

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
150	(113A) D, I	ALEXANDER	32	1
FED. ROAD DIST. NO. -		ILLINOIS	CONTRACT NO. 98910	

D-99-017-05

*32+3=35

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES & COMMITMENTS
- 3 SUMMARY OF QUANTITIES
- 4 SCHEDULE OF QUANTITIES
- 5 ALIGNMENT & SURVEY CONTROL POINTS
- 6 PLAN AND PROFILE SHEET
- 7 MAINTENANCE OF TRAFFIC DETAIL
- 8-31 STRUCTURAL PLANS
- 32-32c BRIDGE APPROACH PAVEMENT DETAILS

HIGHWAY STANDARDS

000001-05
001001-02
001006

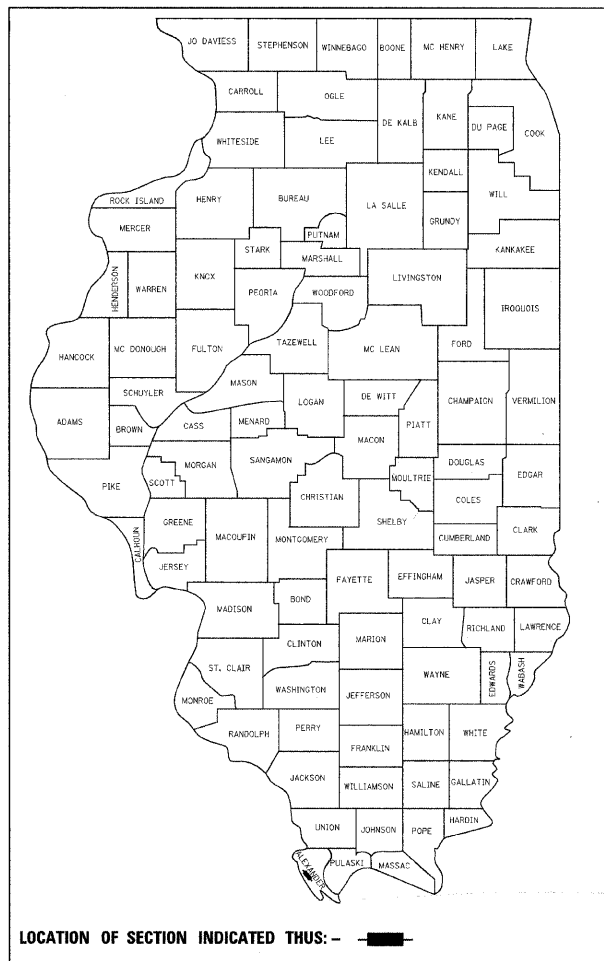
421001-02
515001-03
635006-03
635011-02
701001-02
701006-03
701901-01
720011-01
728001-01
729001-01
780001-02
781001-03
BLR 21-8

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

SBI ROUTE 150 (OLD IL 3)
SECTION (133A) D, I
PROJECT: BHOS-000S(683)
ALEXANDER COUNTY

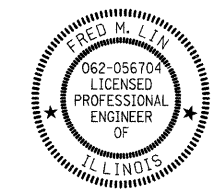
C-99-023-09
BRIDGE REHABILITATION OVER SEXTON CREEK



LOCATION OF SECTION INDICATED THUS: - [shaded box] -

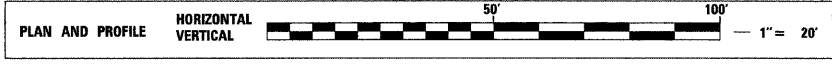
PREPARED BY:
LIN ENGINEERING, LTD.
CHATHAM, ILLINOIS 62629
(217) 483-4168

Fred M. Lin



SEAL

FRED M. LIN, P.E.
ILLINOIS REGISTERED ENGINEER NO. 062-056704
REGISTRATION EXPIRES NOV. 30, 2009

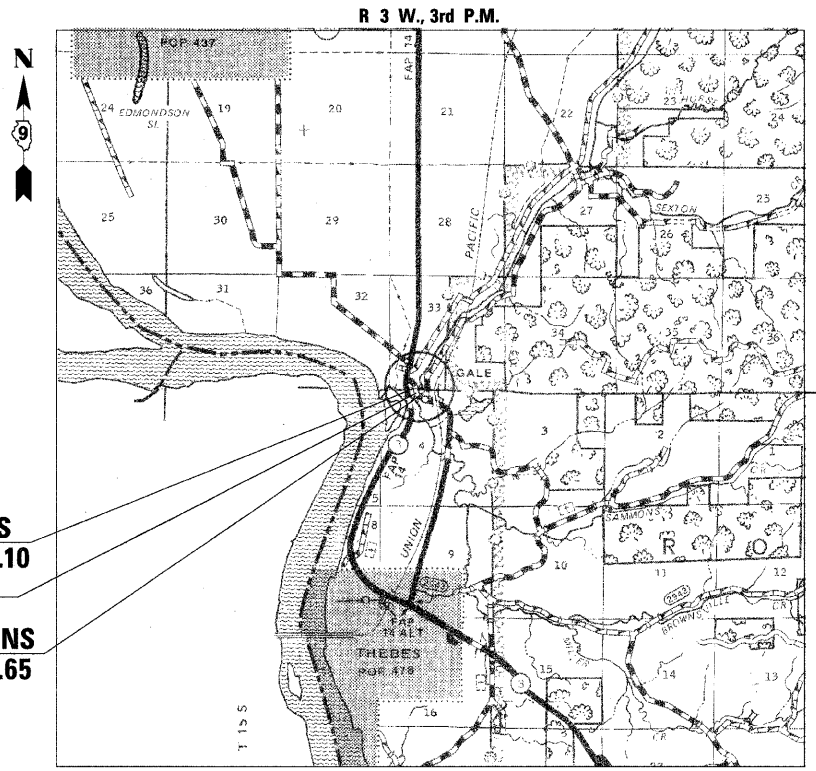


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

THEBES TOWNSHIP, SECTION 4

PROJECT ENGINEER - DAVID PICHE (618) 351-5227
CONSULTANT - LIN ENGINEERING, LTD (630) 323-5168
TENG AND ASSOCIATES (312) 616-0000
CONTRACT NO. 98910



PROJECT ENDS
STA 1214 + 90.10
S.N. 002-0009
PROJECT BEGINS
STA 1210 + 79.65



GROSS LENGTH OF IMPROVEMENT = 410.5 FT = 0.08 MILE
NET LENGTH OF IMPROVEMENT = 410.5 FT = 0.08 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *April 29 2009*

Mary C. Lamic
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 26, 2009
Charles G. Ingraw
ENGINEER OF DESIGN AND ENVIRONMENT

June 26, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

GENERAL NOTES

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITIONS AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS INCLUDED IN THESE PLANS.

AT ALL LOCATIONS WHERE THE PROPOSED HOT MIX ASPHALT OR CONCRETE PAVEMENT JOINS THE EXISTING HOT MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF SAW CUTS AND JOINTS IS CONSIDERED AS INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.

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.

BRIDGE FLOWS SHALL BE MAINTAINED THROUGHOUT THE PROJECT. NORMAL FLOWS SHALL BE ALLOWED TO PASS AT THE RATE IT ENTERS THE JOBSITE. HIGH FLOWS SHALL BE ALLOWED TO PASS WITHOUT CAUSING DAMAGE TO UPSTREAM PROPERTIES.

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.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

ALL ENGINEER'S FIELD OFFICES SHALL CONTAIN ONE FULLY-EQUIPPED FIRST-AID CABINET. THIS ITEM WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE PAY ITEM FOR ENGINEER'S FIELD OFFICE OF THE TYPE SPECIFIED.

ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02(I) AND 670.04(E):
ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE ASSOCIATED PAY ITEMS.

EXISTING AND PROPOSED ROADWAY PROFILE GRADES AND ELEVATIONS ARE PROVIDED IN THE PLANS TO AID THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MATCH THE PROPOSED ROADWAY PROFILE AND SURFACE TO THE EXISTING ROADWAY PROFILE AND SURFACE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE CONTRACT AND SHALL ONLY BE USED AS NEEDED WHEN DIRECTED BY THE ENGINEER:

- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (30 CU. YD.)
- REMOVAL AND REINSTALLATION OF EXISTING STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL (400 FOOT)
- REMOVAL AND REPLACEMENT OF TERMINAL SECTION, SINGLE RAIL (4 EACH)

THE CONTRACTOR SHALL REMOVE OR RELOCATE ALL CONFLICTING MAILBOXES, EXISTING STREET NAME SIGNS, AND ALL PRIVATE AND COMMERCIAL SIGNS IN ACCORDANCE WITH ARTICLES 107.20 & 107.25 AND AS DIRECTED BY THE ENGINEER. SIGN LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID ANY FOUND UTILITIES AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE COST OF PER "LUMP SUM" FOR TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21 (SPECIAL).

IF ANY UNSUITABLE MATERIAL IS ENCOUNTERED DURING CONSTRUCTION, IT WILL BE NECESSARY TO REMOVE THE UNSUITABLE MATERIAL AND REPLACE IT WITH A SUITABLE MATERIAL AS APPROVED BY THE ENGINEER.

ELEVATIONS, DIMENSIONS, AND DETAILS INCLUDED IN THE PLANS ARE SUBJECT TO CONSTRUCTION VARIATIONS.

COMMITMENTS

PROTECTIVE SHIELD WILL BE UTILIZED TO PROTECT AGAINST IMPACTS TO ANY THREATENED OR ENDANGERED SPECIES, WETLANDS, OR OTHER BIOLOGICAL ISSUES IDENTIFIED WITH THIS PROJECT. THIS PROTECTIVE SHIELD SHALL BE KEPT IN PLACE THROUGHOUT THE CONSTRUCTION PHASE OR AS DIRECTED BY THE RESIDENT ENGINEER. THE DISTRICT 9 ENVIRONMENTAL COORDINATOR IS TO BE NOTIFIED OF ANY CHANGES TO THE PROJECT SCOPE OR CONSTRUCTION LIMITS DURING THE CONSTRUCTION PHASE.

Prepared By: *Joe M. Ramirez*
DISTRICT STUDIES & PLANS ENGINEER

Examined By: *James Lewis Gray*
DISTRICT LAND ACQUISITION ENGINEER

Examined By: *Carrie Nelson*
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: *Nirvin A. Thomas*
DISTRICT OPERATIONS ENGINEER

Examined By: *Jim Amstutz*
DISTRICT CONSTRUCTION ENGINEER

Examined By: *Bruce W. Peoples*
DISTRICT MATERIALS ENGINEER

Examined By: *Jim Amstutz*
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: *James Lewis Gray*
ASSISTANT REGIONAL ENGINEER

Approved By: *Mike Kramer*
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

DATE: *Nov. 24* 20 *2008*

FILE NAME = ...\\Roadway\Sheets\GenNotes.dgn	USER NAME = Plotted by Administrator	DESIGNED - KHH	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & COMMITMENTS OLD IL ROUTE 3 OVER SEXTON CREEK				S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - KHH	REVISED - ---		SCALE: N.T.S.	SHEET NO. ___ OF ___ SHEETS	STA.	TO STA.	150	(133A)D, I	ALEXANDER	32	2
		CHECKED - FML	REVISED - ---						CONTRACT NO. 98910				
		DATE - 11/2008	REVISED - ---		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT								

SBI ROUTE 150 (OLD IL ROUTE 3)				FUNDING (HBP) 80% FEDERAL 20% STATE
SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE
CODE NO.	ITEM	UNIT	TOTAL	X032-2A
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU. YD.	30	30
42001300	PROTECTIVE COAT	SQ. YD.	210	210
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ. YD.	160	160
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ. YD.	37	37
44000100	PAVEMENT REMOVAL	SQ. YD.	37	37
44000700	APPROACH SLAB REMOVAL	SQ. YD.	186	186
50102400	CONCRETE REMOVAL	CU. YD.	40.4	40.4
50104800	REMOVAL OF EXISTING CONCRETE DECK	L. SUM	1	1
50157300	PROTECTIVE SHIELD	SQ. YD.	1275	1275
50200100	STRUCTURE EXCAVATION	CU. YD.	28.5	28.5
50300100	FLOOR DRAINS	EACH	21	21
50300225	CONCRETE STRUCTURES	CU. YD.	48.7	48.7
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	197.8	197.8
50300260	BRIDGE DECK GROOVING	SQ. YD.	774	774
50300300	PROTECTIVE COAT	SQ. YD.	953	953
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	36	36
50501130	STRUCTURAL STEEL REPAIR	POUND	34110	34110
50600300	CLEANING AND PAINTING STEEL BRIDGE	L. SUM	1	1
50606400	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L. SUM	1	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	54210	54210
50800515	BAR SPLICERS	EACH	51	51
51500100	NAME PLATES	EACH	1	1

SBI 150 (OLD IL ROUTE 3)				FUNDING (HBP) 80% FEDERAL 20% STATE
SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE
CODE NO.	ITEM	UNIT	TOTAL	X032-2A
52000110	PREFORMED JOINT STRIP SEAL	FOOT	106	106
52100510	ANCHOR BOLTS, 3/4"	EACH	72	72
58700300	CONCRETE SEALER	SQ. FT.	986	986
59000200	EPOXY CRACK INJECTION	FOOT	80	80
* 63300115	REMOVAL AND REINSTALLATION OF EXISTING STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL	FOOT	400	400
* 63300640	REMOVAL AND REPLACEMENT OF TERMINAL SECTION, SINGLE RAIL	EACH	4	4
* 63500105	DELINEATORS	EACH	4	4
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL. MO.	9	9
67100100	MOBILIZATION	L. SUM	1	1
70101855	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21 (SPECIAL)	L. SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL. MO.	2	2
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3300	3300
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	12	12
* 78200520	BARRIER WALL MARKERS, TYPE B	EACH	10	10
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	21.0	21.0
Z0053800	RIVET REMOVAL AND REPLACEMENT	EACH	350	350
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	8	8

*Specialty Items

FILE NAME = ...\\W01\Roadway\Sheets\summary.dgn	USER NAME = Plotted by Administrator	DESIGNED - KHH	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES OLD IL ROUTE 3 OVER SEXTON CREEK				S.B.I. RTE. 150	SECTION (133A)D, I	COUNTY ALEXANDER	TOTAL SHEETS 32	SHEET NO. 3
	PLOT SCALE = 1/8" = 1' IN.	DRAWN - KHH	REVISED - ---		SCALE: N.T.S.	SHEET NO. ___ OF ___ SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
	PLOT DATE = 4/16/2009	CHECKED - FML	REVISED - ---		CONTRACT NO. 98910								
		DATE - 11/2008	REVISED - ---										

20201200 REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

LOCATION	QUANTITY (CU YD)
JOBSITE	30.0
TOTAL =	30.0

42001300 PROTECTIVE COAT

LOCATION	QUANTITY (SQ YD)
STATION	
NORTH APPROACH	80.0
NORTH CONNECTOR	19.2
SOUTH APPROACH	80.0
SOUTH CONNECTOR	19.2
FACE OF CURB & GUTTER	11.2
TOTAL =	209.6
USE =	210

42001400 BRIDGE APPROACH PAVEMENT (SPECIAL)

LOCATION	QUANTITY (SQ YD)
NORTH APPROACH	80.0
SOUTH APPROACH	80.0
TOTAL =	160.0

42001420 BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)

LOCATION	QUANTITY (SQ YD)
NORTH CONNECTOR	19.2
SOUTH CONNECTOR	17.7
TOTAL =	36.9
USE =	37

44000100 PAVEMENT REMOVAL

LOCATION	QUANTITY (SQ YD)
NORTH CONNECTOR	19.2
SOUTH CONNECTOR	17.7
TOTAL =	36.9
USE =	37

44000700 APPROACH SLAB REMOVAL

LOCATION	QUANTITY (SQ YD)
NORTH APPROACH	93.6
SOUTH APPROACH	92.1
TOTAL =	185.7
USE =	186

63300115 REMOVAL AND REINSTALLATION OF EXISTING STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL

LOCATION	QUANTITY (FOOT)
JOBSITE	400
TOTAL =	400

63300640 REMOVAL AND REPLACEMENT OF TERMINAL SECTION, SINGLE RAIL

LOCATION	QUANTITY (EACH)
JOBSITE	4
TOTAL =	4

63500105 DELINEATORS

LOCATION	QUANTITY (EACH)
NORTH APPROACH	2
SOUTH APPROACH	2
TOTAL =	4

67000400 ENGINEER'S FIELD OFFICE, TYPE A

LOCATION	QUANTITY (CAL MO)
JOBSITE	9
TOTAL =	9

67100100 MOBILIZATION

LOCATION	QUANTITY (L SUM)
JOBSITE	1
TOTAL =	1

70101855 TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21 (SPECIAL)

LOCATION	QUANTITY (L SUM)
JOBSITE	1
TOTAL =	1

70106800 CHANGEABLE MESSAGE SIGN

LOCATION	QUANTITY (CAL MO)
JOBSITE	2
TOTAL =	2

78001110 PAINT PAVEMENT MARKING - LINE 4"

LOCATION	QUANTITY (FOOT)
STATION	
STA. 1210+79.65 TO STA. 1214+90.10	
SOLID WHITE (LT/RT EDGE OF PAVEMENT)	820.9
DOUBLE YELLOW (CENTERLINE)	820.9
SUBTOTAL =	1641.8
x 2 APPLICATIONS	1641.8
TOTAL =	3283.6
USE =	3300

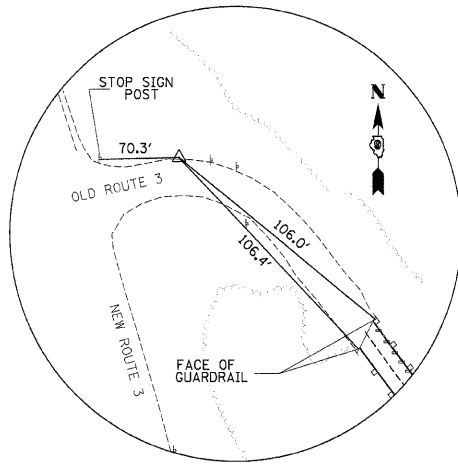
78100105 RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)

LOCATION	QUANTITY (EACH)
STA. 1210+79.65 TO STA. 1214+90.10	12
TOTAL =	12

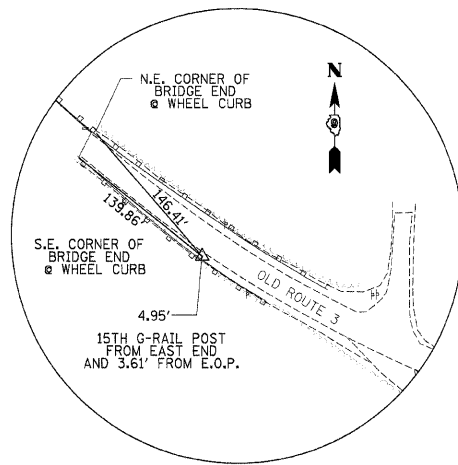
78200520 BARRIER WALL MARKERS, TYPE B

LOCATION	QUANTITY (EACH)
STA. 1211+13.9 LT. TO STA. 1214+47.3 LT.	5
STA. 1211+19.1 RT. TO STA. 1214+58.1 RT.	5
TOTAL =	10

ALIGNMENT & VERTICAL CONTROL



CONTROL POINT 4



CONTROL POINT 5

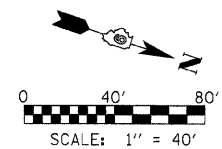
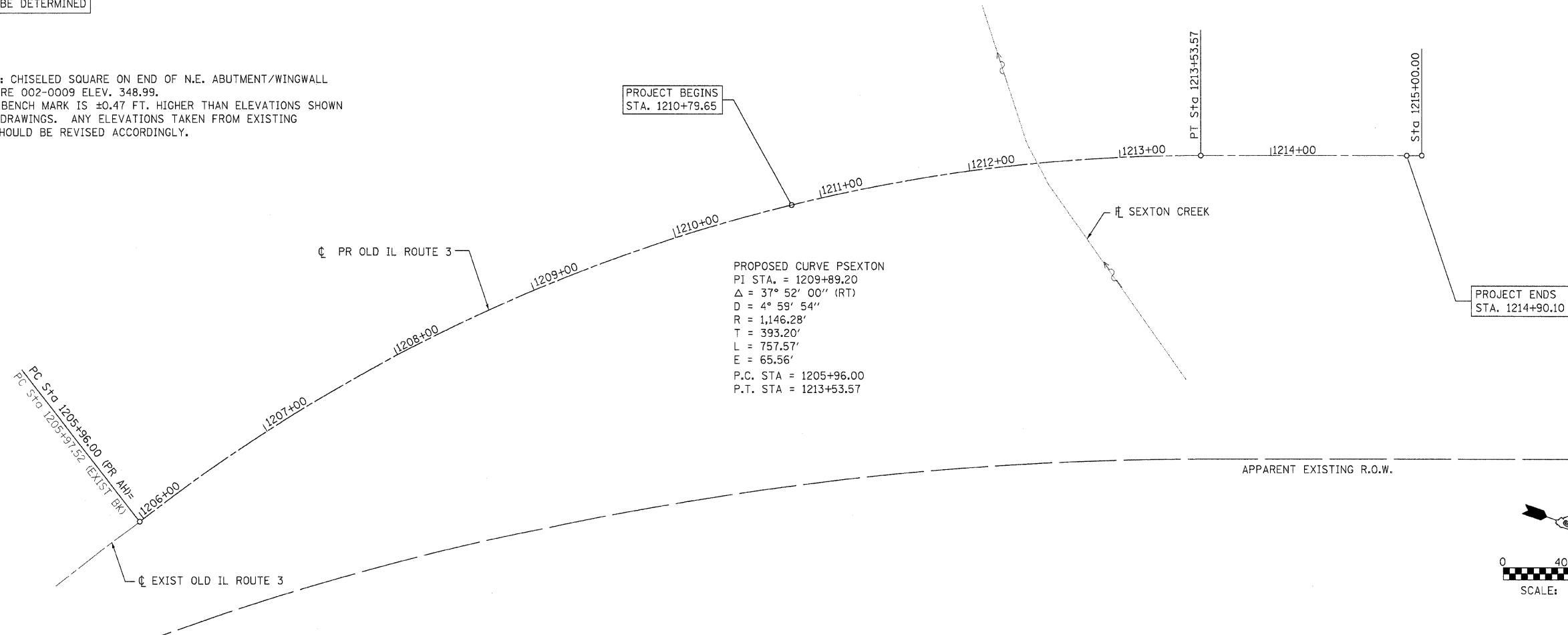
CENTERLINE CONTROL POINTS					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
PI	212184.01	2505770.45	1209+89.20	0.00	TBD
PC	212080.76	2506149.85	1205+96.00	0.00	TBD
PT	212498.41	2505534.31	1213+53.57	0.00	TBD

TBD = TO BE DETERMINED

HORIZONTAL CONTROL POINTS					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
4	212225.30	2505799.98	1216+75.75*	39.37 LT	IP WITH CAP
5	211979.38	2506450.28	1209+73.55	14.81 LT	IP WITH CAP

* NOTE: STA/OFFSET IS FROM EXTENDED FORWARD TANGENT OF PROPOSED CURVE

BENCH MARK: CHISELED SQUARE ON END OF N.E. ABUTMENT/WINGWALL OF STRUCTURE 002-0009 ELEV. 348.99.
 DATUM FOR BENCH MARK IS ±0.47 FT. HIGHER THAN ELEVATIONS SHOWN ON RECORD DRAWINGS. ANY ELEVATIONS TAKEN FROM EXISTING DRAWINGS SHOULD BE REVISED ACCORDINGLY.



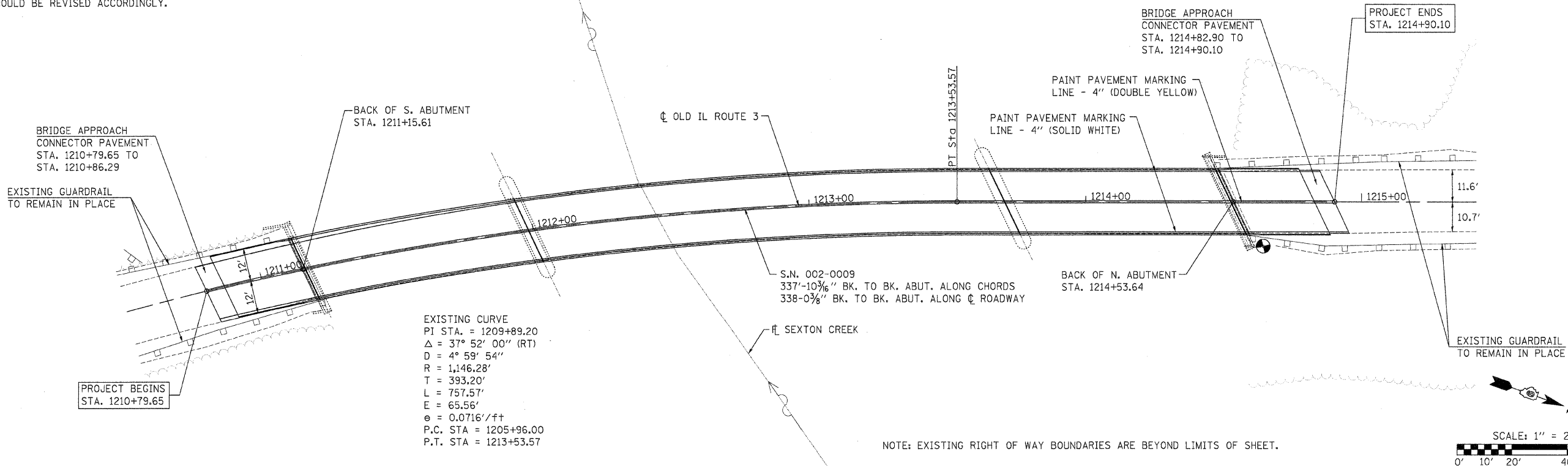
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		DRAWN - KHH	REVISED -
		CHECKED - FML	REVISED -
		DATE - 9/2008	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ALIGNMENT & SURVEY CONTROL POINTS OLD IL ROUTE 3 OVER SEXTON CREEK		
SCALE:	SHEET NO. . OF . SHEETS	STA. 1210+79.65 TO STA. 1214+90.10

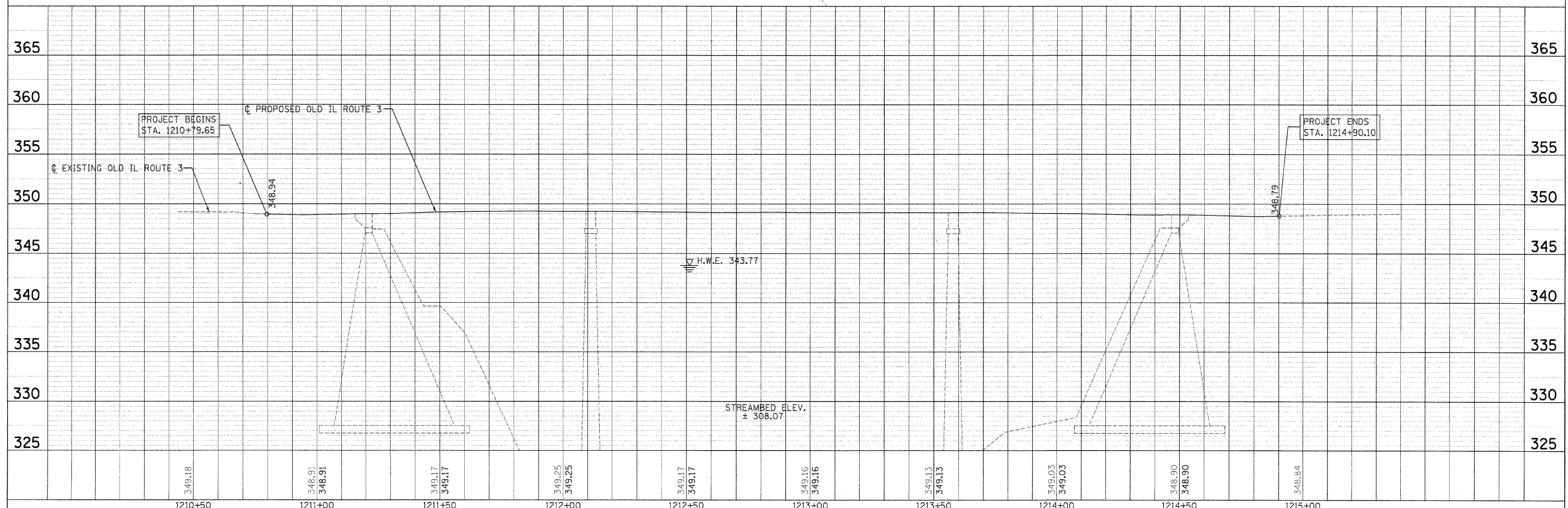
S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
150	(133A)D, I	ALEXANDER	32	5
CONTRACT NO. 98910				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

BENCH MARK: CHISELED SQUARE ON END OF N.E. ABUTMENT/WINGWALL OF STRUCTURE 002-0009 ELEV. 348.99. DATUM FOR BENCH MARK IS ±0.47 FT. HIGHER THAN ELEVATIONS SHOWN ON RECORD DRAWINGS. ANY ELEVATIONS TAKEN FROM EXISTING DRAWINGS SHOULD BE REVISED ACCORDINGLY.

