07-31-2015 LETTING ITEM 037

LOCATION: IL 8

STA. 1628 + 45 - 1630 + 30

**UNDER RR VIADUCT** 

INDEX OF SHEETS:

- 1. COVER SHEET
- 2-3. COMMITMENTS & GENERAL NOTES
- 4-5. SUMMARY OF QUANTITIES
- 6. PLAN VIEW & LINE DIAGRAM
- 7. TYPICAL SECTIONS
- 8-9. SCHEDULE OF QUANTITIES
- 10. EXISTING PLAN & PROFILE
- 11. EXISTING CULVERT & CATCH BASINS
- 12. INLET RECONSTRUCTION DETAIL
- 13. PROPOSED DETOUR PLAN
- 14. REMOVAL PLAN
- 15. PROPOSED PLAN & PROFILE
- 16. PROPOSED DRAINAGE PLAN
- 17–18. CROSS SECTIONS

**HIGHWAY STANDARDS:** 

420001-08 606206-03 420101-05 701501-06 420601-05 701901-04 420701-02 780001-05 601001-04 BLR 22-7 606001-06

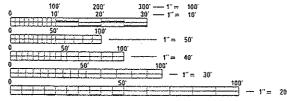
606201-02

IL\_8\_

ADT = 1050 (2013)MU = 3.81% (40)

SU = 7.62% (80)

TRUCK = 120



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER: TOM LACY (309)671-3493 PROJECT MANAGER: RICH DOTSON (309)671-3455

CATALOG NO. 035082-00D CONTRACT MAINT. 68C32

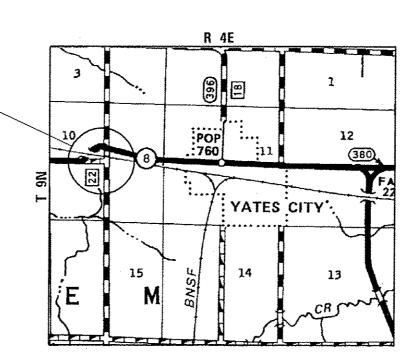
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

# **PROPOSED** HIGHWAY PLANS

FAS 380 (IL 8) SECTION 46(S-1,I) **KNOX COUNTY** C-94-019-15



GROSS LENGTH = 160 FT. = 0.03 MILE NET LENGTH = 160 FT. = 0.03 MILE

380 46(5-1,1) KNOX 18 1
18 VIADUCT GRAINAGE REPAIR ILLINOIS CONTRACT NO. 68C32

D-94-013-15



THIS PROJECT CONSISTS OF RECONSTRUCTION OF IL 8, UNDER THE RAILROAD VIADUCT WITH REMOVAL AND REPLACEMENT OF FULL DEPTH PAVEMENT, EXISTING DRAIN INLETS ADJUSTED. NEW SUB-BASE. UNDERDRAIN AND CURB & GUTTER FOR DRAINAGE IMPROVEMENT.

> STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER D. Baranzelli PE. Oner Osman PEla

> > PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

### **GENERAL NOTES**

#### PROPERTY OWNER ACCESS REQUIREMENTS

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.

#### MINIMUM VERTICAL CLEARANCE

The Contractor shall verify the existing structure vertical clearance prior to placing any replacement pavement under any structure. A minimum (13'-8") vertical clearance shall be maintained under all structures.

#### ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culverts, storm sewers, and/or pipe drains required prior to ordering these items.

#### 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. Unless elevations are shown —— all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

#### EARTH EXCAVATION - INCIDENTAL TO CURB, GUTTER, & DRIVEWAY

Earth excavation and backfill for proposed curb and gutter and driveway pavements shall be included in the unit cost of the various items.

#### **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)
- <sup>†</sup> 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.

## **GENERAL NOTES**

#### PAVEMENT STATIONING NUMBERS & PLACEMENT

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 (20mm) wide, 5 inches (125 mm) high and 5/8 inch (15 mm) deep.

The pavement station numbers shall be installed as specified herein:

Interval - 200 feet (English stationing) or 100 meters (metric stationing)

Bottom of Numbers - 6 inches (150 mm ) 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 (Metric) pavement stations shall use this format "XXX (XX + X00)" 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.

#### EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCTURES

In accordance with Section 602 of the Standard Specifications, the connecting of existing drain tiles, pipe culverts, or storm sewers to the proposed drainage system structures will not be paid for separately but shall be considered as included in the pay items provided.

#### TRANSITION PAYMENT METHOD - NEW/OLD CONSTRUCTION

Three meter (10 ft.)(3m) transitions shall be used to match proposed items of work to existing items in the field unless otherwise shown. The transition shall be paid for at the contract unit price for the proposed item of work specified.

#### COMMITMENTS

No commitments have been made for this project.

#### PROJECT SPECIFIC NOTES

Copies of the Local Detour Concurrence letters are available from the D4 Project Support Engineer. The Pavement Core Samples Report is also available from the D4 Materials Department.

#### TRAFFIC CONTROL

IDOT District Four has signed County and Township approvals for the detour used while IL 8 is closed to traffic under the railroad viaduct. The Contractor shall notify Operations Traffic Control at least one week prior to beginning construction.

The Contractor shall place two Changeable Message Signs as directed by the Operations Traffic Control Technician one week prior to road closure for advanced notice to motorists.

#### EXISTING DRAIN TILE SINKHOLE

IDOT D4 Operations Engineer has agreed to repair the draintile sinkhole behind the guardrail at the existing left side (East) inlet grating. If this work has not been done the Contractor shall coordinate repairs with the Engineer during project construction. Cost of this work shall then be paid using Section 109.04 of the Standard Specifications.

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% STATE
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	2	2
28000500	INLET AND PIPE PROTECTION	EACH	2	2
31100200	SUB-BASE GRANULAR MATERIAL, TYPE A	CU YD	185	185
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SO YD	37]	371
42001200	PAVEMENT FABRIC	SO YD	403	403
42001300	PROTECTIVE COAT	SO YD	371	371
44000100	PAVEMENT REMOVAL	SO YD	371	371
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	370	370
44201298	DOWEL BARS 11/4"	EACH	46	46
44213204	TIE BARS 3/4"	EACH	149	149
				·
48100900	AGGREGATE SHOULDERS, TYPE A 10"	SO YD	42	42
60107600	PIPE UNDERDRAINS 4"	FOOT	382	382
60262700	INLETS TO BE RECONSTRUCTED	EACH	2	2
60602800	CONCRETE GUTTER, TYPE B	FOOT	72	72

-DRAFT-STOAPLNS-SQUODBRIDGES-DRAINAGE C

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CONST. CODE

	F.A.S.	SECTION	COUNTY	TOTAL	SHEET NO.
	380	46(\$-1,1)	KNOX	18	4
	UNDER	RR VIADUCT ORAINAGE REPAIR	CONTRACT	NO. €	8C32
_		RLINOIS FED. A	D PROJECT		

0005 100% STATE TOTAL CODE ITEM UNIT QUANTITY NO. FOOT 298 60608250 COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.06 298 MOBILIZATION L SUM 67100100 1 70101835 TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22 L SUM 1 2 CAL MO 70106800 CHANGEABLE MESSAGE SIGN PAINT PAVEMENT MARKING - LINE 4" FOOT 740 740 78001110 SQ FT 247 247 PAVEMENT MARKING REMOVAL 78300100 1 X7010226 TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 SPECIAL L SUM Z0048665 RAILROAD PROTECTIVE LIABILITY INSURANCE L SUM į

