5993 284 (815)HONE: ENIO

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAS ROUTE 203 MOLINE RD. SECTION 9BR-4 PROJECT ACBHOS=0203(105) **ROCK ISLAND COUNTY** C-92-138-01

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AREAS OF REINFORCEMENT DECIMAL OF AN INCH AND A FOOT 001006 TEMPORARY EROSION CONTROL SYSTEMS 280001-02 NAME PLATE FOR BRIDGES 515001-02 METAL END SECTION FOR PIPE CULVERTS 542401 STEEL PLATE BEAM GUARDRAIL 630001-05 630301-03 SHOULDER WIDENING FOR TYPE 1 GUARDRAIL TERMINALS TRAFFIC BARRIER TERMINAL, TYPE 6A 631032-01 **DELINEATORS** 635001 REFLECTOR AND TERMINAL REPLACEMENT 635006-02 REFLECTOR MARKER AND MOUNTING DETAILS 635011-01 PERMANENT SURVEY MARKERS 667101 TYPICAL PAVEMENT MARKINGS 780001-01 781001-02 TYPICAL APPLICATIONS RAISED REFLECTIVE

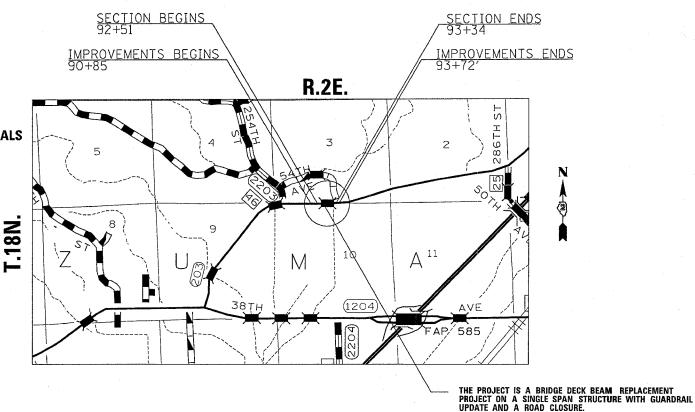
PAVEMENT MARKERS

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

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

ROCK ISLAND COUNTY ZUMA TOWNSHIP, SECTION 3

CONTRACT NO. 64719



GROSS LENGTH OF SECTION = 282.21 FEET = NET LENGTH OF SECTION = 282.21 FEET =

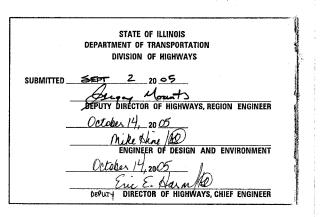
D92-089-01

F.A.S. SECTION COUNTY TOTAL SHEET 203 9BR-4 ROCK ISLAND 21

CONTRACT NO. 64715

COUNTY TOTAL S





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES

			C	ONTRA	CT NO.	64719
 F.A.S. RTE.	SECTION		cou	VTY	TOTAL SHEETS	SHEET NO.
203	9BR-4	R	OCK	ISLAND	21	2
STA.		ŦO	ST	١.		
CCD POAT	DIST NO	It I IMOIS	cc	D AID	DDO IECT	

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	X080-2A 80 % FED 20 % STATE	
20200100	EARTH EXCAVATION	CU YD	52	52	
20400800	FURNISHED EXCAVATION	CU YD	83	83	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	142	142	
25100630	EROSION CONTROL BLANKET	SQ YD	4166	4166	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	20	20	
28000400	PERIMETER EROSION BARRIER	FOOT	588-	588	
28000500	INLET AND PIPE PROTECTION	EACH	1	1	
44000007	BITUMINOUS SURFACE REMOVAL 2"	SO YD	116	116	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	220	220	
50101500	REMOVAL OF EXISTING SUPER STRUCTURES	EACH	1	1 ·	
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1411	1411	
50901005	STEEL BRIDGE RAIL, TYPE SM	FOOT	158	158	
51500100	NAME PLATES	EACH	1	1	
54213450	END SECTION 15	EACH	2	2	
54213465	END SECTION 30	EACH	2	2	
542D0220	PIPE CULVERTS, CLASS D, TYPE 1, 15"	FOOT	90	90	
542D0235	PIPE CULVERTS, CLASS D, TYPE 1, 30"	FOOT	124	124	
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	158	158	

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	X080-2A 80 % FED 20 % STATE	
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	428	428	
59 0 00100	EPOXY CRACK SEALING	FOOT	10	10	
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	12.5	12.5	
63100087	TRAFFIC BARRIER TERMINAL, TYPE GA	EACH	4	4	
63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	3	3	
63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	1	1	
63200310	GUARDRAIL REMOVAL	FOOT	288	288	
63500105	DELINEATORS	EACH	4	4	
66 7 00305	PERMANENT SURVEY MARKERS, TYPE II	EACH	2	2	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3	
67100100	MOBILIZATION	L SUM	1	1	
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	560	560	
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2	
78200410	GUARDRAIL MARKERS, TYPE A	EACH	16	16	
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	2.1	2.1	
X40 <u>6</u> 6414	BITUMINOUS CONCRETE SURFACE COARSE, SUPERPAVE, MIX "C", N50	TON	95	95	
X 70 13015	TRAFFIC CONTROL FOR ROAD CLOSURE	L SUM	1	1	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	

* SPECIALTY TIEMS

GENERAL NOTES

ROUTE NO.	SEC.	COUNTY	TOTAL	SHEET NO.
FAS 203 (Moline Road)	9BR-4	Rock Island	21	4
FED ROAD DIST. NO.	ILLINOIS	PROJECT		
Contract #64719				·····

The final top 100 mm (four inches) of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 6 (modified) shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1 (modified). Class 6 (modified) shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. This work will be included in the contract unit price per Cubic Meter (Cubic Yard) for FURNISHED EXCAVATION.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding or placement of sod at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of FURNISHED EXCAVATION.

Mulch Method II shall be applied over all seeded areas. This shall be included in the cost of the FURNISHED EXCAVATION.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Mainline Surface Course
PG:	PG 64-22
RAP%: (Max)	10%
Design Air Voids	4.2 @ N70
Mixture Composition (Gradation Mixture)	IL 9.5 or 12.5
Friction Aggregate	С
20 Year ESAL	4.3

This structure will retain the same number 081-0034.

Embankment quantities for the construction of the Traffic Barrier Terminals as shown in the plans are included in quantities for Furnished Excavation.

The Contractor shall supply the Resident Engineer with the manufacturer's installation requirements for the type of Steel Plate Beam Guardrail Terminal Type 1 Special (Tangent) or Steel Plate Beam Guardrail Terminal Type I Special (Flared).

Bituminous Prime Coat shall be placed in accordance with Section 406 of the Standard Specifications. The cost of the Bituminous Prime Coat shall be included in the contract unit price per TON for SURFACE COURSE, SUPERPAVE, MIX C, N50.

