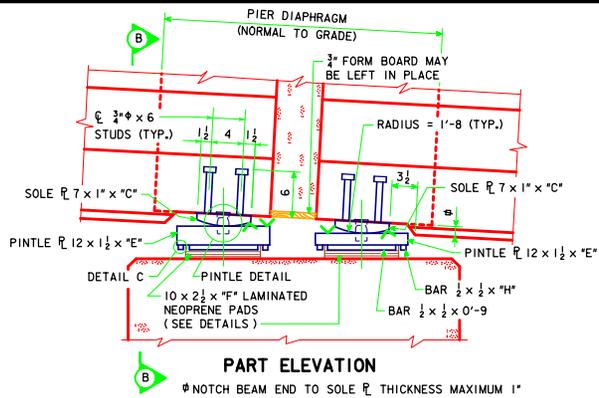CORRECTION 09-12 - REFERENCE TO ASTM A852 WAS DELETED.
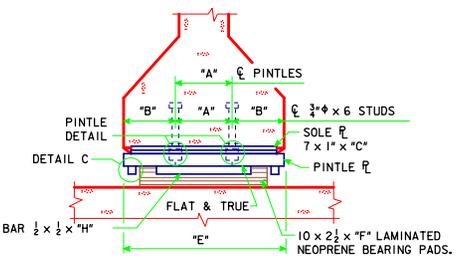
PART ELEVATION (left)
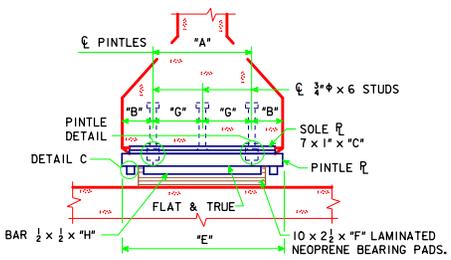
PIER DIAPHRAGM (NORMAL TO GRADE)

¾" FORM BOARD MAY BE LEFT IN PLACE

¢ ¾"φ × 6 STUDS (TYP.)

RADIUS = 1'-8 (TYP.)

SOLE ₽ 7 × 1" × "C"

SOLE ₽ 7 × 1" × "C"

PINTLE ₽ 12 × 1½ × "E"

PINTLE ₽ 12 × 1½ × "E"

DETAIL C   PINTLE DETAIL

10 × 2½ × "F" LAMINATED NEOPRENE PADS (SEE DETAILS)

BAR ½ × ½ × "H"

BAR ½ × ½ × 0'-9

PART ELEVATION

φ NOTCH BEAM END TO SOLE ₽ THICKNESS MAXIMUM 1"

LAMINATED NEOPRENE PADS

MATERIAL FOR NEOPRENE PADS TO BE OF 50 DUROMETER NEOPRENE.

"F"

(TYP.)

¼" STEEL ₽, ASTM A1011 ₽'S REQUIRED, 9¾ × "F"-¼"
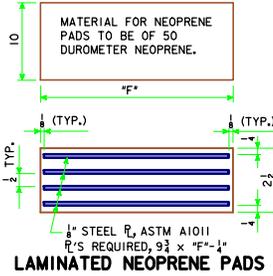
LAMINATED NEOPRENE PADS

SECTION B-B FOR A & B BEAMS

¢ PINTLES "A"

"B" "A" "B"

¢ ¾"φ × 6 STUDS

PINTLE DETAIL

SOLE ₽ 7 × 1" × "C"

DETAIL C   PINTLE ₽

FLAT & TRUE

BAR ½ × ½ × "H"   "E"

10 × 2½ × "F" LAMINATED NEOPRENE BEARING PADS.

SECTION B-B FOR A & B BEAMS
(DIAPHRAGM CONCRETE NOT SHOWN)

SECTION B-B FOR C BEAMS

¢ PINTLES "A"

"B" "G" "G" "B"

¢ ¾"φ × 6 STUDS

PINTLE DETAIL

SOLE ₽ 7 × 1" × "C"

DETAIL C   PINTLE ₽

FLAT & TRUE

BAR ½ × ½ × "H"   "E"

10 × 2½ × "F" LAMINATED NEOPRENE BEARING PADS.