S:-CEN-ORAFT-STOAPLNS-SQUODBRIDGES-DRAINAGE CONTRACTS-68C32\_ILBRR

\* SPECIALTY ITEM

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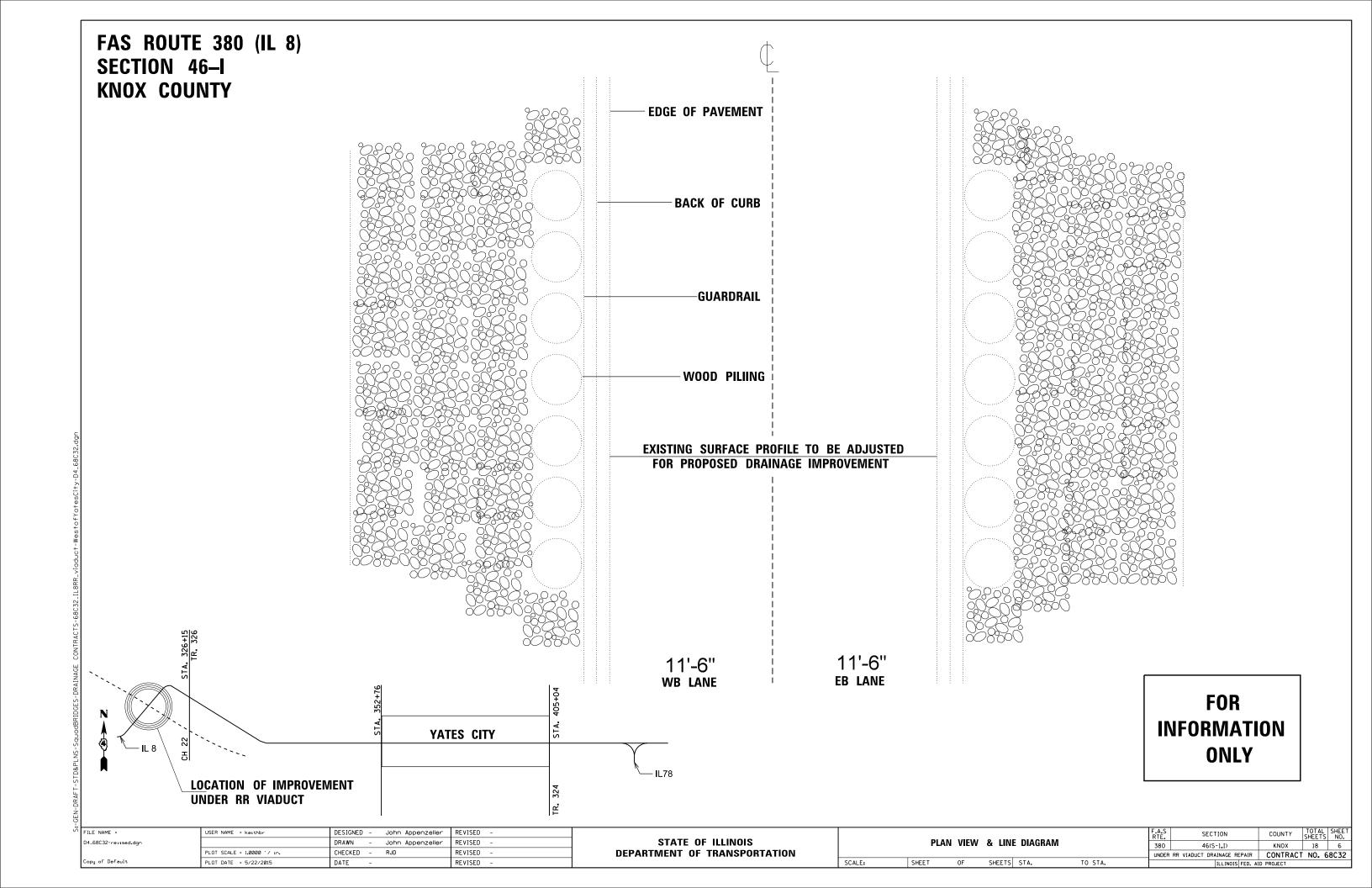
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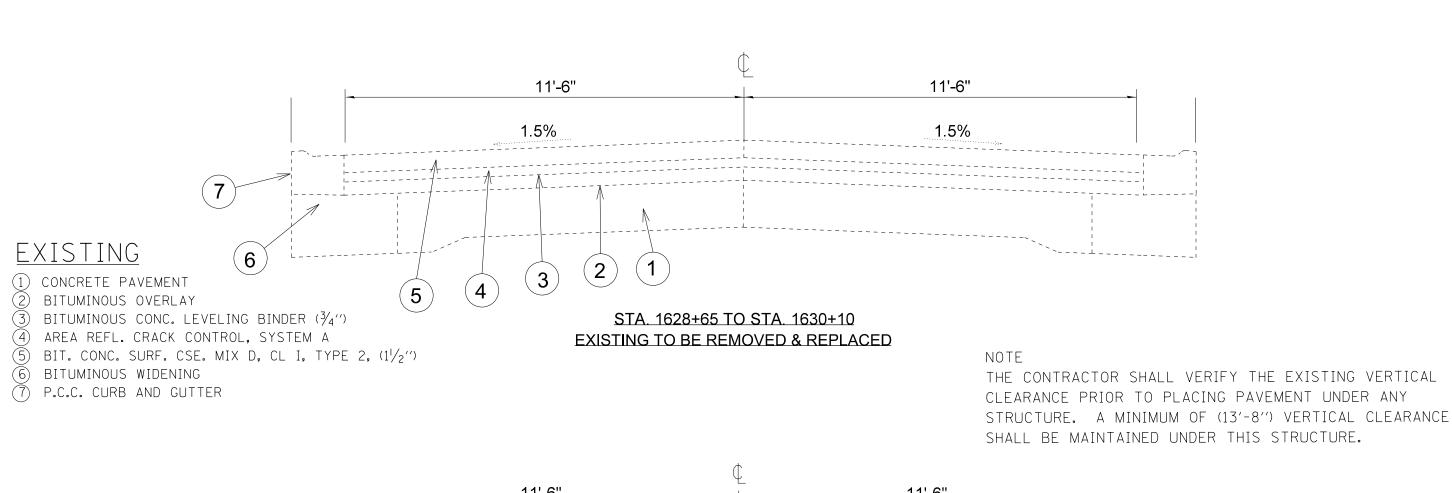
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

