4-25-08 Letting, Item 103

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	1

SHEET NO. INDEX OF SHEETS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-05	701201-02
280001-04	701301-02
353001-04	701311-02
420001-07	701321-09
515001-02	701326-02
630001-07	701901
630301-04	704001-04
631032-03	780001-01
635006-02	781001-02
635011-01	
701001-01	
701006-02	
701011-01	

100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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

CONTRACT NO. 68692

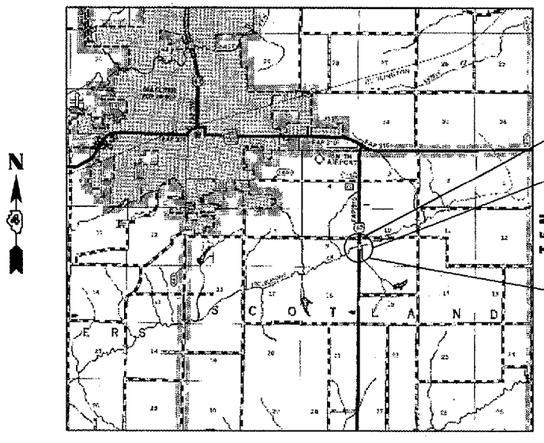
PROJECT ENGINEER: RICH DOTSON (309-671-3455)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP 310 (US 67)
SECTION (39B)I
PROJECT BHF-0310(127)
McDONOUGH COUNTY
C-94-024-07

R 2 W, 4th PM



PROPOSED PROJECT BEGINS
STA. 85+20

PROPOSED PRECAST PRESTRESSED CONCRETE DECK BEAM SUPERSTRUCTURE ON EXISTING DOUBLE SPAN SUBSTRUCTURE 76'-0" BK-BK ABUTMENTS, 33'-0" CLEAR DECK WIDTH WITH STEEL RAILING, TYPE SM., 0° SKEW S.N. 055-0005 ℄ STA. 88+17

PROPOSED PROJECT ENDS
STA. 91+40

SUPERSTRUCTURE REPLACEMENT OVER TROUBLESOME CREEK

LOCATION MAP

NET LENGTH OF PROJECT = 620 FT. = 0.12 MI.

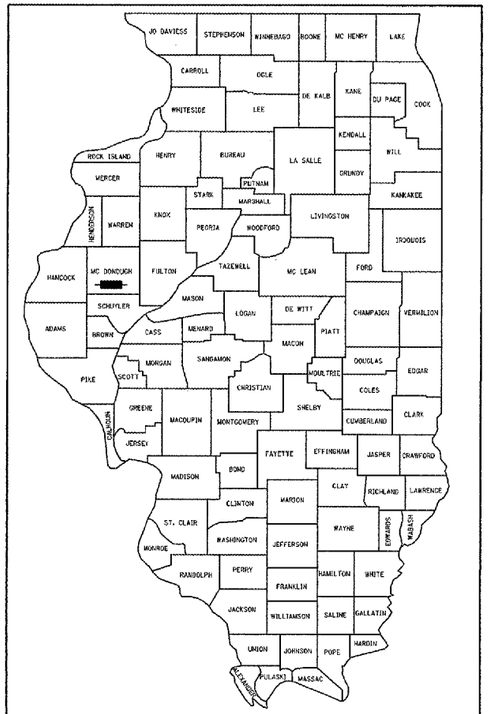
0 1 2
SCALE: 1"=1 MILE

QA/QC CONCRETE

MARTIN J. SILVESTER
062-045266
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

01-22-08
MARTIN SILVESTER, P.E.
LICENSE EXP. DATE 11-30-09

D-94-021-07



LOCATION OF SECTION INDICATED THUS: –

ADT = 2950 (2005); 3803 (2020)
%SU = 6.8 (2005)
%MU = 8.5 (2005)
TOWNSHIP: SCOTLAND
FUNCTIONAL CLASSIFICATION: 30 OTHER PRINCIPLE ARTERIAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Jan 30 20 08
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 21 20 08
Eric E. Harm
ENGINEER OF DESIGN AND ENVIRONMENT
Interim
March 21 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

1. MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSION IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.
2. AFTER PLACEMENT OF THE BRIDGE DECK OVERLAY, THE RESIDENT ENGINEER SHALL NOTIFY THE DISTRICT BRIDGE MAINTENANCE ENGINEER OF THE "AS CONSTRUCTED" MILLING DEPTH AND OVERLAY THICKNESS FOR UPDATING THE ILLINOIS HIGHWAY INFORMATION SYSTEM.
3. THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCH WIDE, 5 INCHES HIGH AND 5/8 INCH DEEP.

   THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:

   INTERVAL - 200 FEET ENGLISH STATIONING

   BOTTOM OF NUMBERS - 6 INCHES FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

   LOCATION:

   - 2, 3, & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
   - MULTI-LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
   - RAMPS - ALONG BASELINE EDGE OF PAVEMENT

   POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER

   FORMAT - ENGLISH PAVEMENT STATIONS SHALL USE THIS FORMAT (XX+XXX) WHERE X REPRESENTS THE PAVEMENT STATION

   THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.
4. CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE BITUMINOUS SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.
5. ADD THE FOLLOWING SENTENCE TO THE END OF PRAGRAPH 670.02 (I) AND 670.04 (E):

   ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.
6. ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS, (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- SIGNED PROPERTY OWNER AGREEMENT FORM - D4 PI0100
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM - D4 PI0101

PLEASE NOTE THAT A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES.

PROPERTY OWNER ACCESS REQUIREMENT

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

PROJECT SPECIFIC NOTES

1. THE THICKNESS OF BITUMINOUS MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.
2. EXCEPT AS NOTED IN THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.
3. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER OR AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE ESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
4. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION. AREAS TO BE SEEDED SHALL BE DETERMINED BY THE ENGINEER AND SEEDED AS SOON AS POSSIBLE.
5. ALL SAW CUTS, NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS, SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED. THE MINIMUM SAW CUT DEPTH IN THE PAVEMENT SHALL BE 1 1/2" UNLESS OTHERWISE SPECIFIED IN A DETAIL SHOWN IN THE PLANS.
6. UNLESS DIRECTED BY THE ENGINEER, PAVEMENT MARKING LINES SHALL NOT BE LAID DIRECTLY OVER A LONGITUDINAL CRACK OR JOINT NOR OVER A TAR OR ASPHALT PAINTED LINE. THE EDGE OF A CENTERLINE OR LANE LINE SHALL BE OFFSET A MINIMUM DISTANCE OF 2" FROM A LONGITUDINAL CRACK OR JOINT. EDGE LINES SHALL BE APPROXIMATELY 2" FROM THE EDGE LINE OF PAVEMENT. SEE SECTION 780 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
7. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OUTSIDE THE LIMITS OF RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
8. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
9. IN ADDITION TO THE FIELD SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION DUE TO CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
10. THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT, AND NO COMPENSATION WILL BE ALLOWED.
11. THE LOCATIONS OF EXISTING UTILITIES ARE NOT SHOWN ON THE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE UTILITIES LOCATED BEFORE BEGINNING ANY WORK.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FORM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT HOURS ADVANCE NOTICE IS REQUIRED.
13. THE DISTRICT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKING (PHONE: 309-671-4460).
14. EXCAVATION REQUIRED FOR WIDENING SHALL BE PAID FOR AS EARTH EXCAVATION.

MIXTURE REQUIREMENTS

LOCATION(S)	SURFACE	BINDER	
MIXTURE USE(S):	HOT-MIX ASPHALT SURFACE COURSE MIX "D", N50, AND HOT-MIX ASPHALT SHOULDERS, 2"	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50 & TEMPORARY RAMP	BASE COURSE WIDENING
AC/PG:	PG 64-22	SBS 70-22	PG 64-22
(MAX). RAP%	15%	0%	25%
DESIGN AIR VOIDS:	4.2% @ N DESIGN = 50	2.5% @ N DESIGN = 50	4.2% @ N = 50
MIXTURE COMPOSITION:	IL 9.5 OR 12.5	IL 4.75	IL 19.0
FRICTION AGGREGATE:	MIX D (DOLOMITE ONLY)	N/A	N/A

* IF THE RAP OPTIONS SELECTED THE ASPHALT CEMENT GRADE MAY BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

COMMITMENTS: NONE

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE THE PLAN QUANTITIES:

HOT MIX ASPHALT MATERIALS (PRIME COAT)	0.00038 TON/SQ. YD. (ON PAVEMENT)
HOT MIX ASPHALT MATERIALS (PRIME COAT)	0.001425 TON/SQ. YD. (ON AGG)
HOT MIX ASPHALT SURFACE / BINDER	0.056 TON/SQ. YD. PER 1"
AGGREGATE MATERIAL	2.05 TON/CU. YD.
RIPRAP	1.35 TON/CU. YD.
NITROGEN FERTILIZER NUTRIENT	90 LBS./ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LBS./ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS./ACRE
AGGREGATE PRIME COAT	0.002 TON/SQ. YD.

REVISIONS NAME	DATE
KJH	1/30/08

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
PROJECT SPECIFIC NOTES,
AND COMMITMENTS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: N.T.S. DRAWN BY GEW
DATE @DATE CHECKED BY MJS

TUG PROJ.= @PROJNO# @TIME@
PLOT DATE = 1/31/2008
FILE NAME = @FILE@

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY FAP 310 80% FEDERAL 20% STATE	STRUCTURE SN.055-0005 80% FEDERAL 20% STATE
				CONSTRUCTION TYPE CODE	
				1000-2A	X080-2A
20200100	EARTH EXCAVATION	CU YD	105	105	
20400800	FURNISHED EXCAVATION	CU YD	321	321	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	797	797	
25000300	SEEDING, CLASS 3	ACRE	0.16	0.16	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	14	14	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	14	14	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	14	14	
25100630	EROSION CONTROL BLANKET	SQ YD	774	774	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	16	16	
28000300	TEMPORARY DITCH CHECKS	EACH	4	4	
28000400	PERIMETER EROSION BARRIER	FOOT	2640	2640	
28100125	STONE RIPRAP, CLASS B3	SQ YD	94	94	
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	114	114	
35300400	PORTLAND CEMENT CONCRETE BASE COURSE 9"	SQ YD	114	114	
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	505	505	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.93	0.93	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	220	220	
40600990	TEMPORARY RAMP	SQ YD	100	100	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	140	140	
44000100	PAVEMENT REMOVAL	SQ YD	425	425	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	65	65	
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50300225	CONCRETE STRUCTURES	CU YD	0.4		0.4
50300260	BRIDGE DECK GROOVING	SQ.YD	399		399
50300300	PROTECTIVE COAT	SQ YD	425		425
50400105	PRECAST CONCRETE BRIDGE SLAB	SQ FT	299		299
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	2500		2500
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	5340		5340
50800515	BAR SPLICERS	EACH	117		117
* 50901050	STEEL RAILING, TYPE SM	FOOT	232		232
51500100	NAME PLATES	EACH	1		1
54002020	EXPANSION BOLTS 3/4 INCH	EACH	16		16
59000200	EPOXY CRACK INJECTION	FOOT	19		19
* 63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	462.5	462.5	
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	822	822	

*SPECIALTY ITEM

REVISIONS	
NAME	DATE
K.JH	1/30/08

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: VERT.
HORIZ.
DATE #DATE

DRAWN BY GEW
CHECKED BY MJS

TUG PROJ.= #PROJNO#
PLOT DATE = 1/31/2008 #TIME#
FILE NAME = #FILE#

THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY FAP 310 80% FEDERAL 20% STATE CONSTRUCTION TYPE CODE 1000-2A	STRUCTURE SN.055-0005 80% FEDERAL 20% STATE CONSTRUCTION TYPE CODE X080-2A
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70103815	TRAFFC CONTROL SURVEILLANCE	CAL DA	4	4	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	133	133	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1410	1410	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	747	747	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	362.5	362.5	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	362.5	362.5	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1410	1410	
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	51	51	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	470	470	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10	
X0301512	GUARDRAIL AGGREGATE EROSION CONTROL	TON	214	214	
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	49		49
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	52	52	
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	425		425
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	52		52
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	14	14	

*SPECIALTY ITEM

REVISIONS NAME	DATE
K.M	1/30/08

ILLINOIS DEPARTMENT OF TRANSPORTATION

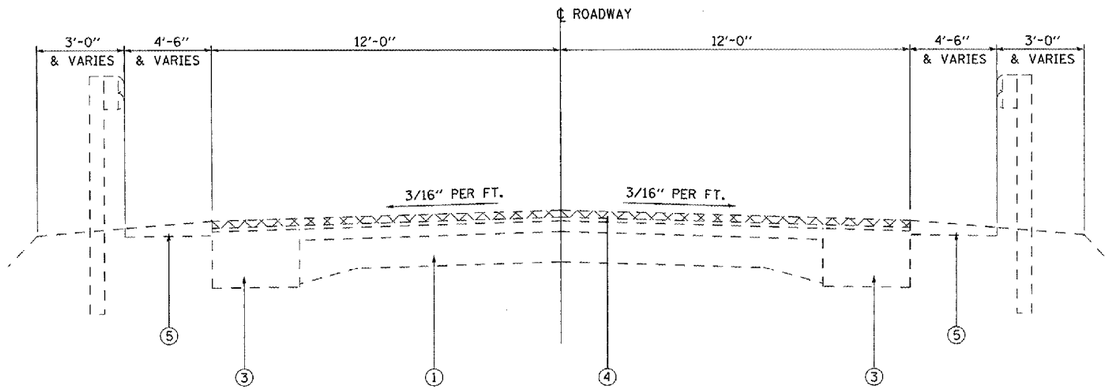
SUMMARY OF QUANTITIES
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: VERT.
HORIZ.
DATE #DATE
DRAWN BY
CHECKED BY MJS

TUG PROJ.= #PROJNO#
PLOT DATE = 1/31/2008 #TIME#
FILE NAME = #FILE#

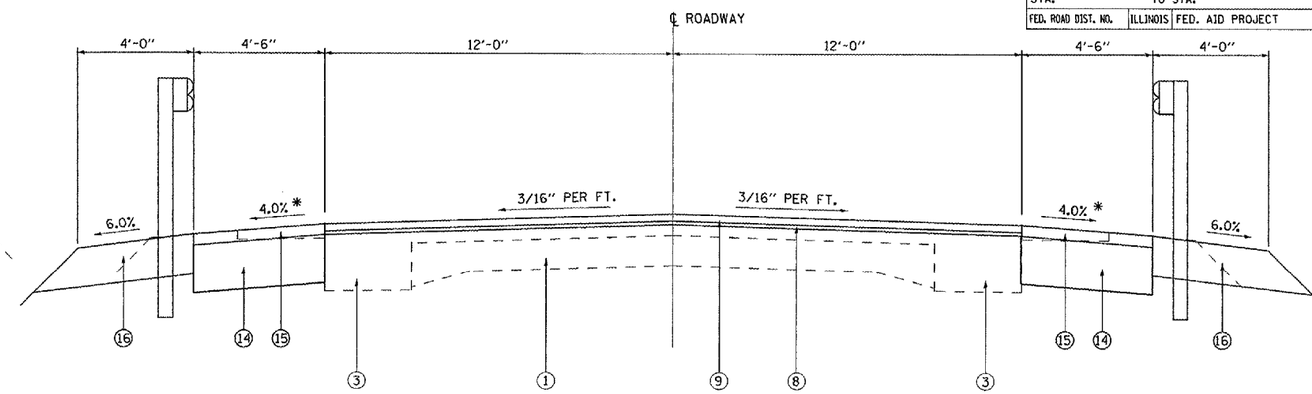
CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION 1

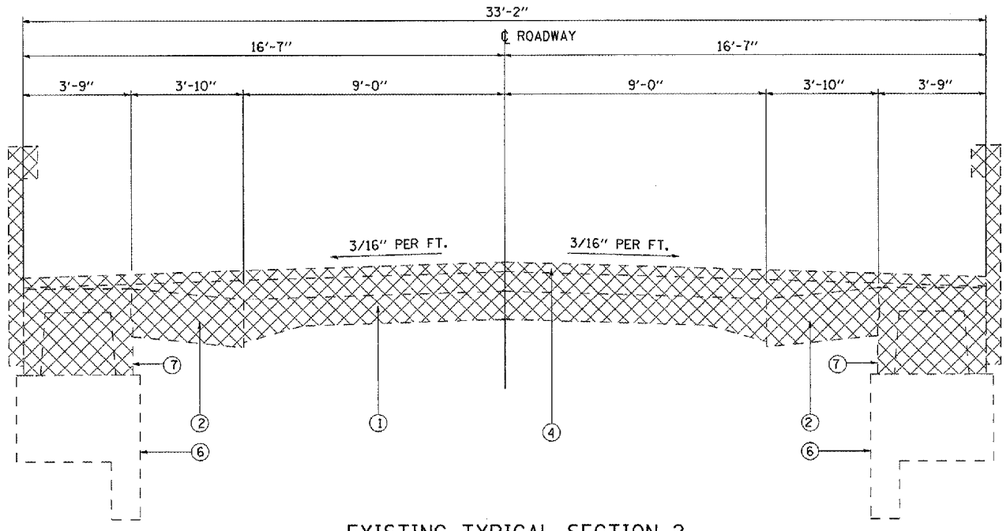
STA. 85+20 TO STA. 87+59.08
STA. 88+74.92 TO STA. 91+40



* 4 % SLOPE ON SHOULDERS SHALL TRANSITION TO 1.5 % SLOPE PRIOR TO BRIDGE APPROACHES

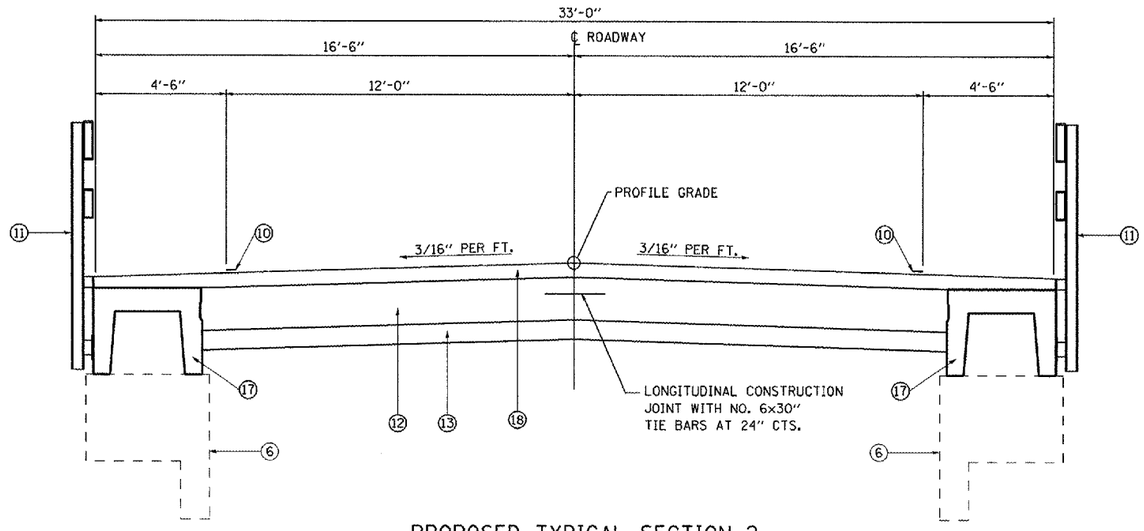
PROPOSED TYPICAL SECTION 1

STA. 85+20 TO STA. 87+59.08
STA. 88+74.92 TO STA. 91+40



EXISTING TYPICAL SECTION 2

STA. 87+59.08 TO STA. 87+79
STA. 88+55 TO STA. 88+74.92



PROPOSED TYPICAL SECTION 2

STA. 87+59.08 TO STA. 87+79
STA. 88+55 TO STA. 88+74.92

LEGEND

① EX P.C.C. PAVEMENT, 9" - 6" - 9"
② EX P.C.C. PAVEMENT, 10"
③ EX BIT. CONC. BASE COURSE WIDENING, 10"
④ EX BIT. CONC. SURFACE
⑤ EX AGG. SHOULDERS
⑥ EX APPROACH CAPS (AT ENDS ONLY - NOT TO BE DISTURBED)
⑦ EX PRECAST SHOULDER UNIT
⑧ PR POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50 (MIN.¾")
⑨ PR HOT-MIX ASPHALT SURF. CSE, MIX "D", N50 (1½")
⑩ PR PAINT PAVT MK, LINE 4" (STRIPE FOR 12'-0")
⑪ PR STEEL RAILING, TYPE SM
⑫ PR PCC BASE COURSE 9"
⑬ PR SUBBASE GRANULAR MATERIAL TYPE A, 4" AND VARIES
⑭ PR HOT-MIX ASPHALT BASE CSE/WIDENING 10"
⑮ PR HOT-MIX ASPHALT SHOULDERS, 1½" AND VARIES
⑯ PR GUARDRAIL AGGREGATE EROSION CONTROL
⑰ PR PRECAST CONCRETE BRIDGE SLAB
⑱ PR CONCRETE WEARING SURFACE, 5"

REMOVAL

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: VERT. NTS
HORIZ.
DATE DEC 2007
DRAWN BY AGG
CHECKED BY MJS

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PLOT DATE = 1/18/2008 10:56:54 AM
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THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GUARDRAIL SCHEDULE

LOCATION	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT) (EACH)	STEEL PLATE BEAM GUARDRAIL TYPE A (FOOT)	TRAFFIC BARRIER TERMINAL TYPE 6A (EACH)
STA RT 85+15.94 TO 85+65.94	1		
STA RT 85+65.94 TO 87+15.94		150.0	
STA RT 87+15.94 TO 87+61.88			1
STA RT 88+72.13 TO 89+18.07			1
STA RT 89+18.07 TO 90+05.57		87.5	
STA RT 90+05.57 TO 90+55.57	1		
STA LT 86+03.44 TO 86+53.44	1		
STA LT 86+53.44 TO 87+15.94		62.5	
STA LT 87+15.84 TO 87+61.88			1
STA LT 88+72.13 TO 89+18.07			1
STA LT 89+18.07 TO 90+80.57		162.5	
STA LT 90+80.57 TO 91+30.57	1		
TOTAL	4	462.5	4

PAVEMENT MARKING SCHEDULE

LOCATION	LENGTH (FOOT)	PVMT MARKING REMOVAL: SOLID WHITE (SQ. FT.)	PVMT MARKING REMOVAL: YELLOW SKIP DASH & NO PASSING (SQ. FT.)	SHORT TERM PVMT MARKING LINE - 4": WHITE (FOOT)	SHORT TERM PVMT MARKING LINE - 4": YELLOW (FOOT)	PAINT PVMT MARKING LINE - 4": SOLID WHITE (FOOT)	PAINT PVMT MARKING LINE - 4": YELLOW SKIP DASH & NO PASSING (FOOT)
STA 84+85.00 TO 91+50			56.67		133.0		170.0
STA RT 85+20.00 TO 91+40.00		206.67				620.0	
STA LT 85+20.00 TO 91+40.00		206.67				620.0	
TOTAL		413.34	56.67	0	133	1240.0	170

NOTE:
SHORT-TERM PAVEMENT MARKING QUANTITIES ARE FOR TWO APPLICATION.
• 10% OF TOTAL LENGTH FOR SHORT-TERM PAVEMENT MARKING

GUARDRAIL & TERMINAL MARKERS SCHEDULE

LOCATION	GUARDRAIL MARKERS TYPE A (EACH)	TERMINAL MARKER DIRECT APPLIED (EACH)
STA RT 85+15.94		1
STA RT 85+65.94 TO 90+05.57	18	
STA RT 87+48.00 TO 88+85.50	6	
STA RT 90+55.57		1
STA LT 86+03.44		1
STA LT 86+53.44 TO 90+80.57	21	
STA LT 87+48.00 TO 88+85.50	6	
STA LT 91+30.57		1
TOTAL	51	4