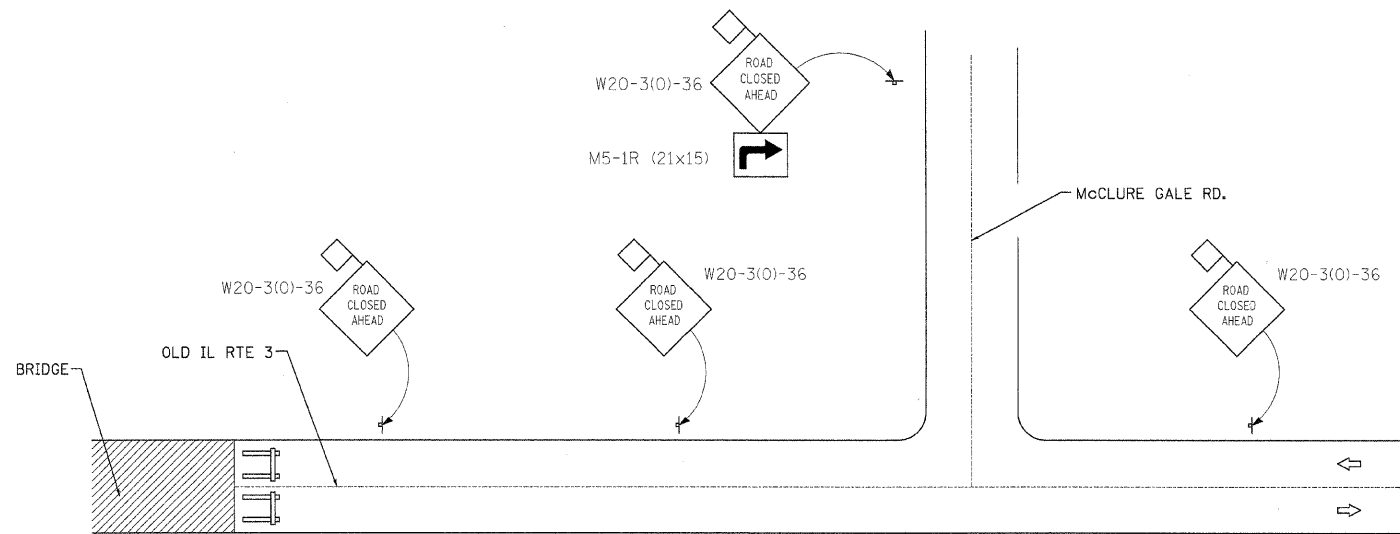


PLAN	SURVEYED	DATE
	PLOTTED	
	REVISIONS	
	BY	
	DATE	
	NO. OF WAYS CHECKED	
	CADD FILE NAME	

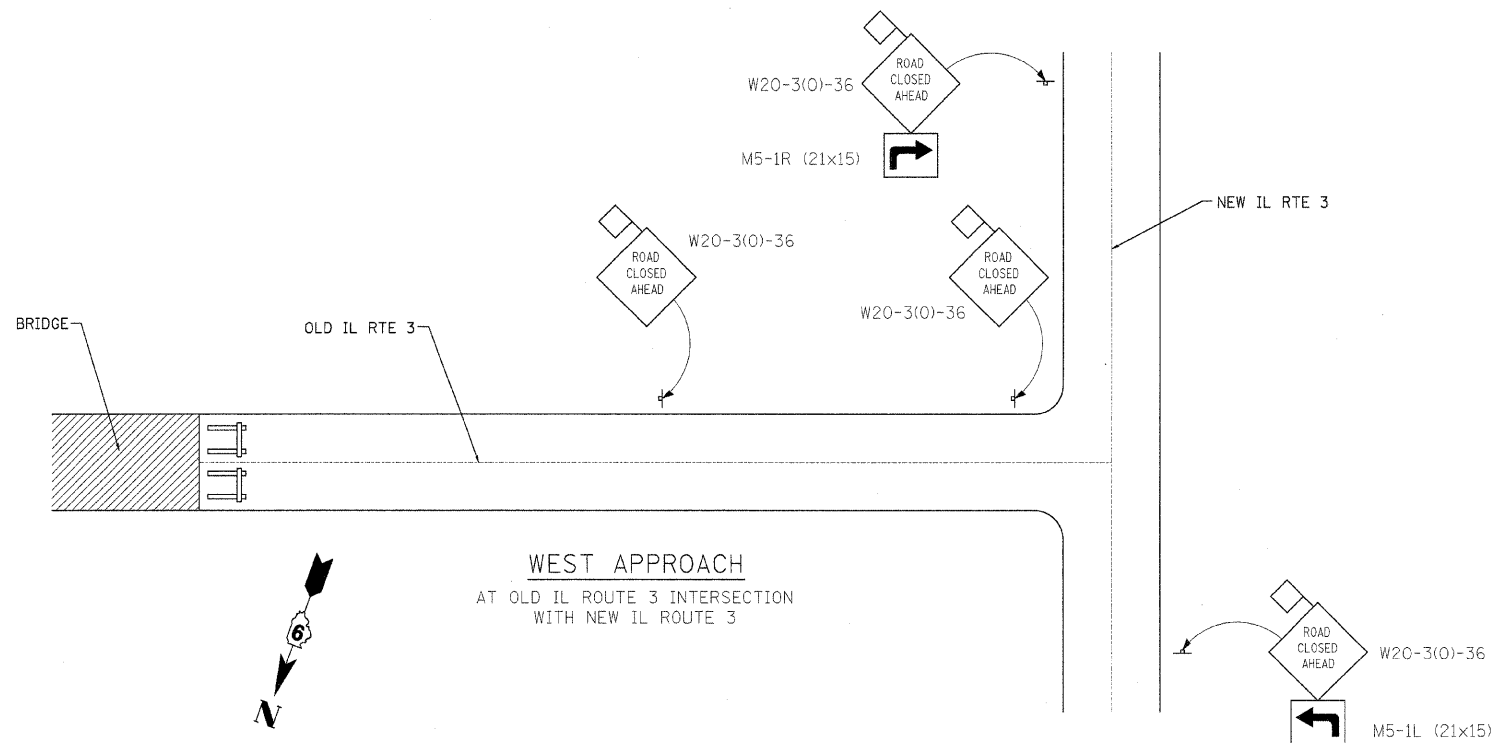
PROFILE	SURVEYED	DATE
	PLOTTED	
	REVISIONS	
	BY	
	DATE	
	NO. OF WAYS CHECKED	
	STRUCTURE NOTATIONS CHORD	



FILE NAME =	USER NAME = Plotted by Administrator	DESIGNED - KHH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE SHEET OLD IL ROUTE 3 OVER SEXTON CREEK		S.B.I. RTE. 150	SECTION (133A)D, I	COUNTY ALEXANDER	TOTAL SHEETS 32	SHEET NO. 6	
...\\M01\Roadway\Sheets\VP&P.dgn	PLOT SCALE = 20.0000' / IN.	DRAWN - KHH	REVISED -		SCALE: _____	SHEET NO. _ OF _ SHEETS	STA. 1210+79.65 TO STA. 1214+90.10	FED. ROAD DIST. NO. _	ILLINOIS FED. AID PROJECT	CONTRACT NO. 98910		
	PLOT DATE = 4/15/2009	CHECKED - FML	REVISED -									
		DATE - 11/2008	REVISED -									



EAST APPROACH
AT OLD IL ROUTE 3 INTERSECTION
WITH McCLURE GALE RD.



WEST APPROACH
AT OLD IL ROUTE 3 INTERSECTION
WITH NEW IL ROUTE 3



NOTES:

1. TRAFFIC CONTROL TO BE PROVIDED IN ACCORDANCE WITH HIGHWAY STANDARD B.L.R. 21-7 AND AS SPECIFIED HEREIN, AND SHALL BE PAID AT THE CONTRACT PRICE PER "LUMP SUM" FOR TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21 (SPECIAL).
2. SIGN LOCATIONS, INCLUDING PORTABLE CHANGEABLE MESSAGE SIGN, SHALL BE DETERMINED BY THE ENGINEER.
3. SEE HIGHWAY STANDARD B.L.R. 21-7 FOR DETAILS NOT SHOWN.

SYMBOLS



WORK AREA



TYPE III BARRICADE



SIGN WITH 18" BY 18" (MINIMUM)
ORANGE FLAG ATTACHED

FILE NAME = ...\\W01\Roadway\Sheets\MOT.dgn

USER NAME = Plotted by Administrator
PLOT SCALE = 10,0000' / 1IN.
PLOT DATE = 4/15/2009

DESIGNED - KHH
DRAWN - KHH
CHECKED - FML
DATE - 11/2008

REVISED - ----
REVISED - ----
REVISED - ----
REVISED - ----

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC DETAIL
OLD IL ROUTE 3 OVER SEXTON CREEK**
SCALE: N.T.S. SHEET NO. ___ OF ___ SHEETS STA. TO STA.

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
150	(133A)D, I	ALEXANDER	32	7
CONTRACT NO. 98910				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

Bench Mark: Chiseled square on end of N.E. abutment/wing wall of structure 002-0009 Elev. = 348.99
 Datum for Bench Mark is ±0.47 ft higher than elevations shown on record drawings.
 Any elevations taken from existing drawings should be revised accordingly.

Existing Structure: SN 002-0009 built as S.B.I. Rte. 150, Sec. 133 B-C, in 1933.
 The structure is a three span truss (pony truss side spans and through truss main span),
 338'-0³/₈" Bk.-Bk. abutments along C. of Roadway and 24'-0" O.-O. deck on spread
 footing conc. abutments and piers. Traffic is to be detoured.

No salvage.

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 1
S.B.I. 150	(133A) D.I	Alexander	32	8	23 SHEETS
FILE NO.	DATE	ILLINOIS	FILE NO.	PROJECT	

Contract #98910

DESIGN SPECIFICATIONS

AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002

LOADING HS20-44

No future wearing surface allowed
 Stresses in existing structural members are limited to 65% Fy

SEISMIC DATA

Not Applicable

DESIGN STRESSES

FIELD UNITS (NEW)

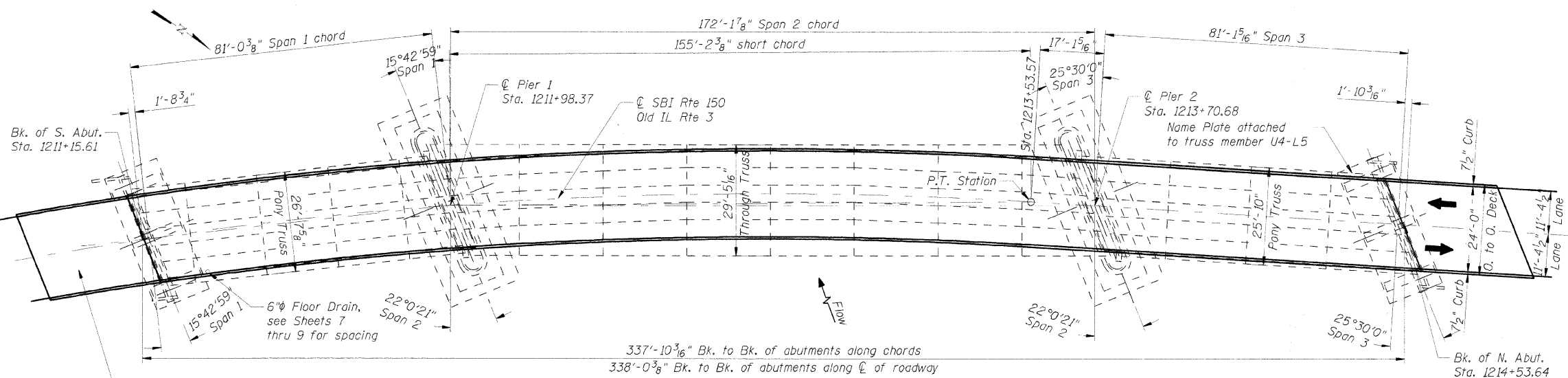
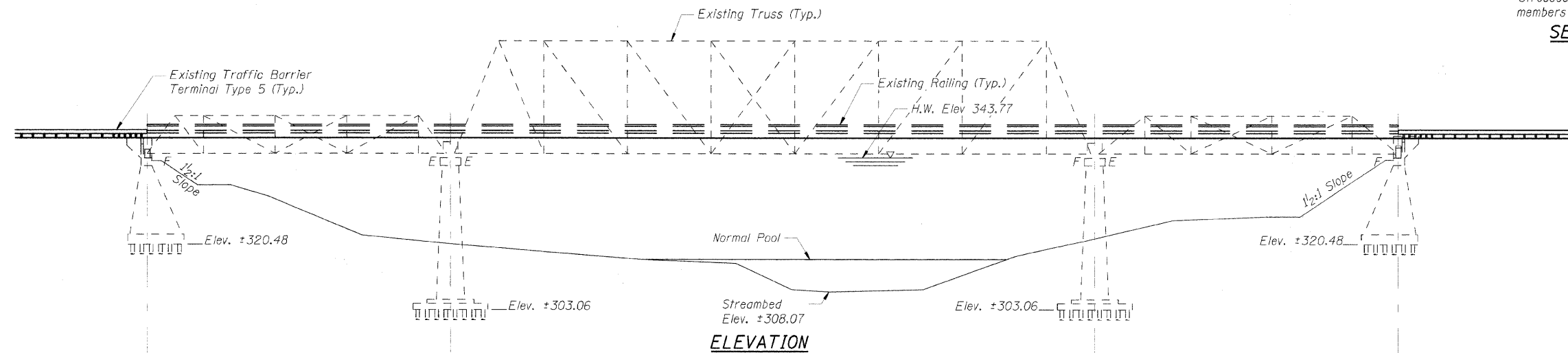
f'c = 3,500 psi
 fy = 50,000 psi (M270 Grade 50)
 fy = 60,000 psi (reinforcement)

FIELD UNITS (EXISTING)

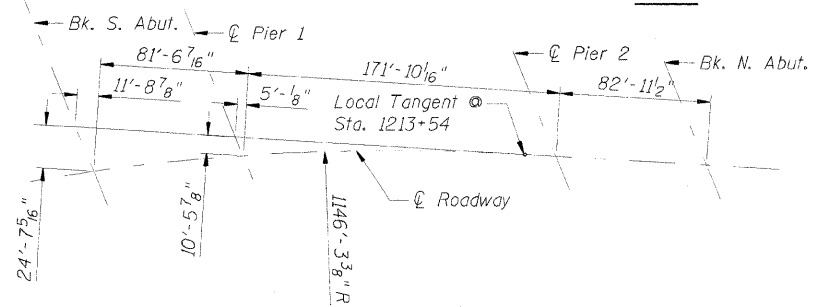
f'c = 3,500 psi
 fy = 33,000 psi (structural steel)
 fy = 33,000 psi (reinforcement)

WATERWAY INFORMATION

100 YR = 349.2
 50 YR = 347.2
 10 YR = Unknown
 NORMAL POOL = 336.65



PLAN



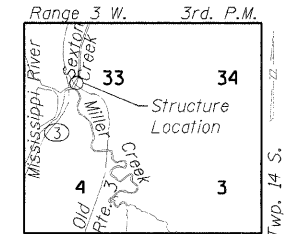
OFFSET SKETCH

CURVE DATA

Δ = 37°52'00" (RT)
 D = 4°59'54"
 R = 1146.28'
 T = 393.20
 L = 757.57
 E = 65.56'
 S.E. = 0.0716'/ft.
 P.C. Sta. = 1205+96.00
 P.T. Sta. = 1213+53.57

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (P.E.)
 ENGINEER OF BRIDGES AND STRUCTURES



LOCATION SKETCH

TENG TENG & ASSOCIATES, INC.
 ENGINEERS/ARCHITECTS-PLANNERS
 CHICAGO, ILLINOIS

Designed By: TCC
 Checked By: J.R.
 Date: Feb 2009
 Drawn By: TCC
 File: 102-0001.SHT

LIN ENGINEERING, LTD.



BY: *Michael J. Haley* DATE: 4/24/09
 SHEETS: 2, 7-14, 18-23 EXPIRE: 11/30/10

TENG & ASSOCIATES, INC.



BY: *R. Haley* DATE: 4/20/09
 SHEETS: 1, 3-6, 15-17 EXPIRE: 11/30/10

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

4-17-2009, 7:53:33 GALLTC C:\NIC\WORKSPACE\GALLTC\NFS-0044\TRANS-07\2202\STRUCT\CAD\02 PHASE II\IA TEND\SHEET\CP02IA001.SHT

Contract #98910

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	-	40.4	40.4
Removal of Existing Concrete Deck	L. Sum	1	-	1
Structure Excavation	Cu. Yd.	-	28.5	28.5
Floor Drains	Each	21	-	21
Concrete Structures	Cu. Yd.	-	48.7	48.7
Concrete Superstructure	Cu. Yd.	197.8	-	197.8
Bridge Deck Grooving	Sq. Yd.	774	-	774
Protective Coat	Sq. Yd.	953	-	953
Jack and Remove Existing Bearings	Each	36	-	36
Structural Steel Repair	Pound	34,110	-	34,110
Cleaning and Painting Steel Bridge	L. Sum	1	-	1
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1	-	1
Reinforcement Bars, Epoxy Coated	Pound	49500	4710	54210
Bar Splicers	Each	-	51	51
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	106	-	106
Anchor Bolts, 3/4" ϕ	Each	-	72	72
Concrete Sealer	Sq. Ft.	-	986	986
Epoxy Crack Injection	Foot	-	80	80
Structural Repair of Concrete (Depth Equal to or less than 5 Inches)	Sq. Ft.	-	21.0	21.0
Rivet Removal and Replacement	Each	350	-	350
Temporary Shoring and Cribbing	Each	8	-	8
Protective Shield	Sq. Yd.	1275	-	1275

Protective Shield System shall be provided within the limits of the superstructure rehabilitation. Quantity is based on a 4 foot overhang from the outside edge of the truss. See Special Provision.

STATION 1212+84.95
REBUILT 20 BY
STATE OF ILLINOIS
S.B.I. RT. 150 SEC. (133A)D,I
LOADING HS20
STR NO. 002-0009

NAME PLATE

See Std. 515001

For location see Sheet 1 of 23.
New Name Plate shall be located next to existing Name Plate.

SEQUENCE OF CONSTRUCTION

1. Replace lateral bracing in Span 1.
2. Remove concrete deck and approaches.
3. Install temporary supports for steel repairs.
4. Remove existing stringer bearings.
5. Remove existing stringer bearing pedestals and abutment backwalls.
6. Make repairs to steel framing and substructure.
7. Construct new stringer bearing pedestals and abutment backwalls.
8. Install new stringer bearings and end diaphragms.
9. Pour new concrete deck and approaches.

INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Screed Plan
4. Top of Slab Elevations I
5. Top of Slab Elevations II
6. Top of Slab Elevations III
7. Superstructure - Span 1
8. Superstructure - Span 2
9. Superstructure - Span 3
10. Superstructure Details
11. Miscellaneous Details
12. Preformed Joint Strip Seal
13. Stringer Bearing Removal
14. Stringer Bearing Details
15. Framing Plan
16. Steel Repair Details
- 16A. Miscellaneous Repair Details
17. Railing Repair Details
18. Concrete Removal
19. North Abutment
20. South Abutment
21. Pier 1 Pedestal
22. Pier 2 Pedestal
23. Bar Splicer Assembly Details

Current Ratings on File for Existing Structure

Inventory: HS 16.3
Operating: HS 27.5
Live Load Restrictions: Yes (36 Ton)

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 3/4 in. ϕ , holes 13/16 in. ϕ , unless otherwise noted.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions Reinforcement bars designated (E) shall be epoxy coated.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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 based upon the unit price bid for the work.

The Theoretical Grade Elevations are provided in these plans to aid the Contractor. It is the Contractor's responsibility to match the top of new deck to the top of existing deck elevations.

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

The Organic Zinc / Epoxy / Urethane Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

Existing areas of steel as shown on the plans shall be cleaned according to SSPC-SP10 and painted using the paint system specified in above note. See Special Provision for "Cleaning and Painting Existing Steel Structures".

The Contractor shall submit calculations and details demonstrating the structural integrity of the bridge is maintained under the additional imposed loads of the containment system. See Special Provisions for "Containment and Disposal of Lead Paint Cleaning Residues".

A minimum of one air monitor will be required to monitor abrasive blasting operations at this site. See Special Provision for "Containment and Disposal of Lead Paint Cleaning Residues".

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Concrete Sealer shall be applied to the designated areas of the abutments and piers.

Plan structural steel and concrete repairs were prepared in accordance with the Structure Feasibility Report, prepared by Teng & Associates, Inc., dated May 31, 2006 and a follow up inspection on April 17, 2008. The Engineer may determine during construction that modification or additions to these repairs may be necessary. Any such modifications shall be approved by the Engineer and shall be paid for at the same rate as the unit bid price for the particular item.

After steel has been cleaned, corroded rivets outside the areas of Structural Steel Removal shall be removed and replaced with high strength bolts as directed by the Engineer and shall be paid for as Rivet Removal and Replacement. Burning of rivet heads in removing existing rivets is not permitted except as specified in the Special Provisions. Rivet removal and replacement for Structural Steel Repair shall be paid for under Structural Steel Repair.

The Contractor shall submit Structural Assessment Report(s) as required for the Contractor's means and methods of construction. See Special Provisions.

The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the special provisions.

The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will be required for this bridge.

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL DATA
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

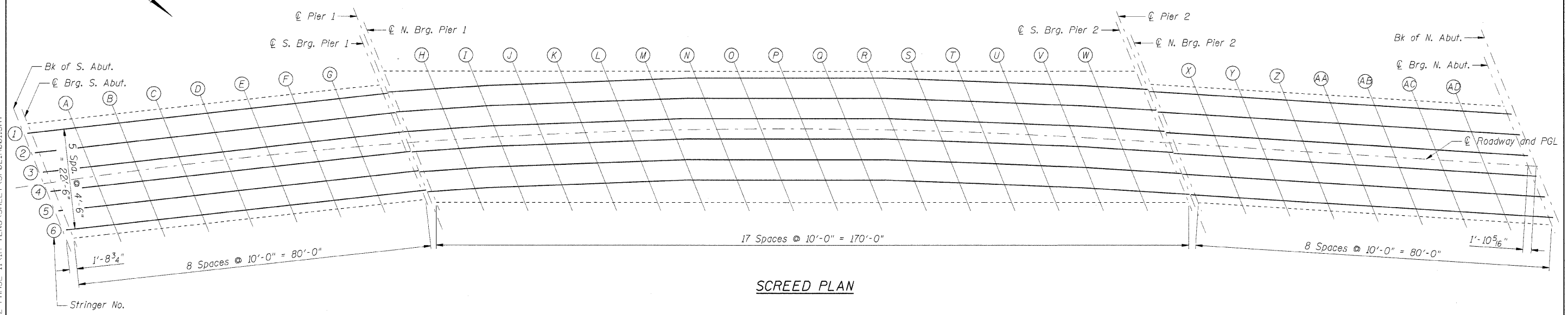
LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: DL5	Checked By: STD	Drawn By: AJF
Date: Feb 2009	File: 002-0009.dgn	

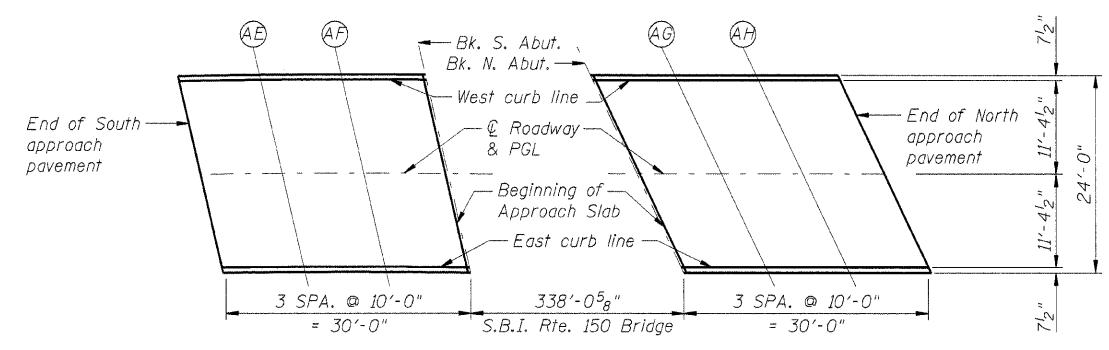
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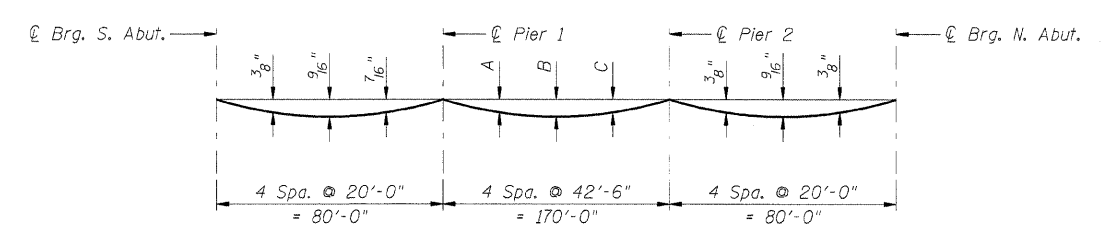
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SCREED PLAN



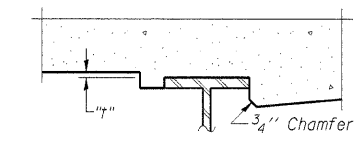
APPROACH SCREED PLAN



DEAD LOAD DEFLECTION DIAGRAM

NOTE:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load as shown in the top of deck elevation tables.

STRINGER	"A"	"B"	"C"
1	15/16"	1 3/8"	15/16"
2	1"	1 1/16"	1 1/8"
3	15/16"	1 1/2"	1 1/8"
4	15/16"	1 1/2"	1 3/16"
5	7/8"	1 1/16"	1 3/16"
6	3/4"	1 5/16"	1 1/8"



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

EAST CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION
End S. Appr. Pvt.	1210+87.73	11.38	348.40
AE	1210+97.84	11.38	348.36
AF	1211+07.95	11.38	348.32
Begin S. Appr. Pvt.	1211+18.05	11.38	348.27
Begin N. Appr. Pvt.	1214+59.40	11.38	348.67
AG	1214+69.40	11.38	348.62
AH	1214+79.40	11.38	348.56
End N. Appr. Pvt.	1214+89.40	11.38	348.60

@ S.B.I. ROUTE 150

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION
End S. Appr. Pvt.	1210+85.27	0.00	348.92
AE	1210+95.27	0.00	348.88
AF	1211+05.27	0.00	348.93
Begin S. Appr. Pvt.	1211+15.27	0.00	348.98
Begin N. Appr. Pvt.	1214+53.97	0.00	348.90
AG	1214+63.97	0.00	348.84
AH	1214+73.97	0.00	348.78
End N. Appr. Pvt.	1214+83.97	0.00	348.76

WEST CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION
End S. Appr. Pvt.	1210+82.86	-11.38	349.44
AE	1210+92.76	-11.38	349.40
AF	1211+02.66	-11.38	349.50
Begin S. Appr. Pvt.	1211+12.55	-11.38	349.63
Begin N. Appr. Pvt.	1214+48.55	-11.38	349.14
AG	1214+58.55	-11.38	349.08
AH	1214+68.55	-11.38	349.01
End N. Appr. Pvt.	1214+78.55	-11.38	348.95

NOTES:
1. Work this sheet with sheets 4 through 6.

TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

Designed By: TGG Checked By: ALR Drawn By: TGG
Date: Feb 2009 File: sp021A001.SHT

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCREED PLAN
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D, I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

Contract #98910

STRINGER 1

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DL DEFLECTION
Back S Abut	1211+12.80	-11.71	349.65	349.65
CL Brg S Abut	1211+14.51	-11.64	349.67	349.67
A	1211+24.41	-11.31	349.76	349.77
B	1211+34.31	-11.06	349.82	349.85
C	1211+44.21	-10.90	349.89	349.94
D	1211+54.12	-10.82	349.94	349.99
E	1211+64.02	-10.83	349.99	350.03
F	1211+73.93	-10.92	350.02	350.05
G	1211+83.83	-11.11	350.05	350.07
CL S Brg Pier 1	1211+93.73	-11.38	350.06	350.06
CL Pier 1	1211+94.76	-11.41	350.06	350.06
CL N Brg Pier 1	1211+95.72	-11.67	350.07	350.07
H	1212+05.37	-11.63	350.06	350.09
I	1212+15.03	-11.67	350.07	350.11
J	1212+24.76	-11.56	350.04	350.10
K	1212+34.52	-11.47	350.07	350.14
L	1212+44.28	-11.46	350.04	350.13
M	1212+54.04	-11.54	350.02	350.12
N	1212+63.83	-11.63	350.02	350.13
O	1212+73.72	-11.50	350.02	350.13
P	1212+83.62	-11.45	350.02	350.13
Q	1212+93.52	-11.50	350.00	350.11
R	1213+03.42	-11.63	350.00	350.10
S	1213+13.43	-11.57	349.99	350.08
T	1213+23.49	-11.51	349.99	350.06
U	1213+33.55	-11.51	349.98	350.04
V	1213+43.63	-11.58	349.98	350.03
W	1213+53.57	-11.68	349.94	349.98
CL S Brg Pier 2	1213+64.01	-11.29	349.86	349.86
CL Pier 2	1213+65.11	-11.68	349.85	349.85
CL N Brg Pier 2	1213+66.43	-11.25	349.85	349.85
X	1213+76.43	-11.25	349.75	349.76
Y	1213+86.43	-11.25	349.65	349.68
Z	1213+96.43	-11.25	349.56	349.59
AA	1214+06.43	-11.25	349.47	349.52
AB	1214+16.43	-11.25	349.38	349.43
AC	1214+26.43	-11.25	349.28	349.31
AD	1214+36.43	-11.25	349.25	349.26
CL Brg N Abut	1214+46.41	-11.25	349.14	349.14
Back N Abut	1214+48.27	-11.25	349.13	349.13

STRINGER 2

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DL DEFLECTION
Back S Abut	1211+13.88	-7.16	349.40	349.40
CL Brg S Abut	1211+15.60	-7.10	349.41	349.41
A	1211+25.54	-6.77	349.46	349.47
B	1211+35.48	-6.53	349.52	349.55
C	1211+45.42	-6.38	349.59	349.63
D	1211+55.36	-6.32	349.63	349.68
E	1211+65.31	-6.34	349.68	349.72
F	1211+75.25	-6.45	349.71	349.74
G	1211+85.19	-6.64	349.74	349.76
CL S Brg Pier 1	1211+95.13	-6.92	349.74	349.74
CL Pier 1	1211+96.16	-6.96	349.74	349.74
CL N Brg Pier 1	1211+97.16	-7.08	349.75	349.75
H	1212+06.86	-7.05	349.74	349.77
I	1212+16.55	-7.12	349.75	349.79
J	1212+26.34	-6.96	349.71	349.77
K	1212+36.14	-6.88	349.71	349.79
L	1212+45.94	-6.89	349.69	349.78
M	1212+55.73	-6.98	349.68	349.79
N	1212+65.58	-7.01	349.68	349.78
O	1212+75.52	-6.90	349.68	349.80
P	1212+85.46	-6.87	349.67	349.79
Q	1212+95.40	-6.93	349.65	349.76
R	1213+05.33	-7.11	349.65	349.75
S	1213+15.42	-6.97	349.64	349.74
T	1213+25.51	-6.94	349.64	349.72
U	1213+35.63	-6.94	349.63	349.70
V	1213+45.74	-7.03	349.63	349.69
W	1213+55.93	-7.10	349.60	349.64
CL S Brg Pier 2	1213+66.19	-7.10	349.57	349.57
CL Pier 2	1213+67.30	-7.10	349.57	349.57
CL N Brg Pier 2	1213+68.57	-6.75	349.55	349.55
X	1213+78.57	-6.75	349.48	349.50
Y	1213+88.57	-6.75	349.40	349.43
Z	1213+98.57	-6.75	349.34	349.38
AA	1214+08.57	-6.75	349.28	349.32
AB	1214+18.57	-6.75	349.20	349.25
AC	1214+28.57	-6.75	349.12	349.16
AD	1214+38.57	-6.75	349.07	349.09
CL Brg N Abut	1214+48.56	-6.75	349.04	349.04
Back N Abut	1214+50.42	-6.75	349.04	349.04

STRINGER 3

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DL DEFLECTION
Back S Abut	1211+14.97	-2.62	349.13	349.13
CL Brg S Abut	1211+16.70	-2.55	349.14	349.14
A	1211+26.67	-2.24	349.15	349.17
B	1211+36.65	-2.01	349.21	349.24
C	1211+46.63	-1.87	349.28	349.33
D	1211+56.62	-1.81	349.32	349.37
E	1211+66.60	-1.85	349.37	349.41
F	1211+76.58	-1.97	349.40	349.43
G	1211+86.56	-2.17	349.43	349.45
CL S Brg Pier 1	1211+96.54	-2.47	349.43	349.43
CL Pier 1	1211+97.57	-2.50	349.43	349.43
CL N Brg Pier 1	1211+98.62	-2.50	349.43	349.43
H	1212+08.35	-2.48	349.42	349.45
I	1212+18.10	-2.51	349.43	349.47
J	1212+27.94	-2.36	349.39	349.45
K	1212+37.77	-2.29	349.35	349.43
L	1212+47.61	-2.32	349.34	349.43
M	1212+57.44	-2.43	349.33	349.43
N	1212+67.36	-2.40	349.32	349.43
O	1212+77.34	-2.31	349.33	349.45
P	1212+87.32	-2.29	349.33	349.45
Q	1212+97.30	-2.37	349.32	349.45
R	1213+08.27	-2.53	349.33	349.44
S	1213+17.42	-2.38	349.32	349.42
T	1213+27.56	-2.35	349.31	349.41
U	1213+37.71	-2.37	349.31	349.38
V	1213+47.87	-2.48	349.30	349.37
W	1213+58.10	-2.53	349.30	349.34
CL S Brg Pier 2	1213+68.37	-2.53	349.30	349.30
CL Pier 2	1213+68.90	-2.53	349.30	349.30
CL N Brg Pier 2	1213+70.72	-2.25	349.28	349.28
X	1213+80.72	-2.25	349.22	349.24
Y	1213+90.72	-2.25	349.17	349.20
Z	1214+00.72	-2.25	349.13	349.17
AA	1214+10.72	-2.25	349.09	349.13
AB	1214+20.72	-2.25	349.04	349.08
AC	1214+30.72	-2.25	348.98	349.01
AD	1214+40.72	-2.25	348.96	348.97
CL Brg N Abut	1214+50.71	-2.25	348.95	348.95
Back N Abut	1214+52.57	-2.25	348.95	348.95

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ILLINOIS DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS I
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-009

TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

Designed By: TGG Checked By: JLR Drawn By: TGG
Date: Feb 2009 File: sp021A002.SHT

Contract #98910

☉ S.B.I. ROUTE 150 AND P.G.L.

STRINGER 4

STRINGER 5

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DL DEFLECTION
Back S Abut	1211+15.61	0.00	348.98	348.98
CL Brg S Abut	1211+17.32	0.00	348.98	348.98
A	1211+27.24	0.00	349.00	349.02
B	1211+37.18	0.00	349.07	349.10
C	1211+47.14	0.00	349.16	349.20
D	1211+57.13	0.00	349.20	349.25
E	1211+67.14	0.00	349.24	349.29
F	1211+77.17	0.00	349.26	349.30
G	1211+87.24	0.00	349.28	349.30
CL S Brg Pier 1	1211+97.33	0.00	349.25	349.25
CL Pier 1	1211+98.37	0.00	349.25	349.25
CL N Brg Pier 1	1211+99.42	0.00	349.25	349.25
H	1212+09.17	0.00	349.25	349.27
I	1212+18.95	0.00	349.24	349.28
J	1212+28.76	0.00	349.22	349.28
K	1212+38.59	0.00	349.19	349.27
L	1212+48.46	0.00	349.17	349.26
M	1212+58.36	0.00	349.16	349.26
N	1212+68.29	0.00	349.16	349.27
O	1212+78.24	0.00	349.17	349.29
P	1212+88.25	0.00	349.17	349.29
Q	1212+98.29	0.00	349.16	349.28
R	1213+08.36	0.00	349.15	349.26
S	1213+18.47	0.00	349.15	349.25
T	1213+28.62	0.00	349.15	349.24
U	1213+38.80	0.00	349.14	349.22
V	1213+49.04	0.00	349.13	349.20
W	1213+59.30	0.00	349.14	349.18
CL S Brg Pier 2	1213+68.90	0.00	349.15	349.15
CL Pier 2	1213+70.68	0.00	349.15	349.15
CL N Brg Pier 2	1213+71.79	0.00	349.15	349.15
X	1213+81.79	0.00	349.10	349.11
Y	1213+91.79	0.00	349.06	349.09
Z	1214+01.79	0.00	349.03	349.07
AA	1214+11.79	0.00	349.00	349.04
AB	1214+21.79	0.00	348.95	349.00
AC	1214+31.79	0.00	348.91	348.94
AD	1214+41.79	0.00	348.90	348.92
CL Brg N Abut	1214+51.78	0.00	348.91	348.91
Back N Abut	1214+53.64	0.00	348.90	348.90

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DL DEFLECTION
Back S Abut	1211+16.07	1.93	348.86	348.86
CL Brg S Abut	1211+17.80	1.99	348.86	348.86
A	1211+27.82	2.29	348.84	348.86
B	1211+37.84	2.51	348.90	348.93
C	1211+47.86	2.64	348.98	349.02
D	1211+57.88	2.69	349.02	349.06
E	1211+67.91	2.64	349.06	349.10
F	1211+77.93	2.51	349.09	349.12
G	1211+87.95	2.29	349.12	349.13
CL S Brg Pier 1	1211+97.96	1.99	349.11	349.11
CL Pier 1	1211+99.00	1.95	349.11	349.11
CL N Brg Pier 1	1212+00.09	2.08	349.10	349.10
H	1212+09.86	2.09	349.10	349.13
I	1212+19.67	2.10	349.10	349.14
J	1212+29.54	2.24	349.06	349.12
K	1212+39.42	2.29	349.03	349.10
L	1212+49.29	2.25	349.01	349.10
M	1212+59.16	2.13	349.01	349.11
N	1212+69.15	2.20	349.00	349.11
O	1212+79.17	2.29	349.01	349.13
P	1212+89.19	2.28	349.01	349.13
Q	1212+99.21	2.19	349.00	349.13
R	1213+09.27	2.12	349.00	349.12
S	1213+19.44	2.22	349.00	349.10
T	1213+29.62	2.23	348.99	349.08
U	1213+39.82	2.19	348.99	349.07
V	1213+50.01	2.07	348.99	349.06
W	1213+60.28	2.05	349.01	349.05
CL S Brg Pier 2	1213+70.55	2.05	349.03	349.03
CL Pier 2	1213+71.66	2.05	349.03	349.03
CL N Brg Pier 2	1213+72.86	2.25	349.01	349.01
X	1213+82.86	2.25	348.98	348.99
Y	1213+92.86	2.25	348.95	348.98
Z	1214+02.86	2.25	348.93	348.97
AA	1214+12.86	2.25	348.91	348.95
AB	1214+22.86	2.25	348.88	348.92
AC	1214+32.86	2.25	348.84	348.87
AD	1214+42.86	2.25	348.85	348.87
CL Brg N Abut	1214+52.85	2.25	348.86	348.86
Back N Abut	1214+54.71	2.25	348.86	348.86

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DL DEFLECTION
Back S Abut	1211+17.18	6.47	348.58	348.58
CL Brg S Abut	1211+18.92	6.53	348.57	348.57
A	1211+28.97	6.83	348.53	348.54
B	1211+39.03	7.03	348.60	348.63
C	1211+49.09	7.15	348.67	348.71
D	1211+59.16	7.19	348.71	348.75
E	1211+69.22	7.13	348.75	348.79
F	1211+79.28	6.99	348.81	348.84
G	1211+89.34	6.76	348.84	348.86
CL S Brg Pier 1	1211+99.39	6.44	348.84	348.84
CL Pier 1	1212+00.43	6.40	348.84	348.84
CL N Brg Pier 1	1212+01.57	6.66	348.82	348.82
H	1212+11.38	6.65	348.82	348.84
I	1212+21.25	6.71	348.81	348.84
J	1212+31.16	6.83	348.77	348.83
K	1212+41.08	6.87	348.75	348.82
L	1212+50.99	6.81	348.73	348.81
M	1212+60.90	6.68	348.72	348.82
N	1212+70.95	6.81	348.72	348.83
O	1212+81.01	6.88	348.73	348.84
P	1212+91.07	6.86	348.72	348.84
Q	1213+01.13	6.74	348.72	348.84
R	1213+11.26	6.72	348.72	348.83
S	1213+21.48	6.81	348.71	348.82
T	1213+31.70	6.81	348.71	348.80
U	1213+41.94	6.75	348.71	348.78
V	1213+52.18	6.62	348.73	348.79
W	1213+62.46	6.62	348.73	348.77
CL S Brg Pier 2	1213+72.73	6.62	348.76	348.76
CL Pier 2	1213+73.84	6.62	348.76	348.76
CL N Brg Pier 2	1213+75.01	6.75	348.75	348.75
X	1213+85.01	6.75	348.74	348.75
Y	1213+95.01	6.75	348.74	348.77
Z	1214+05.01	6.75	348.74	348.78
AA	1214+15.01	6.75	348.74	348.78
AB	1214+25.01	6.75	348.73	348.77
AC	1214+35.01	6.75	348.72	348.75
AD	1214+45.01	6.75	348.75	348.77
CL Brg N Abut	1214+55.00	6.75	348.77	348.77
Back N Abut	1214+56.86	6.75	348.76	348.76

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ILLINOIS DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS II
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

Designed By: TCS Checked By: JLR Drawn By: TCS
Date: Feb 2009 File: sp02\IA003.SHT

ROUTE NO.	SECTION	COUNTY	FEET SHEETS	SHEET	SHEET NO. 6 23 SHEETS
S.B.I. 150	(133A) D,I	Alexander	32	13	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. ROAD PROJECT			

Contract #98910

STRINGER 6

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DL DEFLECTION
Back S Abut	1211+18.30	11.01	348.25	348.25
CL Brg S Abut	1211+20.04	11.07	348.24	348.24
A	1211+30.14	11.36	348.22	348.24
B	1211+40.24	11.55	348.29	348.32
C	1211+50.34	11.66	348.36	348.40
D	1211+60.44	11.68	348.40	348.44
E	1211+70.54	11.62	348.44	348.48
F	1211+80.64	11.46	348.44	348.47
G	1211+90.74	11.22	348.52	348.54
CL S Brg Pier 1	1212+00.83	10.89	348.55	348.55
CL Pier 1	1212+01.88	10.85	348.55	348.55
CL N Brg Pier 1	1212+03.07	11.24	348.54	348.54
H	1212+12.92	11.22	348.52	348.53
I	1212+22.84	11.31	348.49	348.52
J	1212+32.79	11.42	348.46	348.50
K	1212+42.75	11.45	348.43	348.49
L	1212+52.70	11.38	348.42	348.49
M	1212+62.67	11.27	348.42	348.51
N	1212+72.77	11.41	348.43	348.53
O	1212+82.87	11.46	348.43	348.54
P	1212+92.97	11.43	348.42	348.53
Q	1213+03.07	11.30	348.44	348.56
R	1213+13.27	11.33	348.44	348.55
S	1213+23.53	11.39	348.44	348.54
T	1213+33.80	11.39	348.42	348.51
U	1213+44.08	11.31	348.40	348.47
V	1213+53.57	11.20	348.39	348.45
W	1213+64.64	11.20	348.46	348.50
CL S Brg Pier 2	1213+74.92	11.20	348.50	348.50
CL Pier 2	1213+76.02	11.20	348.51	348.51
CL N Brg Pier 2	1213+77.16	11.25	348.50	348.50
X	1213+87.16	11.25	348.51	348.53
Y	1213+97.16	11.25	348.53	348.56
Z	1214+07.16	11.25	348.56	348.60
AA	1214+17.16	11.25	348.58	348.62
AB	1214+27.16	11.25	348.58	348.63
AC	1214+37.16	11.25	348.61	348.64
AD	1214+47.16	11.25	348.67	348.69
CL Brg N Abut	1214+57.15	11.25	348.68	348.68
Back N Abut	1214+59.01	11.25	348.67	348.67

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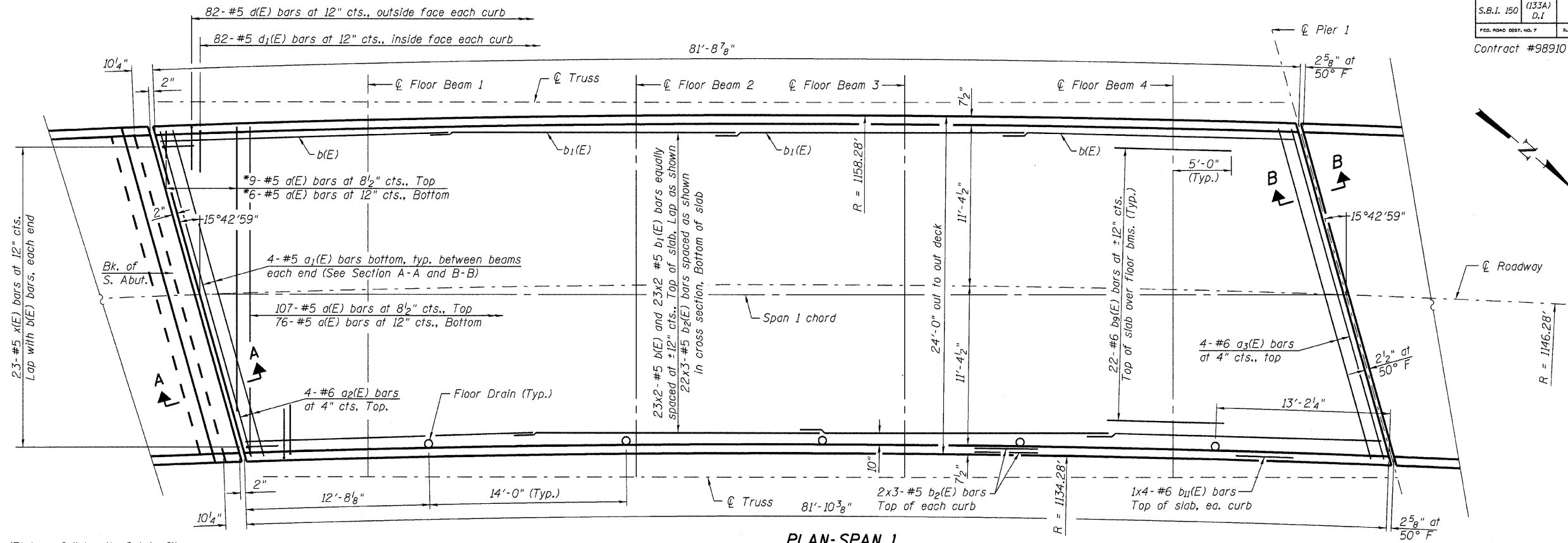
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TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

Designed By: TCG	Checked By: JLR	Drawn By: TCG
Date: Feb 2009	File: sp021A004.SHT	

ILLINOIS DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS III
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

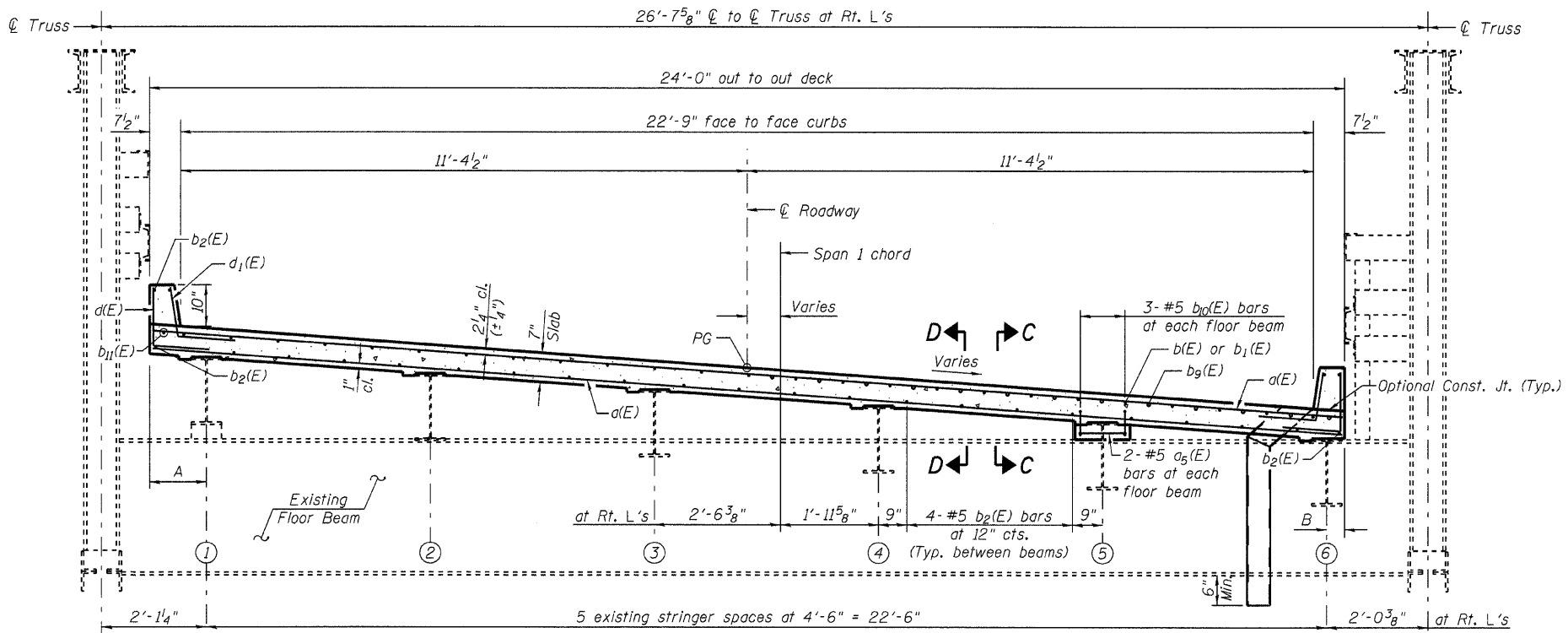
Contract #98910



PLAN-SPAN 1

*Order a(E) bars full length. Cut to fit skew and use remainder in opposite end.

MIN. BAR LAP
#5 bar = 1'-8"
#6 bar = 2'-0"



CROSS SECTION
(Looking North)

OVERHANG DIMENSIONS
(at Rt. L's)

Location	A	B
Cl. Brg. S. Abut.	4 1/4"	11"
Floor Beam 1	9 3/4"	8 3/8"
Floor Beam 2	1'-1 3/4"	4 1/4"
Floor Beam 3	1'-1 1/8"	4 1/2"
Floor Beam 4	10 1/8"	8"
Cl. Pier 1	7 1/8"	1'-2"

Notes:
All longitudinal dimensions are measured along inside face of curb.
All transverse dimensions are measured along radii, unless otherwise shown.
See Sheet 10 of 23 for superstructure details and Bill of Material.
See Sheet 10 of 23 for Sections A-A, B-B, C-C and D-D.
Bars indicated thus 2x3-#5 etc. indicates 2 lines of bars with 3 lengths per line.

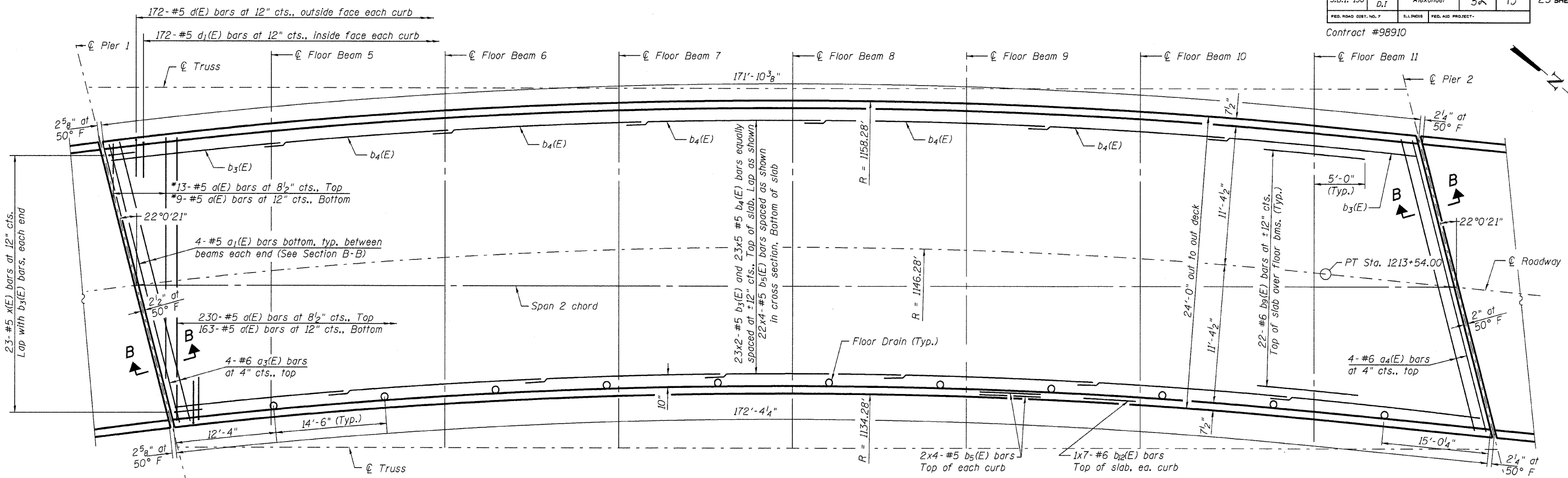
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE - SPAN 1
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: DLS Checked By: STG Drawn By: AJF
Date: Feb. 2009 File: 002-0009.dgn

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Contract #98910



PLAN-SPAN 2

*Order a(E) bars full length. Cut to fit skew and use remainder in opposite end.

MIN. BAR LAP

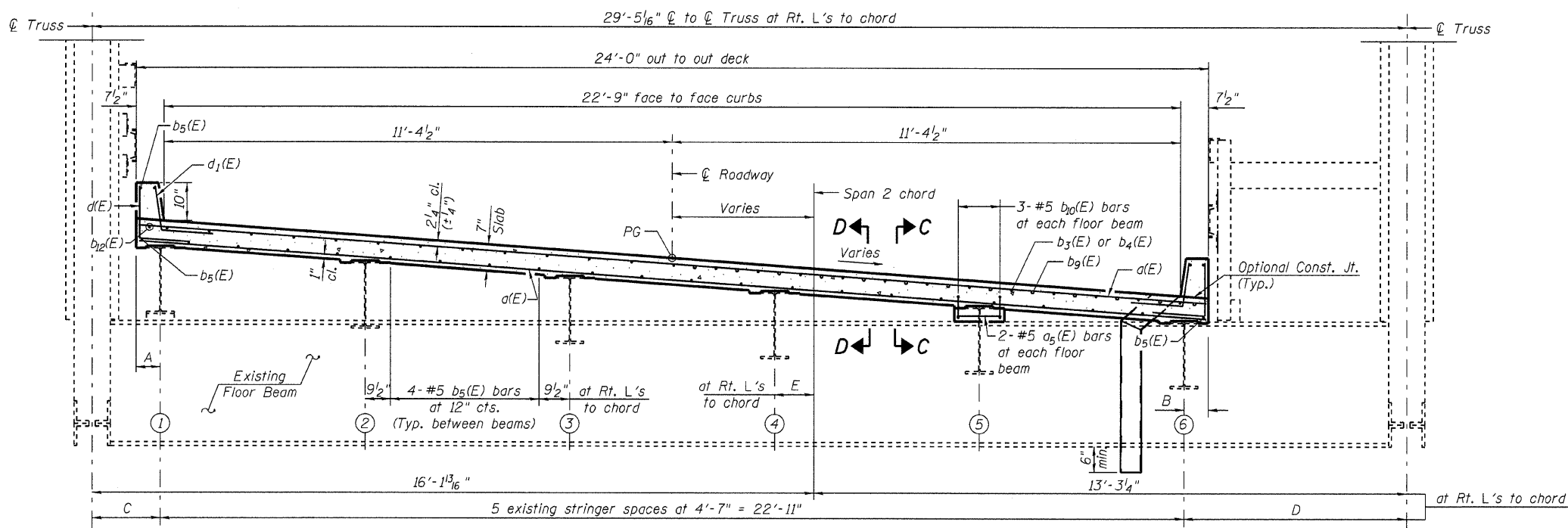
#5 bar = 1'-8"
#6 bar = 2'-0"

DIMENSIONS

(at Rt. L's to chord)

Location	A	B	C	D	E
☐ Pier 1	4"	8 3/4"	4'-9 1/16"	2'-3 3/4"	-2'-0 7/16"
Floor Beam 5	3 7/8"	9 5/8"	3'-2 3/8"	3'-3 1/4"	-10"
Floor Beam 6	6 1/2"	6 3/4"	2'-4 1/2"	4'-1 9/16"	5 1/8"
Floor Beam 7	4"	9 1/8"	1'-6 3/8"	4'-11 1/4"	10 1/2"
Floor Beam 8	6 9/16"	6 1/8"	1'-6 3/8"	4'-11 3/4"	10 1/2"
Floor Beam 9	3 7/8"	9 3/8"	1'-6 3/8"	4'-11 3/4"	10 1/2"
Floor Beam 10	6 1/2"	6 3/4"	2'-4 1/2"	4'-1 9/16"	5 1/8"
Floor Beam 11	3 7/8"	9 5/8"	3'-3 3/8"	3'-2 3/8"	-10 3/8"
☐ Pier 2	4"	9 7/8"	4'-1 9/16"	1'-9 1/16"	-2'-1 9/16"

Notes:
All longitudinal dimensions are measured along inside face of curb.
All transverse dimensions are measured along radii, unless otherwise shown.
See Sheet 10 of 23 for superstructure details and Bill of Material.
See Sheet 10 of 23 for Sections B-B, C-C and D-D.
Bars indicated thus 2x4-#5 etc. indicates 2 lines of bars with 4 lengths per line.



