

B.M.: Chiseled "□" SE Corner of Bridge, Str. No. 069-0022
Sta. 726+71.1, 15.7' Rt., Elev. 615.78 (NAVD 88)

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 753	*	MORGAN	40	20
FEL. ROAD DIST. NO. 1		ILLINOIS	PROJECT	
* 128BR-1				CONTRACT NO. 72A89

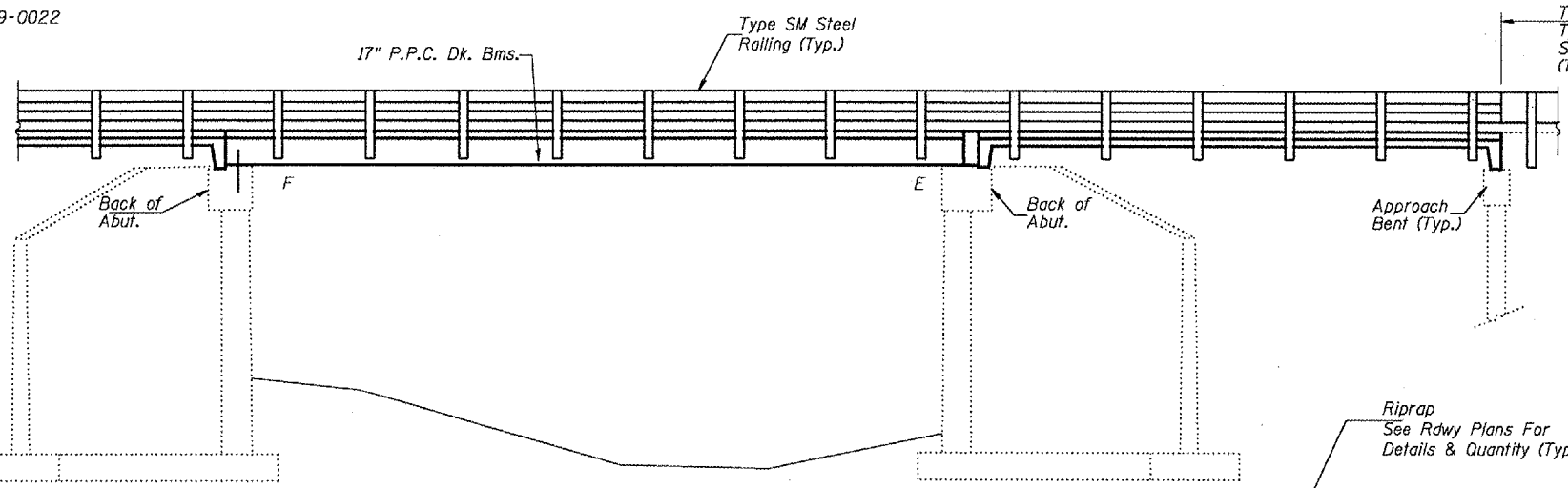
EXISTING STRUCTURE:

SN 069-0022 Built in 1934, Re-Built in 1971.
A single span 17" deep prestressed concrete deck beam superstructure, 44'-7 1/2" back to back abutments and 33'-0" clear roadway width with steel barrier rails on concrete closed abutments.

The existing superstructure is to be replaced with PPC Deck Beams and 5" (min.) Concrete Wearing Surface.

Traffic shall be maintained by utilizing Stage Construction.

No Salvage



GENERAL NOTES

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

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

No in-stream work will be allowed on this project.

The cut strands of each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. 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.

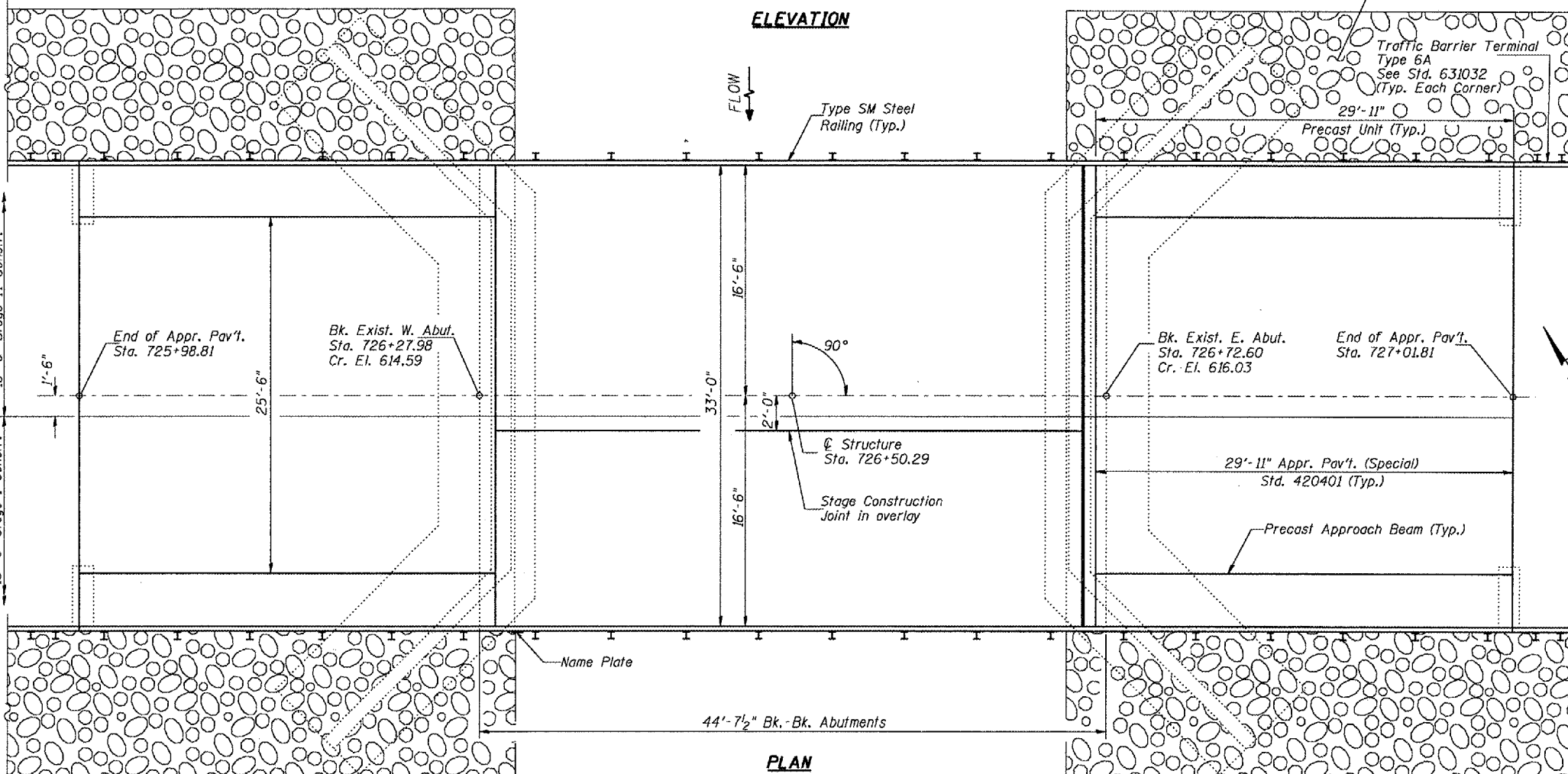
The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for new profile grade and beam camber.

The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying 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.

Repair of the abutments shall be completed prior to placement of the new deck beams.

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on the new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new beams. To distribute load to multiple beams and protect the concrete, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. Prior to placement of the timber mats the following shall be done: placement and tightening of the transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and curing the shear keys. A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.

Protective Coat shall be applied to the top and edges of the concrete wearing surface. Reinforcement bars designated (E) shall be epoxy coated.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Removal of Existing Superstructures	Each	-	-	1
Removal of Existing Precast Concrete Unit	Sq. Ft.	449	-	449
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1,388	-	1,388
Precast Concrete Bridge Slab	Sq. Ft.	449	-	449
Concrete Structures	Cu. Yd.	-	2.1	2.1
Reinforcement Bars, Epoxy Coated	Pound	2,660	580	3,240
Steel Railing, Type SM	Foot	206	-	206
Concrete Wearing Surface, 5"	Sq. Yd.	205	-	205
Bridge Deck Grooving	Sq. Yd.	145	-	145
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	-	38	38
Name Plates	Each	-	-	1
Bar Splicers	Each	167	6	173
Protective Coat	Sq. Yd.	214	-	214
Asbestos Bearing Pad Removal	Each	22	-	22
Concrete Removal	Cu. Yd.	-	1.5	1.5
Preformed Joint Strip Seal	Foot	33	-	33

STATION 726+50.29
REBUILT 200 BY
STATE OF ILLINOIS
F.A.P. 753
SEC 128BR-1
LOADING HS20
STRUCTURE NO. 069-0022

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

LOADING HS20-44
Allow 50#/sq. ft. future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO

NAME PLATE
See Std. 515001

Attach new name plate to back side of 8" rail element. Clean and re-locate existing name plate adjacent to new name plate. Cost included in the cost of "Name Plates".