SUB-BASE GRANULAR MATERIAL, TYPE A, 4" SCHEDULE

LOCATION	QUANTITY (SQ. YD.)
STA 87+59.08 TO STA 87+79.00	56.81
STA 88+55.00 TO STA 88+74.92	56.81
TOTAL	113.62

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL SCHEDULE

LOCATION	RAISED REFL PAVT MRK REM (EACH)
STA 84+85 TO STA 91+50	10
TOTAL	10

HOT MIX ASPHALT SURFACE REMOVAL- BUTT JOINT SCHEDULE

LOCATION	QUANTITY (SQ. YD.)
STA 85+20 TO STA 85+50	110
STA 91+10 TO STA 91+40	110
TOTAL	220

PORTLAND CEMENT CONCRETE BASE COURSE, 9" SCHEDULE

LOCATION	QUANTITY (SQ. YD.)
STA 87+59.08 TO STA 87+79.00	56.81
STA 88+55.00 TO STA 88+74.92	56.81
TOTAL	113.62

PRECAST CONCRETE BRIDGE SLAB SCHEDULE

LOCATION	QUANTITY (SQ. FT.)
STA RT 87+59.08 TO 87+79.00	74.70
STA LT 87+59.08 TO 87+79.00	74.70
STA RT 88+55.00 TO 88+74.92	74.70
STA LT 88+55.00 TO 88+74.92	74.70
TOTAL	298.80

PERIMETER EROSION BARRIER SCHEDULE

LOCATION	QUANTITY (FOOT)
STA RT 84+80.00 TO 91+40.00	1320
STA LT 85+20.00 TO 91+80.00	1320
TOTAL	2640

QUANTITY FOR TWO APPLICATIONS

GUARDRAIL AGGREGATE EROSION CONTROL SCHEDULE

LOCATION	QUANTITY (TON)
STA RT 84+88.94 TO 87+61.00	61.5
STA RT 88+73.00 TO 90+82.57	46.7
STA LT 85+76.44 TO 87+61.00	40.8
STA LT 88+73.00 TO 91+57.57	64.4
TOTAL	213.4

ENGINEER'S FIELD OFFICE, TYPE A

LOCATION	QUANTITY (CAL MO)
TOTAL	6

PAVEMENT REMOVAL SCHEDULE

LOCATION	QUANTITY (SQ. YD.)
STA RT 87+59.08 TO 88+74.92	231.68
STA LT 87+59.08 TO 88+74.92	193.07
TOTAL	424.75

GUARDRAIL REMOVAL SCHEDULE

LOCATION	QUANTITY (FOOT)
STA RT 85+24 TO 87+59	235
STA LT 86+11 TO 87+59	148
DTA RT 88+75 TO 90+57	182
STA LT 88+75 TO 91+32	257
TOTAL	822

HOT MIX ASPHALT SCHEDULE

LOCATION	TEMPORARY RAMP (SQ. YD.)	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50 (TON)	HOT MIX ASPHALT SURFACE COURSE MIX "D", N50 (TON)	BITUMINOUS MATERIALS (PRIME COAT) (TON)	HOT-MIX ASPHALT BASE COURSE WIDENING, 10" (SQ. YD.)	HOT-MIX ASPHALT SHOULDERS (TON)
STA 85+20.00 TO 85+25.00	13.33					
STA 85+20.00 TO 87+59.08			53.55	0.4436	239.08	28.61
STA 85+50.00 TO 86+50.00			7.47			
STA 86+50.00 TO 87+59.08		19.64				
STA 87+49.00 TO 87+59.00	36.67					
STA 87+59.08 TO 87+79.00						
STA 87+79.00 TO 88+55.00						
STA 88+75.00 TO 88+85.00	36.67					
STA 88+55.00 TO 88+74.92						
STA 88+74.92 TO 91+40.00			59.38	0.4810	265.08	35.82
STA 88+74.92 TO 89+85.00		32.28				
STA 89+85.00 TO 91+10.00			9.33			
STA 91+35.00 TO 91+40.00	13.33					
PROVISIONAL			9.41			
TOTAL	100.00	51.92	139.14	0.93	504.16	64.43

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION (CU. YD.)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (CU. YD.)	EMBANKMENT (CU. YD.)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU. YD.)
TOTAL	105	79	400	-321

PERMANENT SEEDING SCHEDULE

LOCATION	TOPSOIL FURNISH & PLACE, 4" (SQ. YD.)	SEEDING CLASS 3 (ACRE)	NITROGEN FERT. NUT. (POUND)	PHOSPHORUS FERT.NUT. (POUND)	POTASSIUM FERT.NUT. (POUND)	EROSION CONTROL BLANKET (SQ. YD.)	TEMPORARY EROSION CONTROL SEEDING (POUND)
TOTAL	797	0.16	14.0	14.0	14.0	774	16

REVISIONS	
NAME	DATE
KJH	1/30/08

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: N.T.S. DRAWN BY GEW
DATE #DATE CHECKED BY MJS

TUG PROJ.* #PROJNOR
PLOT DATE = 1/31/2008 #TIME#
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THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEC. 10, T. 5 N., R. 2 W., 4th P.M.

BARN

EXISTING GUARDRAIL TBR

SPBGR

FLOW TROUBLESOME CREEK

℄ ROADWAY AND ℄ STRUCTURE
STA. 88+17
PROPOSED PRECAST PRESTRESSED CONCRETE DECK BEAM SUPERSTRUCTURE ON EXISTING DOUBLE SPAN SUBSTRUCTURE, 76'-0" BK.-BK. ABUTMENTS, 33'-0" CLEAR DECK WIDTH WITH STEEL RAILING, TYPE SM, 0° SKEW

8" RIPRAP, CLASS B3 (55 S.Y.)

EX ROW

85+00

FAP 310/US 67

90+00

PROJECT BEGINS
STA. 85+20
BEGIN HMA OVERLAY

TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT) (ALL FOUR ENDS)

+59.08

+74.92

TRAFFIC BARRIER TERMINAL TYPE 6A (ALL FOUR CORNERS)

PROJECT ENDS
STA. 91+40
END HMA OVERLAY

SEC. 9, T. 5 N., R. 2 W., 4th P.M.

TEMP DITCH CHECK

INDICATES PAVEMENT REMOVAL

TBM #199 CHISELED SQUARE ON WEST END OF SOUTH CONCRETE HEADWALL SOUTHWEST QUAD OF US 67 AND TR 1050N.
ELEV. 625.926

0 50' 100' — 1" = 20'

PLAN — SURVEYED | PLOTTED | ALIGNMENT CHECKED | P.I. COORD'S MAY CHECKED | CADD FILE NAME | NOTE BOOK | NO. ____ | BY | DATE

PROFILE — SURVEYED | PLOTTED | GRADE CHECKED | NO. LEVELS | STRUCTURE NOTATIONS CHKD | NOTE BOOK | NO. ____ | BY | DATE

625
620
615
610
605

PROJECT BEGINS STA. 85+20
BEGIN HMA OVERLAY
EL. 620.11

℄ EXISTING ROADWAY
FAP310/US67

BEGIN PCC PAVEMENT REMOVAL
STA. 87+59.08 EL. 620.28

BACK OF ABUT
STA. 87+79

℄ PROP. ROADWAY

BACK OF ABUT
STA. 88+55

END PCC PAVEMENT REMOVAL
STA. 88+74.32 EL. 620.48

S.B. EL. 609.3

PROJECT ENDS
STA. 91+40
END HMA OVERLAY
EL. 620.29

85+50	86+00	86+50	87+00	87+50	88+00	+17	88+50	89+00	89+50	90+00	90+50	91+00	91+50
620.11	620.18	620.08	620.01	620.01	620.01	620.00	620.10	620.20	620.16	620.20	620.31	620.34	620.31	620.19
620.11	620.31	620.21	620.21	620.21	620.28	620.28	620.38	620.48	620.48	620.48	620.48	620.47	620.44	

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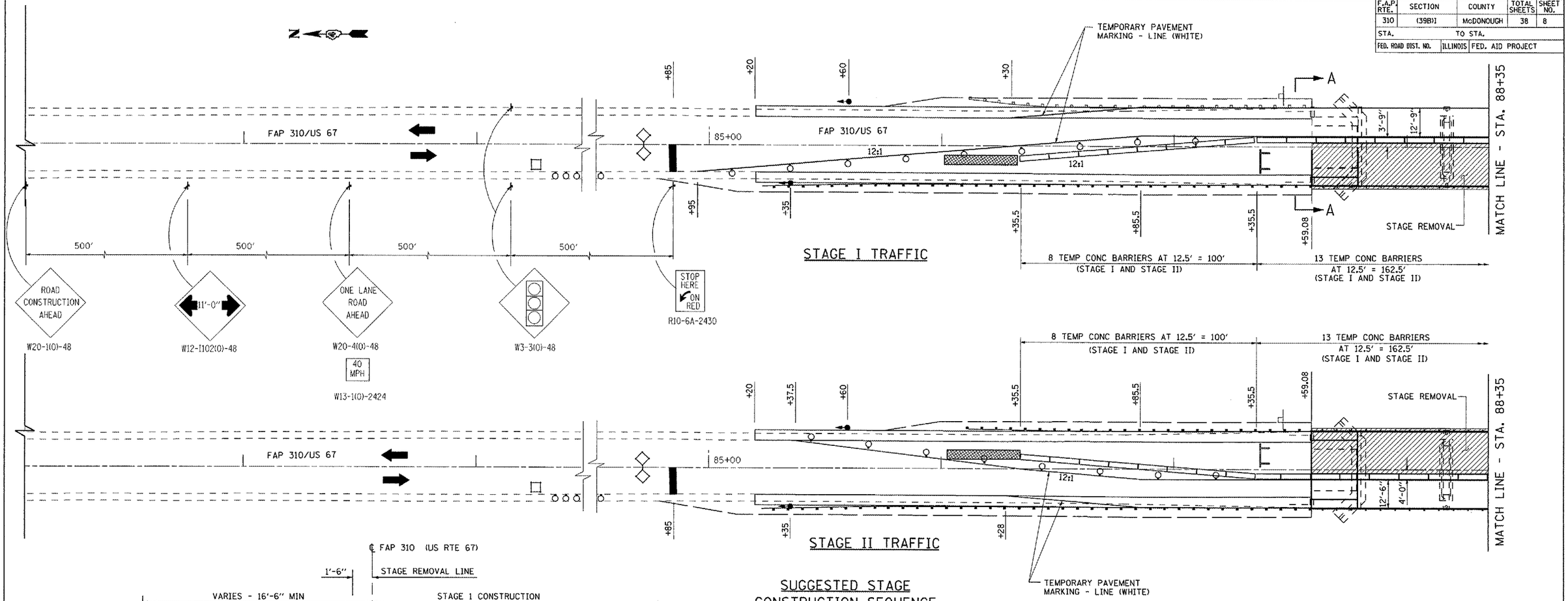
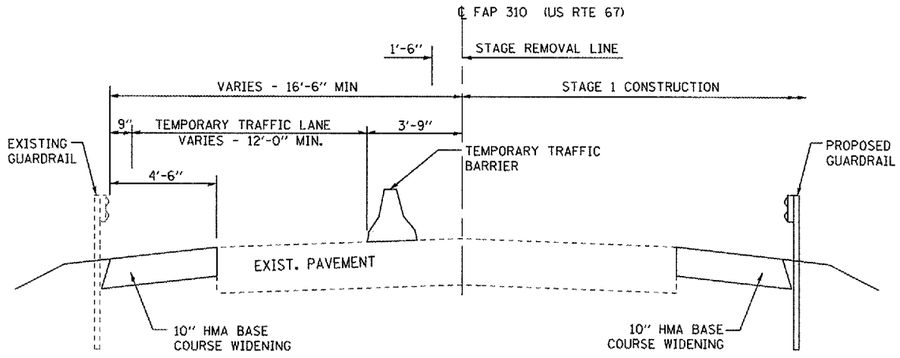
THE UPCHURCH GROUP, INC.

US 67 PLAN AND PROFILE SHEET

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





SECTION A-A

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- SIGN
- TYPE III BARRICADE
- DRUM WITH STEADY BURNING LIGHT
- DOUBLE VERTICAL PANEL
- TRAFFIC SIGNAL
- INDUCTION LOOP DETECTOR
- TEMPORARY CONCRETE BARRIER

SUGGESTED STAGE CONSTRUCTION SEQUENCE

STAGE I

1. CONSTRUCT HMA BASE COURSE WIDENING STA. 85+20 TO STA. 87+59 AND STA. 88+75 TO 91+40 (STD 701326)
2. ERECT TRAFFIC CONTROL FOR STAGE I.
3. REMOVE EXISTING DECK RIGHT, ℄ STA. 88+17 AND EXISTING PAVEMENT RIGHT STA. 87+59.08 TO 87+79 AND STA. 88+55 TO 88+74.92.
4. CONSTRUCT PROPOSED STAGE I PRECAST PRESTRESSED DECK ℄ STA. 88+17 AND PROPOSED PCC BASE CSE AND TEMPORARY RAMP AT ENDS OF PCC BASE CSE.
5. CONSTRUCT PROPOSED GUARDRAIL & TERMINALS RIGHT STA. 85+22.19 TO STA. 90+61.82.

STAGE II

1. ERECT TRAFFIC CONTROL FOR STAGE II.
2. REMOVE EXISTING DECK LEFT, ℄ STA. 88+17 AND EXISTING PAVEMENT LEFT STA. 87+59.08 TO 87+79 AND STA. 88+55 TO 88+74.92
3. CONSTRUCT PROPOSED STAGE II PRECAST PRESTRESSED DECK ℄ STA. 88+17 AND PROPOSED PCC BASE CSE AND TEMPORARY RAMP AT ENDS OF PROPOSED PCC BASE CSE.
4. CONSTRUCT PROPOSED GUARDRAIL & TERMINALS LEFT. STA. 86+09.69 TO STA. 91+36.82

FINAL

1. REMOVE ALL STAGE TRAFFIC CONTROL AND RE-ESTABLISH NORMAL TRAFFIC PATTERNS.
2. COMPLETE HOT MIX ASPHALT SURFACE REMOVAL, HMA SHOULDERS 2", BINDER AND SURFACE COURSE UNDER TRAFFIC WITH FLAGGERS (STD 701201).
3. FINAL STRIPING, SEEDING AND MISCELLANEOUS CLEANUP.

GENERAL NOTES

1. THIS TRAFFIC CONTROL DETAIL SHALL BE USED IN CONJUNCTION WITH STANDARD 701321.
2. EXISTING PAVEMENT MARKING THAT CONFLICT WITH THE REVISED STAGE TRAFFIC PATTERNS DURING ALL PHASES OF STAGE CONSTRUCTION SHALL BE REMOVED.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL PROPERTIES DURING ALL PHASES OF CONSTRUCTION.
4. EACH DETECTOR LOOP SHALL BE CONNECTED TO A SEPARATE DETECTOR AMPLIFIER.
5. WIDTH RESTRICTION SIGNING SHALL BE INSTALLED ACCORDING TO THE SPECIAL PROVISION TITLED "WIDTH RESTRICTION SIGNING". TWO SETS OF SIGNS, INCLUDING SIGN ASSEMBLY A AND SIGN ASSEMBLY B, WILL BE REQUIRED.

WORK THIS SHEET WITH SHEET 9 OF 38

0 50' 100' — 1"= 20'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN - STAGE I AND II
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: 1"=20' DRAWN BY GEW
DATE DEC 2007 CHECKED BY MJS

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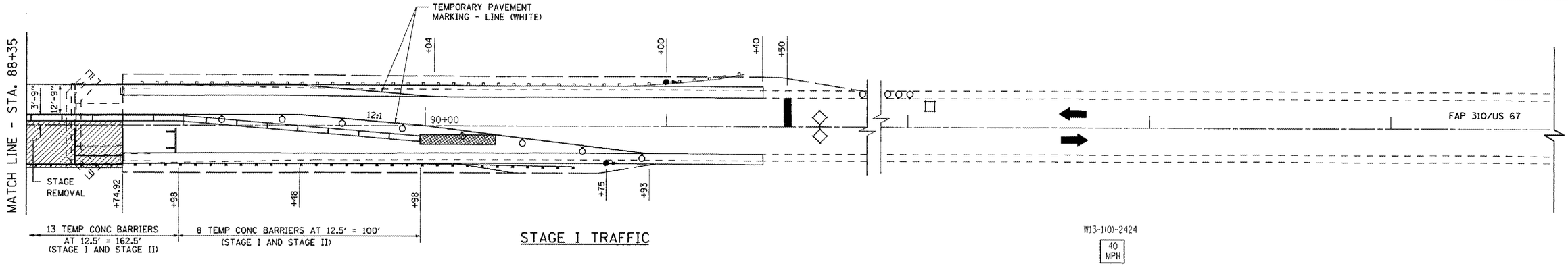
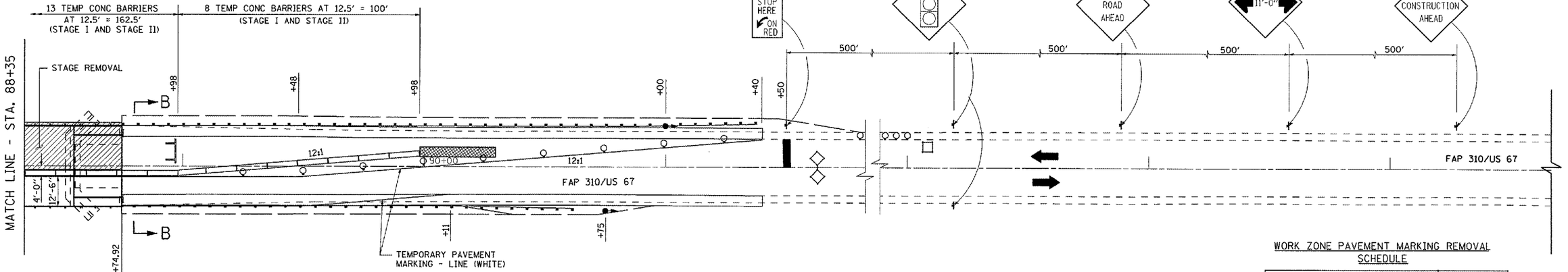
CONTRACT NO. 68692

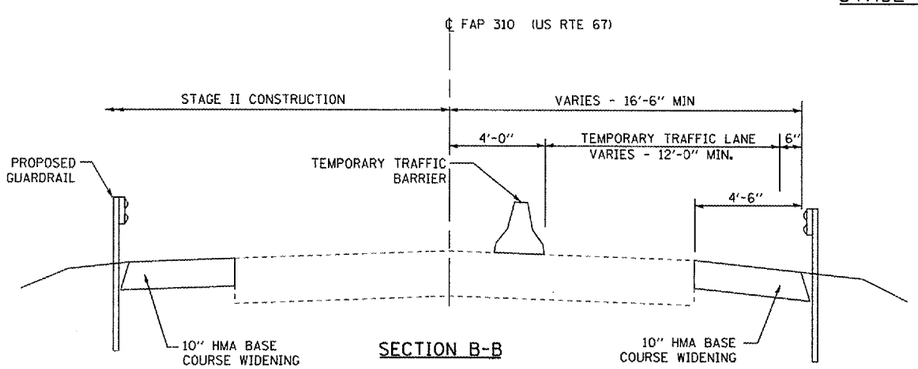
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



STAGE I TRAFFIC



STAGE II TRAFFIC



SECTION B-B

TRAFFIC CONTROL SCHEDULE

LOCATION STATION TO STATION	TEMP. CONC. BARRIER (FOOT)	RELOCATE TEMP. CONC. BARRIER (FOOT)	IMPACT ATTENUATORS TEMPORARY (FRN) TL3 (EACH)	IMPACT ATTENUATORS RELOCATE (FD) TL3 (EACH)
STAGE I STA. 86+35.5 TO 89+98	362.5		2	
STAGE II STA. 86+35.5 TO 89+98		362.5		2
TOTAL	362.5	362.5	2	2

WORK ZONE PAVEMENT MARKING REMOVAL SCHEDULE

LOCATION STATION TO STATION	WORK ZONE PVMT. MARKING REMOVAL (SQ. FT.)
STAGE I	
STA. 86+30 TO STA. 90+04 LT	125
STA. 84+95 TO STA. 90+93 RT	200
STAGE II	
STA. 84+85 RT	24
STA. 91+50 LT	24
STA. 86+28 TO STA. 90+11 RT	128
STA. 85+37.5 TO STA. 91+40 LT	201
SHORT TERM ℄	
STA. 84+85 TO STA. 91+50	45
TOTAL	747

WORK THIS SHEET WITH SHEET 8 OF 38

0 50' 100' — 1"= 20'

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- SIGN
- TYPE III BARRICADE
- DRUM WITH STEADY BURNING LIGHT
- DOUBLE VERTICAL PANEL
- TRAFFIC SIGNAL
- INDUCTION LOOP DETECTOR
- TEMPORARY CONCRETE BARRIER

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN - STAGE I AND II
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: 1"=20' DRAWN BY GEW
DATE DEC 2007 CHECKED BY MJS

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THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

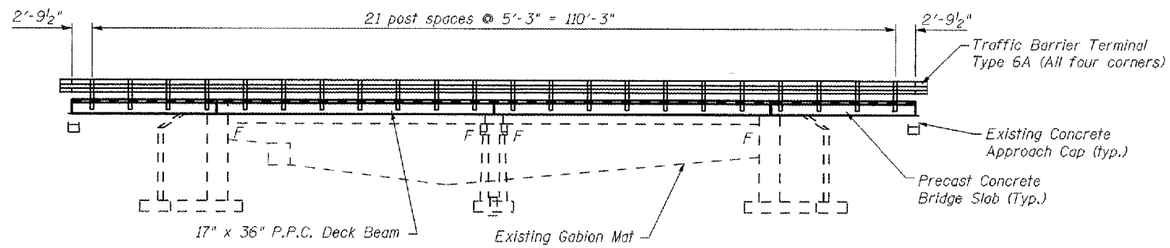
SHEET 1 OF 12 SHEETS

Benchwork: TBM #199. Chiseled Square on west end of south concrete headwall southwest quad of US67 and TR1050N. Elevation 625.926

Existing Structure: S.N. 055-0005. Built as S.B.I. Rte. 3, Section 39B at Sta. 88+17 in 1923. The existing PPC Deck Beams shall be removed and replaced. Superstructure removal shall be 33'-2" wide by 76'-0" long. Existing gabions in channel to remain.

Traffic to be maintained using stage construction. One lane is to remain open at all times.

No salvage.



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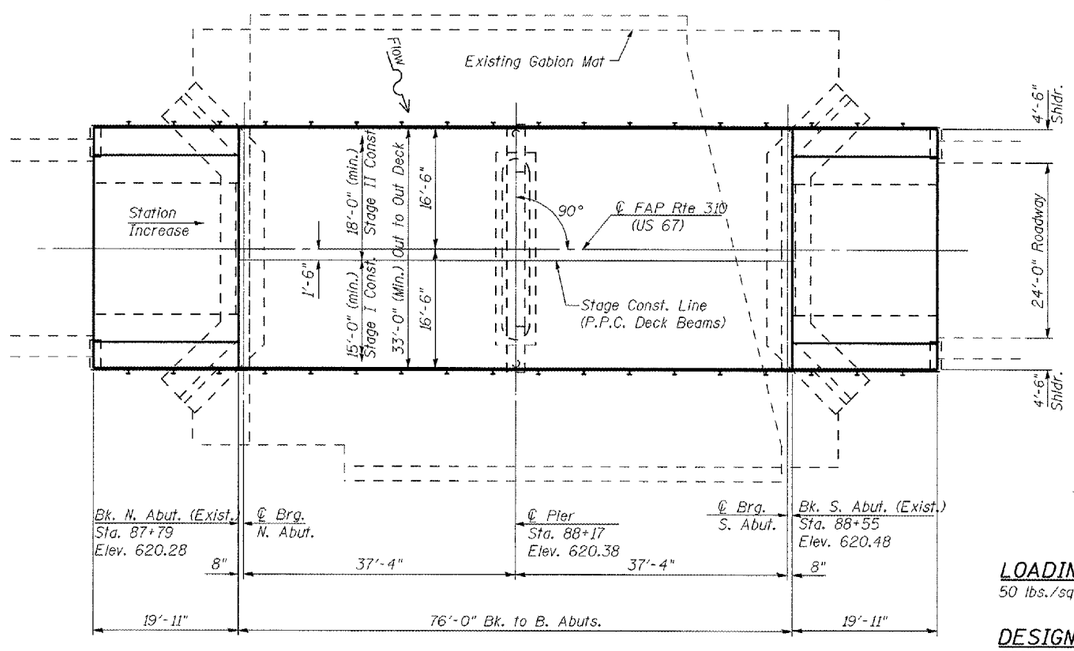
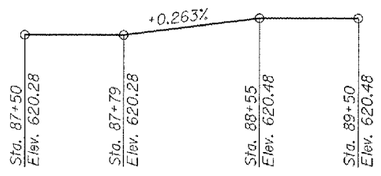


PLAN



PROFILE GRADE
(Along ℄ Roadway)

STATION 88+17
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 310 SEC. (39B)1
F.A.P. PROJ.
LOADING HS20-44
STR. NO. 055-0005

NAME PLATE
See Std. 515001

Attach new name plate to the backside of 8" rail element. Existing Name Plate shall be removed, cleaned and relocated adjacent to new Name Plate. Cost included with Name Plates.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation or a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

The Contractor is advised that the existing P.P.C. Deck Beams are in a deteriorated condition with reduced load bearing capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removing and replacement of the superstructure.

The Minimum thickness of the Concrete Overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber.

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations prepared and sealed by an Illinois Licensed Structural Engineer verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Superstructure.

No instream work will be allowed on this project.

Repairs of abutments and pier shall be completed prior to placement of the new beams.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Structures	Cu. Yd.		0.4	0.4
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2500		2500
Reinforcement Bars, Epoxy Coated	Pound	5310	30	5340
Steel Railing, Type SM	Foot	232		232
Name Plates	Each		1	1
Asbestos Bearing Pad Removal	Each		52	52
Epoxy Crack Injection	Foot		19	19
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.		49	49
Bridge Deck Grooving	Sq. Yd.	399		399
Protective Coat	Sq. Yd.	425		425
Concrete Wearing Surface, 5"	Sq. Yd.	425		425
Expansion Bolts ¾" ϕ	Each		16	16
Bar Splicers	Each	117		117

LOADING HS 20-44
50 lbs./sq. ft. allowance for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications 17th Edition

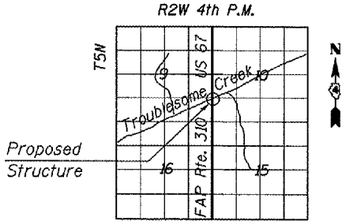
DESIGN STRESSES

FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" ϕ low lax strands)
f'si = 201,960 psi (1/2" ϕ low lax strands)

PRECAST CONCRETE UNITS
f'c = 4,500 psi
fy = 60,000 psi (Reinforcement)

APPROVED
For Structural Adequacy Only
Ralph E. Anderson
Engineer of Bridges & Structures



LOCATION SKETCH

MARTIN J. SILVESTER
081-004873
LICENSED STRUCTURAL ENGINEER
OF ILLINOIS

01-22-08

MARTIN J. SILVESTER
STRUCTURAL ENGINEER
LICENSE EXP. DATE 11-30-08

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)1
McDONOUGH COUNTY STR. 055-0005

SCALE: N.T.S. DRAWN BY RWH
DATE DEC 2007 CHECKED BY MJS

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PLOT DATE = 1/21/2008
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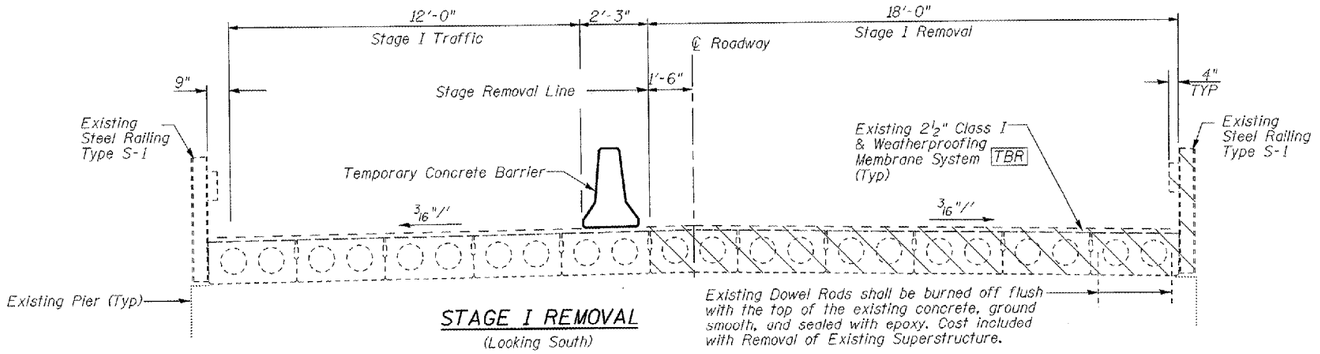
THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

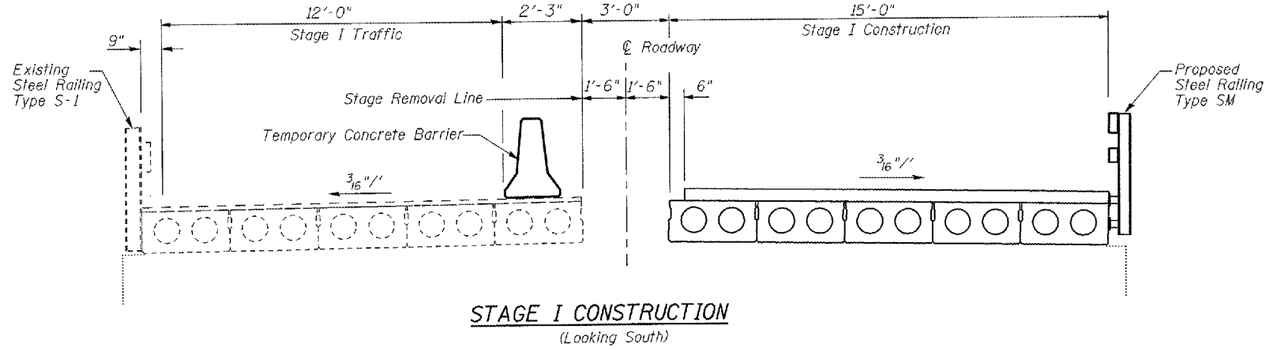
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET 2 OF 10 SHEETS



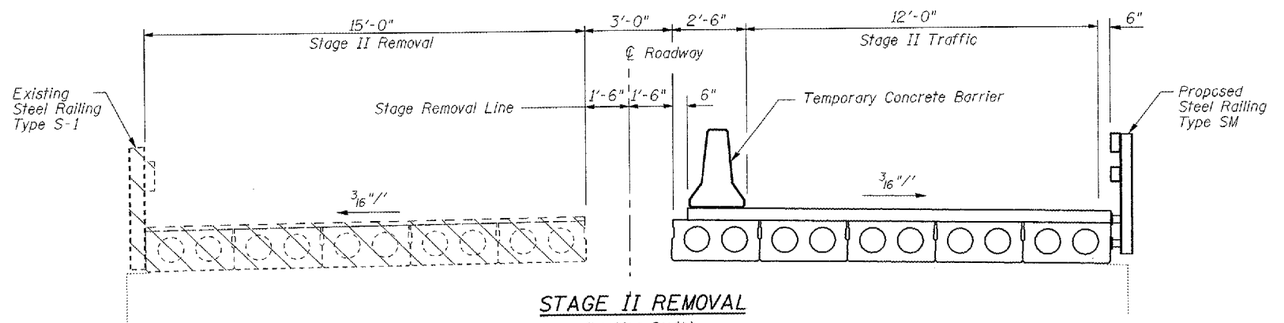
STAGE I REMOVAL

(Looking South)



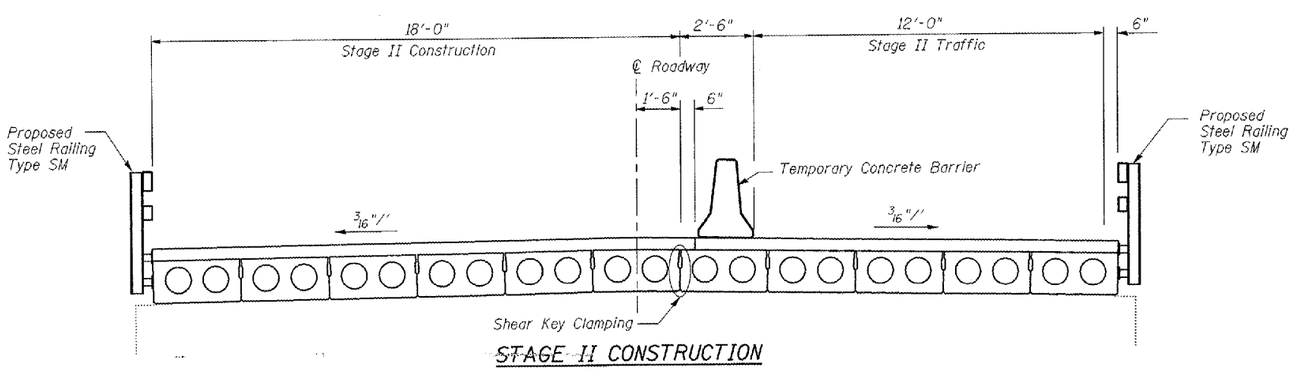
STAGE I CONSTRUCTION

(Looking South)



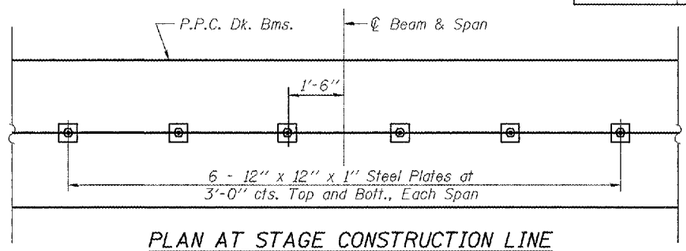
STAGE II REMOVAL

(Looking South)

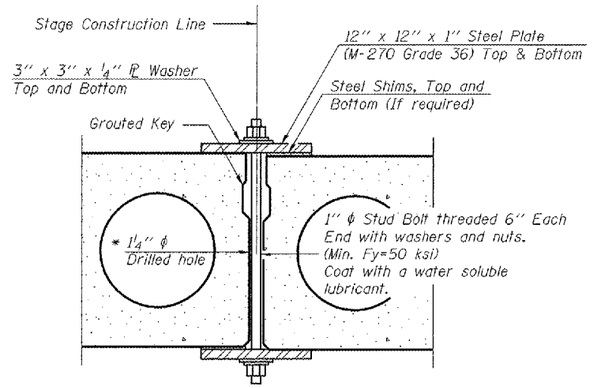


STAGE II CONSTRUCTION

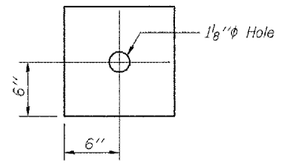
(Looking South)



PLAN AT STAGE CONSTRUCTION LINE



SECTION



CLAMPING PLATE

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

See Stage Construction Details for traffic lanes.

* As an alternate to the drilled holes, the Contractor may request the Fabricator to cast 2" diameter semi-circular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts. If the Contractor elects to use this alternate, the details shall be identified on the shop drawings.

Notes: All Cross sections are looking upstation.
Hatched area indicates "Removal of Existing Superstructures". Cost of removal of the existing wearing surface, existing precast concrete bridge slab and steel railing (including the railing on the approach) are included with "Removal of Existing Superstructures". For quantity of Temporary Concrete Barrier see Roadway Plans.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)1
McDONOUGH COUNTY STR. 055-0005

SCALE: N.T.S. DRAWN BY GEW
DATE DEC 2007 CHECKED BY MJS

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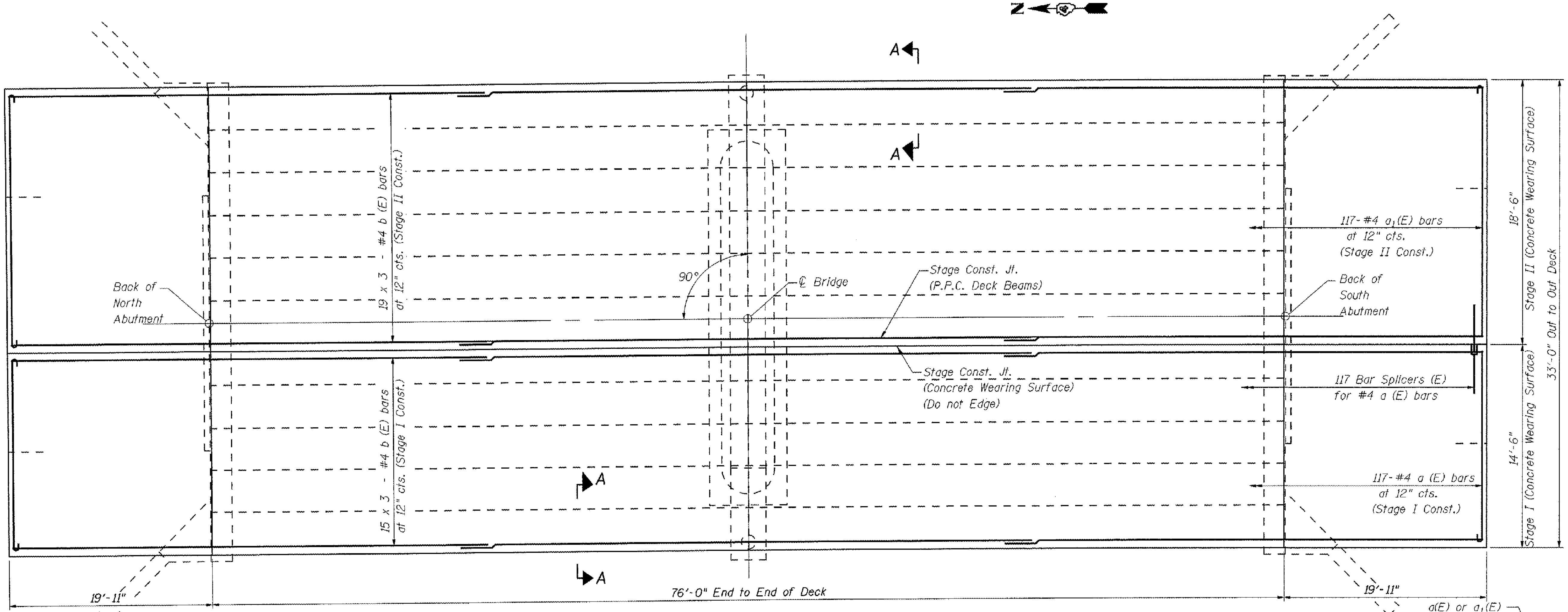
THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	12

STA. TO STA.

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

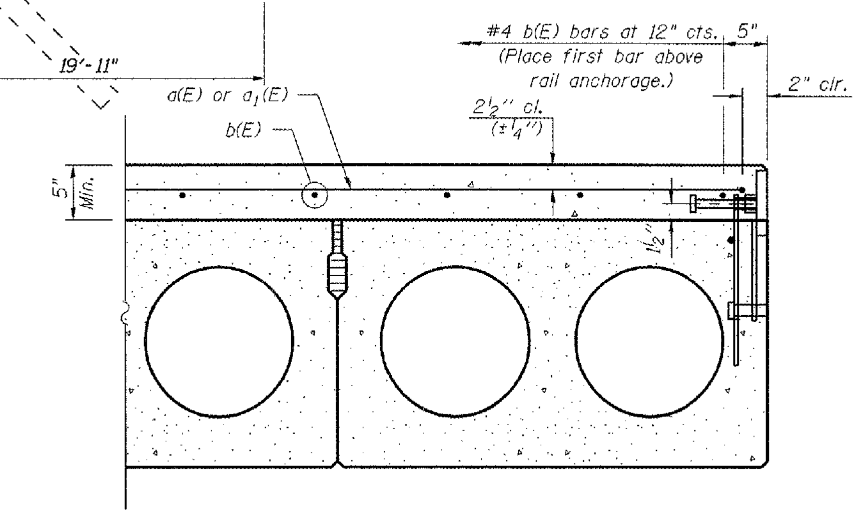


PLAN

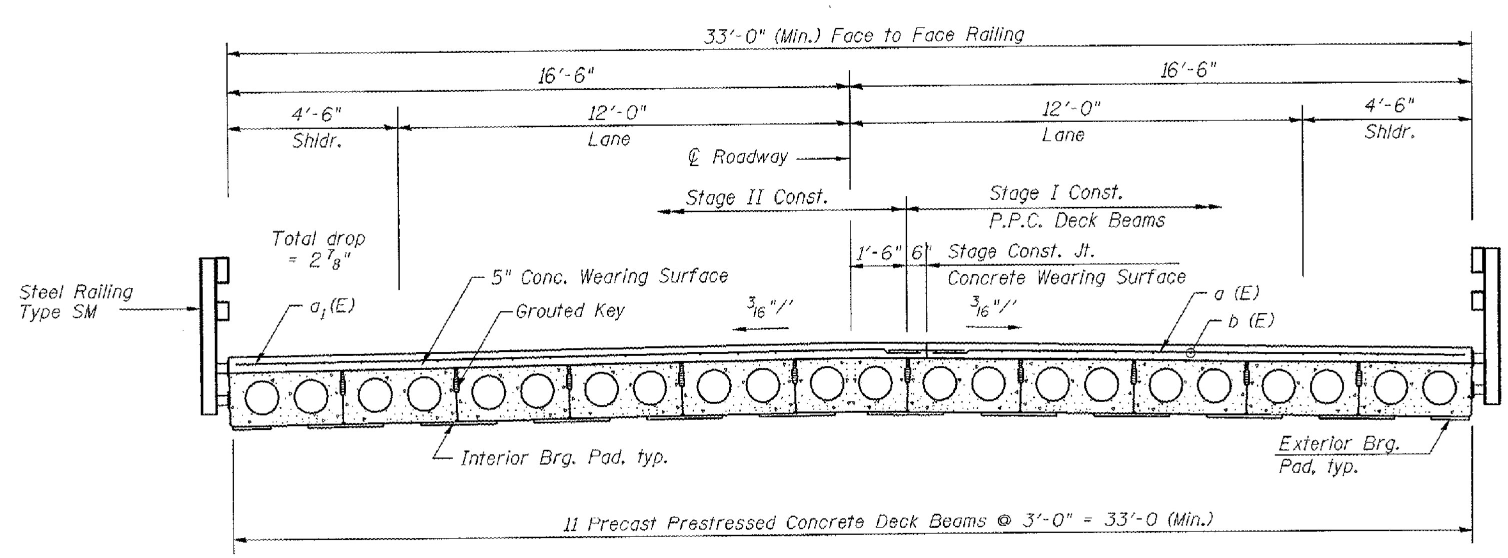
Notes:

For remainder of superstructure details, see Sheets 6 of 12.

Bars indicated thus 15 x3 - #4 etc. indicates 15 lines of bars with 3 lengths per line.



SECTION A-A



CROSS SECTION

(Looking South)

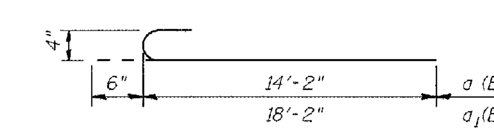
MIN. BAR LAP

#4 Bar = 1'-8"

BILL OF MATERIAL

Bar	No.	Size	Length (ft)	Shape
a(E)	117	#4	14'-8"	⊏
a_1(E)	117	#4	18'-8"	⊏
b(E)	102	#4	39'-8"	—

Item	Unit	Qty.
Reinforcement Bars, Epoxy Coated	Pound	5310
Concrete Wearing Surface, 5"	Sq. Yd.	425
Bridge Deck Grooving	Sq. Yd.	399
Protective Coat	Sq. Yd.	425



BAR a(E) & a_1(E)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

SCALE:
DRAWN BY RMH
DATE DEC 2007
CHECKED BY MJS

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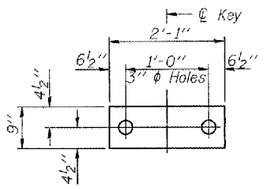
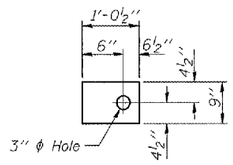
CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET 4 OF 12 SHEETS

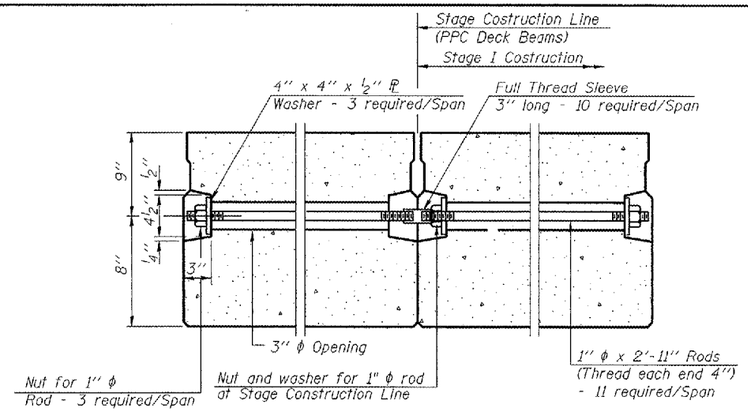


FABRIC BEARING PAD
(Interior)

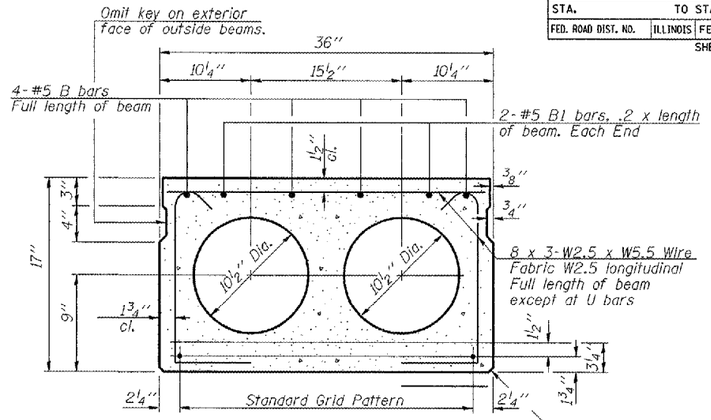


FABRIC BEARING PAD
(Exterior)

FIXED



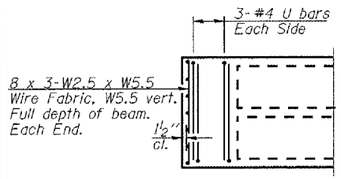
TYPICAL TRANSVERSE TIE ASSEMBLY
(Looking South)



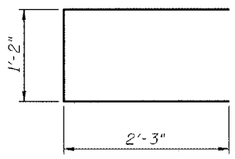
TYPICAL SECTION

13 - ½" ϕ Strands. Each Strand Stressed to 30,900 Lbs.
7-Strands 1¾" up, 4-Strands ¾" up, 2-Strands 12" up

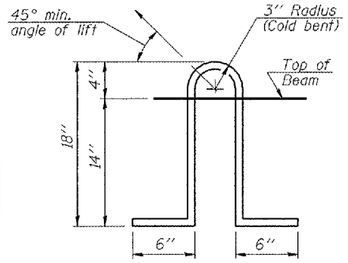
Note:
Place strands symmetrically about ℄ of beam.



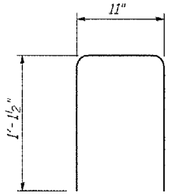
END PLAN



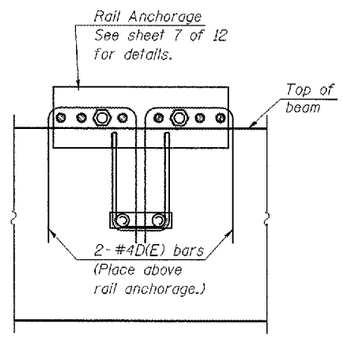
BAR U



LIFTING LOOP DETAIL

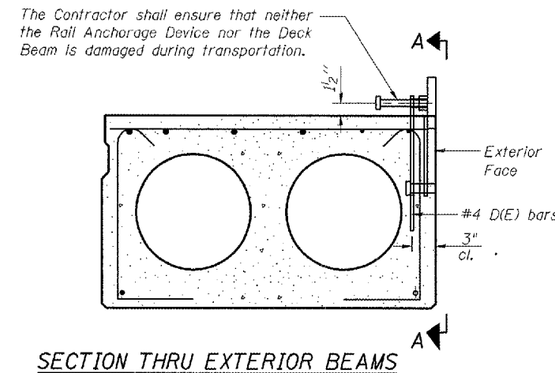


#4 D(E) BAR



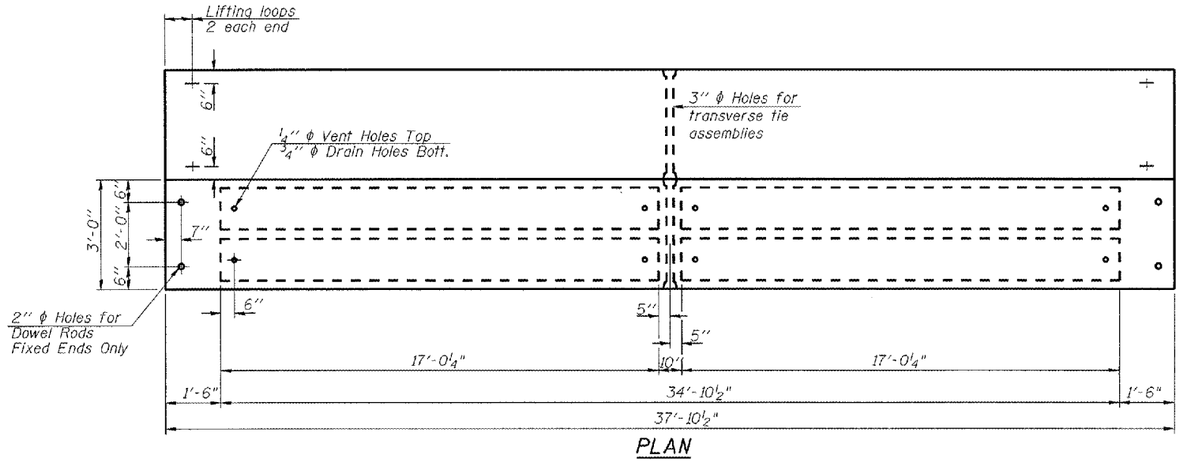
SECTION A-A

The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into beam. Drilling into the beam will not be permitted.