CONST. CODE

| F.A.S. | SECTION | COUNTY | SHEET |





(F) GEOTECHNICAL FABRIC FOR

**GROUND STABILIZATION** 

PLOT DATE = 5/22/2015

DESIGNED - JJA

DRAWN - JJA

CHECKED - RJD

REVISED

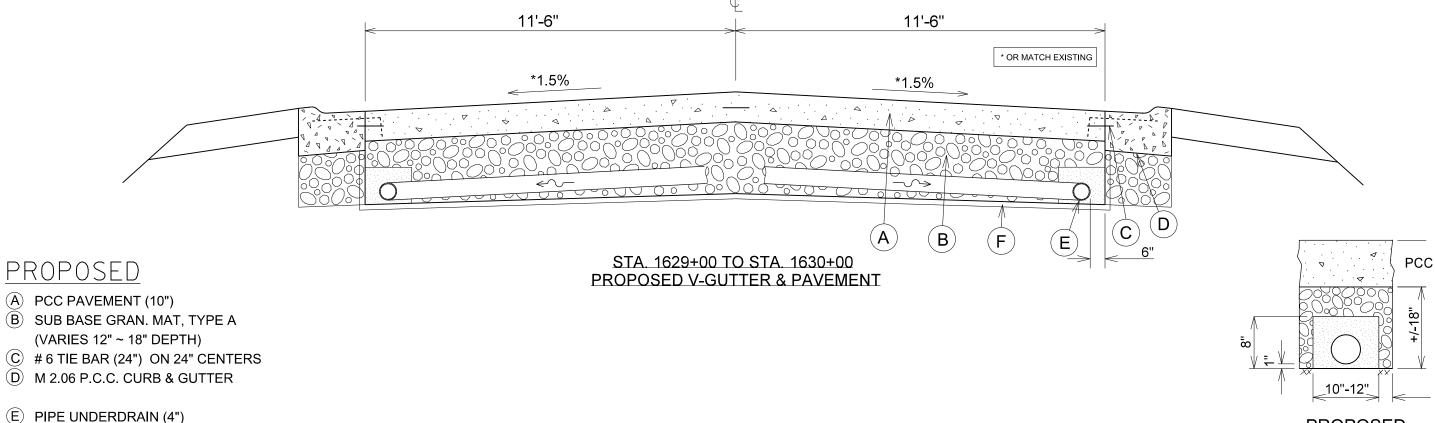
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STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**PROPOSED** 

UNDERDRAIN DETAIL

UNDER RR VIADUCT DRAINAGE REPAIR | CONTRACT NO. 68C32

46(S-1,I)

TYPICAL SECTIONS

OF SHEETS STA.

