NOTES:
1. ALL TIES SMALL WAVE IDENTIFICATION COLOR CODE PAINTED ON TIE CASING OF JOINT AREA
2. RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
3. GUARD RAILS ARE RAISED 1" AND FORM A 1 3/8" FLANGEWAY
4. COORDINATE SWITCH MACHINE AND MACHINE PLATE (NE) WITH H/D COTTONES
5. ALL TIE LENGTHS SMALL WAVE 1.44" FROM THE END TO RAIL CENTERLINE EXCEPT AS NOTED AND 1-80 CANNED TIES
6. TIES AT TIEectomy WITH DOUBLE COIL SPRING WASHER IN PLACE

TURNOUT DATA

SWITCH TIES

PIECE ANGLE

13°-1/8" FOOT LENGTH 35 5/16"

SLOT LENGTH 35 5/16"

CONSISTENT RAIL 950/16"

TOTAL LENGTH 60.5"

TIE COUNT 125 PER SIDE

H/D COTTONES 2 3/4" FLANGEWAY 7/8" TIES PER SIDE

DESIGN RAIL VELOCITY 60 MPH

SPECIAL TRACKWORK

NO 10 LH TURNOUT WITH 90M PROG AND HST SWITCH MACHINE ON TURNOUT SIDE

PENINSULA CORRIDOR JOINT POWERS BOARD

SPECIAL TRACKWORK

NO 10 TURNOUT

Proj. No. 20503

05.10.11

SPECIAL TRACKWORK

Inc. No. 20503
### Table of Material

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<tr>
<th>REV</th>
<th>QTY</th>
<th>DESCRIPTION</th>
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<td>4</td>
<td>HOLE 3/8&quot; OR 1 1/8&quot; SQUARE HEAD DOP 1 1/2&quot; OR 5</td>
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<td>9</td>
<td>2</td>
<td>BOLT, 1/4&quot;-20 x 3 3/4&quot; LONG, TIN, SQUARE HEAD, DOP 3 7/8&quot; OR 5</td>
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<tr>
<td>10</td>
<td>10</td>
<td>COTTER PIN, 1/16&quot; OR 1/8&quot;</td>
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### 21'-5" Overall Length

1. ROUND EDGES OF SWITCH STEPS AT CONTACT AREAS, 1/2" R
2. REFILL ALL BOLT HOLES
3. WRITE CALTRAIN RD NUMBER ON VERT OR PARR WITH WATERPROOF MARKER OR PAINT

### Side View - Vertical Bending Detail

- Floating Heel (Other Side)

---

**NOTES:**

- Peninsular Corridor Joint Powers Board
- Special Trackwork
- No 10 Turnout
- Switch Point Assembly for LH Turnout
- LH Straight 21'-5" Samson

---

**Caltrain**

- Special Trackwork
- No 10 Turnout
- Switch Point Assembly for LH Turnout
- LH Straight 21'-5" Samson

---

**Peninsula Corridor Joint Powers Board**

- Special Trackwork
- No 10 Turnout
- Switch Point Assembly for LH Turnout
- LH Straight 21'-5" Samson

---

**Caltrain**

- Special Trackwork
- No 10 Turnout
- Switch Point Assembly for LH Turnout
- LH Straight 21'-5" Samson
NOTES:
1. ROUND EDGES OF SWITCH STEPS AT CONTACT AREAS, 1/2" R
2. REMOVAL ALL BOLT HOLE
3. WRITE CALTRAIN 50 NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT
NOTES:
1. ROUND EDGES OF SWITCH STRIPS AT CONTACT AREAS 1/2" R
2. DEVEL ALL BOLT Holes
3. WRITE CALTRAIN BD NUMBER ON HEEL OR PALE WITH WATERPROOF MARKER ON PAINT
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<tr>
<td>3</td>
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<td>BOLT, 1/2&quot; DIA X 4' LONG, SQUARE HEAD DRILLED @ 3 3/16&quot; GRADE 5</td>
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<tr>
<td>4</td>
<td>12</td>
<td>NUT, 3/4&quot; UNIHEX, GRADE 5</td>
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<td>5</td>
<td>13</td>
<td>NUT, 1&quot; UNIHEX, GRADE 5</td>
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<td>6</td>
<td>14</td>
<td>SPRING WASHER, 3/4&quot; IDA</td>
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<td>7</td>
<td>15</td>
<td>SPRING WASHER, 1&quot; IDA</td>
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<td>8</td>
<td>16</td>
<td>COPPER PIN, 3/16&quot; DIA X 2 3/4&quot; LONG</td>
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<td>9</td>
<td>17</td>
<td>COPPER PIN, 1/4&quot; DIA X 2 3/4&quot; LONG</td>
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**SIDE VIEW – VERTICAL BENDING DETAIL**