One 16d galvanized nail shall be used to toe nail the wood block out to the wood post on all Traffic Barrier Terminal Type I Specials.

Delineators shall be installed as shown in Standard 635001, except that the post shall be rotated 180° and only metal-backed delineators shall be permitted.

Delineators shall be placed at the ends of approach guardrail terminal sections, and at each headwall or end section of AR Culverts. This work will be paid for at the contract unit price each for DELINEATORS.

Pavement marking shall be done according to Standard 780001, except as follows:

- . All words, such as ONLY, shall be 2.4 m (8 feet) high.
- 2. All non-freeway arrows shall be the large size.
- The distance between yellow no-passing lines shall be 200 mm (8"), not 180 mm (7") as shown in the detail of Typical Lane and Edge Lines.

Permanent survey markers, Type II shall be cast-in-place as shown on Highway Standard 667101. A marker shall be placed near each end of the structure in such a location that will take into account satellite and future construction. Location shall be determined by the Engineer.

The Contractor shall submit to the Engineer a description of location, elevation, and coordinates for each permanent survey marker. The Engineer shall submit this information to the Survey Crew.

The following quantities have been estimated for the Good Neighbor Policy as needed: X4066414 Bituminous Surface Course, Superpave, Mix "C", N50 - 50 tons 48101200 Aggregate Shoulder, Type B – 80 ton

Rock Island County Engineer shall be informed 1 week prior to the construction beginning. Above listed shall be invited to the pre-construction meeting.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

Mediacom
Alliant Energy
Dome Pipeline Corp.

Commonwealth Edison Citizen's Telephone

Following are the known utilities located within the project limits or immediately adjacent to the project construction limits which are not members of JULIE and should be notified individually by the contractor:

Mr. Dennis Schultz IDOT 819 Depot Ave. Dixon, IL 61021

Due to environmental concerns, the following shall be strictly adhered to:

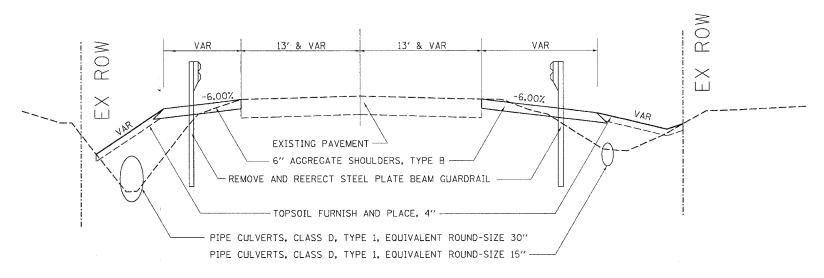
- 1. All work shall be performed from the existing decks and no work shall take place below the existing structure on the ground.
- 2. No fill shall be placed in or around Zuma Creek.

The Resident Engineer, prior to closing the road and after the project is finished, shall contact the corresponding Township and the Rock Island County Engineer to videotape the following roads: From Moline Road to 286 Street North/50th Avenue North, to IL 92 to Moline Road.

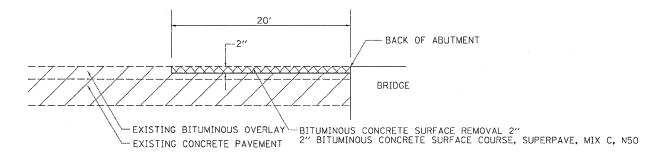
Program #5 (Arch. Size) Enlarge 200% Enlarge 107% **TYPICAL SECTIONS**

MOLINE RD.

