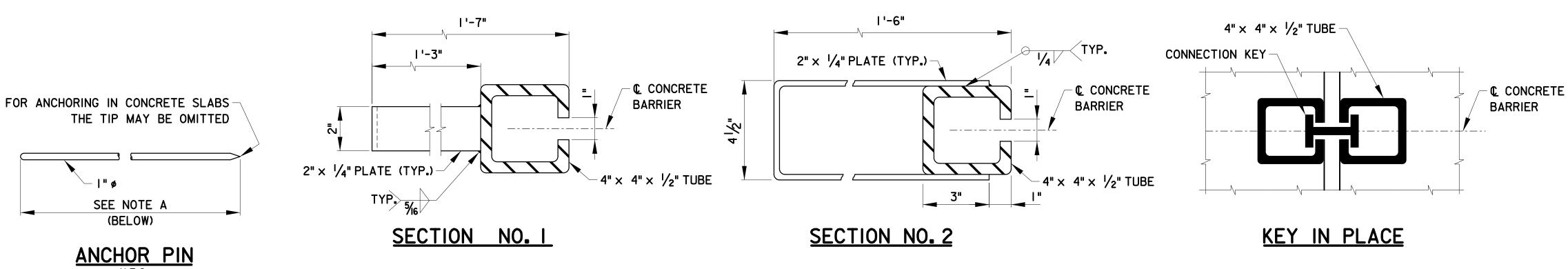


SECTION A-A SECTION D-D PLAN-ANCHOR RECESS/POCKET **ELEVATION** **CONNECTION KEY**



NOTE A:

THE LENGTH OF THE ANCHOR PINS SHALL BE SUCH THAT THE FOLLOWING MINIMUM EMBEDMENT LENGTHS ARE OBTAINED:

(a) INTO MIN. 6" THICK PORTLAND CEMENT CONCRETE PAVEMENTS AND BRIDGE DECKS 5 INCHES EMBEDMENT

(b) INTO FLEXIBLE PAVEMENT 1'-6"

"X" DISTANCE FROM END OF BARRIER TO 4B5 BAR

(c) INTO UNPAVED AREA 2'-6"

WHEN ANCHOR PINS ARE IN PLACE, THEY SHALL NOT PROJECT ABOVE THE PLANE OF THE CONCRETE SURFACE OF THE BARRIER.

HOLES IN BRIDGE DECKS SHALL BE 1/4" & MAXIMUM AND MADE WITH A CORE DRILL OR ANY OTHER APPROVED ROTARY DRILLING DEVICE THAT DOES NOT IMPART AN IMPACT FORCE. HOLES SHALL BE BLOWN CLEAN PRIOR TO PLACEMENT OF THE PINS.

BARS LIST (EACH BARRIER SECTION)								
MARK	SIZE	NUMBER IN EACH SECTION	LENGTH	TYPE	Α	В	С	LOCATION
4B I	4	6	4'- "	1	5"	26"	2"	STIRRUPS
4B4	4	SEE NOTE 13	3'-1"	Ш	151/2"	4"		STIRRUPS
4B5	4	SEE NOTE 13	4'- "	1	5"	26"	2'	STIRRUPS
6B2	6	2	SEE NOTE 13	STR.				LONGITUDINAL (TOP) NORMAL SECTION
6B3	6	2	SEE NOTE 13	STR.				LONGITUDINAL (BOTTOM) NORMAL SECTION
6B4	6	2	l '-2"	STR.				TRANSVERSE (BOTTOM) NORMAL SECTION
6B5	6	2	0'-6"	STR.				TRANSVERSE (TOP) NORMAL SECTION

MINIMUM

CLEAR AREA

39"

33"

12"