SECTION THRU EXTERIOR BEAMS

See Typical Secton for strand pattern, dimensions and bar locations.



PLAN

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Lifting loops shall be 2-½" ϕ-270 ksi strands, as shown.

The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Required Release Strength, f'ci, shall be 4,000 p.s.i.

See Sheet 6 and 7 of 12 for rail anchorage locations.

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms.	Sq. Ft.	2500

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK BEAM DETAILS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)1
McDONOUGH COUNTY STR. 055-0005

SCALE: DRAWN BY

DATE DEC 2007 CHECKED BY MJS

THE UPCHURCH GROUP, INC.

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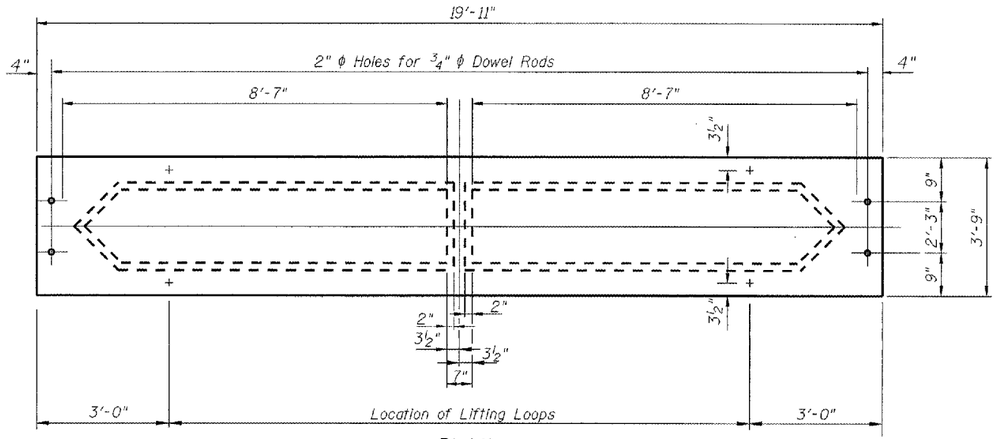
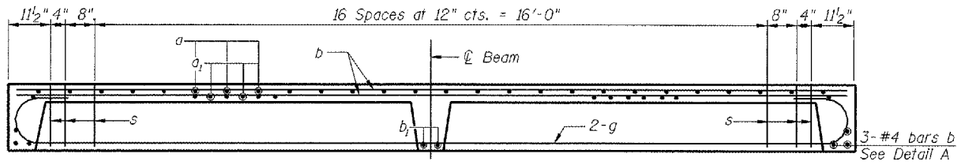
CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

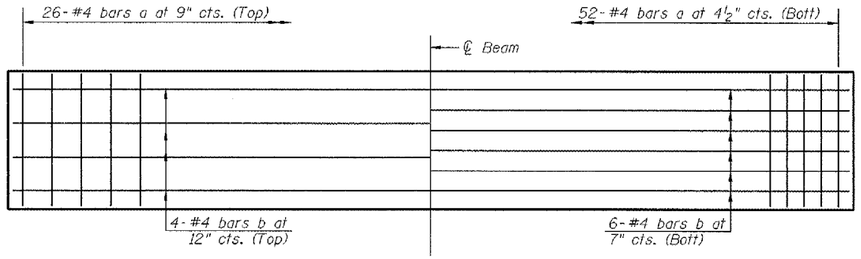
SHEET 5 OF 12 SHEETS



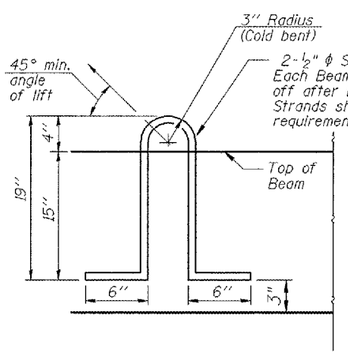
PLAN



LONGITUDINAL SECTION

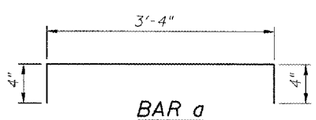


SLAB REINFORCEMENT



LIFTING LOOP DETAIL

Approved alternate may be substituted for the above.



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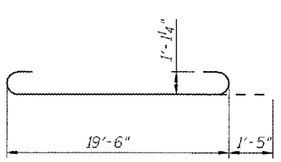

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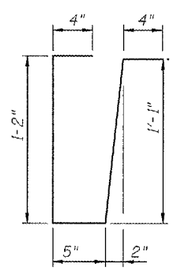
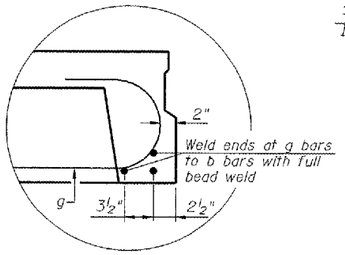


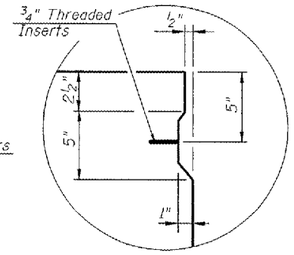
BAR s

Note: Space reinforcement to miss dowel rods.

Note: *Tack welding of stirrups to bottom longitudinal reinforcement bars will not be permitted except as otherwise authorized in writing by the Engineer.*



DETAIL A



KEY DETAIL

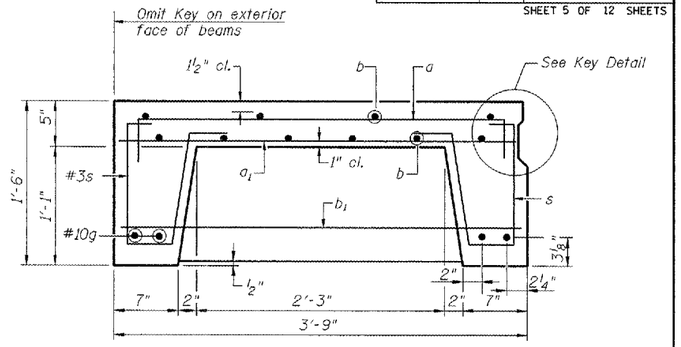
The surface of the member shall not deviate more than 1/1200 of the full length of the member on the member's surface. In addition to State Inspection and prior to erection, the beam shall be tested and approved by the resident Engineer at the jobsite.

The units shall remain on the bottom supporting forms until the concrete has attained a compressive strength of not less than 3,500 pounds per square inch.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛" fabric adjusting shims of the dimensions shown shall be provided for each bearing.

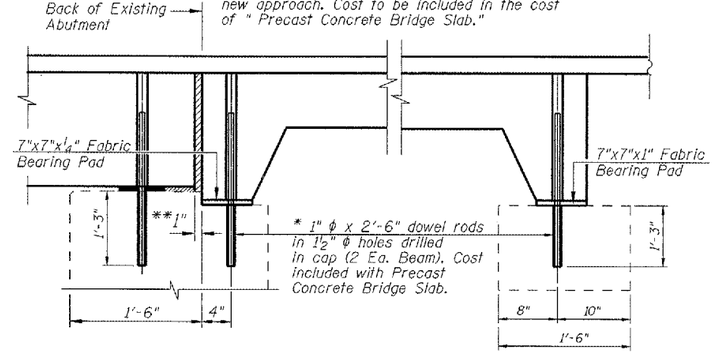
BEARING PADS

(1" - 8 Required)
(¼" - 8 Required)



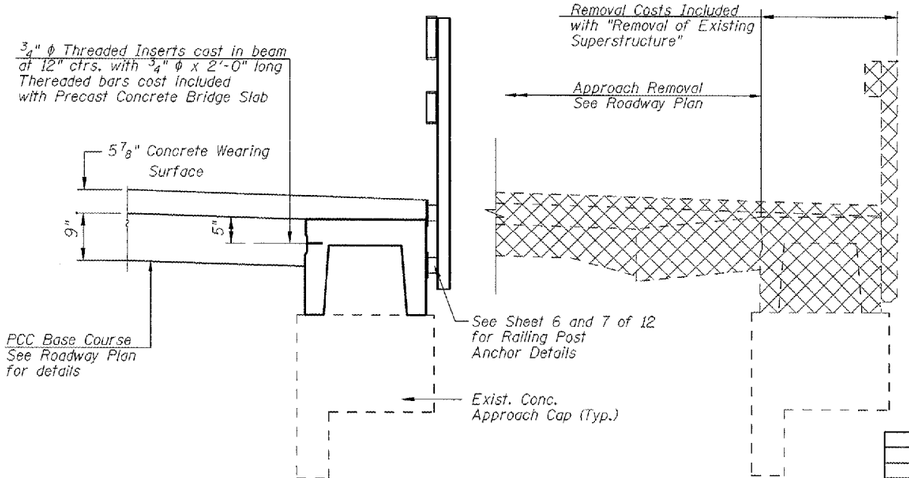
TYPICAL SECTION

**Existing Dowel Rods shall be cut of and ground flush with the top of the existing concrete. Cost to be included in the cost of "Removal of Existing Superstructures". New Zinc Coated Dowel Rods shall be grouted after beams are in place and allow to cure a minimum of 24 hours prior to pouring the new approach. Cost to be included in the cost of " Precast Concrete Bridge Slab."*



TYPICAL SECTION

** Joint shall be filled with non-shrink ground. Dimension may vary to accommodate tolerance in beam lengths.



TYPICAL APPROACH SECTION

TYPICAL APPROACH REMOVAL SECTION

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Concrete Bridge Slab	Sq. Ft.	299

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROACH DETAILS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

SCALE: N.T.S. DRAWN BY GEW
DATE DEC 2007 CHECKED BY MJS

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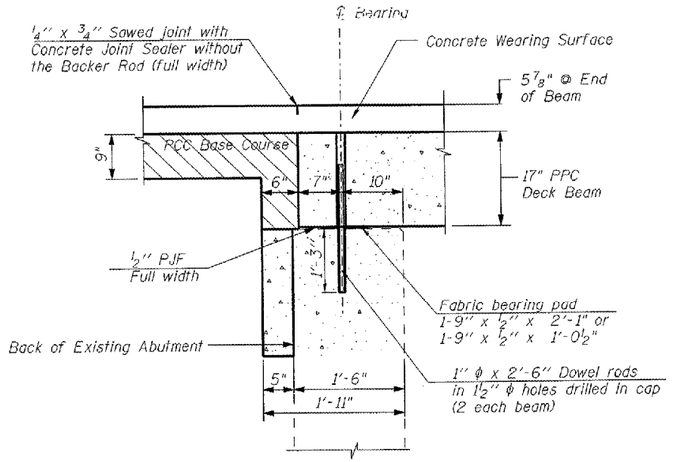
THE UPCHURCH GROUP, INC.

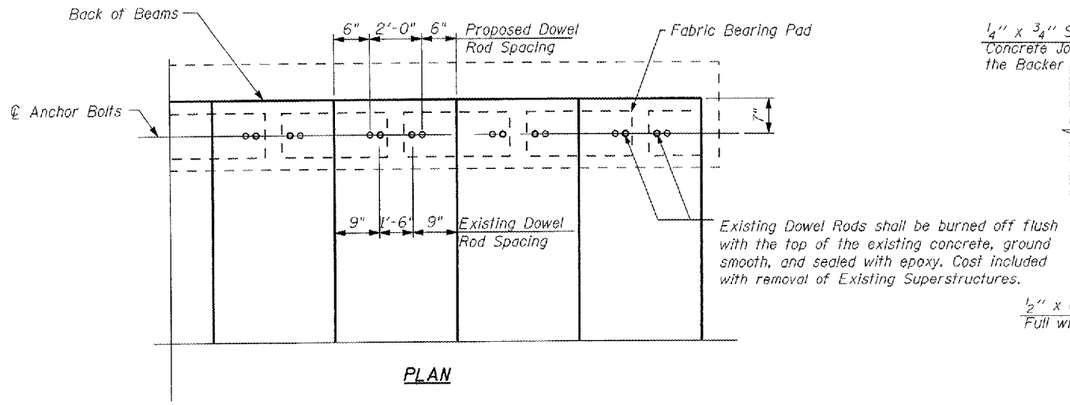
CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET 6 OF 12 SHEETS

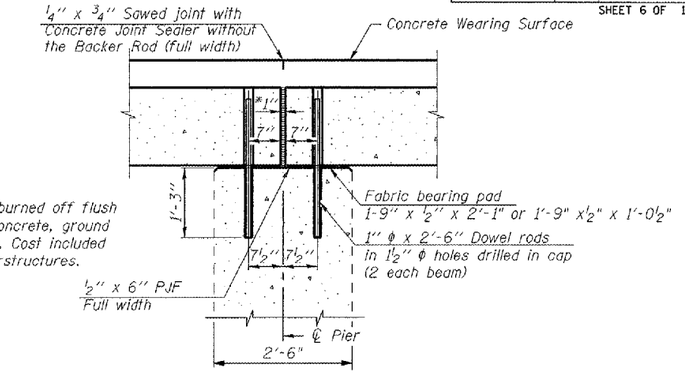


SECTION THRU ABUTMENTS



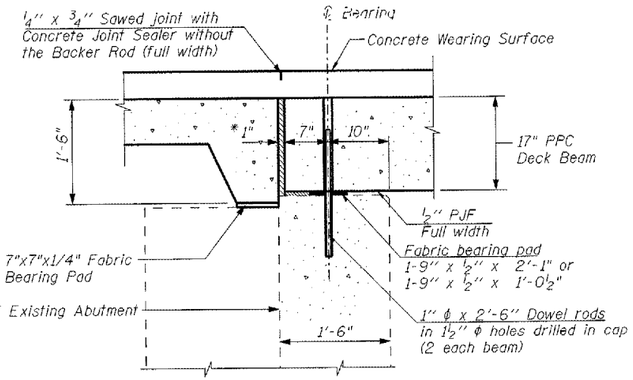
PLAN

DOWEL ROD SPACING



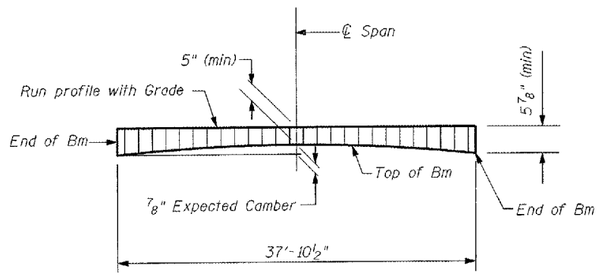
SECTION THRU EXISTING PIER

*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.



SECTION THRU ABUTMENTS

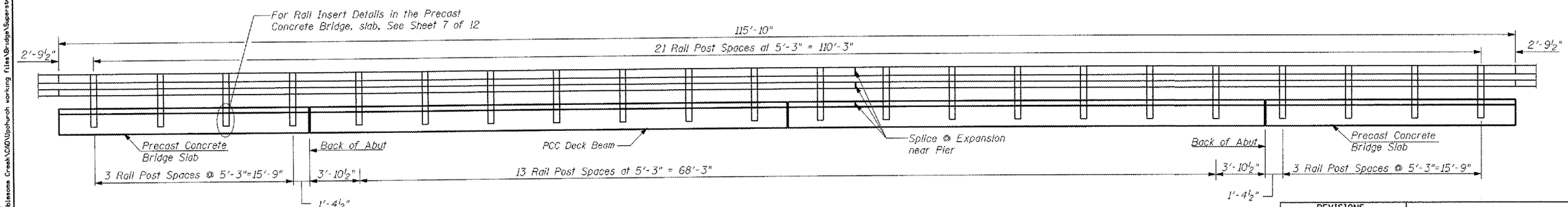
At outside beams



CAMBER DIAGRAM

Notes :
After beams have been erected, holes shall be drilled into substructure and zinc coated anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
All horizontal dimensions are at right angles to beam ends.

See sheet 4 of 12 for bearing pad details.



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

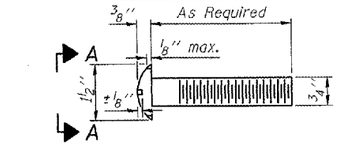
SCALE: N.T.S. DRAWN BY LP
DATE DEC 2007 CHECKED BY MJS

TUG PROJ.# = 3087812-01
PLOT DATE = 1/18/2008 9:26:53 AM
FILE NAME = P:\IDOT\Districts\Troublesome Creek\C540\Upchurch working files\Bridge\Superstrdetail.dgn

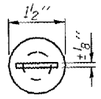
CONTRACT NO. 68692

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

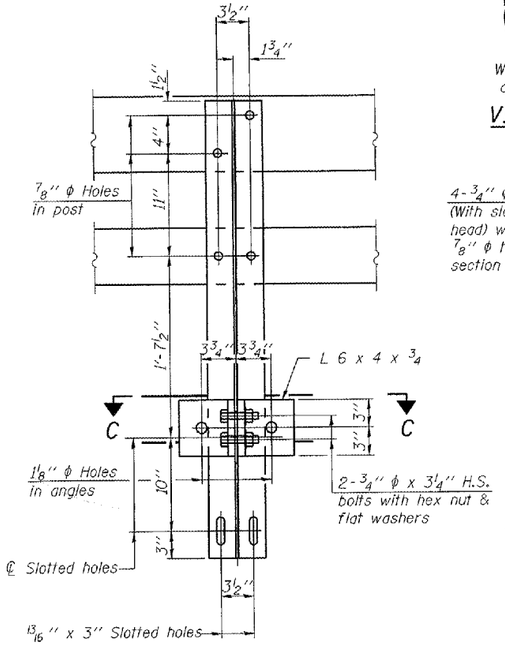
SHEET 7 OF 12 SHEETS



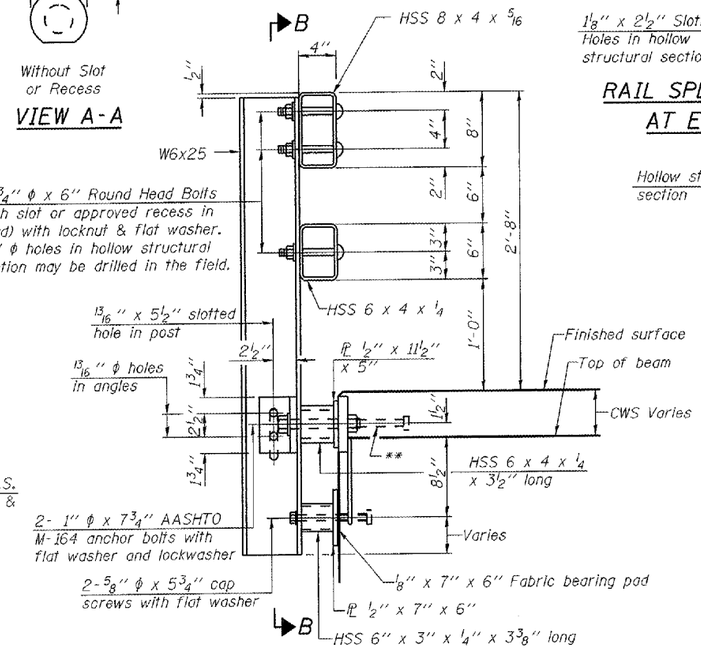
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



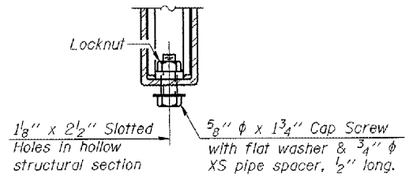
VIEW A-A



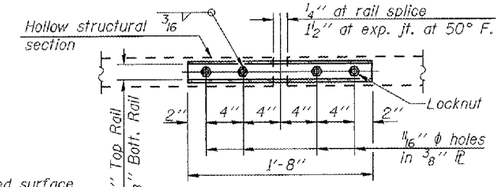
SECTION B-B



SECTION AT RAIL POST

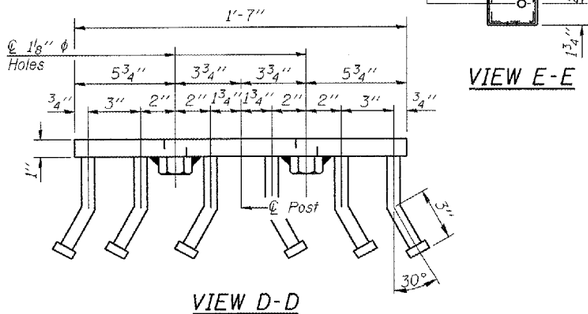


RAIL SPLICE CONNECTION AT EXPANSION JT.