SHEET

# SCHEDULE OF QUANTITIES

	PAVEMENT REMOVAL / REPLACEMENT QUANTITIES												
	LOCATION	TOTAL ROADWAY	LENGTH	AREA	SUB-BASE GRAN. MAT. TYPE A	CEMENT CONCRETE PAVEMENT	PAVEMENT FABRIC	PROTECTIVE COAT	PAVEMENT REMOVAL		SHOU	EGATE LDERS E A 10"	
		WIDTH			12~24 IN	10 IN			10 IN	LEFT AREA	LEFT SIDE	RIGHT AREA	RIGHT SIDE
		FT	FT	SQ YD	CU YD	SQ YD	SQYD	SQYD	SQ YD	SQ YD	TON	SQ YD	TON
IL 8													
STA.	1628 + 45 TO 1628 + 65	23.00	20.00	51.11						2.22	0.71	2.22	0.71
STA.	1628 + 65 TO 1630 + 10	23.00	145.00	370.56	185.28	370.56	402.77	370.56	370.56	16.11	5.16	16.11	5.16
STA.	1630 + 10 TO 1630 + 30	23.00	20.00	51.11						2.22	0.71	2.22	0.71
	GRA	ND-TOTAL			185	371	403	371	371	21	7	21	7

LOCATION	LENGTH	Pavement Marking Removal (x4)	Paint Pvmt. Marking Line 4" White (x2)	Paint Pvmt. Marking Line 4" Yellow (x2)
	FT	SQ FT	FT	FT
IL 8				
Sta. 1628 + 45 - 1628 + 65	20	6.7	20	20
Sta. 1628 + 65 - 1630 + 10	145	48.4	145	145
Sta. 1630 + 10 - 1630 + 30	20	6.7	20	20
	TOTAL	247	370	370

EN-DRAFT-STD&PLNS-SquadBRIDGES-DRAINAGE CONTRACTS-68C32\_IL8RR\_viaduct-WestofYatesCity-D4\_68C3

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Ī							F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
l			SCHED	JLE OF QUA	ANTITIES		380	46(S-I,I)	KNOX	18	8
ļ					UNDER	RR VIADUCT DRAINAGE REPAIR	CONTRACT	NO. (	58C32		
l	SCALE:	SHEET	OF	OF SHEETS STA. TO STA.   ILLINOIS FED. AID PROJECT							

# SCHEDULE OF QUANTITIES

EXCAVATING & GRADING EXISTING SHOULDER				
LOCATION	UNIT			
Sta. 1628 + 45 - 1630 + 30	2			
TOTAL	2			

PIPE UNDERDRAINS 4"				
LOCATION	F00T			
Sta. 1628 + 70 - 1630 + 05	382			
TOTAL	382			

T. C. & P.	TANDARD 701501 SPECIAL
LOCATION	LSUM
Jobsite	1
TOTAL	1

INLET AND PIPE PROTECTION	
LOCATION	EACH
Sta. 1629 + 68.4 L.&R. EOP	2
TOTAL	2

INLETS TO BE RECONSTRUCTED	
LOCATION	EACH
Sta. 1629 + 68.4 L.&R.	2
TOTAL	2

**CONCRETE GUTTER, TYPE B** 

**FOOT** 72 72

RAILROAD PROTECTIVE LIABILITY INSUR	ANCE
LOCATION	LSUM
JOBSITE	1
TOTAL	1

PORTLAND CEMENT CONCRETE PAVEME	NT 10"
LOCATION	SQ YD
Sta. 1628 + 65 - 1630 + 10	371
TOTAL	371

<b>⊦</b> 10	371	Sta. 1628 + 45 - 1630 + 18	
	371	TOTAL	
			_

LOCATION

PAVEMENT REMOVAL		
LOCATION	SQ YD	
Sta. 1628 + 65 - 1630 + 10	371	
TOTAL	371	

COMBINATION CONCRETE CURB & GUTTER, T	YPE M-2.06
LOCATION	SQ YD
Sta. 1628 + 58 - 1630 + 30 L.&R. E.O.P.	298
TOTAL	298

COMBINATION CURB & GUTTER REMOVAL	
LOCATION	FOOT
Sta. 1628 + 45 - 1630 + 30 L.&R. E.O.P.	370
TOTAL	370

MOBILIZATION		
LOCATION	LSUM	
JOBSITE	1	
TOTAL	1	

DOWEL BARS 11/4"		
LOCATION	EACH	
Sta. 1628 + 65 & 1630 + 10 Pvmt. Width	46	
TOTAL	46	

