Engineering Standard

Signalling

CRN SD 007

SIGNALLING DESIGN PRINCIPLES – SINGLE LINE SECTIONS

Version 1.1

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Summary of changes from previous version

Section	Summary of change
	No Changes from V1.0

Contents

7 Single Line Sections

7.1 Single Line Section Control in Single Line Areas: Principle 7.1

7.1.1 Introduction

This Principle addresses the requirements for the provision of block circuit controls on single line sections.

7.1.2 Requirements

The following requirements shall be met before a signal controlling the entrance to a single line block section is permitted to clear and continuously thereafter.

- The directly opposing signal(s) controlling the entrance to the single line block section at the opposite end shall be proved normal.
- Intermediate directly opposing signals within the single line block section controlling movements in the opposite direction, shall be proved normal.
- The track circuits between the overlap clearance point of the signal to be cleared and the directly opposing signal(s) controlling the entrance to the single line block section at the opposite end, shall be clear unless occupied by a train being signalled through diverging points which prevent it from proceeding onto the overlap track or unless occupied by a preceding train travelling in the same direction.
- The half-pilot staffs at each end of the single line block section shall be proved normal.
- Any releasing switches situated in the single line section shall be proved normal.
- Any trapping protection on points operated from ground frames situated in the single line section shall be proved normal.
- Other points detection shall be proved normal as applicable.
- Directional controls associated with operation of level crossing equipment within the single line section shall be proved normal.
- The block control circuit closed for a period of fifteen seconds immediately before the signal controlling the entrance to the single line block section clears to show a proceed aspect.
- This is not required where the track circuit equipment provided has intrinsic delayed pick characteristics.

7.1.3 Half-Pilot Staff

On single line track control or track block sections, or on bidirectional signalling sections on double lines, pilot staff working under section signalling failure conditions may be facilitated by the installation at each end of the section of a half pilot staff held captive in a pilot staff lock erected on or near the signal(s) controlling entry to the single line section. The half pilot staffs from each end are joined together to form the one pilot staff for the section.

The following two examples show the type of details required to be inscribed on half pilot staffs in single line areas.

TARANA TA32	WALLERAWANG WG15	Interlocking and signal where half Pilot Staff located.
(To WALLERAWANG)	(To TARANA)	Interlocking at opposite end of single line section.
KILBRIDE 05/11	WALLAROBBA 06/12	
(To WALLAROBBA)	(To KILBRIDE)	

The signal number is the main line Home/Starting or Starting signal for the single line section concerned and, also applies to the loop, siding, branch line, etc, Home/Starting or Starting signals(s) leading onto the single line section.

7.1.4 Pilot Staff Lock Designation Plate

Designation plates attached to Pilot Staff Locks are to be inscribed with details similar to the following two examples.

HALF PILOT STAFF WALLERAWANG WG15 to TARANA TA32	Interlocking and Home/Starting or Starting Signal(s) leading into the single line section Interlocking at opposite end of section and opposing Home/Starting or Starting Signal(s) leading into the single line Section

HALF PILOT STAFF
KILBRIDE 05/11M.11L
to
WALLAROBBA 06/12M.12L