CROSS SECTION
(Looking North)

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE - SPAN 2
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

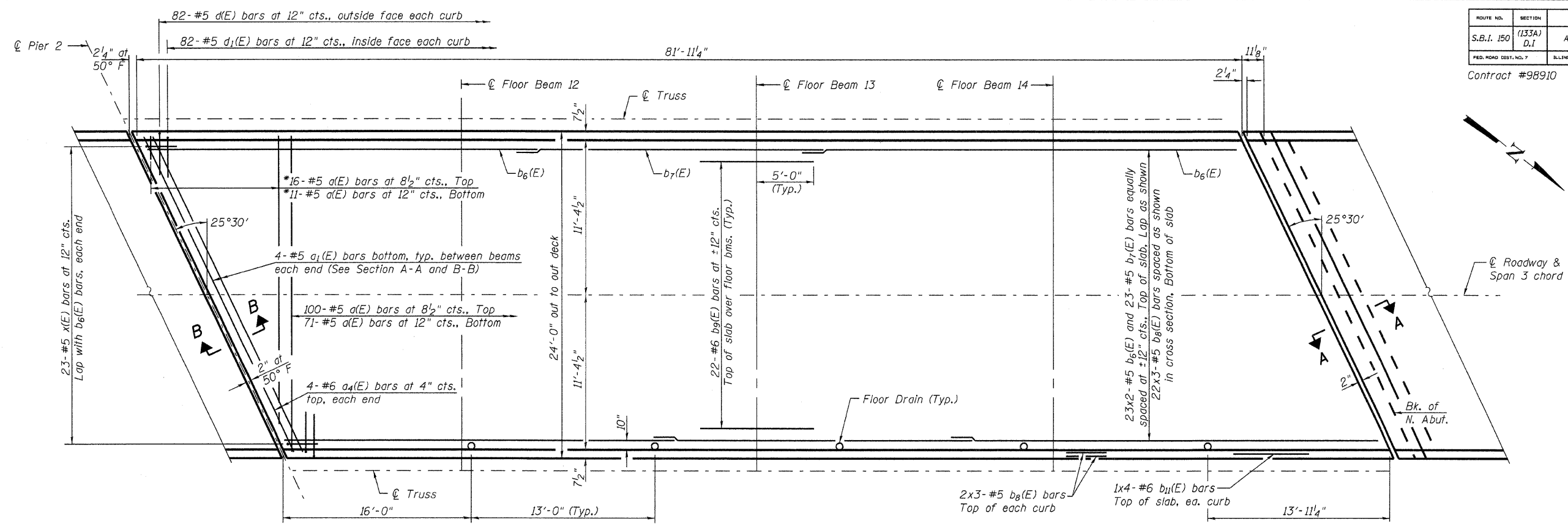
LE LIN ENGINEERING, LTD.
Consulting Engineers
Channah, Illinois

Designed By: DLS Checked By: STD Drawn By: AJF
Date: Feb 2009 File: 002-0009.dgn

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9 23 SHEETS
S.B.I. 150	(133A) D.1	Alexander	32	16	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #98910

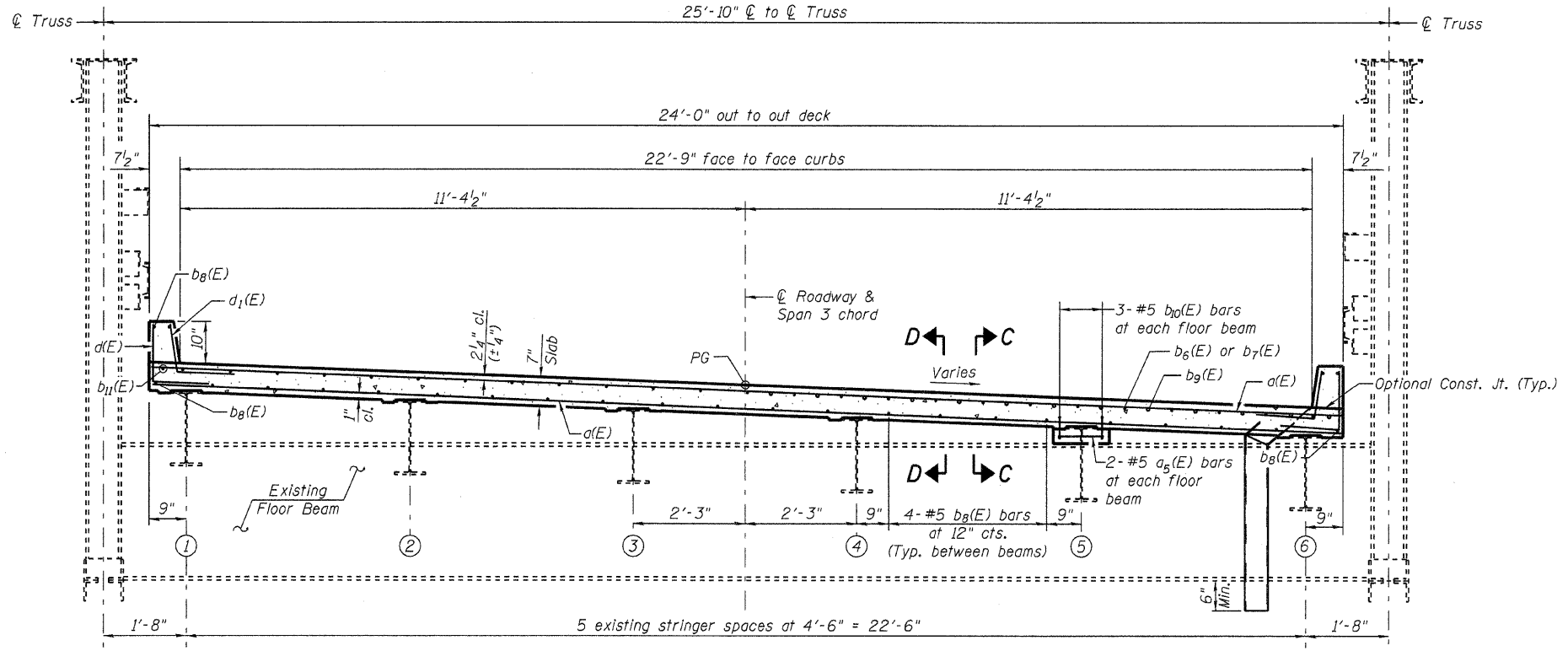


*Order a(E) bars full length. Cut to fit skew and use remainder in opposite end.

PLAN-SPAN 3

MIN. BAR LAP

- #5 bar = 1'-8"
- #6 bar = 2'-0"



Notes:
 All longitudinal dimensions are measured along inside face of curb.
 See Sheets 10 of 23 for superstructure details and Bill of Material.
 See Sheet 10 of 23 for Sections A-A, B-B, C-C and D-D.
 Bars indicated thus 2x3-#5 etc. indicates 2 lines of bars with 3 lengths per line.

NEAR MIDSPAN

CROSS SECTION
(Looking North)

NEAR FLOORBEAM

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Chatham, Illinois

Designed By: DLS Checked By: STD Drawn By: A.J.F.
 Date: Feb. 2009 File: 002-0009.dgn

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE - SPAN 3
 OLD ILLINOIS ROUTE 3
 OVER SEXTON CREEK
 S.B.I. ROUTE 150 - SECTION (133A)D.1
 ALEXANDER COUNTY
 STATION 1212+84.95
 STRUCTURE NO. 002-0009

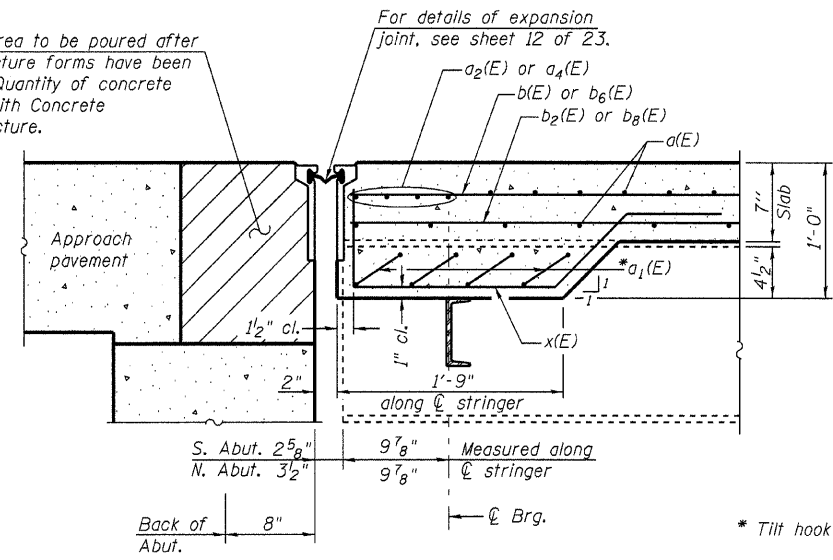
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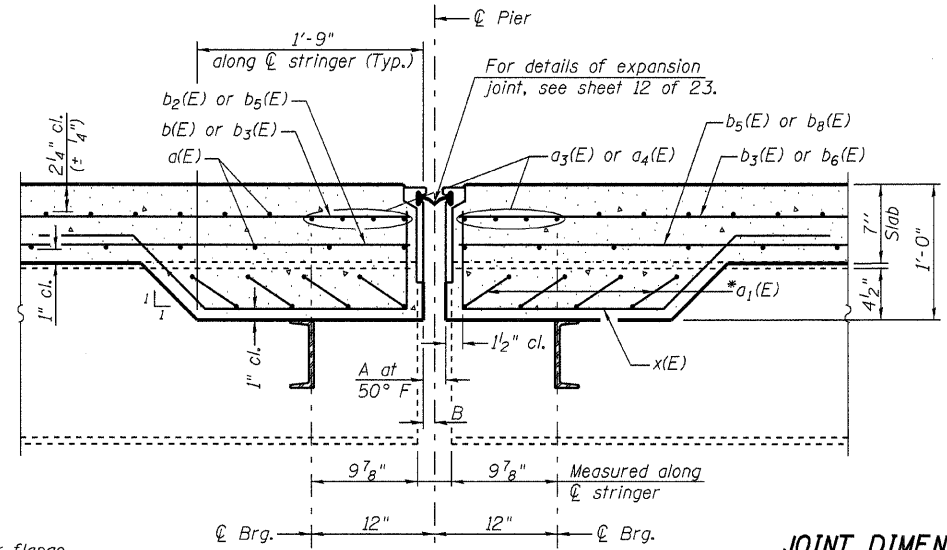
Contract #98910

Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.



SECTION A-A

(Dimensions at Rt. L's to Abut., unless noted)

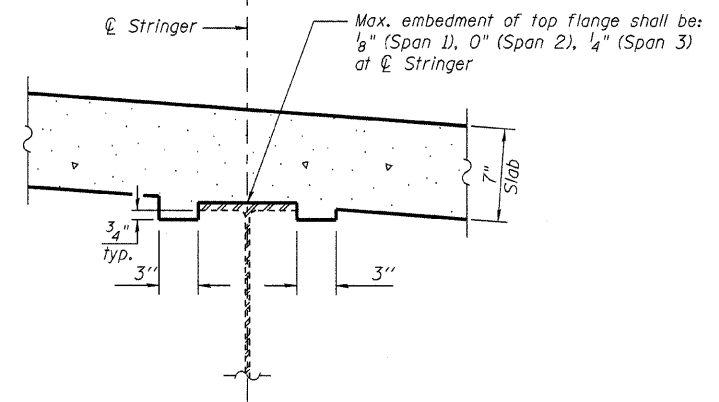


SECTION B-B

(Dimensions at Rt. L's to Pier, unless noted)

JOINT DIMENSIONS

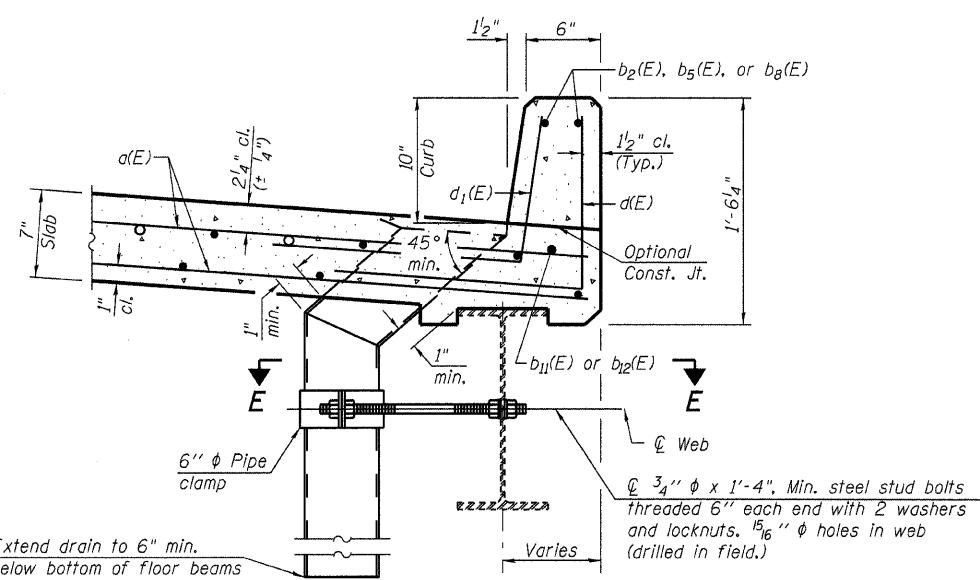
	A	B
Pier 1	2 1/2"	1 1/4"
Pier 2	2"	1"



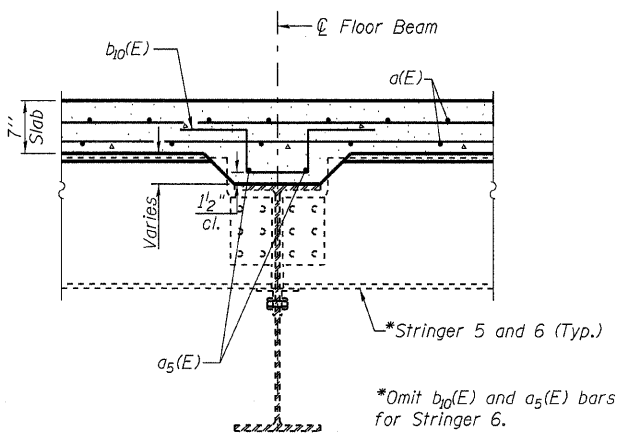
STRINGER FILLET DETAIL

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	811	#5	23'-9"	—
a1(E)	120	#5	5'-7"	—
a2(E)	4	#6	24'-4"	—
a3(E)	8	#6	24'-10"	—
a4(E)	12	#6	26'-3"	—
a5(E)	28	#5	0'-10"	—
b(E)	46	#5	23'-7"	—
b1(E)	46	#5	19'-9"	—
b2(E)	78	#5	28'-10"	—
b3(E)	46	#5	30'-10"	—
b4(E)	115	#5	24'-1"	—
b5(E)	104	#5	44'-4"	—
b6(E)	46	#5	30'-11"	—
b7(E)	23	#5	23'-1"	—
b8(E)	78	#5	28'-5"	—
b9(E)	308	#6	10'-0"	—
b10(E)	42	#5	6'-3"	—
b11(E)	16	#6	21'-11"	—
b12(E)	14	#6	26'-4"	—
d(E)	672	#5	2'-4"	L
d1(E)	672	#5	2'-0"	L
x(E)	138	#5	5'-6"	—
Reinforcement Bars, Epoxy Coated		Pound	49500	
Concrete Superstructure		Cu. Yd.	197.8	

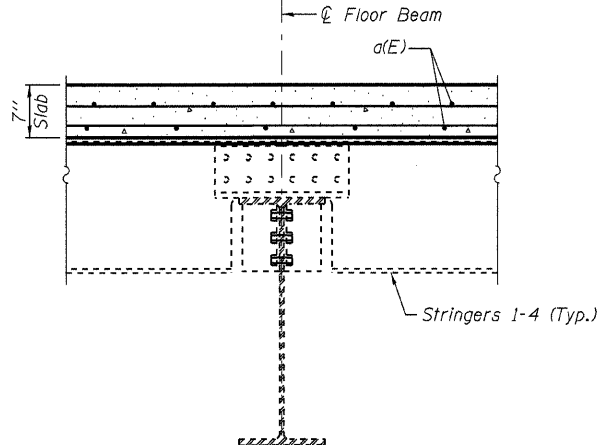


SECTION THRU CURB



SECTION C-C

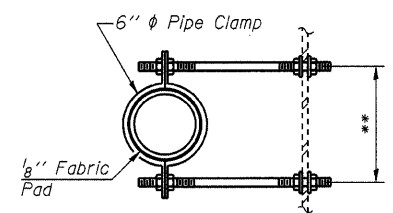
(At Floor Beam)



SECTION D-D

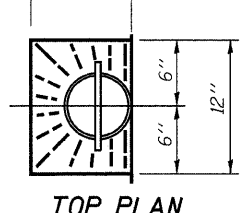
(At Midspan)

FLOOR BEAM FILLET DETAILS

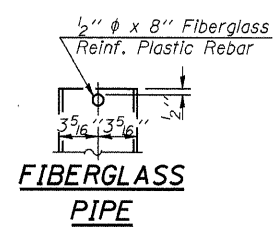


SECTION E-E

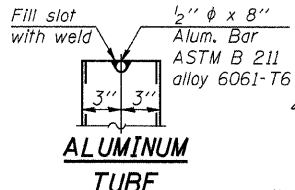
** Dimension as required by Pipe Clamp



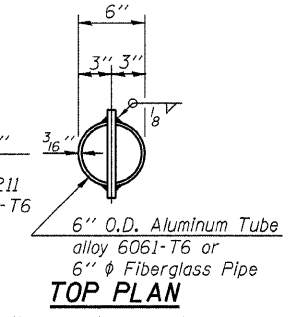
TOP PLAN



FIBERGLASS PIPE

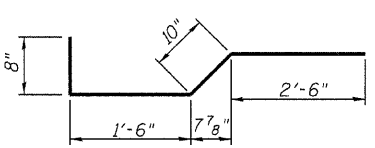


ALUMINUM TUBE

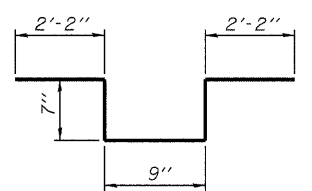


TOP PLAN

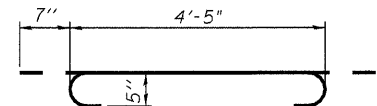
(Showing Aluminum Tube)



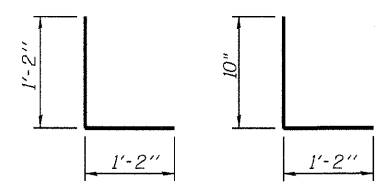
BAR x(E)



BAR b10(E)



BAR a1(E)



BAR d(E)

BAR d1(E)

(Bend d(E) and d1(E) bars to fit as necessary)

Notes:
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

Lin Engineering, Ltd.
Consulting Engineers
Chatham, Illinois

Designed By: DLS
Checked By: STD
Date: Feb 2009

Drawn By: A.J.F.
File: 002-0009.dgn

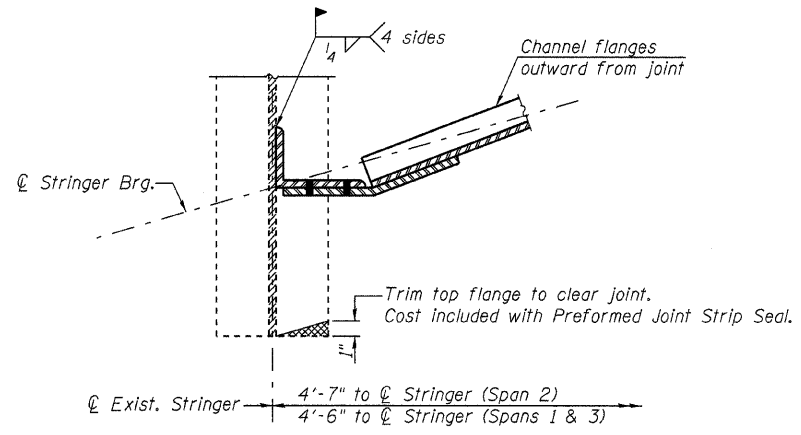
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

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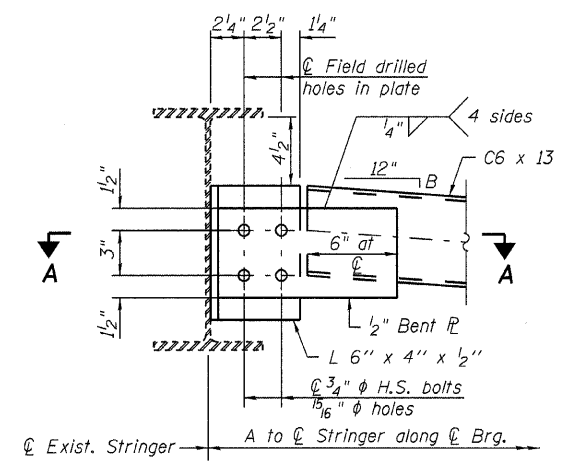
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Contract #98910



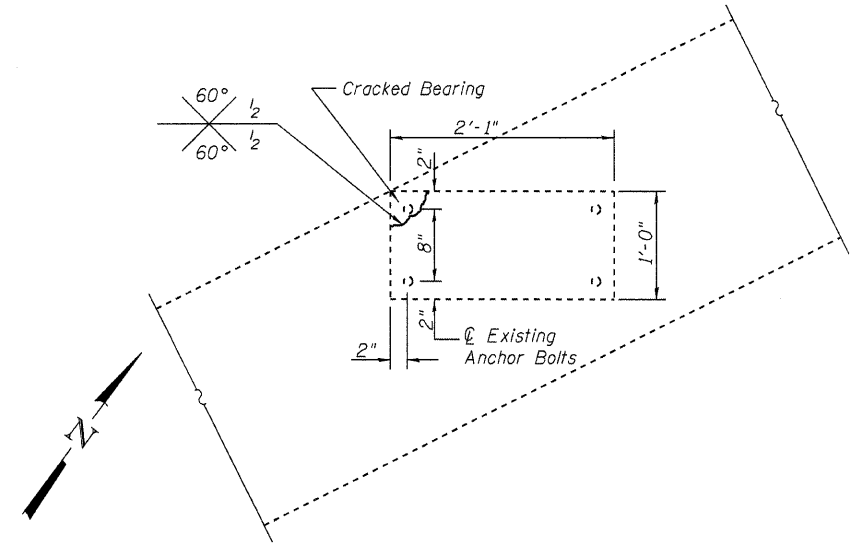
SECTION A-A



END DIAPHRAGM
(30 - Required)

Location	A
Stringer S. Abut.	4'-8 1/8"
S. Brg. Pier 1	4'-8 1/8"
N. Brg. Pier 1	4'-9 1/8"
S. Brg. Pier 2	5'-0 1/8"
N. Brg. Pier 2	4'-11 1/8"
Stringer N. Abut.	4'-11 1/8"

Notes:
Two hardened washers required for each set of oversized holes.
Contractor shall verify dimensions and measure slope "B" in field.



PLAN OF EXISTING WEST TRUSS BEARING AT NORTH ABUTMENT

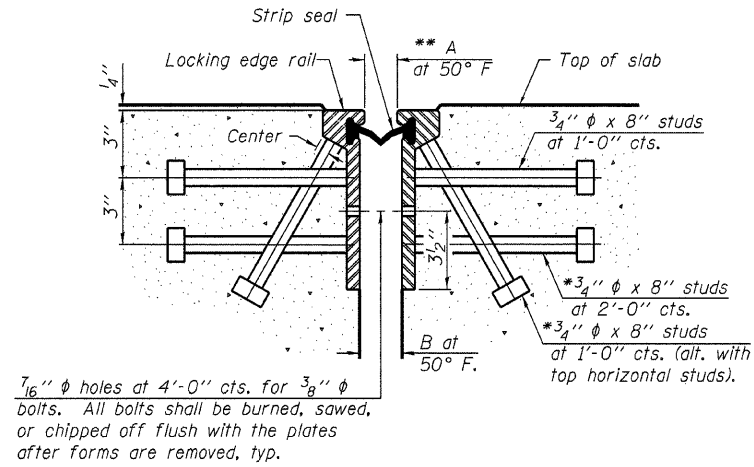
ILLINOIS DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAILS
 OLD ILLINOIS ROUTE 3
 OVER SEXTON CREEK
 S.B.I. ROUTE 150 - SECTION (133A)D.1
 ALEXANDER COUNTY
 STATION 1212+84.95
 STRUCTURE NO. 002-0009

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Chatham, Illinois
 Designed By: DLS Checked By: STD Drawn By: A.J.F.
 Date: Feb 2009 File: 022-0009.dgn

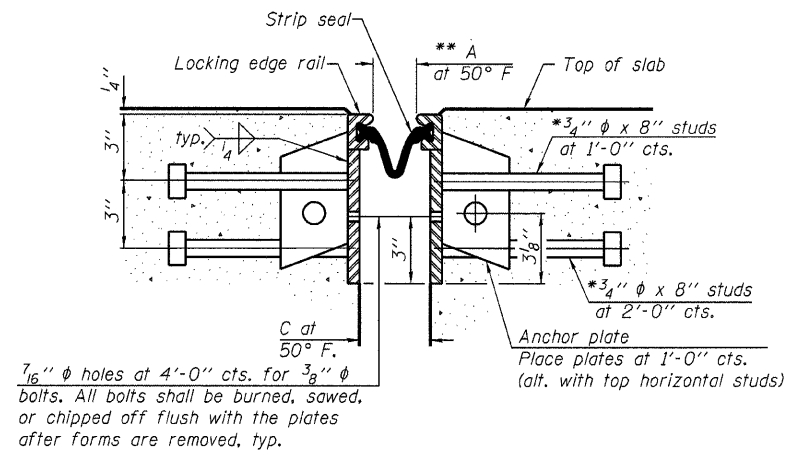
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Contract #98910

*Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.
**When joint is fixed, dimension is set at 1 1/2".



SECTION THRU ROLLED RAIL JOINT



SECTION THRU WELDED RAIL JOINT

JOINT DIMENSIONS

Location	A	B	C
Pier 1	2"	2 1/2"	3 1/4"
Pier 2	1 1/2"	2"	2 3/4"

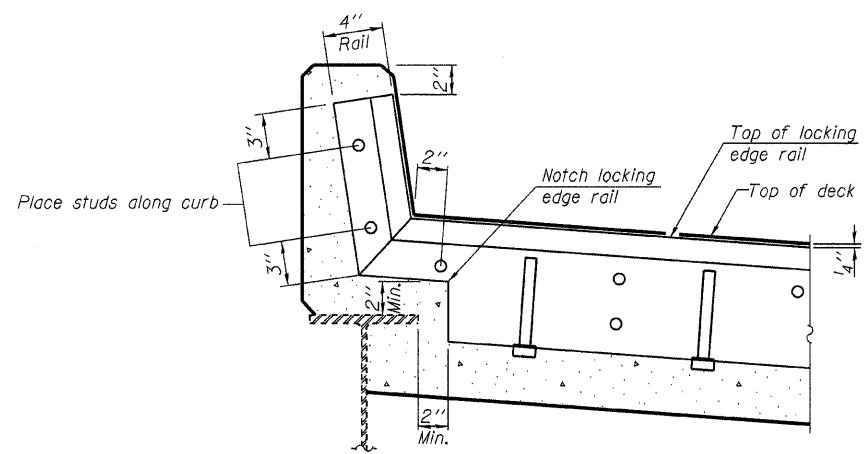
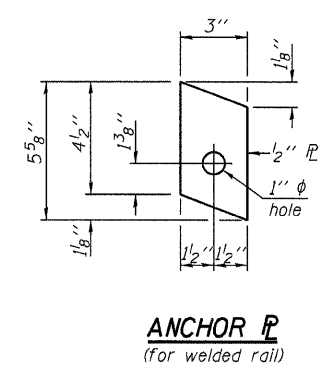
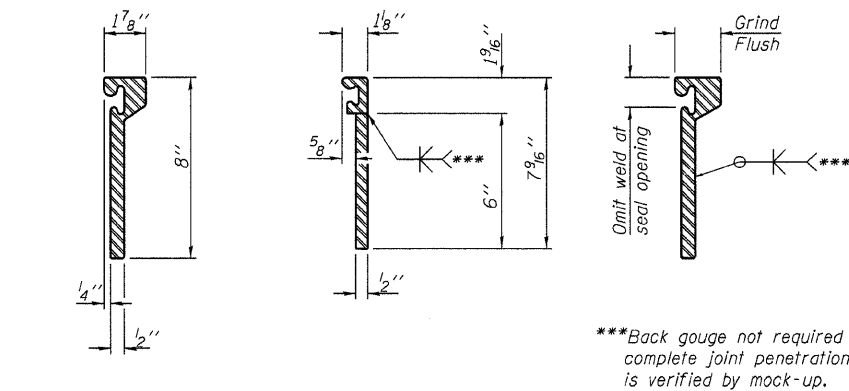
Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". 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 height and thickness of the Locking Edge Rails shown are minimum dimensions. 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 and stage construction joints.

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.