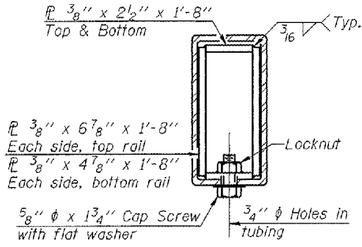


PLAN-BOTT. SPLICE PL TYPICAL

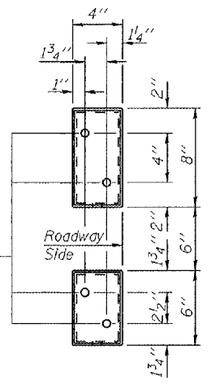
℄ - 5/8" reduced base welded studs. Provide 4 - 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032



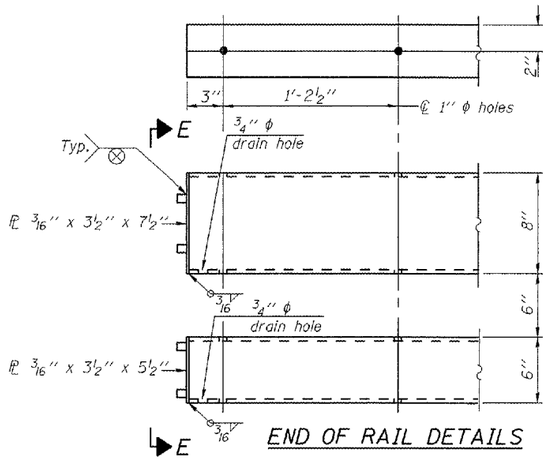
VIEW D-D



SECTION AT RAIL SPLICE

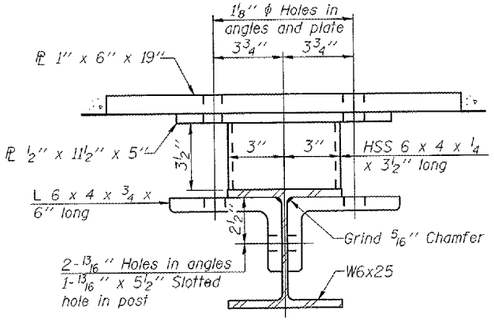


VIEW E-E

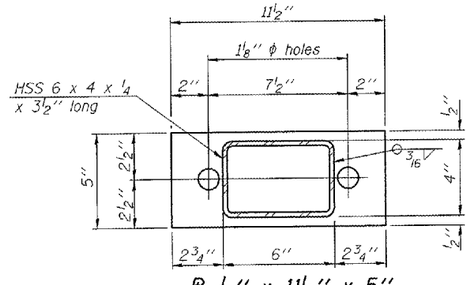


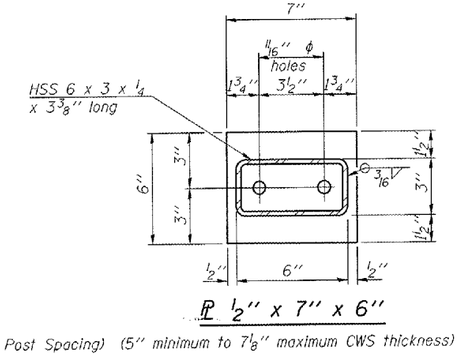
END OF RAIL DETAILS

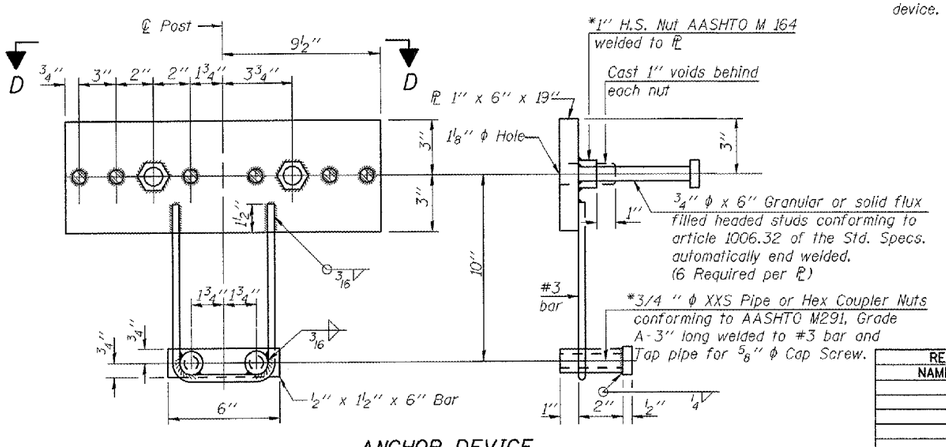
Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
**The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



SECTION C-C







ANCHOR DEVICE

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	232

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE SM
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

SCALE: N.T.S. DRAWN BY GEW
DATE DEC 2007 CHECKED BY MJS

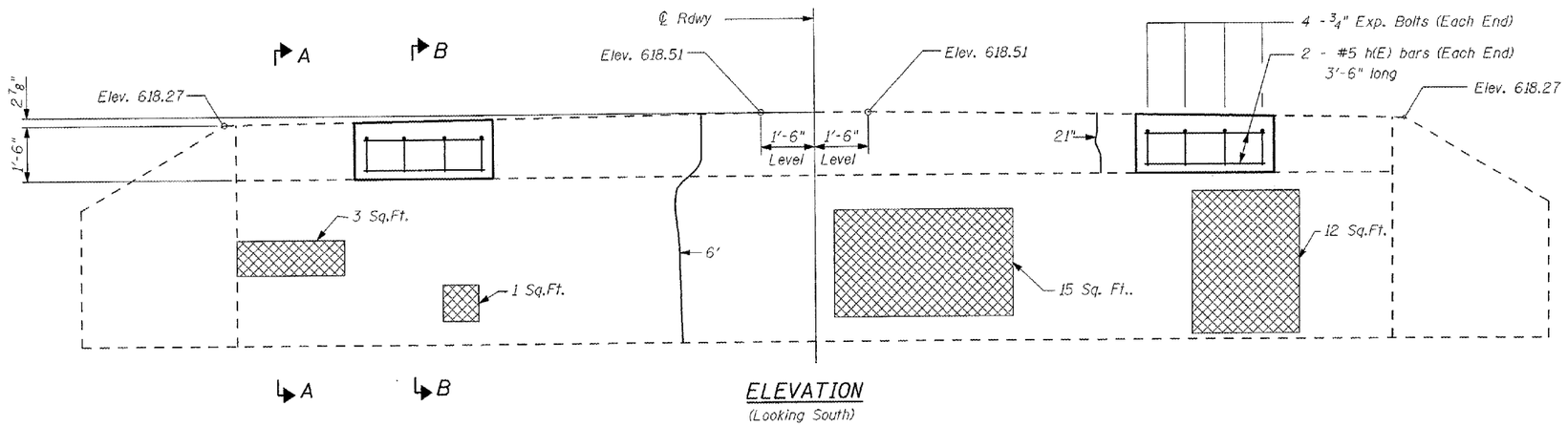
R-34CWS 9-3-07 (6'-3" Maximum Post Spacing) (5" minimum to 7 1/8" maximum CWS thickness)

PLOT SCALE = 2.0000 / IN. PLOT DATE = 1/16/2008 FILE NAME = P:\IDOT\District4\Troublesome Creek\CAD\Upchurch working Files\Bridge\SteelRailing.dgn

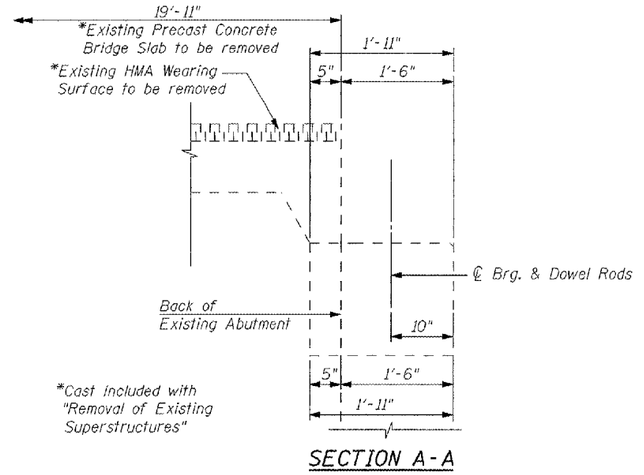
CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

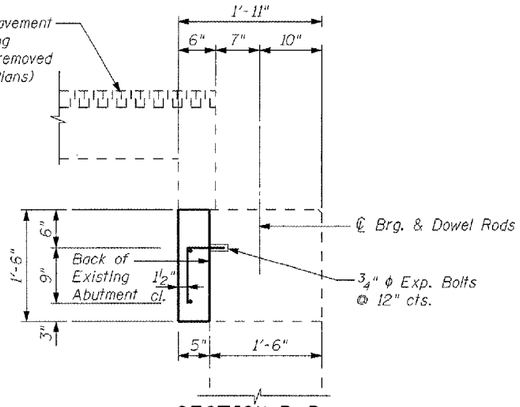
SHEET 8 OF 12 SHEETS



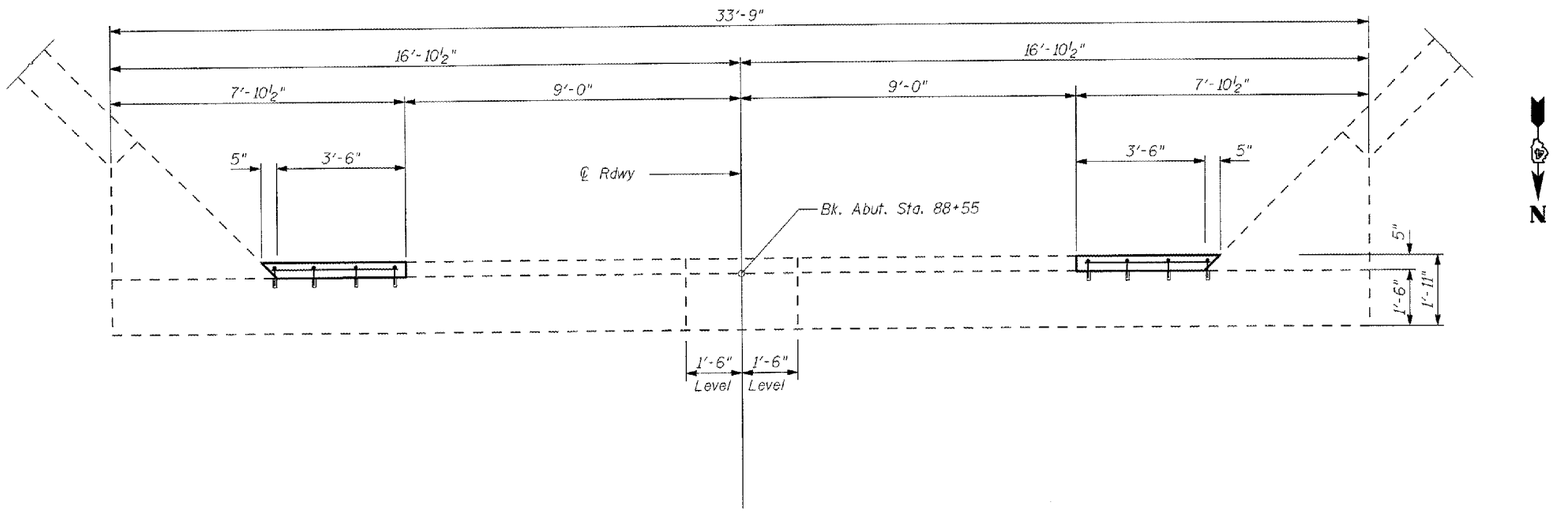
ELEVATION
(Looking South)



SECTION A-A



SECTION B-B



PLAN

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	0.2
Reinforcement Bars, Epoxy Coated	Pound	15
Expansion Bolts ¾" ϕ	Each	8
Epoxy Crack Injection	Foot	8
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	31

LEGEND

Structural repair of Concrete (Depth equal to or less than 5")

± 5' — Epoxy Crack Injection (Crack widths shown are approx. 1/16" to 1/8" in width)

H.L. — Hairline Crack (not to be sealed)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

SCALE: DRAWN BY RMH

DATE DEC 2007 CHECKED BY MJS

TUS PROJ.# = 3107R12-01
PLOT DATE = 1/18/2008 9:11:28 AM
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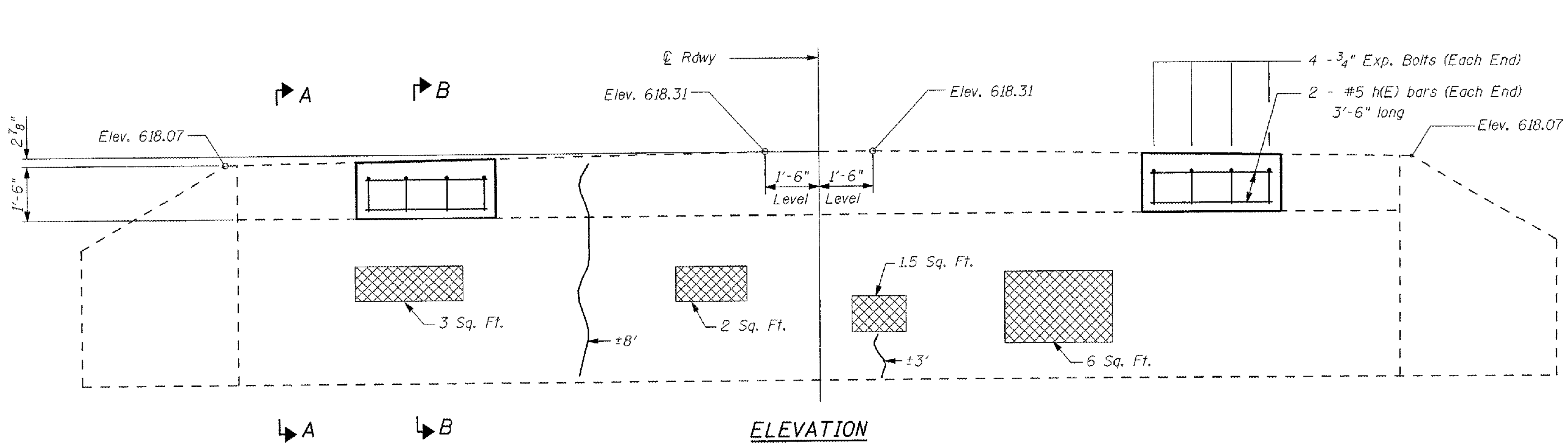
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	18

CONTRACT NO. 68692

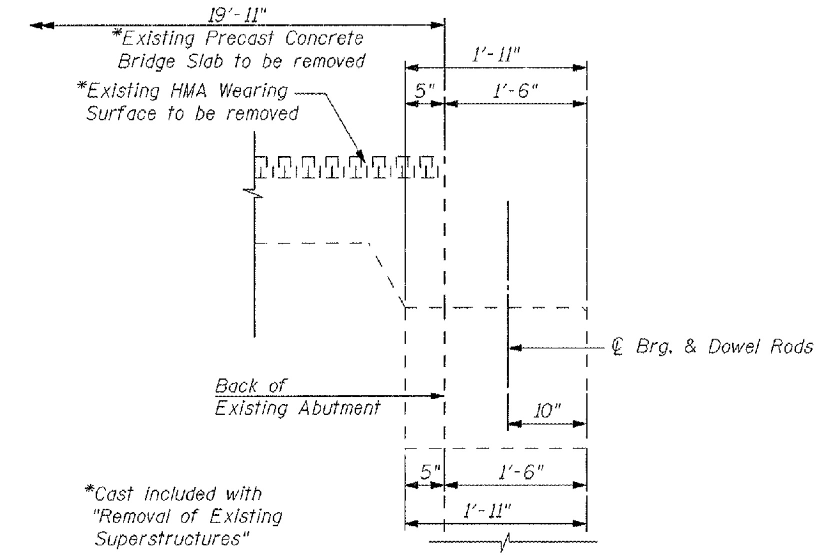
STA. TO STA.

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

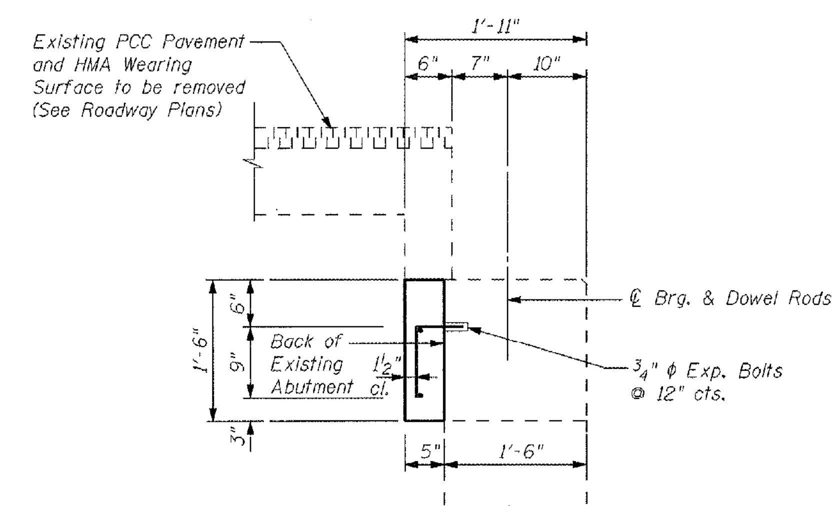
SHEET 9 OF 12 SHEETS



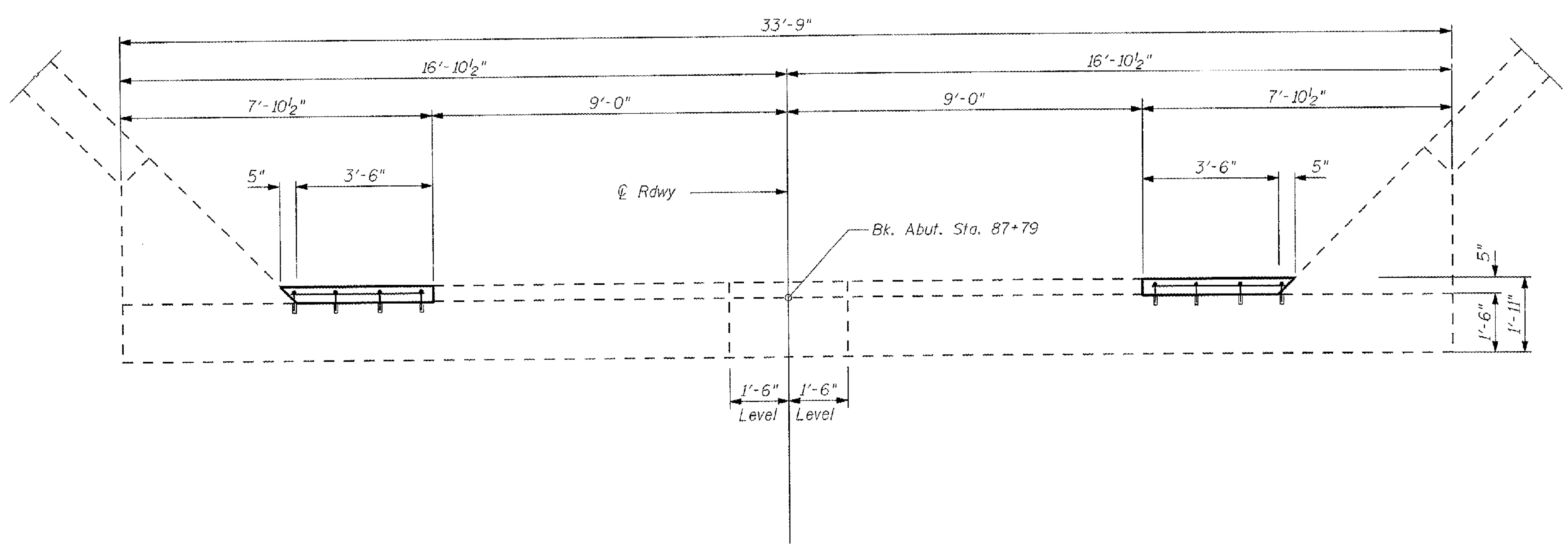
ELEVATION
(Looking North)



SECTION A-A



SECTION B-B



PLAN

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	0.2
Reinforcement Bars, Epoxy Coated	Pound	15
Expansion Bolts ¾" ϕ	Each	8
Epoxy Crack Injection	Foot	11
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	13

LEGEND

Structural repair of Concrete (Depth equal to or less than 5")

± 5' — Epoxy Crack Injection (Crack widths shown are approx. $\frac{1}{16}$" to $\frac{1}{8}$" in width)

H.L. — Hairline Crack (not to be sealed)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

SCALE: DRAWN BY RMH

DATE DEC 2007 CHECKED BY MJS

UG PROJ. = 3107012-01
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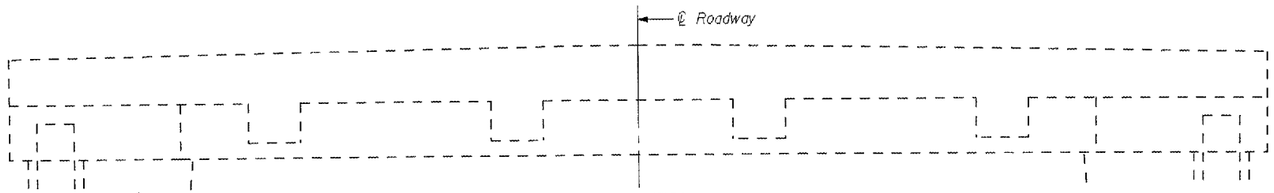
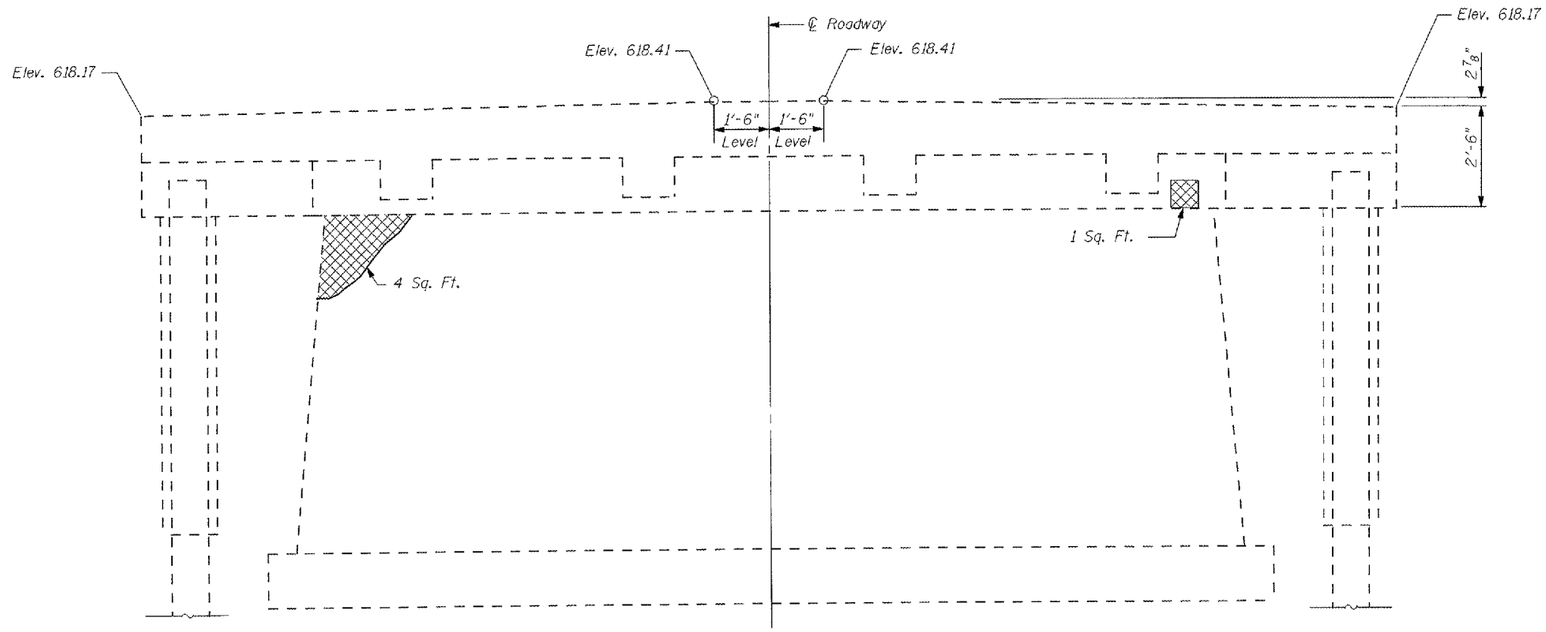
CONTRACT NO. 68692

F.A.P.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	19
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

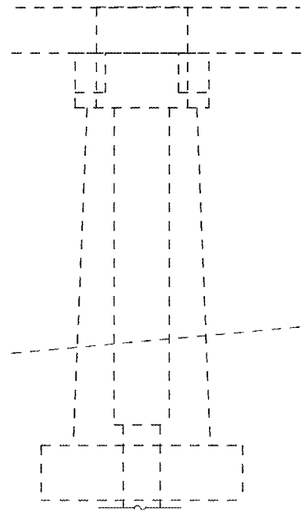
SHEET 10 OF 12 SHEETS



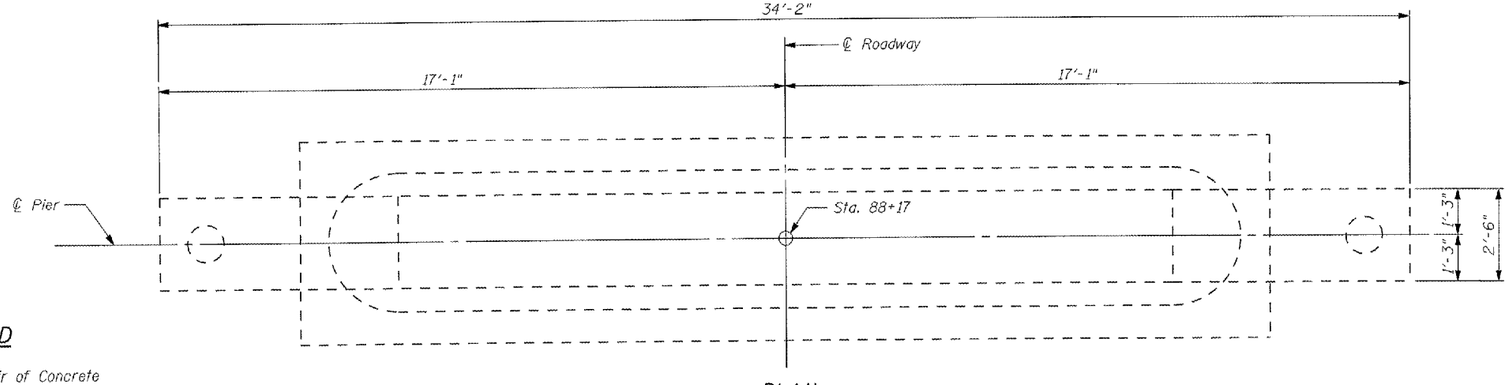
ELEVATION
(North Face)



ELEVATION
(South Face)



ELEVATION
(Side View)



PLAN

LEGEND

Structural repair of Concrete (Depth equal to or less than 5")

± 5' — Epoxy Crack Injection (Crack widths shown are approx. 1/16" to 1/8" in width)

H.L. — Hairline Crack (not to be sealed)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	5

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER DETAILS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

SCALE: N.T.S. DRAWN BY RMH
DATE DEC 2007 CHECKED BY MJS

THE UPCHURCH GROUP INC.