**NOTES:**
1. ROUND EDGES OF SWITCH STEPS AT CONTACT AREAS, 1/2" R
2. BEND ALL BOLT HEADS
3. WHITE GALVANIZE DR NUMBER ON HEAD OF RAIL WITH WATERPROOF MARKER OR PAINT
NOTES:

1. ALL BURNING METHODS PROMULGATED
2. ALL DECK RAILINGS SHALL BE BURNED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF RAIL WITH A WHITE LINE USING WATERPROOF MARKER ON PART
4. WRITE CALTRAIN 59 NUMBER ON TOP OF RAIL WITH WATERPROOF MARKER ON PART
RAIL END / HOLE BEVELING DETAILS

1. ALL BOLTS WHEELS SHALL BE BEVELED PER DETAIL.
2. POINT OF BURLINGTON SHALL BE MARKED ON GAUGE SIDE OF PART.
3. BOLT HEADS WHEELS SHALL BE MARKED WITH A WATERPROOF MARKER OR PAINT.
4. WRITE CALTRAIN #10 ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT.
RAIL END / HOLE BEVELING DETAILS
RAIL HEAD ONLY - NOT BASE

A PARTIAL SECTION
SCALE 1/8'' = 1'-0"

NOTES:
1. ALL TURNING MACHINES PROVIDED.
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL.
3. LIGHTNING HOLE SHALL BE MADE ON GAUGE SIDE OF RAIL WITH A HOLE IN Diam 0.062 IN. WATERPROOF WAXED OR PAINT.
4. HEAT TREATED OR HARDENED ON RAIL OR WELD OF RAIL WITH WATERPROOF WAXED OR PAINT.
TIE "0" BLOCKOUT DETAIL

1-80 CANNED TIE

PLACING 1/30 TIE THICK TIE OUTER RAIL SEALS ACCORDINGLY. ALL RAIL SEALS ARE FLAT

NOTES:
1. TIES SHALL INCLUDE TIE 3, 5, 4, 6 THROUGH 54. THREE 1-80 CANNED TIES, PLATE TIE PADS, AND PIV INSERTS
2. TIE LENGTHS ARE DETERMINED BY ADDING 1-1/2" 7/8" FROM RAIL GAUGE LINE OR (1-1/8" FROM RAIL CENTRILINE) PER SIDE AT THE CENTERLINE OF EACH TIE LOCATION
3. ALL TIES ARE PLAT (100% CANNED) EXCEPT 1-80 CANNED TRANSITION TIES
4. TRANSITION TIES (QUANTITY 2) SHALL INCORPORATE 1-80 CANNED RAIL SEALS AND USE 4-3 1/8" BETWEEN STRAIGHT RAIL SEAT GAUGES. LENGTH SHALL BE 6'-9"
5. THIS DRAWING SHOWS TIE "0" PLACEMENT FOR SWITCH MACHINE ON RH/TURNOUT SIDE
6. USE OPPOSITE HAND FOR SWITCH MACHINE ON LH/TURNOUT SIDE
7. SEE TABLE OF MATERIALS TABLE FOR TIES 1, 2 AND 5

BILL OF MATERIALS (TIES 1, 2, AND 5)