	T. C. & P. STANDARD BLR 22	
LOCATION		LSUM
Jobsite		1
TOTAL		1

TIE BARS ¾"	
LOCATION	EACH
Sta. 1628 + 65 & 1630 + 10 Pvmt. Length	149
TOTAL	149

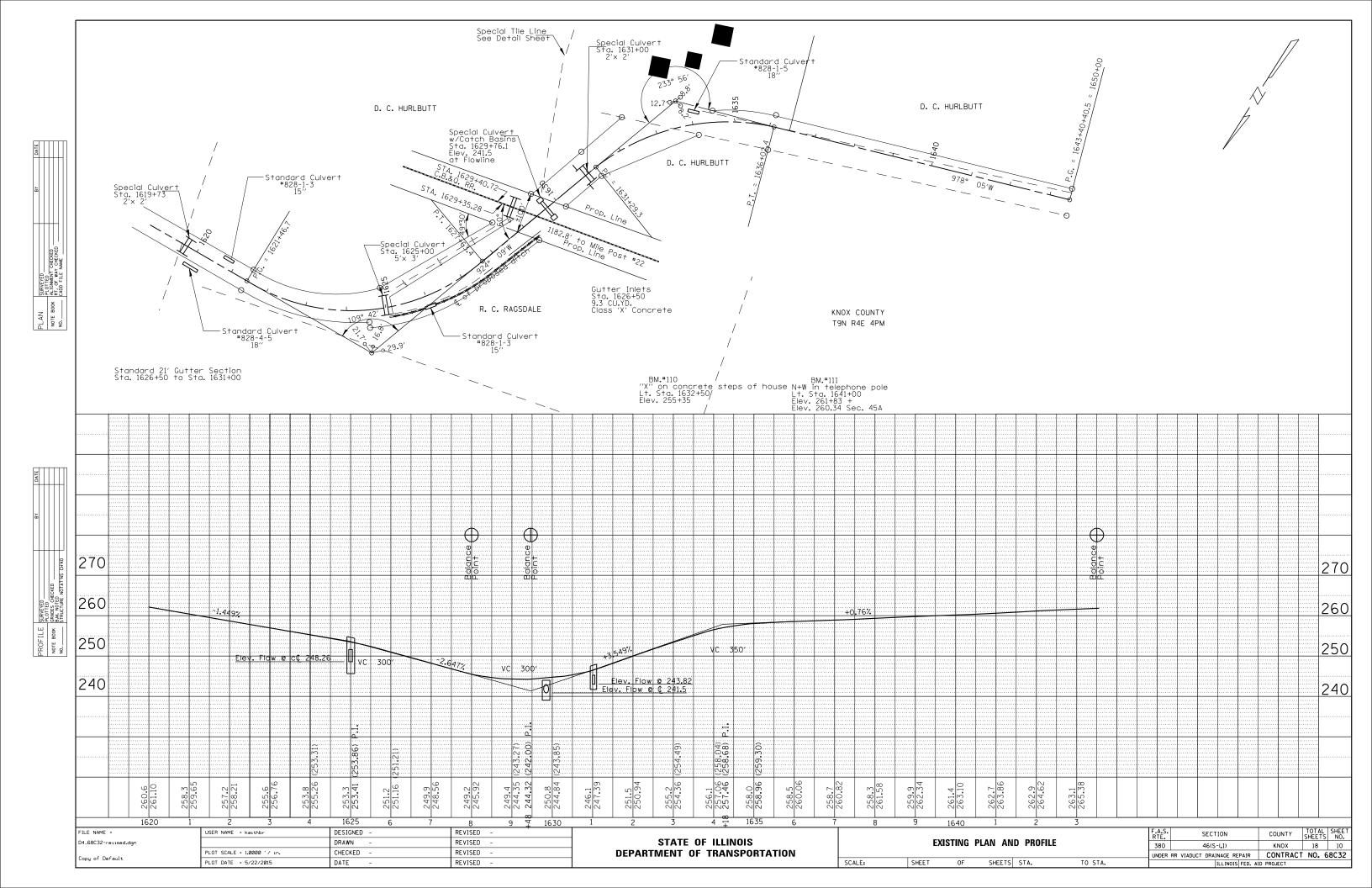
CHANGEABLE MESSAGE SIGN	
LOCATION	CAL MO
JOBSITE	2
TOTAL	2