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

PLAN

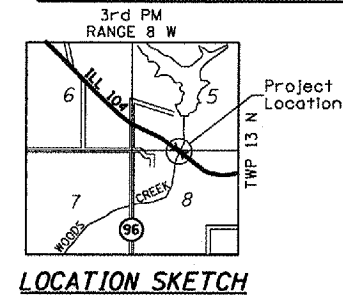
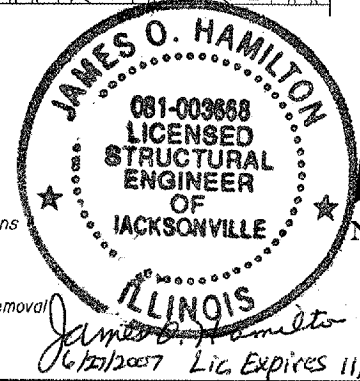
NOTE:
See Roadway plans for profile grade information.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 p.s.i.
f'ci = 5,000 p.s.i. (Concrete Wearing Surface)
fy = 60,000 p.s.i. (Reinforcement)

PRECAST PRESTRESSED UNITS
f'c = 5,000 p.s.i.
f'ci = 4,000 p.s.i.
f's = 270,000 p.s.i. (1/2" ϕ low relaxation strands)
f'si = 201,960 p.s.i. (1/2" ϕ low relaxation strands)

PRECAST NON-PRESTRESSED UNITS
f'c = 4,500 p.s.i.

- INDEX TO SHEETS**
- General Plan
 - Stage Construction Details
 - Temporary Concrete Barrier For Stage Construction
 - Approach Details
 - Deck Beam Details
 - Overlay Details & Typical Sections
 - Preformed Joint Strip Seal
 - Steel Railing, Type SM
 - Superstructure Details
 - Abutment Concrete Repair & Removal
 - Abutment Details
 - Bar Splicer Assembly Details

