

**EAST COAST RAILWAY
SAMBALPUR DIVISION**

Sl. No. SWR/KDLR/ 52

STATION WORKING RULES OF KANDEL ROAD STATION (CODE: KDLR)

BG/MG/NG: Broad Gauge
Date of issue: 29.03.2012
Date brought into force:

NOTE: - The Station Working Rule (SWR) must be read in conjunction with General and Subsidiary Rules and Block Working Manual. These rules do not in any way supersede any rule in the above books.

1. STATION WORKING RULE DIAGRAM: -

- 1.1 **STATION WORKING RULE DIAGRAM NO.** S.I/WRD – 11066, ALT-B.
1.2 **SIGNAL INTERLOCKING PLAN NO.:** - S.I – 11066, ALT-E

The Station Working Rule diagram and Signal Interlocking Plan shows the complete lay out of the yard, siding, normal position of points, the Signaling and Interlocking arrangements, Gradients and Level Crossings within the station limits. This must be referred to for giving details of the point numbers and signals when reporting accidents.

2. DESCRIPTION OF STATION: - KANDEL ROAD is a four-line station situated in TITLAGARH -VIZIANAGARAM section at KM. 224.307 from Raipur. It is a Standard – III interlocked Class 'B' station with central panel and Multi Aspect Colour Light Signaling.

2.1 GENERAL LOCATION:-

- 2.1.1 **NAME OF STATION :** - KANDEL ROAD (KDLR)
2.1.2 **CLASSIFICATION OF STATION: -** 'B' class
2.1.3 **NAME OF THE SECTION: -** TITLAGARH-VIZIANAGARAM, Double Line, Non-RE, BG section.
2.1.4 **ROUTE: -** D Spl.
2.1.5 **LOCATION: -** KM 224.307 from Raipur.

2.2 BLOCK STATIONS, IBH, IBS ON EITHER SIDE AND THEIR DISTANCE AND OUTLYING SIDINGS: -

- i) Raipur end - KESINGA (Code: KSNG) inter distance 8.643 K.M.
ii) Vizianagaram end – RUPRA ROAD (Code: RPRD) inter distance 7.507 K.M.
iii) Passenger halt: - Nil
iv) Flag station: - Nil
v) Outlying siding: - Nil
vi) D.K. station: - Nil.
vii) IBH: - Nil
viii) IBS: - Nil

2.3 **BLOCK SECTION LIMITS: -**

Sl. No	Between Stations	The point from which "Block Section" commences	The point at which "Block Section" ends
1.	KDLR-KSNG (UP LINE)	UP Advanced starter signal No. 11 of KSNG	BSLB on UP Line at KDLR.
2.	KDLR-KSNG (DN LINE)	DN Advanced starter signal No. 12 of KDLR	BSLB on DN Line at KSNG
3.	KDLR-RPRD (UP LINE)	UP Advanced starter signal No. 11 of KDLR.	First facing Point No.17A on UP line at RPRD.
3.	KDLR-RPRD (DN LINE)	DN Advanced starter signal No.12 of RPRD	First facing Point No.16A on DN line at KDLR.

2.3.1 **STATION SECTION:**

- (a) UP LINE: - The portion between BSLB and UP Adv. starter signal of the station
(b) DN LINE: - The portion between Outermost facing point and DN Adv. starter signal of the station.

2.3.2 **STATION LIMIT:**

- (a)UP LINE: - The portion between UP Distant and UP Advanced starter signal of the station.
(b)DN LINE: -The portion between DN Distant signal and DN Adv. starter signal of the station.

2.4: **GRADIENT: -**

- (a) From the Centre of the station building towards KSNG.

Chainage in Metre		Inter-Distance	Gradient	
From	To		UP Line	DN Line
CSB	825.0 M	825 M	1 in 400 F	1 in 400 F
825.0 M	1421.15 M	596.15 M	---	1 in 200 F
825.0 M	1971.15 M	1146.15M	1 in 200 F	---
1421.15 M	1971.15 M	550 M	---	1 in 116.1 F
1971.15 M	2321.15 M	350 M		1 in 650 R
1971.15 M	2521.15 M	550 M	1 in 156 F	--
2321.15 M	Block Section	----	--	1 in 117 F
2521.15 M	Block Section	---	1 in 275 F	--

- (b) From the Centre of station building towards RPRD.

Chainage in Metre		Inter distance	Gradient	
From	To		UP Line	DN Line
CSB	510.0 M	510 M	1 in 400 R	1 in 400 R
510 M	1375.0 M	865 M	1 in 200 R	1 in 200 R
1375.0 M	2050.0 M	675 M	1 in 150 R	1 in 150 R
2050.0 M	Block Section	-----	--	1 in 238 R
2050.0 M	2300 M	250 M	1 in 236 R	--
2300 M	Block Section	-----	1 in 250 R	--

Correction Slip No. 01
Date of Issue: 08.10.2012.

2.5 **LAY OUT: -**

- i) No. of running lines :- 4 (Four)
- ii) No. of sidings :- 01(One) siding,
The Goods siding (CAL-40M) with both side entry takes off from Line No.1 at RPRD end of the yard.
- iii) No. of Passenger platform :- 03 (Three), One low level Passenger platform (475.25 x 5.20 M) on Line No.1 and One low level Island platform (480 x 10.7 M) between Line No.3 & Line No.4.
- iv) No. of goods shed platform :- Nil
- v) FOB :- 01 at 44.53M from CSB.

2.5.1 RUNNING LINES, DIRECTION OF MOVEMENTS AND HOLDING CAPACITY IN CSL: -

(i)

Srl No	Line No.	Description	CSL	Isolation Provided	
				KSNB end	RPRD end
1.	Line No. 1	Common Loop	732.74 M (STR-STR)	ORL	ORL
2.	Line No. 2	UP Main line	732.74 M (STR-SB)	-	-
3.	Line No. 3	DN Main line	725.0 M(SB-STR)		-
4.	Line No. 4	DN Loop line	725.0 M (SB-STR)	ORL	DS Point

(ii) **DIRECTIONS OF MOVEMENT: -**

Trains arriving from KESINGA end are UP trains.

Trains arriving from RUPRA ROAD end are DN trains.

2.5.2 NON RUNNING LINES AND CAL:

Srl No.	Description	CAL	Take off Line No.	Exit	Operation
1.	Goods Siding	40 Mts. (DS to DS)	Line No.1	Both way	Operated by Ground lever near siding point and controlled by 13 from operating panel.

(Detailed working of siding is mentioned in Appendix – 'B')

2.5.3 ANY ABNORMAL FEATURE IN THE LAY OUT: NIL

2.6 i) LEVEL CROSSINGS: (STATION LIMIT):-

Srl. No	Location	Km.	Normal Position	Class	Type	Operation	Communication
1.	Between DN Starter signal and DN Adv. Starter signal	223.641 (223/10) (RV-181)	Open to road traffic	'C'	Lifting barrier	Winch operated	Magneto Phone with SM/KDLR
2.	Between DN Distant & DN Home signal	225.278	----	'C'	Unmanned	---	---

Correction Slip No. 03

Date of Issue: 18.02.2014.

ii) LEVEL CROSSING: (IN BLOCK SECTION)

SI No	Location	KM & No.	Normal Position	Class	Type	Operation	Communication
1.	Between KDLR-RPRD	229/8-9 (RV-187)	Open to road traffic	'C'	Lifting barrier	Winch operated	Magneto telephone connection with SM/RPRD.
2.	Between KDLR-KSNG	218.469 (RV-175)	Open to Road Traffic	'C'	Lifting barrier	Winch operated	Magneto telephone connection with SM/KSNG.
3.	Between KDLR-KSNG	220/6-7 (RV-177)	Closed to Road Traffic	'C'	Lifting barrier	Winch operated	Magneto telephone connection with SM/KDLR
4.	Between KDLR-RPRD	225/14-15 (RV-184)	Closed to Road Traffic	'C'	Lifting barrier	Winch operated	Magneto telephone connection with SM/KDLR.

Train Actuated Warning Device has not been provided at above Level Crossing Gates.

(Details of working are given in Appendix 'A')

3.0 SYSTEM AND MEANS OF WORKING:

(Rule No. Chapter XIV of GR & SR, Chapters III & V of BWM)

- i) **System of working:** - Absolute block System of working.
- ii) **Type of block instruments:** - Double Line Lock and Block Instruments connected with KSNG and RPRD
- iii) **Instruments:** - Non -co-operative type.
- iv) **Staff responsible for their operation:** - SM on duty.
- v) **Custodian of keys:** -SM on duty

Block instrument is provided with double locking. One key will be with SM & other key will be with S&T maintainer. SM on duty is responsible for operation of Block instruments and the keys of the instruments must be under personal custody of the SM on duty vide GR 5.01(4), 14.12(1) 9A) (1) and GR 5.08.

4.0 SYSTEM OF SIGNALLING AND INTERLOCKING:**4.1.1 STANDARD OF INTERLOCKING AND TYPE OF SIGNALLING:**

The station is provided with Standard III interlocking, central panel with Multiple Aspect Colour Light Signaling and block proving Axle counters. All the points (Except hand operated siding point) are centrally operated from central panel by on duty Station Master. The Home signals and Advanced Starter signals are interlocked with respective Double line lock and block instruments. GR 3.08(4) (b) governs the aspect and indications of the signals. The station has no end cabins.

Minimum equipment of signals – Distant, Inner distant, Home, Starter and Advanced starter in either direction.

4.1.2 STATION MASTER'S CONTROL PANEL: -

- (i) A push button type electrical control apparatus (operation cum indication panel) is provided in the Station Master's office to operate electrically UP and DOWN points and signals. The control apparatus is provided with a lock up key named (SM's Key) which shall always remain in the personal custody of the SM on duty in terms of GR 5.08. The position of all points, signals and running lines are available in the Station Master's illuminated panel diagram. Reminder collars are provided for use on push buttons, which will be placed on point button, route button, signal button or on any other button to prevent operation of the button in case of concerned line is blocked; or to prevent inadvertent operation of a particular button as and when required.
- (ii) **SEALING OF EMERGENCY OPERATION BUTTONS/KEYS:-**

All 'emergency operation buttons' on the Station Master's control panel shall be kept sealed in normal condition by S&T staff. Whenever any emergency operation is initiated, SM on duty shall break open the seal of the concerned button to make the button operative. Immediately after completion of emergency operation SM on duty shall inform concerned S&T staff for resealing of the concerned button.

4.1.3. **TRACK CIRCUIT:** -

All the lines including point zone between Home and Advanced starter signal on either direction is track circuited. The position of the running lines including point zones i.e. occupied/clear is indicated in the illuminated diagram at the Station Master's office. Normally there will be no indication of track circuits. It shows 'RED' when the line is occupied and 'WHITE' when the track is clear provided the route is set. Calling-On Track circuits are provided 7RL beyond Home signal in either side of the station.

4.1.3.1 **AXLE COUNTER**

Both UP and DN lines of KDLR-KSNG section and KDLR - RPRD block section are monitored by axle counter system. Electronic axle counters along with associated entrance and exit trolley suppression tracks are provided at both ends of the station just ahead of advanced starters. Two pairs of electronic axle counter devices are provided on both UP and DN line between KANDEL ROAD and KESINGA. One pair beyond DN advanced starter signal of KANDEL ROAD and DN home signal of KESINGA station, one pair just beyond UP Advanced starter signal of KESINGA and beyond UP home signal of KDLR station. Similarly, One pair beyond DN advanced starter signal of RUPRA ROAD and beyond DN home signal of KANDEL ROAD station and one pair just beyond UP Advanced starter signal of KANDEL ROAD and beyond UP home signal of RUPRA ROAD station is provided for counting the axles 'IN' and axles 'OUT' to indicate whether the concerned block section is clear of trains as well as to verify the arrival of last vehicle of the incoming train.

The position of block section i.e. clear/occupied is reflected in the illuminated panel diagram provided in the Station Master's office which shows 'GREEN' when the block section is clear and 'RED' when the block section is occupied.

Block Instruments of both sections are interlocked with respective Axle Counters. Whenever a train enters into the block section, block section clear indication i.e 'GREEN' disappears and occupied indication i.e 'RED' appears on the panel. If after the complete arrival of the train, 'RED' indication does not change to 'GREEN', it should be assumed as block instrument failure and necessary action as per GR 14.13 to be followed. The axle counter is interlocked with the block instruments.

In case of failure of Axle Counter, Resetting operation shall be initiated by SM on duty, details of which are mentioned in Appendix B.

[Details are given in Appendix-'B']

4.1.4 **POSITION AND OPERATION OF POINTS:** -

The position of all points are shown in station Working Rule Diagram and also on operating panel. All points are power operated through Station Master's control panel apparatus. All cross over points on running line are independently worked by electric point machine and have built in locking and detection arrangement.