SECTION B-B FOR C BEAMS
(DIAPHRAGM CONCRETE NOT SHOWN)

DETAIL C

½ × ½ KEEPER BAR

PINTLE ₽

LAMINATED PAD

DETAIL C

PINTLE DETAIL

1⅝"φ

SEAL

BAR 1¾ × ⅛ × 1¾

EXTENSION

R= 1¾

1½"φ

DRIVING FIT INTO PINTLE PLATE

¼"φ DRAIN HOLE
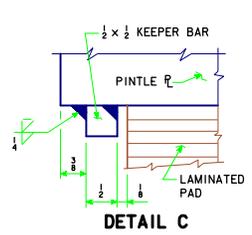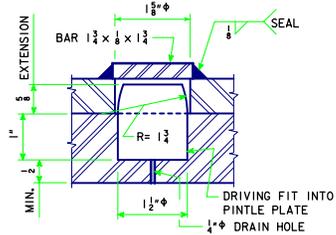
PINTLE DETAIL

PLAN OF PINTLE PLATE

1½"φ PINTLES (SEE DETAIL)

BAR ½ × ½ × 0'-9

TYP. ¾   ½

GALVANIZED PINTLE ₽ 12 × 1½ (MIN.) × "E"

BAR ½ × ½ × "H"

4½ 4½   ¢ PINTLES

9

1'-0

PLAN OF PINTLE PLATE

PART ELEVATION (right)

PIER DIAPHRAGM (NORMAL TO GRADE)

9 × VAR. × "F" + ½ NEOPRENE PADS (SEE DETAILS)

PART ELEVATION

PLAN OF NEOPRENE PAD

MATERIAL FOR NEOPRENE PADS TO BE OF 70 DUROMETER NEOPRENE.

"F" + ½

PLAN OF NEOPRENE PAD

SECTION A-A

1" - "D"

1" + "D"

9

SECTION A-A

SLOPE	"D"
SLOPE ≤ 1.4%	0"
1.4% < SLOPE ≤ 4.2%	⅛"
4.2% < SLOPE ≤ 5.0%	¼"

SLOPE CALCULATION FORMULA

$$SLOPE_{SPAN\ 1} = 100\% \cdot \frac{P/G\ ELEV.\ @\ NEAR\ ABUT. - P/G\ ELEV.\ @\ PIER\ 1}{SPAN\ 1\ LENGTH}$$

$$SLOPE_{SPAN\ 2} = 100\% \cdot \frac{P/G\ ELEV.\ @\ PIER\ 1 - P/G\ ELEV.\ @\ PIER\ 2}{SPAN\ 2\ LENGTH}$$

$$SLOPE_{SPAN\ 3} = 100\% \cdot \frac{P/G\ ELEV.\ @\ PIER\ 2 - P/G\ ELEV.\ @\ FAR\ ABUT.}{SPAN\ 3\ LENGTH}$$

SLOPE CALCULATION FORMULA

FIXED PIER BEARING NOTES:

IF CALCULATED SLOPE FOR A GIVEN SPAN EXCEEDS 1.4%, THE NEOPRENE BEARING PADS AT THE FIXED PIER FOR THAT SPAN SHALL BE TAPERED. REFER TO TABLE FOR DIMENSIONS OF TAPERED PADS.

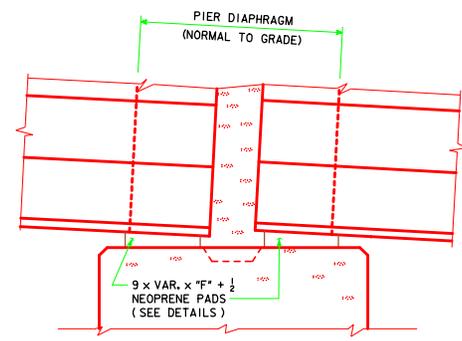COST OF NEOPRENE PADS SHALL BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".
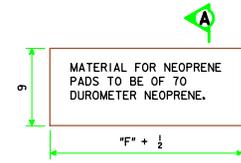
FIXED PIER

EXPANSION PIER BEARING NOTES:

SURFACES MARKED "V" SHALL BE FINISHED ANSI 250.

PINTLE PLATES ARE A PART OF THE SUPERSTRUCTURE "STRUCTURAL STEEL QUANTITY".

COSTS OF ANCHORED CURVED SOLE PLATES AND NEOPRENE PADS ARE TO BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

THE SOLE PLATES AND PINTLE PLATES SHALL BE GALVANIZED. ALL WELDING SHALL BE COMPLETED PRIOR TO GALVANIZING. THE SURFACE OF THE PINTLE PLATE IN CONTACT WITH THE LAMINATED NEOPRENE PADS SHALL BE FREE OF PROJECTIONS DUE TO THE GALVANIZING.

SOLE PLATES ARE TO BE SET IN FORMS WHEN BEAMS ARE CAST AND THE BOTTOM OF BEAMS FORMED OUT AS SHOWN TO EXCLUDE CONCRETE.

SOLE PLATES SHALL COMPLY WITH ONE OF THE FOLLOWING :
ASTM A 514 GRADE B
ASTM A 709 GRADE HPS 70W

EXPANSION PIER

VARIABLE DIMENSIONS

	BEAM BOTTOM FLANGE WIDTH	
	A & B BEAMS 1'-5	C BEAMS 1'-8
"A"	0'-6	1'-0
"B"	0'-5½	0'-4
"C"	1'-3½	1'-6½
"E"	1'-5	1'-8
"F"	1'-3	1'-6
"G"	—	0'-6
"H"	0'-11	1'-2