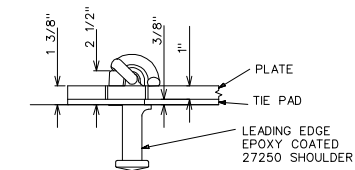


NOTES:

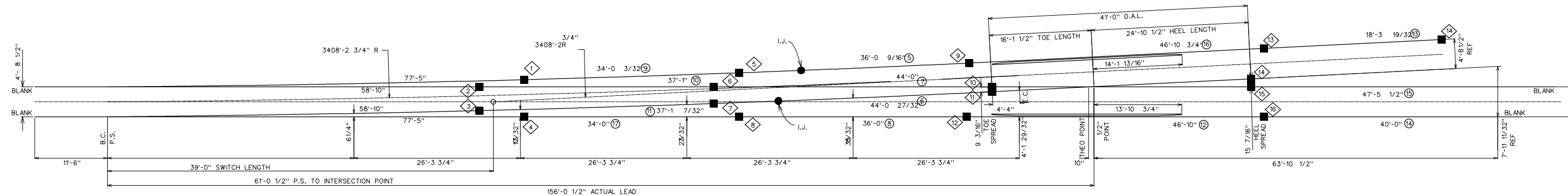
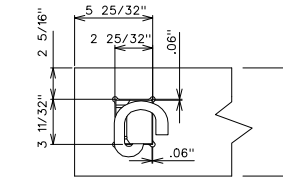
- TIE MATERIALS TO INCLUDE:
  - TIES A THROUGH 100 (OMITTING 1, 2, 7, 12, 16).
  - 2 X 8'-6" (1:80 CANT) TRANSITION TIES.
  - X25-30535 (COMPLETE PAD SET FOR EACH #20 CONCRETE TURNOUT)
  - PANDROL 2 PIECE TIE PAD ASSEMBLY 15005, 7.5mm THICK CONSISTING OF ABRASION PLATE 14534 AND PAD 14533
  - PANDROL ECL-2055 CLIPS & X25-00080 ON ALL STANDARD TIES.
  - PANDROL ECL-2063 CLIPS & X10-04050 FOR INSULATED JOINTS ( QUANTITY OF 8).
- TIE PADS TO PROTRUDE 1/4" BEYOND ENDS AND FLUSH TO SIDES OF PLATES.
- ALL TIES ARE PERPENDICULAR TO STRAIGHT TRACK.
- ALL STANDARD CONCRETE RAIL SEATS SHALL NOT BE PRE-TREATED WITH EPOXY.
- ALL RAIL SEATS ARE FLAT UNLESS SPECIFICALLY SHOWN OTHERWISE.
- OUTER RAIL SEATS ADJACENT TO FROG PLATES SHALL BE FLAT AND RAISED 1/8" TO COMPENSATE FOR FROG PLATE THICKNESS.
- TWIN STEM SHOULDERS ( NORTRAK 27250 AND PANDROL 8770 OR EQUIVALENTS ) SHALL BE USED AS INDICATED.
- TOTAL LINEAR LENGTHS OF CONCRETE SHOWN IS 1327'-2 1/16" TIE LENGTH ARE DETERMINED BY ADDING 24" OUT FROM RAIL CENTERLINES.

TURNOUT PROPERTIES:

FROG NUMBER: 20  
 FROG LENGTH: 41'-0"  
 FROG ANGLE: 2° 51' 51"  
 THROW AT FIRST ROO: 4 3/4"  
 LENGTH OF SWITCH POINT: 39'-0" / 58'-10"  
 HEEL SPREAD OF SWITCH: 6 1/4"  
 POINT ANGLE: 0° 26' 23"  
 ACTUAL LEAD: 156'-0 1/2"  
 P.S. TO H.F.: 180'-11"  
 CENTERLINE RADIUS: 3408' -2 3/4"  
 DEGREE OF CURVE: 1° 40' 52"

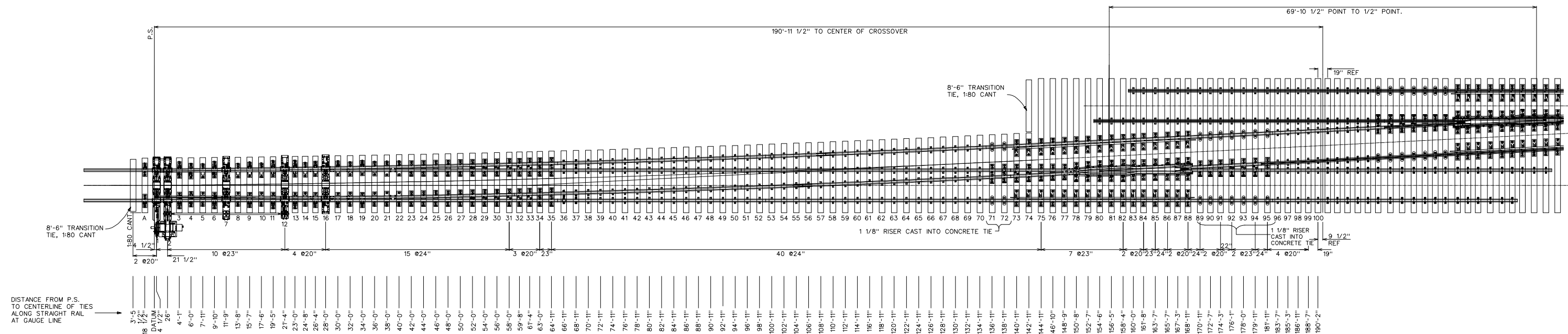


TYP. POP UP TWIN STEM SHOULDER DETAIL (N.T.S.)



TURNOUT GEOMETRY

- WELDED JOINT (0" GAP) DRILL 9 1/2" X 6" X 1 5/16" DIA. 3 3/32" A.B.
- INSULATED JOINT (3/16" GAP) DRILL 3 1/2" X 6" X 1 5/16" DIA. 3 3/32 A.B.



METRIC CONVERSION: 1 inch=25.4mm, 1 foot=304.8mm

No.	Date	Revision	By Approved
0	19/01/31	REVISED PDF VERSION ESTABLISHED	
Standard CONCRETE TIE SET FOR #20-136RE-LIH RBM TURNOUT FOR LH CROSSOVER			
13'-0" TC HST SW MACHINE MAINLINE SIDE, WELDED POWER OPERATED/ROTARY ASSIST DRIVE			
Drawn	Checked	Approved	VP Engineering & Asset Management
MG	GGG		



Date JAN 31, 2019 Plan Number GTS-2121 Rev 0

REFERENCE: Sheet 1 OF 1