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<tr>
<th>No.</th>
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<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>TIES 1, 2, AND 5 (HOLLOW STEEL TIE) FOR RH/TURNOUT WITH POWER SWITCH MACHINE ON MAINLINE SIDE</td>
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<tr>
<td>2</td>
<td>5</td>
<td>TIES 1, 2, AND 5 (HOLLOW STEEL TIE) FOR RH/TURNOUT WITH POWER SWITCH MACHINE ON TURNOUT SIDE</td>
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NOTES:
1. SET SHELMA INCLUD TIES 0, 2, 3, 4, 6 THROUGH 59, THREE 1/80 CANTED TIES, PLATE TIE PAS AND PAN INSERTS.
2. TIE LENGTHS ARE DETERMINED BY ADDING 1/4 1/2 1/4" FROM RAIL GAUGE LINE OR 1 1/2" FROM RAIL CENTERS PER SIDE AT THE CENTER OF EACH TIE LOCATION.
3. ALL TIES ARE FLAT (NON-CANTED) EXCEPT 1/80 CANTED TRANSITION TIES.
4. TRANSITION TIES (QUANTITY 3) SHALL INCORPORATE 1/80 CANTED RAIL SEATS AND USE 4 1/2" BETWEEN STRAIGHT RAIL SEAT GAUGES. LENGTH SHALL BE 8 1/2".
5. THE DRAWING SHOUL TIE "O" PLACEMENT FOR SWITC MACHINE ON RH/TURNOUT SIDE.
6. USE OPPOSITE HAND FOR SWITC MACHINE ON RH/MACHINE SIDE.
7. SEE BILL OF MATERIALS TABLE FOR TIES 1, 2, AND 5.
NOTE:
1. COORDINATE SWITCH MACHINE AND MACHINE PLATES (NE) WITH CALTRAIN
### TIE OF MATERIAL

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*NOT SHOWN ON ASSEMBLY FOR CLARITY*

---

### HOLLOW TIE TOP COVER DETAIL

#### A - SECTION

- SCALE: 1/8" = 3

### END COVER PLATE

#### B - SECTION

- SCALE: 1/8" = 3

### HOLLOW TIE SIDE END COVER DETAIL

#### C - SECTION

- SCALE: 1/8" = 3

### WELDING DETAIL

- SCALE: 1/8" = 3

---

### PENINSULA CORRIDOR JOINT POWERS BOARD

STANDARD DRAWINGS

- SPECIAL TRACKWORK
  - NO TO TURNOUT
  - HOLLOW TIES FOR RH TURNOUT
  - SWITCH MACHINE TURNOUT SIDE

DIA FEE No. 52-290

[Signature]

[Date]

[Institution] Caltrain
NOTE:
1. Coordinate switch machine and machine plates ( Misc ) with CalTrain.
FROG BASE PLATE 110-39RC

NOTES:
1. E.O. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN.
2. HOLES SHALL BE DRILLED PLUGGED WITH SLUGS AND STOPS AND NOT TO PROJECT FROM PLUG.
3. SHIPPED IN BOXES CAPTIVE BLOCKS SHALL BE FREE OF MILS AND SPATTERS
4. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING
5. SEE SHEET 5 FOR SHELLFIELD WELDING DETAIL

PENINSULA CORRIDOR JOINT POWERS BOARD
STANDARD DRAWINGS
SPECIAL TRACKWORK
NO 10 TURNOUT
WSM FROG RH
FROG BASE PLATE 110-39RC
Hall of Material

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Notes:
1. E.G. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN.
2. HELD RIVETS SHALL BE DRILLED PLUGS WITH SHOULDER & NOT TO PROTRUDE MORE THAN .010".
3. SEE 02-2605 FOR SHOULDER WELDING DETAILS.

Frog Base Plate 10-136-47RC

Frog Base Plate 10-136-48RC
NOTES:
1. KD CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT (CLEARLY STAMPED AS SHOWN)
2. HOMS SHALL BE DRESSED FLUSH WITH SWITCH HEAD AND NOT TO PROTRUDE INTO RAIL SEAT
3. HOLLOW HOLE CENTERS ARE INDICATED ON DRAWING