BARRIER SECTION

*FULLY PINNED - PINS IN EVERY ANCHOR PIN RECESS ON BOTH SIDES OF BARRIER

			_				
					TABLE OF JOINT AND ANCHORAG	E TREATMEI	NTS
OF V	ARIABLE	BARS		IOINIT		РССВ	
MARK	"X"	NO. EACH SECTION			TREATMENT	ALTERNATE DESIGN	CL
4B4	N.A.	9		CONNECTION KEY AND BARRIER		 	
4B5	6'-11"	2		A		A,B	
4B4	N.A.	8			 		
4B5	6'-5"	2					
4B4	N.A.	7	В	•	A,B		
4B5	5'-11"	2			·		
4B4	N.A.	6				+	
4B5	7'-0"						
4B4	N.A.	5		С	•	A,B	
4B5	6'-0"			•			
4B4	N.A.	4					
4B5	5'-0"	I					
4B4	N.A.	3		D		В	
4B5		0	1		RARRIER SECTION		
	MARK 4B4 4B5	MARK "X" 4B4 N.A. 4B5 6'-11" 4B4 N.A. 4B5 6'-5" 4B4 N.A. 4B5 5'-11" 4B4 N.A. 4B5 7'-0" 4B4 N.A. 4B5 6'-0" 4B4 N.A. 4B5 5'-0" 4B4 N.A.	4B4 N.A. 9 4B5 6'-11" 2 4B4 N.A. 8 4B5 6'-5" 2 4B4 N.A. 7 4B5 5'-11" 2 4B4 N.A. 6 4B5 7'-0" 1 4B4 N.A. 5 4B5 6'-0" 1 4B4 N.A. 4 4B5 5'-0" 1 4B4 N.A. 3	MARK "X" NO. EACH SECTION 4B4 N.A. 9 4B5 6'-11" 2 4B4 N.A. 8 4B5 6'-5" 2 4B4 N.A. 7 4B5 5'-11" 2 4B4 N.A. 6 4B5 7'-0" 1 4B4 N.A. 5 4B5 6'-0" 1 4B4 N.A. 4 4B5 5'-0" 1 4B4 N.A. 3	MARK "X" NO. EACH SECTION 4B4 N.A. 9 4B5 6'-II" 2 4B4 N.A. 8 4B5 6'-5" 2 4B4 N.A. 7 4B5 5'-II" 2 4B4 N.A. 6 4B5 7'-O" I 4B4 N.A. 5 4B5 6'-O" I 4B4 N.A. 4 4B5 5'-O" I 4B4 N.A. 3	OF VARIABLE BARS MARK "X" NO. EACH SECTION 4B4 N.A. 9 4B5 6'-II" 2 4B4 N.A. 8 4B5 6'-5" 2 4B4 N.A. 7 4B5 5'-II" 2 4B4 N.A. 6 4B5 7'-0" I 4B4 N.A. 5 4B5 6'-0" I 4B4 N.A. 4 4B5 5'-0" I 4B4 N.A. 3 4B5 5'-0" I 4B5 5'-0" I <t< td=""><td>MARK "X" NO. EACH SECTION JOINT CLASS TREATMENT ALTERNATE DESIGN 4B4 N.A. 9 4B5 6'-II" 2 A CONNECTION KEY AND BARRIER END SECTIONS FULLY PINNED* A,B 4B4 N.A. 8 CONNECTION KEY AND NON-SHRINK GROUT AT EVERY JOINT; 6" x 6" STEEL BOX BEAM SPANNING EACH JOINT; AND BARRIER END SECTIONS FULLY PINNED* A,B 4B5 7'-0" I AT EVERY JOINT; TRAFFIC SIDE OF ALL BARRIER SECTIONS PINNED; AND BARRIER SECTIONS PINNED; A,B 4B5 6'-0" I AND BARRIER END SECTIONS FULLY PINNED* A,B 4B5 5'-0" I AT EVERY JOINT; TRAFFIC SIDE OF ALL BARRIER END SECTIONS FULLY PINNED* A,B 4B5 5'-0" I AT EVERY JOINT AND BOLT EVERY AND NON-SHRINK GROUT AT EVERY JOINT AND BOLT EVERY AND CONNECTION EVERY AND CONNECTION</td></t<>	MARK "X" NO. EACH SECTION JOINT CLASS TREATMENT ALTERNATE DESIGN 4B4 N.A. 9 4B5 6'-II" 2 A CONNECTION KEY AND BARRIER END SECTIONS FULLY PINNED* A,B 4B4 N.A. 8 CONNECTION KEY AND NON-SHRINK GROUT AT EVERY JOINT; 6" x 6" STEEL BOX BEAM SPANNING EACH JOINT; AND BARRIER END SECTIONS FULLY PINNED* A,B 4B5 7'-0" I AT EVERY JOINT; TRAFFIC SIDE OF ALL BARRIER SECTIONS PINNED; AND BARRIER SECTIONS PINNED; A,B 4B5 6'-0" I AND BARRIER END SECTIONS FULLY PINNED* A,B 4B5 5'-0" I AT EVERY JOINT; TRAFFIC SIDE OF ALL BARRIER END SECTIONS FULLY PINNED* A,B 4B5 5'-0" I AT EVERY JOINT AND BOLT EVERY AND NON-SHRINK GROUT AT EVERY JOINT AND BOLT EVERY AND CONNECTION

PRECAST CONCRETE CONSTRUCTION BARRIER JOIN - ANCHOR AND CONNECTION DETAILS

GENERAL NOTES. CONT'D:

19. AFTER REMOVAL OF THE BARRIER, THE HOLES IN THE SURFACE ON WHICH THE BARRIER SAT WHICH WERE USED TO ANCHOR THE SYSTEM, SHALL BE FILLED. THE ONLY EXCEPTION IS WHEN THE HOLES ARE IN AN AREA WHICH IS TO BE REMOVED. HOLES IN FLEXIBLE PAVEMENT, OR UNPAVED AREAS SHALL BE FILLED AS DIRECTED. HOLES IN PORTLAND CEMENT CONCRETE PAVEMENTS, OR STRUCTURAL DECKS, SHALL BE FILLED WITH NON-SHRINK GROUT MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 905.12 AND 905.14, EXCEPT THAT IN LATEX MODIFIED CONCRETE BRIDGE DECK, A COMPATIBLE NON-SHRINK GROUT MATERIAL SHALL BE USED. FOR HOLES WHERE ADHESIVE ANCHORS WERE PLACED, THE HOLES SHALL BE FILLED WITH THE APPROVED ADHESIVE.