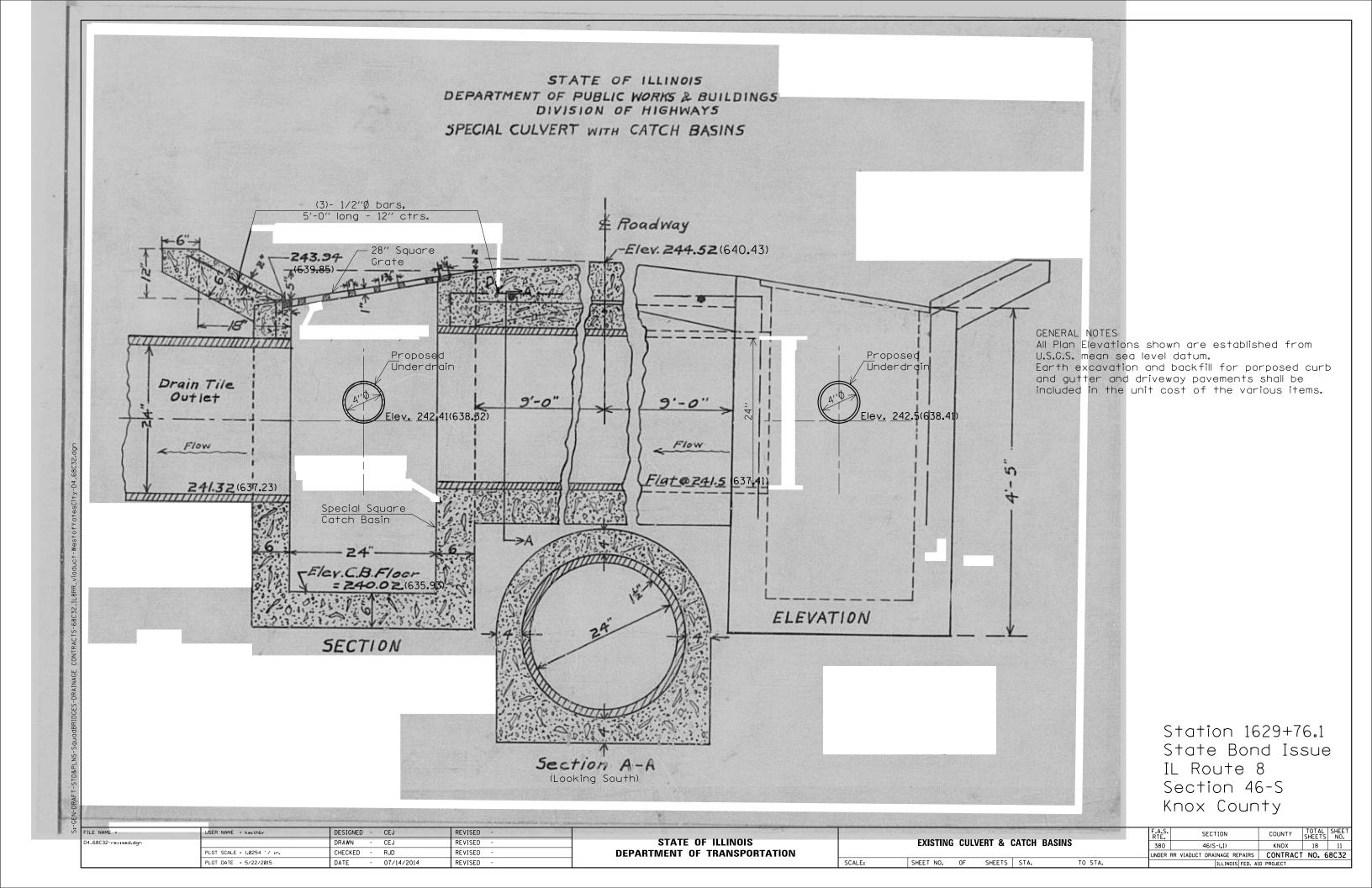
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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							UNDER RR VIADUCT DRAINAGE REPAIR   CONTRACT NO. 68				
	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT					