STA. 91+15.47 - STA. 92+51.43
STA. 93+34.16 - STA. 93+71.95

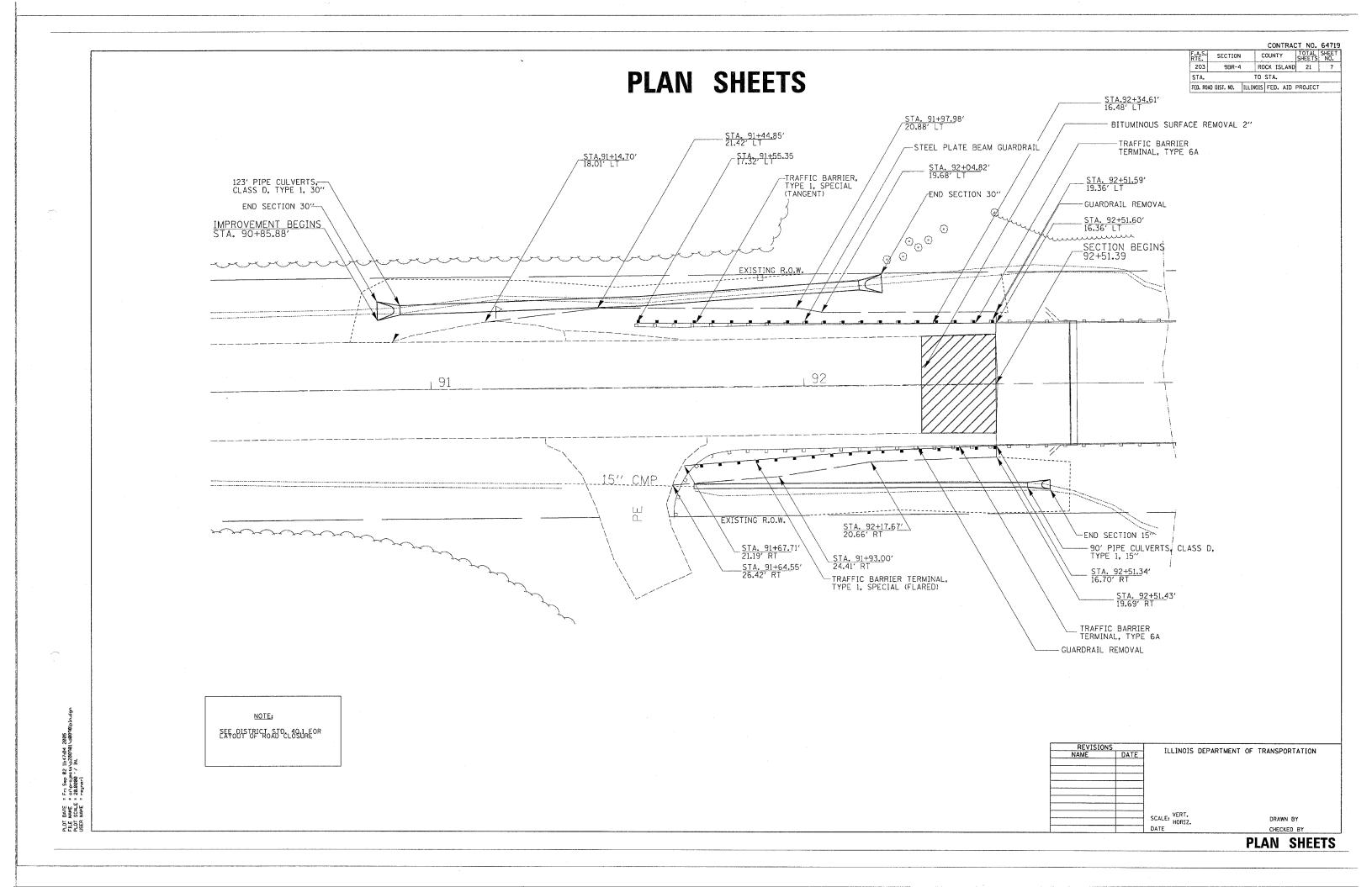


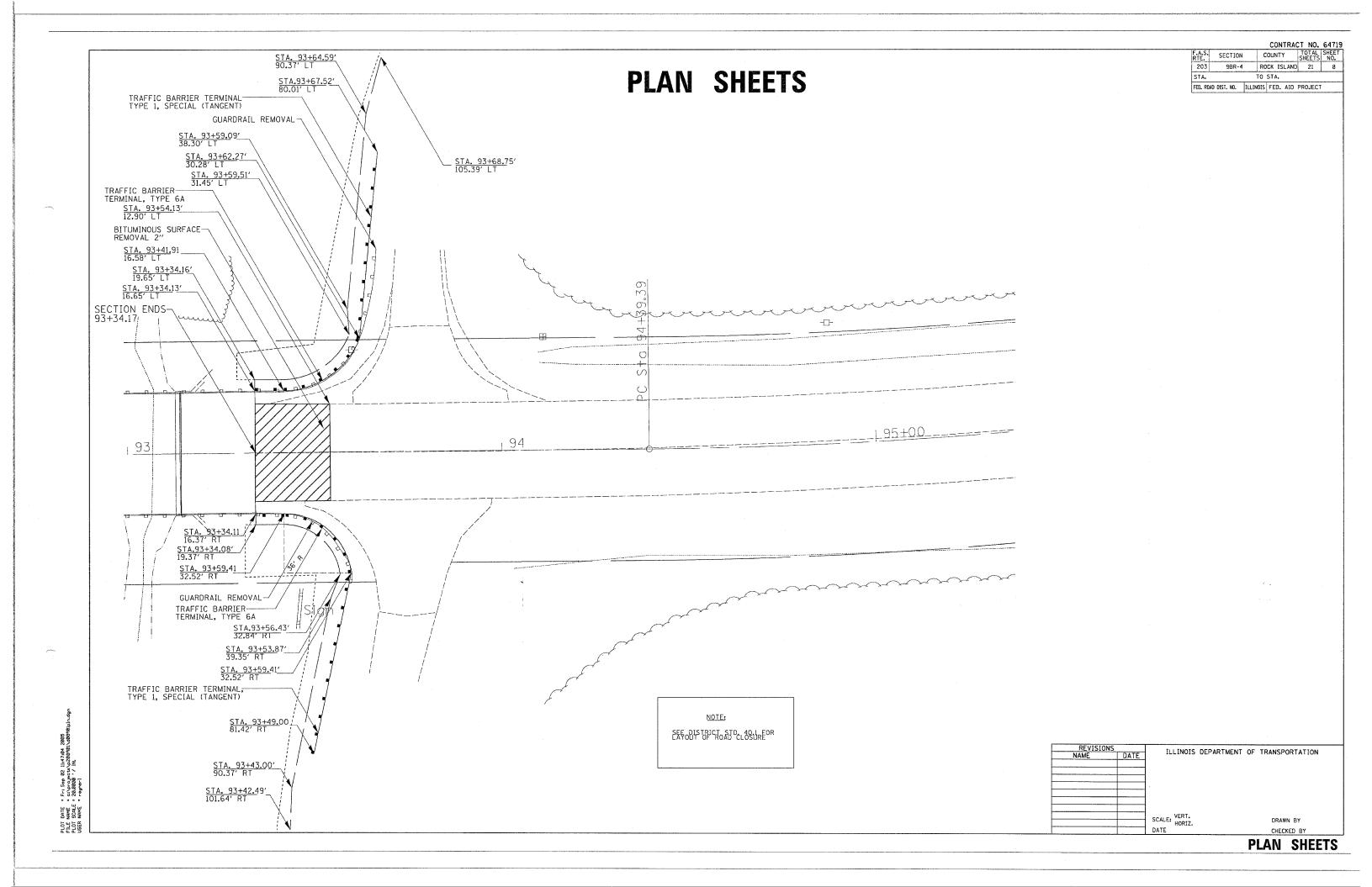
BITUMINOUS SURFACE REMOVAL STA 92+31 TO STA 92+51 STA 93+34 TO STA 93+54



