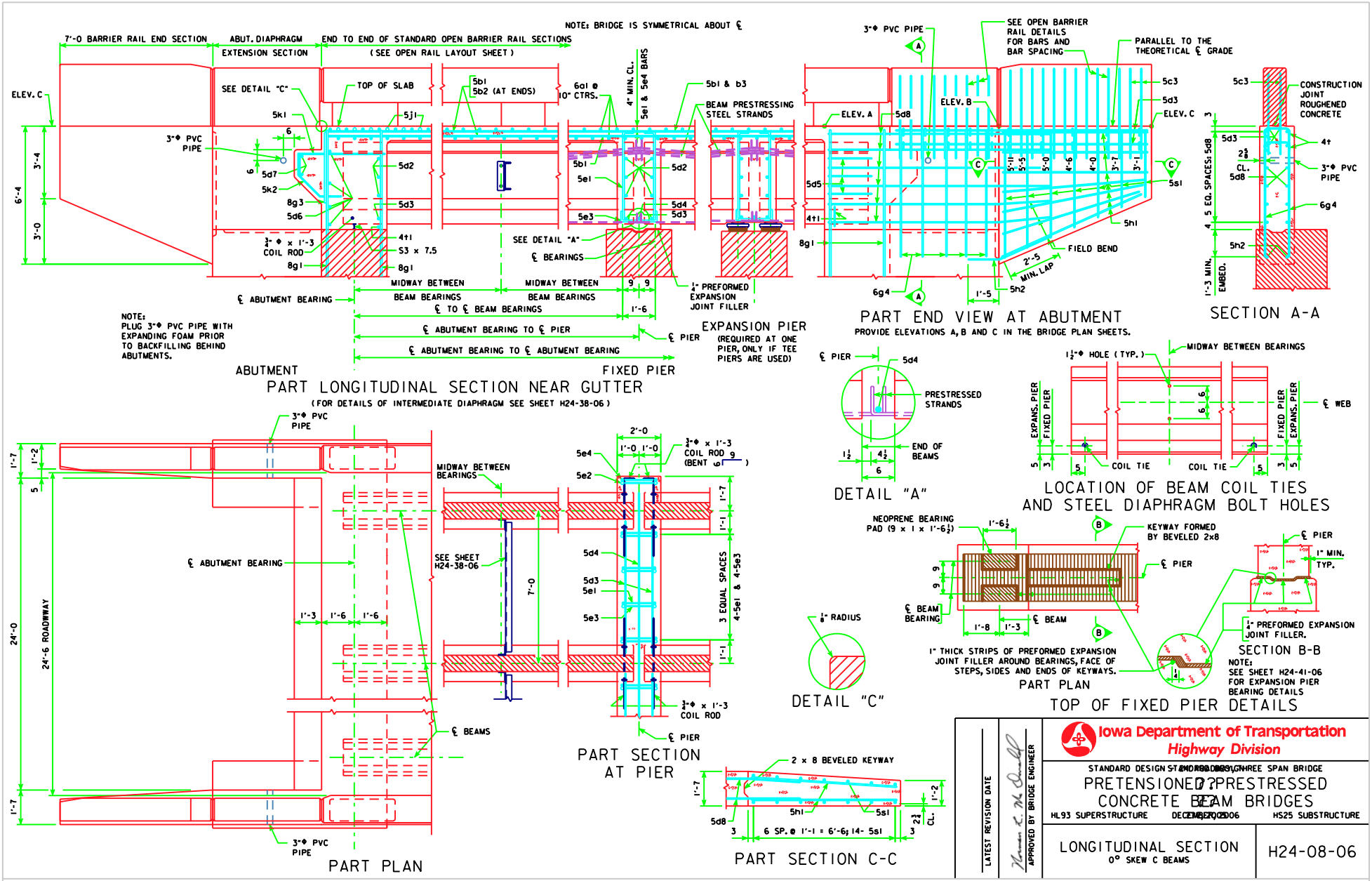
NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
7'-0 BARRIER RAIL END SECTION
ABUT. DIAPHRAGM EXTENSION SECTION
END TO END OF STANDARD OPEN BARRIER RAIL SECTIONS (SEE OPEN RAIL LAYOUT SHEET)
ELEV. C
SEE DETAIL "C"
TOP OF SLAB
5b1
5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
3"Φ PVC PIPE
SEE OPEN BARRIER RAIL DETAILS FOR BARS AND BAR SPACING
PARALLEL TO THE THEORETICAL ℄ GRADE
ELEV. A
ELEV. B
ELEV. C
5c3
5d3
5s1
5h1
5h2
6g4
FIELD BEND
2'-5 MIN. LAP
1'-5
5d8
5d5
4t1
8g1
5k1
5j1
5d7
5k2
8g3
5d6
5d2
5d3
4t1
S3 x 7.5
8g1
3/4"Φ x 1'-3 COIL ROD
SEE DETAIL "A"
℄ BEARINGS
5b1
5e1
5e3
5d4
5d3
1/4" PREFORMED EXPANSION JOINT FILLER
MIDWAY BETWEEN BEAM BEARINGS
℄ ABUTMENT BEARING
℄ TO ℄ BEAM BEARINGS
℄ ABUTMENT BEARING TO ℄ PIER
℄ ABUTMENT BEARING TO ℄ ABUTMENT BEARING
℄ PIER
NOTE: PLUG 3"Φ PVC PIPE WITH EXPANDING FOAM PRIOR TO BACKFILLING BEHIND ABUTMENTS.
ABUTMENT
FIXED PIER
EXPANSION PIER (REQUIRED AT ONE PIER, ONLY IF TEE PIERS ARE USED)
PART LONGITUDINAL SECTION NEAR GUTTER
(FOR DETAILS OF INTERMEDIATE DIAPHRAGM SEE SHEET H24-38-06)
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A, B AND C IN THE BRIDGE PLAN SHEETS.