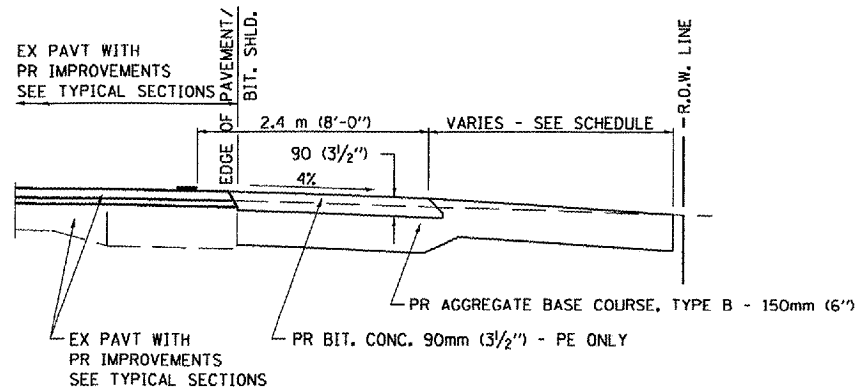


GENERAL PLAN
F.A.P. 753 (ILL 104) OVER
WOODS CREEK
SECTION 128BR-1
MORGAN COUNTY
STATION 726+50.29
STR. NO. 069-0022

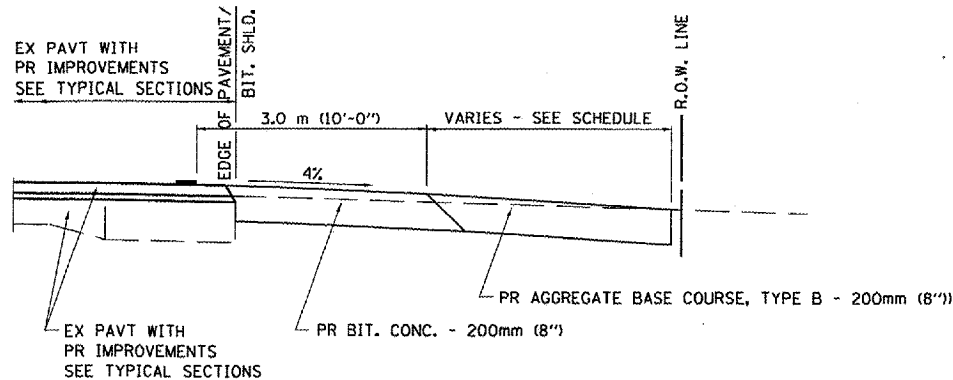
HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Rev: _____ Date: _____

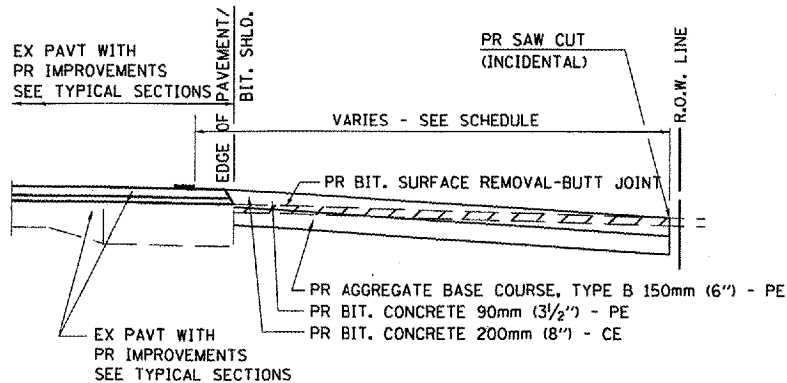
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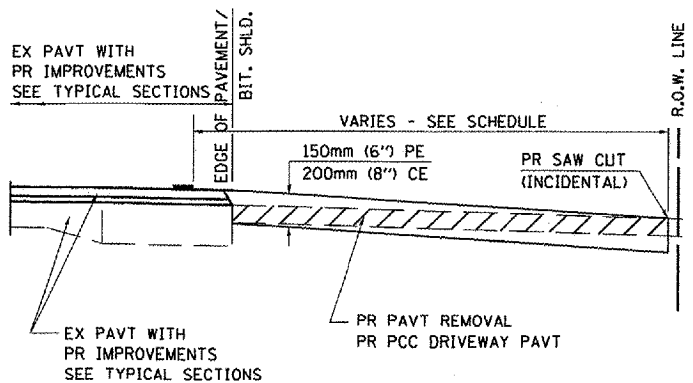
SECTION A-A FOR EX EARTH/AGGREGATE FE & PE



