4-23-10 LETTING ITEM 340

DESIGNER: CLARK JONES
PHONE: (309)671-3452

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	1
FED. ROAD DIST. NO. 4	ILLINOIS	CONTRACT NO. 68927		

23+1=24

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAP 622 ROUTE IL. 97
SECTION (128BR-1)I
MISC. BRIDGE REPAIRS
FULTON COUNTY

INDEX OF SHEETS:

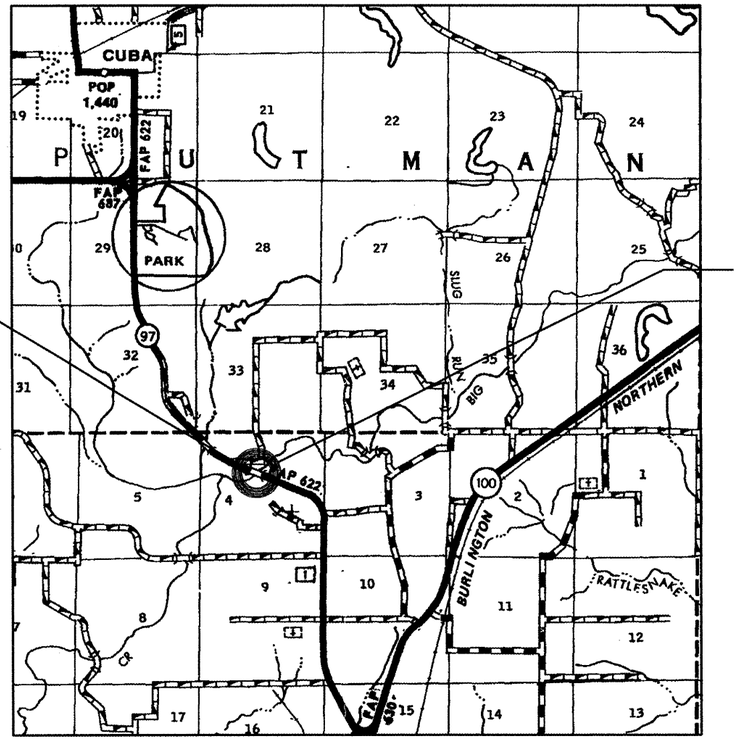
STANDARDS:

701001–02
701006–03
701201–03
701321–10
701901–01
704001–06
780001–02

DISTRICT STANDARDS:

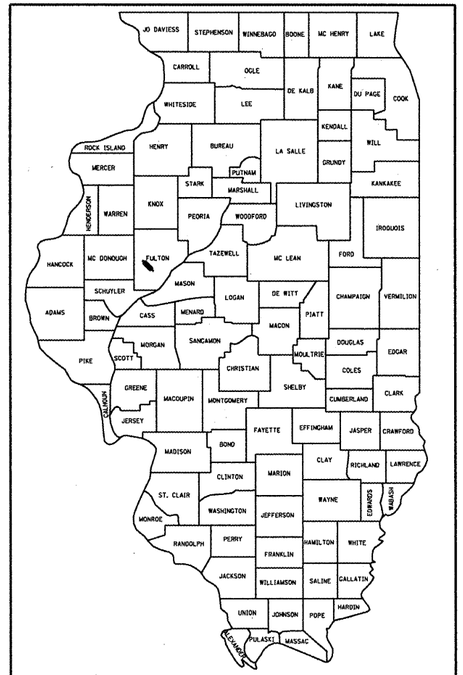
630101–

C–94–154–09



LOCATION MAP

D–94–093–09

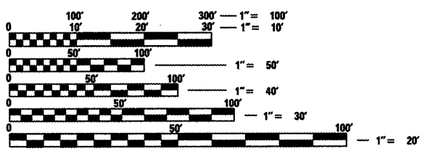


LOCATION OF SECTION INDICATED THUS: –

REMOVE & REPLACE WEARING SURFACE WITH LATEX MODIFIED CONCRETE, EXISTING JOINTS WITH STRIP SEALS, DECK PATCHING, S. ABUT. CAP REPAIR, N. ABUT. BACKWALL REPAIR AND NELSON BEAM REPLACEMENTS ON STRUCTURE CARRYING IL. 97 OVER BIG CRK. (SN.029-0027), 4 MILES SOUTH OF CUBA.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 8, 2010
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 16, 2010
Scott E. Stitt, P.E. /bc
ACTING ENGINEER OF DESIGN AND ENVIRONMENT
March 19, 2010
Christine M. Reed /bc
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



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

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

PROJECT ENGINEER: JIM MILLER
PHONE: (309)671-3451

PROJECT ENGINEER: JIM MILLER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 68927 CATALOG NO. 034309–00D

COMMITMENTS

No commitments have been made for this project.

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

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.

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

Reinforcement bars dsignated (E) shall be epoxy coated.

UTILITIES – LOCATIONS /INFORMATION ON PLANS

The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on careful field investigation and the best information available, but they are not guaranteed. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

JOB SPECIFIC NOTES

TAPER REMOVAL @ FRAME & GRATES ADJUSTED BY OTHERS

At locations where frames and grates have previously been adjusted by others and they are surrounded by hot–mix asphalt tapers, the Contractor for this contract shall remove and dispose of the hot–mix asphalt taper material prior to the placement of the Latex Concrete overlay. This work will not be paid for separately, but will be considered as included in the cost of the BRIDGE DECK LATEX CONCRETE OVERLAY pay item.

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.
Milling shall be used to remove the existing 1 3/4" Class I bituminous overlay and an additional 1/4" of the concrete deck surface. Hydro–Scarification shall be used to remove remaining waterproofing membrane and surface irregularities.

TRAFFIC CONTROL PLAN

1. "LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER" traffic control standard and additional plan sheet(s) shall be used during construction of this project.

2. On–site adjustments of traffic lane taper lengths or signage locations may be used to compensate for distance from construction work area to side road entrance.

BASE COURSE WIDENING, 9"

The following mixture requirements are applicable to this project:

MIXTURE USE(S):	SURFACE LIFT	LOWER LIFTS
AC/PG:	PG 64-22	PG 64-22
RAP% (MAX): **	30% Max	25.0% Max
Design Air Voids:	3.0% @ N=30	4.0% @ N=50
Mixture Composition: (Graduation Mixture)	IL. 9.5L	IL 19.0L
Friction Aggregate:	Mixture C	N/A

** If RAP option is selected, the asphalt cement grade may need to be adjusted by the Materials Engineer.

PAVEMENT MIX SPECIFICATION

The following mixture requirements are applicable as replacement for the existing HMA Surface Removal quantity on the bridge approaches.

MIXTURE USE(S):	SURFACE LIFT
AC/PG:	PG 64-22
RAP% (MAX): **	15% Max
Design Air Voids:	4.0% @ N=50
Mixture Composition: (Graduation Mixture)	IL. 9.5 or 12.5
Friction Aggregate:	Mixture D

** If RAP option is selected, the asphalt cement grade may need to be adjusted by the Materials Engineer.

SN.029-0027 IL.
97 over BigCrk.

S:\ GEN\ DRAFT\ STDRPLNS\ SQUADIA\ BRIDGE CONTRACTS\ JOINTS\ Joints w-Overlay\ 68927\ SN.029-0027 IL-97ovrBigCreek.dgn

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		DRAWN - CEJ	REVISED -
	PLOT SCALE = 100.7051 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 2/4/2010	DATE - 01/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMITMENTS & GENERAL NOTES

SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	2
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	100% STATE SAFETY-2A FULTON COUNTY UNIT	TOTAL	RURAL
20200500	EARTH EXCAVATION (WIDENING)	CUYD	156	156
28001000	AGGREGATE (EROSION CONTROL)	TON	72.2	72.2
35650400	BASE COURSE WIDENING, 9"	SQYD	623	623
40600115	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	GAL	78	78
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQYD	599	599
40600990	TEMPORARY RAMP	SQYD	115	115
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	59	59
42001300	PROTECTIVE COAT	SQYD	445	445
44000700	APPROACH SLAB REMOVAL	SQYD	9	9
44000915	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQYD	430	430
50102400	CONCRETE REMOVAL	CUYD	14.8	14.8
50300255	CONCRETE SUPERSTRUCTURE	CUYD	20.4	20.4
50300260	BRIDGE DECK GROOVING	SQYD	430	430
50400105	PRECAST CONCRETE BRIDGE SLAB	SQFT	600	600
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2720	2720
50800515	BAR SPLICERS	EACH	24	24
50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	80	80
52000110	PREFORMED JOINT STRIP SEAL	FOOT	106	106
67100100	MOBILIZATION	LSUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIP	EACH	12	12

CODE NO.	ITEM	100% STATE SAFETY-2A FULTON COUNTY UNIT	TOTAL	RURAL
70106800	CHANGEABLE MESSAGE SIGN	CALMO	2	2
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	1952	1952
70301000	WORKZONE PAVEMENT MARKING REMOVAL	SQFT	651	651
70400100	TEMPORARY CONCRETE BARRIER	FOOT	325	325
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	250	250
* 78005110	EPOXY MARKING - LINE 4"	FOOT	1250	1250
78300105	PAVEMENT MARKING REMOVAL	FOOT	1250	1250
X0322185	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQYD	410	410
X0324744	REMOVAL OF EXISTING PRECAST CONCRETE UNITS	SQFT	600	600
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQFT	148	148
X7200201	WIDTH RESTRICTION SIGNING	LSUM	1	1
Z0012200	BRIDGE DECK HYDRO-SCARIFICATION (1/2 INCH)	SQYD	430	430
Z0016000	DECK SLAB REPAIR (FULL DEPTH)	SQYD	25	25
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
X0321468	PLUG EXISTING DECK DRAINS	EACH	7	7

* SPECIALTY ITEM

SN.029-0027 IL.
97 over BigCrk.

FILE NAME = SN.029-0027 IL.97ovr BigCreek.dgn	USER NAME = jonesce	DESIGNED - CEJ	REVISED -
		DRAWN - CEJ	REVISED -
	PLOT SCALE = 103.7051 ' / IN.	CHECKED -	REVISED -
* Emergency Bridge Beam Repair	PLOT DATE = 2/5/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: _____ SHEET NO. __ OF ___ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	3
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

S:_GEN_DRAFT_STDS&PLNS_SOUND14_BRIDGE CONTRACTS_JOINTS_Joints w-Overlay_68927_SN.029-0027 IL.97ovr BigCreek.dgn

SCHEDULE OF QUANTITIES

EARTH EX. (WIDENING)

LOCATION	CUYD
Bridge Approach Shoulders	156
TOTAL	156

AGGREGATE (EROSION CONTROL)

LOCATION	TON
Existing Guardrail Lengths	72.2
TOTAL	72.2

BASE COURSE WIDENING, 9"

LOCATION	SQYD
Bridge Approach Shoulders	623
TOTAL	623

POLY. BIT. MAT. (PRIME COAT)

LOCATION	GAL
Approach Butt Joint Removal Areas	78
TOTAL	78

HMA SFC. REM.-BUTT JOINT

LOCATION	SQYD
Bridge Approaches	599
TOTAL	599

TEMPORARY RAMP

LOCATION	SQYD
Approach Butt Jts. & Bridge Jts.	115
TOTAL	115

HMA ASPHALT SURFACE COURSE, MIX "D", N50

LOCATION	TON
Approach Butt Joint Removal Areas	59
TOTAL	59

PROTECTIVE COAT

LOCATION	SQYD
Proposed Latex Concrete Deck	445
TOTAL	445

APPROACH SLAB REMOVAL

LOCATION	SQYD
Bridge Approaches	9
TOTAL	9

HMA SURFACE REMOVAL (DECK)

LOCATION	SQYD
Jobsite - SN.029-0027	430
TOTAL	430

CONCRETE REMOVAL

LOCATION	CUYD
Jobsite - SN.029-0027 Abutments	14.8
TOTAL	14.8

CONCRETE SUPERSTRUCTURE

LOCATION	CUYD
Jobsite - SN.029-0027 Abutments	20.4
TOTAL	20.4

BRIDGE DECK GROOVING

LOCATION	SQYD
Jobsite - SN.029-0027	430
TOTAL	430

PRECAST CONCRETE BRIDGE SLAB

LOCATION	SQFT
Bridge Approaches	600
TOTAL	600

REINFORCEMENT BARS, EPOXY COATED

LOCATION	POUND
Proposed Bridge Joints	2720
TOTAL	2720

BAR SPLICERS

LOCATION	EACH
Proposed Bridge Joints	24
TOTAL	24

REM. & RE-ERECT. EXIST. RAILING

LOCATION	FOOT
Nelson Beam Removal Areas	80
TOTAL	80

PREFORMED JOINT STRIP SEAL

LOCATION	FOOT
Proposed Bridge Joints	106
TOTAL	106

MOBILIZATION

LOCATION	LSUM
Jobsite - SN.029-0027	1
TOTAL	1

T.C.& P. STANDARD 701321

LOCATION	EACH
Jobsite - SN.029-0027	1
TOTAL	1

SN.029-0027 IL. 97 over BigCrk.