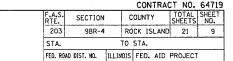
SCHEDULE OF QUANTITIES

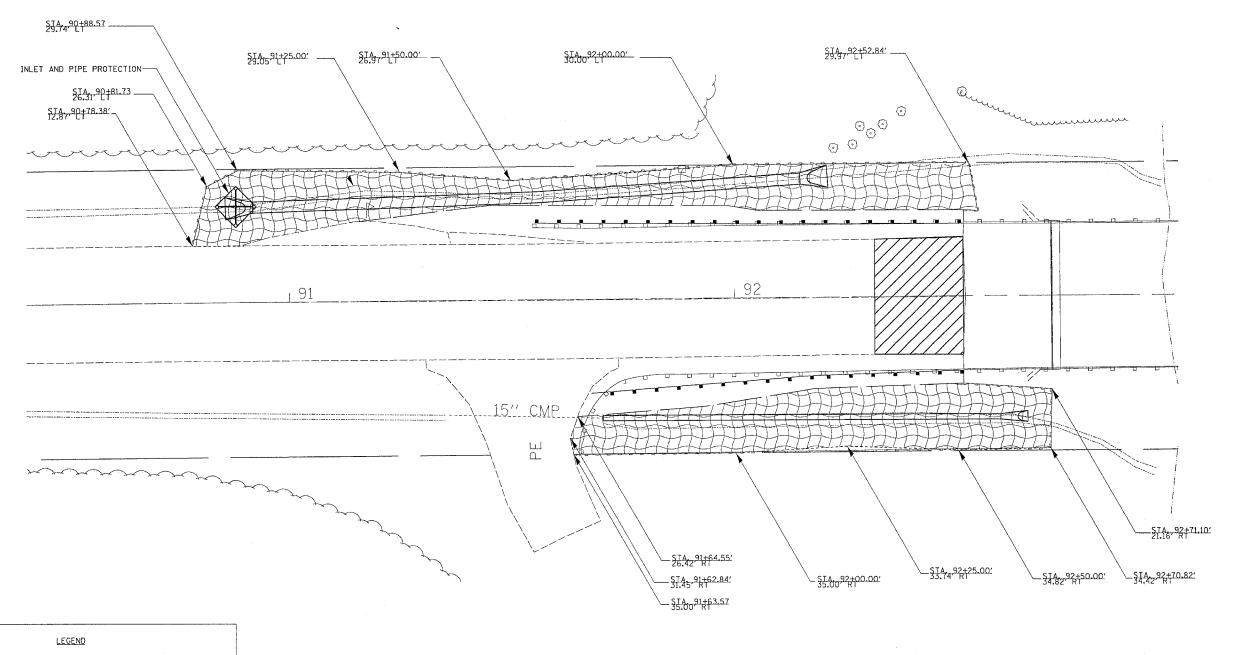
20200100	EARTH EXCAVATION CU YD LOCATION 14 91 + 38 93 + 52 TOTAL	15.47 - 34.11 -	92 + 51.59 LT & RT 93 + 71.95 LT & RT	63100087	TRAFFIC BARRIER TERMINAL. TYPE 6A EACH LOCATION 1 92 + 17.67 - 92 + 51.43 RT 1 92 + 17.84 - 92 + 51.59 LT 1 93 + 34.11 - 93 + 59.41 RT
20400800	FURNISHED EXCAVATION CULYD LOCATION 83 91 + 83 TOTAL	0 -	92 + 25 LT & RT	63100167	1 93 + 34.13 - 93 + 62.27 LT 4 TOTAL TRAFFIC BARRIER TERMINAL, TYPE 1. SPECIAL (TANGENT) EACH LOCATION ON FERSE
21101615	TOPSOIL FURNISH AND PLACE 4" SO YD LOCATION 58 91 + 84 93 +	0 - 34.08 -	92 + 51.59 LT & RT 93 + 71.95 LT & RT		1 91 + 55.35 - 92 + 5.2 LT 1 93 + 59.41 - 93 + 49 RT 1 93 + 62.27 - 93 + 67.52 LT 3 TOTAL
28000250	142 TOTAL TEMPORARY EROSION CONTROL SEEDING			63100169	IRAFFIC BARRIER TERMINAL. TYPE 1. SPECIAL (FLARED) EACH LOCATION 1 91 + 67.71 - 92 + 17.58 RT
	POUND LOCATION 10 90 + 10 93 + 20 TOTAL	89.89 - 34.08 -	92 + 51.59 LT & RT 93 + 71.95 LT & RT	63200310	1 TOTAL GUARDRAIL REMOVAL FOOT LOCATION 97 91 + 54.81 - 92 + 51.56 LT
28000400	PERIMETER EROSION BARRIER EOOT LOCATION 340 90 + 248 93 + 588 TOTAL	78.38 - 29.4 -	92 + 71.1 LT & RT 93 + 71.95 LT & RT		97 91 + 54.81 - 92 + 51.56 LT 97 91 + 64.94 - 92 + 51.31 RT 36 93 + 34.07 - 93 + 59.43 RT 58 93 + 34.13 - 93 + 66.89 LT 288 TOTAL
28000500	588 TOTAL INLET AND PIPE PROTECTION EACH LOCATION 1 90 + 1 TOTAL	91 . 99 LT		63500105	DELINEATORS EACH LOCATION 1 91 + 55.35 LT 1 91 + 67.71 RT 1 93 + 49 RT
4400007	BITUMINOUS CONCRETE SURFACE REMOV SQ YD LOCATION 58 92 + 58 93 + 116 TOTAL	31.48 - 34.08 -	92 + 51.39 93 + 54.12	78001110	1 93 + 67.52 LT 4 TOTAL PAINT PAYEMENT MARKING LINE 4" FOOT LOCATION 70 92 + 31.48 - 93 + 54.12 SKIP DASH - 2 COATS
48101200	AGGREGATE SHOULDERS, TYPE B TON 33 91 + 29 91 + 35 93 + 43 80 220 TOTAL	34.15	92 + 51.59 LT 92 + 51.33 RT 93 + 71.95 LT 93 + 41.63 RT	78100100 78200410	490 92 + 31.48 - 93 + 54.12 WHITE EDGELINES - 2 COATS RAISED REFLECTIVE PAVEMENT MARKER EACH LOCATION 2 92 + 31.48 - 93 + 54.12 2 GUARDRAIL MARKERS, TYPE A
542D0220	PIPE CULVERIS, CLASS D. TYPE 1 15" FOOT LOCATION 90 91 +	70.25 -	92 + 59.54 RT	10200 110	EACH LOCATION 4 91 + 55.35 - 92 + 51.59 LT 4 91 + 67.71 - 92 + 51.43 RT 4 93 + 34.11 - 93 + 49 RT 4 93 + 34.13 - 93 + 67.52 LT
542D0235	PIPE CULVERTS, CLASS D. TYPE 1 30" FOOT LOCATION 124 90 + 124 TOTAL	91.96 -	92 + 14.92 LT	78201000	TERMINALMARKER - DIRECT APPLIED EACH LOCATION 1 91 + 55.35 LT
54213450	END SECTIONS 15" EACH LOCATION 1 92 + 1 TOTAL	51.05 RT			1 91 + 67.71 RT 1 93 + 49 RT 1 93 + 67.52 LT 4 TOTAL
54213465	END SECTIONS 30" EACH LOCATION 1 90 + 1 92 + 2 TOTAL			X4066414	BITUMINOUS CONCRETE SURFACE COURSE. SUPERPAVE. MIX C. N50 TON LOCATION 10 92 + 31.48 - 92 + 51.39 10 93 + 34.08 - 93 + 54.12 50 GOOD NEIGHBOR POLICY 25 BRIDGE 95 TOTAL
6300000	STEEL PLATE BEAM GUARD RAIL, TYPE A EOOT LOCATION 12.5 92 + 12.5 TOTAL		92 + 17.7 LT		95 TOTAL





EROSION CONTROL SHEETS





PERIMETER EROSION BLANKET

EROSION CONTROL BLANKET & SEEDING

INLET AND PIPE PROTECTION

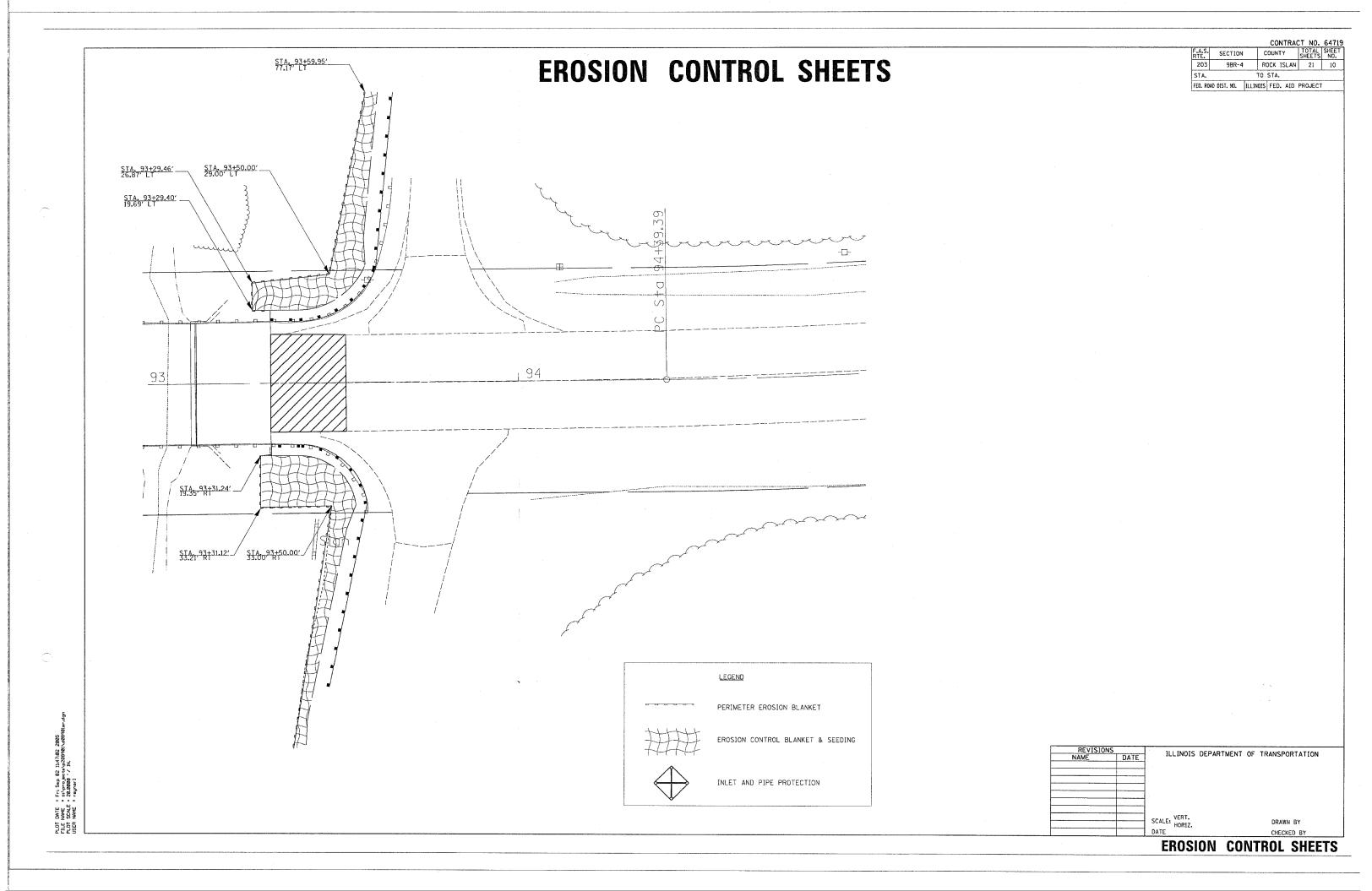
REVISIONS
NAME
DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT.
HORIZ.
DATE

CHECKED BY

EROSION CONTROL SHEETS



Bench Mark:

Existing Structure: Designated as structure at Station 522+40, built in 1922 under SBI Route 3, Section 9-9B. Originally a slab bridge, the superstructure was replaced in 1970 with PPC-deck beams. The existing structure is a single span 21" x 36" PPC-deck beam bridge with closed abutments, top & bottom restrained, on piles. The back to back abutment length is 43'-0" and the out to out width is 33'-0". The existing deck beams and bridge railing are to be removed and replaced. Road closure shall be used during construction.

> Limits of Existing -

Structure

© Brg. W. Abut. Sta. 92+71.96 Elev. 596.83

Proposed Name Plate

<u>€</u> Bridge Sta. 92+92.75

21" x 36" PPC) Deck Beams

Existing Natural Ground |

ELEVATION

41'-7" € Brg. to € Brg.

PLAN

43'-0" Bk to Bk. of Existing Abutments

Existing Name Plate

© Brg. E. Abut. Sta. 93+13.54

Elev. 596.91

(on abutment)

No Salvage

Traffic Barrier Terminal Type 6A, Std 631032

Typ. all four corners)

N

€ F.A.S. Rte. 203

Bk Exist. W. Abut.

Sta. 92+71.25

Elev. 596.83

& P.G.

T TITILITY



- 1. General Plan
- 2. General Notes
- 3. Type SM Steel Bridge Rail Side Mounted
- 4. Superstructure Details-1
- 5. Superstructure Details-2
- 6. Abutments

Existing Bridge Rail and Posts on Precast Units to be removed & replaced

Existing 18" X 3'-9" Precast Units to remain (Typ. all four corners)

......

(Typ. all four corners)

Existing Abutment (Typ.)

Bk Exist. E. Abut.

Sta. 93+14.25

Elev. 596.91

7. Concrete Repair

UTE NO.	SECTION	coi	MTY	SHEETS	SHEET NO.	SHEET	NO.	1
FAS 203	9BR-И	ROCK I	SLAND	21	11	7 sh	EETS	
ROAD DIST	ND, 7	ILLINDIS	FED. ALD PRI	MECT-				

LOADING HS20-44 (New Construction)

No Allowance for future wearing surface.

DESIGN SPECIFICATIONS (New Construction)

DESIGN STRESSES

PRECAST PRESTRESSED UNITS

 $f'_{c} = 5,000 \text{ psi}$ $f'_{oi} = 4,000 \text{ psi}$

 $f_s' = 270,000 \text{ psi } (\frac{1}{2}" \phi \text{ low lax. strands})$ $f_{si}' = 201,960 \text{ psi } (\frac{1}{2}" \phi \text{ low lax. strands})$

*Existing Beam Removal and Proposed Beam Erection Sequence:

- 1. Two adjacent lines of existing beams shall be removed.
- 2. One new beam shall be installed and doweled into position.
- 3. One adjacent existing beam shall be removed.
- 4. Repeat steps 2 and 3 for remainder of beams.
- * If the Contractor chooses an alternate method of beam removal and replacement, the contractor must submit details and calculations for a bracing system for approval. The details are to be signed & sedled by an Illinois licensed Structural Engineer.



EXISTING PROFILE GRADE

(Along & Roadway)

STATION 92+93 REBUILT 20__ BY STATE OF ILLINOIS F.A.S. ROUTE 203-SEC 9BR-M LOADING HS20 STRUCTURE NO. 081-0034

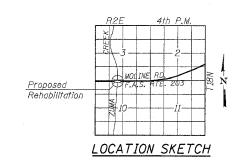
NAME PLATE

(See Std. 515001) Existing Nameplate to Remain



Michael J. Hay Michael T. Haley

Licensed Structural Engineer State of Illinois No. 81-5991



ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN MOLINE ROAD OVER ZUMA CREEK F.A.S. ROUTE 203-SECTION 9BR-M ROCK ISLAND COUNTY STATION 92+92.75 STRUCTURE NO. 081-0034

REVISIONS DATE LIN ENGINEERING,LTD.

8/5/05

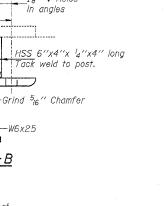
4-34" \$ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7₈" ♦ Holes in hollow structural section may be drilled in the field. W6x25-¹³l6 " x 5¹2" Slotted Hole in post Finished Surface ¹³i6 '' ∮ holes in angles TTTV-Top of Existing Approach Beam A D 2- 1" \$ x 734" AASHTO M 164 Anchor Bolts with flat washer & lockward. HSS 6" x 4" x 4" x 4" long Tack weld to post.

SECTION AT RAIL POST AT EXISTING APPROACH BEAMS

`—₽ ½′′x7′′x6′′

HSS 6" x 3" x 4" x 3½" long

Tack weld to post & plate.

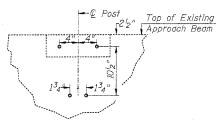


 $2-\frac{3}{4}$ " $\phi \times \frac{3}{4}$ " H.S. Bolts with

hex nut & flat washers

1'8" ¢ Holes

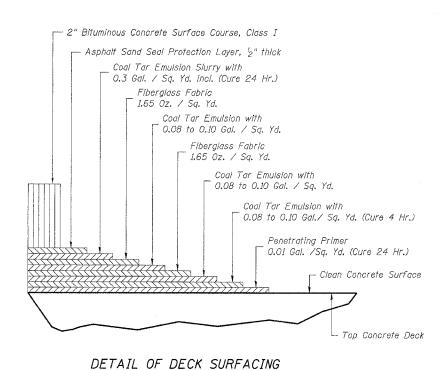
-L 6 x 4 x ³₄



EXISTING BOLT LAYOUT

SECTION B-B

SECTION A-A



2-5₈" \$\psi x 53₄" Cap Screws

with flat washer.

Note: Work this sheet with Sheet 3 of 7.

GENERAL NOTES

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

The minimum thickness of the Bituminous overlay shall be 2" and varies as required to adjust for the new profile grade and beam camber.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

No instream work will be allowed on this project.

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

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Polymer Modified Portland Cement Mortar	Sq. Ft	-	2.1	2.1
Epoxy Crack Sealing	Foot	-	9.5	9.5
Removal of Existing Superstructure	Each	1	-	1
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft	1410.8	-	1410.8
Steel Bridge Rail, Type SM	Foot	158	-	158
Name Plates	Each	1		1
Portland Cement Mortar Fairing Course	Foot	427.5	-	427.5
Waterproofing Membrane System	Sq. Yd.	157.7	-	157.7
Bituminous Concrete Surface Course, SUPERPAVE, MIX "C", N50	Tons	24.4		24.4

* Removal of existing superstructure includes removal of bridge railing on existing precast end units.

REVISIONS DATE LIN ENGINEERING,LTD.

ILLINOIS DEPARTMENT OF TRANSPORTATION GENERAL NOTES MOLINE ROAD OVER ZUMA CREEK F.A.S. ROUTE 203-SECTION 9BR-M ROCK ISLAND COUNTY STATION 92+92.75 STRUCTURE NO. 081-0034

⁷8" ∮ Holes

1 a'' ¢ Holes

1316 " x 3" Slotted Holes -

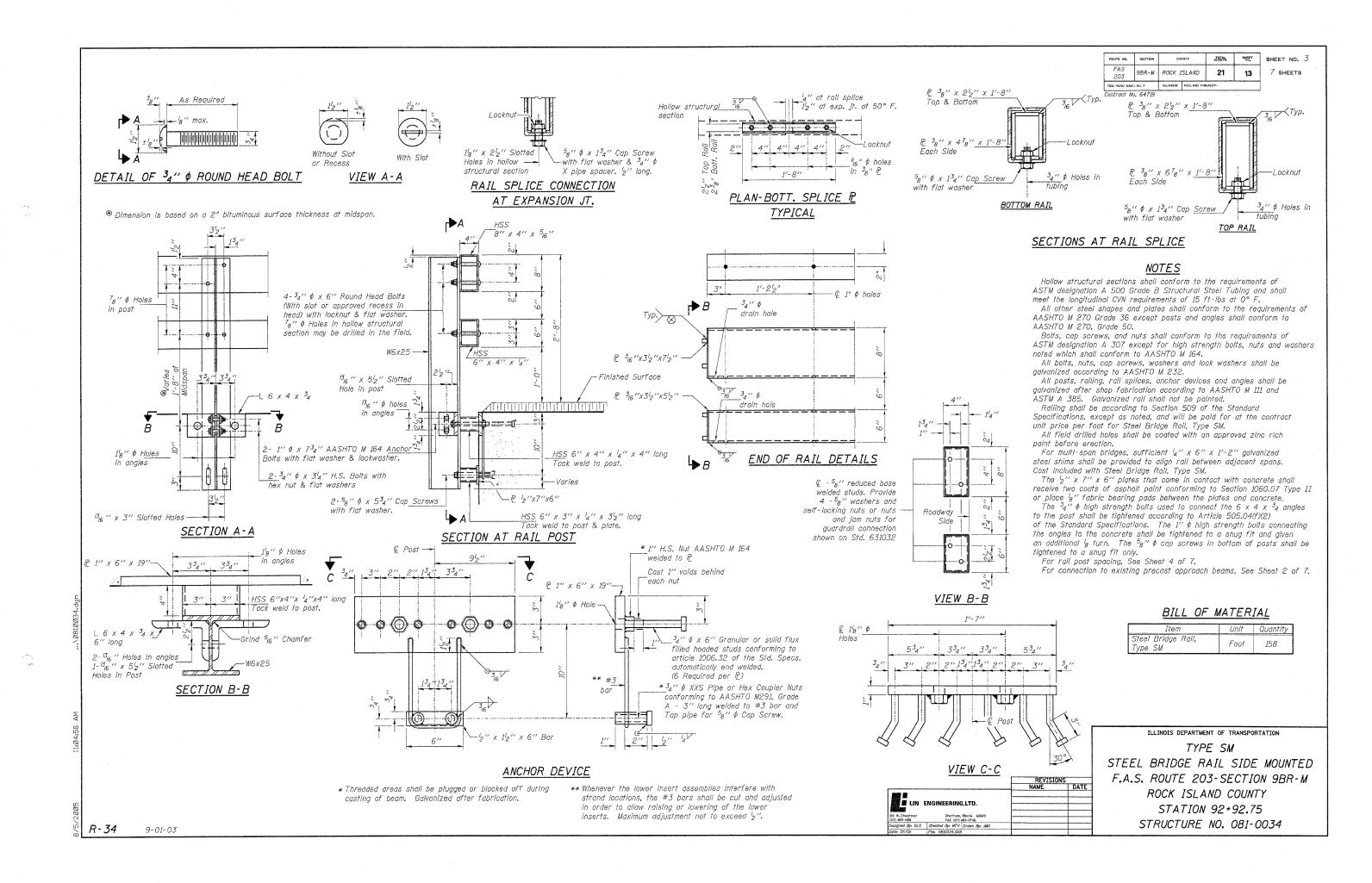
Exist. Anchor Plate

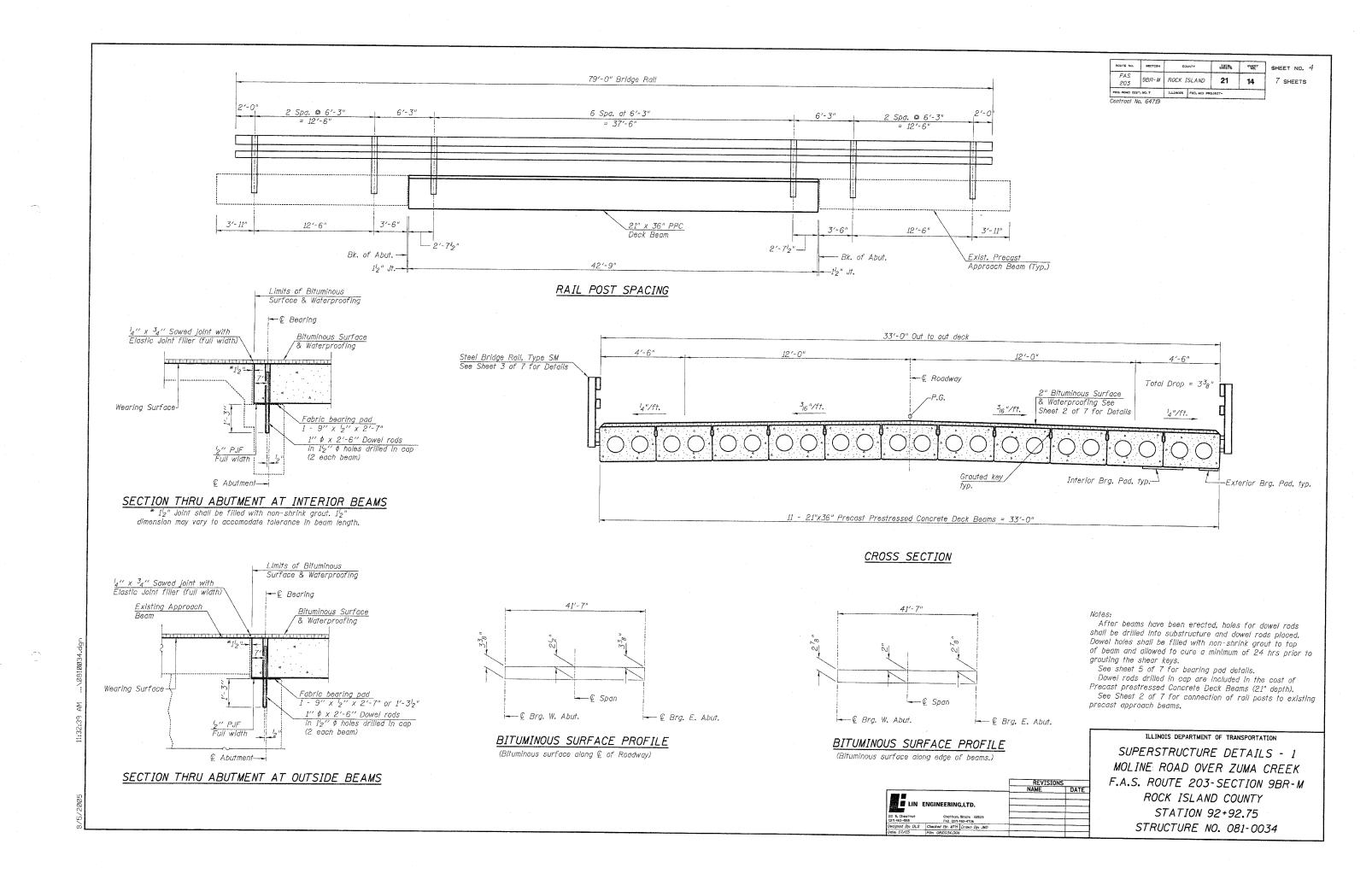
6" long

Holes in Post

2-¹³₁₆ " Holes in angles 1-¹³₁₆ " x 5¹₂" Slotted

in angles





2-#5 B1 bars each end

x 3-W2.5 x W5.5 Wire

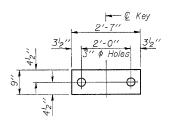
Fabric W2.5 longitudinal

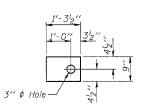
└─ ¾′′ Chamfer

Full length of beam except at U bars

12

10/4"





FABRIC BEARING PAD

1'-0"Lifting loops
2 each end

FABRIC BEARING PAD

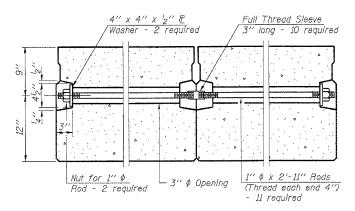
Sym. about © Beam

3" ∮ Holes for transverse tie

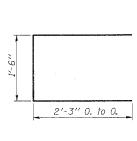
assemblies

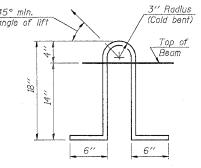
FIXED

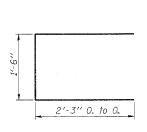
′ ¢ Vent Holes Top ′′ ¢ Drain Holes Bott.



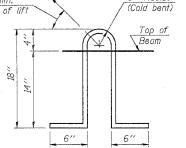
TYPICAL TRANSVERSE TIE ASSEMBLY







BAR U



LIFTING LOOP DETAIL

TYPICAL SECTION '2" \$ Strands, Each Strand Stressed to 30,900 Lbs. $\bar{5}$ -Strands 1^3 4" up, 6-Strands 3^1 4" up

Standard Grid Pattern

15/2"

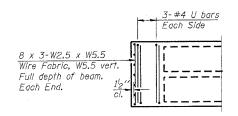
Place strands symmetrically about & of beam.

Omit key on exterior face of outside beams.

104"

4-#5 B bars Full length of beam

PLAN



18'-11'2"

42'-9" O. to O.

END OF BEAM - PLAN

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be $l_2^{\prime\prime}$ and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be $2-\frac{1}{2}$ " ϕ -270 ksi strands, as shown.

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

Non prestressing steel shall conform to AASHTO M-31 or M 322 Grade 60.

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

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

Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

Required Release Strength, f'cl, shall be 4000 p.s.i. See sheet 4 of 7 for location of rail anchors. Bridge rail inserts shall be cast in precast beams.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" Depth) Sq. Ft. 1410.8

STRUCTURE NO. 081-0034

LIN ENGINEERING,LTD.

SUPERSTRUCTURE DETAILS - 2 MOLINE ROAD OVER ZUMA CREEK F.A.S. ROUTE 203-SECTION 9BR-M ROCK ISLAND COUNTY STATION 92+92.75

ILLINOIS DEPARTMENT OF TRANSPORTATION

2" \Phi Holes for Dowel Rods

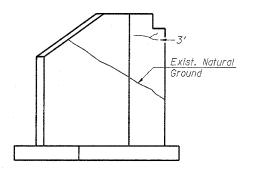
SHEET NO. 6 FAS 203 9BR-M ROCK ISLAND 21 16 FED. ROAD DIST, NO. 7 ILLINOIS FED. AID PROSECT. Contract No. 64719 Z West Abut. East Abut. 33'-0" Out to Out Deck 16'-6" 3′-9" Exist. Precast Approach Beam, Typ. ^l2" x 2^l2" PJF out to out beams End of Approach Slab End of Deck Beams Fabric Bearing Pad

1 - 9"x ½"x 2'-7"

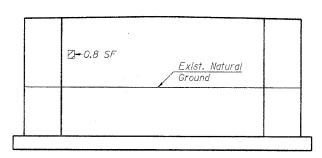
typical except as noted <u>Fabric Bearing Pad</u> 1 - 9"x ½"x ½"-3½" exterior edge of Back of Abutment cap Proposed dowel rod spacing (Typ.) exterior beams -----3"-**Ł** -3" - @ Roadway 9" 1'-6" 9" Existing dowel rod spacing (Typ.) 3'-0" Level Burn existing dowel rods flush with existing abutment surface. Grind existing dowel rods smooth and seal with epoxy. Cost is included with Precast Prestressed Concrete Deck Beams (21" Depth) ABUTMENT PLAN (Bituminous Surface not shown) Proposed Deck Beam (Typ) ILLINOIS DEPARTMENT OF TRANSPORTATION -Fabric Bearing Pad **ABUTMENTS** Existing Abutment Cap-MOLINE ROAD OVER ZUMA CREEK F.A.S. ROUTE 203-SECTION 9BR-M SECTION A-A ROCK ISLAND COUNTY LIN ENGINEERING,LTD. (Bituminous surface and dowel rods not shown.) STATION 92+92.75 STRUCTURE NO. 081-0034



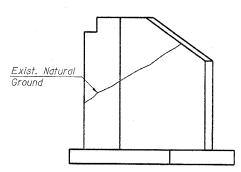




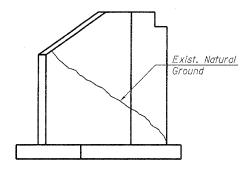
SOUTHWEST WINGWALL



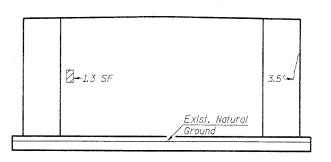
WEST ABUTMENT



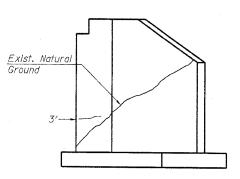
NORTHWEST WINGWALL



NORTHEAST WINGWALL



EAST ABUTMENT



SOUTHEAST WINGWALL

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Sealing	Foot	9.5
Polymer Modified Portland Cement Mortar	Sq. Ft.	2.1

<u>LEGEND</u>

-3'Epoxy Crack Sealing Polymer Modified Portland Cement Mortar

		REVISIONS		
		NAME	DATE	
LIN	ENGINEERING,LTD.			
210 W. Cheatruit (217) 493-468	Chathem, Mhole 62629 FAX (217) 483-4706			
Designed By: DLS	Checked By: MTH Drown By: JMD			
Date: 07/05	File: OBJO034.DGN			

ILLINOIS DEPARTMENT OF TRANSPORTATION CONCRETE REPAIR MOLINE ROAD OVER ZUMA CREEK F.A.S. ROUTE 203-SECTION 9BR-M ROCK ISLAND COUNTY STATION 92+92.75 STRUCTURE NO. 081-0034

The quantities shown are for estimating purposes only.

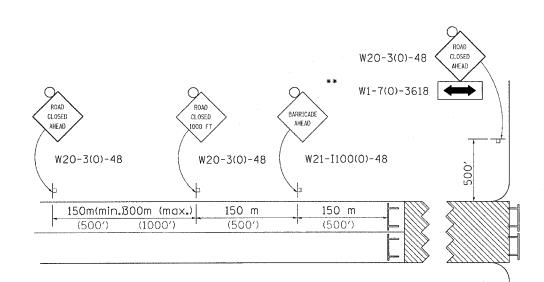
Area to be repaired will be determined by the Engineer at the time of Construction. Actual repair locations shall be shown on the as-built plans.

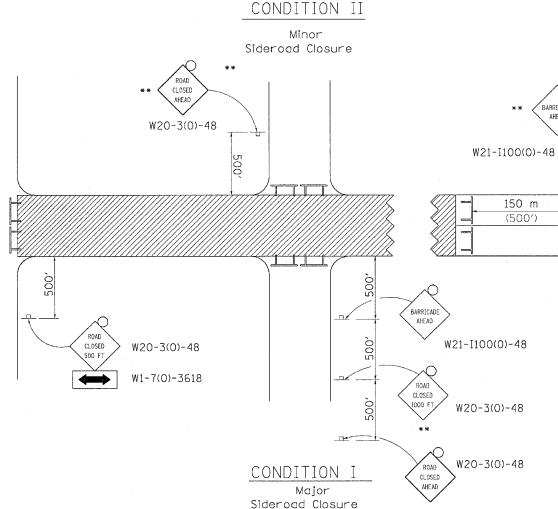
TRAFFIC CONTROL FOR ROAD CLOSURE

W20-3(0)-48

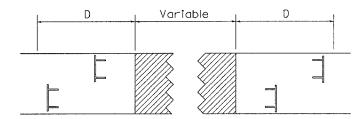
(1000')

150m(min.B00m (max.)





ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To All Thru Traffic" detail on Highway Standard 702001. If the distance "D" exceeds 600 m (2000') an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

SYMBOLS



Work area



Type III Barricade with Flashers



Sign with flashing light

GENERAL NOTES

Longitudinal dimensions may be adjusted to fit field conditions.

When speed limit is less than 45mph, change sign spacing to 250' and change ROAD CLOSED 1000 FT to ROAD CLOSED 500 FT.

Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision.

W20-3(0)-48

150 m

(500')

** Where local access is to be maintained, barricades are to be set up as shown in Road Closed to thru traffic.

Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 702001.

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

TYPICAL APPLICATION FOR ROAD CLOSURE

PLOT DATE = Fr. Sep 02 11.47.02 2005 FILE NAME = c:\projects\p2089@1\d0890ler.dgn PLOT SCALE = 50.0000 '/ IN.