TUG PROJ.# = 307812-08
PLOT DATE = 1/18/2008 9:11:07 AM
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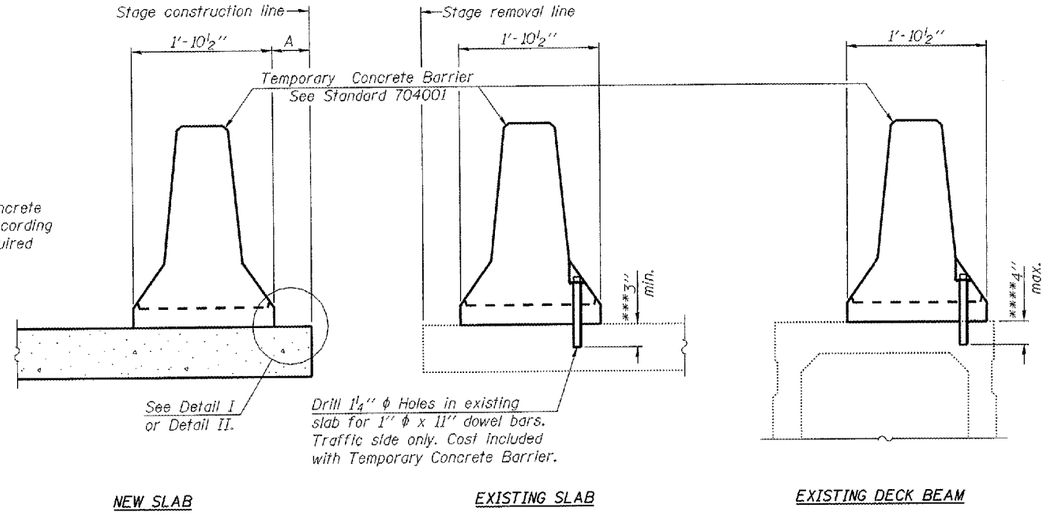
CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	20
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET 11 OF 12 SHEETS

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB EXISTING SLAB EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

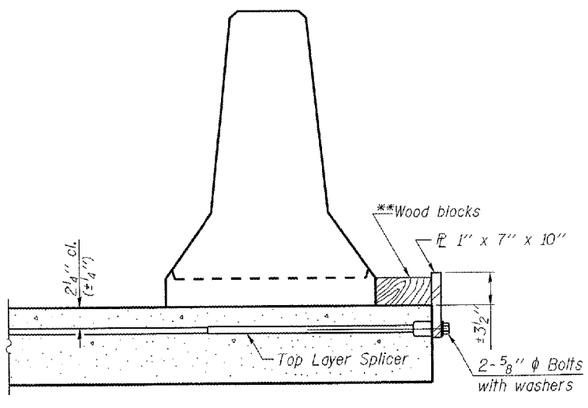
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

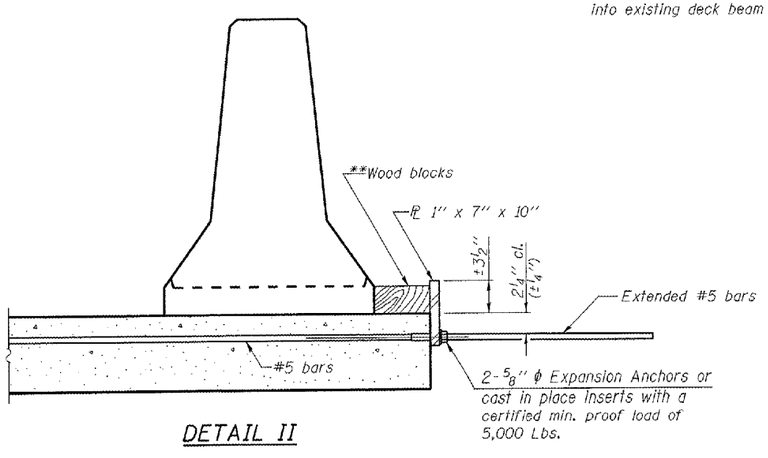
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

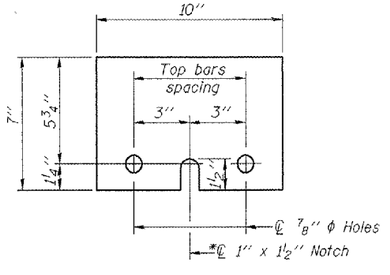


DETAIL I



DETAIL II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER ℙ 1" x 7" x 10"

* Required only with Detail II

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

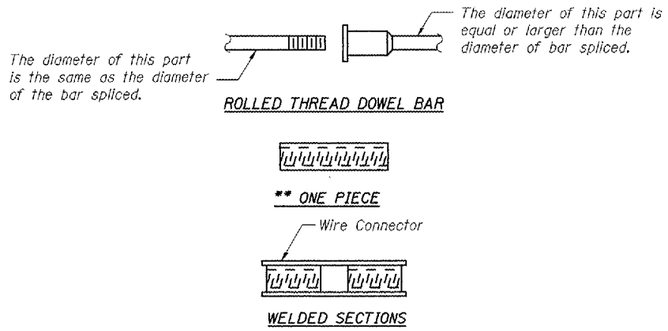
SCALE: N.T.S. DRAWN BY GEW
DATE DEC 2007 CHECKED BY MJS

9-3-07

CONTRACT NO. 68692

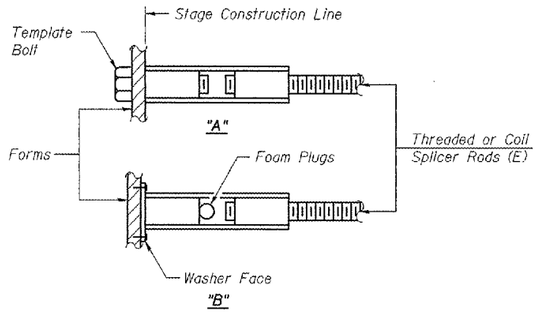
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET 12 OF 12 SHEETS



BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

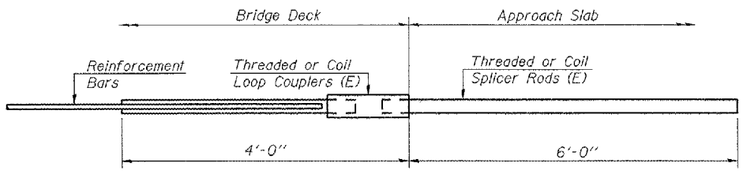
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times fy \times A_t$

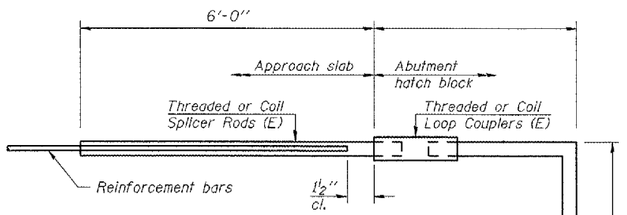
Where fy = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



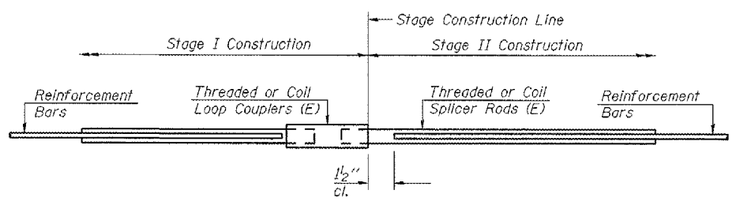
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



STANDARD

Bar Size	No. Assemblies Required	Location Concrete
#4	117	Wearing Surface

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY STR. 055-0005

SCALE: N.T.S. DRAWN BY GEW
DATE DEC 2007 CHECKED BY MJS

TUG PROJ.# = 3187B12-01
PLOT DATE = 1/18/2008 10:44:21 AM
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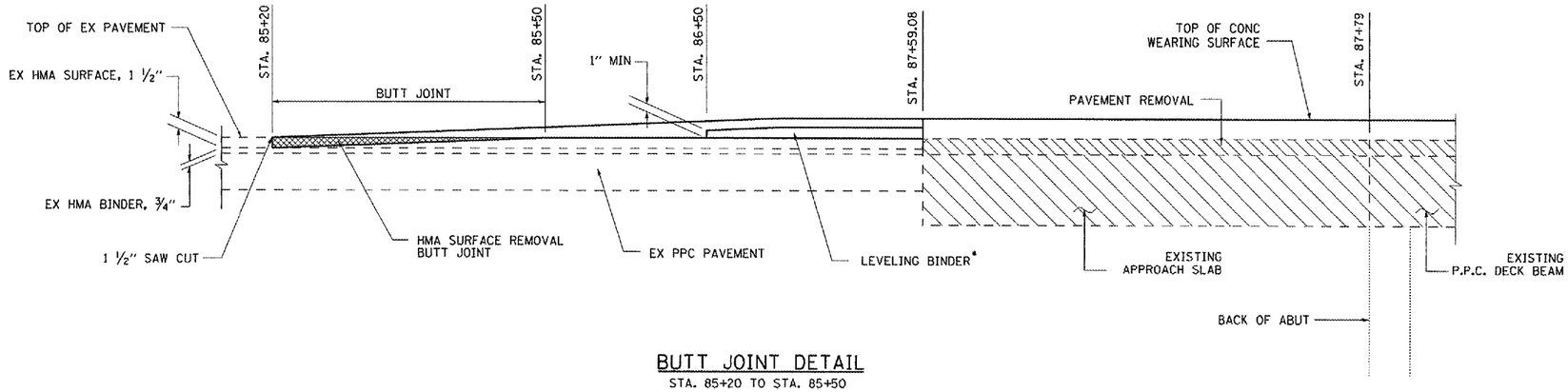
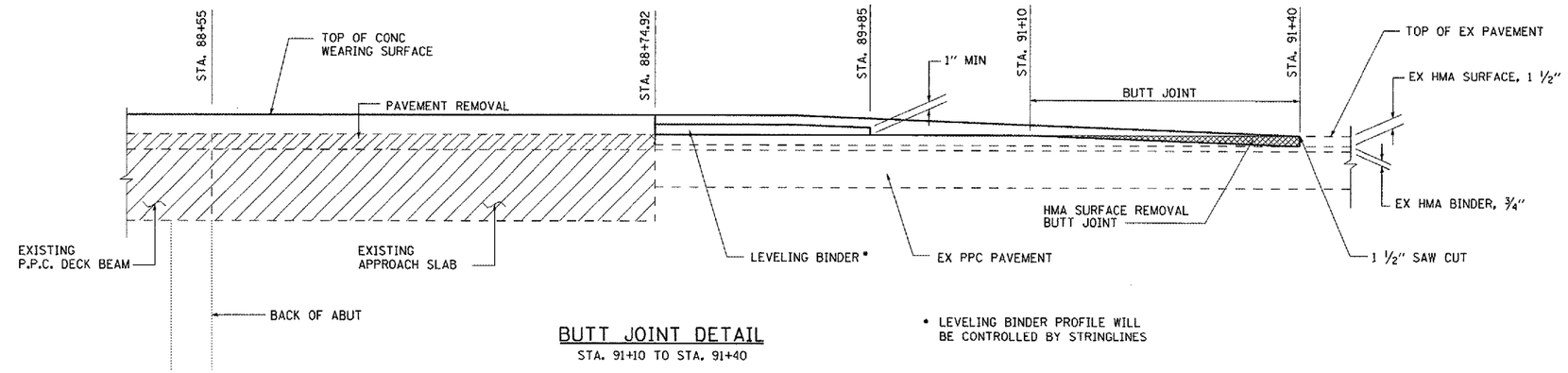
THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)I	McDONOUGH	38	22
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

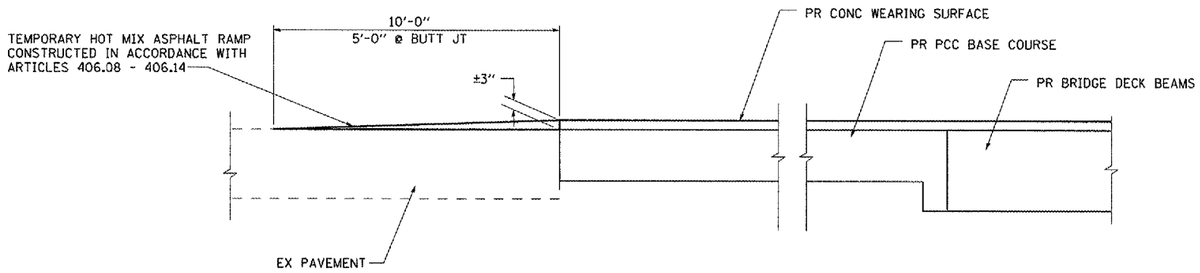


BUTT JOINT DETAIL
STA. 85+20 TO STA. 85+50



BUTT JOINT DETAIL
STA. 91+10 TO STA. 91+40

* LEVELING BINDER PROFILE WILL BE CONTROLLED BY STRINGLINES



TEMPORARY RAMP DETAIL

STA. 85+20 TO STA. 85+25
STA. 87+49 TO STA. 87+59
STA. 88+75 TO STA. 88+85
STA. 91+35 TO STA. 91+40

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS
US 67 OVER TROUBLESOME CREEK
FAP 310 SECTION (39B)I
McDONOUGH COUNTY

SCALE: VERT. NTS HORIZ.
DRAWN BY AGG
DATE DEC 2007
CHECKED BY MJS

TUG PROJ.# 3187812-B1
PLOT DATE = 1/22/2008 10:45:00 AM
FILE NAME = P:\DOT\Illinois\T-troublesome Creek\CAD\Upchurch working files\B\details.sht

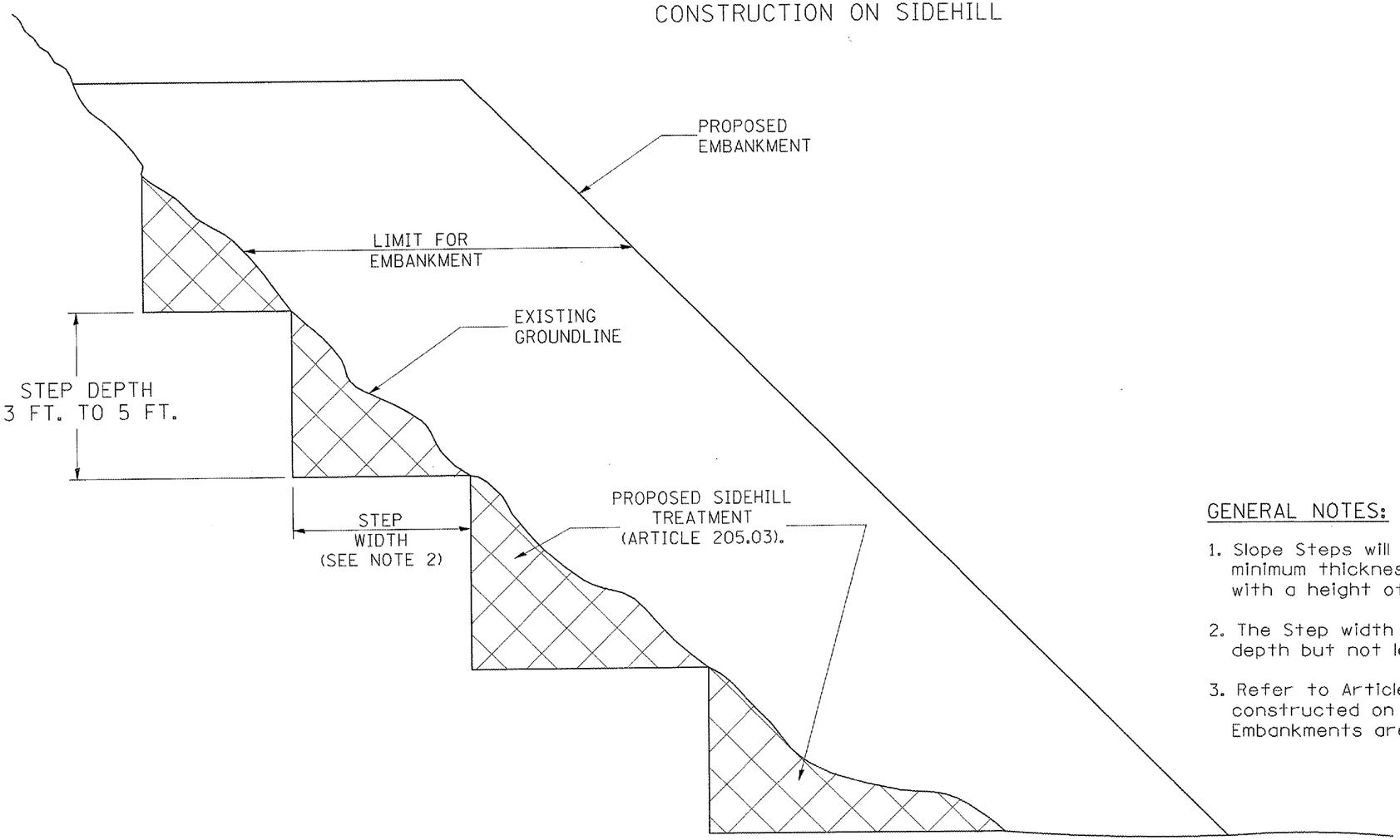
THE UPCHURCH GROUP, INC.

CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-BJ)	McDONOUGH	38	23
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



DESIGNER NOTE:
1. EACH PROJECT SHOULD BE REVIEWED INDEPENDENTLY FOR TREATMENT REQUIRED.
2. REFER TO THIS DETAIL WITH NOTE ON APPLICABLE TYPICAL SECTIONS.

GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT (IN ACCORDANCE WITH 205 OF THE STANDARD SPECIFACATION).

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE BOX, REVISED GENERAL NOTES.	T.P.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

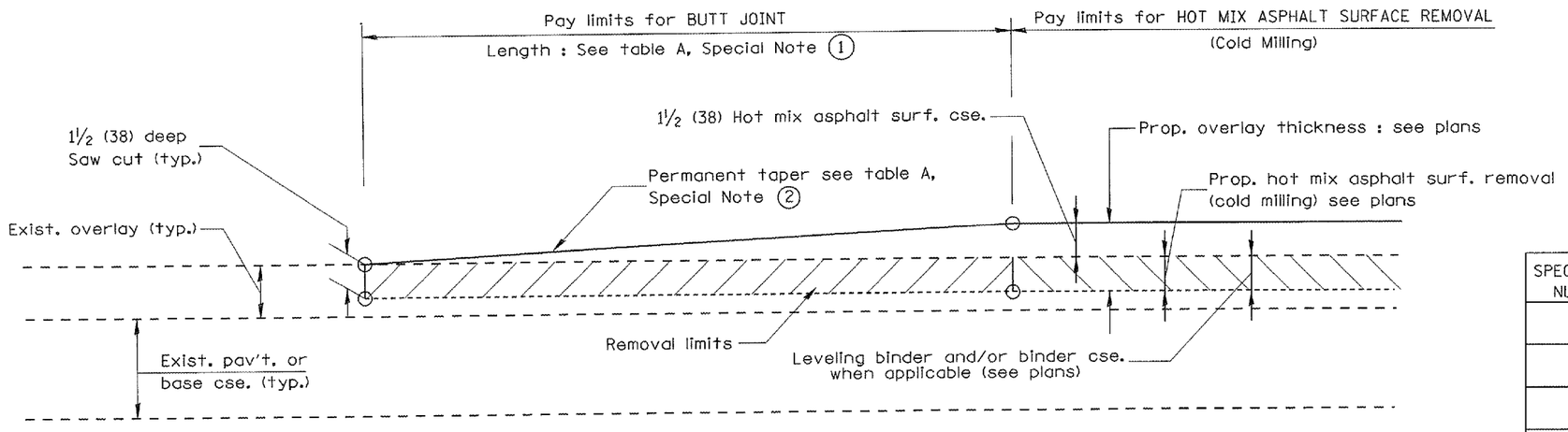
SLOPE STEPS DETAIL

CADD STD. NO. 205001-D4
SCALE: NOT DRAWN TO SCALE
DRAWN BY CADD
CHECKED BY

205001-D4

CONTRACT NO. 6869

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	24
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

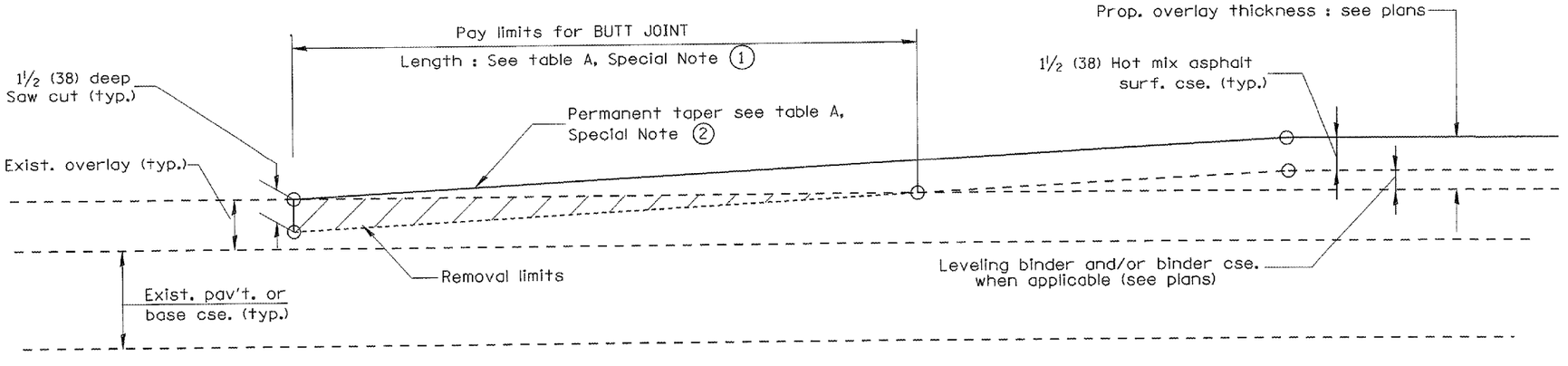
TABLE A
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
(2)	PERMANENT TAPER RATE	1:480	1:240
(3)	TEMPORARY RAMP TAPER RATE	1:80	1:40
(4)	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
(5)	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.

DESIGNER NOTES:
1. Include District Special Provision for Butt Joints & for Hot Mix Asphalt Removal (Cold Milling).
2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Hot Mix Asphalt Removal (Cold Milling).