CONSTRUCTION JOINT ROUGHENED CONCRETE
4 5 EQ. SPACES: 5d8
1'-3 MIN. EMBED.
SECTION A-A
℄ PIER
5d4
PRESTRESSED STRANDS
END OF BEAMS
DETAIL "A"
1 1/2"Φ HOLE (TYP.)
MIDWAY BETWEEN BEARINGS
EXPANS. PIER
FIXED PIER
℄ WEB
COIL TIE
LOCATION OF BEAM COIL TIES AND STEEL DIAPHRAGM BOLT HOLES
3"Φ PVC PIPE
℄ ABUTMENT BEARING
SEE SHEET H24-38-06
MIDWAY BETWEEN BEARINGS
3/4"Φ x 1'-3 COIL ROD (BENT)
3 EQUAL SPACES 4-5e1 & 4-5e3
3/4"Φ x 1'-3 COIL ROD
℄ BEAMS
℄ PIER
24'-0
24'-6 ROADWAY
PART PLAN
PART SECTION AT PIER
1/8" RADIUS
DETAIL "C"
NEOPRENE BEARING PAD (9 x 1 x 1'-6 1/2)
KEYWAY FORMED BY BEVELED 2x8
℄ PIER
℄ BEAM BEARING
℄ BEAM
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
PART PLAN
1" MIN. TYP.
1/4" PREFORMED EXPANSION JOINT FILLER.
SECTION B-B
NOTE: SEE SHEET H24-41-06 FOR EXPANSION PIER BEARING DETAILS
TOP OF FIXED PIER DETAILS
2 x 8 BEVELED KEYWAY
6 SP. @ 1'-1 = 6'-6; 14- 5s1
PART SECTION C-C
LATEST REVISION DATE
APPROVED BY BRIDGE ENGINEER
Iowa Department of Transportation
Highway Division
STANDARD DESIGN STANDARD DESIGN
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
HL93 SUPERSTRUCTURE
HS25 SUBSTRUCTURE
LONGITUDINAL SECTION
0° SKEW C BEAMS
H24-08-06