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	PLOT DATE = 2/5/2010	DATE - 02/05/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
US 24 (FAP 317) US 150

SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(1288R-1)I	FULTON	23	4
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

T.C. & P. STANDARD 701201

LOCATION	LSUM
Jobsite - SN.029-0027	1
TOTAL	1

WORKZONE PVMT. MRKG. REM.

LOCATION	SQFT
Traffic Staging Tapers	651
TOTAL	651

BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"

LOCATION	SQYD
Jobsite - SN.029-0027	410
TOTAL	410

DECK SLAB REPAIR (FULL DEPTH)

LOCATION	SQYD
Jobsite - SN.029-0027 Deck	25
TOTAL	25

TEMP. BRIDGE TRAFFIC SIGNALS

LOCATION	EACH
Jobsite - SN.029-0027	1
TOTAL	1

TEMP. CONCRETE BARRIER

LOCATION	FOOT
Traffic Staging Tapers	325
TOTAL	325

REM. OF EXISTING PRECAST CONCRETE UNITS

LOCATION	SQFT
Bridge Approaches	600
TOTAL	600

IMPACT ATT, TEMP. (NDR) TEST LEV. 3

LOCATION	EACH
Jobsite - SN.029-0027	2
TOTAL	2

TEMP. RUMBLE STRIP

LOCATION	EACH
Project IL. 97	12
TOTAL	12

RELOCATE TEMP. CONCRETE BARRIER

LOCATION	FOOT
Traffic Staging Tapers	250
TOTAL	250

STRUCTURAL REPAIR OF CONCRETE

LOCATION	SQFT
Bridge Abutments	148
TOTAL	148

IMPACT ATT. RELOCATE (NDR) TEST LEV. 3

LOCATION	EACH
Jobsite - SN.029-0027	2
TOTAL	2

CHANGEABLE MESSAGE SIGN

LOCATION	CALMO
Project IL. 97	2
TOTAL	2

EPOXY PVMT. MRKG.-LINE 4"

LOCATION	FOOT
Jobsite - SN.029-0027	1250
TOTAL	1250

WIDTH RESTRICTION SIGNING

LOCATION	LSUM
Project IL. 97	1
TOTAL	1

PVMT. MRKG. TAPE, TYPE III 4"

LOCATION	FOOT
Traffic Staging Tapers	1952
TOTAL	1952

PVMT. MRKG. REMOVAL

LOCATION	FOOT
Jobsite - SN.029-0027	1250
TOTAL	1250

BRIDGE DECK HYDRO-SCARIFICATION 1/2"

LOCATION	SQYD
Jobsite - SN.029-0027	430
TOTAL	430

SN.029-0027 IL.
97 over BigCrk.

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		DRAWN - CEJ	REVISED -	
	PLOT SCALE = 103.7051 ' / IN.	CHECKED -	REVISED -	
	PLOT DATE = 2/5/2010	DATE - 02/05/2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
US 24 (FAP 317) US 150

SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	5
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

T5N R3E 4PM
SEC 4

N

Wayne A. VanMiddlesworth

N. YOCUM RD.

CREEK

Comcast buried fiber optic 4'-8' from piers at least 4' deep

abandoned cable and Telephone on poles

R.O.W.

A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A — A

FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO — FO

55'-0"

±205' Jt. to Sideroad Rad.

35°55'

486 487 488 489+00 490

℄ Structure Tangent at Sta.489+00

24'-0"

40'-0"

T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T — T

IL. Bell buried cable ±4' EOP., ±2' deep

40'-0"

Flow

99'-4" Bk. to Bk. Exist. Abuts.

PLAN

R.O.W.

R.O.W.

B.N. R.R.

X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X — X

BIG

Wayne A. VanMiddlesworth

SN.029-0027 IL.
97ovrBig Creek

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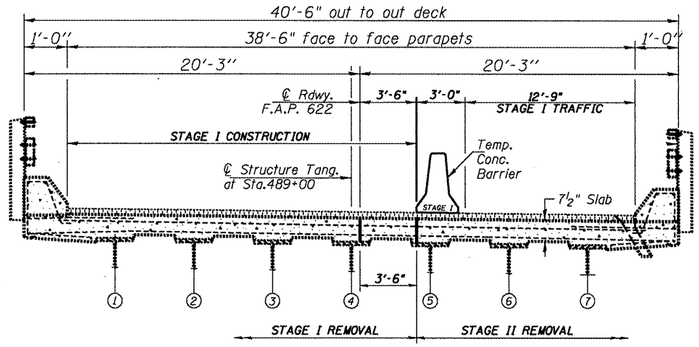
FILE NAME = SN.029-0027 IL.97ovr BigCreek.dgn	USER NAME = jonesce	DESIGNED - CEJ	REVISED - ---
		DRAWN - CEJ	REVISED - ---
	PLOT SCALE = 103.7051 ' / IN.	CHECKED - ---	REVISED - ---
	PLOT DATE = 2/5/2010	DATE - 01/05/2010	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

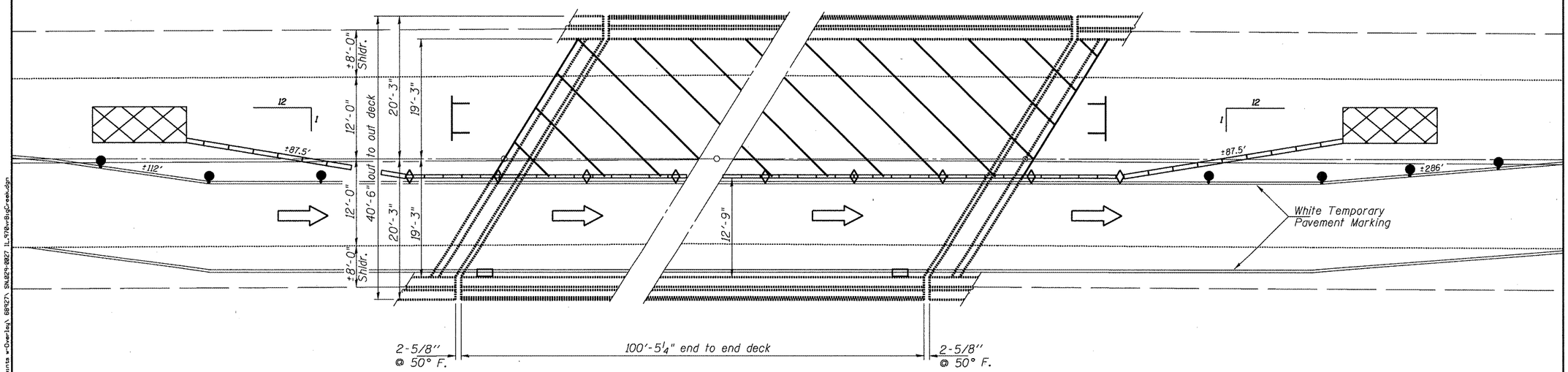
GENERAL LAYOUT

SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	6
	Misc. Structure Repairs	CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



CROSS SECTION
(Looking East)



PLAN
(Stage I)

SYMBOLS

- Work Area
- Barrier Wall Marker
- Drum w/steady burning light
- Temporary Concrete Barrier
- Temporary Concrete Barrier
- Impact Attenuator
- Type III Barricade

NOTES
Refer to Highway Standards 701201/701321 in conjunction with this sheet for exact placement of traffic management devices and other clarifications as construction staging symbols and dimensioning were duplicated off of these standards. Traffic staging sequence shall be at the discretion of the Engineer for given field applications. Staging lane widths recomended by the Bridge Office. Wide Load Signing used this stage only.

SN.029-0027 IL.
97ovrBig Creek

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		DRAWN - CEJ	REVISED - ---
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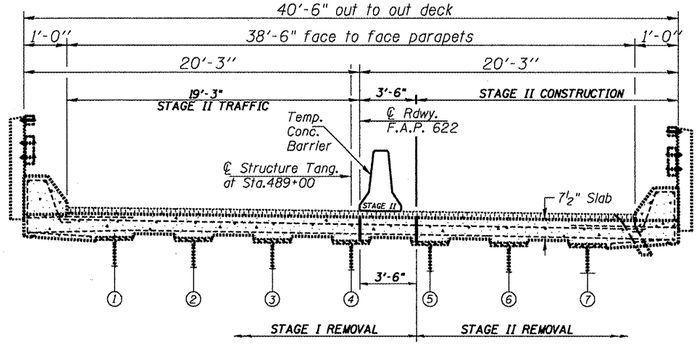
	PLOT DATE = 2/5/2010	DATE - 01/25/2010	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

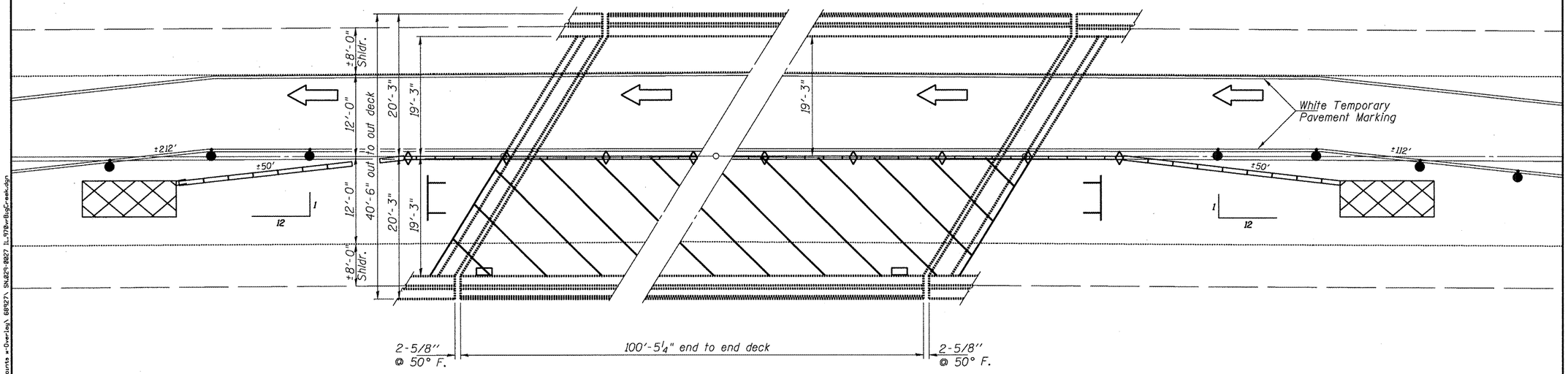
PROPOSED TRAFFIC CONTROL

SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	7
	Misc. Structure Repairs	CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



CROSS SECTION
(Looking East)



PLAN
(Stage II)

SYMBOLS

- Work Area
- Barrier Wall Marker
- Drum w/steady burning light
- Temporary Concrete Barrier
- Temporary Concrete Barrier
- Impact Attenuator
- Type III Barricade

NOTES
Refer to Highway Standards 701201/701321 in conjunction with this sheet for exact placement of traffic management devices and other clarifications as construction staging symbols and dimensioning were duplicated off of these standards. Traffic staging sequence shall be at the discretion of the Engineer for given field applications. Staging lane widths recomended by the Bridge Office.

SN.029-0027 IL.
97ovrBig Creek

S:\ GEN\ DRAFT\ STDAPLNS\ SQUAD14\ BRIDGE CONTRACTS\ JOINTS\ Joints *-Overlay\ 68927\ SN.029-0027 IL.97ovr-BigCreek.dgn

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		DRAWN - CEJ	REVISED - ---
	PLOT SCALE = 103.7051 ' / IN.	CHECKED - ---	REVISED - ---
	PLOT DATE = 2/5/2010	DATE - 01/25/2010	REVISED - ---

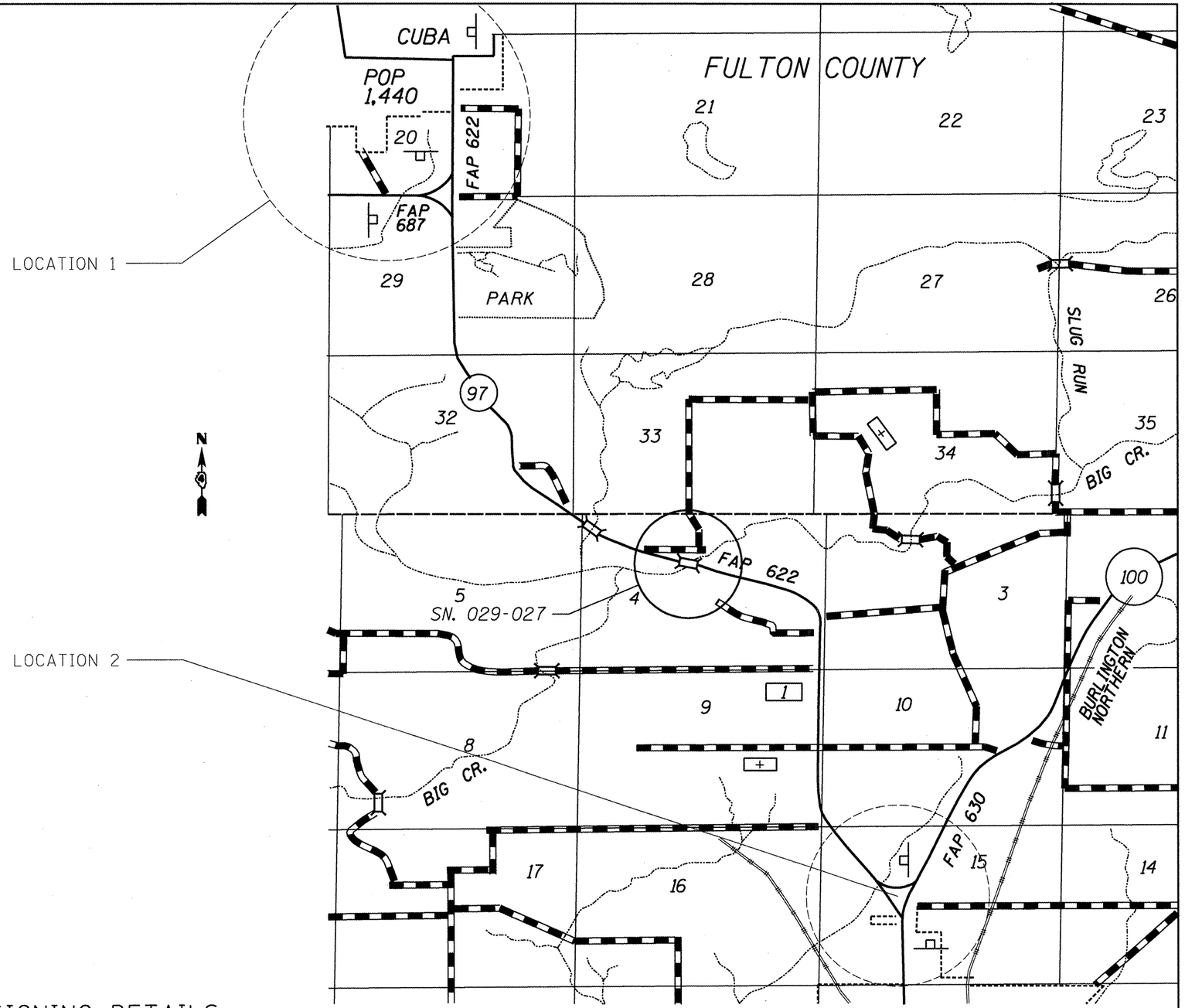
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC CONTROL

SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	8
	Misc. Structure Repairs	CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

NOTES
Notification signs shall be posted where shown indicating maximum width ahead of 11'-3" for stage construction on IL. 97. Changeable Message Boards shall be placed facing SB traffic exiting Cuba and NB traffic at IL. 97/IL. 100 junction one week prior to work start date for public safety and awareness. Width Restriction Signing will only be needed on Stage I and shall be removed when construction staging progresses to Stage II.



CONTRACTOR PROVIDED SIGN -A-

MAX. WIDTH 11'-3" XX MILES

IL. 97

SN. 029-0027 SIGNING

	SIGN -A-	SIGN -B-
LOCATION 1	3 EA.	NA
LOCATION 2	2 EA.	NA
LOCATION 3		
LOCATION 4		

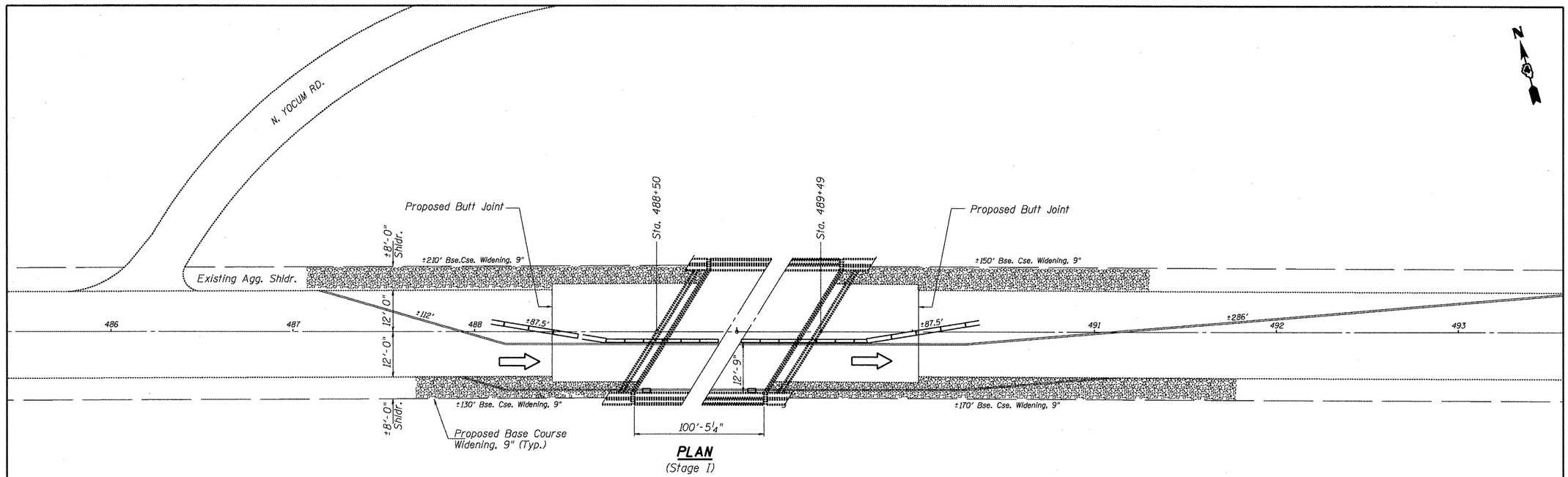
SEE SPECIAL PROVISIONS FOR SIGNING DETAILS

SN.029-0027 IL. 97ovrBig Creek

S:\ GEN\ DRAFT\ STDRFLNS\ SGANG14\ BRIDGE CONTRACTS\ JOINTS\ Joints +Overlay\ 68927\ SN.029-0027 IL.97ovrBigCreek.dgn

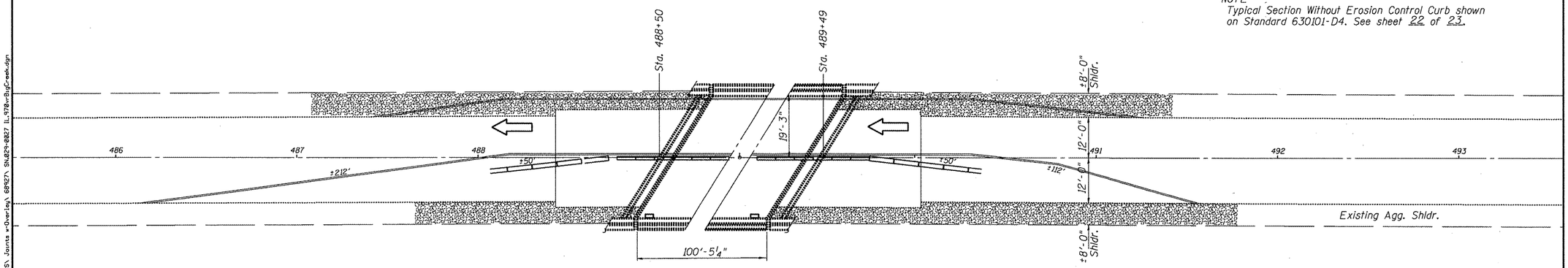
FILE NAME = SN.029-0027 IL.97ovr BigCreek.dgn	USER NAME = jonesce	DESIGNED - CEJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WIDTH RESTRICTION SIGNING
		DRAWN - CEJ	REVISED -		
	PLOT SCALE = 103.7851 ' / IN.	CHECKED -	REVISED -		SCALE: _____ SHEET NO. __ OF ___ SHEETS STA. _____ TO STA. _____
	PLOT DATE = 2/4/2010	DATE - 01/25/2010	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	9
		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



PLAN
(Stage I)

NOTE
Typical Section Without Erosion Control Curb shown on Standard 630101-D4. See sheet 22 of 23.



PLAN
(Stage II)

SYMBOLS

Shoulder Removal/Replacement

Temporary Concrete Barrier

Pavement Marking Tape, Type III, 4"

NOTES
Shoulder removal/replacement quantities calculated using existing ±8'-6" aggregate shoulder. Proposed shoulder length & width shall require existing material to be removed. Cost paid for as EARTH EXCAVATION (WIDENING).
Construction staging sequence shall be at the discretion of the Engineer for given field applications.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Earth Excavation Widening	Cu. Yd.	156
Aggregate (Erosion Control)	Ton	72.2
Base Course Widening, 9"	Sq. Yd.	623

SN.029-0027 IL.
97ovrBig Creek

S:\ GEN\ DRAFTI STDSPLNS\ SDIAD14\ BRIDGE CONTRACTS\ JOINTS\ Joints w-Overlay\ 68927\ SN.029-0027 IL.97ovr-BigCreek.dgn

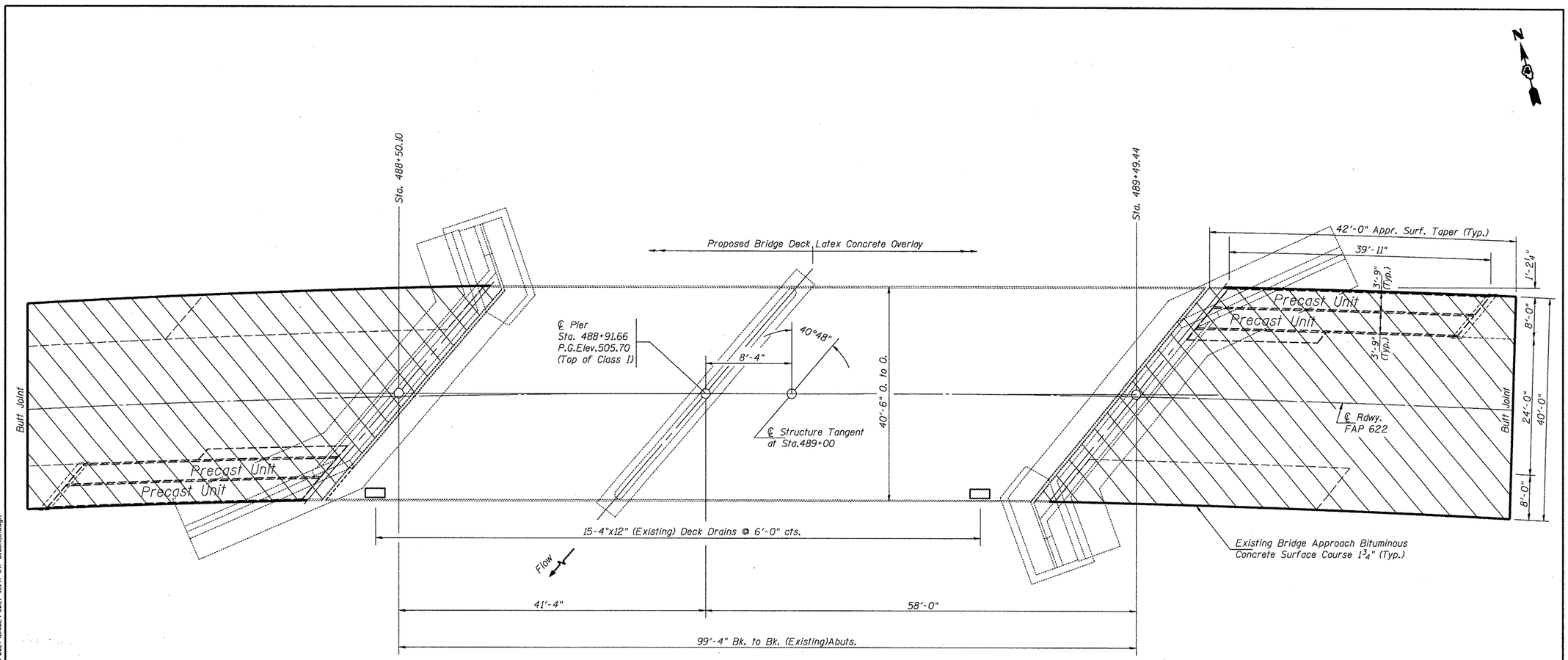
FILE NAME = SN.029-0027 IL.97ovr BigCreek.dgn	USER NAME = jonesce	DESIGNED - CEJ	REVISED - ___
		DRAWN - CEJ	REVISED - ___
	PLOT SCALE = 103.7051 ' / IN.	CHECKED - ___	REVISED - ___
	PLOT DATE = 2/8/2010	DATE - 02/03/2010	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BASE COURSE WIDENING DETAIL

SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	10
Misc. Structure Repairs		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



PLAN

PRIME COAT CONVERSION FACTORS		
SURFACE TYPE	BIT PR COAT (GAL/SQ YD)	AGG PR COAT (LB/SQ YD)
COLD MILLED SURFACES	0.1	4
EXISTING PAVEMENT	0.05	4
NEW BITUMINOUS COURSES	0.03	2

BITUMINOUS & AGGREGATE CONVERSION FACTORS	
SURFACE TYPE	
BIT. SURF. COURSES	112 LB /SQ YD/IN
ALL OTHER BIT.	112 LB /SQ YD/IN
AGGREGATE SHOULDERS	2.05 TONS/CUYD

HMA Removal & Surface Course

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Polymerized Bituminous Material (Prime Coat)	Gallon	78
HMA Surface Course Removal-Butt Joint	Sq. Yd.	599
Temporary Ramp	Sq. Yd.	115
Hot-Mix Asphalt Surface Course, Mix D, N50	Ton	59

SN. 029-0027 IL. 97 ovr BigCreek

FILE NAME = SN.029-0027 IL.97ovr BigCreek.dgn	USER NAME = jonesce	DESIGNED - CEJ	REVISED - ---
		DRAWN - CEJ	REVISED - ---
	PLOT SCALE = 103.7051 ' / IN.	CHECKED - ---	REVISED - ---
	PLOT DATE = 2/8/2010	DATE - 02/01/2010	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

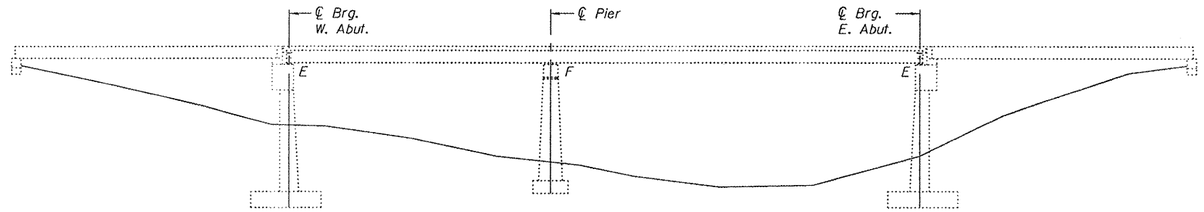
BUTT JOINTS DETAIL

SCALE: _____ SHEET NO. __ OF ___ SHEETS STA. _____ TO STA. _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	11
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

S:\GEN\DRAFT\STDNPLNS\SQUAD14\BRIDGE CONTRACTS\JOINTS\Joints-Overlay\68927 SN.029-0027\SN.029-0027 IL.97 ovr BIGCREEK.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

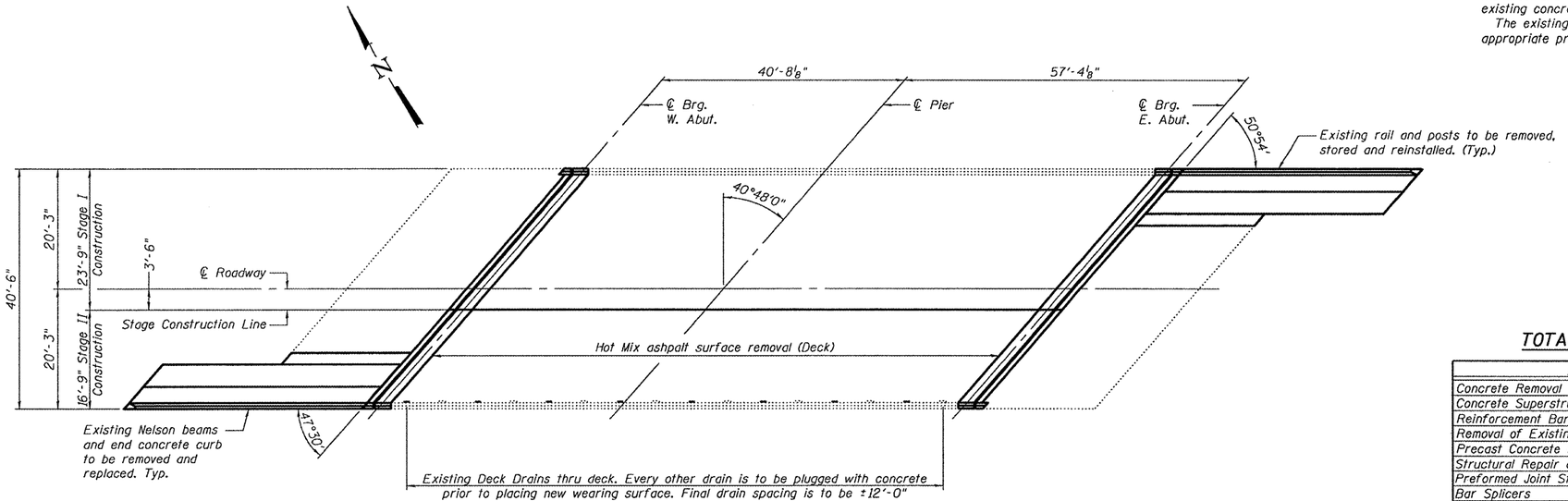
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

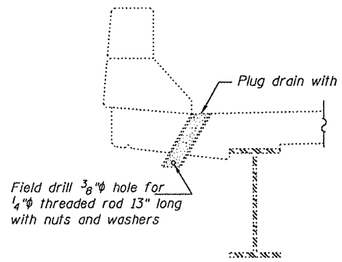


DESIGN STRESSES
PRECAST UNITS

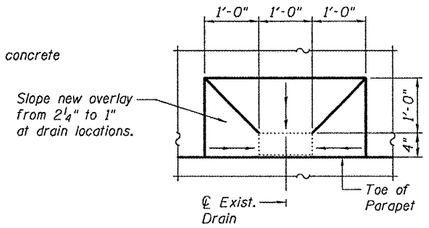
f'c = 4,500 psi
f'ci = 1,800 psi
f's = 20,000 psi
h = 8
Allow 25 pounds per square foot for future wearing surface.
Design specifications: 2002 AASHTO

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	14.8
Concrete Superstructure	Cu. Yd.	20.4
Reinforcement Bars, Epoxy Coated	Pound	2,720
Removal of Existing PC Units	Sq. Ft.	600
Precast Concrete Bridge Slab	Sq. Ft.	600
Structural Repair of Concrete	Sq. Ft.	148
Preformed Joint Strip Seal	Foot	106
Bar Splicers	Each	24
Removing and Re-erecting Existing Railing	Foot	80
Approach Slab Removal	Sq. Yd.	9
Bridge Deck Hydro-Scarification 1/2"	Sq. Yd.	430
Bridge Deck latex Concrete Overlay, 2 1/4"	Sq. Yd.	410
Protective Coat	Sq. Yd.	445
Bridge Deck Grooving	Sq. Yd.	430
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	430
Plug Existing Deck Drains	Each	7
DeckSlab Repair (Full Depth)	Sq. Yd.	25



DRAIN PLUG DETAIL



OVERLAY SLOPE DETAIL AT DRAIN LOCATIONS

DESIGNED	Drew Christopher
CHECKED	Adrian T. Halloway
DRAWN	Drew Christopher
CHECKED	IJL ATH

March 11, 2010
EXAMINED
ENGINEER OF STRUCTURAL SERVICES
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
RALPH E. ANDERSON
081-004625
SPRINGFIELD
LICENSED STRUCTURAL ENGINEER

Expires: November 30, 2010

PLAN AND ELEVATION
SN 029-0027

SHEET NO. 1	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	622	(128BR-1)I	Fulton	23	12
			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-94-001-09

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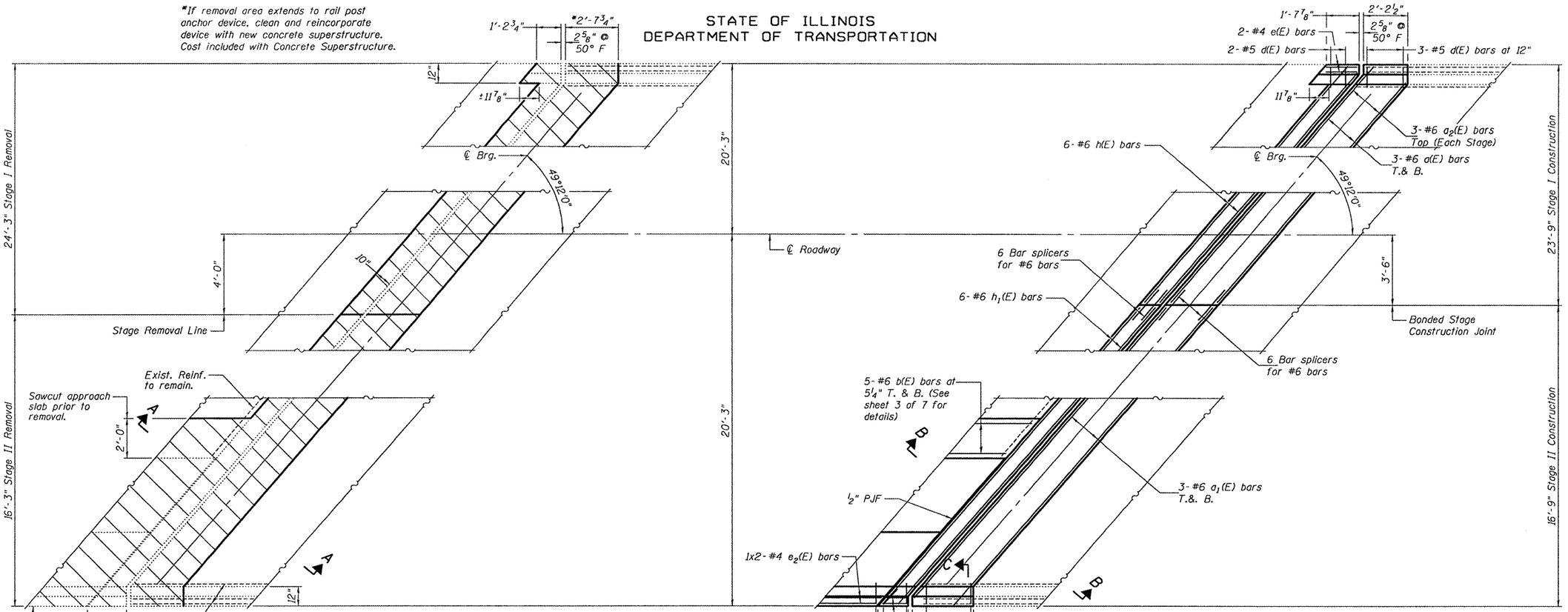
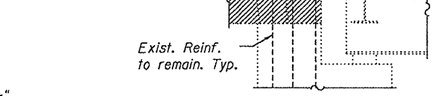
*If removal area extends to rail post anchor device, clean and reincorporate device with new concrete superstructure. Cost included with Concrete Superstructure.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

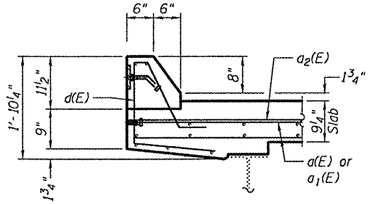


WEST ABUTMENT REMOVAL PLAN
(East Abutment similar by rotation)

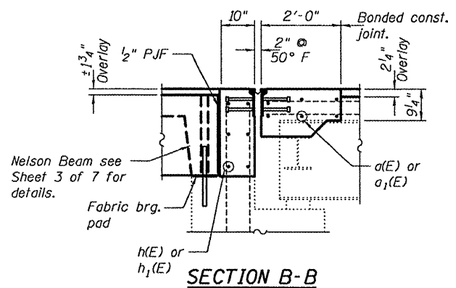


SECTION A-A
(Dims at Rt. L's to joint)

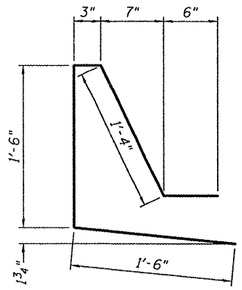
WEST ABUTMENT PLAN
(East Abutment similar by rotation)



SECTION C-C



SECTION B-B
(Dims at Rt. L's to joint)



Bar d(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	12	#6	30'-4"	——
a_1(E)	12	#6	21'-4"	——
a_2(E)	12	#6	4'-0"	——
d(E)	22	#5	5'-1"	
e(E)	4	#4	1'-4"	——
e_1(E)	4	#4	1'-3"	——
e_2(E)	4	#4	20'-8"	——
h(E)	12	#6	30'-10"	——
h_1(E)	12	#6	21'-7"	——
Concrete Removal			Cu. Yd.	14.8
Concrete Superstructure			Cu. Yd.	20.4
Reinforcement Bars, Epoxy Coated			Lbs.	2,130

Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

ABUTMENT JOINT DETAILS
SN 029-0027

DESIGNED	I.J.L.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	I.J.L. A.T.H.

March 11, 2010
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 2	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	622	(128BR-1)I	Fulton	23	13
			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-94-001-09

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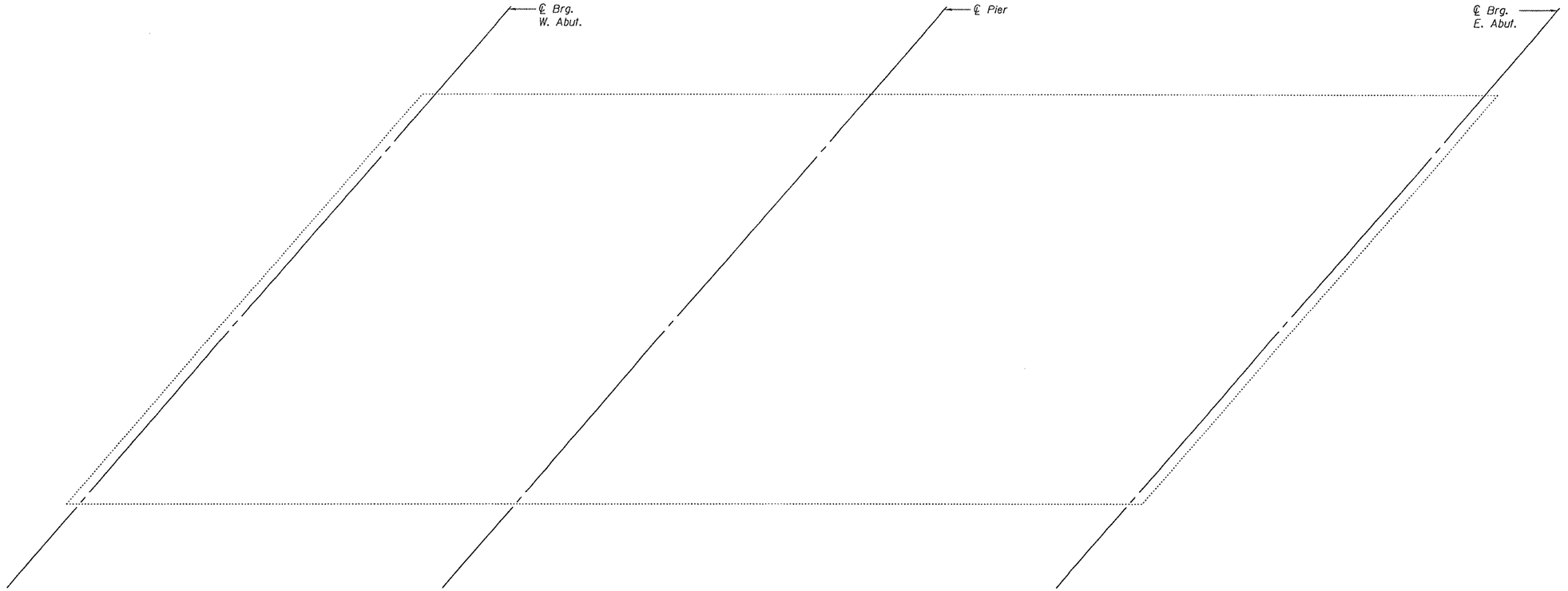
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DECK PATCHING PLAN

DESIGNED	I.J.L.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	I.J.L. A.T.H.

March 11, 2010
EXAMINED _____ ENGINEER OF STRUCTURAL SERVICES
PASSED _____ ENGINEER OF BRIDGES AND STRUCTURES

DECK PATCHING PLAN
SN 029-0027

SHEET NO. 2A	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	622	(128BR-1)I	Fulton	23	13A
			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-94-001-09

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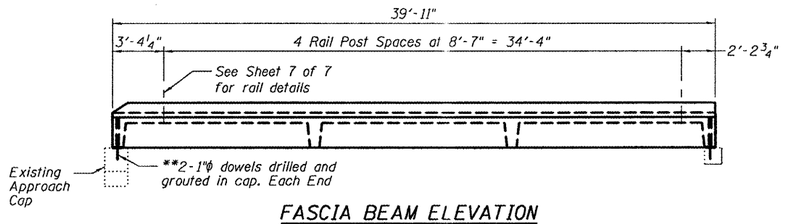
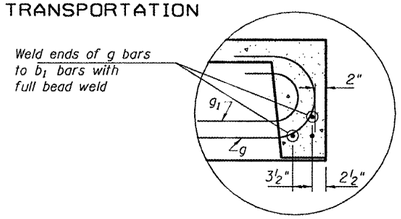
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

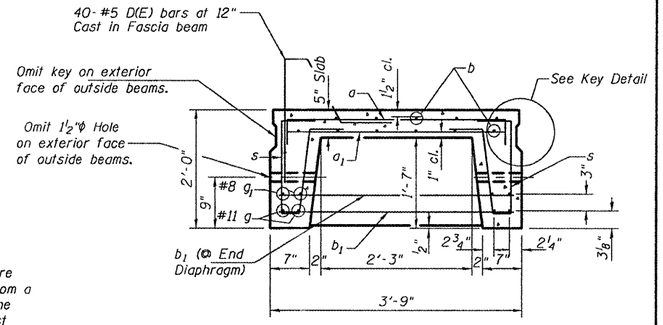


FASCIA BEAM ELEVATION

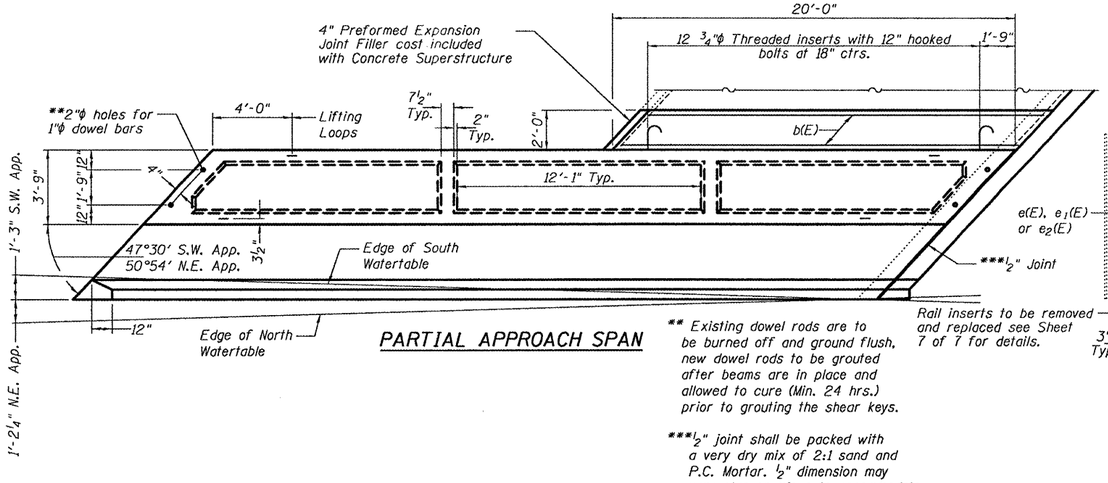


DETAIL A

Note:
The surface of the member shall not deviate more than 1/1200 of the full length of the member from a straight line connecting the two end points on the member's surface. (See Special Provision Precast Concrete Structures)



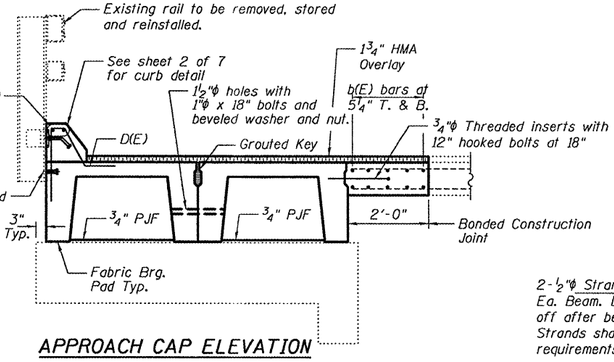
TYPICAL SECTION THRU BEAM



PARTIAL APPROACH SPAN

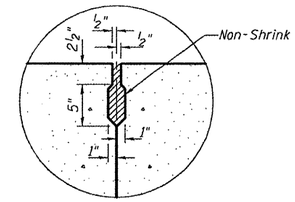
** Existing dowel rods are to be burned off and ground flush, new dowel rods to be grouted after beams are in place and allowed to cure (Min. 24 hrs.) prior to grouting the shear keys.

***1/2" joint shall be packed with a very dry mix of 2:1 sand and P.C. Mortar. 1/2" dimension may vary plus or minus to accommodate tolerance in beam lengths.

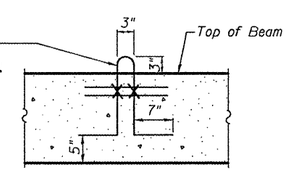


APPROACH CAP ELEVATION

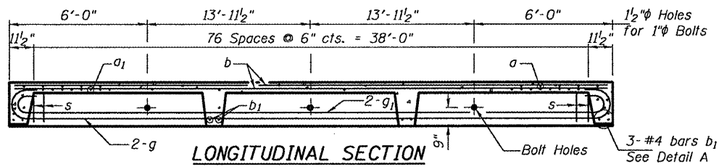
New approach slab and curb on top of Nelson Beams is to be paid for as Concrete Superstructure.



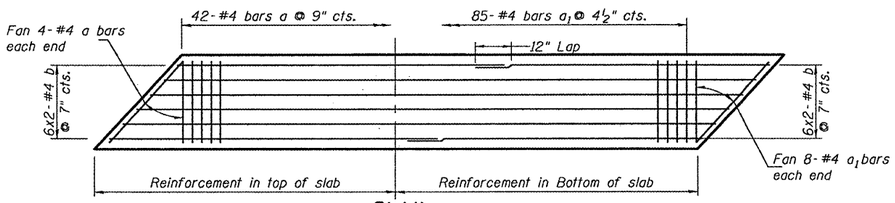
KEY DETAIL



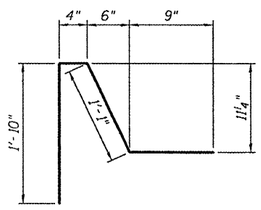
LIFTING LOOP
Approved alternate may be substituted for the above.



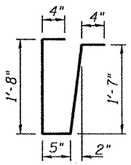
LONGITUDINAL SECTION



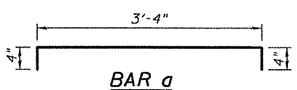
PLAN
Showing Slab Reinforcement



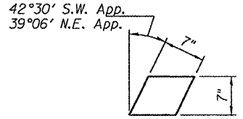
BAR D(E)



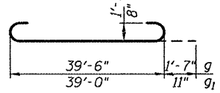
BAR s



BAR a



BEARING PADS



BARS g and g1

Note:
Tack welding of stirrups to bottom longitudinal reinforcement bars will not be permitted except as otherwise authorized in writing by the Engineer.
See sheet 2 of 7 for curb dimensions and top reinforcement.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b(E)	20	#6	19'-9"	——
Precast Concrete Bridge Slab			Sq. Ft.	600
Reinforcement Bars, Epoxy Coated			Pound	590

APPROACH BEAM DETAILS
SN 029-0027

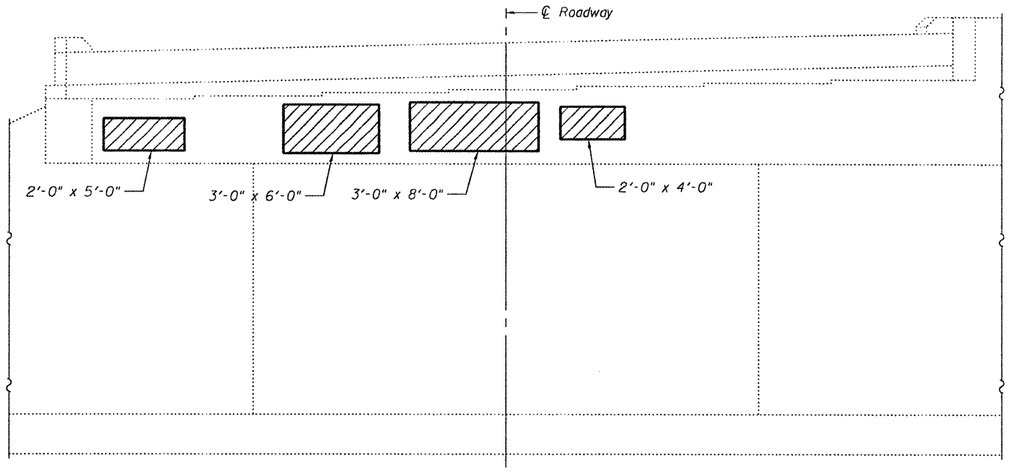
DESIGNED	I.J.L.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	I.J.L. A.T.H.