CASE 2 : NO HOT MIX ASHALT SURFACE REMOVAL (COLD MILLING)

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
4-1-97	CORRECTION TO DEPTH	J.A.
9-15-05	REVISED DESIGNER NOTE	M.M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

BUTT JOINTS

CADD STD NO. 406101-D4 SHEET 1 OF 3

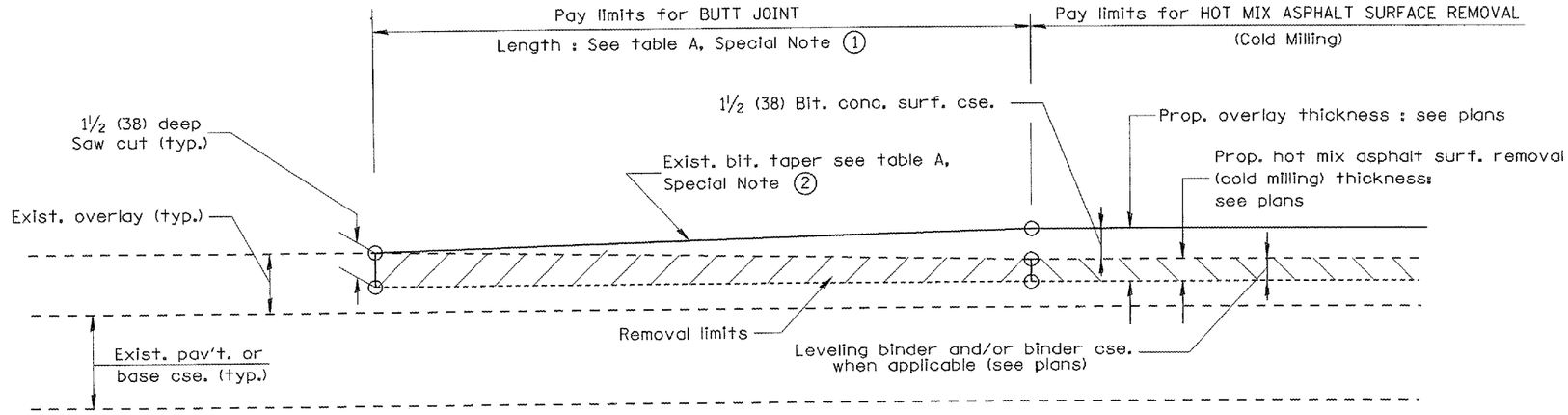
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

DATE CHECKED BY

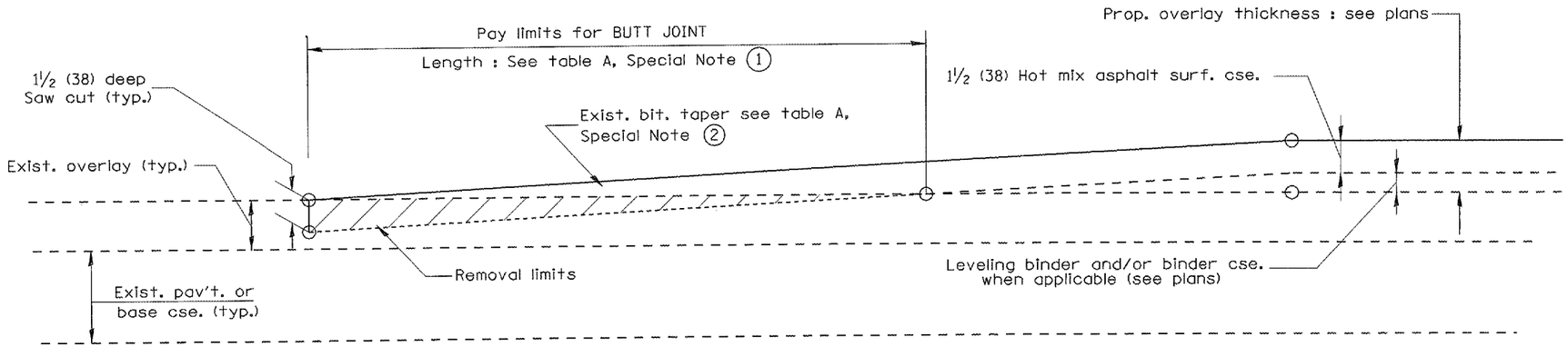
406101-D4 (1)

CONTRACT NO. 68692

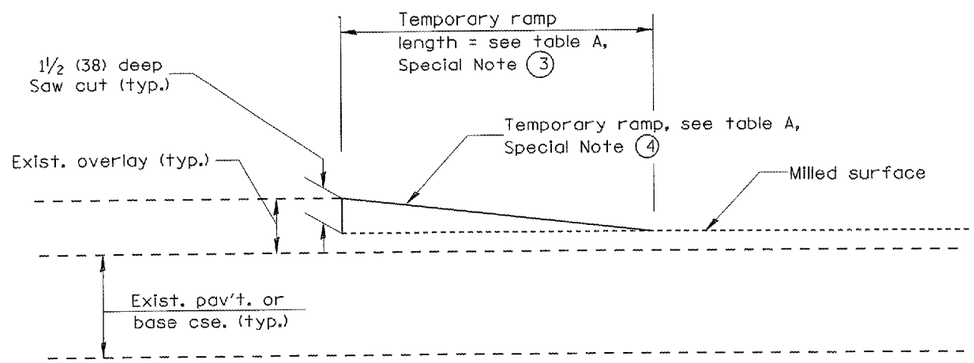
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 3 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

BUTT JOINTS

CADD STD NO. 406101-D4 SHEET 2 OF 3

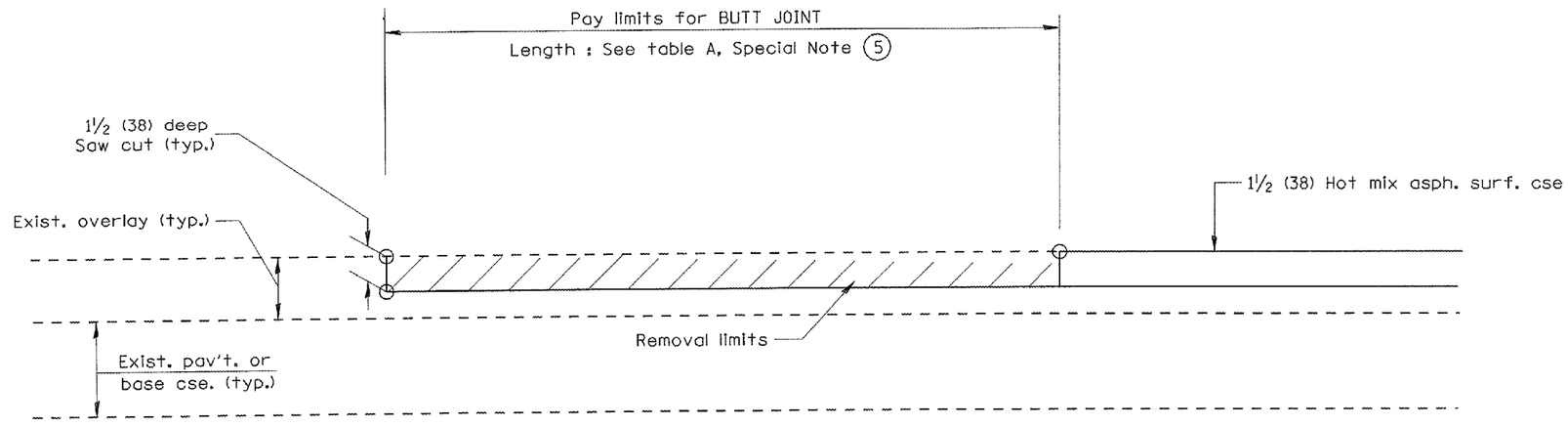
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

CHECKED BY

406101-D4 (2)

CONTRACT NO. 6869

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	26
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

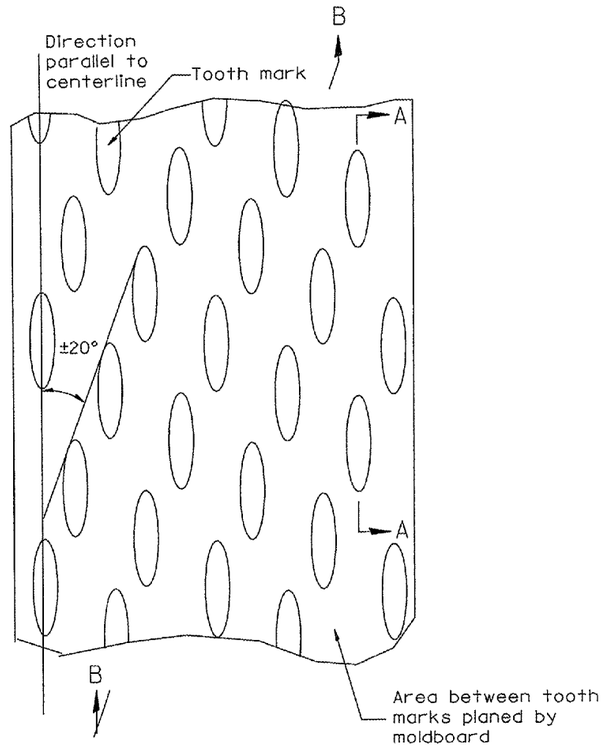
BUTT JOINTS

CADD STD NO. 406101-D4 SHEET 3 OF 3
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD
CHECKED BY

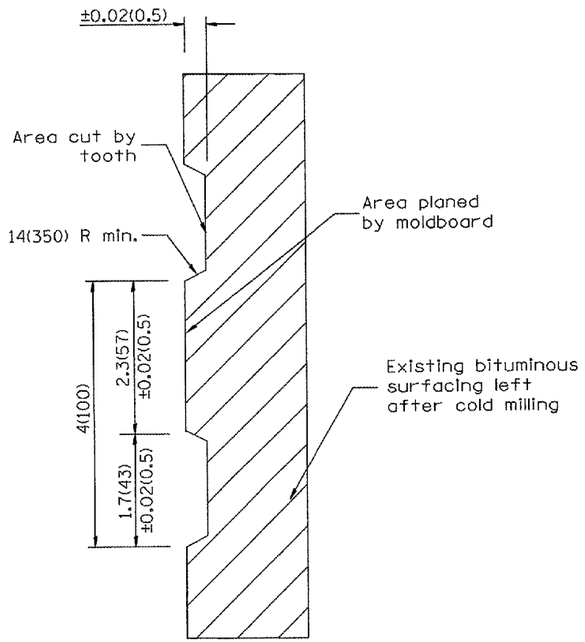
406101-D4 (3

CONTRACT NO. 6869

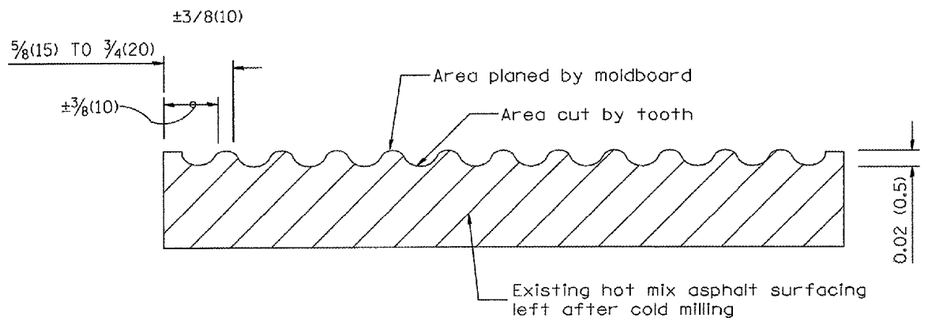
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	27
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN



SECTION A-A



SECTION B-B PROJECTED
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

DESIGNER NOTE
1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1- 1-97	RENUM. C-104.01, NEW REVISION BOX	T. P.
4-20-98	REMOVED MILLING DETAIL FROM STD.	J. A.
9-08-98	CORRECT NOTE LEADER PLACEMENT	R. W.
10-16-06	REVISED TO 200T SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

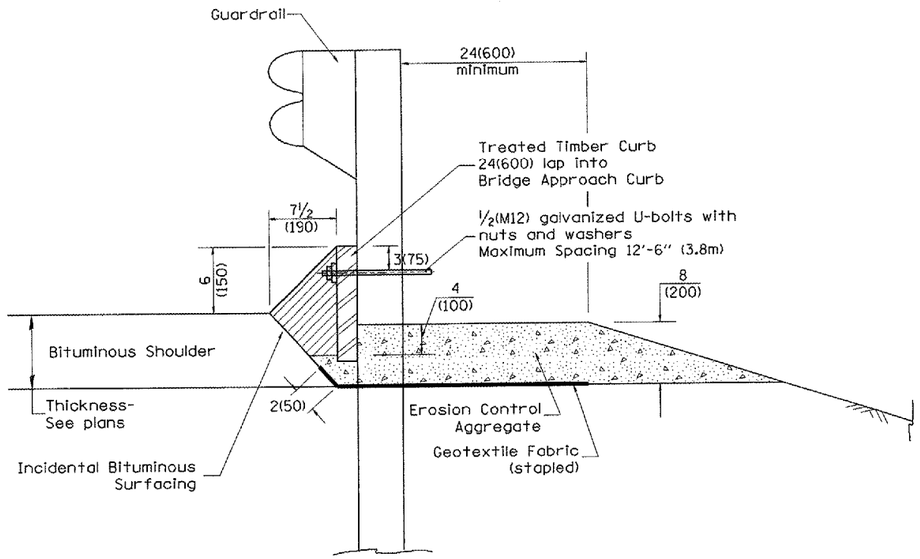
CADD STD NO. 440001-D4

SCALE: NOT DRAWN TO SCALE — DRAWN BY CADD

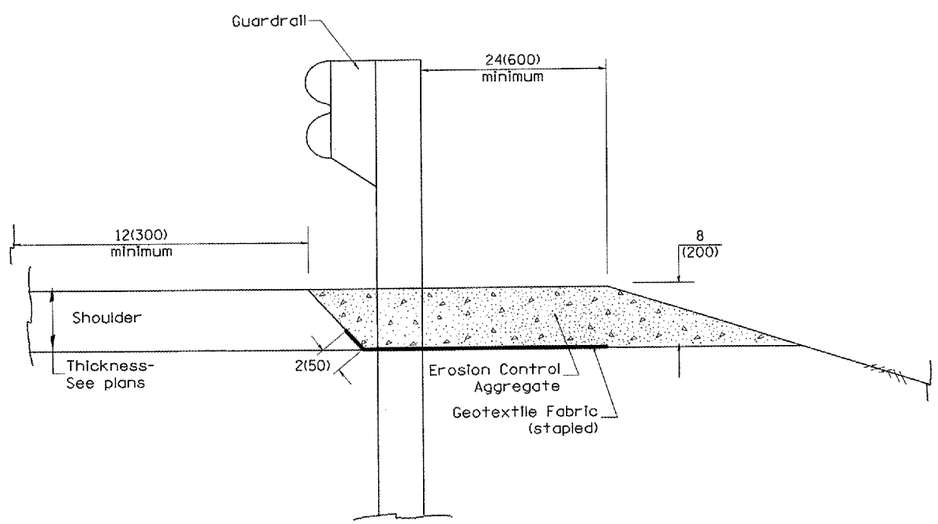
DATE — CHECKED BY

CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	28
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: EROSION CONTROL CURB

1. This work shall consist of grading as needed, installing hardware and treated timber boards, furnishing and placing mastic material and incidental bituminous surfacing in front of Steel Plate Beam Guardrail in accordance with Plan Details.

2. Timber shall be treated in accordance with Article 1007.12. All preservatives specified in the article will be allowed. Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu. ft. (6.4 kg/m³)

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

DESIGNER NOTE:
1. Use EROSION CONTROL CURB at guardrail installations where grades are equal to or greater than 1% and at inlets. (Include District Special Provision)
2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1% (Include District Special Provision)
3. Include State Standards 609001, 609006 or 610001 if applicable.
4. Include the following District Cadd Standards as needed: Slope Drains for Exposed Pipes; Seepage Collars for Buried Pipes; Seepage Collars for Exposed Pipes; Concrete Thrust Blocks and Pipe Elbow.
5. Include District Special Provision -"Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. C-22.01, NEW REVISION BOX	T.P.
3-1-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.
11-3-00	CORRECTION TO NOTES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL EROSION CONTROL TREATMENTS

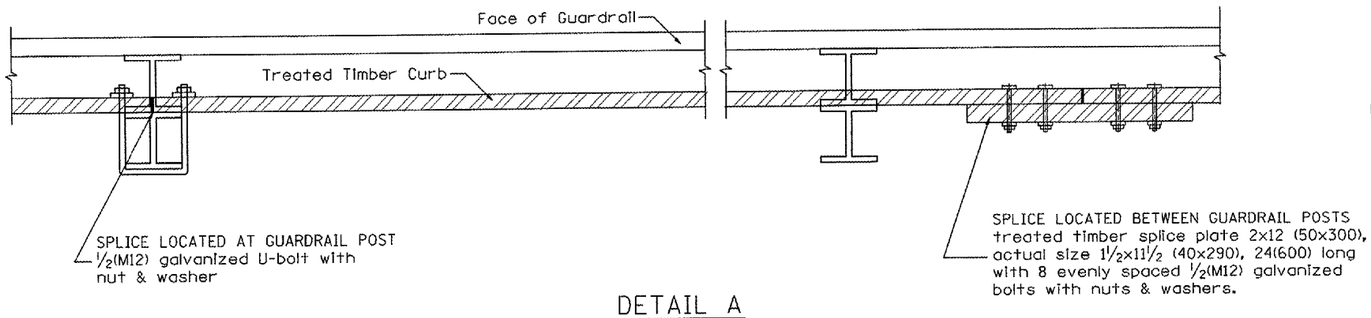
CADD STD NO. 630101-D4(1)
SCALE: NOT DRAWN TO SCALE

SHEET 1 OF 2
DRAWN BY CADD
CHECKED BY

630101-D4(1)

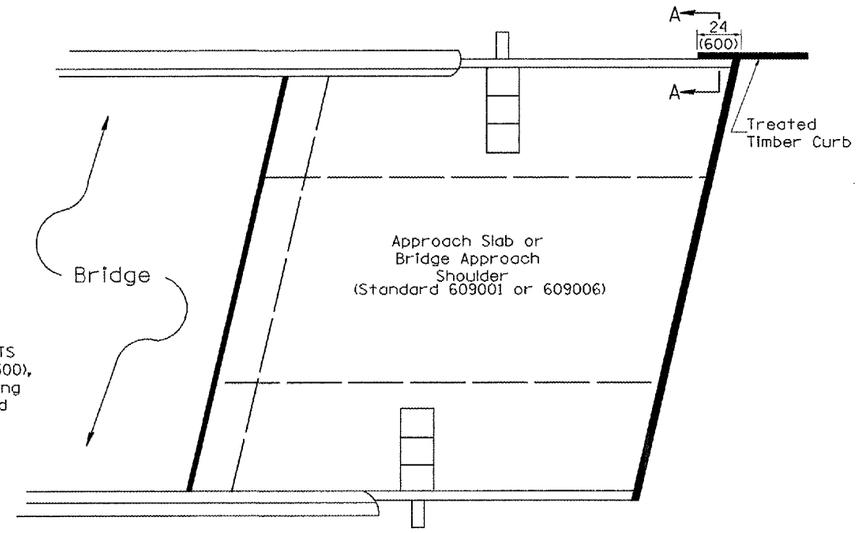
CONTRACT NO. 6869

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	29
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



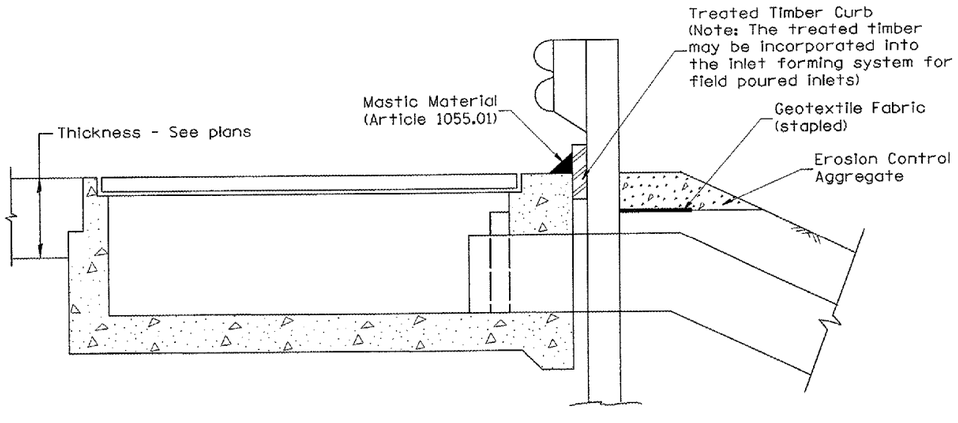
DETAIL A

(Typical Treated Timber Splices)

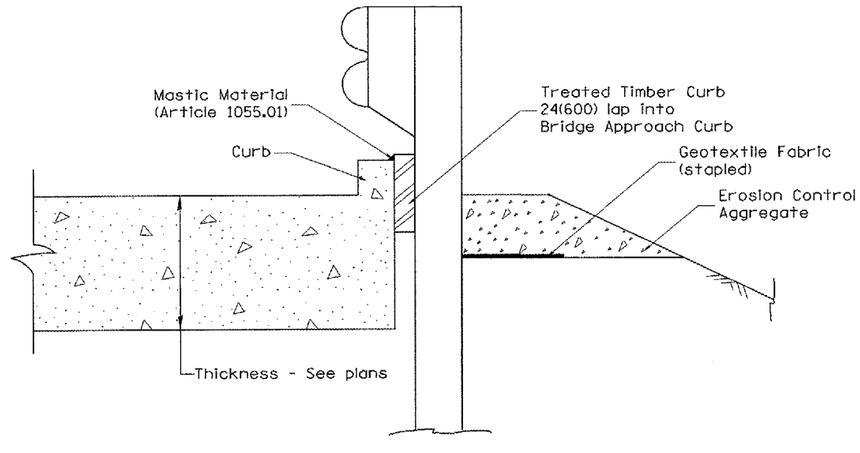


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION WITH EROSION CONTROL CURB
AT INLETS TYPE E & F (STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH EROSION CONTROL CURB
AT BRIDGE APPROACH CURB
(STANDARD 609001 OR 609006)

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL EROSION
CONTROL TREATMENTS

CADD STD NO. 630101-D4(2)

SCALE: NOT DRAWN TO SCALE

SHEET 2 OF 2

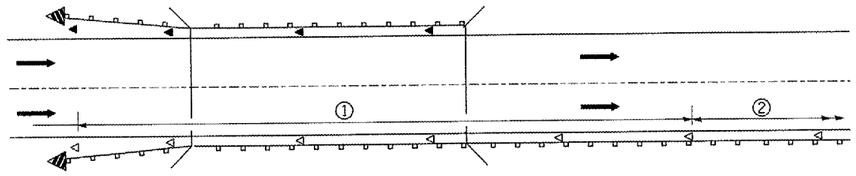
DRAWN BY CADD

CHECKED BY

630101-D4(2

CONTRACT NO. 68692

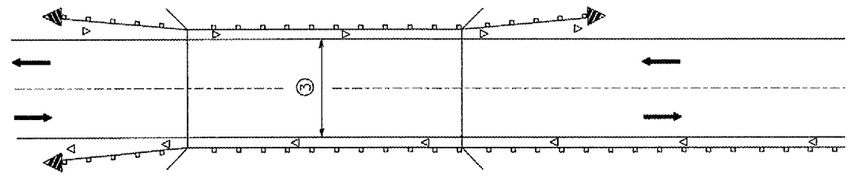
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)1	McDONOUGH	38	30
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



① Spacing 80 ft. (24 m) max. for first 400 ft. (122 m) or curve spacing shown in Standard 635001, whichever is less (min. 4 reflectors regardless of length).

② After 400 ft. (122 m), transition to normal delineator spacing shown in Standard 635001, and continue as required.

ONE-WAY TRAFFIC



③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the bridge pavement is less than 24 (610) wider than the pavement approaching the bridge.

TWO-WAY TRAFFIC

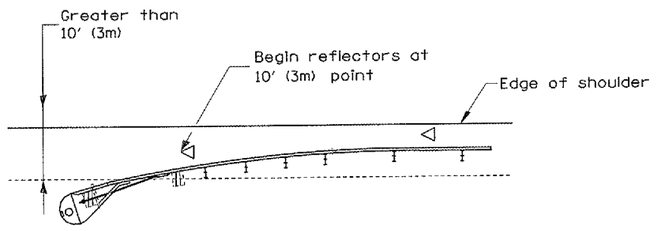
GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS

LEGEND

◁ Monodirectional silver

◀ Monodirectional amber

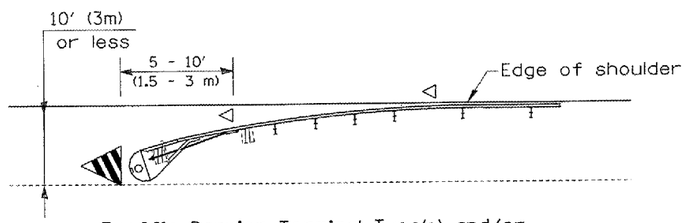
Terminal Marker - Black/Yellow Left or Right as appropriate



NOTE: Omit terminal marker when terminal over 10' (3m) from edge of paved shoulder or break point of unpaved shoulder, or when terminal buried in backslope.

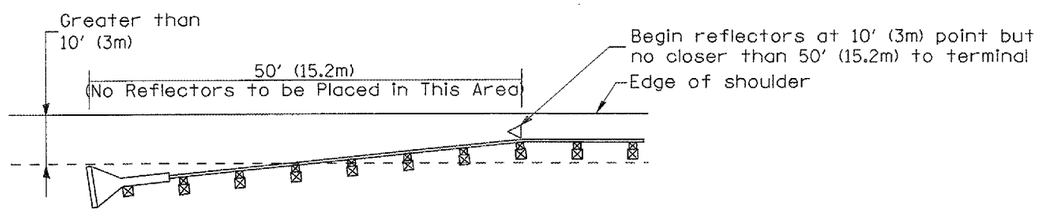
Traffic Barrier Terminal Type(*) and/or Turned-Down Terminal

[Terminal over 10' (3m) from edge of shoulder]
*See Plans for Type



Traffic Barrier Terminal Type(*) and/or Turned-Down Terminal

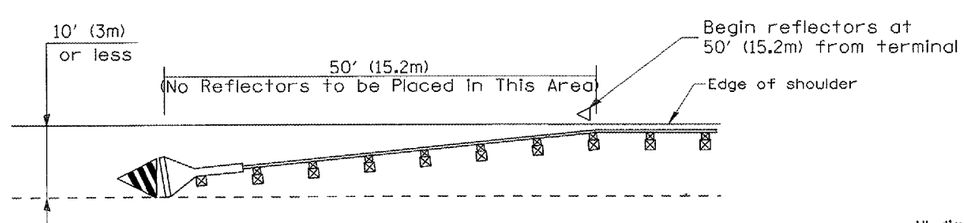
[Terminal over 10' (3m) or less from edge of shoulder]
*See Plans for Type



NOTE: Omit terminal marker when terminal over (10') from edge of paved shoulder or break point of unpaved shoulder.

