# CATCHPOINT DETAILED INSPECTION

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| Location: Track: I.D. No.: |
| Kilometrage: Date:  |
|  All measurements in mm.  All Speed in km/h |
| Points | Measure | Response | Comments |
| Gauge (Measured at switch tip) |  | >1455 apply plain track geometry responses1429 to 1427 speed 60/65 and monitor1426 to 1425 speed 20/20 and monitor<1425 speed 10/10 and pilot trains |  |
| Open throw dimension (Switch blade open gap) |  | 85 mm to < 95 mm monitor80 mm to < 85 mm speed 20/20 and monitor<80 mm speed 10/10 and pilot trains |  |
| Switch blade closed gap |  | 1 mm to 3 mm record as defect, program adjustment>3 mm record as defect, urgent attention |  |
| Switch Width at Tip(Closed switch only, as presented to the wheel) (non-tangential, non-undercut switch only) |  | 4 to 6 monitor7 to 8 speed 20/20 and monitor>8 speed 10/10 and pilot trains |  |
| Switch Height at Tip (distance from running surface to top of switch)(non-tangential, non-undercut switch only) |  | Conventional switch only:>12 to <13 monitor12 or less speed 10/10 and pilot trainsUndercut and asymmetric switches should not sit high of the machined section of stock rail. Report any defect.  |  |
| Switch Tip Wear Angle(non-tangential, non-undercut switch only) |  | Angle from vertical. Report suspect angles:18 to 26 degrees monitor>26 degrees speed 10/10 and pilot trains |  |
| Stock Rail Wear Angle(non-tangential, non-undercut switch only) |  |  |
| Spreader Bar/Drive Rods |  | Missing/Broken – Notify signalling maintainer. Secure switch and/or impose 10/10 speed and pilot trains as appropriate. |  |
| Switch Blade Damage(deeper than 19mm from running surface of stock rail) |  | 100 to 199 long – monitor≥200 long - speed 10/10 and pilot trains |  |
| Back of switch rail to stock rail (Flangeway throat gap) |  | 35 mm to <40 mm speed 40/40 and monitor<35 mm speed 10/10 and pilot trains |  |
| Rail Brace/Chair |  | Cracked/Loose – monitorBroken/Ineffective:1 only – monitor except for 60/65 speed 25 tonne, 40/40 speed 30 tonne axle load areas.2 consecutive – speed 60/65 except for 40/40 speed in 25/30 tonne axle load areas.>2 consecutive - speed 10/10 and pilot trains |  |
| Switch Bearing Stops |  |  |
| Ineffective Bearers/Fasteners(In critical area) |  | 1 only – monitor2 consecutive – speed 40/40 and monitor>2 consecutive - speed 10/10 and pilot trains |  |
| Points | Measure | Response | Comments |
| Heel Blocks(includes pivot and fixed heel, stress transfer and creep control blocks) |  | Cracked - 23 tonne axle load speed 80/90, cracked 25 tonne speed 60/65, cracked 30 tonne speed 40/40.Broken but effective – 40/40 speed and monitor.Missing/Broken ineffective – speed 10/10 and pilot trains |  |
| Bolts |  | Loose/Broken/Missing – record as defect and prioritise |  |
| Lever Effectiveness(Manual Points) |  | Insufficient tension to keep switch closed under trafficReport as defect and prioritise. |  |
| Switch/Stock rail contact area (amount of lipping) |  | Report if switch or stock rail need grinding and prioritise. Report if switch or stock rail have lipping of 1mm or greater. This lipping should be ground. |  |
| Catchpoints | Ok/Not Ok | Comments |
| Response assessment by competent person |
| Throw Off RailDerail BlockLanding Area |  |  |
|  |  |
|  |  |
| General | Ok/Not Ok | Comments |
| Response assessment by competent person |
| Drainage |  |  |
| Bearers/Fasteners |  |  |
| Ballast |  |  |
| Stock Rails (1) |  |  |
| Track Geometry (2) |  |  |
| TIMBERS REQUIRED (Optional) |
| 2.8m | 3.0m | 3.2m | 3.4m | 3.6m | 3.8m | 4.0m | 4.2m | 4.4m | 4.6m | 4.8m | 5.0m | 6.0m |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes:

Reporting of rolling contact fatigue (RCF), rail squats, wheel burns and corrugations which will require appropriate repair / renewal action

If the Track Geometry is not ok or the turnout has been determined as high risk, a manual assessment of track geometry parameters using form ETE0301F-04 Manual Recording of Gauge, Play & Superelevation in Points & Crossings is required.

\* “Monitor” means at an appropriate increased frequency compared to the current inspection

\* Responses are default actions pending appropriate repair / renewal action

\* If the cause of a defect is known, and it is known that it will not deteriorate into an unsafe condition an alternate response to that shown is permitted with appropriate documentation

Name of Inspector: Signature: