

1-18-2013 LETTING ITEM 059

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

PROPOSED  
HIGHWAY PLANS

F.A.S. 825 (CH 13)  
OVER F.A.I. 57 (I-57)  
D9 CM BRIDGE REPAIR 2013-1

JEFFERSON COUNTY

C-99-035-12

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
825	**	JEFFERSON	6	1
		ILLINOIS	CONTRACT NO. 78307	

\*\*09 CM BRIDGE REPAIR 2013-1

D-99-031-12



FOR INDEX OF SHEETS, SEE SHEET NO. 2

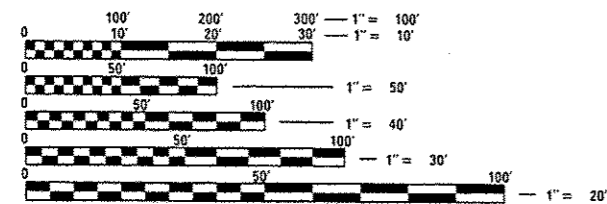
TRAFFIC DATA

FAS 825 TRAFFIC DATA

2011 ADT = 450  
3 % TRUCKS

TOWNSHIP:

SPRING GARDEN

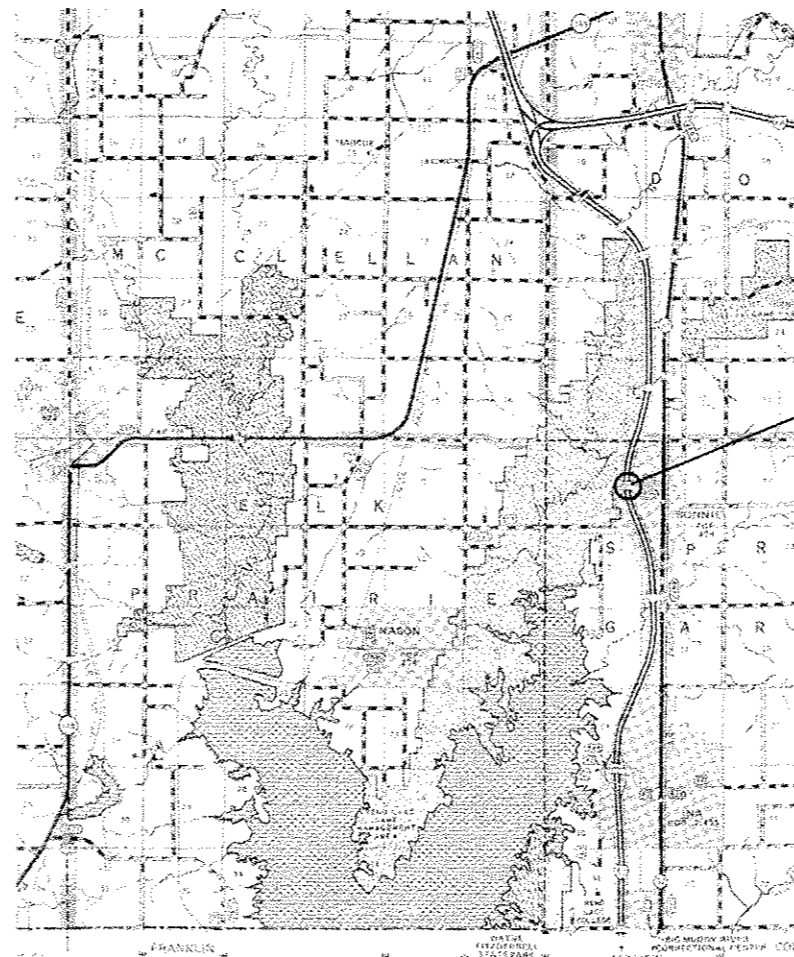


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT DESIGNER: RUSS WALKER  
PROJECT MANAGER: DAVID PICHE (618) 351-5227

CONTRACT NO. 78307



PROJECT LOCATION  
SN 041-0054

GROSS LENGTH = 303 FT. = 0.057 MILE  
NET LENGTH = 303 FT. = 0.057 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED Sept 26 20 12

Anna Cameron  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 7 20 12  
John D. Baranzelli PE/a  
actg ENGINEER OF DESIGN AND ENVIRONMENT

Dec 7 20 12  
William R. Frey lsc  
actg DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

**GENERAL NOTES**

- 1) THE THICKNESS OF HOT-MIX ASPHALT MIXTURE 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 HOT-MIX ASPHALT MIXTURE IS PLACED.
- 2) FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:
 

ALL HOT MIX ASPHALT	2.016 TONS/CU YD
BITUMINOUS MATERIALS: ON PAVEMENT	0.09 GAL /SQ YD
- 3) PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHOULD CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.
- 4) IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.
- 5) COMMITMENTS: NONE AS OF OCTOBER 19, 2012.

**STANDARDS**

- |           |  |
|-----------|--|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS     |
| 701001-02 | OFF-ROAD, 2L2W MORE THAN 15' FROM PAVEMENT EDGE  |
| 701006-04 | OFF-ROAD, 2L2W 15' TO 24" FROM PAVEMENT EDGE     |
| 701201-04 | LANE CLOSURE, 2L2W DAY ONLY, FOR SPEEDS ≥ 45 MPH |
| 701901-03 | TRAFFIC CONTROL DEVICES                          |

**MIXTURE REQUIREMENTS**

LOCATION(S):	FAS 825 SURFACE
MIXTURE USE(S):	HOT-MIX ASPHALT SURFACE COURSE
AC/PG:	PG 64-22
RAP% (MAX):	10%
DESIGN AIR VOIDS:	4% @ Ndes 90
MIXTURE COMPOSITION: (GRADATION MIXTURE):	IL 9.5 mm OR IL 12.5 mm
FRICTION AGGREGATE:	MIXTURE C
MIXTURE WEIGHTS:	112LBS / SY / INCH THICKNESS

**INDEX OF SHEETS**

- 1 COVER SHEET
- 2 INDEX OF SHEETS; GENERAL NOTES; STANDARDS
- 3 SUMMARY OF QUANTITIES
- 4 GENERAL PLAN AND ELEVATION
- 5 BUTT JOINT DETAIL
- 6 CROSS SECTION

Prepared By: *Joe B. Anderson*  
DISTRICT STUDIES & PLANS ENGINEER

Examined By: *Paul S. G.*  
DISTRICT LAND ACQUISITION ENGINEER

Examined By: *Cami Nilsen*  
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: *Carl M. H.*  
DISTRICT OPERATIONS ENGINEER

Examined By: *[Signature]*  
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: *Doris A. [Signature]*  
DISTRICT CONSTRUCTION ENGINEER

Examined By: *[Signature]*  
DISTRICT MATERIALS ENGINEER

Approved By: *Ormer A. [Signature]*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

*Sept 26* 2012  
DATE

\*\*09 CM BRIDGE REPAIR 2013-1

FILE NAME =	USER NAME = walkera	DESIGNED - RAW	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SIGNATURES, GENERAL NOTES, STANDARDS, &amp; INDEX OF SHEETS</b>	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
01\pw_work\p1dot\walkera\0299139\sh-	plan.dgn	DRAWN - RAW	REVISED -			825	**	JEFFERSON	6	2	
	PLOT SCALE = 1/8" = 1' / in.	CHECKED - TWH	REVISED -			CONTRACT NO. 78307					
	PLOT DATE = 9/17/2012	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

**SUMMARY OF QUANTITIES**

CODE NUMBER	PAY ITEM	07EOD, 01	
		CONSTRUCTION TYPE CODE 0014	
		FUNDING 100% STATE	
		UNIT	TOTAL
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	72
40600982	HOT - MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	147
40600990	TEMPORARY RAMP	SQ YD	33
40603320	HOT - MIX ASPHALT SURFACE COURSE, MIX "C", N90	TON	84
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701201	EACH	1
70300220	TEMPORARY PAVEMENT MARKING - LINE 4''	FOOT	1212
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	404
* 78001110	PAINT PAVEMENT MARKING - LINE 4''	FOOT	1212

\*SPECIALTY  
ITEM

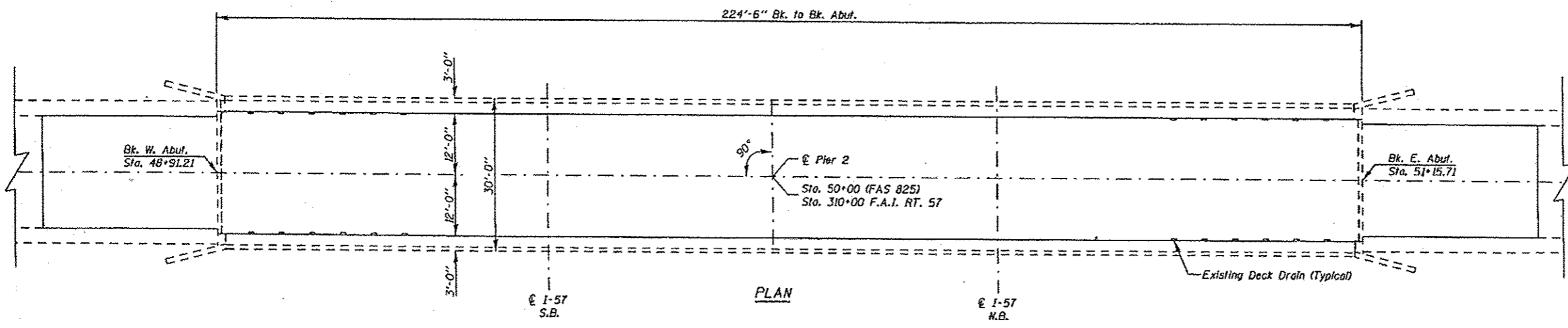
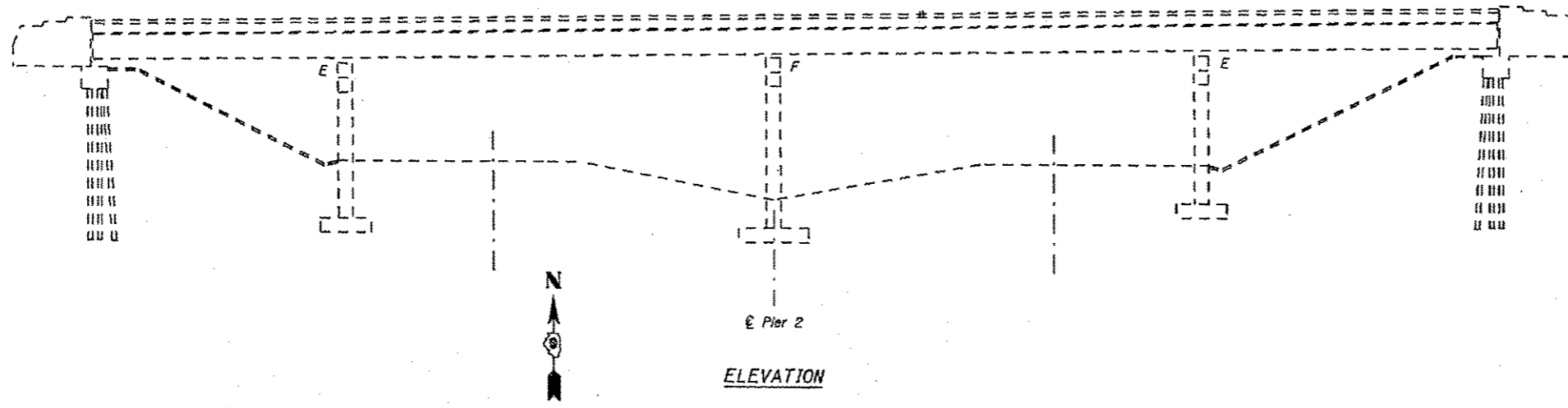
\*\*09 CM BRIDGE REPAIR 2013-1

**GENERAL NOTES**

The bridge deck surface shall be cleaned with oil-free compressed air or wire brushes to remove all oil, grime, and loose particles, surfaces that will not respond to cleaning by compressed air or wire brushes shall be cleaned by sandblasting.

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.

Maintain existing deck drain openings and transition asphalt overlay at each drain location.



**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Bituminous Materials (Prime Coat)	Gal.	72
Hot-Mix Asphalt Surface Course, Mix "C", #90	Ton	84

**SCOPE OF WORK**

There should be a 2" HMA Overlay with prime coat applied to the bridge deck with surface removal butt joints in the approach pavements.

**CURVE DATA**

F.A.I. ROUTE 57  
 P.I. Sta. 312+83.05  
 $\Delta = 40^\circ-51'-10''$   
 $D = 1^\circ-00'$   
 $R = 5729.65$   
 $T = 2133.86$   
 $L = 4085.21$   
 S.E. .01 FT/FT

**DESIGN STRESSES**

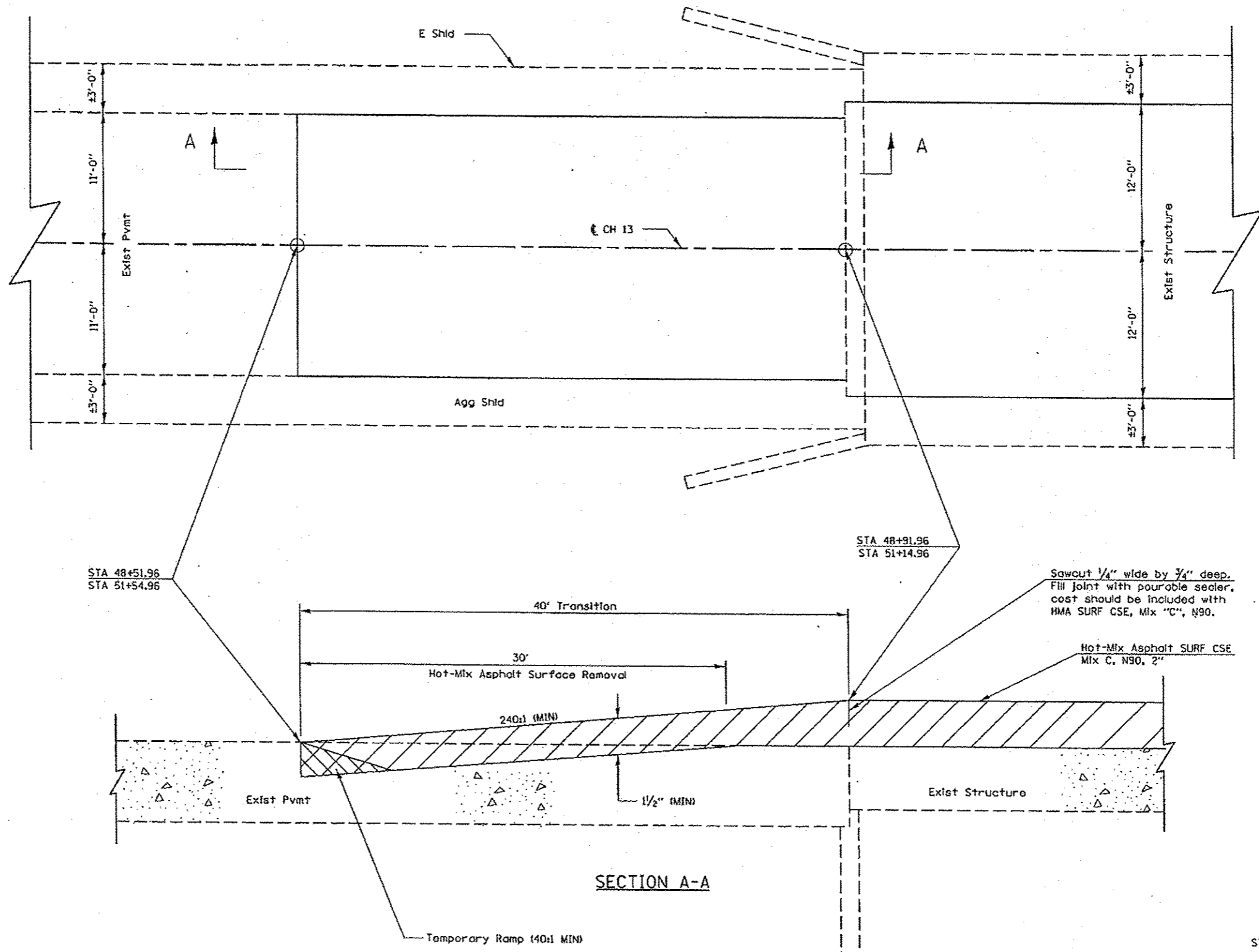
$f_c = 1400$  psi Super & Sub  
 $f_s = 20000$  psi Reinf.  
 $f_s = 20000$  psi Struct  
 $v = 75$  psi Flgs.  
 $N = 10$

BRIDGE REPAIRS  
 FAS 825 (CH 13) OVER FAI 57  
 JEFFERSON COUNTY  
 STA. 310+00  
 SN 041-0054

FILE NAME *	USER NAME * walkerr	DESIGNED - RAW	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL PLAN AND ELEVATION</b>		F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pe_walkerr\pawdot\walkerr\024913\sh...	PLDW	DRAWN - RAW	REVISED -				B25	**	JEFFERSON	6	4
Plot Scale * 24.0043' / in.	PLDW	CHECKED - TWH	REVISED -				CONTRACT NO. 78307		ILLINOIS FEO. AID PROJECT		
Plot Date * 9/17/2012	PLDW	DATE -	REVISED -				SCALE:	SHEET OF SHEETS	STA. TO STA.		

\*\* 09 CM BRIDGE REPAIR 2013-1

# BUTT JOINT



Sawcut 1/4" wide by 3/4" deep. Fill joint with pourable sealer, cost should be included with HMA SURF CSE, Mix "C", N90.

Hot-Mix Asphalt SURF CSE Mix C, N90, 2"

## SECTION A-A

### REVISIONS

DRAWN	10-17-90
REVISED	01-11-07
REVISED	3-25-08
REVISED	

STD. 9-86

\*\* 09 CW BRIDGE REPAIR 2013-1

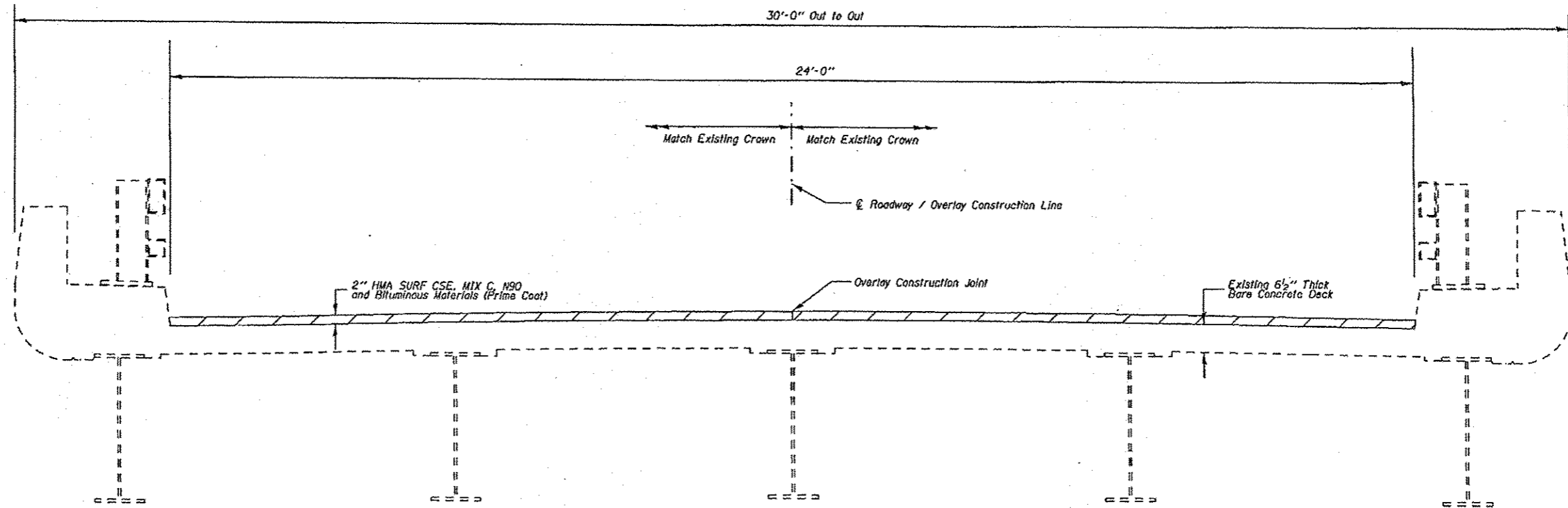
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...	...	CHECKED - TWH	REVISED -
...	...	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BUTT JOINT DETAILS  
SN 041-0054

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
825	**	JEFFERSON	6	5
CONTRACT NO. 78307				
ILLINOIS FED. AID PROJECT				



CROSS SECTION

STATION	LENGTH (INFORMATION ONLY)	TEMPORARY PAVEMENT MARKING - LINE 4'		PAINT PAVEMENT MARKING - LINE 4'	
		SOLID WHITE	YELLOW DBL. LINE (NO PASSING)	SOLID WHITE	YELLOW DBL. LINE (NO PASSING)
48+51.96 TO 51+54.96	303	606	606	606	606
TOTALS			1212		1212

BRIDGE REPAIRS  
 FAS 825 (CH 13) OVER FAI 57  
 JEFFERSON COUNTY  
 STA. 310+00  
 SN 041-0054

FILE NAME :	USER NAME : walkerra	DESIGNED - RAW	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTION</b>	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLAN.DGN	DRAWN - RAW	REVISED -			825	**	JEFFERSON	6	6
	PLOT SCALE = 2.4817' / in.	CHECKED - TWH	REVISED -			CONTRACT NO. 78307				
	PLOT DATE = 9/17/2012	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET OF SHEETS	STA. TO STA.				

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