END TREATMENT AT CURB

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	106

ILLINOIS DEPARTMENT OF TRANSPORTATION
PREFORMED JOINT STRIP SEAL
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

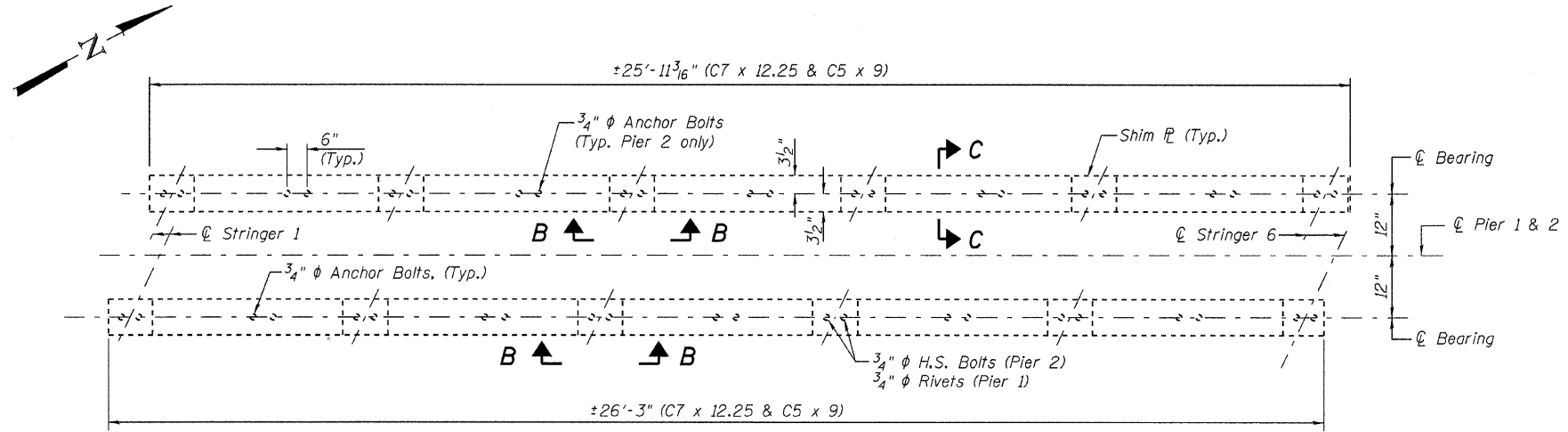
LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: DLS
Checked By: STD
Date: Feb 2009

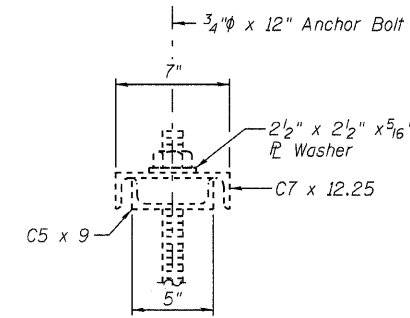
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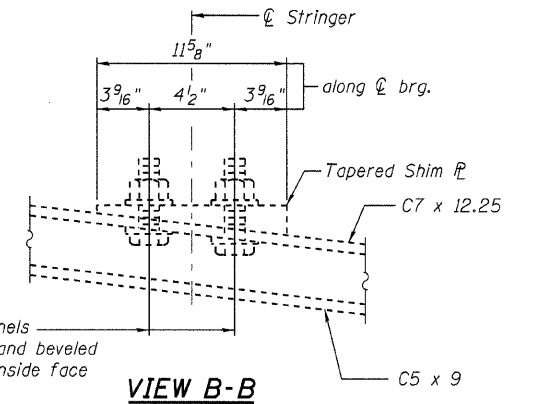
Contract #98910



EXISTING STRINGER BEARINGS PLAN AT PIERS 1 & 2

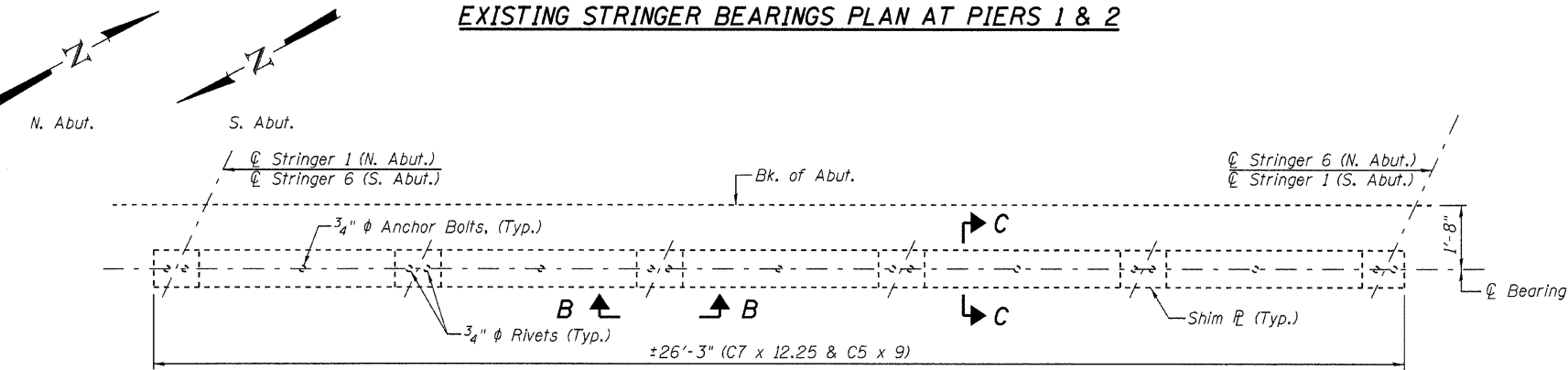


SECTION C-C

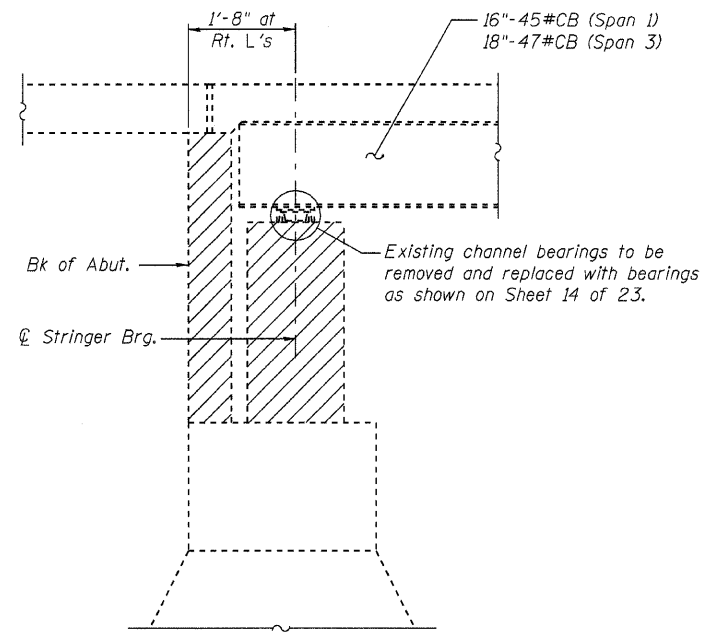


VIEW B-B

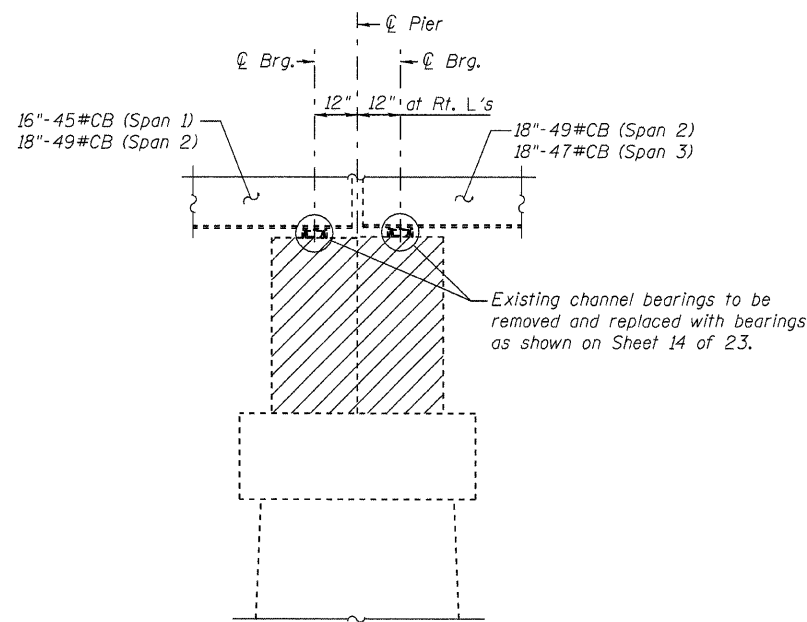
Pier 2 - $\varnothing 1 5/16$ " Hole in \bar{P} and Channels for $3/4$ " \varnothing H.S. Bolt with nut and beveled washer, tack welded bolt to inside face of C7.
Pier 1 - $3/4$ " \varnothing Rivets
Abutments - $3/4$ " \varnothing Rivets



EXISTING STRINGER BEARINGS PLAN AT ABUTMENTS



SECTION THRU EXISTING ABUTMENTS



SECTION THRU EXISTING PIERS

BILL OF MATERIAL

Item	Unit	Total
Jack & Remove Existing Bearings	Each	36

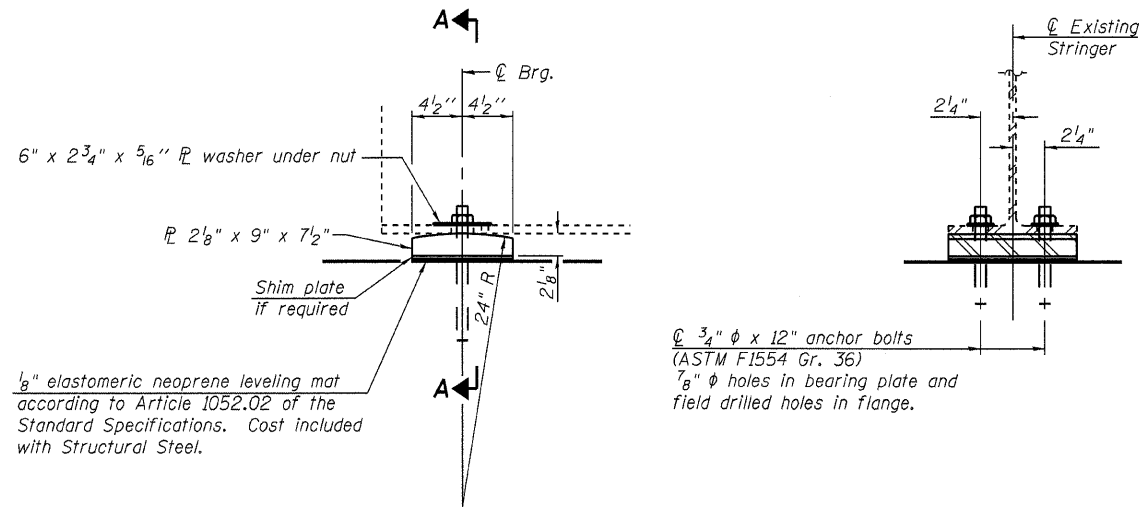
Notes:
Max. Stringer \varnothing Reaction due to self weight = 590#
Hatched areas indicate Concrete Removal.
See Sheet 18 of 23 for limits and quantity.

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRINGER BEARING REMOVAL
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Designed By: DLS
Checked By: STD
Drawn By: AJF
Date: Feb 2009
File: 002-0009.dgn

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Contract #98910

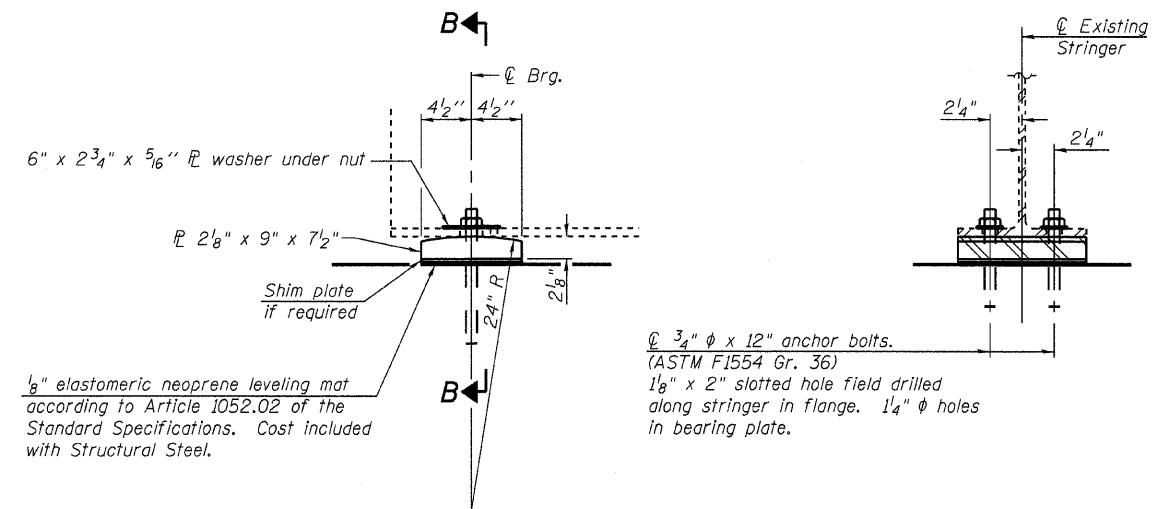


ELEVATION

SECTION A-A

FIXED BEARINGS - AT ABUTMENTS & SOUTH BEARING OF PIER 2

(18 - Required)

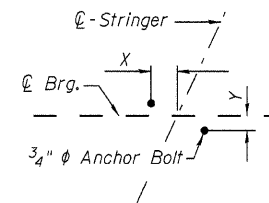


ELEVATION

SECTION B-B

EXPANSION BEARINGS - AT PIER 1 & NORTH BEARING OF PIER 2

(18 - Required)



ANCHOR BOLT LOCATION

	X	Y
S. Abutment	2 1/8"	5 1/8"
S. Brg. Pier 1	2 1/8"	5 1/8"
N. Brg. Pier 1	2 1/8"	3 1/4"
S. Brg. Pier 2	2"	1"
N. Brg. Pier 2	2"	1"
N. Abutment	2"	1"

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Cost of all steel plates, shim plates, field drilling, and field welding & grinding for stringer bearings shall be included with Structural Steel Repair.

Cost of temporary support of existing stringers during bearing installation is included with Jack and Remove Existing Bearings. See Sheet 13 of 23.

All bearing plates shall be placed perpendicular to stringers.

BILL OF MATERIAL

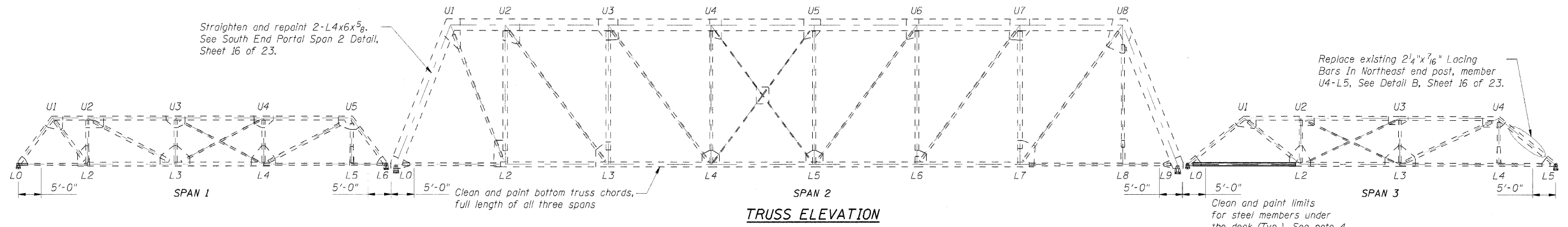
Item	Unit	Total
Anchor Bolts 3/4" φ	Each	72

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRINGER BEARING DETAILS
 OLD ILLINOIS ROUTE 3
 OVER SEXTON CREEK
 S.B.I. ROUTE 150 - SECTION (133A)D,I
 ALEXANDER COUNTY
 STATION 1212+84.95
 STRUCTURE NO. 002-0009

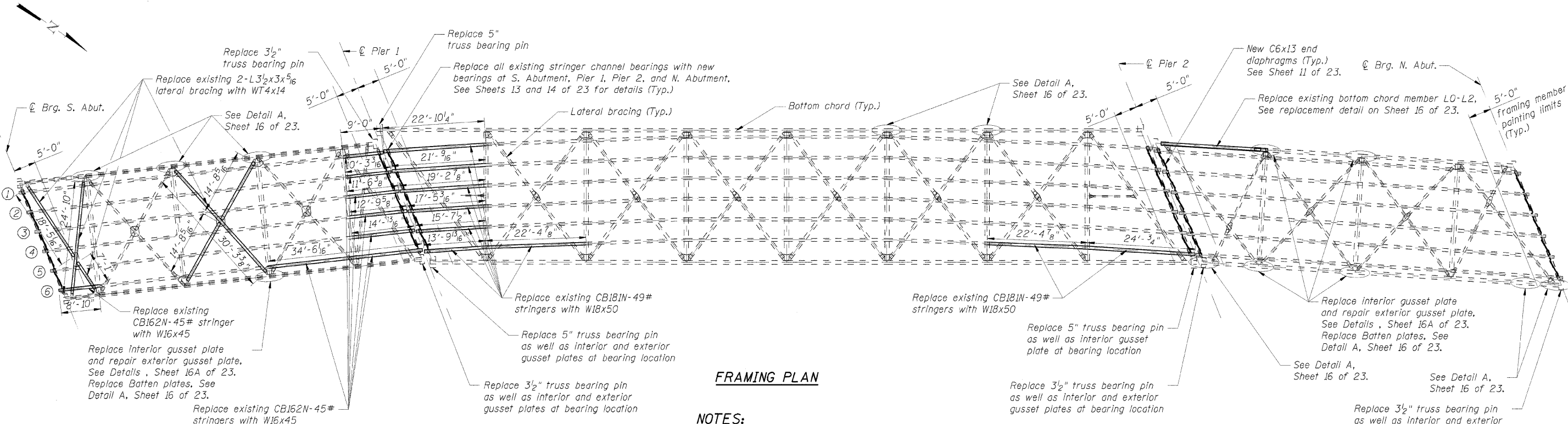
LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Chatham, Illinois
 Designed By: DLS Checked By: STG Drawn By: AJF
 Date: Feb 2009 File: 002-0009.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO.
S.B.I. 150	(133A) D.1	Alexander	32	22	23 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #98910



TRUSS ELEVATION



FRAMING PLAN

NOTES:

1. All steel repairs and new steel shown on this sheet to be paid for under "Structural Steel Repair".
2. See Sheet 16 of 23 for detail of Stringer Seat Replacement.
3. See Sheet 16 of 23 for detail of Floor Beam Web Repair.
4. All steel members underneath the deck that are to remain shall be cleaned and painted within 5 feet from any deck joint.
5. All truss bearing anchor bolts are to be repaired. See Sheet 16A of 23 for detail of Anchor Bolt Repair.
6. See Sheet 16A of 23 for detail of Truss Pin Replacement details.
7. See Sheet 16A of 23 for detail of Gusset Plate Repair and Replacement details.
8. All work to support the truss while performing the pin and chord member replacements to be included with "Temporary Shoring and Cribbing".

TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

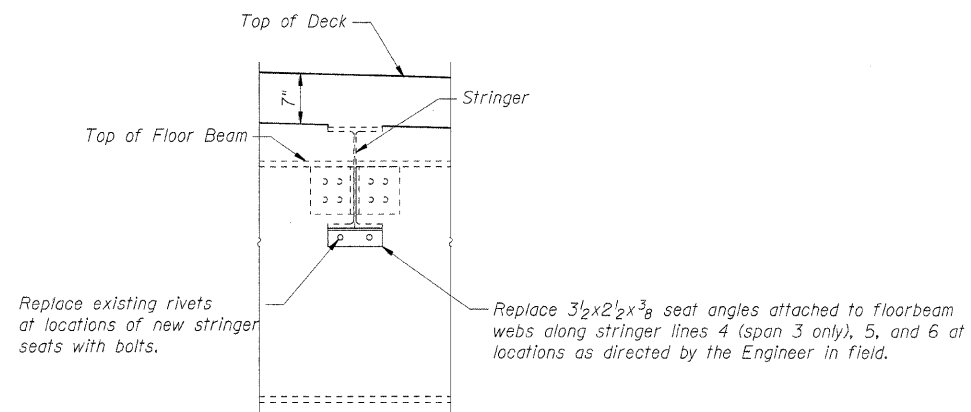
Designed By: TCC Checked By: LJR Drawn By: TCC
Date: Feb 2009 File: 98910.DWG

ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.1
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

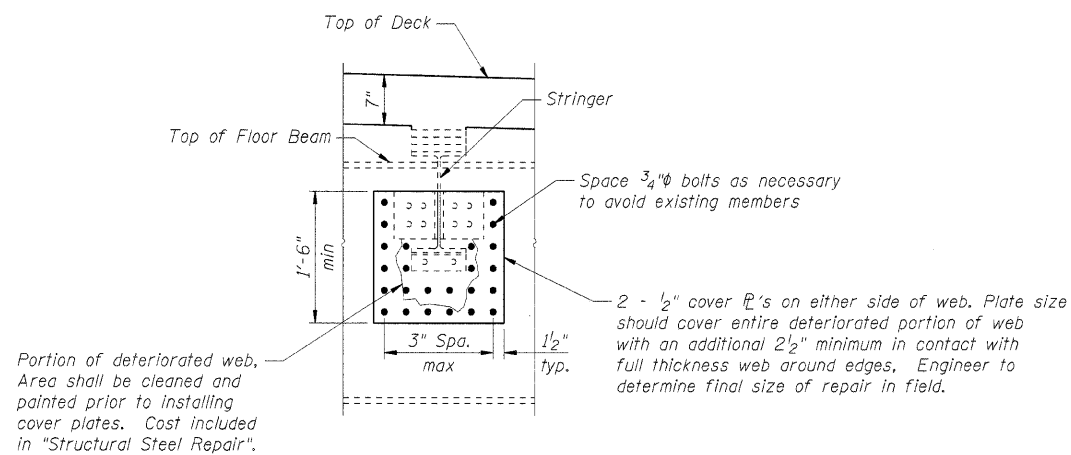
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PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16
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FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #98910

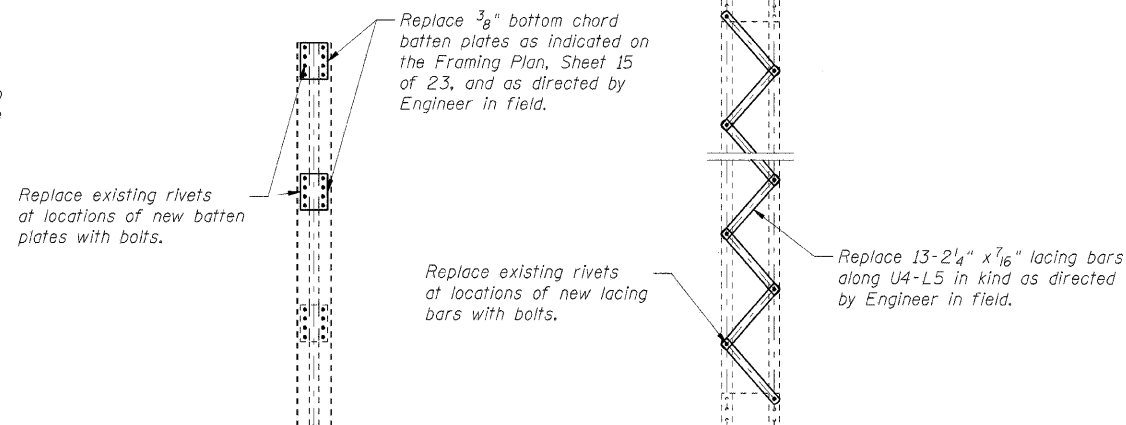


STRINGER SEAT REPLACEMENT DETAIL



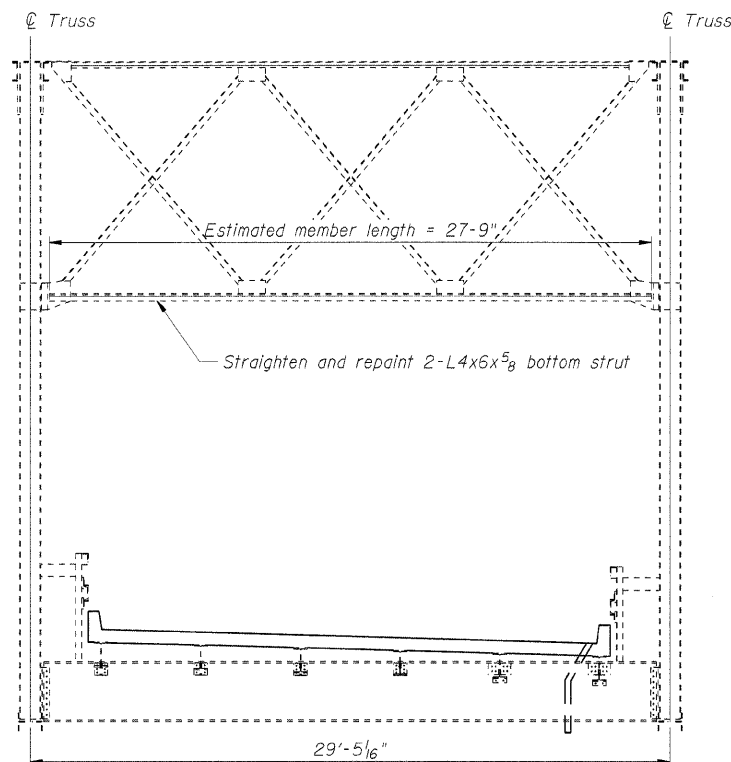
FLOOR BEAM WEB REPAIR DETAIL

NOTE: Existing stringer to be shortened as necessary to accommodate floor beam web repairs. Contractor shall be responsible for retrofitting stringer end connection as necessary as approved by Engineer.

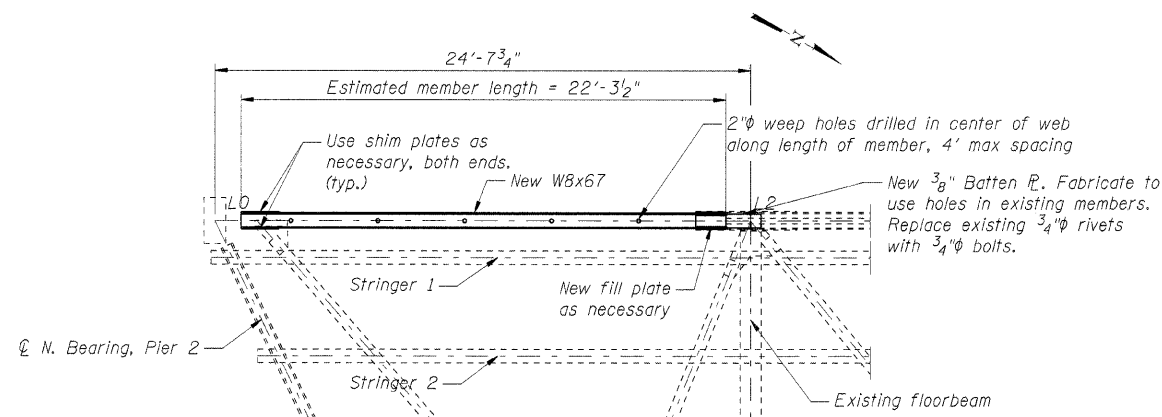


PLAN DETAIL A

PLAN DETAIL B
(Span 3)



SOUTH END PORTAL SPAN 2



BOTTOM CHORD REPLACEMENT SPAN 3

MEMBER SERVICE FORCES

LOADING	AXIAL (kips)
Steel DL only	2.2
25 psf DL	1.2

NOTES:

- All steel repairs shown on this Sheet to be paid for under "Structural Steel Repair".
- Existing rivets in spans 1 and 3 are 3/4", existing rivets in span 2 are 1/2" according to record plans. Replace rivets with a bolt equal to existing rivet diameter.

TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

Designed by: TCG Checked by: ALR Drawn by: TCG
Date: Feb. 2009 File: S1021A001.SMT

ILLINOIS DEPARTMENT OF TRANSPORTATION
STEEL REPAIR DETAILS
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D, I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

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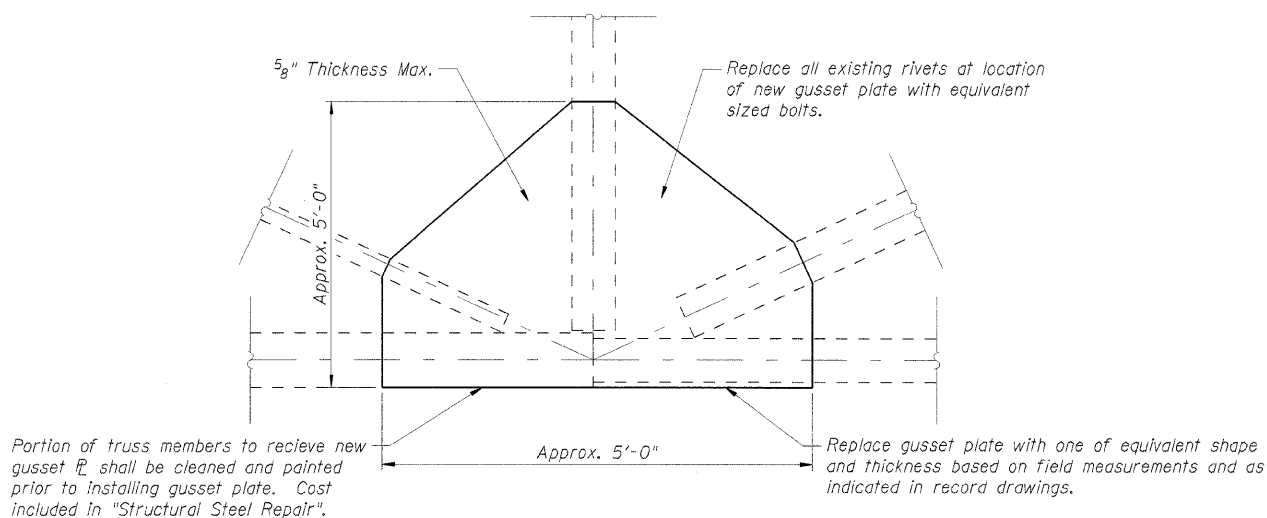
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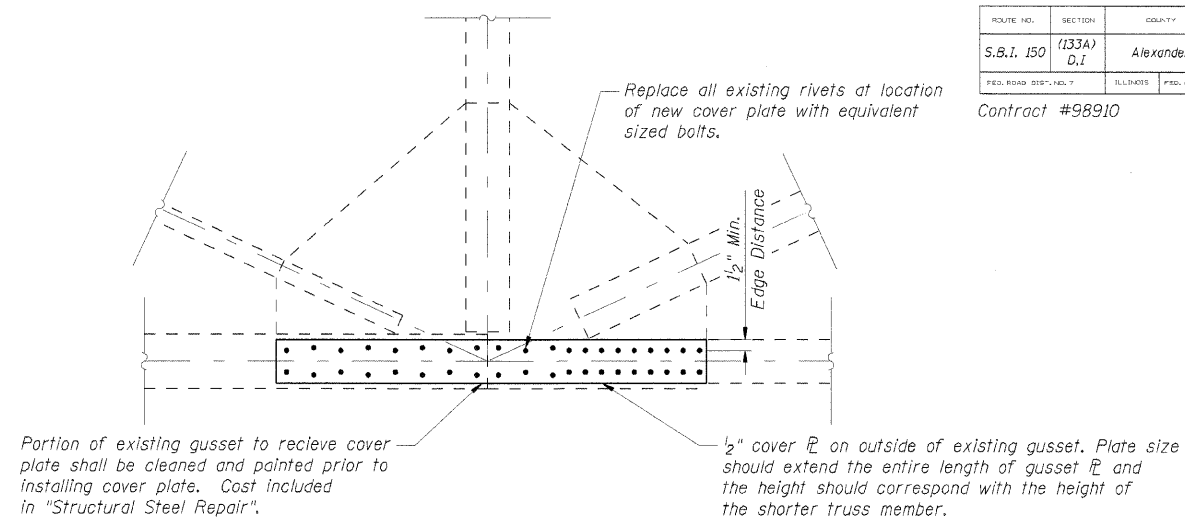
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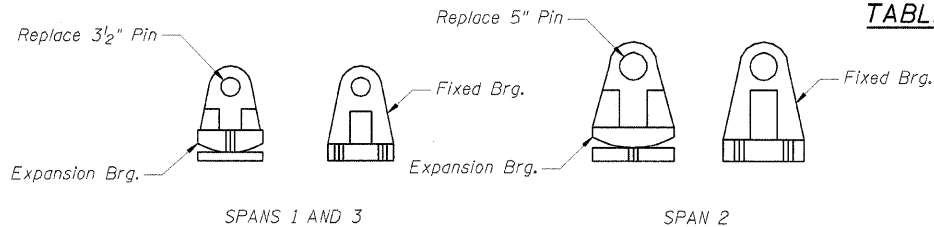
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
S.B.I. 150	(133A) D,I	Alexander	32	24	23 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		Contract #98910



TYPICAL INTERIOR GUSSET REPLACEMENT



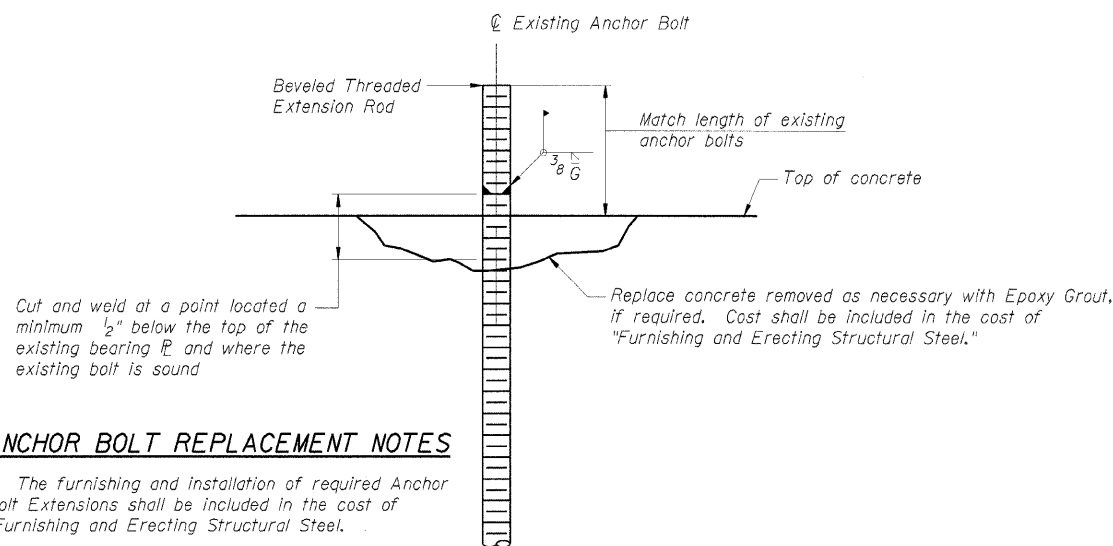
TYPICAL EXTERIOR GUSSET REPAIR



TRUSS BEARINGS

TABLE OF PIN REPLACEMENT

Span	Location	Bearing
1	Pier 1	SW
1	Pier 1	NW
2	Pier 1	SW
2	Pier 2	NW
3	Pier 2	NE
3	W. Abut.	NW

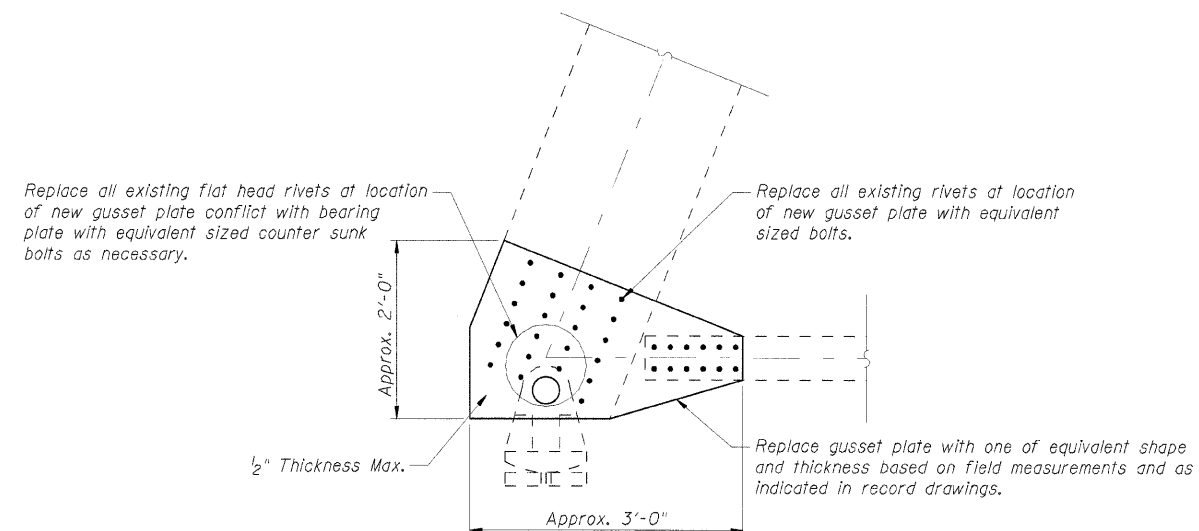


ANCHOR BOLT REPLACEMENT NOTES

- The furnishing and installation of required Anchor Bolt Extensions shall be included in the cost of "Furnishing and Erecting Structural Steel."
- New Hardware including washers and nuts that accompany anchor bolt replacement shall be included in the cost of "Furnishing and Erecting Structural Steel."

ANCHOR BOLT REPAIR DETAIL

Spans 1 and 3: 1/4" Bolt (24 Each)
Span 2: 1/2" Bolt (12 Each)



TYPICAL BEARING GUSSET REPLACEMENT

(Interior and exterior gusset P's)

NOTES:

- All steel repairs shown on this Sheet to be paid for under "Structural Steel Repair".
- Existing rivets in spans 1 and 3 are 3/4", existing rivets in span 2 are 7/8" according to record plans. Replace rivets with a bolt equal to existing rivet diameter.
- 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.

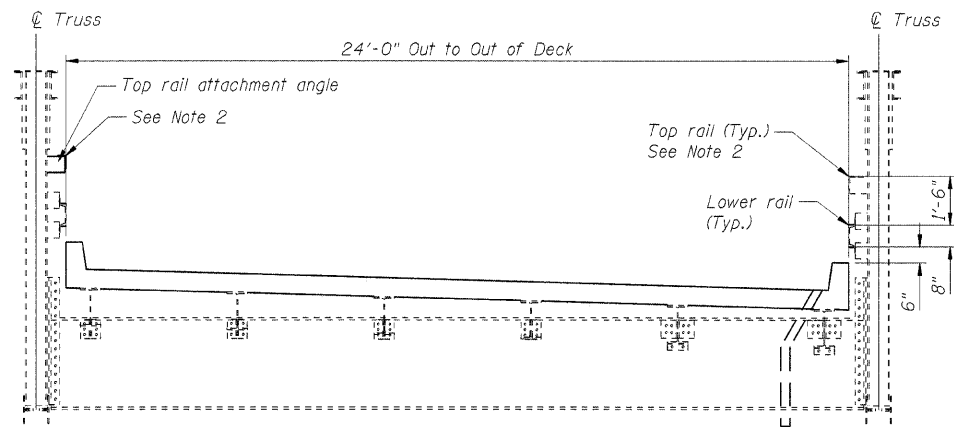
TENG TENG & ASSOCIATES, INC.
ENGINEERS-ARCHITECTS-PLANNERS
CHICAGO, ILLINOIS

Designed By: TCG Checked By: J.R. Drawn By: TCG
Date: Feb. 2009 File: 61021A003.SHT

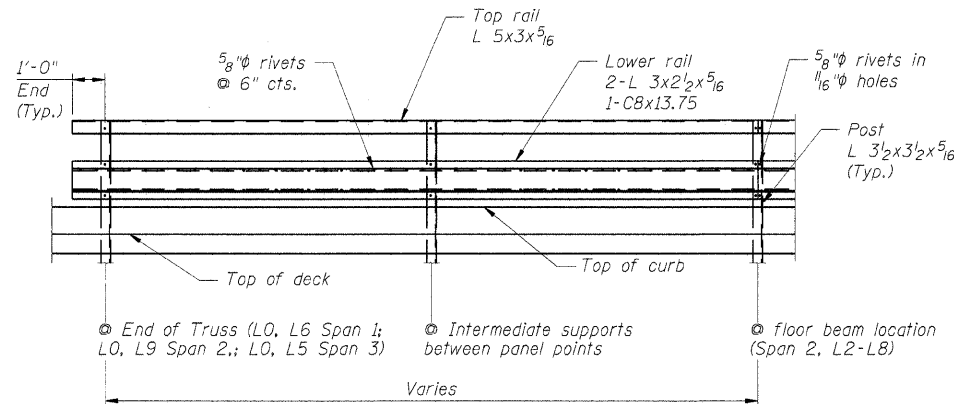
ILLINOIS DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS REPAIR DETAILS
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17 23 SHEETS
S.B.I. 150	(133A) D, I	Alexander	32	25	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

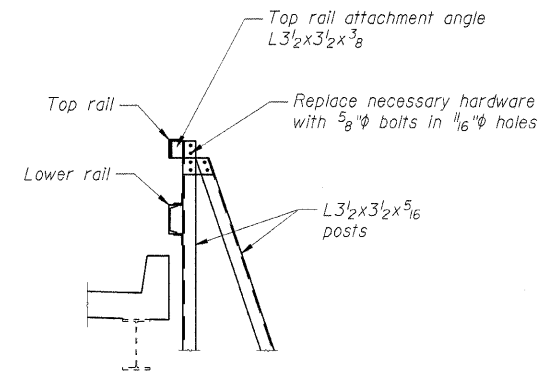
Contract #98910



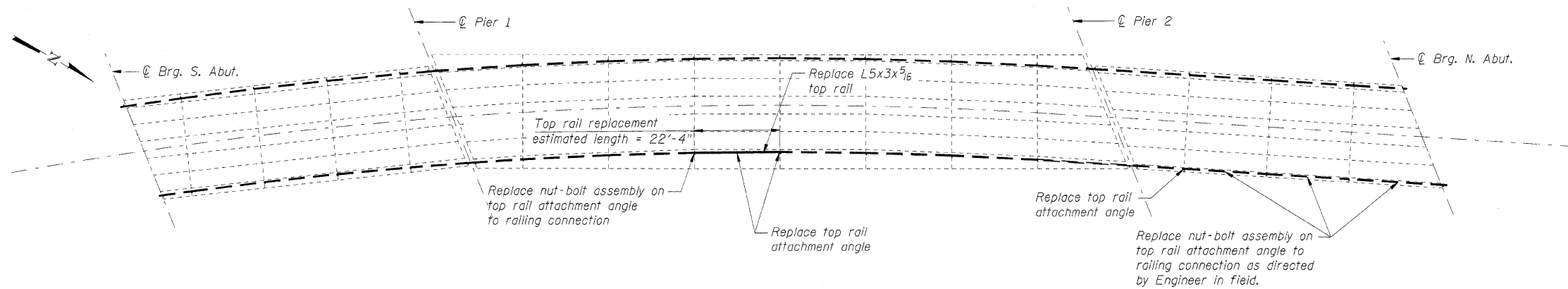
RAILING CROSS SECTION
(Spans 1 & 3)



EXISTING RAILING PARTIAL ELEVATION



RAIL POST DETAIL



RAILING PLAN

NOTE:

- All steel repairs shown on this Sheet to be paid for under "Structural Steel Repair".
- Replace damaged railing elements as indicated on this sheet and as directed by Engineer in field. Clean and paint existing and new railing members, connections, and supports.

TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

Designed By: TCO Checked By: JLR Drawn By: TCO
Date: Feb 2009 File: S1021A002.SHT

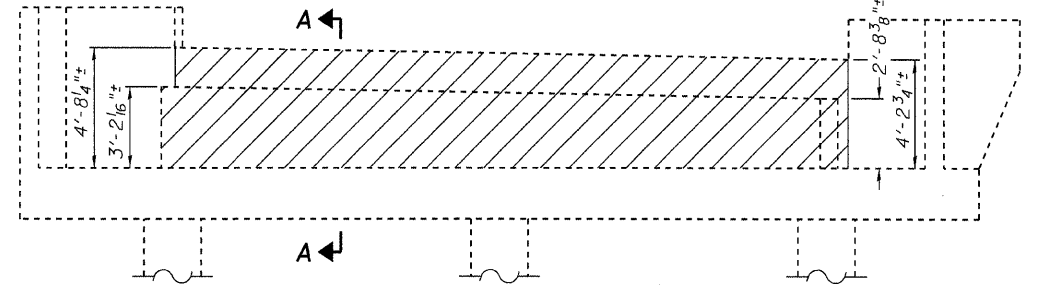
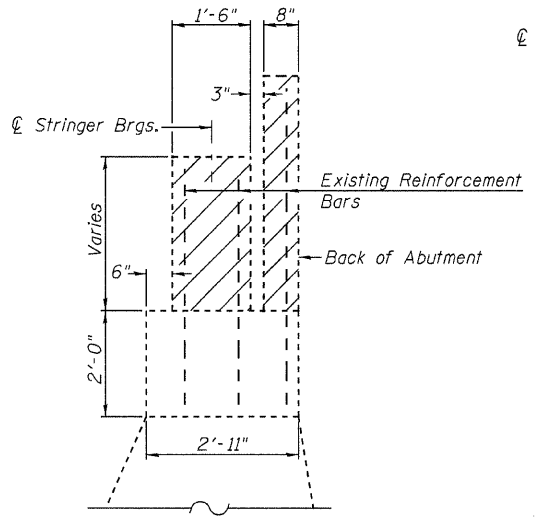
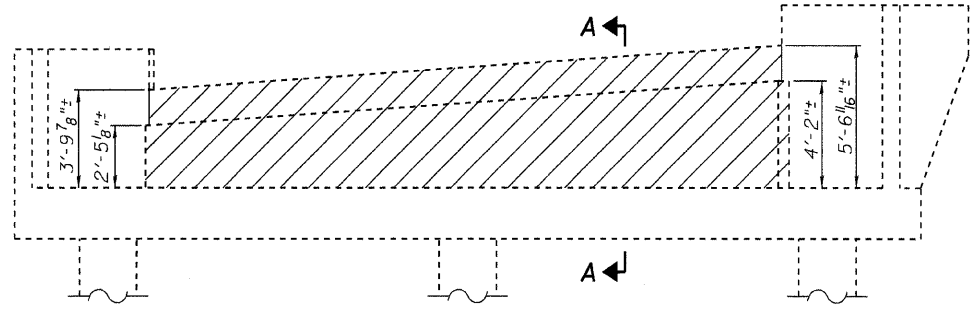
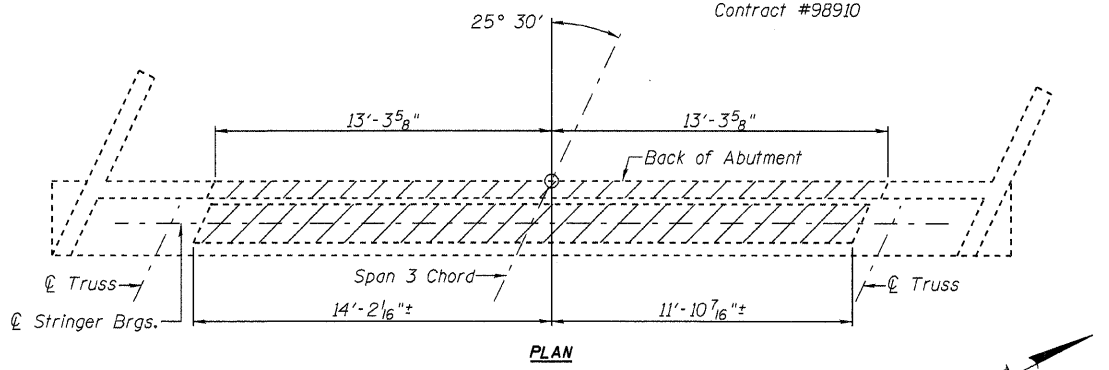
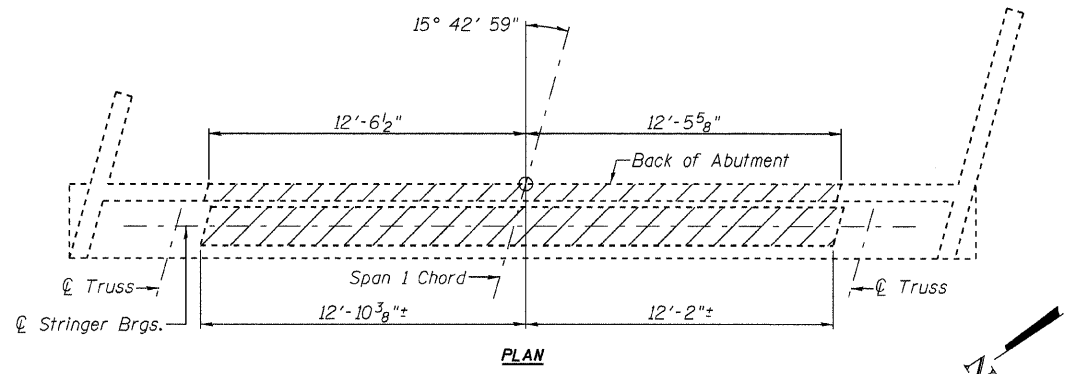
ILLINOIS DEPARTMENT OF TRANSPORTATION
RAILING REPAIR DETAILS
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D, I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

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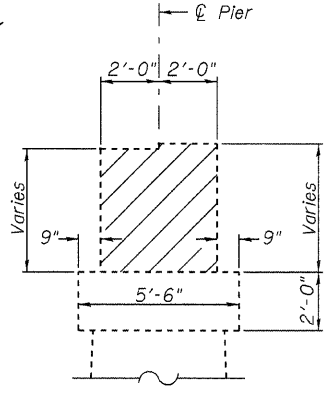
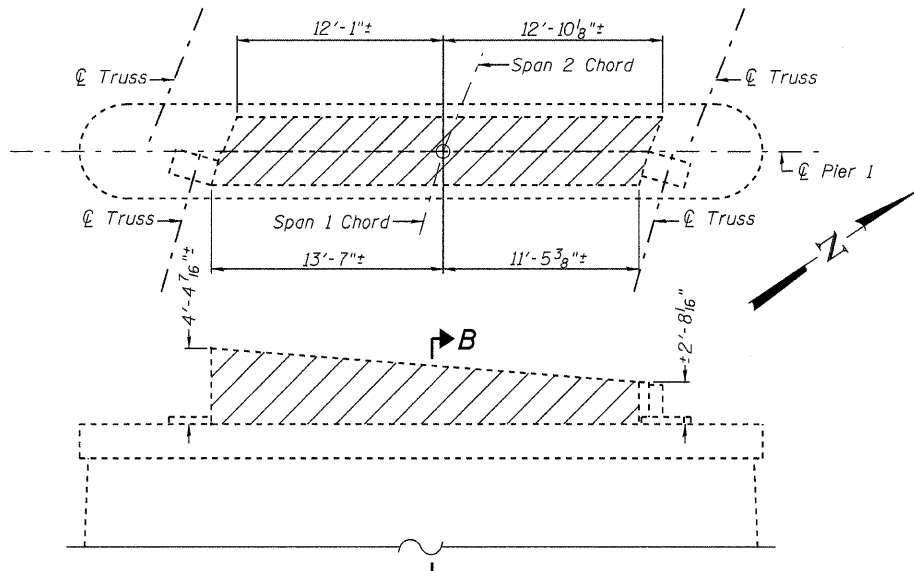
Contract #98910



SOUTH ABUTMENT
ELEVATION (Looking South)

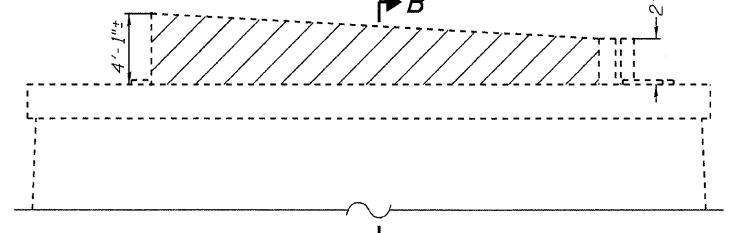
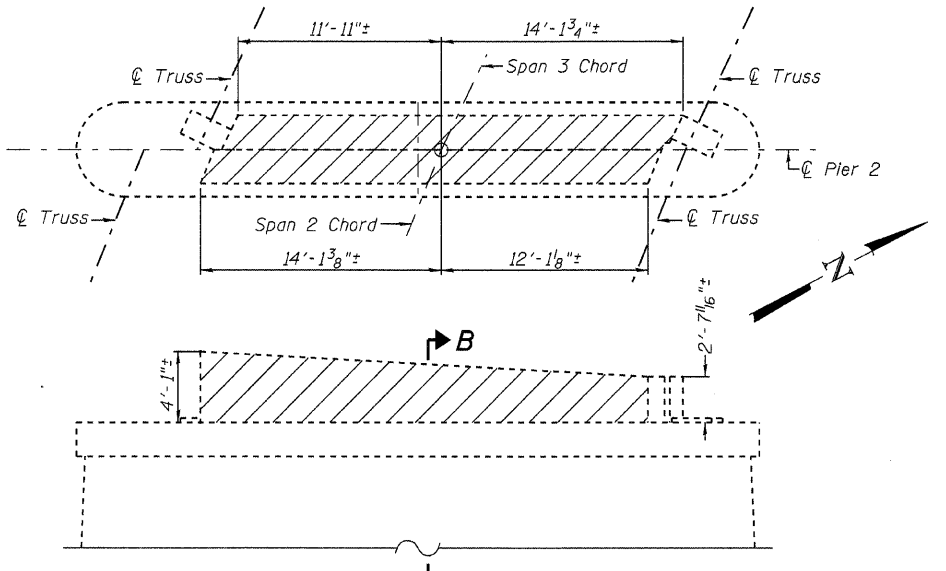
SECTION A-A
(Dimensions at Rt. L's)

NORTH ABUTMENT
ELEVATION (Looking North)



PIER 1

SECTION B-B
(Dimensions at Rt. L's)



PIER 2

Notes:
Hatched areas indicate Concrete Removal.
Existing reinforcement shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
The existing piers are unreinforced. The Contractor shall take necessary precautions to avoid damaging the existing piers beyond the limits of Concrete Removal.
The Contractor is to provide temporary stringer support when performing Concrete Removal and reconstruction. Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	40.4

ILLINOIS DEPARTMENT OF TRANSPORTATION
CONCRETE REMOVAL
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

Lin Engineering Ltd.
Consulting Engineers
Chatham, Illinois

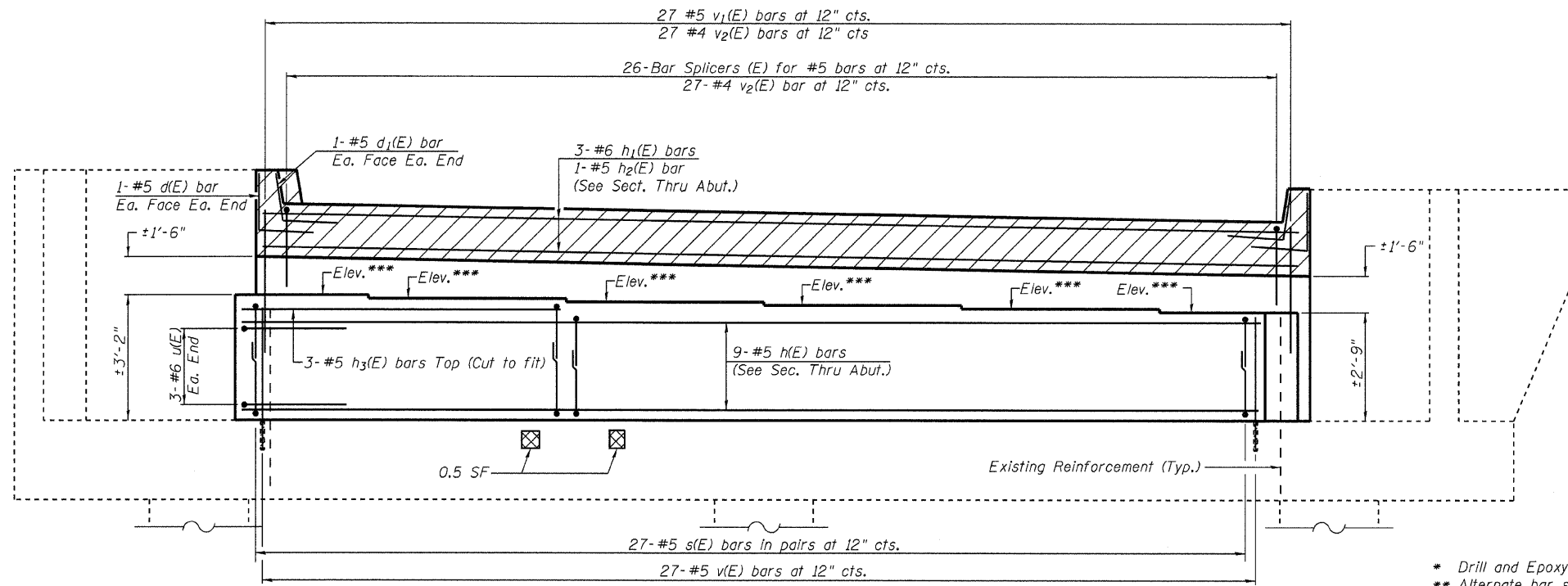
Designed By: DLS
Checked By: STD
Date: Feb 2009

Drawn By: A.F.
File: 002-0009.dgn

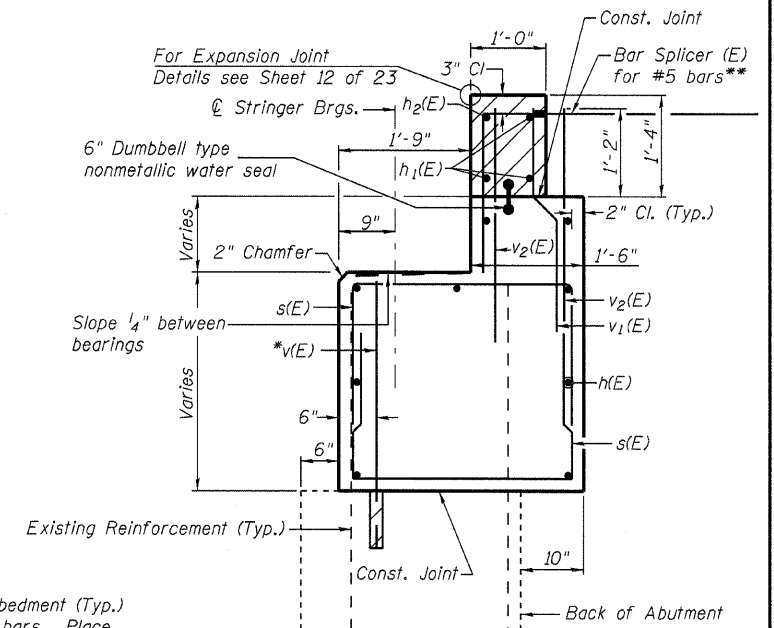
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ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO.
S.B.I. 150	(133A) D.I	Alexander	32	27	23 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #98910

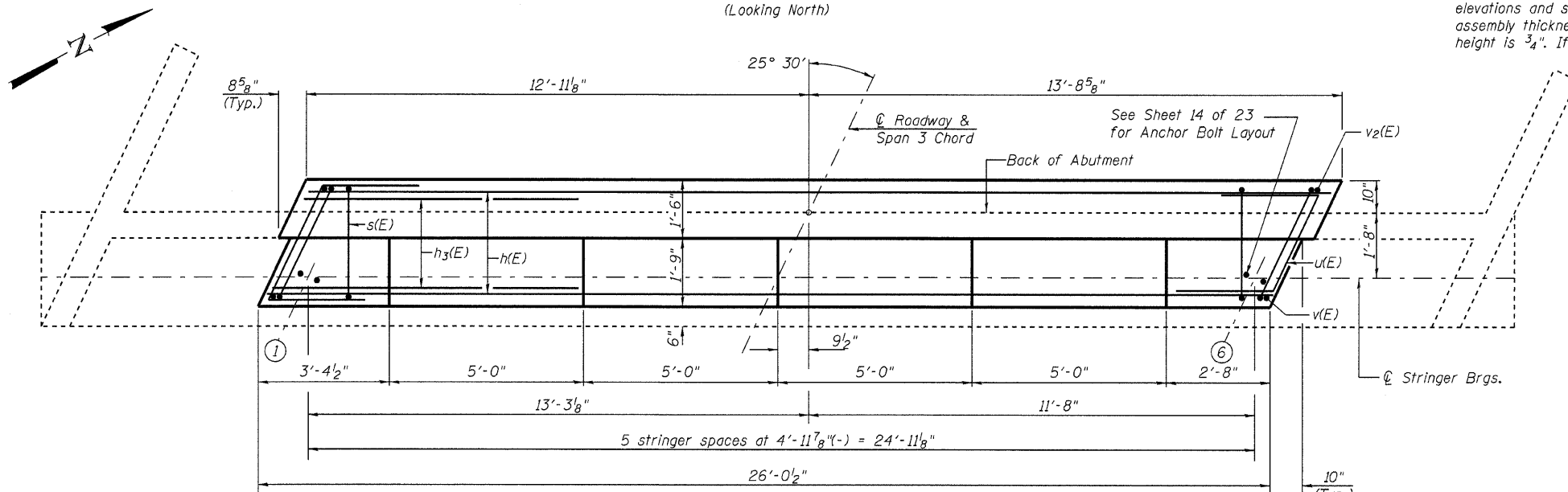


ELEVATION
(Looking North)



SECTION THRU ABUTMENT
(At right angles)

- * Drill and Epoxy Grout 9" min. embedment (Typ.)
- ** Alternate bar splicers with v2(E) bars. Place parallel to stringers
- *** Contractor is to determine bearing seat elevation by field surveying the bottom of stringer elevations and subtracting the 2 1/4" bearing assembly thickness. Minimum allowable step height is 3/4". If less is required, consult Engineer.



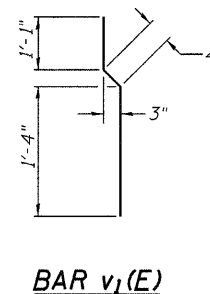
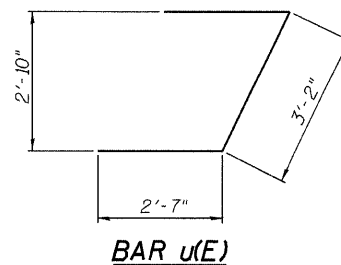
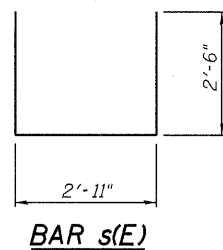
PLAN
(Hatched area not shown for clarity)

BILL OF MATERIAL
(North Abutment)

Bar	No.	Size	Length	Shape
d(E)	4	#5	2'-4"	J
d1(E)	4	#5	2'-0"	J
h(E)	9	#5	25'-8"	—
h1(E)	3	#6	26'-4"	—
h2(E)	1	#5	26'-4"	—
h3(E)	3	#5	8'-0"	—
s(E)	54	#5	7'-11"	U
u(E)	6	#6	8'-4"	J
v(E)	27	#5	3'-9"	—
v1(E)	27	#5	2'-9"	—
v2(E)	54	#4	3'-1"	—
Structure Excavation		Cu. Yd.	14.8	
Reinforcement Bars, Epoxy Coated		Pound	1250	
Concrete Structures		Cu. Yd.	11.4	
Concrete Sealer		Sq. Ft.	191	
Structural Repair of Concrete (Depth ≤ 5")		Sq. Ft.	1.0	

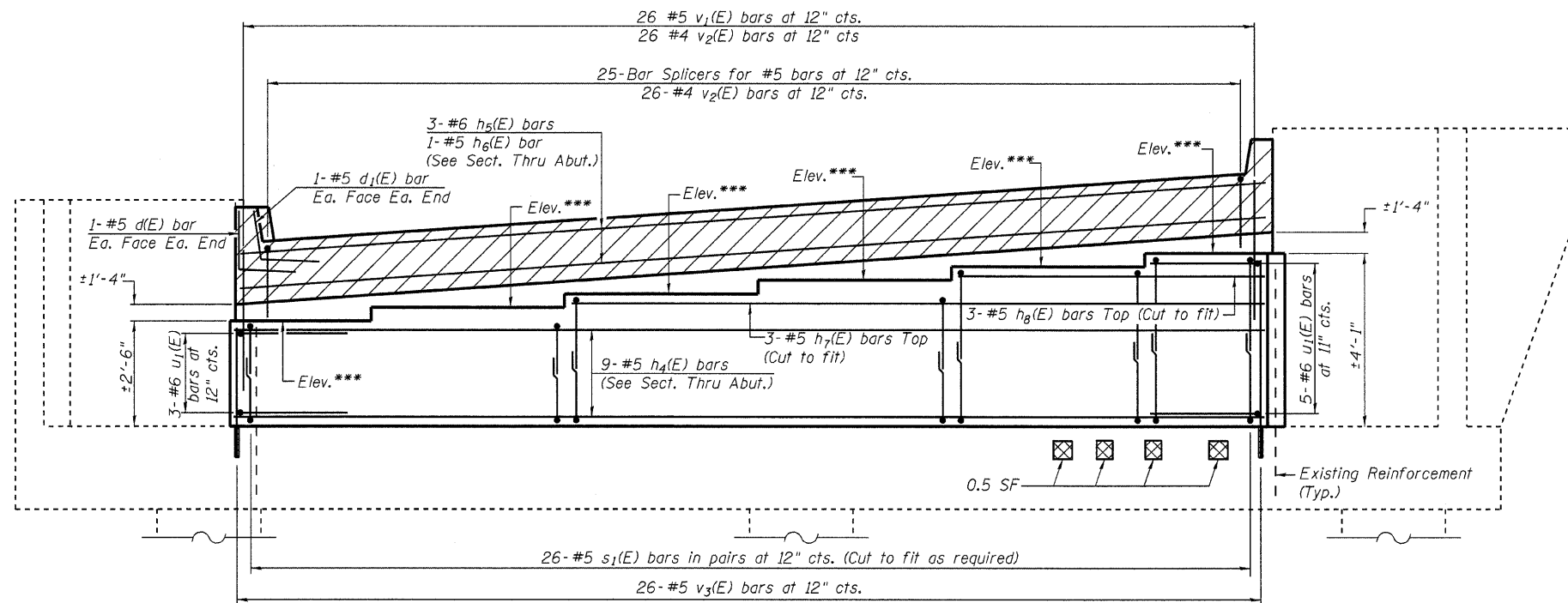
Notes:

Hatched area to be poured after false work has been removed. Quantity of concrete included with Concrete Superstructure.
 Concrete sealer shall be applied to all exposed faces of new concrete under the joint.
 Cross Hatch area represents Structural Repair of Concrete. The quantities shown are for estimating purposes only. The area to be repaired will be determined by the Engineer at the time of construction.
 For details of d(E) and d1(E) bars, see Sheet 10 of 23.
 For details of Bar Splicers, see Sheet 23 of 23.
 Space reinforcement in cap to miss Anchor Bolts.
 Pour steps monolithically with cap.



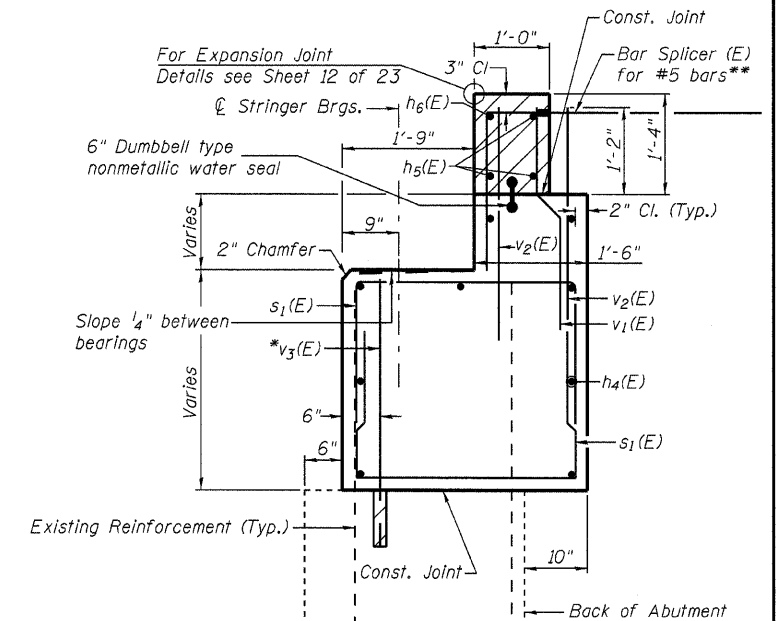
LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Chatham, Illinois
 Designed By: DLS Checked By: STD Drawn By: A.F.
 Date: Feb 2009 File: 002-0009.dgn

ILLINOIS DEPARTMENT OF TRANSPORTATION
NORTH ABUTMENT
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009



ELEVATION
(Looking South)

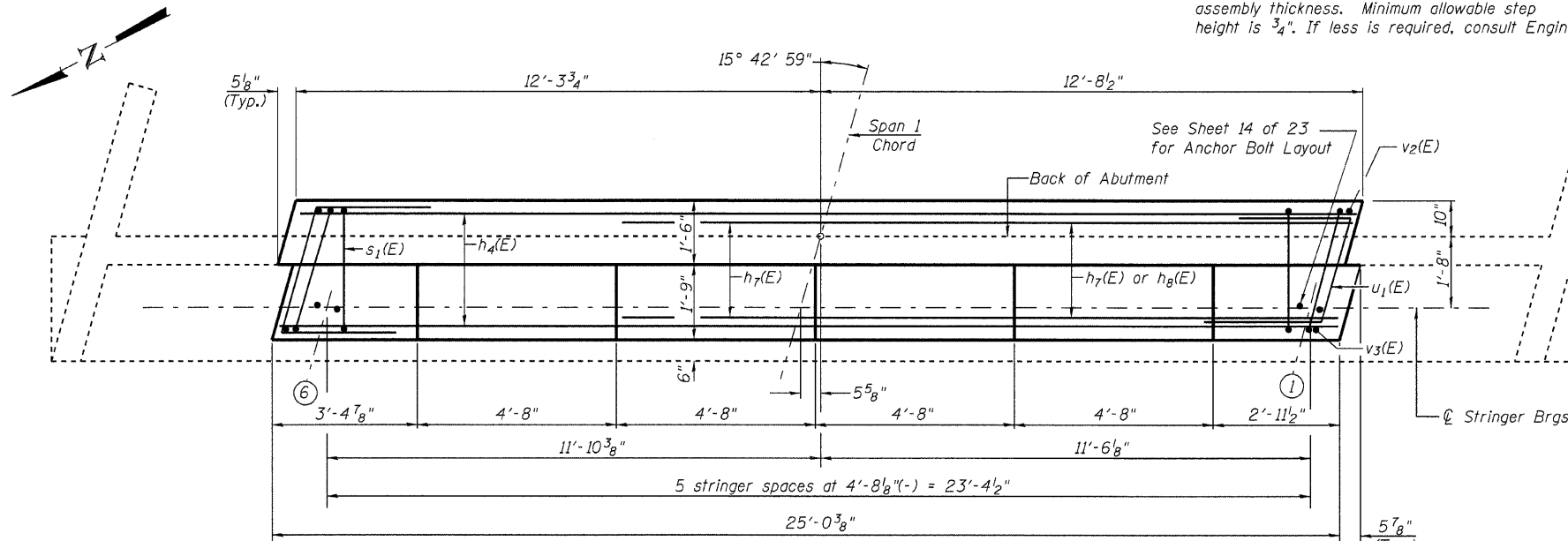
- * Drill and Epoxy Grout 9" min. embedment (Typ.)
- ** Alternate bar splicers with v2(E) bars. Place parallel to stringers
- *** Contractor is to determine bearing seat elevation by field surveying the bottom of stringer elevations and subtracting the 2 1/4" bearing assembly thickness. Minimum allowable step height is 3/4". If less is required, consult Engineer.



SECTION THRU ABUTMENT
(At right angles)

BILL OF MATERIAL
(South Abutment)

Bar	No.	Size	Length	Shape
d(E)	4	#5	2'-4"	L
d1(E)	4	#5	2'-0"	L
h4(E)	9	#5	24'-8"	—
h5(E)	3	#6	24'-7"	—
h6(E)	1	#5	24'-7"	—
h7(E)	3	#5	17'-1"	—
h8(E)	3	#5	7'-10"	—
s1(E)	52	#5	8'-11"	U
u1(E)	8	#6	8'-1"	J
v1(E)	26	#5	2'-9"	—
v2(E)	52	#4	3'-1"	—
v3(E)	26	#5	4'-8"	—
Structure Excavation		Cu. Yd.	13.7	
Reinforcement Bars, Epoxy Coated		Pound	1360	
Concrete Structures		Cu. Yd.	11.8	
Concrete Sealer		Sq. Ft.	193	
Structural Repair of Concrete (Depth ≤ 5")		Sq. Ft.	2.0	

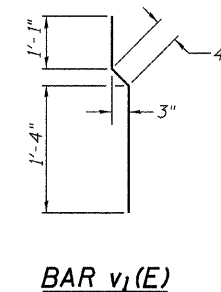
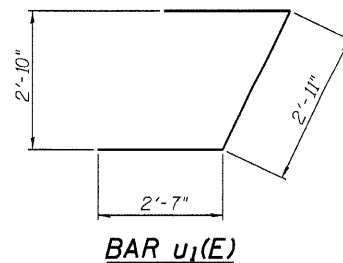
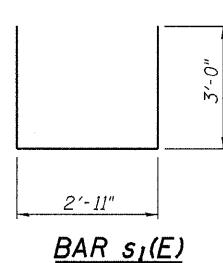


PLAN

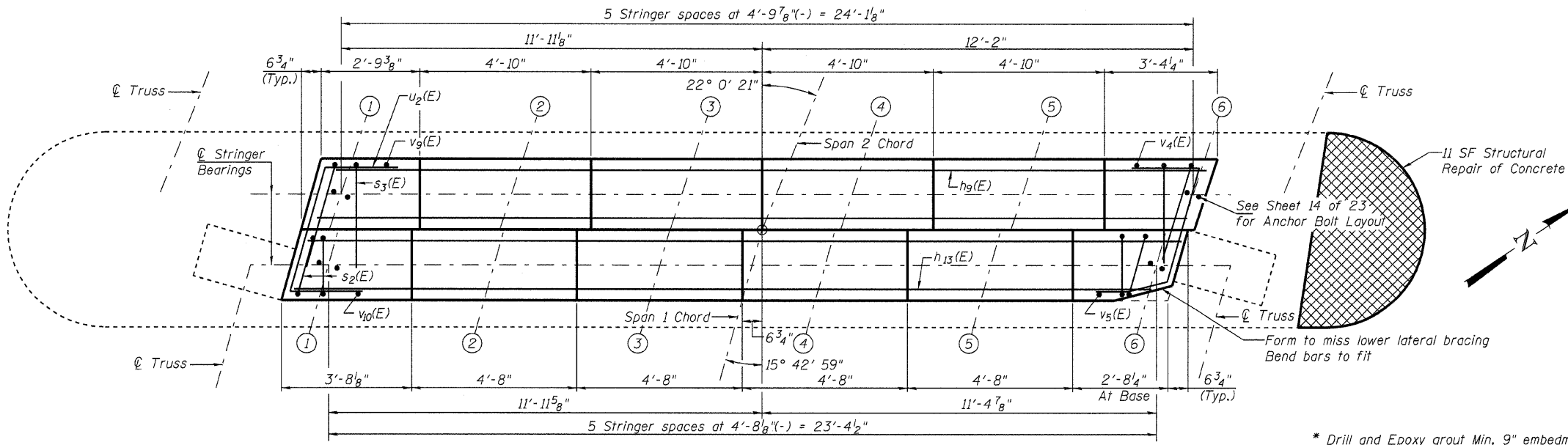
(Hatched area not shown for clarity)

Notes:

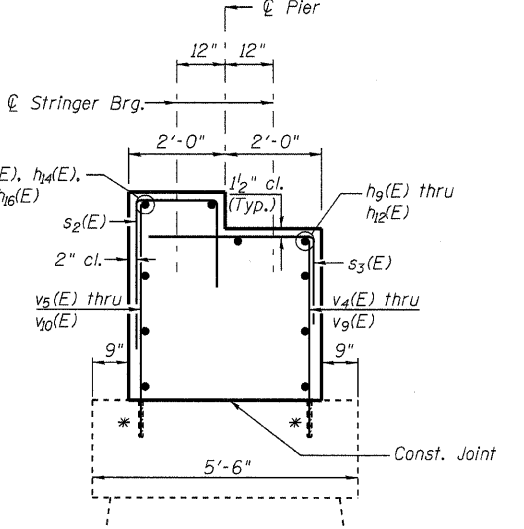
Hatched area to be poured after false work has been removed. Quantity of concrete included with Concrete Superstructure.
 Concrete sealer shall be applied to all exposed faces of new concrete under the joint.
 Cross Hatch area represents Structural Repair of Concrete. The quantities shown are for estimating purposes only. The area to be repaired will be determined by the Engineer at the time of construction.
 For details of d(E) and d1(E) bars, see Sheet 10 of 23.
 For details of Bar Splicers, see Sheet 23 of 23.
 Space reinforcement in cap to miss Anchor Bolts.
 Pour steps monolithically with cap.



Contract #98910



PLAN

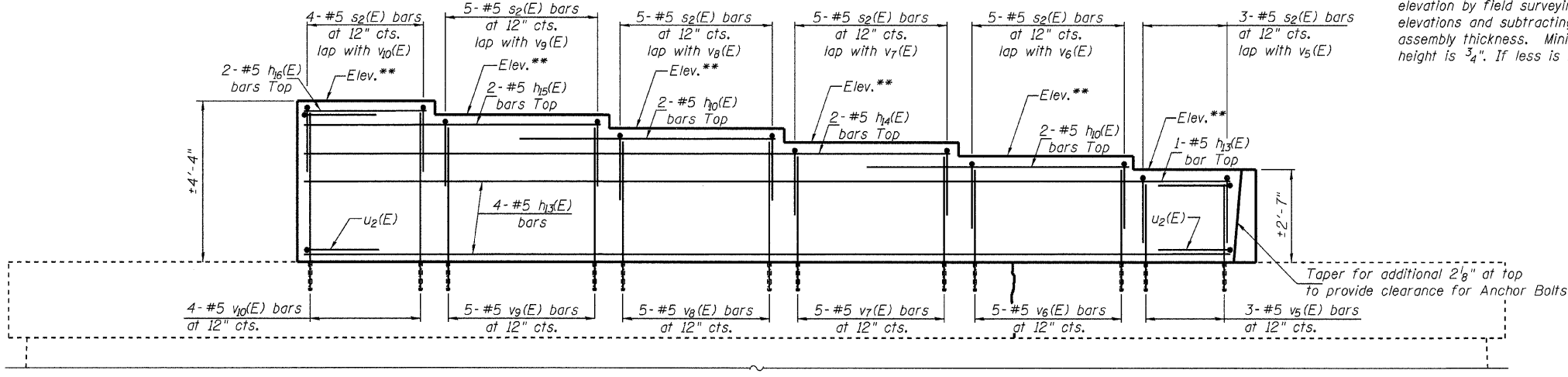


SECTION THRU PEDESTAL
(Dimensions at Rt. L's)
(Looking West)

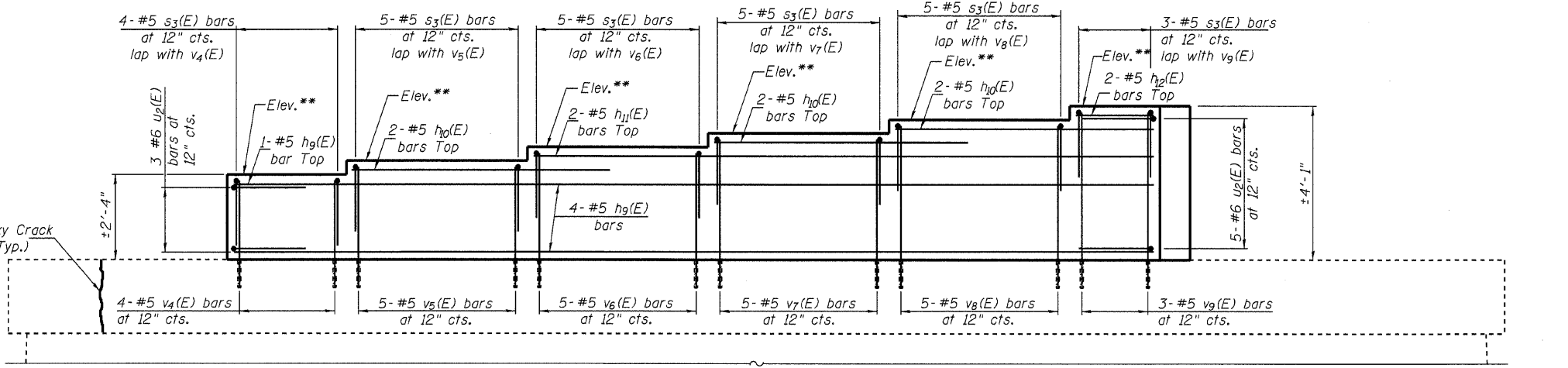
BILL OF MATERIAL
(Pier 1)

Bar	No.	Size	Length	Shape
h9(E)	5	#5	25'-2"	—
h10(E)	10	#5	7'-3"	—
h11(E)	2	#5	17'-0"	—
h12(E)	2	#5	3'-0"	—
h13(E)	5	#5	24'-11"	—
h14(E)	2	#5	17'-4"	—
h15(E)	2	#5	8'-0"	—
h16(E)	2	#5	3'-4"	—
s2(E)	27	#5	5'-1"	┌
s3(E)	27	#5	5'-7"	└
u2(E)	8	#6	9'-0"	┌
v4(E)	4	#5	2'-11"	—
v5(E)	8	#5	3'-3"	—
v6(E)	10	#5	3'-7"	—
v7(E)	10	#5	4'-0"	—
v8(E)	10	#5	4'-4"	—
v9(E)	8	#5	4'-8"	—
v10(E)	4	#5	4'-11"	—
Reinforcement Bars, Epoxy Coated		Pound	1070	
Concrete Structures		Cu. Yd.	12.5	
Concrete Sealer		Sq. Ft.	299	
Structural Repair of Concrete (Depth ≤ 5")		Sq. Ft.	11.0	
Epoxy Crack Injection		Foot	40	

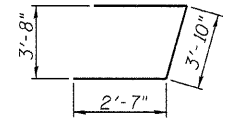
The quantities shown for repair are for estimating purposes only. The area to be repaired will be determined by the Engineer at the time of construction.



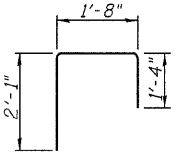
ELEVATION-SOUTH HALF
(Looking North)



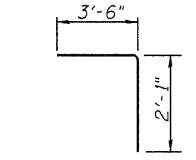
ELEVATION-NORTH HALF
(Looking South)



BAR u2(E)



BAR s2(E)



BAR s3(E)

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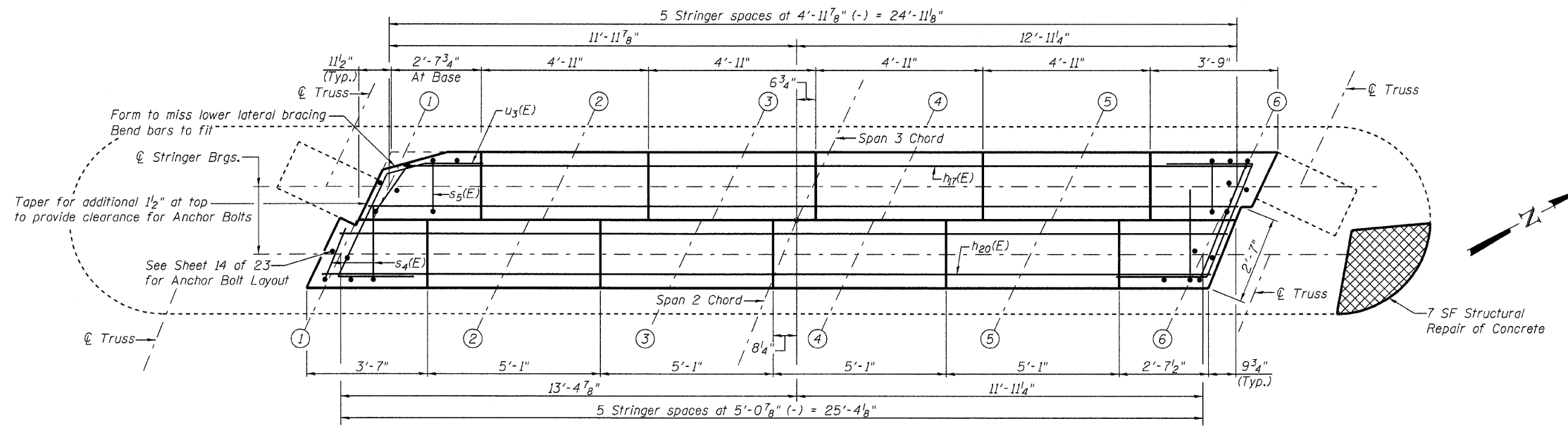
Notes:
Opposite side of pedestal not shown on elevation views for clarity.
Concrete Sealer shall be applied to all exposed faces of new concrete.
Space reinforcement bars to miss anchor bolts.
Four steps monolithically with cap.

LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Designed By: DLS
Checked By: STD
Date: Feb 2009
Drawn By: A.J.F.
File: 002-0009.dgn

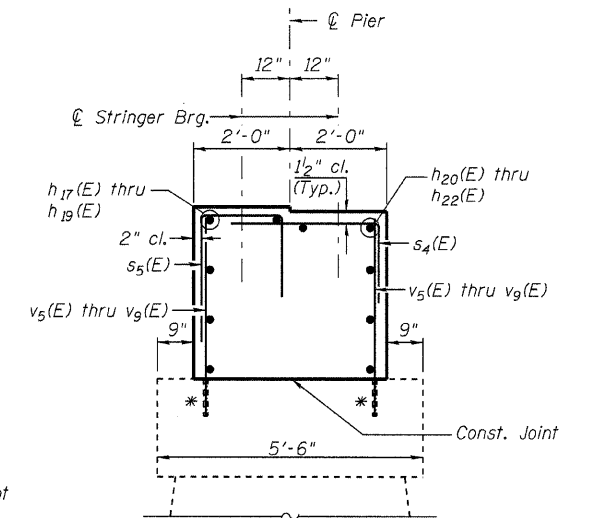
ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER 1 PEDESTAL
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 22 23 SHEETS
S.B.I. 150	(133A) D.I	Alexander	3/2	30	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #98910



PLAN



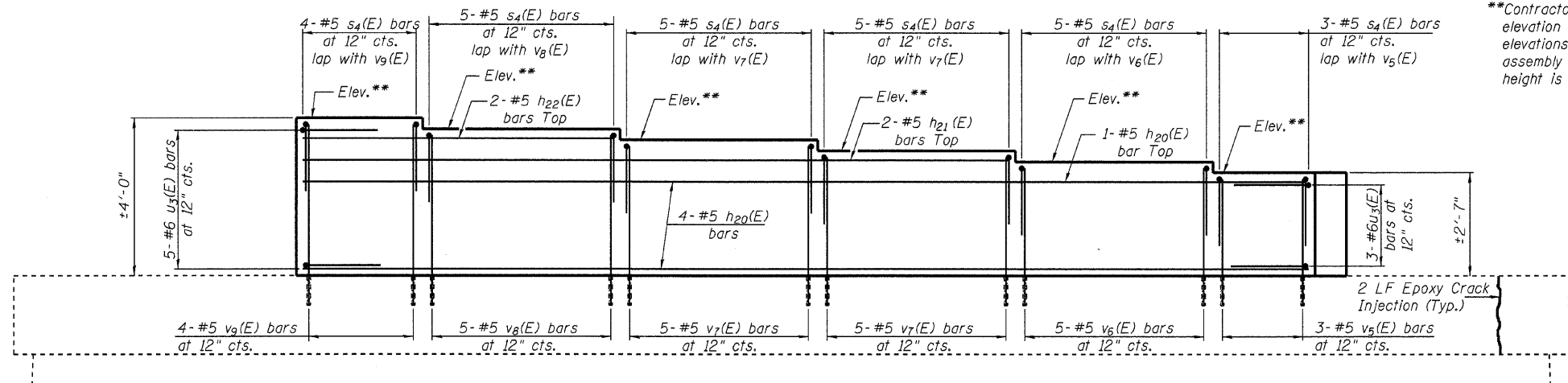
SECTION THRU PEDESTAL
(Dimensions at Rt. L's)
(Looking East)

* Drill and Epoxy grout Min. 9" embedment
** Contractor is to determine bearing seat elevation by field surveying the bottom of stringer elevations and subtracting the 2 1/4" bearing assembly thickness. Minimum allowable step height is 3/4". If less is required, consult Engineer.