TYPE I BAR

TYPE II BAR

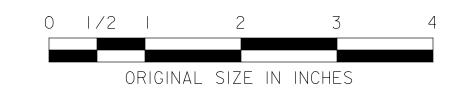
20. WORK THIS DRAWING WITH STANDARD DRAWINGS TP-23 AND TP-23A.

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0	REISSUED DRAWING	09/23	
REV.	DESCRIPTION	DATE	

GENERAL NOTES:

- STEEL PLATE SHALL BE ASTM A36, ASTM A588, OR A572 GRADE 50.
- 2. REINFORCING BARS SHALL BE ASTM A615, GRADE 60.
- 3. CONCRETE SHALL BE WHITE OR GREY CLASS B (4000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS)
- 4. CONCRETE CLEAR COVER FOR REINFORCING BARS SHALL BE $1\frac{1}{2}$ " MIN.
- 5. A MINIMUM OF TWO (2) RECESSED LIFTING DEVICES SHALL BE USED ON EACH SECTION. EACH LIFTING DEVICE SHALL HAVE A MINIMUM CAPACITY OF 6 TON.
- 6. TUBE STEEL SHALL BE ASTM A500, GRADE B OR C.
- ANCHOR PINS SHALL BE I" & ASTM A36. ANCHOR BOLTS SHALL BE I" & ASTM F1554 GRADE 36.
- 8. ANCHOR PINS ARE NOT REQUIRED IN EVERY BARRIER SECTION. SEE TABLE OF JOINT AND ANCHORAGE TREATMENTS.
- 9. ALL BARRIER END SECTIONS SHALL BE PINNED UNLESS OTHERWISE NOTED.
- IO. $2\frac{5}{8}$ " X $5\frac{1}{2}$ " DRAINAGE POCKETS TWO (2) REQUIRED IN SECTIONS 12' OR GREATER, ONE (1) REQUIRED IN 8' & 10' SECTIONS.
- II. AFTER A BARRIER SECTION HAS BEEN PLACED AND THE CONNECTION KEY INSERTED. REMOVE ANY SLACK IN THE JOINT BY PULLING THE SECTION IN A DIRECTION PARALLEL TO ITS LONGITUDINAL AXIS.
- 12. THE PRECAST CONCRETE CONSTRUCTION BARRIER SHALL BE CAST IN STEEL FORMS.
- 13. THE PRECAST CONCRETE CONSTRUCTION BARRIER SHALL TYPICALLY BE FURNISHED IN 20'-0" SECTIONS. OTHER LENGTHS MAY BE USED TO MEET FIELD CONDITIONS. THE AND PLACEMENT OF THE 4B4 AND 4B5 BARS WILL VARY WITH THE LENGTH OF THE BARRIER SECTION AS SHOWN ON THE TABLE OF VARIABLE BARS, THE 6B2 AND 6B3 BARS SHALL BE 10 INCHES SHORTER THAN THE NOMINAL LENGTH OF THE BARRIER SECTION.
- 14. REINFORCING SHOWN IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING NECESSARY FOR HANDLING SHALL BE THE OPTION AND RESPONSIBILITY OF THE CONTRACTOR.
- 15. WELDING AND FABRICATION OF STEEL STRUCTURES SHALL BE IN ACCORDANCE WITH SECTIONS I THRU 6 OF THE ANSI/AASHTO/AWS DI.5 BRIDGE WELDING CODE AND SECTION 10 OF THE ANSI/AWS DI.I STRUCTURAL WELDING CODE WHICHEVER IS MORE STRICT WHEN THERE IS CONFLICT. SURFACES TO BE WELDED SHALL BE FREE OF SCALE, SLAG, RUST, MOISTURE, GREASE, OR ANY OTHER MATERIAL THAT WILL PREVENT PROPER WELDING OR PRODUCE OBJECTIONAL FUMES. WELDING SHALL BE SHIELDED METAL ARC WELDING USING PROPERLY DRIED $\frac{5}{32}$ " ø E7018 ELECTRODES.
- 16. PRECAST CONCRETE CONSTRUCTION BARRIER (PCCB) ALTERNATE DESIGN A OR B MAY BE USED INTERCHANGEABLY IN ANY LOCATION WHERE JOINT CLASS A.B. OR C HAS BEEN SPECIFIED, ALTERNATE DESIGN B MUST BE USED WHERE JOINT CLASS D IS SPECIFIED.
- 17. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 18. PRECAST CONCRETE CONSTRUCTION BARRIER SHALL NOT BE INSTALLED ON SURFACES STEEPER THAN IOH: IV.

MASH TL-3



NEW JERSEY TURNPIKE AUTHORITY NEW JERSEY TURNPIKE GARDEN STATE PARKWAY

STANDARD DRAWINGS

PRECAST CONCRETE CONSTRUCTION BARRIER - 1

OFFICE OF THE CHIEF ENGINEER NEW JERSEY TURNPIKE AUTHORITY

STANDARD DRAWING

OF

CONTRACT NO. SHEET NO.