Traffic Barrier Terminal Type 1 (Special)

[Terminal over 10' (3m) from edge of shoulder]



Traffic Barrier Terminal Type 1(Special)

[Terminal 10' (3m) or less from edge of shoulder]

TERMINAL MARKER PLACEMENT

All dimensions are in inches (millimeters) unless otherwise noted.

DESIGNER NOTE:
1. INCLUDE APPROPRIATE SPECIAL PROVISIONS FOR "GUARD RAIL DELINEATION POLICY; 1. TERMINAL MARKER, 2. TERMINAL MARK POST, AND 3. GUARDRAIL AND BARRIER WALL MARKERS."
FROM INTERIM SPECIAL PROVISIONS 94-74; "GUARDRAIL AND BARRIER WALL DELINEATION."
2. IF POST MOUNT TERMINAL MARKER IS USED, INCLUDE STATE STD. 720011.

DATE	REVISIONS	BY
1-1-97	RENUM. E-10.02, NEW REVISION BOX	T.P.
3-1-97	CORRECT STD. SPEC. *	J.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL AND BARRIER WALL DELINEATION

CADD STD. NO. 635101-D4

SHEET 1 OF 3

SCALE: NOT DRAWN TO SCALE

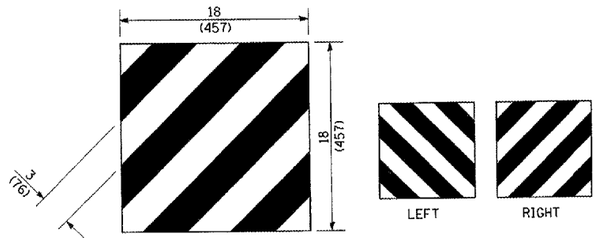
DRAWN BY CADD

CHECKED BY

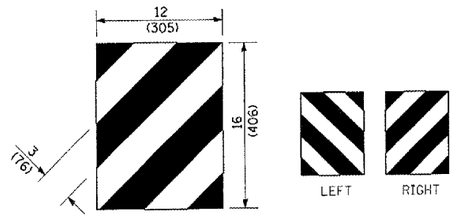
635101-D4 (1)

CONTRACT NO. 6869

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	31
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



For Traffic Barrier Terminal Type 1 (Special)



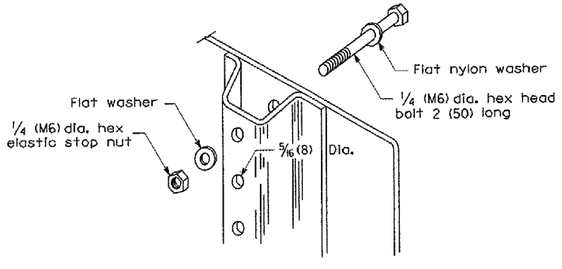
For Traffic Barrier Terminal Type (*)
and Post Mount
* See Plans for Type

TERMINAL MARKER DETAILS

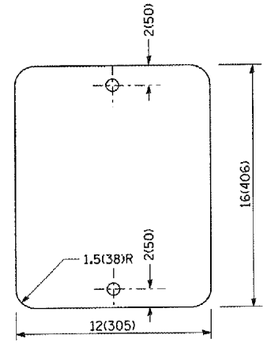
Color: Black / Yellow reflectorized

OM - I100 (L or R) Direct applied reflective sheeting

OM - I200 (L or R) Post mounted

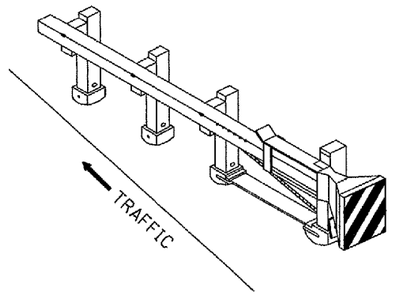


DETAIL OF MOUNTING TERMINAL MARKER TO POST

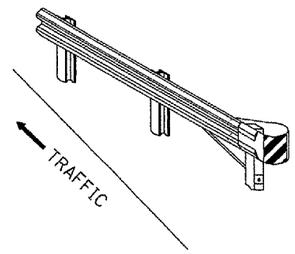


STANDARD TERMINAL MARKER

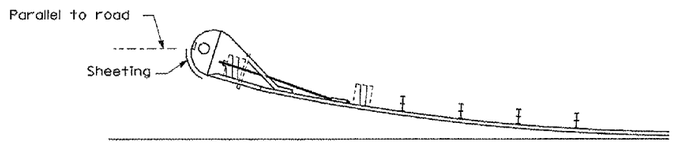
POST MOUNTED TERMINAL MARKER ASSEMBLY



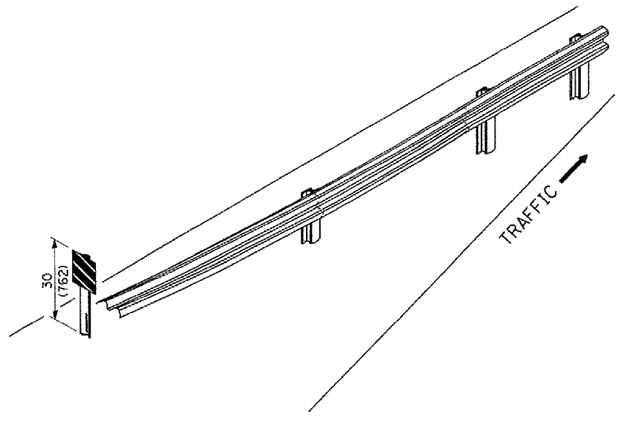
Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type 1 (Special)



Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type (*)
* See Plans for Type



Sheeting Position for
Traffic Barrier Terminal Type (*)
* See Plans for Type



ALTERNATE TREATMENT - POST MOUNTED
(For turned-down terminal where sheeting cannot be direct applied)

TERMINAL MARKER TREATMENTS

GENERAL NOTES

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

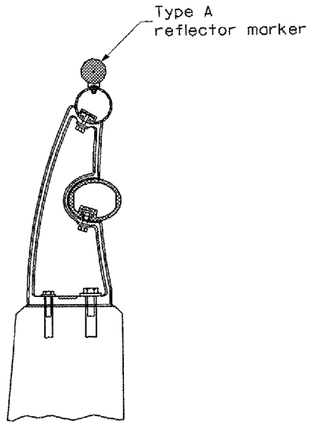
GUARDRAIL AND
BARRIER WALL DELINEATION

CADD STD. NO. 635101-D4 SHEET 2 OF 3
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD
CHECKED BY

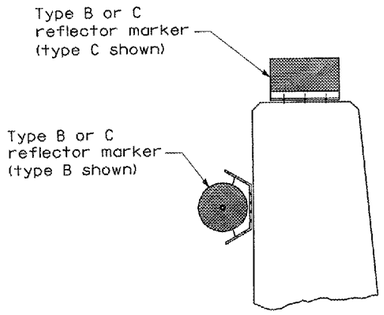
635101-D4 (2)

CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	32
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

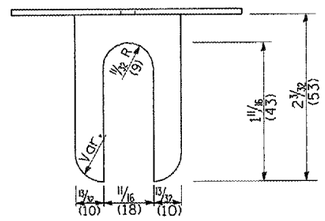


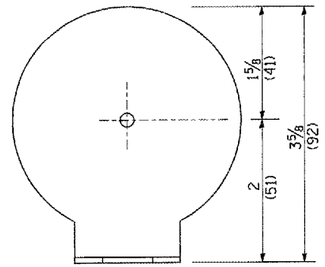
TYPICAL MOUNTING DETAIL
FOR BRIDGE RAIL REFLECTOR

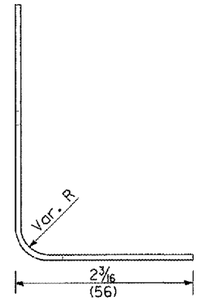


TYPICAL MOUNTING DETAIL
FOR BARRIER WALL REFLECTOR

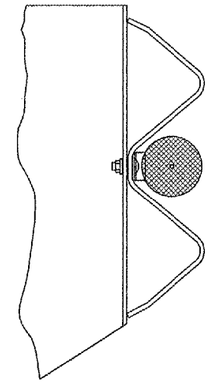
REFLECTOR MOUNTING



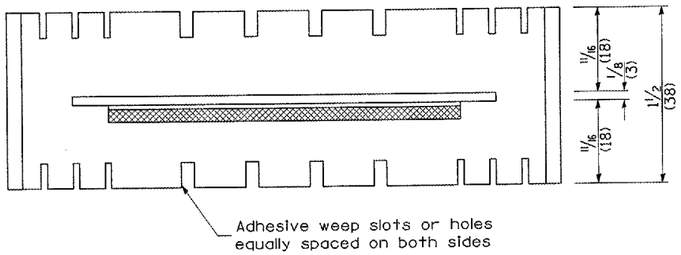


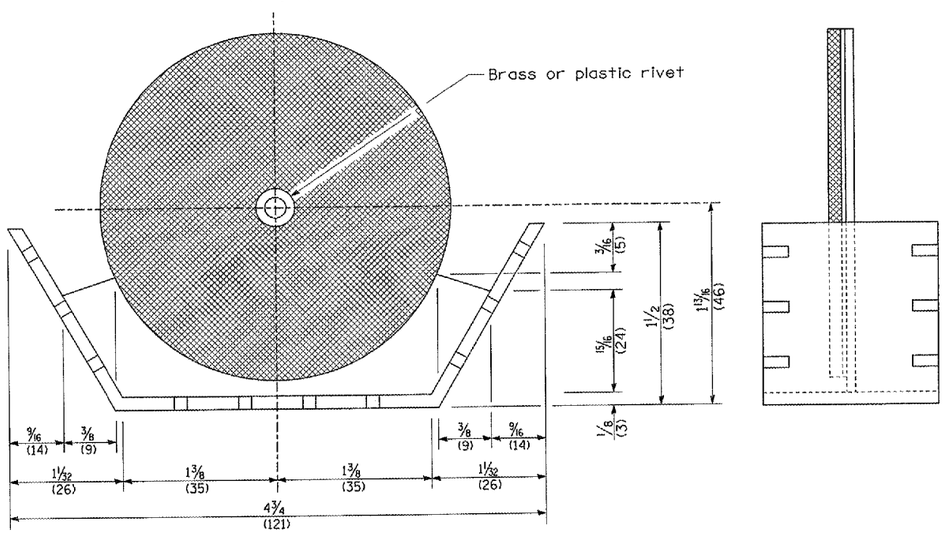


REFLECTOR MARKER TYPE A

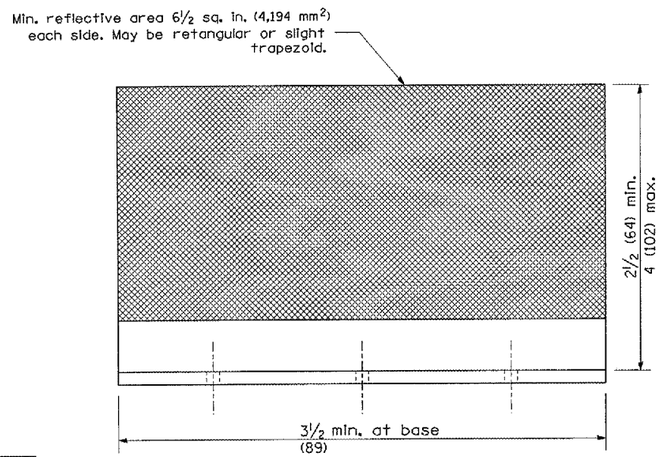


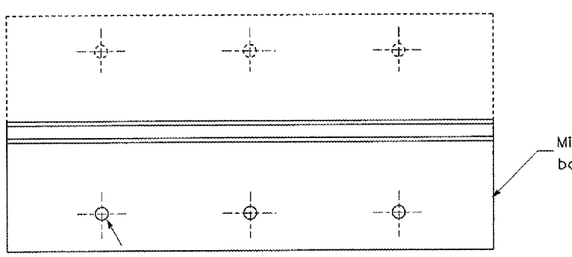
TYPICAL GUARDRAIL MOUNTING WITH
REFLECTOR MARKER TYPE A



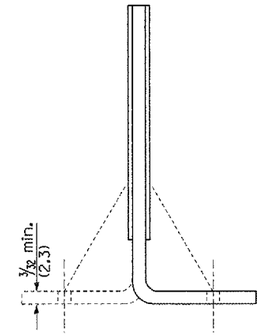


REFLECTOR MARKER TYPE B





REFLECTOR MARKER TYPE C



Cross section may be "T"
or "L" shaped and may have
side supports at ends.

REFLECTORS

All dimensions are in inches (millimeters)
unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

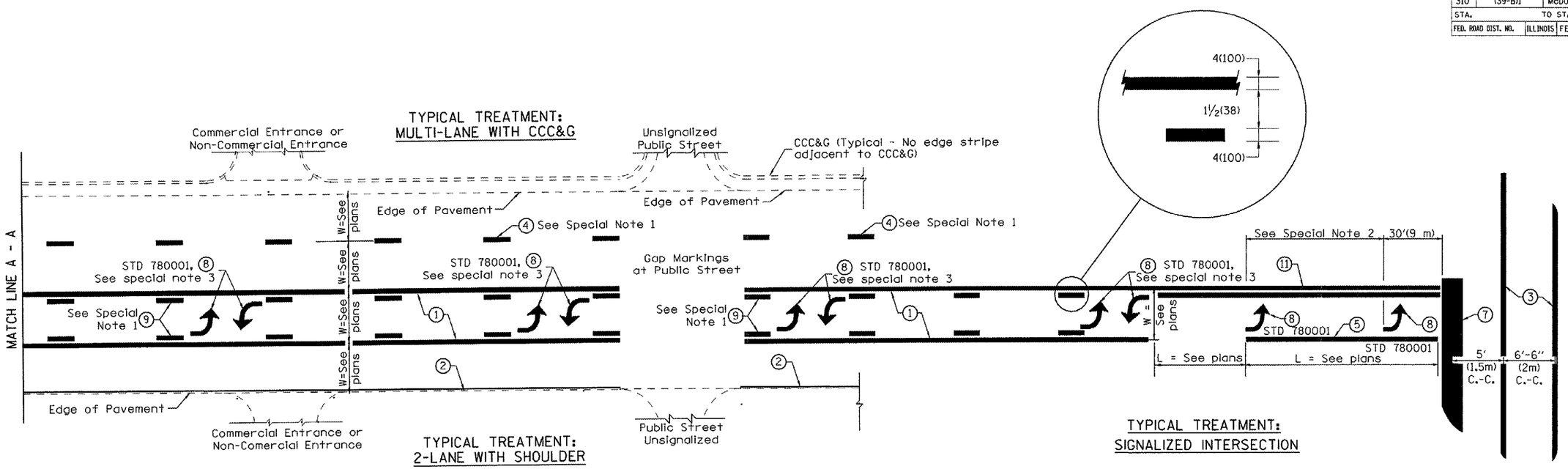
GUARDRAIL AND
BARRIER WALL DELINEATION

CADD STD. NO. 635101-D4 SHEET 3 OF 3
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD
CHECKED BY

635101-D4 (3)

CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)1	McDONOUGH	38	33
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

1. 4(100) Solid (Yellow)
2. 4(100) Solid (White)
3. 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
   2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
4. 6(150) Skip-Dash (White) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
5. 8(200) Solid (White)
6. 12(300) Diagonal (White) (Item 6 is shown on Std. 780001)
7. 24(600) Stop Bar (White)
8. Letters & Arrows — 33' (10m) (See Std. 780001 and Special Notes 2 & 3)
9. 4(100) Skip-Dash (Yellow) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
10. 12(300) Diagonal (Yellow) (See Table A) — 45°
11. 4(100) Double Solid (Yellow) — 11(280) C.-C. — See Table A

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversly across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
   A. A minimum of two (2) arrows is required.
   B. The maximum spacing between arrows is 80' (24 m).
   C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
   A. A minimum of two (2) arrow pairs is required.
   B. The maximum spacing between arrow pairs is 200' (61 m).
   C. Arrow pairs shall be evenly spaced if three (3) or more are required.
   D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. F-8.03, NEW REVISION BOX	T.P.
2-7-97	ADD BI DIRECTIONAL DIMENSION	J.A.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.
8-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

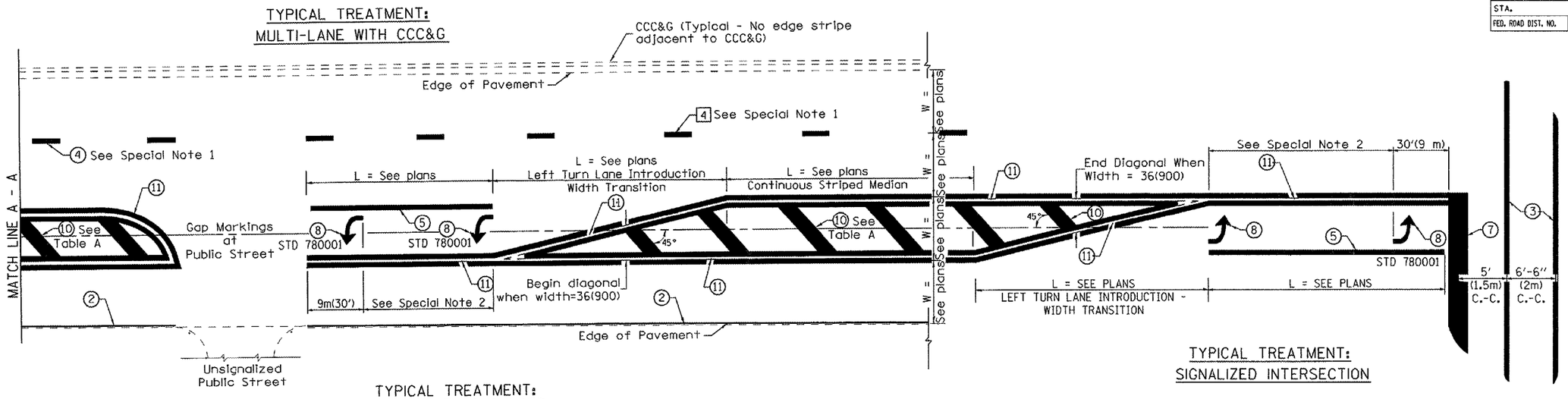
TYPICAL PAVEMENT MARKINGS

CADD STANDARD 780001-D4 — SHEET 1 OF 2
SCALE: NOT DRAWN TO SCALE — DRAWN BY CADD — CHECKED BY

780001-D4 (1)

CONTRACT NO. 6869

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39-B)I	McDONOUGH	38	34
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

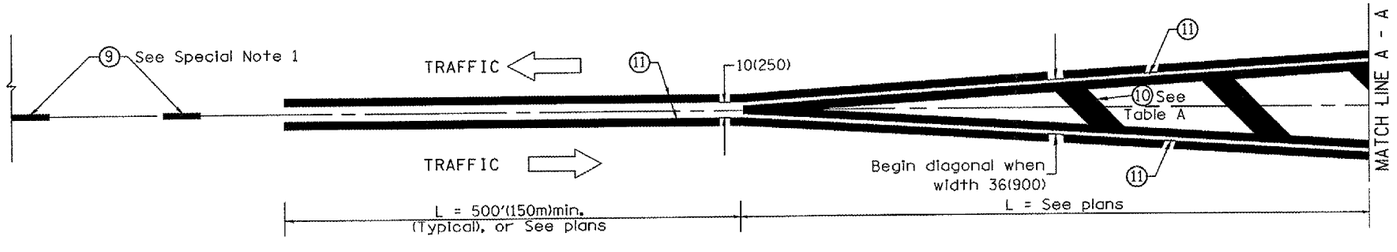


FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

TYPICAL PAVEMENT MARKINGS

CADD STANDARD 780001-D4

SCALE: NOT DRAWN TO SCALE

SHEET 2 OF 2

DRAWN BY CADD

CHECKED BY

780001-D4 (2)

CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	35
STA. 85+00.00		TO STA. 86+50.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

620
615

℄ FAP 310/US 67

EX. ROW

6.0%
4.0%
619.82
620.22
3/16"/F.T.
3/16"/F.T.
619.82
4.0%
6.0%
3.5%
1.8%

C= 3
F= 18
TS= 9

C= 3
F= 2
TS= 0

86+50.00

620
615

℄ FAP 310/US 67

EX. ROW

6.0%
4.0%
619.89
620.21
3/16"/F.T.
3/16"/F.T.
619.89
4.0%
6.0%
4%
2.2%

C= 3
F= 9
TS= 9

C= 1
F= 1
TS= 0

86+00.00

620
615

℄ FAP 310/US 67

EX. ROW

4.0%
619.99
620.31
3/16"/F.T.
3/16"/F.T.
619.99
4.0%
6.0%
4%
3.1%

C= 2
F= 11
TS= 13

C= 3
F= 2
TS= 0.1

85+50.00

PROJECT BEGINS STA. 85+20

620
615

℄ FAP 310/US 67

EX. ROW

6.0%
620.06
619.68
6.0%
4%

C= 0
F= 0
TS= 0

C= 5
F= 0
TS= 0

85+00.00

80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

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PLOT SCALE = #SCALE#
USER NAME = #USER#

CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	36
STA. 87+00.00	TO STA. 89+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

620

615

℄ FAP 310/US 67

EX. ROW

6.0%

4.0%

19.97

3/16"/FT.

620.48

3/16"/FT.

19.97

4.0%

6.0%

3:1

1:2:1

C= 2
F= 13
TS= 9

C= 2
F= 6
TS= 2

EX. ROW

89+00.00

BRIDGE OMISSION STA. 87+79 TO STA. 88+55

℄ FAP 310/US 67

620.28

EX. ROW

6.0%

4.0%

19.82

3/16"/FT.

3/16"/FT.

19.82

4.0%

6.0%

3:1

2:1:1

C= 3
F= 7
TS= 8

C= 2
F= 4
TS= 0.2

EX. ROW

87+50.00

℄ FAP 310/US 67

620.21

EX. ROW

6.0%

4.0%

19.82

3/16"/FT.

3/16"/FT.

19.82

4.0%

6.0%

3:1

2:1

C= 3
F= 13
TS= 8

C= 2
F= 2
TS=0.1

EX. ROW

87+00.00

ORIGINAL SURVEY
NOTE BOOK
NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

FINAL SURVEY
NOTE BOOK
NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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USER NAME = $USER$

CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	37
STA. 89+50.00	TO STA. 91+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

620
615

PROJECT ENDS STA. 91+40

℄ FAP 310/US 67

8" STONE RIPRAP CLASS B3

EX. ROW

6.0%

4.0%

3/16"/FT.

620.44

3/16"/FT.

4.0%

3:1

C= 3
F= 19
TS= 9

C= 2
F= 22
TS= 22

91+00.00

℄ FAP 310/US 67

8" STONE RIPRAP CLASS B3

620.15

620.47

620.15

C= 3
F= 15
TS= 10

C= 2
F= 9
TS= 9

90+50.00

℄ FAP 310/US 67

8" STONE RIPRAP CLASS B3

620.12

620.48

620.12

C= 2
F= 16
TS= 8

C= 2
F= 2
TS= 0.4

90+00.00

℄ FAP 310/US 67

8" STONE RIPRAP CLASS B3

620.01

620.46

620.01

C= 2
F= 14
TS= 9

C= 2
F= 4
TS= 2

89+50.00

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

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CONTRACT NO. 68692

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(39B)1	McDONOUGH	38	38
STA. 91+00.00	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

PLOT DATE = 1/18/2008
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PLOT SCALE = 40.0000 '/ In.
USER NAME = USER

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620

615

EX. ROW

4.5%

5.0%

619.90

620.19

C. FAP 310/US 67

C= 3
E= 0
TS= 0

C= 0
E= 0
TS= 0

EX. ROW

91+50.00

620

615

80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80