March 11, 2010
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

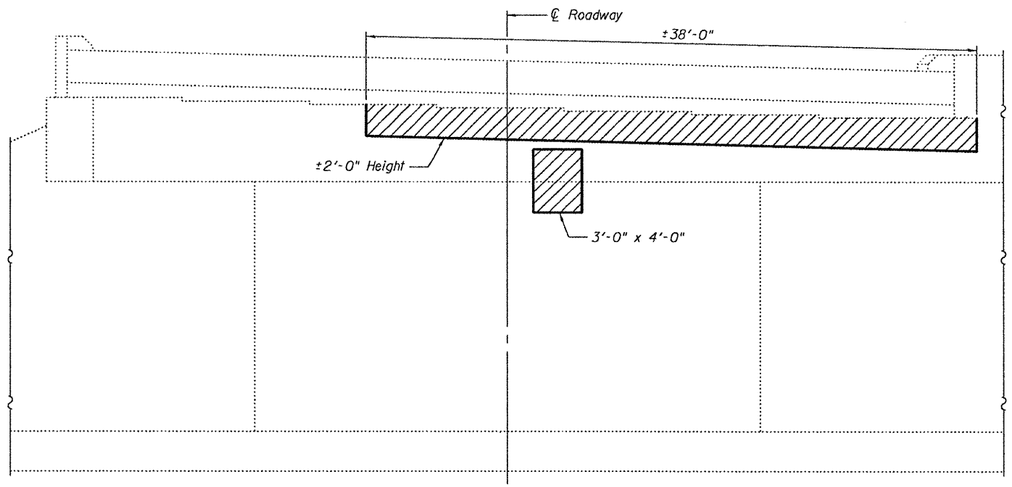
SHEET NO. 3	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	622	(128BR-1)I	Fulton	23	14
			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-94-001-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WEST ABUTMENT ELEVATION



EAST ABUTMENT ELEVATION

Structural Repair of Concrete (Depth ≤ 5")

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	148

DESIGNED	I.J.L.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	I.J.L. A.T.H.

March 11, 2010
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES

ABUTMENT REPAIR DETAILS
SN 029-0027

SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	622	(128BR-1)I	Fulton	23	15
7 SHEETS			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-94-001-09

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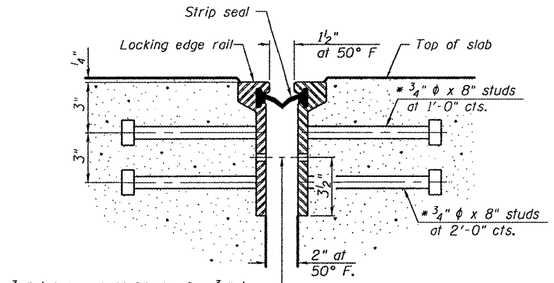
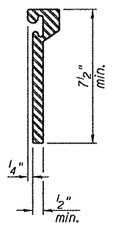
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

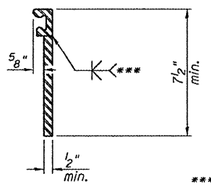


7/16" ϕ holes at 4'-0" cts. for ⅜" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU ROLLED RAIL JOINT



ROLLED EXTRUDED RAIL



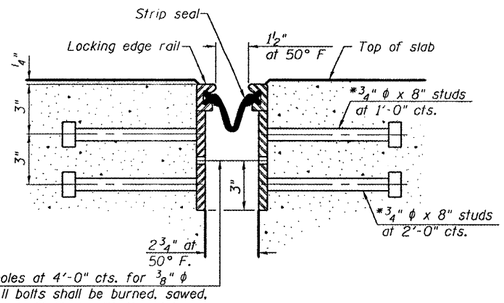
WELDED RAIL

*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

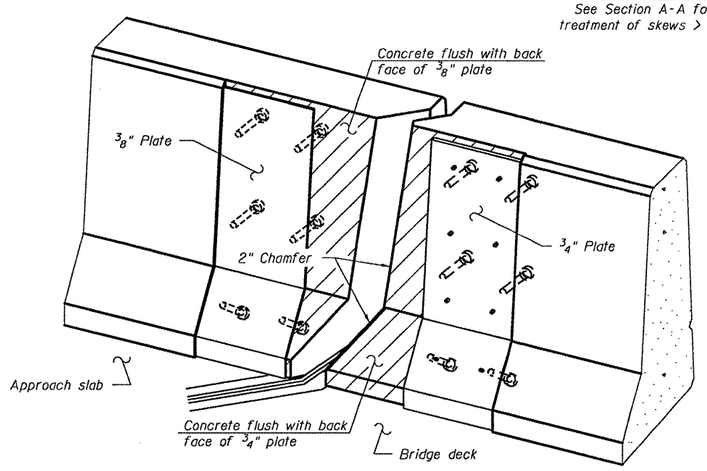
The inside of the locking edge rail groove shall be free of weld residue.

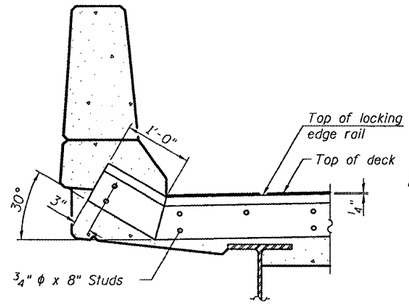
Rolled rail shown, welded rail similar.



7/16" ϕ holes at 4'-0" cts. for ⅜" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

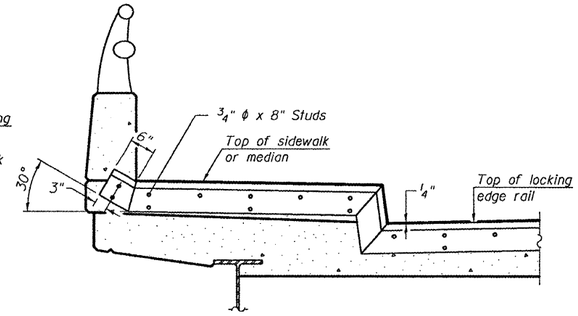
SECTION THRU WELDED RAIL JOINT





AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

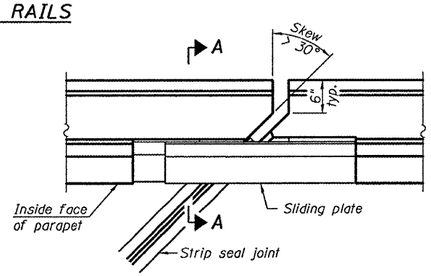
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

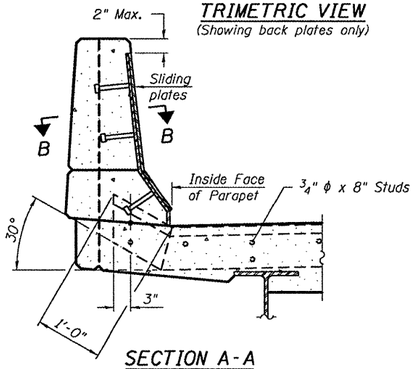
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

LOCKING EDGE RAILS



PLAN



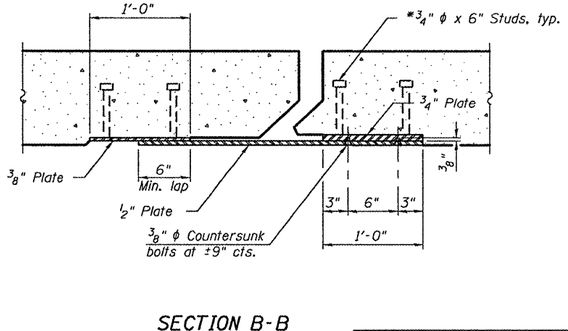
SECTION A-A

TRIMETRIC VIEW

(Showing back plates only)

POINT BLOCK DETAILS

(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	106

DESIGNED	I.J.L.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	I.J.L. A.T.H.

March 11, 2010
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

EJ-SSJ 11-1-09

SLT-94-001-09

STRIP SEAL DETAILS SN 029-0027

SHEET NO. 5	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	622	(128BR-1)I	Fulton	23	16
			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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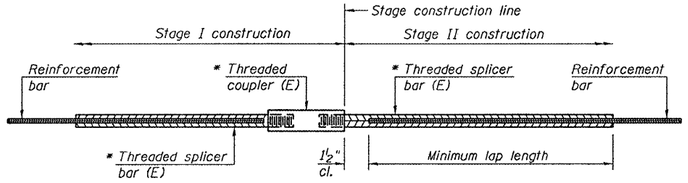
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

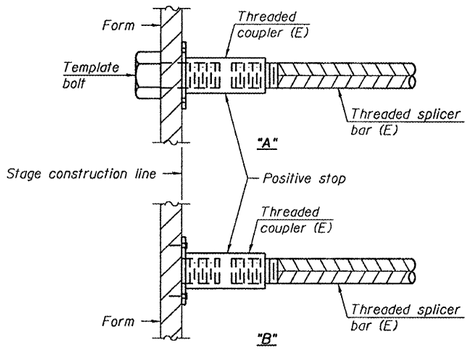
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

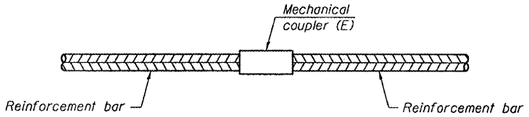
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
W. Abut.	#6	12	3
E. Abut.	#6	12	3



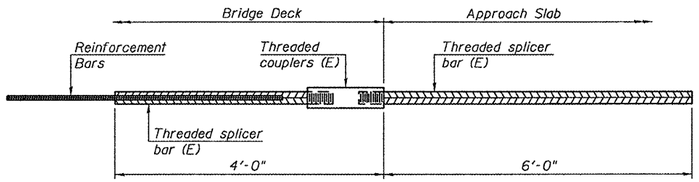
INSTALLATION AND SETTING METHODS

"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.



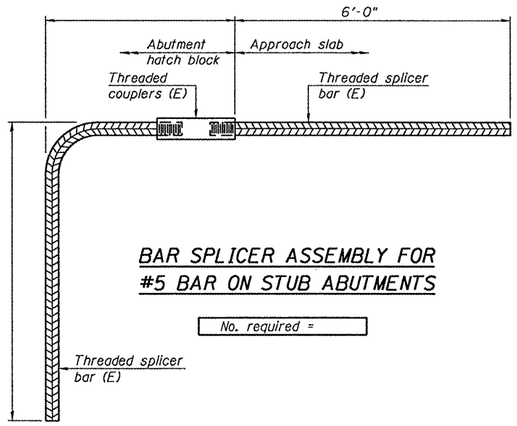
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

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

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

DESIGNED	I.J.L.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	I.J.L. A.T.H.

March 11, 2010
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES

BSD-1 11-1-09

SLT-94-001-09

BAR SPLICER DETAILS
SN 029-0027

SHEET NO. 6	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	622	(128BR-1)I	Fulton	23	17
			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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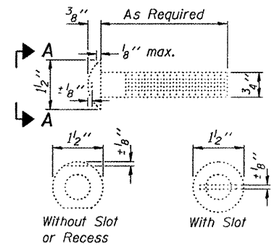
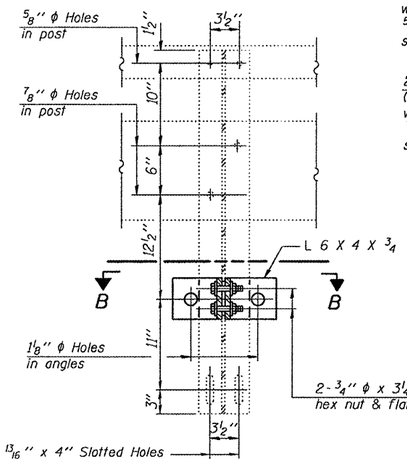
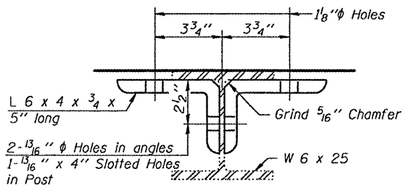
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



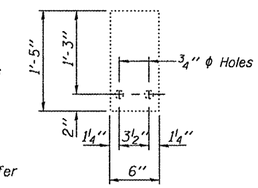
VIEW A-A
ROUND HEAD BOLT



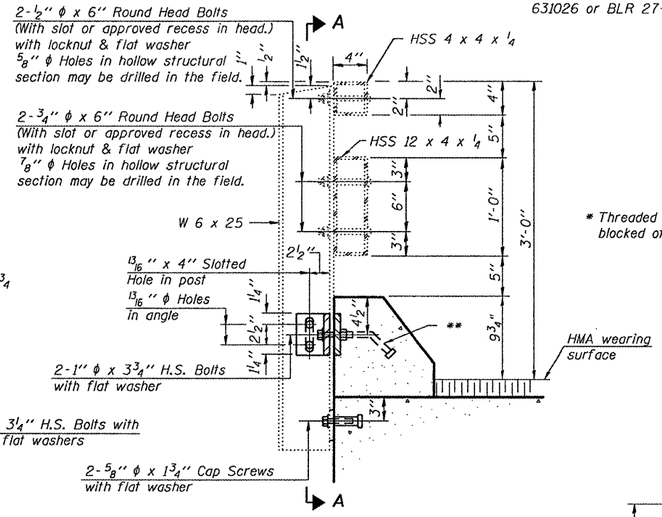
SECTION A-A



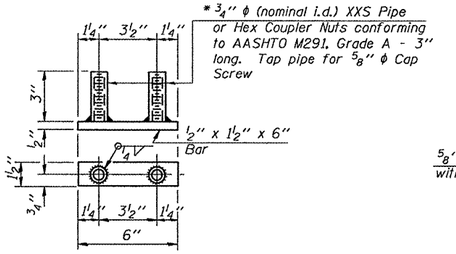
SECTION B-B



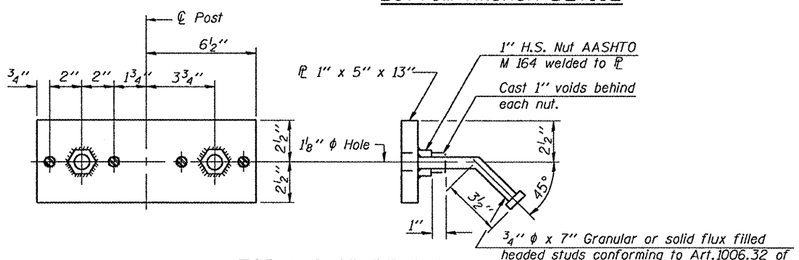
1/4" SHIM PLATE



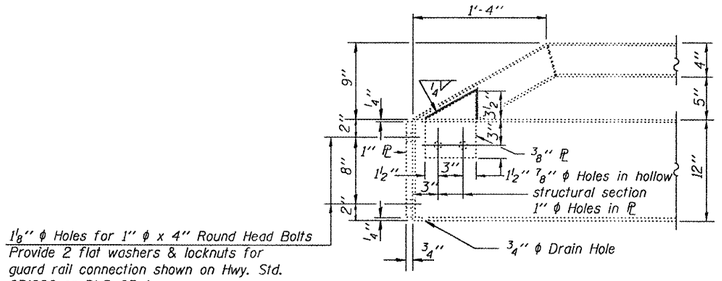
SECTION AT RAIL POST

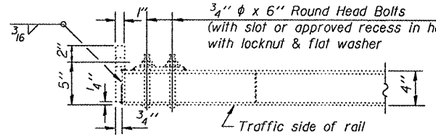


BOTTOM ANCHOR DEVICE



TOP ANCHOR DEVICE

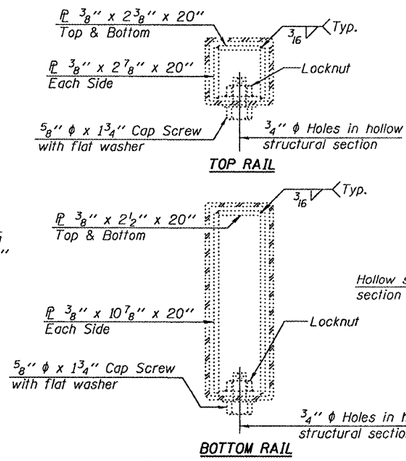




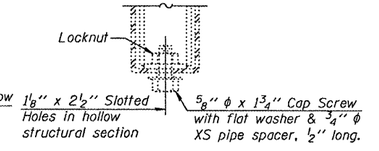
END OF RAIL DETAILS

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'-5" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type T-1.
All 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.

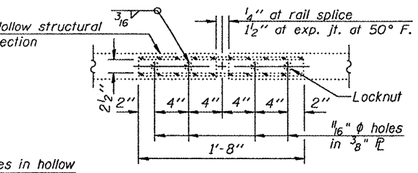
* Threaded areas shall be plugged or blocked off during casting of beam.



SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE PL TYPICAL

BILL OF MATERIAL

Item	Unit	Quantity
Removing and Re-erecting Existing Railing	Foot	80

DESIGNED	I.J.L.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	I.J.L. A.T.H.

March 11, 2010
EXAMINED
ENGINEER OF STRUCTURAL SERVICES
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

R-24A 11-1-09 (9'-6" Maximum Post Spacing)

SLT-94-001-09

RAILING DETAILS
SN 029-0027

SHEET NO. 7	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	622	(128BR-1)I	Fulton	23	18
			CONTRACT NO. 68927		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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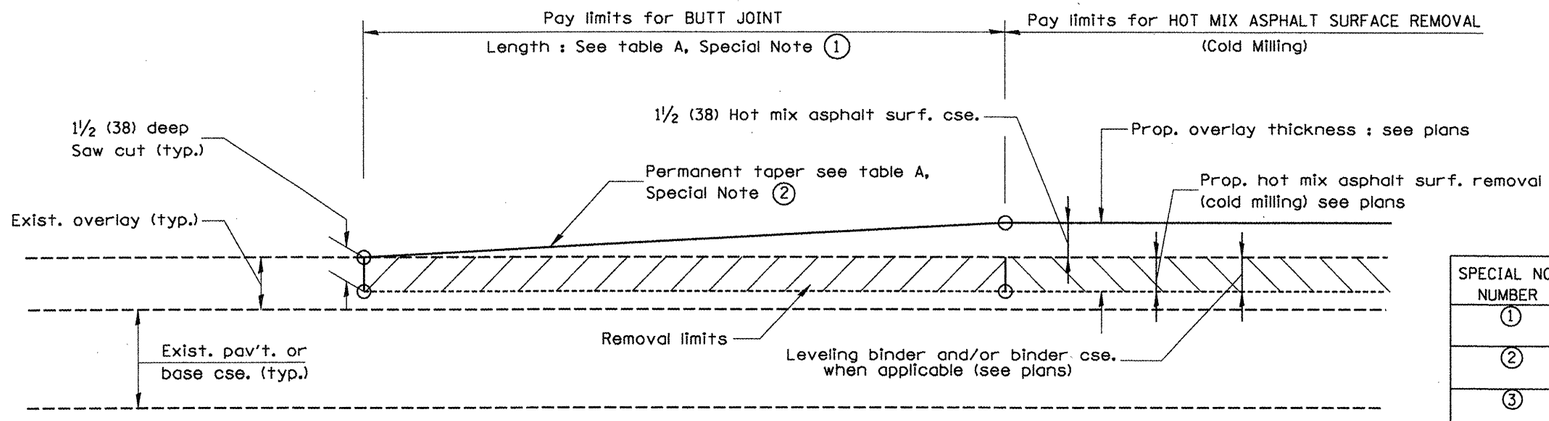


CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

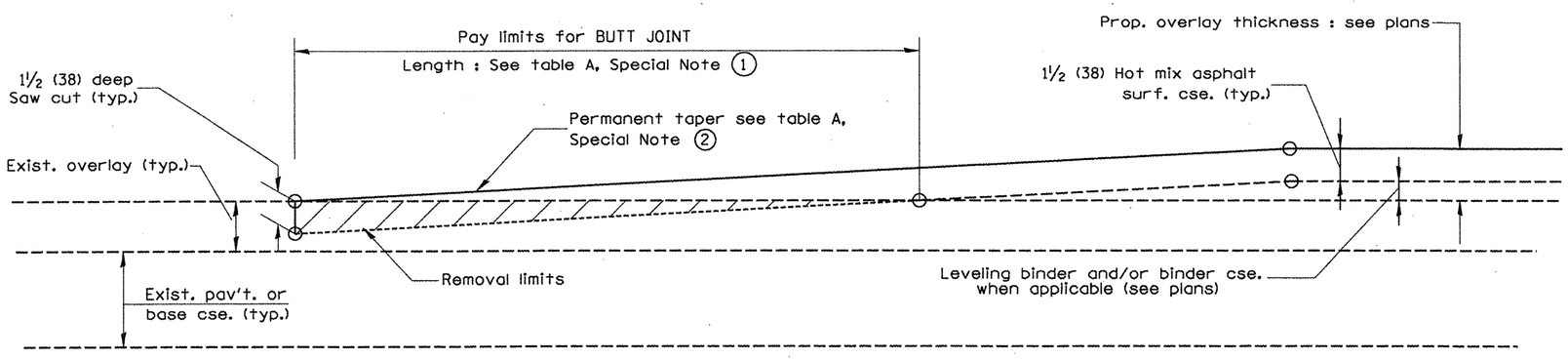
TABLE A

(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.



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

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).

SN.029-0027 IL.97 over Big Creek
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	BENUM. C-23.01. NEW REVISION BOX	I.P.			
04-01-97	CORRECTION TO DEPTH	J.G.			
09-15-05	REVISED DESIGNER NOTE	M.M.A.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

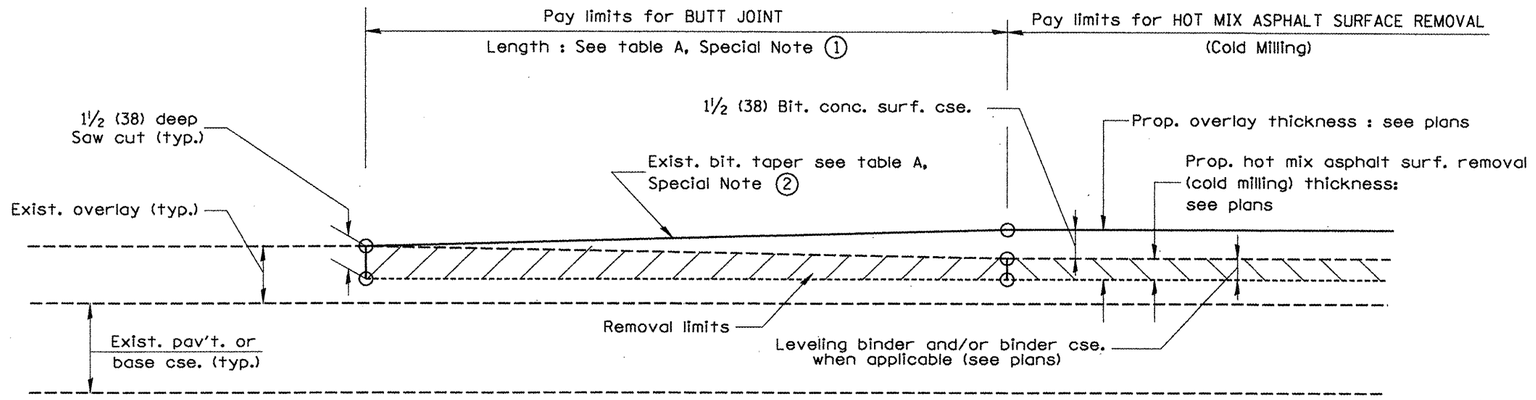
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