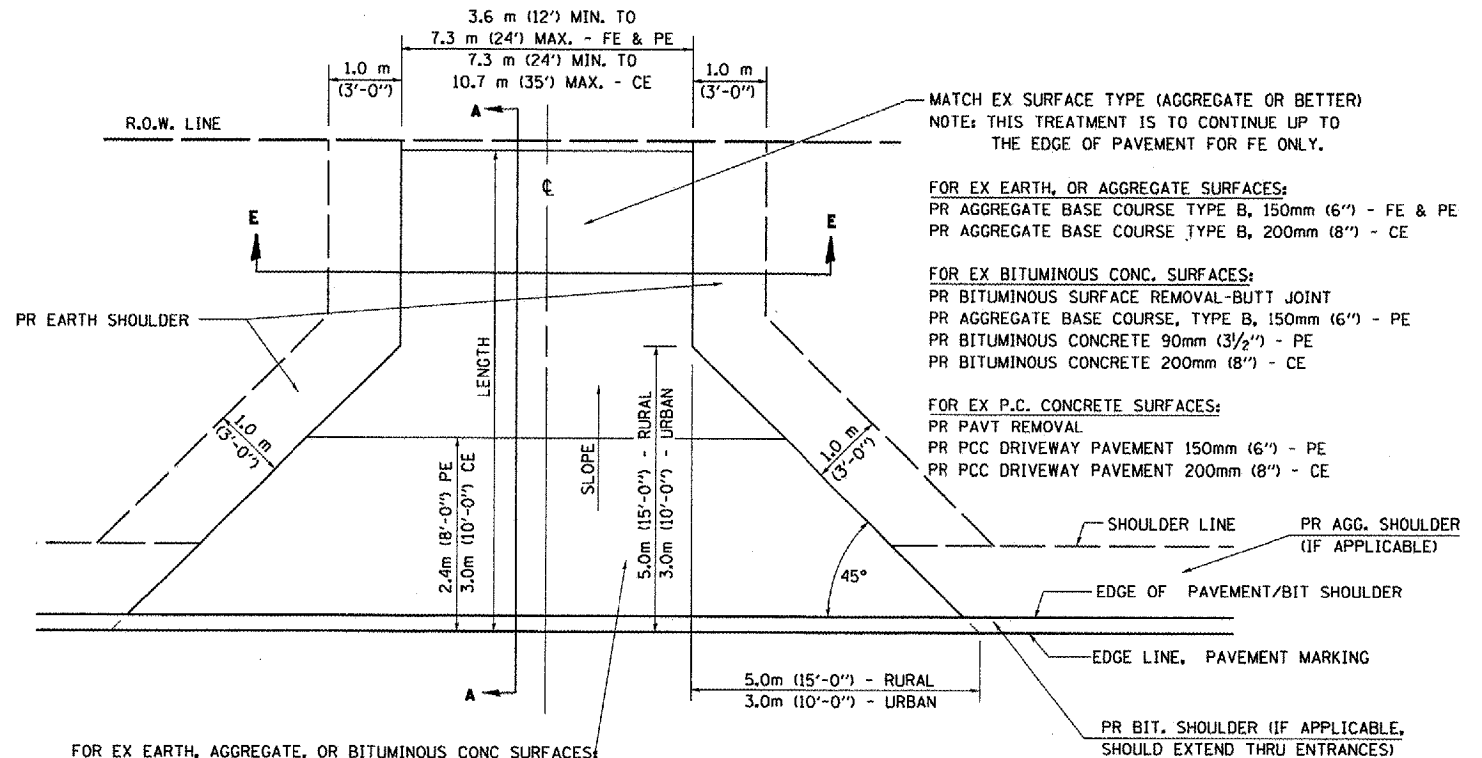
SECTION A-A FOR EX EARTH/AGGREGATE CE



SECTION A-A FOR EX BITUMINOUS PE & CE



SECTION A-A FOR EX P.C. CONC. PE & CE



FOR EX EARTH, AGGREGATE, OR BITUMINOUS CONC SURFACES:
 PR BIT SURFACE REMOVAL-BUTT JOINT (IF APPLICABLE)
 PR AGGREGATE BASE COURSE TYPE B 150mm (6'') - FE
 PR AGGREGATE BASE COURSE TYPE B, 150mm (6'') &
 PR BITUMINOUS CONCRETE 90mm (3 1/2'') - PE
 PR BITUMINOUS CONCRETE 200mm (8'') - CE

FOR P.C. CONCRETE SURFACES:
 PR PAVT REMOVAL
 PR PCC DRIVEWAY PAVT 150mm (6'') - PE
 PR PCC DRIVEWAY PAVT 200mm (8'') - CE

GENERAL NOTES:

THE RESIDENT ENGINEER WILL DETERMINE THE EXACT TYPE OF IMPROVEMENT TO BE COMPLETED FOR ALL ENTRANCES, SIDEROADS AND MAILBOX TURNOUTS ON THIS PROJECT.

THE PLAN DETAILS AND SCHEDULES SHOULD BE USED AS A GUIDE FOR THE ENGINEER TO IMPLEMENT THE FINAL DESIGN. THE ENGINEER MAY DECIDE TO SALVAGE PORTIONS OF THE EXISTING ENTRANCE PAVEMENT STRUCTURE; THEREFORE, REDUCING PAY ITEM QUANTITIES. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS REDUCTION IN QUANTITIES.

ANY WORK THE ENGINEER REQUIRES WHICH IS NOT COVERED BY A PAY ITEM CONTAINED IN THE PLANS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

BITUMINOUS CONCRETE REQUIRED TO CONSTRUCT THE ENTRANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 406 AND 408 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

WHEN THE BITUMINOUS CONCRETE PROPOSED FOR THE IMPROVEMENT IS THICKER THAN 75 mm (3 INCHES) AND REQUIRE PLACEMENT IN MORE THAN ONE LIFT. THE BOTTOM LIFT(S) SHALL MEET THE REQUIREMENTS OF BITUMINOUS BASE COURSE IN PORTION 406 OF THE STANDARD SPECIFICATIONS AND THE TOP LIFT OF 50 mm (2 INCHES) SHALL MEET THE REQUIREMENTS OF BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE.

THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH SECTIONS 351, 358, 408, 423 AND 440 OF THE STANDARD SPECIFICATIONS.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

SECTION E - E ENTRANCE TYPICAL SECTION

NOTE 1: WIDTH OF ENTRANCE MAY BE INCREASED AT THE PIPE CULVERT DUE TO THE DITCHLINE BEING LOCATED IN THE ENTRANCE FLARE AREA.

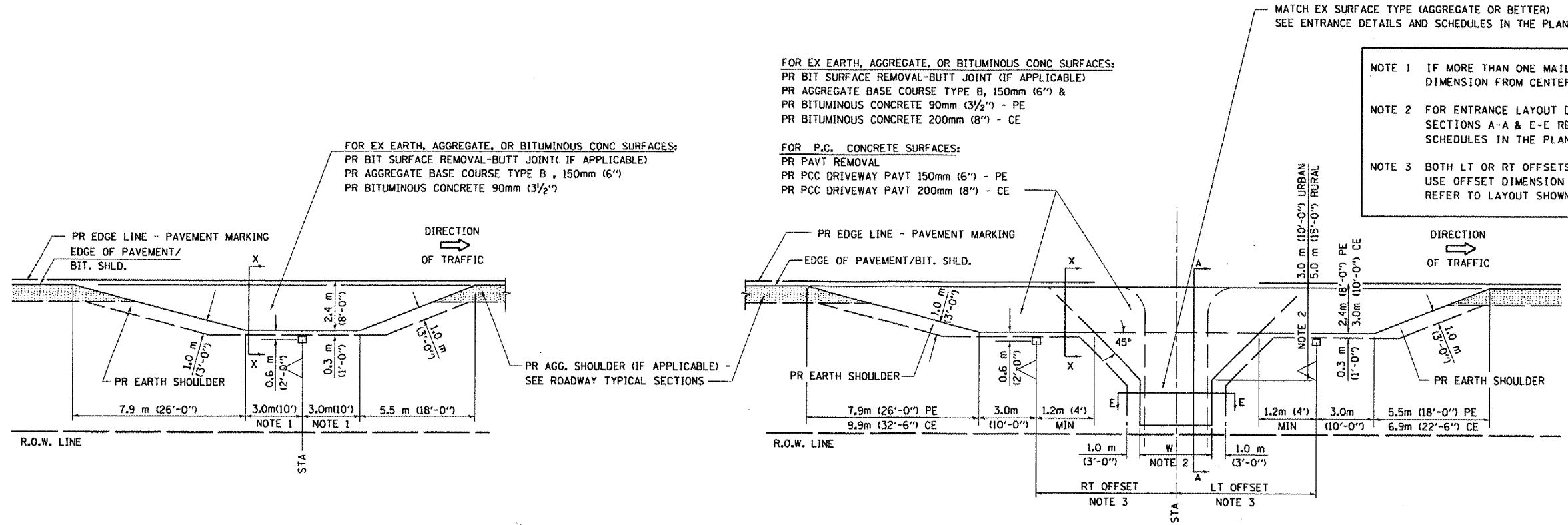
REVISIONS	
NAME	DATE
JCN	2/19/03
JCN	4/01/04

SHEET 1 OF 3
 ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT SIX
ENTRANCE & MAILBOX TURNOUT
W / O CONCRETE GUTTER
(3R - PROJECTS)