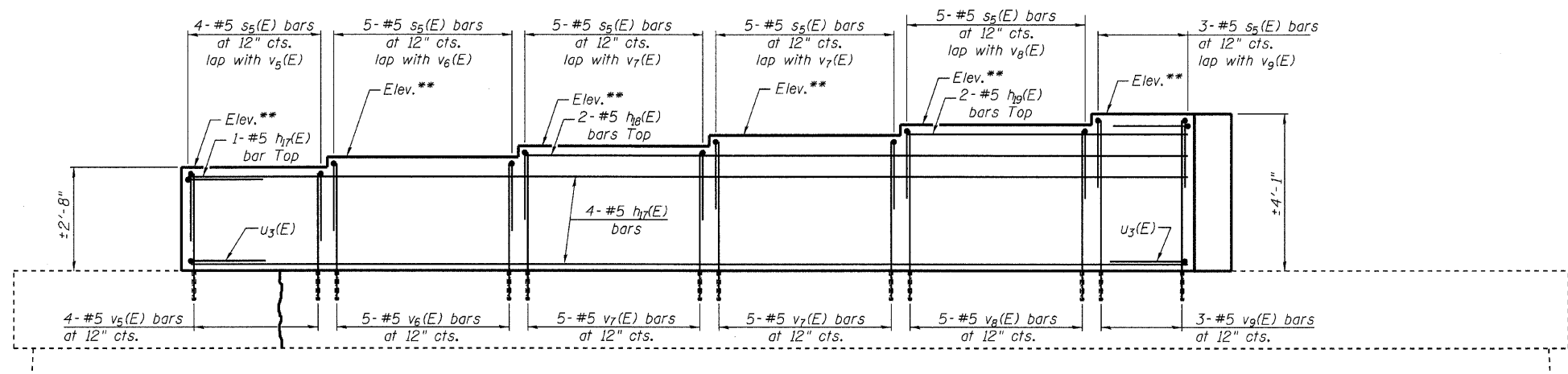
BILL OF MATERIAL
(Pier 2)

Bar No.	Size	Length	Shape
h17(E)	#5	25'-8"	—
h18(E)	#5	17'-2"	—
h19(E)	#5	7'-2"	—
h20(E)	#5	26'-2"	—
h21(E)	#5	18'-6"	—
h22(E)	#5	8'-4"	—
s4(E)	#5	5'-10"	└
s5(E)	#5	5'-4"	└
U3(E)	#6	9'-2"	└
v5(E)	#5	3'-3"	—
v6(E)	#5	3'-7"	—
v7(E)	#5	4'-0"	—
v8(E)	#5	4'-4"	—
v9(E)	#5	4'-8"	—
Reinforcement Bars, Epoxy Coated	Pound	1030	
Concrete Structures	Cu. Yd.	13.0	
Concrete Sealer	Sq. Ft.	303	
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	7.0	
Epoxy Crack Injection	Foot	40	

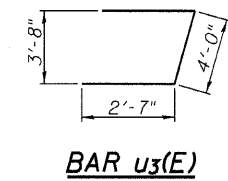
The quantities shown for repair are for estimating purposes only. The area to be repaired will be determined by the Engineer at the time of construction.



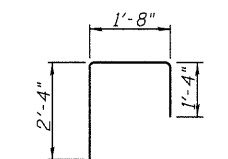
ELEVATION-SOUTH HALF
(Looking North)



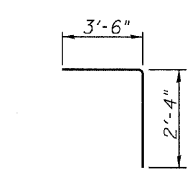
ELEVATION-NORTH HALF
(Looking South)



BAR U3(E)



BAR S5(E)



BAR S4(E)

Notes:
Opposite side of pedestal not shown on elevation views for clarity.
Concrete Sealer shall be applied to all exposed faces of new concrete.
Space reinforcement bars to miss anchor bolts.
Four steps monolithically with cap.

Lin Engineering Ltd.
Consulting Engineers
Chatham, Illinois

Designed By: DLS
Checked By: STG
Date: Feb 2009

Drawn By: A.F.
File: 002-0009.dgn

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER 2 PEDESTAL
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D.I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

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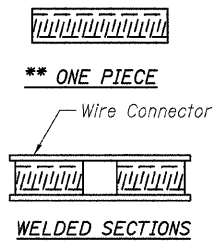
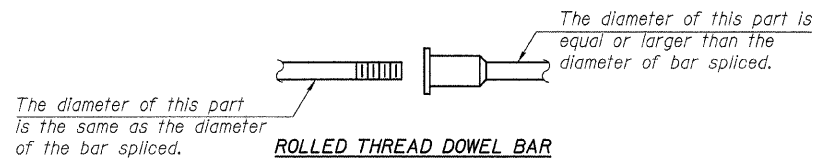
Contract #98910

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:

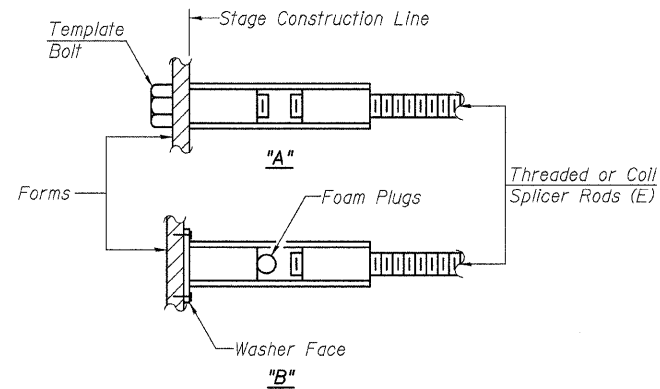
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

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'-2"	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



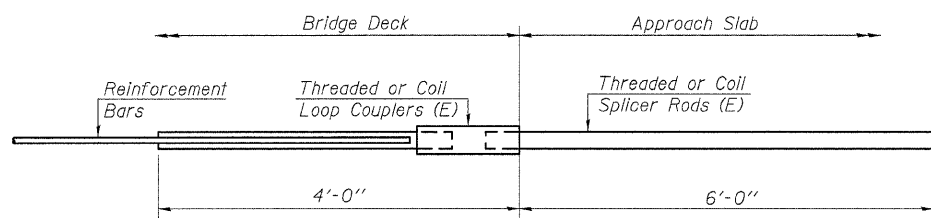
BAR SPLICER ASSEMBLY ALTERNATIVES

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



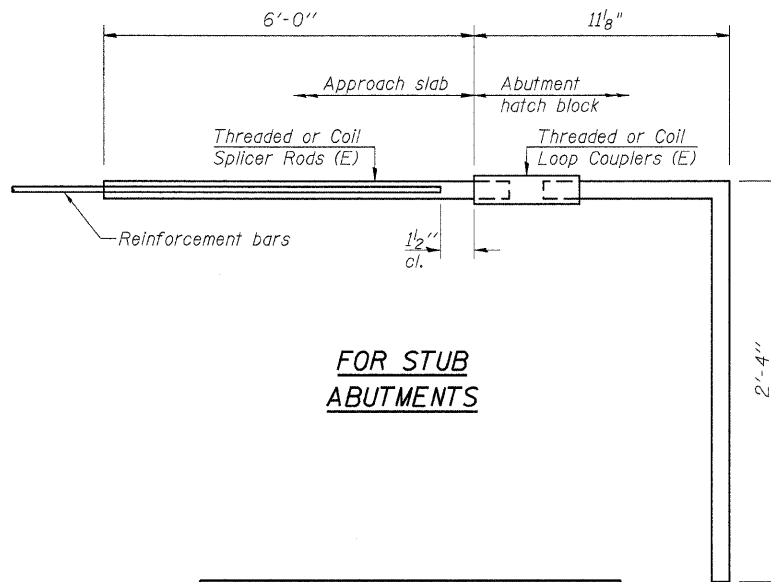
INSTALLATION AND SETTING METHODS

"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.



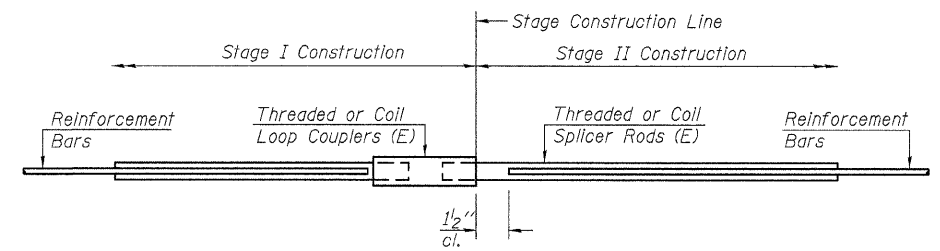
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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 = 51



STANDARD

Bar Size	No. Assemblies Required	Location

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D, I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: DLS Checked By: STD Drawn By: A.J.F.
Date: Feb. 2009 File: 002-0009.dgn

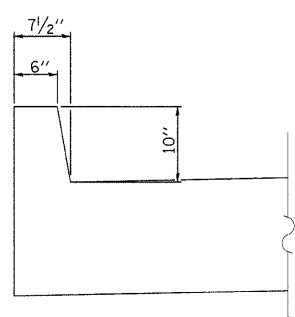
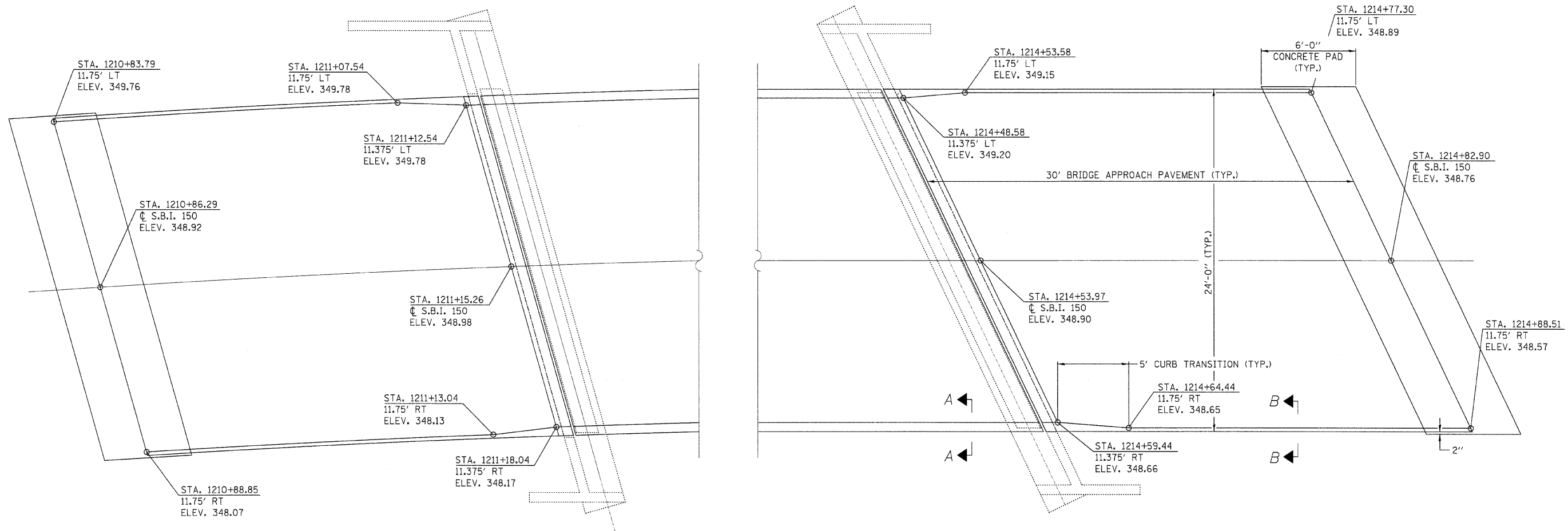
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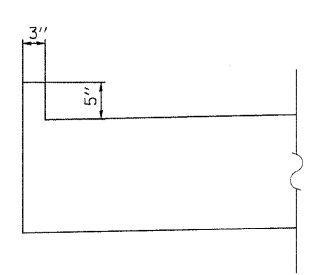
6/8/2009

NOTE:

- BRIDGE APPROACH PAVEMENT WILL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 420 OF THE STANDARD SPECIFICATIONS AND AS DETAILED ON THIS PLAN.
- PLAN DIMENSIONS AND ELEVATIONS PROVIDED ON THIS SHEET ARE SUBJECT TO CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS AND ELEVATIONS, INCLUDING EXISTING GUARDRAIL POSTS, AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION.
- SEE STANDARD 421001-02 FOR REINFORCEMENT DETAILS NOT SHOWN.
- SEE STANDARD 420401-06 FOR OTHER DETAILS NOT SHOWN.
- DIMENSIONS AND ELEVATIONS OF BRIDGE APPROACH CONNECTOR PAVEMENT (NOT SHOWN) SHALL MATCH EXISTING PAVEMENT CROSS SECTION.

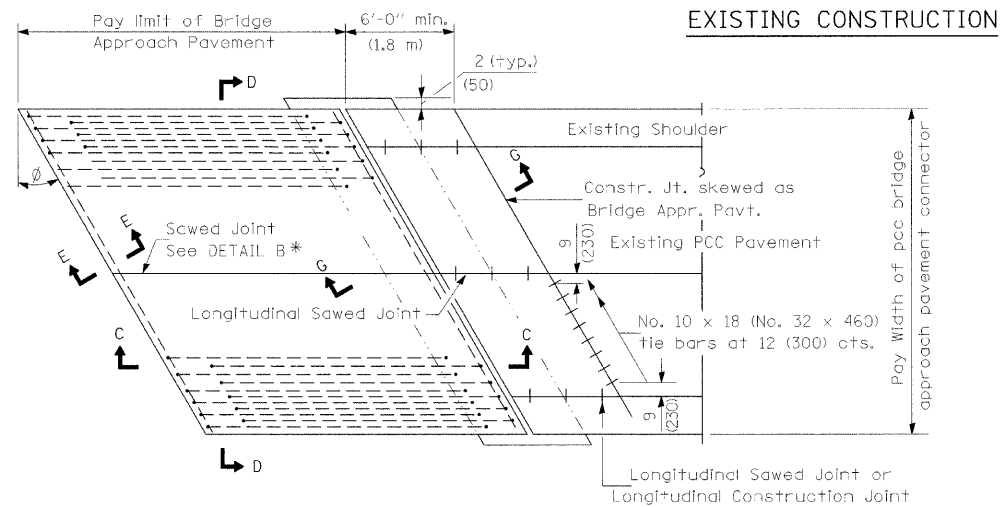


SECTION A-A



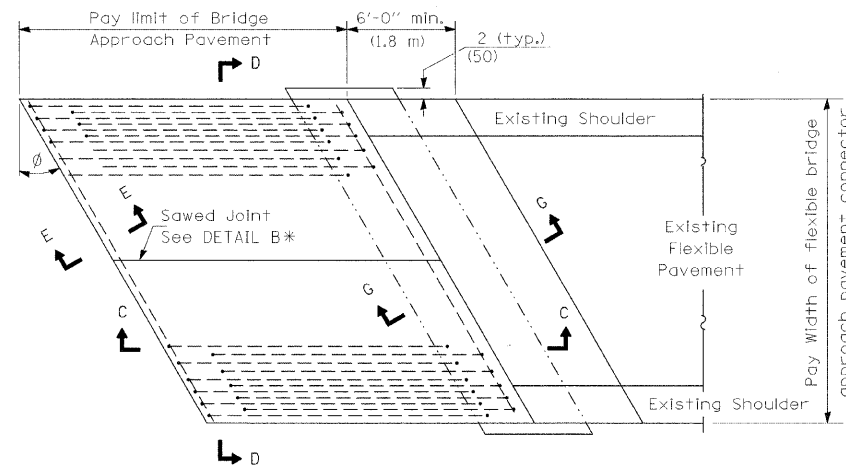
SECTION B-B

FILE NAME = ...Roadway\Sheets\Bridge appr.dgn	USER NAME = Plotted by Administrator	DESIGNED - KHH	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT DETAIL OLD IL ROUTE 3 OVER SEXTON CREEK			S.B.I. RTE. 150	SECTION (133A)D, I	COUNTY ALEXANDER	TOTAL SHEETS 32	SHEET NO. 32
PLOT SCALE = 1:2000 / IN.	CHECKED - FML	REVISED - ---	REVISED - ---		SCALE: N.T.S.	SHEET NO. ___ OF ___ SHEETS	STA. TO STA.	FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT				
PLOT DATE = 4/16/2009	DATE - 11/2008	REVISED - ---	REVISED - ---		CONTRACT NO. 98910							

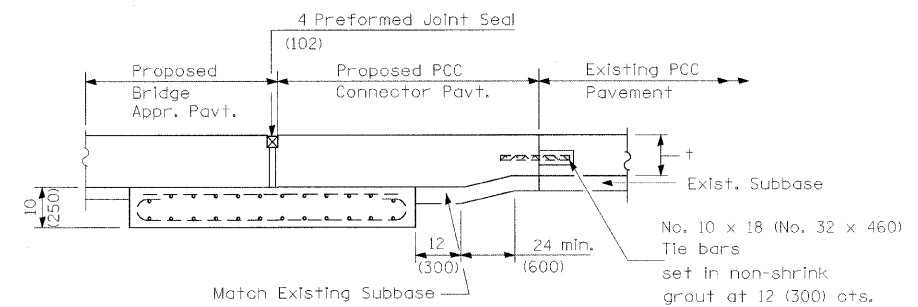


EXISTING CONSTRUCTION

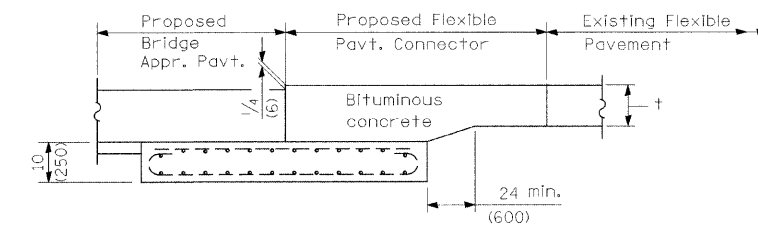
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)



BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

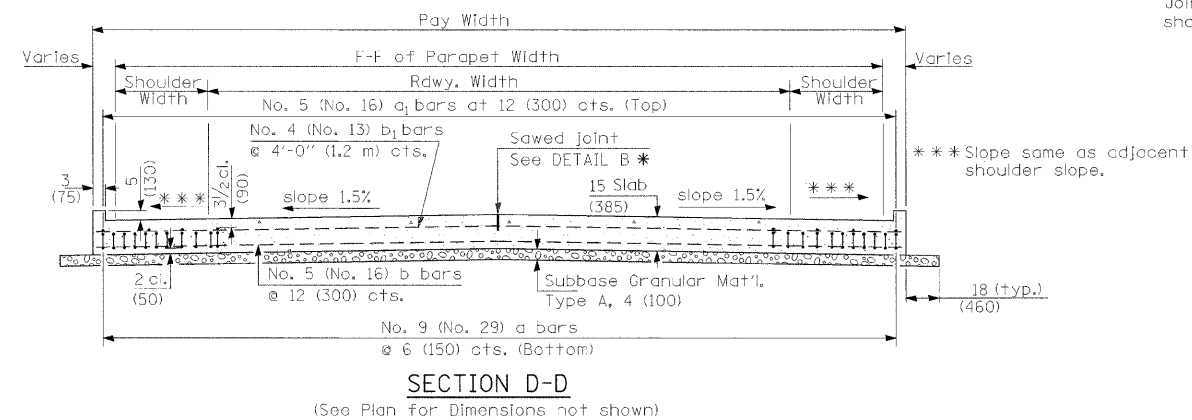
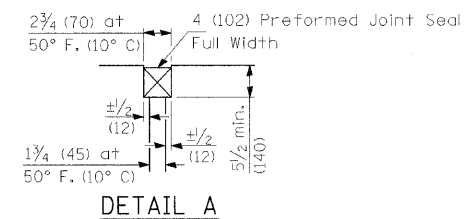
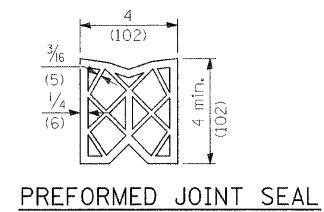
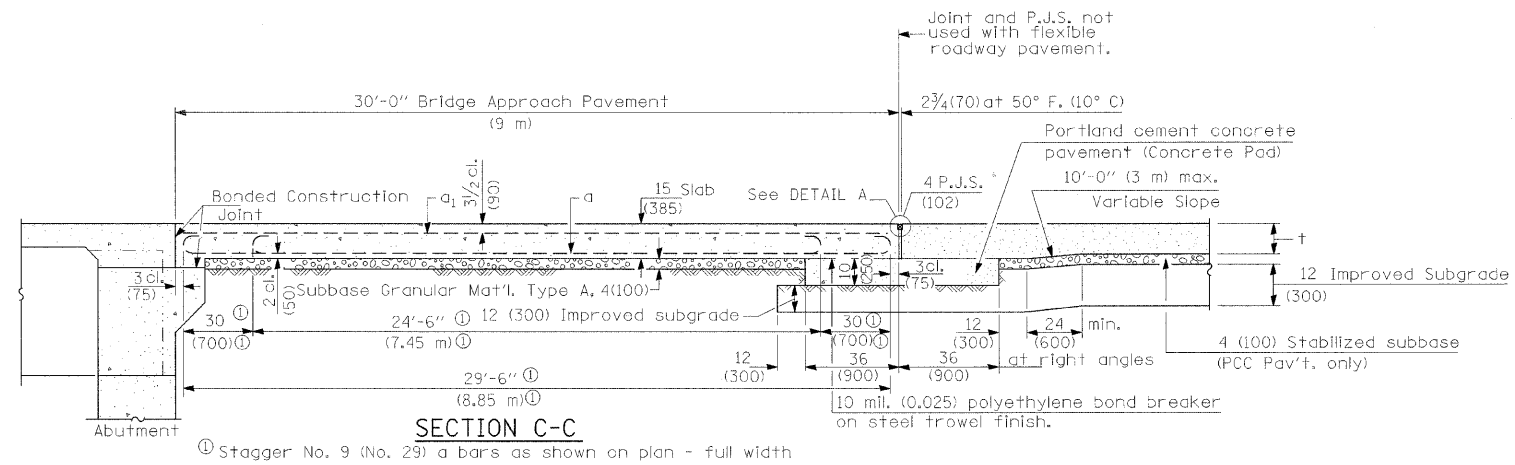


SECTION G-G - RIGID PAVEMENT

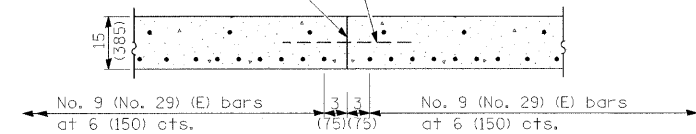


SECTION G-G - FLEXIBLE PAVEMENT

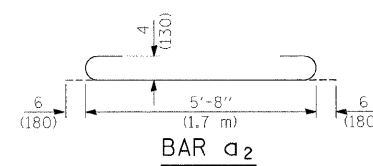
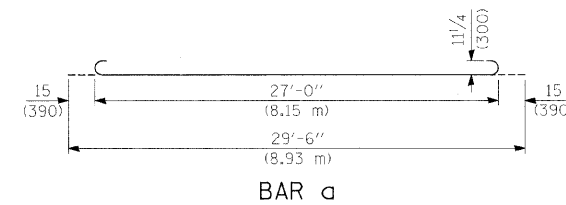
FILE NAME =	USER NAME = halsteadw	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT DETAIL OLD IL ROUTE 3 OVER SEXTON CREEK	S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
C:\Documents and Settings\halsteadw\Local Settings\Temporary Internet Files\Content...	DRAWN: 01B4F3\@-bridge appr.dgn	CHECKED - ---	REVISED - ---			150	(133A)D, I	ALEXANDER	32	32A	
PLOT SCALE = 1:2000' / IN.	DATE - 11/2008					CONTRACT NO. 98910					
PLOT DATE = 4/29/2009						FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					
					SCALE: N.T.S.	SHEET NO. ___ OF ___ SHEETS	STA. _____	TO STA. _____			



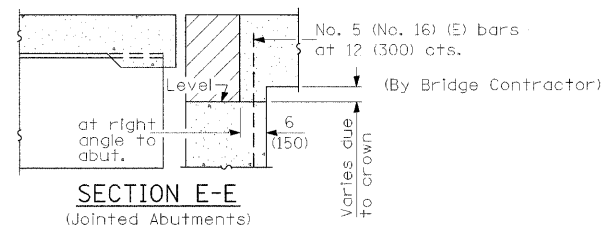
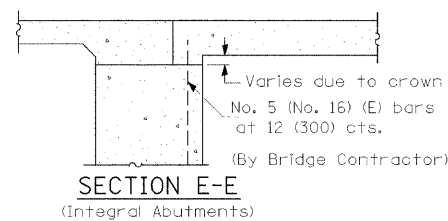
Longitudinal Construction Joint in accordance with details shown on Standard 420001.



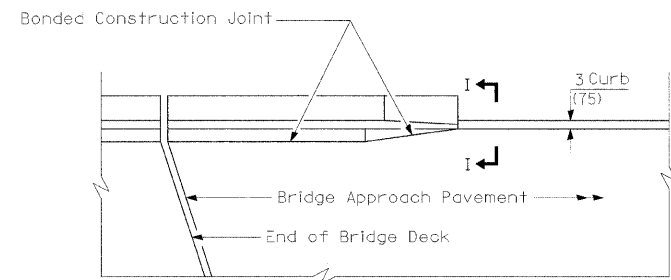
As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.



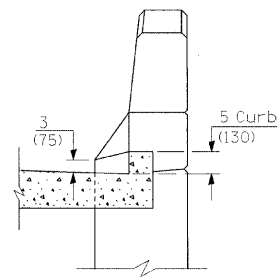
DESIGN STRESSES
 $f_y = 60,000$ p.s.i. (400 MPa)
 $f'_c = 3,500$ p.s.i. (24 MPa)
 $n = 8.5$



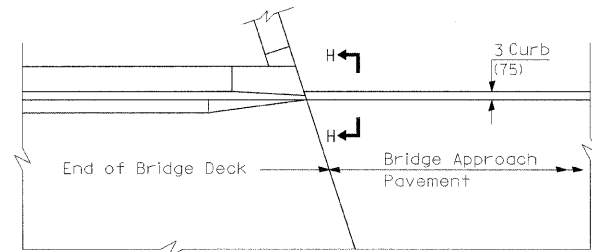
FILE NAME =	USER NAME = halsteadw	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT DETAIL OLD IL ROUTE 3 OVER SEXTON CREEK	S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
C:\Documents and Settings\halsteadw\Local Settings\Temporary Internet Files\Content	DRAWN: OTBB4\F3\0\bridge_approach.dgn	CHECKED - ---	REVISED - ---			150	(133A)D, I	ALEXANDER	32	32B	
PLOT SCALE = 1:2000' / 1" IN.	DATE = 11/2008	REVISIONS				CONTRACT NO. 98910					
PLOT DATE = 4/29/2009						FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					
					SCALE: N.T.S.	SHEET NO. ___ OF ___ SHEETS		STA.	TO STA.		



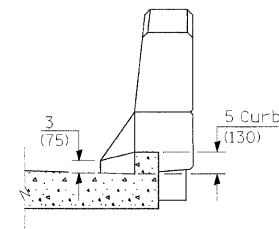
**PARAPET TO CURB TRANSITION
PILE BENT ABUTMENT**



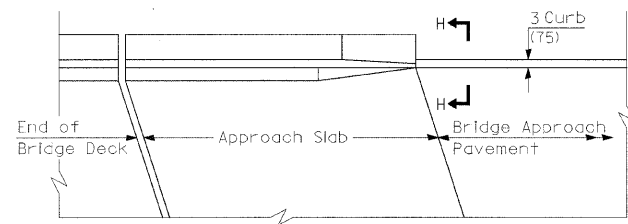
SECTION I - I



**PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT**



SECTION H - H



**PARAPET TO CURB TRANSITION
VAULTED ABUTMENT**

FILE NAME =	USER NAME = halsteadtw	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT DETAIL OLD IL ROUTE 3 OVER SEXTON CREEK	S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
C:\Documents and Settings\halsteadtw\Local Settings\Temporary Internet Files\Content	DRAWN 07B44F3\Bbridge apprvgn	CHECKED - ---	REVISED - ---			150	(133A)D, I	ALEXANDER	32	32C	
PLOT SCALE = 1:2000' / IN.	DATE - 11/2008	REVIS	REVIS			CONTRACT NO. 98910					
PLOT DATE = 4/29/2009	REVIS	REVIS	REVIS			FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					
					SCALE: N.T.S.	SHEET NO. ___ OF ___ SHEETS		STA.	TO STA.		