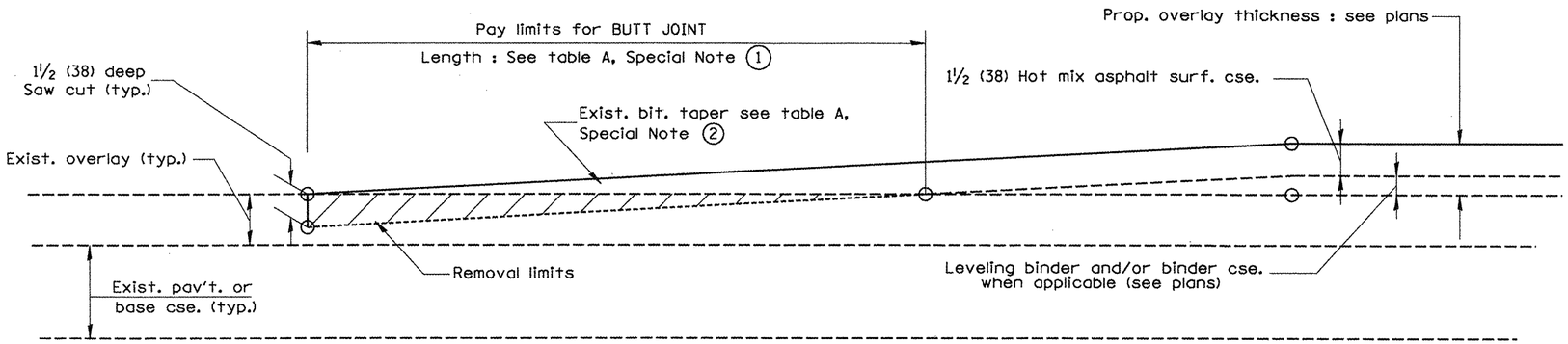
BUTT JOINTS

SHT. 1 OF 3
CADD SIG. 406101-04

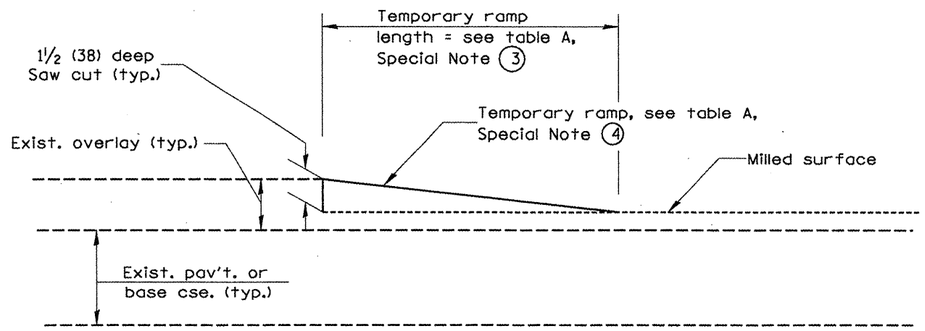
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	19
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



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

SN.029-0027 IL.97 over Big Creek
All dimensions are in inches (millimeters) unless otherwise noted.

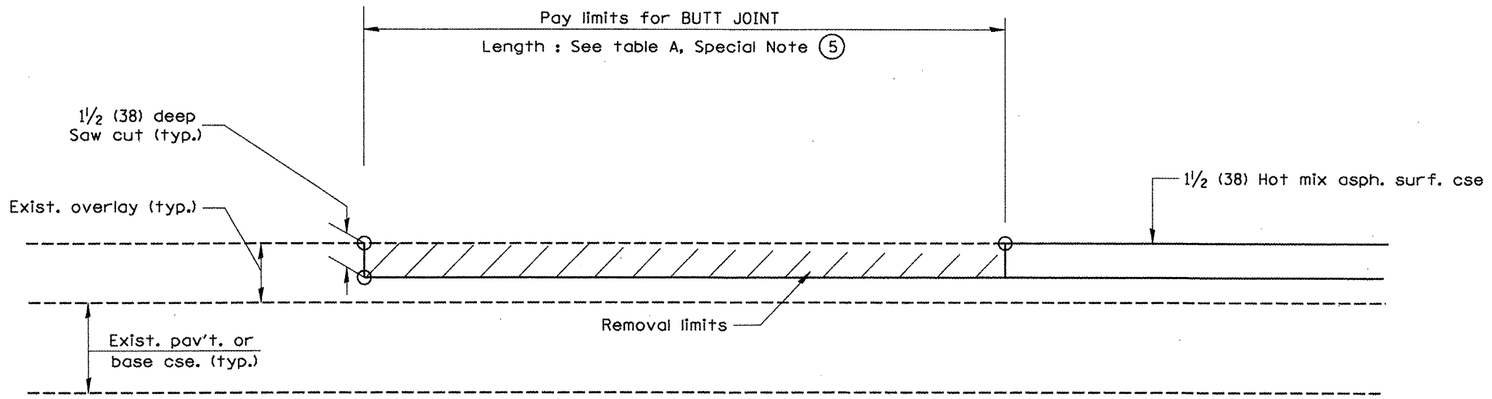
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 2 OF 3
CADD SIG. 406101:04

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	(128BR-1)I	FULTON	23	20
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



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

SN.029-0027 IL.97 over Big Creek
All dimensions are in inches (millimeters) unless otherwise noted.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

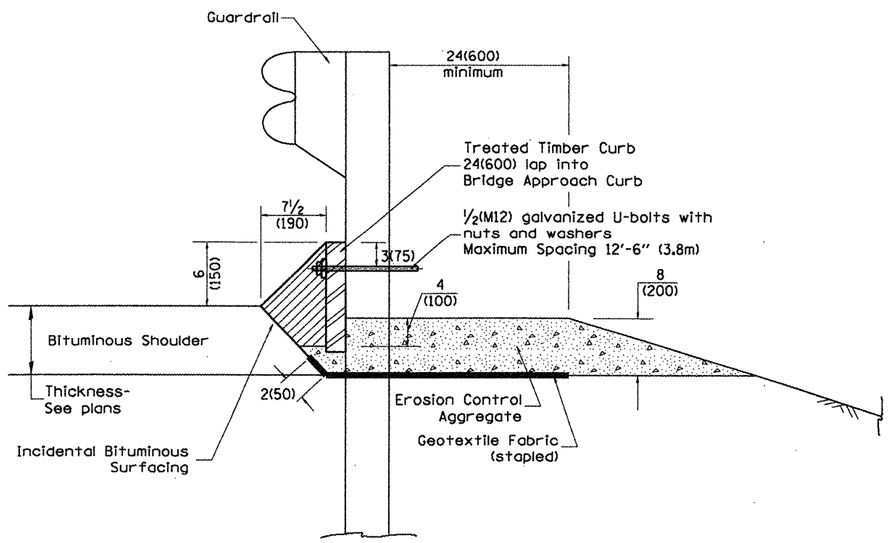
NOT TO SCALE

SHT. 3 OF 3
C400_STD_406101-04

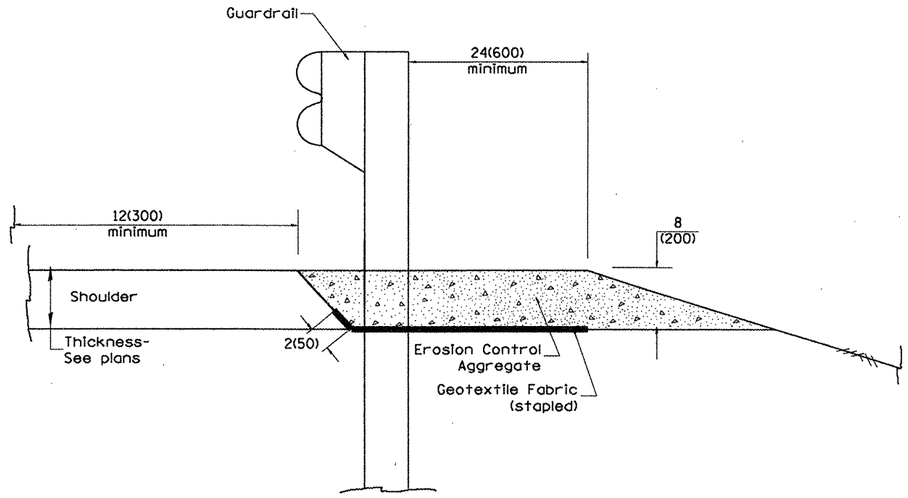
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	21
MISC. BRIDGE REPAIRS		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTES:

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; Slope Drains for Buried 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.



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.

SN.029-0027 IL.97 over Big Creek
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	BENUM. C-22.01. NEW REVISION BOX	T.P.			
03-01-97	CORRECT SIO. NUMBERS IN NOTES PG. 2	M.A.			
11-03-00	CORRECTION TO NOTES	M.A.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

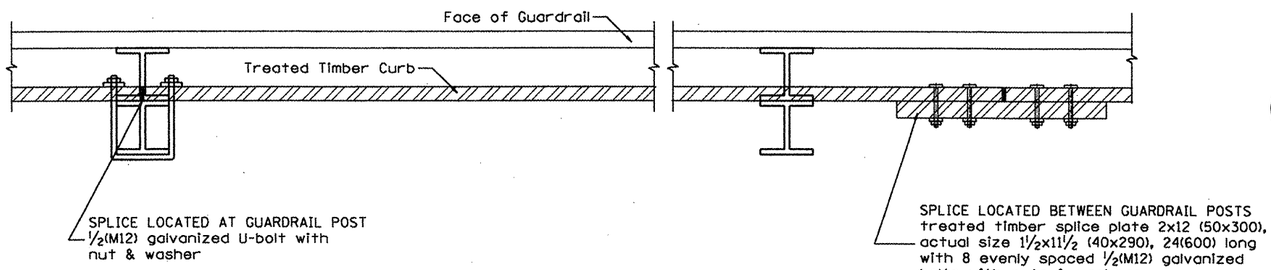
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

NOT TO SCALE

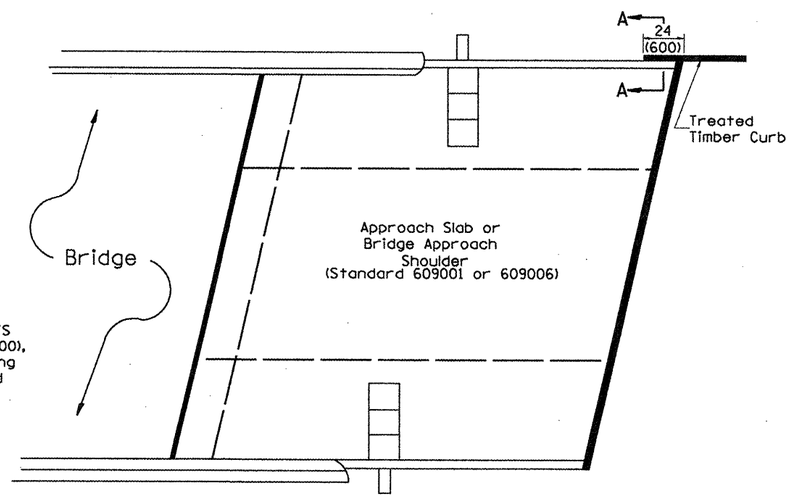
SHT. 1 OF 2
CADD SIO. 630101-09

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	22
Misc. Structure Repairs		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



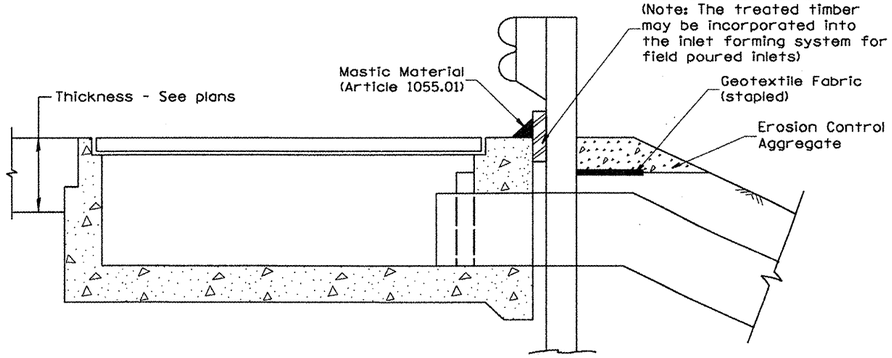
DETAIL A

(Typical Treated Timber Splices)

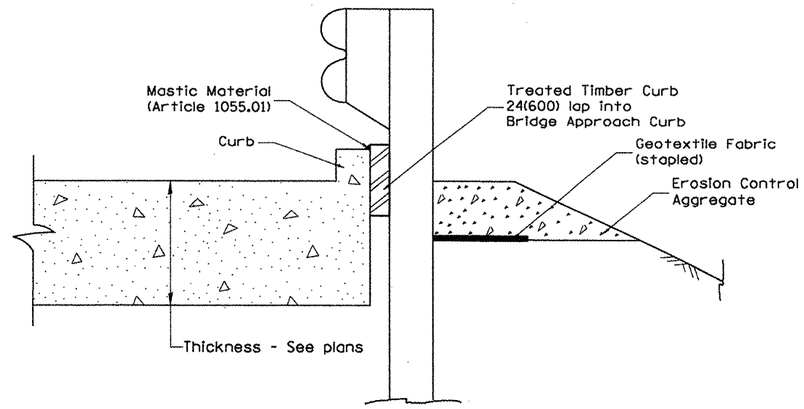


PLAN VIEW

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)

SN.029-0027 IL.97 over Big Creek
All dimensions are in inches (millimeters) unless otherwise noted.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

NOT TO SCALE

SHT. 2 OF 2
CADD SIG. 630101-09

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
622	(128BR-1)I	FULTON	23	23
Misc. Structure Repairs		CONTRACT NO. 68927		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		