#### **ELEVATION**

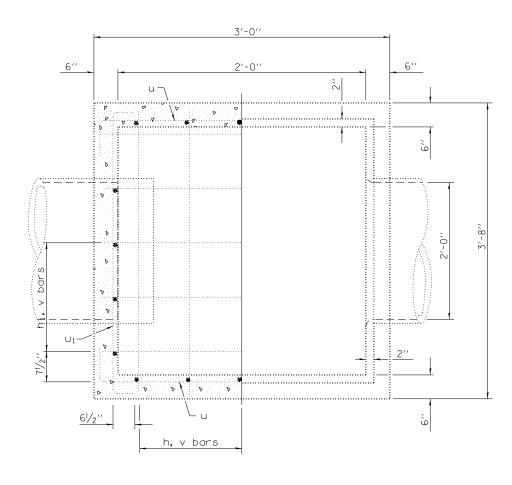
### LEGEND

INLETS TO BE RECONSTRUCTED

## MATERIALS REQUIRED FOR INLET RECONSTRUCTION

Bar	Qty.	Size	Shape	Length		
h <sub>1</sub>	8	No. 4		2′-9′′		
u	20	No. 4		2'-0''		
U <sub>1</sub>	8	No. 4	L			
F	ormed (	Concrete	cu. yd.	2.8		
Re	inforce	ment bars	lbs.	82		

All bars shall be at 12 (300) centers unless otherwise shown. Reinforcement bar clearance shall be  $1/\!\!/_2$  (40).



#### SECTION A-A

(With grating removed to show plan of structure)

### **NOTES**

Existing Inlets to be adjusted to grade with new formed and poured concrete bringing the top elevations to finished grade of proposed pavement as per Section 602 of the Standard Specifications. Existing vertical reinforcement shall be saved a minimum of six inches above sawcut. If bars are deteriorated, vertical holes shall be drilled in catch basin walls for new reinforcement installation. Cost to be included in "INLETS TO BE RECONSTRUCTED".

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

				F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
		INLET REC	ONSTRUCTI	380	46(S-I,I)	KNOX	18	12		
				UNDER RR VIADUCT DRAINAGE REPAIR   CONTRACT NO. 68C32				8C32		
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

TYPE III 7 7 BARRICADES ... TO YATES CITY BNSF RR VIADUCT PAVEMENT AND CURB & GUTTER REPLACEMENT LOCATION SIGNALED AT GRADE CROSSING TYPE III BARRICADES **✓** TO MAQUON Township ROAD-CLOSURE 500′ W20-1(0)-48 CH Refer to Highway Standards 701501, and BLR-22 for exact placement of traffic management devices and other clarifications as construction staging symbols and dimensioning were duplicated off of these standards. COUNTY TOTAL SHEET NO.

KNOX 18 13 FILE NAME = USER NAME = keithbr DESIGNED - CEJ REVISED -SECTION STATE OF ILLINOIS D4\_68C32-revised.dgn DRAWN - CEJ REVISED PROPOSED DETOUR PLAN 380 46(S-I,I) PLOT SCALE = 1.0000 '/ in. CHECKED - RJD REVISED **DEPARTMENT OF TRANSPORTATION** UNDER RR VIADUCT DRAINAGE REPAIR | CONTRACT NO. 68C32 PLOT DATE = 5/22/2015 DATE - 08-4-2014 REVISED SCALE: SHEET SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT

