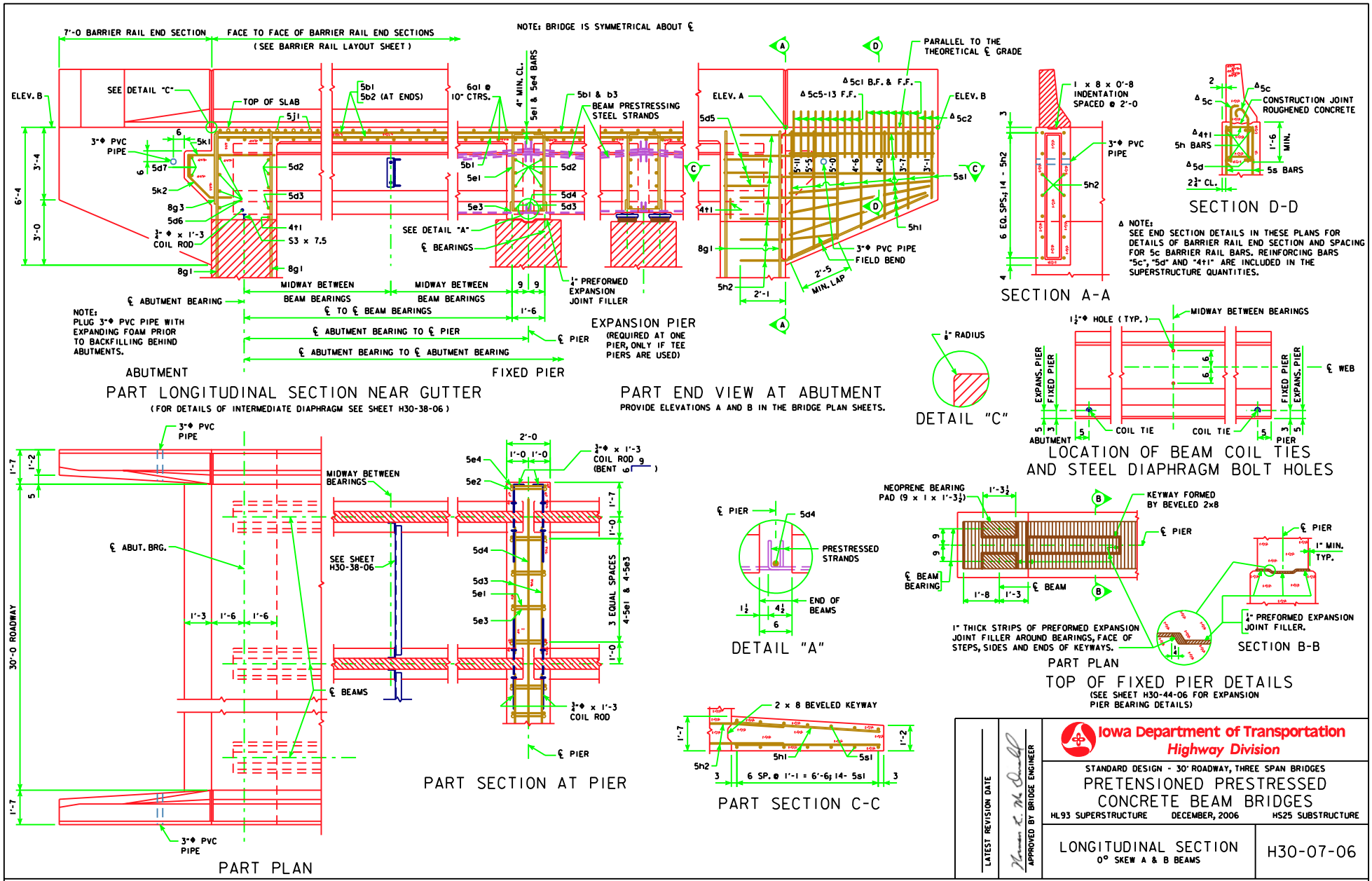
7'-0 BARRIER RAIL END SECTION
FACE TO FACE OF BARRIER RAIL END SECTIONS
(SEE BARRIER RAIL LAYOUT SHEET)
NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
ELEV. B
SEE DETAIL "C"
TOP OF SLAB
5j1
5b1
5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
3"Φ PVC PIPE
5k1
5d7
5k2
5d2
5d3
8g3
5d6
¾"Φ x 1'-3 COIL ROD
4†1
S3 x 7.5
8g1
5e1
5e3
5d4
SEE DETAIL "A"
℄ BEARINGS
1/4" PREFORMED EXPANSION JOINT FILLER
6'-4
3'-4
3'-0
MIDWAY BETWEEN BEAM BEARINGS
℄ ABUTMENT BEARING
℄ TO ℄ BEAM BEARINGS
℄ ABUTMENT BEARING TO ℄ PIER
℄ ABUTMENT BEARING TO ℄ ABUTMENT BEARING
℄ PIER
1'-6
NOTE:
PLUG 3"Φ PVC PIPE WITH EXPANDING FOAM PRIOR TO BACKFILLING BEHIND ABUTMENTS.
ABUTMENT
FIXED PIER
PART LONGITUDINAL SECTION NEAR GUTTER
(FOR DETAILS OF INTERMEDIATE DIAPHRAGM SEE SHEET H30-38-06)
PARALLEL TO THE THEORETICAL ℄ GRADE
Δ 5c1 B.F. & F.F.
Δ 5c5-13 F.F.
ELEV. A
ELEV. B
Δ 5c2
5d5
5s1
5h1
4†1
8g1
5h2
2'-1
2'-5 MIN. LAP
3"Φ PVC PIPE FIELD BEND
EXPANSION PIER
(REQUIRED AT ONE PIER, ONLY IF TEE PIERS ARE USED)
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A AND B IN THE BRIDGE PLAN SHEETS.
1 x 8 x 0'-8 INDENTATION SPACED @ 2'-0
3"Φ PVC PIPE
5h2
6 EQ. SPS.; 14 - 5h2
SECTION A-A
Δ 5c
CONSTRUCTION JOINT ROUGHENED CONCRETE
Δ 4†1
5h BARS
Δ 5d
5s BARS
2¾" CL.
1'-6 MIN.
SECTION D-D
Δ NOTE:
SEE END SECTION DETAILS IN THESE PLANS FOR DETAILS OF BARRIER RAIL END SECTION AND SPACING FOR 5c BARRIER RAIL BARS. REINFORCING BARS "5c", "5d" AND "4†1" ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES.
1/8" RADIUS
DETAIL "C"
1½"Φ HOLE (TYP.)
MIDWAY BETWEEN BEARINGS
EXPANS. PIER
FIXED PIER
℄ WEB
COIL TIE
ABUTMENT
PIER
LOCATION OF BEAM COIL TIES AND STEEL DIAPHRAGM BOLT HOLES
3"Φ PVC PIPE
30'-0 ROADWAY
℄ ABUT. BRG.
MIDWAY BETWEEN BEARINGS
SEE SHEET H30-38-06
℄ BEAMS
1'-3
1'-6
1'-6
3"Φ PVC PIPE
PART PLAN
2'-0
1'-0 1'-0
¾"Φ x 1'-3 COIL ROD (BENT 6)
5e4
5e2
5d4
5d3
5e1
5e3
3 EQUAL SPACES 4-5e3
¾"Φ x 1'-3 COIL ROD
℄ PIER
PART SECTION AT PIER
℄ PIER
5d4
PRESTRESSED STRANDS
END OF BEAMS
1½
4½
6
DETAIL "A"
2 x 8 BEVELED KEYWAY
5h2
5h1
5s1
6 SP. @ 1'-1 = 6'-6; 14- 5s1
PART SECTION C-C
NEOPRENE BEARING PAD (9 x 1 x 1'-3½)
1'-3½
KEYWAY FORMED BY BEVELED 2x8
℄ PIER
℄ BEAM BEARING
℄ BEAM
1'-8
1'-3
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
PART PLAN
℄ PIER
1" MIN. TYP.
¼" PREFORMED EXPANSION JOINT FILLER.
SECTION B-B
TOP OF FIXED PIER DETAILS
(SEE SHEET H30-44-06 FOR EXPANSION PIER BEARING DETAILS)
LATEST REVISION DATE
APPROVED BY BRIDGE ENGINEER
Iowa Department of Transportation
Highway Division
STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
HL93 SUPERSTRUCTURE
DECEMBER, 2006
HS25 SUBSTRUCTURE
LONGITUDINAL SECTION
0° SKEW A & B BEAMS
H30-07-06