SCALE: VERT. DRAWN BY CADD
 HORIZ. CHECKED BY JCN
 DATE: FEBRUARY 23, 1999

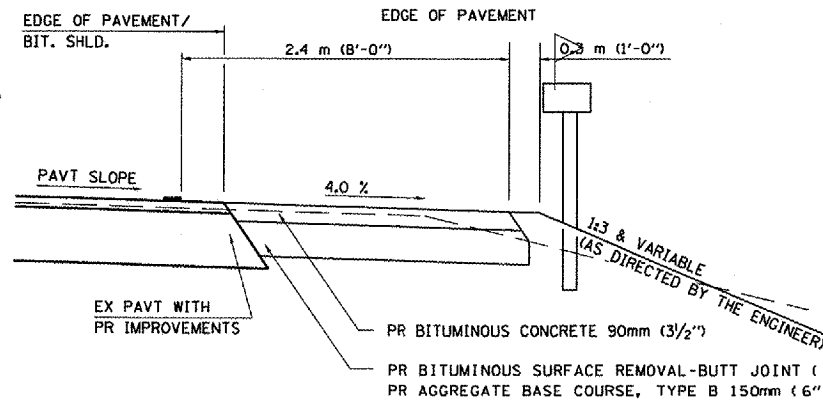
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DETAILS OF MAILBOX TURNOUTS

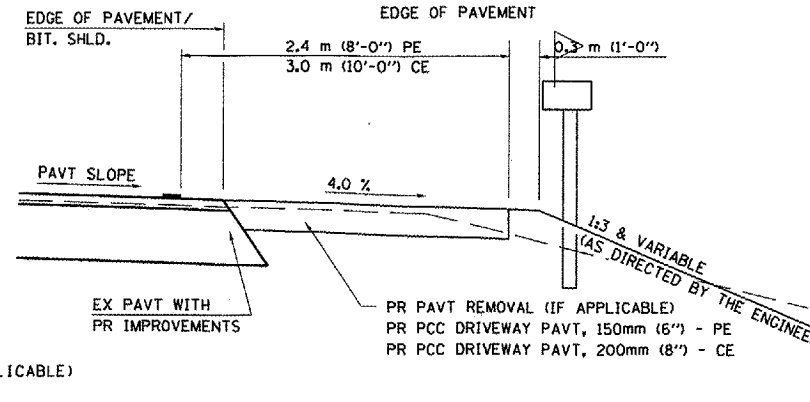


PLAN - MAILBOX TURNOUTS

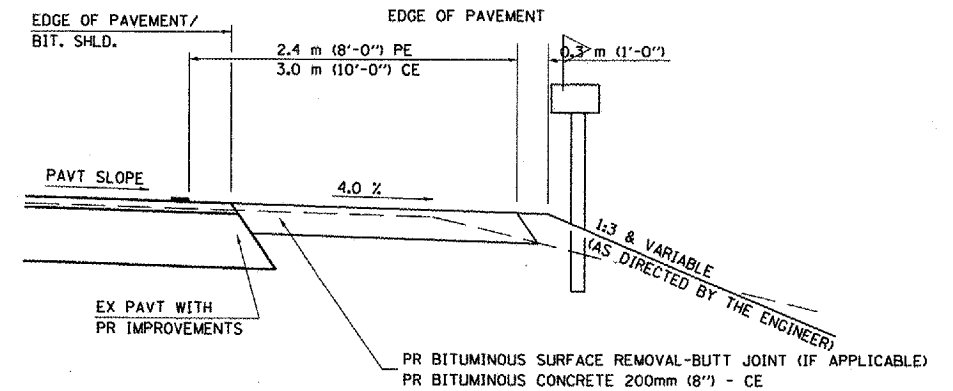
PLAN - COMBINED MAILBOX TURNOUT WITH TRAILING OR LEADING ENTRANCE



SECTION X-X THRU MAILBOX TURNOUT
 ALSO APPLIES TO MAILBOX TURNOUTS COMBINED WITH EX EARTH, AGGREGATE, OR BITUMINOUS PE & FE



SECTION X-X THRU MAILBOX TURNOUT
 COMBINED WITH EX CONC PE OR CE



SECTION X-X THRU MAILBOX TURNOUT
 COMBINED WITH EX EARTH, AGGREGATE, OR BITUMINOUS CE

PLOT DATE = 7/2/2007
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 PLOT SCALE = 42.3528 / IN.
 USER NAME = laughton-1

ENT 3R

Rev. 9-4-07

REVISIONS	
NAME	DATE
JCN	2/19/03
JCN	4/01/04

SHEET 2 OF 3
 ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT SIX
DETAILS FOR RURAL / URBAN
ENTRANCE & MAILBOX TURNOUT
W / O CONCRETE GUTTER
(3R - PROJECTS)
 SCALE: VERT. HORIZ.
 DATE: FEBRUARY 23, 1999
 DRAWN BY CADD
 CHECKED BY JCN