4.1.5 **IBS:** - NIL

4.1.6 Correction Slip No. 01
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ATOR: - One trap indicator provided on DS point of line No-4 at RPRD end.

4.1.7 **REPEATER (BANNER TYPE):** - Nil

4.1.8. **ELECTRICAL KEY TRANSMITTER (EKT):**-

EKTs at both end CH locations for the operation of points through crank handle have been provided. The keys are extracted from EKTs in the crank handle locations for operating the points by crank handles. EKTs are also provided at SM's office for operation of hand operated siding points.

4.1.9 **CALLING ON SIGNALS:**-

'Calling on' signals have been provided below UP and DN home signals. It shows no light when 'ON' and 'YELLOW' light when taken off.

4.1.10 **SHUNT SIGNALS:**-

Position light shunt signals have been provided at either end of the yard ahead of top points for back shunting in the yard and to be used whenever necessary. Forward shunting movement may be carried out with starter signals in addition to traffic signals.

4.1.11 **ANTI COLLOISION DEVICE:** - NIL

4.1.11 **EMERGENCY CROSSOVER:**- NIL

4.1.12 **LC GATE OPERATION:**- Given in Appendix 'A'

4.2 **CUSTODY OF RELAY ROOM KEY AND PROCEDURE FOR ITS HANDING OVER AND TAKING OVER BETWEEN STATION MASTER AND S&T MAINTENANCE STAFF:** -

The relay room should be kept locked with two separate locks, the arrangement should be such that one key is kept with the SM on duty and the other with the signal maintainer. Whenever required, the key in the custody of Station Master shall be given to the signal staff with proper acknowledgement in the relay room key register. After completion of work, the signal staff shall return the key to SM on duty. The details of the transaction should be properly recorded in the relevant register at the Station duly signed by SM on duty and the signal staffs concerned vide Operating Manual 1.14 and G & SR 3.51.05. If the relay room key is handed over to the Signal staff regarding the interference in safety gears, the train shall be piloted in and piloted out.

NOTE: Details of signalling and interlocking are given in Appendix 'B' of the SWR.

4.3 **POWER SUPPLY:** -

Normally for signaling and interlocking installation power supply is drawn from State Electricity Board (230V, 50Hz) but when this source fails DG set for standby is installed at the station to feed the S&T equipment. The SM however maintains the records of the power failures and promptly report the failure immediately to the controller and to the concerned Electrical and S&T staff. In addition to this the station is provided with solar power System.

In SM's office there is SM Power Panel, which represents the voltage of the integrated power supply system.

- i) In case voltage drops 105.9V an audible buzzer appears for starting Generator.
- ii) In case voltage drops 105.1V an audible buzzer appears for emergency start of Generator.
- iii) In case voltage drops 104.3V an audible buzzer appears for system shut down.

Correction Slip No. 03
Date of Issue: 18.02.2014.

The SM now has to start the diesel engine for standby (Auxiliary) power supply. After stable run of the Diesel engine, the SM/SS on duty has to operate the change over switch for connection the Auxiliary supply to the signaling installation. On resumption of power supply, the Diesel Generator shall be stopped by SM/SS on duty after isolation Diesel Generator by change over switch. Each time the power supply goes OFF or On SM on duty shall acknowledge. In case of nay audible buzzer in SM's power panel, SM on duty should acknowledge the buzzer by pressing 'buzzer stop button'.

Inverters have been provided to prevent possibility of blank signals in case of SEB power supply failure. Whenever SEB power supply fails inverter will immediately extend power supply to signals thereby preventing blank signals. Based on the indication shown in the SM's power Panel SM on duty should start DG for avoiding any case of shut down of power sub system of Integrated Power Supply system. Solar Power Supply has been provided in the station as standby power supply. If there is any indication on SM's power panel regarding deviation in IPS system call S&T staff.

5.0 **TELECOMMUNICATION FACILITIES: -**

- (i) Telephones attached with Double Line Block Instruments for Block Section KDLR-KSNG & KDLR-RPRD.
- (ii) Station to Station fixed telephone (Hot line) is provided
- (iii) Station is provided with Auto Telephone connected with Railway Exchange
- (iv) BSNL telephone is provided
- (v) The station is connected to BLGR – SPRD control circuit by a control telephone
- (vi) Station to station 25 Watt VHF communication is provided
- (vii) Telephone is provided between Station and both end crank handle locations.
- (viii) Telephone is provided between Station and LC Gates at KM 223.641, KM 220/6-7 and KM 225/14-15.

- Note:**
- (i) For obtaining line clear, VHF should be used as a last alternative and not as a sole means of communication.
 - (ii) VHF and Walkie Talkie sets should not be used for unnecessary discussions with Loco Pilots, Guards or any other staff.
 - (iii) The on duty SM shall use the above electrical communication instruments stated in Para-5.0 strictly in order of preference for obtaining/granting line clear vide SR 14.01.01. In case of failure of any of the above means of communication the SM on duty shall work vide SR 6.02.06

(Details are mentioned in Appendix 'B' of the SWR.)

6.0 **SYSTEM OF TRAIN WORKING: -**

The movement of trains is controlled by Section Controller on duty whose orders shall be complied with, provided they do not contravene any General Rules, Subsidiary Rules, Station Working Rules, Block Working Manual and other safe working instructions issued from time to time. In the event of suspension of control working, the Station Master on duty shall work independently in conjunction with the Station Master of the adjoining block stations and shall be responsible to ensure that there is no undue delay to train operation in general.

6.1 **DUTIES OF TRAIN WORKING STAFF: -**

Details of duties of operating staff are mentioned in Appendix 'D' of the SWR.

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6.1.1 **TRAIN WORKING STAFF IN EACH SHIFT: -**

The following are the complement of train working and operating staff provided at this station to work in each shift.

SL No.	Designation	Roster	No. of staff in each shift	Hrs. of Duty
1.	SS(In-charge)----- DY.SS /SM/ASM-----	Continuous	01	--09 hrs. --08 hrs.
2.	TP/Sr.TP/TPM-B/ TPM-A	Continuous	01	08 hrs
3.	GK/Sr.GK	E I.	01	12 hrs

The above staff shall work as per the rosters issued by DPO/SBP from time to time and these rosters shall be displayed in the SM's office.

6.1.2 **RESPONSIBILITY OF ASCERTAINING CLEARANCE OF THE LINES & ZONES OF RESPONSIBILITY:**

The SM/SM on duty is responsible to ascertain the clearance of the nominated line between outer most facing points of concerned line as per SR. 3.40.02(b) 3rd Para.

6.1.3 **ASSURANCE OF STAFF IN ASSURANCE REGISTER: -**

All staff before taking up independent charge of their duties at this station shall make a written declaration in the assurance register that they have read and thoroughly understood the system in force and must sign such declaration.

No Railway servant shall be entrusted with any duty involving safety of the public unless the station in-charge is satisfied that the concerned staff is competent for the post. No Railway servant unless duly examined and certified shall be allowed to work the points and signals. The SS is responsible to see that all the staff are conversant with the Station Working Rules and their signature obtained in the Assurance register after he is satisfied that they have thoroughly understood the working rules of the station. In case of Group 'D' staff, their signature/thumb impression must be obtained after explaining them fully about their duties and responsibilities.

The SM is responsible personally for maintaining the Assurance Register and for obtaining declaration of the staff working under him. The Assurance of staff shall be maintained in two parts, one for Group 'C' and the other for Group 'D' staff. A duplicate copy of the Assurance Register must be maintained and kept in personal custody of the Station Manager.

The declaration shall be renewed in the following cases: -

- (i) Whenever there is a change in the Station Working Rules.
- (ii) For any staff who have not worked at the station or were away from the station for a period of 15 days or more.

6.2 (A) **CONDITIONS FOR GRANTING LINE CLEAR: -**

The conditions laid down in GR 8.01 (1) (a) & (b), 8.01 (2) (b), 8.03 (1) (a) (b) (c) (ii) & (2) (a) (b) (c) (ii) shall be complied with by the Station Master on duty before granting line clear.

The line shall not be considered clear and 'Line Clear' shall not be given unless:

- (i) ~~The whole of the~~ last proceeding train has arrived complete.
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- (ii) All necessary signals have been put back to 'ON' behind the said train.
- (iii) The line is clear up to the first facing point for DN trains and BSLB for UP trains.

NOTE: If the light of the reception signal is fused/ not burning, 'Line Clear' shall not be granted for a train till such time it is ensured that the concerned driver is notified of the fact in writing by the SM on duty of the station to which such line clear is granted.

(B) **OUTLYING SIDING: - NIL.**

6.2.1 **ANY SPECIAL CONDITIONS TO BE OBSERVED WHILE RECEIVING OR DESPATCHING A TRAIN: - NIL**

6.2.1.1 **SETTING OF POINTS AGAINST BLOCKED LINE: -**

All Points shall normally be set for the straight except when otherwise authorised by special instructions. When a running line is blocked by a stable load, wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after arrival of a train at the station, the points at either end should immediately be set against the blocked line except when shunting or for any other movement towards the blocked line is required to be done vide 3.51.06(a). If all the lines at the station happen to be blocked, then SR. 3.51.06 (b) shall be followed.

6.2.1.2 **RECEPTION OF TRAIN ON BLOCKED LINE: -**

In case reception of a train on an obstructed line, the SMs shall follow GR 5.09 & SR 5.09.01.

6.2.1.3 **RECEPTION OF TRAIN ON NON-SIGNALLED LINE: - NA.**

6.2.1.4 **DESPATCH OF TRAINS ON NON-SIGNALLED LINE: - NA**

6.2.1.5 **DESPATCH OF TRAINS FROM LINE PROVIDED WITH COMMON STARTER SIGNAL:- N/A**

6.2.1.6 **SPECIAL RESTRICTIONS -**

- i) Over run line shall not be obstructed for stabling vehicles or harbouring Engine. In case, it is obstructed due to any accident or any other reason, it ceases to be substitute for adequate distance and in that case the train shall be passed over loop line as per subsidiary rule 3.40.02 (a).
- ii) SR 4.48.01 & 5.20.01 (b) shall also apply to the station.
- iii) Shunting in the face of an approaching train is prohibited.
- iv) Hand, Loose and Fly shunting in the yard is prohibited.
- iv) No load shall be stabled on main line without a live engine attached.
- vi) Speed is raised to 30 KMPH on first directional loop lines on either side of main lines and over its turnouts. However, no train shall be allowed to negotiate at a speed more than 15 KMPH, if it involves negotiating more than one crossover at a time.

6.2.1.6 **SPECIAL INSTRUCTIONS-**

After any non-signal movement has taken place over point, SM on duty shall operate the point to normal and reverse position for ensuring the correct setting and indication on the panel. Then after, further signal movement may be permitted over the point.

6.3 **CONDITIONS FOR TAKING 'OFF' APPROACH SIGNALS: -**

A. Reception of trains is governed by General Rules Nos. 3.36, 3.38, 3.40, 4.17, Subsidiary Rule 3.42.02 (a)(iv), 3.42.03, 3.36.02, 3.36.04 and other relevant provisions of General and

Subsidiary Rules, Block Working Manual and Station Working Rules of the station.

B. Adequate distance to be kept clear vide General Rule 3.40.

LINE NO.	CLEARANCE OF ADEQUATE DISTANCE			
	DN TRAINS		UP TRAINS	
	FROM	TO	FROM	TO
Common Loop (L-1)	Foot of the Starter Signal No. 3	UP Adv. Starter signal No.11 or End of ORL	Foot of the Starter signal No. 8	DN Adv. Starter signal No. 12 or end of the ORL
UP Main Line (L-2)	Foot of the Starter Signal No. 5	UP Adv. Starter signal No.11	---	---
DN Main Line (L-3)	---	---	Foot of the Starter Signal No. 6	DN Adv. Starter signal No. 12
DN Loop Line (L-4)	---	---	Foot of the Starter Signal No. 4	DN Adv. Starter signal No. 12 or foot of the ORL

Before admitting a train on any line, it must be ensured that the route indication for the respective line shows 'WHITE' indication in the illuminated panel diagram. To receive a train, for which line clear is given, the Station Master on duty shall nominate a clear line in consultation with the Section Controller on duty. He shall personally satisfy himself that the nominated line is clear and free from all obstructions by seeing the track circuit indication or by physical verification of the nominated route in case of failure of track circuit. He shall suspend all non-isolated shunting and thereafter set the points of the nominated route by means of push button switch provided on the control panel. He shall then verify from the visual indication available in the panel that points are set to the desired route. The interlocked L.C gates are to be closed and key is to be transmitted by the gateman on duty to the panel through RKT for reception of train.

Unless the track circuit indication for the concerned line is 'Clear' even with other conditions satisfied, the operation of panel control button by the station Master on duty will not permit the concerned home signal to be taken off. However, reception of trains will be possible in such case with "Calling on signal" provided below home signal unless the first track circuit in advance of home signal does not show 'RED' indication.

After the train has left the Station in rear the Station Master on duty shall instruct the Gateman of interlocked LC Gate to close the Gate against road traffic and to transmit the Key electrically. Station Master will ensure that the gate is in closed condition when the closed indication appears on the panel. The Station Master on duty shall then operate the concerned push button on control panel for taking off the reception signal. He shall then verify on the panel that the correct reception signal is taken off.

C. **TAKING OFF CALLING ON SIGNAL:**

Miniature colour light calling on signal is provided below the home signals in terms of GR 3.13(6) (b). A calling-on signal shows no light in the 'ON' position. A calling-on signal is taken

'OFF' for reception of a train when the home signal above can not be taken 'OFF' due to failure or any other reason or for admission of a train on blocked line.

To take off calling on signal, the train must come to a stop at the foot of the Home signal, occupying track circuit in rear of the signal. When a train occupies the track circuit, a RED light strip will appear on the panel. The particular route on which the train is intended to be received shall be set by individual point operation by operating point button & point group buttons or by setting route by pressing route button & signal button or by crank handling in the event of failure of operation of points through panel. After the route is set, the calling-on signal button 'C1'/'C2' (Red with white dot), as the case may be, shall be pressed simultaneously along with concerned route button for 2-3 seconds and released. After a lapse of 120 seconds, the calling-on signal clears and a yellow light indication appears on the panel for the concerned calling-on signal.

6.3.1 **RESPONSIBILITY OF STATION MASTER FOR RESTORATION OF SIGNALS TO 'ON':** - If for any reason after taking off signals, it is required to put back the signal and alter the route, in terms of Subsidiary Rules 3.36.02, a time delay of 2 minutes shall be observed before the points can be altered.

6.4 **SIMULTANEOUS RECEPTION, DESPATCH, CROSSING & PRECEDENCE OF TRAINS:** - According to the existing interlocking at this station, the simultaneous reception and despatch of trains is permitted as stipulated below: - (GR 3.47)

(a)	Reception of a DN train on Line No.1	(a)	Despatch of a DN train from Line No.3 or 4.
(b)	Reception of a DN train on Line No.4.	(b)	Despatch of DN train from Line No.1 or 3 or Reception of an UP train on Line No.1 or 2
(c)	Reception of an UP train on line No.1.	(c)	Reception of a DN train on line No.3 or 4 or Despatch of an UP train from Line No.2

6.5 **COMPLETE ARRIVAL OF TRAIN:** - (Rule no. GR 4.16 & SR 4.17.01, GR 4.17.02, GR 14.10)

a) **STAFF RESPONSIBLE TO VERIFY COMPLETE ARRIVAL:** - SM on duty.

b) **MODE OF VERIFICATION:** Through AXLE COUNTER.

6.5.1 **L.V. VERIFICATION THROUGH AXLE COUNTER:** -

Entire block section at both sides of the station is monitored by axle counter system and the position of block section whether clear or occupied is indicated in the panel in Station Master's office. As soon as a train enters in to the block section, the 'RED' indication appears in the axle counter indication panel. After the whole train clears the block section, 'GREEN' indication appears on the axle counter indication panel. This confirms the complete arrival of train and the SM on duty shall give 'Train out of Block section' report on seeing the section clear (GREEN) indication at the panel.

6.5.2 **L.V. VERIFICATION WHEN AXLE COUNTER FAILS:** -

In case of failure of axle counter, the Station Master on duty shall obtain complete arrival certificate from the Guard of the train in the complete arrival register (T/1410) maintained at the station for stopping trains. For through passing trains, the Station master on duty shall

satisfy himself about complete arrival of the train by verification of the last vehicle indicator vide Subsidiary Rule 4.16.05 that the train is complete. In case a train arrives/passes incomplete, action shall be taken as per Subsidiary Rules 4.17.02. The 'Train out of Block section' signal shall be withheld to the station in rear until complete arrival certificate is received from the station in advance supported by a Private Number.

6.5.3 L.V. VERIFICATION WHEN MOTOR TROLLEY FOLLOWING: -

On occasions when motor trolley follows a train, the points shall not be altered until the following motor trolley is admitted on the same line. In the event of motor trolley is delayed in the section, the Station Master on duty shall take action in terms of Subsidiary Rule 15.25.03 (b) (vi).

6.5.4 RECEPTION OF TRAIN ON BLOCKED LINE: -

For admission of a train on a blocked line, the SM on duty shall comply with the instruction laid down in GR 5.09 and SRs thereto.

6.6 DESPATCH OF TRAINS: -

Despatch of trains are governed by General Rules 3.36, 3.38, 3.39, 3.42, 5.11 & 8.01, Subsidiary Rules 3.36.04(b), 3.42.04 and Block Working Manual 2.07(5)(a)(b) and other provisions of General Rules, Subsidiary Rules, Block Working Manual and Station Working Rules of the station.

To despatch a train, the Station Master on duty, having obtained line clear for that train, shall set the route for the out going train correctly and satisfy himself by observing the visual indication on the panel board. He shall then suspend all non-isolated shunting. He shall also ensure that the interlocked Level Crossing gate on the route is closed against road traffic. The Station Master on duty shall then operate the concerned push button on control panel for taking off the concerned route starter and advanced starter signals.

The Station Master on duty shall watch the safe passage of the train with its last vehicle indicator. After the train passes the Advanced starter complete, he shall send the 'TRAIN ENTERING BLOCK SECTION' signal to the station in advance

When a train is worked without a Guard or Brake Van, the instructions laid down in Subsidiary Rules 4.23.02 and 4.25.02 shall be followed

6.6.1 PUTTING BACK SIGNALS TO 'ON' IN CASE OF EMERGENCY: -

If a signal once taken 'Off' for reception/despatch of a train has to be, in an emergency, put back to 'ON', the procedure laid down in General Rules 3.36.02 shall be followed. In case of reception of train, route shall not be altered until the train has come to a stand outside Home signal. In case of departure signal before changing route, the line clear authority is to be withdrawn from the Driver with a memo, taking his acknowledgement thereof.

6.7 TRAINS RUNNING THROUGH: -

The procedure detailed in Para 6.3, 6.6 above and General Rules 4.17, 4.42 and Subsidiary Rules 3.36.04(b)(i) 3.42.02(a)(iv), shall be observed.

The SM on duty is responsible to observe/watch the condition of the vehicles on a passing train and shall wave green hand signal horizontally as per Subsidiary Rule 4.42.02 until anything wrong is noticed on train. For this purpose the SM on duty shall stand in such a position that a clear view of the passing train is seen by him and that his hand signals can clearly be seen by

the Loco Pilot & Guard of the train. He shall depute his points man with hand signal to the other side of the passing train who shall exhibit danger hand signal to draw the attention of the Guard/Driver of the train in case of observing any unsafe condition(s)/abnormalities in the train. He shall also report to the SM on duty for taking further suitable action in terms of SR 4.42.02 (d).

The Station Master on duty is responsible to see that a train passes complete with its last vehicle indicator. If a train passes without last vehicle indicator or its authorized substitute, action shall be taken as per General Rules 4.17 and Subsidiary Rules 4.17.02.

6.8 WORKING IN CASE OF FAILURE: -

In case of failure of S&T equipments, on duty Station Master shall work in accordance to GR 3.68, 3.69 and 3.70 and SRs thereto.

6.8.1 PROCEDURE TO BE FOLLOWED INCASE OF FAILURE OF A SIGNAL & INTERLOCKING:

Whenever there is a failure of points, signals, track circuits or any other interlocking gear at the station that includes level crossing gate (s). if any etc. the SM on duty shall follow the procedure detailed in GR 3.68, 3.72, 3.74 and SR thereto. In case of defective approach signals, the trains will be piloted in vide SR 3.69.02, 3.69.03 & 3.69.05. In case of defective departure signals, trains will be piloted out vide GR 3.70 & SR 3.70.01. & 3.70.02

6.8.2 TRACK CIRCUIT:

In the event of failure of track circuit in the yard concerned signal shall be suspended and trains shall be admitted on calling-on signal. If calling-on signal fails then train shall be piloted 'IN'. Before piloting a train in to the yard the clearance of the track must be ensured by physical verification.

6.8.3 AXLE COUNTER:

In the event of failure of axle counter of concerned block section SM on duty shall initiate resetting of axle counter after ensuring the complete arrival of the train by SM of other end Station. After resetting the first train will be piloted 'OUT' to the concerned Block section for normalising the system of working. In case of failure of Axle counter Block instrument of concerned block section shall be suspended. Details of operations involved in resetting of axle counter are given in Appendix-'B'.

6.8.4 DEFECTIVE SIGNALS:

When signals become defective, the procedure laid down in GR & SR shall be followed. A signal in the OFF position is the final indication that the points are correctly set for the route, for which it applies. If, it is found impossible to take OFF a signal the setting of points on the route to which it applies shall be inspected by the Station Master on duty before the signal is declared as defective irrespective of what is indicated by the position of the route. [Refer GR 3.68 to 3.46, 3.52 to 3.56, 3.71, 3.80 and SR 3.68.01 (c)].

In case of disconnection of signal and interlocking for repairs and maintenance, procedure laid down in GR and relevant SRs shall be followed.

In the event of signal showing no lights, Station Master on duty shall before giving line clear, initiate action in accordance with the procedure prescribed in GR and the relevant SRs. [Refer GR 3.51, 3.69, 3.49 (4), 3.68 to 3.77].

6.8.5 BLOCK INSTRUMENT:

In the event of partial interruption/ failure of block instrument the concerned block instrument shall be suspended till its rectification and trains shall work as per GR. [Refer GR 6.02 .03, 6.02.04 and SR 6.02.06].

Both UP and DN advanced Starters are electrically interlocked with respective block instruments so that the same cannot be taken off unless the concerned block instrument is in line clear position (TGT). When the block instrument is suspended in 'Line clear' position, the concerned advanced Starter must also be treated as suspended.

During the failure of Block Instrument the authority will be T/369(3b) with identification number & Private Number issued from the station in advance written both in figure and words.

UP and DN Home signals are electrically interlocked with respective block instrument can be normalised from 'TRAIN ON LINE' to 'LINE CLOSED' position, when the corresponding Home signals are in the 'ON position. However, the Home signals can be taken off in case of failure of the block instruments.

6.8.6 DEFFECTIVE INTERLOCKING:

In the event of interlocking becoming defective, the points will be treated as defective. The SM on duty on receipt of this information will immediately introduce non-interlocking system of working at the station. Trains will be Piloted In or Out as the case may be. The SM on duty shall be responsible for correct setting, clamping and padlocking of points for admission of train.

6.8.7 DEFFECTIVE/DAMAGED POINTS:

When any point fails to operate normally by the route setting operation through panel it is inevitable to operate the points with crank handle. The SM on duty shall personally ensure clamping and padlocking of all facing and trailing points on the route. Crank handles are interlocked with signals and interlocking system. When points become defective, the signals controlling these points shall be considered defective and vice-versa and the procedure for use of crank handle for motor operated points shall be followed as per operating manual para-20.06.

The responsibility of correct setting of points, clamping and padlocking the points for reception and despatch of trains at the station, rests with SM on duty himself.

6.8.8 RECEPTION OF A TRAIN ON BLOCKED LINE:

Whenever trains are to be admitted on an obstructed line the SM on duty shall authorize the of both facing and trailing end of the concerned route vide SR 3.69.03.

A stop hand signal shall be exhibited by the SM on duty at a distance of not less 45mts. from the point of obstruction to indicate to the Driver as to where the train shall be brought to a stand.

6.8.9 INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE:

However, before declaring a signal is defective, the setting of the point on the route to which it applies shall be inspected by the Station Superintendent/Station Master irrespective of the position of the switches point laid down in GR with relevant SRs shall be followed. [Refer GR 3.68, 3.70 & SR 3.77.01(b)]. Initiate action in accordance with the procedure prescribed in GR and relevant Subsidiary Rules there to. [Refer GR 3.49(4) and 3.68, 3.77]

6.8.10 ISSUE OF CAUTION ORDER: -

Whenever in consequence of the line being under repair or for any other reason special precautions are necessary, a caution order detailing the kilometers and speed at which a train shall travel and the reasons for taking such precautions shall be handed over to Loco Pilot in terms of GR 4.09 and SRs thereto.

6.9 WORKING OF MOTOR TROLLEY, MATERIAL LORRIES ETC:

(a) Motor Trolleys are run in accordance with Subsidiary Rules 15.25.03 to 15.25.07.

(b) Material Trolleys will work in accordance with Subsidiary Rules 15.27.05 to 15.27.08

The following precautions must be taken:

- i) The section where axle counters are provided in lieu of track circuits, trolleys, motor trolleys, Lorries etc which are not insulated, shall not be allowed to run except on line clear.
- ii) Motor trolleys / tower wagons / material Lorries are not likely to actuate the axle counter correctly. When they are to run over the sections split by axle counters, the whole section to be treated as one and next train to be started after the first train has arrived complete.
- iii) In all other respects, the working of a light Motor trolley shall conform to the rules laid down for ordinary trolleys while running without block protection & to those laid down for motor trolleys while running under block protection or following another light motor trolley or a motor trolley.

7.0 **BLOCKING OF LINES:** -

Whenever a running line is blocked either by loose vehicles or by a stabling train or by a train which is to cross or give precedence to another train, the points at rear should immediately be set against the blocked line except during shunting movement and reminder collars shall be placed on the concerned point push button and route button(s) for the blocked lines. A clear remark in 'RED' ink shall be made immediately in the train signal register. The stable load or loose vehicles are to be secured as per General Rules 5.23 and Subsidiary Rules 5.23.01 to prevent rolling down of vehicles. A record thereof shall be made in the Station Diary vide SR 5.23.01 (a) (c) & (d).

7.1 **USE OF REMINDER COLLARS:-**

Whenever a running line is blocked either by loose vehicles or by stabled train or by a train which is to cross or give precedence to another train even for a short while or during shunting operation, the reminder collars must be placed on concerned point push button, signal and route button(s) for the blocked lines on the operating panel by SM on duty.

7.2 **SECURING OF VEHICLES:** -

As far as practicable loose vehicles shall not be allowed to stand on the running lines. However, under unavoidable circumstances, if it is necessary to detach vehicles from a train or to stable a train and leave them standing on running line, SM on duty shall be responsible to secure vehicles/stable loads in accordance with GR 5.23 and SR 5.23.01 to prevent rolling down of vehicles and arrest obstruction of fouling.

NOTE: Special care shall be taken to secure special type vehicles fitted with roller bearings while standing in siding or on running lines A stabled load register to be maintained shift wise.

7.3 **ALTERING OF POINTS TO A CLEAR LINE WHEN RUNNING LINE IS BLOCKED:-**

- a) When a running line is blocked by stable load e.g., wagons, vehicles or by a train which is to cross or give precedence to another train or immediately after arrival of a train at the station etc. the points at rear should immediately be set against the blocked line except when shunting or another movement is required to be performed in that direction on the same line.
- b) If all the lines at a station happen to be blocked when line clear has been granted to a train, the points should be set for the line occupied by a stable load or a goods train in that order so that in case of a mishap, the chances of casualties are minimized.
- c) In case all the lines are occupied by passenger carrying trains, points should be set for a loop line, to negotiate which the speed of the incoming train would be reduced, which in turn would minimize the consequences of casualties. While doing so, points shall be set for a loop, occupied by a train, if any, whose engine is facing the direction of approach of the incoming train rather than a loop line, occupied by a train where a passenger coach will, in case of collision, receive the impact.

7.4 **LOADING AND UNLOADING OF VEHICLES ON RUNNING LINE:-**

Loading and unloading from vehicles on running line is prohibited unless permitted by Sr. DOM / SBP vide SR 5.19.01.

At stations where loading and unloading of goods is permitted whether full rake or part there of,

the station master shall ensure that no goods are left fouling any line before and after clearance of the rake from the line. The railway servant supervising loading and unloading shall also ensure that consignment does not foul any line vide SR 5.19.001: (a).

If the stations are on gradients, the rake should be properly secured as detailed in SR 5.23.01.

During the time of loading / unloading, the station master shall ensure isolation of the lines(s) as detailed in SR 3.51.06.

8.0 **SHUNTING: -**

8.1 **GENERAL PRECAUTIONS: -**

Shunting shall be performed in terms of General Rules 3.46, 3.52 to 3.56, 5.13, 5.14, 5.16, 5.17, 5.19, 5.20 to 5.23, 8.09, 8.10, 8.12, 8.13, 8.14, 8.15 and Subsidiary Rules thereto. The Guard/Asst.Guard/SS/SM/TPM on duty is authorized to supervise shunting operation. Normally back shunt signals shall be used for shunting operation. In case of non-signalling movement, the authority for shunting is a shunting order (T-806) to be issued by the SM on duty, which shall be withdrawn after completion of shunting, or in need when train movement is involved to receive/despatch trains on the adjacent line. The same shall be cancelled and pasted to its record foil. The staff supervising shunting shall ensure correct setting, clamping and pad locking of points.

8.2 **SHUNTING IN THE FACE OF APPROACHING TRAIN:**

Shunting in the face of an approaching train is prohibited.

8.3 **PROHIBITION OF SHUNTING, SPECIAL FEATURES IF ANY: -**

Hand, Fly & Loose shunting is not permitted at both ends of the yard.

8.4 **SHUNTING ON SINGLE LINE:- NA**

8.5 **SHUNTING ON DOUBLE LINE:-**

Shunting or obstruction for any other purpose shall not be permitted in the block section in rear unless it is clear and blocked back vide GR 8.06(2) & BWM 5.15(1) (B). Shunting or obstruction for any other purpose in the block section in advance is governed by GR 8.06(3) and BWM 5.15(2) (B).

- a) Shunting shall not be permitted in the block section in advance unless it is clear and is blocked forward vide GR 8.06(3).
- b) Shunting shall not be permitted outside the station section (i.e., in the block section in rear) unless it is clear and is blocked back vide GR 8.06(2).
- c) When line clear has been given, no obstruction shall be permitted in the Block Section in rear vide GR 8.06(1).
- d) Shunting following a train traveling away: Rule No. 8.06 (3) shall be followed.
- e) Shunting up to IBS : NA
- f) Shunting beyond IBS : NA

8.5.2 **DURING FAILURE OF BLOCK INSTRUMENT ON DOUBLE LINE:**

The Station Master shall see that the shunting of trains for vehicles is carried on only at such time and such manner as it will not involve any danger to passenger and traffic. He shall permit shunting in accordance with GR 8.05 to 8.15, 5.13, 5.14, 5.16, 5.17, 5.20, 5.21 and BWM 5.15

8.6 **SHUNTING IN THE SIDING TAKING OFF FROM STATION YARD & GOODS YARD: -**

When shunting in the station yard / siding, proper shunting authority in form T/806 to be issued to the train staff with clear instruction and limit upto which shunting is to be performed. While performing shunting in the siding, relevant GR 5.14 and SRs thereto to be followed.

9.0 **ABNORMAL CONDITIONS:** -**(A) THE RULES TO BE OBSERVED IN THE EVENT OF ABNORMAL CONDITION:** -**[I] PARTIAL FAILURE OF COMMUNICATION:** -

In the event of suspension of single line token Block Instrument and during partial failure of other available means of communications, trains will be worked in terms of Subsidiary Rule 6.02.06 and Chapter-III Part-I of Block Working Manual.

[II] THE AUTHORITY TO PROCEED IN THE OCCUPIED BLOCK SECTION IN CASE OF OBSTRUCTION OF LINE OR ACCIDENT:- - In case, it is necessary to allow a train into an obstructed block section due to engine failure, obstruction or accident, a Block ticket shall be issued in terms of SR 6.02.05. Absolute Block System on the affected block section shall be suspended and concurrence of the SM on duty at other end shall be obtained and recorded in caution order register and train signal register.

On the Block ticket (T/A 602), it shall be mentioned in detail the place of obstruction i.e. Engine Km., B/Van Km., whether the train is to return or to wait at the place of obstruction for the arrival and return of another following train(s) or to proceed to next station.

A caution order shall be issued restricting the speed to 15 KMPH. in day light hours when the visibility is good and 10 KMPH at night or whenever clear view for 800 Mtrs. is not available.

On arrival at the station, the Block ticket shall be collected with necessary endorsement from Loco Pilot and/or Guard and be cancelled and pasted to its record foil if the Block ticket is issued from the same station or shall be sent to the issuing station for cancellation and record.

In case of an accident/engineering block, an assurance from SE (P.WAY) concerned shall be obtained that the line is safe for movement of trains before resumption of normal working. When the obstruction is removed and an assurance in writing is obtained from SE (P.WAY) concerned or Guard/Driver, the SMR/SM on duty may resume normal working after exchanging proper messages supported by Private Number.

[III] TRAINS DELAYED IN BLOCK SECTION: - In case of train delayed in the block section, the Station Master will take action as per GR 6.04 and SRs thereto.

[IV] FAILURE/PASSING OF INTERMEDIATE BLOCK STOP SIGNAL AT ON: - NIL

[V] FAILURE OF LV AXLE COUNTER: - Details of the operation are given in Appendix 'B' of SWR.

(B) (i)PROCEDURE FOR EMERGENCY OPERATION OF POINTS BY CRANK HANDLE:-

When any point fails to operate normally by the route setting operation or through the concerned Point button through panel, it is inevitable to operate the points with crank handle. Station master on duty shall personally ensure clamping and padlocking all facing and trailing points enroute. Crank handle keys are interlocked with signals and interlocking system.

Correction Slip No. 01
Date of Issue: 08.10.2012.

The crank handle key in RKT in CH locations can be released from the RKT. The SM has to press concerned crank handle button and Trans button. This will enable SM/TP to extract crank handle key CH-1/CH-2/CH-3/CH-4 from RKT in CH locations. SS/SM/TPM on duty after extracting the crank handle key from RKT in CH location shall insert it in the space/groove provided in the point machine and turn it to open the slot for insertion of crank

handle in the point machine. After inserting the crank handle in the point machine he shall operate it to set the point to desired position. After completion of point work the crank handle key is to be inserted in the RKT in CH location and transmitted to station. Station Master on getting ' Key IN ' flashing indication that will appear on panel, shall press relevant CH button & Group Release button to get the steady key "IN" indication. SS/SM on duty shall personally ensure clamping and padlocking of all facing and trailing points en-route. The cases of failure of motor operated points should be promptly reported to the concerned ESM/Signal Inspector for immediate rectification. SS/SM on duty as per OM 20.06 (d) shall maintain an emergency crank handle register. The procedure for use of crank handle for motor operated points shall be followed in terms of operating Manual 20.06.

(ii) **EMERGENCY POINT OPERATION:**

Emergency point operation facility is provided to operate point from the panel in the event of failure of track circuit controlling the point. A push button (BLACK WITH RED DOT) is provided on the top of panel. If such operation is necessary, the SM on duty, after ensuring that no vehicle is standing on the concerned point track circuit, shall insert SM's emergency point operation key in and shall push the emergency point operation button and then operate the required point button and the point group button (Normal or Reverse). Point button shall be pressed immediately on releasing the emergency point operation button. All such operations will be registered in the emergency point operation counter. Each operation of emergency point operation shall be recorded in the station diary and in the register meant for this purpose. Before initiating emergency point operation when the concerned point zone track circuit is showing occupied, SM on duty must carry out physical verification at site to ascertain that the said track circuit is clear of vehicles.

(iii) **EMERGENCY ROUTE RELEASE OPERATION:-**

This panel interlocking is based on the principle of 'DEAD APPROACH LOCKING'. As such when a route is set and signal is taken off on the route, the route gets locked. Normally the route is released by the passage of the train over the route. When it becomes necessary to alter the route after the signal has been taken off vide SR 3.36.02 (a), the concerned signal must be put back to danger by simultaneously pressing the Signal cancellation button and the concerned signal button. Then the emergency route release button (white with red dot) positioned on the top of panel to be pressed and subsequently the concerned signal button pertaining to the route is to be pressed with out

releasing the emergency route release button. A white light will flash (UP or DN) indicating that the timer is working. After 120 seconds, the white light along with the white strip of light will disappear suggesting the route has been released. In case the route illumination (a white strip of lights) does not disappear, it suggests that the route is not released / cancelled. In such case, the emergency cancellation of route has to be resorted to. The concerned S&T staff should be advised immediately to get the emergency route release button resealed after rectification of fault if any. Each operation of emergency cancellation of route is recorded in the emergency route release counter by registering the next higher number. All such operations and the new number should be recorded in the station diary and in the Train signal register.

- (C) **CERTIFICATION OF CLEARANCE OF TRACK BEFORE CALLING-ON SIGNAL IS OPERATED:-**
To take 'OFF' a calling on signal during failure of track circuit on the route, the clearance of the track over which the train would pass must be physically checked by the SM on duty. After satisfying himself, SM on duty shall initiate the calling on signal operation. The procedure shall be strictly followed.
- (D) **REPORTING FAILURE OF POINTS, TRACK CIRCUIT/AXLE COUNTER AND INTERLOCKING:-**
In case of failure of any interlocking gear at the station, the SM on duty shall communicate the failure report to the Signal Maintainer, the JE/SE/SSE (SIG) of the Section and others through a memo as per SR 3.68.04 and shall document all such transactions.

9.1 **TOTAL FAILURE OF COMMUNICATION: -**

In the event of total failure of communications between KDLR-KSNG or KDLR-RPRD stations i.e. when line clear cannot be obtained by any one of the following means stated in order of preference viz.

- (a) Block Instruments, Track Circuits or Axle counters,
- (b) Telephone attached to the Block Instruments,
- (c) Station to station fixed telephone (hot line)
- (d) Fixed telephones such as Railway auto phones & BSNL phones,
- (e) Control telephone, and
- (f) VHF set.

The trains shall be worked in terms of GR.6.02.03, which is summarized in brief as follows:

- (i) Each train before being allowed to enter into the Block Section should be stopped and the Guard and Loco Pilot of the train apprised of the situation.
- (ii) The SM will hand over an authority for working of train during total interruption of communication to the Loco Pilot of each train which shall include-
 - a) Authority to proceed without 'Line Clear'. [T/C 602]
 - b) Authority to pass the Last Stop Signal at its "ON" position, i.e. T/369(3b).
 - c) A caution order restricting the speed to 25KMPH by day when view ahead is clear and 10KMPH by night or when view ahead is not clear.

- (iii) No train shall be allowed to enter the Block Section until there is a clear interval of 30 minutes between the train about to leave and the train, which has immediately proceeded.
- (iv) Fixed signals except the last stop signal may be taken "OFF" for the dispatch of the train and for the reception of the train at the next block station, reception signals may be taken only after the train has been brought to a stand outside it.
- (v) No train shall be backed. In exceptional circumstances when it may be unavoidable, to back a train, the train shall be backed only after providing protection by placing one detonator at 250 meters and two detonators in 10 meters apart at 500 meters at rear of the point up to which the train shall be backed.
- (vi) On arrival at the next block station the driver shall hand over the 'Authority to proceed without line clear' to the SM on duty who will preserve the same for further inspection.
- (vii) Before resuming normal working when any means of communication is established. SM of either end must satisfy that there is no train in the block section and block section clearance has been obtained from driver/guard/PWI.. [Refer SR 6.02.03].

9.2 **TEMPORARY SINGLE LINE WORKING ON A DOUBLE LINE SECTION: -**

During temporary single line working when other line is obstructed either between KSNG – KDLR or KDLR-RPRD stations, train shall be worked as per the detail procedure in SR 6.02.01, which is summarized as below:

- (a) Before introducing single line working the SM on duty must satisfy that the line on which single line working will be introduced is clear and free from all obstructions.
- (b) The Lock and Block instrument will be suspended. The Commutators of Lock & Block Instrument will be kept on "Train on line position".
- (c) SM proposing single line working must issue a message with
 - (i) The cause of introduction of single line working,
 - (ii) Line on which the single line will be introduced,
 - (iii) Source of information about the clearance of the line on which single line will be introduced,
 - (iv) Place of obstruction,
 - (v) Restriction of speed, If any,
 - (vi) Assurance about keeping the last stop signal at 'ON' position if the train runs on right line and in case of wrong line all signals are to be kept at 'ON' position etc under the exchange of Private Number.
- (d) SM on duty at the other end of the block section will acknowledge the message and confirm the same by a Private Number.
- (e) After obtaining line clear for the train from the advance station, the Loco Pilot must be given as-
 - (i) Authority for Temporary Single Line (TSL) working on double line (T-D/602) indicating there in
 - Caution order
 - The line on which single line working is introduced.
 - The chainage/ kilometer of obstruction.
 - Any other speed restriction, if any existing.
 - Endorsement to inform all Gang man and Gateman about the single line working (for the first train only).
 - The speed of the first train to be restricted to 25 KMPH subject to other speed restriction.
 - Authority to pass Signal in "ON" position
 - (ii) A pilot memo T/369(3b) to pass the last stop signal at its 'ON' position. The approach stop signals at the station in advance may be taken "OFF". In case a train proceeding on wrong line, the train shall be piloted out and at the receiving station, the train shall be piloted 'IN', on the authority of T/369(3b).

On being ensured that the obstructed line is clear of all obstructions, the SS/SM will resume normal working after exchanging message with the SM of the other concerned end supported by private number in consultation with the Section Controller on duty when there is no train in the block section.

A goods train or an engine may be allowed on wrong line by blocking back the section without introducing single line working. [Refer SR. 6.02.05(g) (i)]

Whenever total interruption of all communication occurs during single line working on double line, the procedure detailed in GR should be followed. [Refer SR 6.02.02]

9.3 **DESPATCH OF TRAINS UNDER AUTHORITY TO PROCEED WITHOUT LINE CLEAR OR TO ASSIST THE CRIPPLED TRAIN: -**

The Station Master will take action as per SR 6.02.03 for despatch of trains under authority to proceed without line clear. Actions shall be taken to assist the crippled train as per SR 6.02.05.

In case, it is necessary to allow a train into an obstructed block section due to engine failure, obstruction or accident, a Block ticket shall be issued in terms of SR 6.02.05. Absolute Block System on the affected block section shall be suspended and concurrence of the SS/SM at other end shall be obtained and recorded in caution order register and train signal register.

On the Block ticket (T/A 602), it shall be mentioned in detail the place of obstruction i.e. Engineering Km., B/Van Km., whether the train is to return or to wait at the place of obstruction for the arrival of another following train(s) or to proceed to next station.

A caution order shall be issued restricting the speed to 15 KMPH. in day light hours when the visibility is good and 10 KMPH at night or whenever clear view for 800 Mtrs. is not available. On arrival at the station, the Block ticket shall be collected with necessary endorsement from Loco Pilot / Guard and be cancelled and pasted to its record foil or shall be sent to the issuing station for cancellation. In case of an accident/engineering block assurance from SE (P.WAY) concerned shall be obtained that the line is safe for movement of trains before resumption of normal working. When the obstruction is removed and an assurance in writing is obtained from SE (P.WAY) concerned or Guard/ Loco Pilot, the SM on duty may resume normal working after exchanging proper messages supported by Private Number.

9.4 **TRAINS DELAYED IN BLOCK SECTION**

If a train carrying passenger does not arrive within 10 minutes and if a goods train does not arrive within 20 minutes after allowing for its normal running time from the station in rear, the SM at the station in advance shall immediately advise the station in rear and the control this fact. There after SMs at either end of the Block section shall immediately stop all trains proceeding in to the block section on adjacent line in either direction and warn the Drivers and Guards of such trains by issue of suitable Caution Orders. [Refer GR 6.04 & SRs thereto].

10.0 **VISIBILITY TEST OBJECT: -**

- i) V.T.O. post / Authorised substitutes earmarked to work as V.T.O. Post. - The lights of DN starter signal No 8 and UP starter signal No.3 of line No.1 during day and light are earmarked to serve as VISIBILITY TEST OBJECTS vide GR 3.61 (2) (b) (ii).
- ii) Distance between CSB and V. T. O. post: - 180 Mts.
- iii) Station Master on duty will test the visibility during thick and foggy weather and if visibility is impaired, he will work as per GR 3.61 and SRs thereto.

11.0 **ESSENTIAL EQUIPMENTS AT THE STATION: -** This is mentioned in the Appendix 'E' of the SWR. Essential equipments shall be kept ready on hand in good condition with necessary relief stock.

12.0 **FOG SIGNAL MEN NOMINATED TO BE CALLED IN CASE OF FOG: -**

In order to indicate to the Loco Pilots of approaching trains the location of signal during thick, foggy and tempestuous weather or during dust storm, the SM on duty shall arrange for fog signalling in terms of General Rule 3.61 and Subsidiary Rules thereto. Assurance of the staff shall be taken in the Fog Signal Register in the month of October every year as token of their having knowledge of Fog Signalling Rules and their use.

Fog signalmen shall be detailed for duty at stations being recruited partly from the station traffic staff and partly from Engineering Gang man and must not be substitutes or casual labour but regular employees of the railway

12.0 **STATION DETONATOR REGISTER (OPT/124)**

A Register regarding detonator is maintained at the station.

(a) **INSTRUCTIONS:**

This register contains the following parts.

Part. - I: Particulars of fog signalmen posted at the station from time to time.

Part – II: Particulars of receipt and stock of detonating (fog) signals at the station to be filled in whenever detonators are used or received.

Part – III: Periods of fogs, fog signalmen on duty and details of detonators used.

Part – IV: Particulars of issue and testing of fog signals at the station.

(b) In charge of the station shall ensure that the information maintained in the register is kept upto date and is accurate in all respects.

(c) Transportation inspectors shall check the registers and also the stock of detonators on hand each time they visit the station and initial with date as an indication having done so.

CERTIFICATE:- NOTHING IN THIS RULES SHALL BE READ AS CANCELLING, AMENDING AND MODIFYING ANY OF THE GENERAL RULES, SUBSIDIARY RULES, BLOCK WORKING MANUAL AND OPERATING MANUAL. THESE RULES HENCEFORTH CANCEL ALL PREVIOUS STATION WORKING RULES OF KANDEL ROAD STATION.

APPENDICES

APPENDIX 'A' -- WORKING OF L.C. GATE.

APPENDIX 'B' -- SYSTEM OF SIGNALLING AND INTERLOCKING AND COMMUNICATION ARRANGEMENTS AT THE STATION.

APPENDIX 'C' -- ANTI COLLISION DEVICE (RAKSHA KAVACH).

APPENDIX 'D' -- DUTIES OF TRAIN PASSING STAFF AND STAFF IN EACH SHIFT.

APPENDIX 'E' -- LIST OF ESSENTIAL EQUIPMENTS PROVIDED AT THE STATION.

APPENDIX 'F' -- RULES FOR WORKING OF DK STATIONS, HALTS, IBH, IBS AND OUTLYING SIDINGS.

APPENDIX 'G' -- RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS.

APPENDIX - 'A'

DETAILS OF LEVEL CROSSING GATES TOGETHER WITH INSTRUCTIONS TO OPERATING STAFF INCLUDING LEVEL CROSSING GATEMAN ABOUT THEIR NORMAL WORKING, THEIR MAINTENANCE AND THEIR WORKING IN CASE OF FAILURE / EMERGENCIES WITH SPECIAL PROVISIONS IF ANY.

1.0 WORKING INSTRUCTIONS OF INTERLOCKED TRAFFIC L.C. GATE (No-RV-181) SITUATED AT KM 223.641 AT KSNG END OF THE YARD.

1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

1.	Number of Level Crossing Gate: -	RV-181
2.	Engineering or Traffic Gate: -	Traffic.
3.	Under control of Station Master/PWI:	SM/ KDLR.
4.	Location KM	223.641
5.	At. Station: -	KDLR.
6.	In between stations: -	KDLR-KSNG
7.	BG/MG/NG: -	BG.
8.	Single line/Double line/Multiple line: -	Double Line.
9.	Normal Position: -	Open to road traffic.
10.	Interlocked/Non Interlocked: -	Interlocked.
11.	Means of interlocking: -	EKT
12.	Provision of Gate signal at Kms.	(i) Up line NIL (ii) Dn line NIL
13.	Signalling arrangement: -	Nil.
14.	Means of Communication:	Magneto Telephone Communication from Gate Goomty with SM/ KDLR.
15.	Width of level crossing Gate: -	7.5 m.
16.	Type of road. (NH/SH/Others): -	Others
17.	Name of Road: -	Village Road
18.	Metaled/NonMetaled:	Non-Metaled
19.	Approach Road: -	Non-Metaled
20.	Width of the road: -	5.50 m.
21.	Angle of road crossing (In case of the skew Gates)	-----.
22.	Road gradient (If any)	(i) North/East side- Level (ii) South/West side- Level
23.	Road alignment (Straight/Curve): -	(i) North/East side-Straight (ii) South/West side-.Straight.
24.	Provision of height gauges: -	Not provided.
25.	Type of Barriers: -	Coupled Lifting barriers.
26.	Length of checkrails: -	7.50 Meter.
27.	Road surface in between Level Xings Gates	Hexagonal Blocks.
28.	Length of speed breakers: -	5.50 M.
29.	Road signs: -	Available
30.	Speed breaker indication board: -	Provided.
31.	TVU: -	2924 on 7/2010.
32.	Census next due on: -	7/2013
33.	Demarcation for placement of Detonators: -	Provided.
34.	No. of the Gateman working: -	02
35.	Nearest Railway Medical Assistance: -	KDLR
36.	Nearest Private Medical Assistance available (if any)	TIG.
37.	List of equipment available Yes//No: -	Yes.

1.2. **THIS GATE IS PROVIDED WITH EQUIPMENT AS PER SR 16.02.01 AND RECORDS AS PER SR 16.02.03 AS FOLLOWS:**

<u>EQUIPMENT:</u>	
ITEMS	QUANTITY/NUMBERS
1. Hand signal Lamp /Tri Colour Torch	3(5 on Quadruple/Line or twin single line)
2. Hand signal Flag Green	1 mounted on sticks
3. Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line and 7 in case Hexable section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q/Twin single line and 5 on Hexable section)
6. Spares chains with padlocks	2 with stop mark
7. Detonators	10 in tin case
8. Gate Lamps	2
9. Tommy Bar	1
10. Motor Pan	1
11. Spade/Fowrah	1
12. Rammer	1 (in case of asphalted road this may not be provided)
13. Pick Axe	1 (in case of asphalted road this may not be provided)
14. Tin case for flags	1
15. Can for oil	1
16. Water pot/Bucket	1
17. Canister for Muster Roll	1
18. Set of spare spectacles of Gateman Wearing glasses.	1
19. Board demarcating protection of level crossing Gate diagram in case of obstruction on Gate .	1
20. Basket	1
21. Whistle	1
22. Wall clock	1
23. Small size chains with padlocks to be used in case of failure of boom lock.	02

1.3 **THE GATEMAN SHALL BE PROVIDED WITH FOLLOWING REGISTERS: -**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) Gateman Rule Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as gateman.
- vii) Bio–Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.

1.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The Gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the gate shall be in his personal custody.

2. **POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:**

During passage of trains, Gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the gate – lodge facing the approaching train.
- ii) In daytime, Gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In night time, Gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. **ROUTINE DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red banner flag by day and red light by night is placed across the track in case of emergency and obstruction on the track.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close & lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to driver.
- vii) If lifting barriers get damaged or becomes out of order, the Gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions & remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order & ready for immediate use.
- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

4. **ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN.**

In case Gateman observes anything unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the driver/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the Loco Pilot /guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If Loco Pilot /guard fails to take notice, Gateman shall immediately inform the Station Master to take appropriate action, under exchange of private number.
- iv) In case of train parting, Gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Loco Pilot /Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.
- vi) In case the train does not stop, Gateman shall immediately inform the Station Master to take appropriate action, under exchange of private number.

5. ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:

- i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, if an, in the 'ON' position.
- ii) Therefore, if he is unable to remove the obstruction, gateman shall immediately advise the SM on duty, if connected by telephone, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master after or three attempts he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under: -

- i) If both lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away from the line on which train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators and red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG & place one detonator on the line. Thereafter he shall proceed to a distance 1200m on BG from the level crossing gate and place 3 detonators on the track in 10m apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.
- v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate detonators on his way back.
- vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the driver of the approaching train.
- vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- viii) Thereafter, he shall stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

(B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.

- ii) If the gate is broken by a road vehicle, which is fouling the track or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the Gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the SM/KDLR and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

1.5 **SPECIAL INSTRUCTIONS:**

1. **MODE OF OPERATION:**

This is a Manned, interlocked traffic L.C.Gate situated at KSNG end of the yard in between DN Starter and DN Adv. Starter signal at Km 223.641. This gate is interlocked with Station stop signals. Telephone communication is provided between the L.C. gate lodge with SM of KDLR Station. The level crossing gate is of lifting barrier type operated by means of winch provided at the gate lodge.

The normal position of the gate is open to road traffic. A two-lever ground frame is provided at the gate lodge. The key of the LC remains in the winch normally. When it is necessary to close the gate, for taking off signals or for shunting operations the SM on duty shall inform the gate man to close and lock the gate. The gate man on duty shall then close the barriers of the LC gate by operating winch. Then key 'P' is obtained from winch after closing the level crossing Gate releases GF-2. When GF-2 is reversed it locks the Level crossing booms and releases GF-1 and Key 'R'. When Key 'R' is transmitted electrically to Panel in conjunction with GF-1 reversed, L.C Gate closed indication will appear on the Panel and concerned reception and despatch signals get released.

After passage of the Train or completion of shunting, the SM on duty shall inform the gateman and press LC gate controlling button No. 7 and keep it pressed till such time the gate man extracts the control key 'R' from the RKT instrument. After getting the Key 'R' the gate man will open the L.C gate by normalizing the levers.

In the event of failure of any UP reception signal or DN despatch signals or during Non Interlocking working the Traffic Gateman shall be informed and the Train shall be passed in terms of SR 3.69.02, 3.69.03 and 3.70.01 after ensuring correct closing and locking of L.C Gate. During this period the L.C Gate shall be opened only when necessary & safe to do so.

2. **INTIMATION TO GATEMAN:**

- i) Before taking off reception/departure signals Station Master/KDLR shall inform the gateman, the number, description, and direction of the train.
- ii) The gateman shall close the gate and transfer the key to the Station Master.
- iii) The reception/departure signals will then be taken 'OFF'
- iv) In order to ensure that road traffic is not held up for a long time, the SM/ KDLR must ensure that the train is ready for departure in all respects before he advises the gateman for closing the gate.
- v) When a train has to be piloted to and from the station yard or any shunting movement is to be done, the staff deputed to pilot the train to perform the shunting across the gate shall be personally responsible to ensure that the gate is closed against road traffic before allowing any movement across the gate.

3. **FAILURE OF TELEPHONIC COMMUNICATION:**

When Telephonic Communication fails or it does not get any response from the Gateman

- despite 2 or 3 attempts, the following procedure should be adopted:
- i) Station Master on duty/ KDLR shall send written advice to the gateman through the porter with full details of number, description and direction of the train.
 - ii) Gateman on receipt of such advice shall close the gate and transmit the key to the Station Master/ KDLR, which will enable him to take 'OFF' reception/Departure signals.
 - iii) When sufficient time is not available because of greater frequency of train service, station Master/ KDLR will issue written authority to the train Loco Pilot to pass the signal at 'ON' position.
 - iv) In addition, Station Master/ KDLR shall also issue a caution order advising the Loco Pilot to whistle continuously and approach the gate cautiously.
 - v) The train driver shall be instructed to pass the gate cautiously, on before signaled by the gateman. If hand signal is not seen, Loco Pilot should be prepared stop short of the gate and ensure that gate is closed following GR.3.73.
 - vi) In case of an approaching train, the Station Master/ KDLR shall advise the Station Master/KSNG, under exchange of private number, that the telephone at the gate has failed.
 - vii) The station Master/ KSNG shall then issue a caution order to the Loco Pilot before dispatching a train into the block section from his end.
 - viii) He should also advise S&T staff responsible for maintenance of the telephone rectify the defect at the earliest.
 - ix) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection /fit memo for the same.

4. **FAILURE OF LIFTING BARRIERS:**

- i) When the gate cannot be closed due to failure of lifting barriers, the gateman will immediately inform, the SM on duty/ KDLR, under exchange of PN, and ensure the lifting barriers of gate do not foul the track.
- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- iv) After securing the gate against road traffic, gateman shall show green hand signal flag by day and green light by night to the driver of the approaching train.
- v) Station Master on duty/ KDLR shall issue a caution order to the Loco Pilot of a departing train.
- vi) He shall also advise the SM/ KSNG at the despatching end, under exchange of PN, to similarly issue a caution order to the Loco Pilot before despatching an UP train into the block section from his end.
- vii) SM/ KDLR will advise maintenance staff responsible for maintenance of lifting barriers to repair the defect at the earliest.
- viii) Normal working will resumed only after maintenance staff repair the barrier and issue reconnection/fit memo for the same.

5. **FAILURE OF THE GATE KEY WITH THE GATE IN CLOSED POSITION WHEN GATE KEY CANNOT BE EXTRACTED FOR OPENING THE GATE.**

- i) If the gate key cannot be extracted from the gate leaves or the key transmitter, then gateman must immediately inform the SM/ KDLR on duty on telephone, under exchange of private number.
- ii) Thereafter, the gate must be treated as non – interlocked and procedure for reception/ despatch of trains as prescribed for non – interlocked gate should be adopted.
- iii) Station Master on duty/ KDLR shall issue a caution order to the Loco Pilot of a departing train.
- iv) He shall also advise the SM/KSNG at the despatching end, under exchange of PN, to similarly issue a caution order to the Loco Pilot before despatching a train into the block section from his end.
- v) Station Master/ KDLR will advise S&T staff responsible for maintenance of winch /key transmitter to rectify the defect at the earliest.
- vi) Normal working will resumed only after S&T staff repairs the winch/key transmitter/key transmitter and issue reconnection/fit memo for the same.

6. FAILURE OF THE GATE KEY,WITH THE GATE IN OPEN CONDITION:

- i) If the gate key cannot be extracted from the winch, gate lever or key transmitter then gateman must immediately inform the Station Master on duty/ KDLR on telephone, under exchange of PN.
- ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception/despatch of trains as prescribed for non interlocked gate should be adopted.
- iii) Gateman shall secure the gate against road traffic by means of chains and padlocks and pass the trains on hand signals.
- iv) Station Master on duty/ KDLR shall issue caution order to the driver of a departing train.
- v) He shall also advise the station Master/KSNG at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train into the block section from his end.
- vi) Station Master/ KDLR will advise S&T staff responsible for maintenance of winch/key transmitter to rectify the defect at the earliest.
- vii) Normal working will resumed only after S&T staff repair the winch/key transmitter and issue reconnection/fit memo for the same.

7. OBSTRUCTION AT THE GATE:

- i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- ii) Immediately after this, the gateman shall advise the Station Master/ KDLR on duty, regarding the defects/obstruction at the gate, under exchange of private number.
- iii) Stationmaster/ KDLR on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.

- iv) If there is no response from the Station Master / KDLR after two or three attempts, he shall first protect the gate and then inform on phone.
 - v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item No.1.4. (5).
 - vi) Thereafter he shall protect the gate from the other direction also.
 - vii) He shall note down the particulars of the road vehicle, name of the driver, owner and reply these details to the station Master/ KDLR who shall not start the trains unless he has been assured by the gateman that the road vehicle or the lifting barriers are not fouling the track.
 - viii) The Station Master/ KDLR shall also inform the station Master/KSNG at the despatching end, under exchange of private number, asking him not to despatch any train in the block section from his end, until the track has been cleared of all obstructions.
 - ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master/ KDLR accordingly, under exchange of private number.
 - x) Station Master/ KDLR shall then issue a caution order to Loco Pilots of all trains to proceed cautiously, and pass the gate signal at 'ON' position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.
 - xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and they're after exhibit green hand signal, if the gate is not obstructed.
 - xii) Station Master/ KDLR shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
 - xiii) Normal working will be resumed only after maintenance staffs rectify the defective lifting barriers and issue reconnection/fit memo for the same.
8. **OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**
If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master/ KDLR will adopt the procedure given under item No. 7 above. If the obstruction fouls the level Crossing Gate, gateman must keep the gate closed against road traffic till the track is cleared of the obstruction.

2.0 GATE WORKING INSTRUCTIONS FOR "C" CLASS ENGG. NON-INTERLOCKED LEVEL CROSSING GATE (NO-RV-175) AT KM 218.469 BETWEEN KSNG-KDLR STATIONS.

2.1 GENERAL INSTRUCTIONS: -**2.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-175.
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of Station Master/PWI:	PWI.
4.	Location KM	218.469 (218/7)
5.	At. Station: -	----
6.	In between stations: -	KSNG-KDLR.
7.	BG/MG/NG: -	BG.
8.	Single line/Double line/Multiple line: -	Double Line.
9.	Normal Position: -	Open to road traffic.
10.	Interlocked/Non Interlocked: -	Non-interlocked.
11.	Means of interlocking: -	NIL.
12.	Provision of Gate signal at Kms.	i) UP line-Nil ii) Dn line-NIL
13.	Signalling arrangement: -	NIL.
14.	Means of Communication:	Telephone Communication from Gate Goomty to SM office / KSNG.
15.	Width of level crossing Gate: -	7.5 Meters.
16.	Type of road. (NH/SH/Others): -	Others(Village.)
17.	Name of Road: -	The Village road.
18.	Metaled/Non Metaled:	Metaled
19.	Approach Road: -	Metaled
20.	Width of the road: -	5.5 m.
21.	Angle of road crossing (In case of the skew Gates)	86 (LH curve).
22.	Road gradient (If any)	i) North side- 1 in 32 ii) South side- 1 in 32.
23.	Road alignment (Straight/Curve): -	i) North Side- Straight ii) South side- Straight.
24.	Provision of height gauges: -	Not Provided
25.	Type of Barriers: -	Winch Operated Lifting barriers.
26.	Length of check rails: -	9.5 Meter.
27.	Road surface in between Level Xings Gates: -	CC Bocks.
28.	Length of speed breakers: -	7.5 Meters.
29.	Road signs: -	Available
30.	Speed breaker indication board: -	Provided.
31.	TVU: -	18614 on 07/2010.
32.	Census next due on: -	07/2013.
33.	Demarcation for placement of Detonators: -	Displayed.
34.	No. of Gateman working: -	02.
35.	Nearest Railway Medical Assistance: -	TIG.
36.	Nearest Private Medical Assistance available (if any)	KSNG.
37.	List of equipment available Yes//No: -	yes.

2.2. EQUIPMENT:

	ITEMS	QUANTITY/NUMBERS
1.	Hand signal Lamp/ Tri Colour Torch	3 (5 on Quadruple/Line or twin single line)
2.	Hand signal Flag Green	1 mounted on sticks

3.	Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line & 7 in case Hexaple section mounted on sticks)
4.	Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5.	Posts for exhibiting red banner flag	2 (4 on Q/Twin single line & 5 on Hexaple section)
6.	Spares chains with padlocks	2 with stop mark
7.	Detonators	10 in tin case
8..	Gate Lamps	2
9.	Tommy Bar	1
10.	Motor Pan	1
11	Spade/Fowrah	1
12.	Rammer	1 (in case of asphalted road this may not be provided)
13.	Pick Axe	1 (in case of asphalted road this may not be provided)
14.	Tin case for flags	1
15.	Can for oil	1
16.	Water pot/Bucket	1
17.	Canister for Muster Roll	1
18.	Set of spare spectacles of Gateman Wearing glasses.	1
19.	Board demarcating protection of L.C.Gate diagram in case of obstruction on Gate .	1
20.	Basket	1
21.	Whistle	1
22.	Wall clock	1
23	Small size chains with pad locks to be used in case failure of Boom lock.	2

2.3 **THE GATEMAN SHALL BE PROVIDED WITH FOLLOWING REGISTERS: -**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) General Rules Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as gateman.
- vii) Bio–Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.

2.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the gate shall be in his personal custody.

2. **POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:**

During passage of trains, gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the gate – lodge facing the approaching train.

- ii) In daytime, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In nighttime, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. ROUTINE DUTIES OF GATEMAN:

- i) Gateman shall ensure that red banner flag by day and red light by night is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close and lock the gate against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to driver on walkie – talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

4. ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN.

In case gateman observes anything unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the Loco Pilot /guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the Loco Pilot/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If driver/guard fails to take notice, gateman shall immediately inform the station Master/KSNG, to take appropriate action, under exchange of private number.
- iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Loco Pilot /Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.
- vi) In case the train does not stop, gateman shall immediately inform the Station Master/KSNG, to take appropriate action, under exchange of private number.

5. ACTION IN EMERGENCY AT THE LEVEL CROSSING:

- i) In case of an obstruction at the level crossing gate, he shall place banner flag/red light lamps on the stave on track at 5 m. away from the edge of the road at Level Crossing.
- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the SM/KSNG on duty, regarding the defects/obstructions at the gate, under exchange of PN.
- iii) If there is no response from the Station Master/KSNG after three attempts, he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under: -

(A) ON DOUBLE LINE.

- i) If both the lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away from the line on which train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators, red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters on BG from the level crossing gate and place 3 detonators on the track in 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.
- v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.
- vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the driver of the approaching train.
- vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- viii) Thereafter, he shall stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

(B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the Station Master/KSNG and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

2.5 SPECIAL INSTRUCTIONS:

1. MODE OF OPERATION:

This is a Non-interlocked 'C' Class Engineering L.C.Gate situated at Km 218/7 between KSNG-KDLR stations. This gate is provided with winch operated coupled lifting barriers. The gateman closes and opens the lifting barriers of gate manually by operating the winch. Telephone communication is provided between the L C. gate lodge and SM's office of KSNG station. The level crossing gate is normally kept open to road traffic and closed against road traffic for passage of trains. Station Master / KSNG authorizes the gateman to open the L.C.Gate after complete passage of train from the gate by observing tail board/ tail lamp. The gateman before opening the gate shall ensure that SM has not advised him to keep the gate closed for any other train from the same direction or from other direction. He shall display a banner flag across the track while the gate is in open condition.

2. EXCHANGE OF PRIVATE NUMBERS :

- (a) When Gate is connected with the station at the dispatching end:
 - i) Station Master / KSNG at the dispatching end shall advise the gateman the number, description, direction and expected time of the passage of the train at the gate, under exchange of private number.
 - ii) Such advice shall be given before taking 'OFF' departure signal or giving an authority to proceed to the driver.
 - iii) The gateman on receipt of the advice shall close the gate well in time and confirm the same, under exchange of private number.
 - iv) Station Master / KSNG will take off the departure signals after getting the private number of the gateman.
 - v) Gates cannot be opened unless authorized by the SM/KSNG, under exchange of private number.
- (b) When Gate is connected with the station at the receiving end:
 - i) Station Master /KDLR at the despatching end shall advise the Station Master / KSNG at the other end the number, description, direction and expected time of passage of the train at the gate, under exchange of private number.
 - ii) Such advice shall be given before obtaining line clear.
 - iii) Station Master / KSNG at the receiving end shall in turn convey the same advice to the gateman, under exchange of private number.
 - iv) Gateman shall close the gate and thereafter give his private number to the Station Master / KSNG.
 - v) Only then shall the Station Master / KSNG at the receiving end grant line clear to the Station Master /KDLR at the despatching end.
 - vi) Gates cannot be opened unless authorized by the SM/KSNG, under exchange of private number.

3. FAILURE OF TELEPHONE COMMUNICATION:

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure shall be adopted:

- i) The station Master/ KSNG at the dispatching end shall then issue a caution order to the Loco Pilot before dispatching a train in the block section from his end.
- ii) The caution order should advise the Loco Pilot to whistle continuously and approach the gate cautiously.
- iii) The driver should be instructed to pass the gate cautiously, on being hand signaled by the gateman. If hand signal is not seen, Loco Pilot should be prepared to stop short of the gate and depute his Assistant driver will give the all right signal and if the gate is not closed the Assistant driver must close the gate and then give the all right signal. In the absence of the Assistant driver, the Loco Pilot may take the assistance of the Assistant Guard/Guard and shall stop clear of the level crossing to pick up the Assistant driver who will reopen the gate for passage of the road traffic.
- iv) In case of an approaching train, the Station Master/ KSNG shall advise the Station Master/KDLR dispatching end, under exchange of private number that the telephone at the gate has failed.
- v) The Station Master at the despatching end shall then issue a caution order to the Loco Pilot before despatching a train in the block section from his end.
- vi) Station Master/ KSNG shall also advice to the gateman through Gangman/Patrolman or Loco Pilot of the first train that the telephone has become defective.
- vii) He should also advise S&T staff responsible for maintenance of the telephone rectify the defect at the earliest.
- viii) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection /fit memo for the same.

4. **FAILURE OF LIFTING BARRIERS:**

- (i) When the gate cannot be closed due to failure of lifting barriers, the gateman will immediately inform the station Master on duty/ KSNG, under exchange of Private number, and ensure that lifting barriers of gate do not foul the track.
- (ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- (iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- (iv) After securing the gate against road traffic, he shall show green hand signal flag by day and green light by night to the Loco Pilot of an approaching train.
- (v) Station Master on duty/ KSNG shall issue caution order to the Loco Pilot of departing train.
- (vi) He shall also advise the Station master/KDLR at the despatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching a train in the block section from his end.
- (vii) He should also advise maintenance staff responsible for maintenance of the lifting barriers to rectify the defect at the earliest.
- (viii) Normal working will be resumed only after maintenance staff rectify the lifting barriers and issue reconnection/fit memo for the same.

5. **OBSTRUCTION AT THE GATE:**

- i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- ii) Immediately after this, the gateman shall advise the Station Master/ KSNG, regarding the defects/obstruction at the gate, under exchange of private number.
- iii) Stationmaster on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master / KSNG after two or three attempts, he shall first protect the gate and then inform on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item No.2.4. (5).
- vi) Thereafter he shall protect the gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the driver, owner and reply these details to the station Master/ KSNG who shall not start the trains unless he has been assured by the gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/ KSNG shall also inform the station Master/KDLR at the despatching end, under exchange of private number, asking him not to despatch any train in the block section from his end, until the track has been clear of all obstruction.
- ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.
- x) Station Master/ KSNG shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the gate signal at 'ON' position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.
- xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and they're after exhibit green hand signal, if the gate is not obstructed.
- xii) Station Master/ KSNG shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- xiii) Normal working will be resumed only after maintenance staffs rectify the defective lifting barriers and issue reconnection/fit memo for the same.

6. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master/ KSNG will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

3.0 GATE WORKING INSTRUCTIONS OF "C" CLASS ENGG. NON-INTERLOCKED LEVEL CROSSING GATE AT KM 229/8-9 (No.RV-187) BETWEEN KDLR-RPRD STATIONS.

3.1 GENERAL INSTRUCTIONS: -

3.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

1. Number of Level Crossing Gate: -	RV-187
2. Engineering or Traffic Gate: -	Engineering.
3. Under control of Station Master/PWI:	PWI.
4. Location KM	229/8-9
5. At. Station: -	-----.
6. In between stations: -	RPRD- KDLR.
7. BG/MG/NG: -	BG.
8. Single line/Double line/Multiple line: -	Double Line.
9. Normal Position: -	Open to road traffic.
10. Interlocked/Non Interlocked: -	Non-interlocked.
11. Means of interlocking: -	NIL.
12. Provision of Gate signal at KMs	(i) Up line- NIL (ii) Dn line- NIL
13. Signaling arrangement: -	NIL.
14. Means of Communication:	Magneto Telephone Communication from Gate Goomty with SM/RPRD.
15. Width of level crossing Gate: -	7.5 meters.
16. Type of road. (NH/SH/Others): -	Others
17. Name of Road: -	RPRD-Bhawanipatn Road
18. Metaled/Non:	Metaled
19. Approach Road: -	Metaled
20. Width of the road: -	5.5 m
21. Angle of road crossing (In case of the skew Gates)	(60 Degree).
22. Road gradient (If any)	(i) North/East side. --- (ii) South/West side --
23. Road alignment (Straight/Curve): -	(i) North/East side –Straight. (ii) South/West side-Straight
24. Provision of height gauges: -	Not provided.
25. Type of Barriers: -	Lifting Barriers
26. Length of check rails: -	7.5 Meters.
27. Road surface in between Level: -	CCB
28. Length of speed breakers: -	5.5 M
29. Road signs: -	Available
30. Speed breaker indication board: -	Provided
31. TVU: -	8631 on 07/2013
32. Census next due on: -	07/2016
33. Demarcation for placement of Detonators: -	Provided.
34. No. of Gateman working: -	02
35. Nearest Railway Medical Assistance: -	TIG
36. Nearest Private Medical Assistance available (if any)	RPRD.
37. List of equipment available Yes//No: -	Yes.

1.2. EQUIPMET:

ITEMS	QUANTITY/NUMBERS
1. Hand signal Lamp/ Tri Colour Torch	3 (5 on Quadruple/Line or twin single line)
2. Hand signal Flag Green	1 mounted on sticks)
3. Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line and 7 in case Hexaple section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q/Twin single line and 5 on Hexaple section)
6. Spares chains with padlocks	2 with stop mark
7. Detonators	10 in tin case
8. Gate Lamps	2
9. Tommy Bar	1
10. Motor Pan	1
11. Spade/Fowrah	1
12. Rammer	1 (in case of asphalted road this may not be provided)
13. Pick Axe	1 (in case of asphalted road this may not be provided)
14. Tin case for flags	1
15. Can for oil	1
16. Water pot/Bucket	1
17. Canister for Muster Roll	1
18. Set of spare spectacles of Gateman Wearing glasses.	1
20. Board demarcating protection of level crossing Gate diagram in case of obstruction on Gate .	1
20. Basket	1
21. Whistle	1
22. Wall clock	1
23. Small size chains with padlocks to be used in case of failure of boom lock.	2

1.3 **THE GATEMAN SHALL BE PROVIDED WITH FOLLOWING REGISTERS: -**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) Gateman Rule Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as Gateman.
- vii) Bio–Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.

3.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the gate shall be in his personal custody.

2. POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:

During passage of trains, gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the gate – lodge facing the approaching train.
- ii) In daytime, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In nighttime, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. ROUTINE DUTIES OF GATEMAN:

- i) Gateman shall ensure that red banner flag by day and red lamp by night is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close and lock the gate against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to Loco pilot on walkie – talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at L.C. gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

4. ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN.

In case gateman observes anything unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the Loco pilot/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the Loco pilot/guard by whistling continuously, shouting, gesticulating, & throwing ballast on the brake van or by any other means.
- iii) If Loco pilot/guard fails to take notice, gateman shall immediately inform the station Master/RPRD, to take appropriate action, under exchange of private number.
- iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Loco pilot/Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.
- vi) In case the train does not stop, gateman shall immediately inform the Station Master/RPRD, to take appropriate action, under exchange of private number.

5. ACTION IN EMERGENCY AT THE LEVEL CROSSING:

- i) In case of an obstruction at the L.C. gate, he shall place banner flag/red light lamps on the stave on track at 5 m. away from the edge of the road at Level Crossing.
- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the SM/RPRD on duty, regarding the defects/obstructions at the gate, under exchange of PN.
- iii) If there is no response from the Station Master/RPRD after three attempts, he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under: -

(A) ON DOUBLE LINE.

- i) If both the lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 m away from the line on which train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators, red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters on BG from the level crossing gate and place 3 detonators on the track in 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.
- v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.
- vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the Loco pilot of the approaching train.
- vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- viii) Thereafter, he shall stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

(B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the Loco pilot, owner and relay these details to the Station Master/RPRD and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

3.5 **SPECIAL INSTRUCTIONS:**

1. **MODE OF OPERATION:**

This is a Non-interlocked 'C' Class Engineering L.C.Gate situated at Km 218/7 between RPRD-KDLR stations. This gate is provided with winch operated coupled lifting barriers. The gateman closes and opens the lifting barriers of gate manually by operating the winch. Telephone communication is provided between the L C. gate lodge and SM's office of RPRD station. The level crossing gate is normally kept open to road traffic and closed against road traffic for passage of trains. Station Master / RPRD authorizes the gateman to open the L.C.Gate after complete passage of train from the gate by observing tail board/ tail lamp. The gateman before opening the gate shall ensure that SM has not advised him to keep the gate closed for any other train from the same direction or from other direction. He shall display a banner flag across the track while the gate is in open condition.

2. **EXCHANGE OF PRIVATE NUMBERS :**

- (a) When Gate is connected with the station at the dispatching end:
 - i) Station Master / RPRD at the dispatching end shall advise the gateman the number, description, direction and expected time of the passage of the train at the gate, under exchange of private number.
 - ii) Such advice shall be given before taking 'OFF' departure signal or giving an authority to proceed to the Loco pilot.
 - iii) The gateman on receipt of the advice shall close the gate well in time and confirm the same, under exchange of private number.
 - iv) Station Master / RPRD will take off the departure signals after getting the private number of the gateman.
 - v) Gates cannot be opened unless authorized by the SM/RPRD, under exchange of private number.
- (b) When Gate is connected with the station at the receiving end:
 - i) Station Master /KDLR at the despatching end shall advise the Station Master / RPRD at the other end the number, description, direction and expected time of passage of the train at the gate, under exchange of private number.
 - ii) Such advice shall be given before obtaining line clear.
 - iii) Station Master / RPRD at the receiving end shall in turn convey the same advice to the gateman, under exchange of private number.
 - iv) Gateman shall close the gate and thereafter give his private number to the Station Master / RPRD.
 - v) Only then shall the Station Master / RPRD at the receiving end grant line clear to the Station Master /KDLR at the despatching end.
 - vi) Gates cannot be opened unless authorized by the SM/RPRD, under exchange of private number.

4 **FAILURE OF TELEPHONE COMMUNICATION:**

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure shall be adopted:

- i) The station Master/ RPRD at the dispatching end shall then issue a caution order to the Loco pilot before dispatching a train in the block section from his end.
- ii) The caution order should advise the Loco pilot to whistle continuously and approach the gate cautiously.
- iii) The Loco pilot should be instructed to pass the gate cautiously, on being hand signaled by the gateman. If hand signal is not seen, Loco pilot should be prepared to stop short of the gate and depute his Assistant Loco pilot will give the all right signal and if the gate is not closed the Assistant Loco pilot must close the gate and then give the all right signal. In the absence of the Assistant Loco pilot, the Loco pilot may take the assistance of the Assistant Guard/Guard and shall stop clear of the level crossing to pick up the Assistant Loco pilot who will reopen the gate for passage of the road traffic.
- iv) In case of an approaching train, the Station Master/ RPRD shall advise the Station Master/KDLR dispatching end, under exchange of private number that the telephone at the gate has failed.
- v) The Station Master at the despatching end shall then issue a caution order to the Loco pilot before despatching a train in the block section from his end.
- vi) Station Master/ RPRD shall also advice to the gateman through Gangman/Patrolman or Loco pilot of the first train that the telephone has become defective.
- vii) He should also advise S&T staff responsible for maintenance of the telephone rectify the defect at the earliest.
- viii) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection /fit memo for the same.

5 FAILURE OF LIFTING BARRIERS:

- (i) When the gate cannot be closed due to failure of lifting barriers, the gateman will immediately inform the station Master on duty/ RPRD, under exchange of Private number, and ensure that lifting barriers of gate do not foul the track.
- (ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- (iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- (iv) After securing the gate against road traffic, he shall show green hand signal flag by day and green light by night to the Loco pilot of an approaching train.
- (v) Station Master on duty/ RPRD shall issue caution order to the Loco pilot of departing train.
- (vi) He shall also advise the Station master/KDLR at the despatching end, under exchange of private number, to similarly issue a caution order to the drive before despatching a train in the block section from his end.
- (vii) He should also advise maintenance staff responsible for maintenance of the lifting barriers to rectify the defect at the earliest.
- (viii) Normal working will be resumed only after maintenance staff rectify the lifting barriers and issue reconnection/fit memo for the same.

6 OBSTRUCTION AT THE GATE:

- i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- ii) Immediately after this, the gateman shall advise the Station Master/ RPRD, regarding the defects/obstruction at the gate, under exchange of private number.
- iii) Stationmaster on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master / RPRD after two or three attempts, he shall first protect the gate and then inform on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item No.3.4. (5).
- vi) Thereafter he shall protect the gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the Loco pilot, owner and reply these details to the station Master/ RPRD who shall not start the trains unless he has been assured by the gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/ RPRD shall also inform the station Master/KDLR at the despatching end, under exchange of private number, asking him not to despatch any train in the block section from his end, until the track has been clear of all obstructions.
- ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.
- x) Station Master/ RPRD shall then issue a caution order to Loco pilots of all trains to proceed cautiously, and pass the gate signal at 'ON' position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.
- xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and they're after exhibit green hand signal, if the gate is not obstructed.
- xii) Station Master/ RPRD shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- xiii) Normal working will be resumed only after maintenance staffs rectify the defective lifting barriers and issue reconnection/fit memo for the same.

7 OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master/ RPRD will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

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4.0 **GATE WORKING INSTRUCTIONS OF "C" CLASS ENGG. NON-INTERLOCKED LEVEL CROSSING GATE AT KM 220/6-7 (No.RV-177) BETWEEN KSNG-KDLR STATIONS.**

4.1 **GENERAL INSTRUCTIONS: -**

4.1.1 **DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-177.
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of Station Master/PWI:	PWI.
4.	Location KM	220/6-7 (220.459)
5.	At. Station: -	---
6.	In between stations: -	KSNG-KDLR.
7.	BG/MG/NG: -	BG.
8.	Single line/Double line/Multiple line: -	Double Line.
9.	Normal Position: -	Closed to road traffic.
10.	Interlocked/Non Interlocked: -	Non-interlocked.
11.	Means of interlocking: -	NIL.
12.	Provision of Gate signal at Kms.	(i) Up line -NIL (ii) Dn line - NIL
13.	Signalling arrangement: -	NIL.
14.	Means of Communication:	Telephone connection from Gate Goomty to SM office/ KDLR.
15.	Width of level crossing Gate: -	7.50 Meters.
16.	Type of road. (NH/SH/Others): -	Others
17.	Name of Road: -	village road.
18.	Metaled/Non-Metaled:	Metaled
19.	Approach Road: -	Metaled
20.	Width of the road: -	5.50 m.
21.	Angle of road crossing (In case of the skew Gates)	----
22.	Road gradient (If any)	(i) North/East side.--Level. (ii) South/West side.- Level
23.	Road alignment (Straight/Curve): -	(i) North/East side. Straight. (ii) South/West side. Straight.
24.	Provision of height gauges: -	Not Provided
25.	Type of Barriers: -	winch Operated Lifting barriers.
26.	Length of check rails: -	9.5 Meter.
27.	Road surface in between Level Xings Gates: -	Hexagonal blocks.
28.	Length of speed breakers: -	7.50 Meters.
29.	Road signs: -	Available
30.	Speed breaker indication board: -	Provided.
31.	TVU: -	3978 on 03/2013.
32.	Census next due on: -	03/2016.
33.	Demarcation for placement of Detonators: -	Displayed.
34.	No. of Gateman working: -	02.
35.	Nearest Railway Medical Assistance: -	KDLR.
36.	Nearest Private Medical Assistance available (if any)-	KSNG.
37.	List of equipment available Yes//No: -	Yes.

4.2. **EQUIPMENT:**

ITEMS	QUANTITY/NUMBERS
1. Hand signal Lamp Tri Colour Torch	3 (5 on Quadruple/Line or twin single line)
2. Hand signal Flag Green	1 mounted on sticks
3. Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line & 7 in case Hexable section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q/Twin single line and 5 on Hexable section.)

6.	Spare chains with padlocks	2 with stop mark
7.	Detonators	10 in tin case
8.	Gate Lamps	2
9.	Tommy Bar	1
10.	Motor Pan	1
11.	Spade/Fowrah	1
12.	Rammer	1 (in case of asphalted road this may not be provided)
13.	Pick Axe	1 (in case of asphalted road this may not be provided)
14.	Tin case for flags	1
15.	Can for oil	1
16.	Water pot/Bucket	1
17.	Canister for Muster Roll	1
18.	Set of spare spectacles of Gateman Wearing glasses.	1
21.	Board demarcating protection of level crossing Gate diagram in case of obstruction on Gate .	1
20.	Basket	1
21.	Whistle	1
22.	Wall clock	1
23.	Small size chains with padlocks to be used in case failure of gate boom lock.	02

4.3 **THE GATEMAN SHALL BE PROVIDED WITH FOLLOWING REGISTERS: -**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) Gateman Rule Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as gateman.
- vii) Bio-Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.

4.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:** The gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the gate shall be in his personal custody.

2. **POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:**

During passage of trains, gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the gate – lodge facing the approaching train.
- ii) In daytime, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In nighttime, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. **ROUTINE DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red banner flag by day and red light by night is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.

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- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to Loco Pilot on walkie – talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

4. **ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN.**

In case gateman observes anything unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the Loco Pilot/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the Loco Pilot/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If Loco Pilot/guard fails to take notice, gateman shall immediately inform the station Master to take appropriate action, under exchange of private number.
- iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Loco Pilot/Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.
- vi) In case the train does not stop, gateman shall immediately inform the Station Master to take appropriate action, under exchange of private number.

5. **ACTION IN EMERGENCY AT THE LEVEL CROSSING:**

- i) In case of an obstruction at the level crossing gate, he shall place banner flag/red light lamps on the stave on track at 5 m. away from the edge of the road at Level Crossing.
- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master after three attempts, he shall first protect the gate and then inform on phone.
The gateman shall protect the line as under: -

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(A) ON DOUBLE LINE.

- i) If both the lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away from the line on which train is expected to arrives first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators and red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters on BG from the level crossing gate and place 3 detonators on the track 10 meters apart. Having thus protected the line, he shall return to the level crossing gate picking up the intermediate detonator on his way back.
- v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate detonators on his way back.
- vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the Loco Pilot of the approaching train.
- vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- viii) Thereafter, he shall stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

(B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the Station Master/ KDLR and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

4.5 ENGINEERING ITEMS:

Visibility: -

Direction	Side	Visibility Distance
UP	Right	750 m.
	Left	900 m.
DN	Right	750m
	Left	900 m.

- i) Speed Breaker: - Speed Breakers of approved design are provided on either side of this Level Crossing gate.
- ii) Periodical Census of traffic has been taken and the latest TVU is 3978 on 03/2013.

4.6 SPECIAL INSTRUCTIONS:

- 1. **MODE OF OPERATION:** This is a Manned & Non-interlocked Engineering L.C.Gate situated at Km 220/6-7 in between KSNG-KDLR Stations. This gate is provided with winch operated coupled lifting barriers and the gate is closed/opened by the gateman manually by winch operation. Telephone communication is provided between the L C. gate lodge with SM office of KDLR station. The level crossing gate is normally kept closed and locked against road traffic. The Station Master/ KDLR shall

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not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number. When the gateman desires to open the gate for passage of road traffic he should ensure that no PN has been exchanged with the Station Master/ KDLR for the passage of train or the whole of the train with last vehicle indicator has passed over the level crossing gate for which the gateman has exchanged private number with the SM/ KDLR. Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate.

2. EXCHANGE OF PRIVATE NUMBERS.

- (i) The normal position of level crossing gate being "Closed to Road Traffic" it should always be in closed condition against road traffic, except when, it is opened for passage of road traffic over the level crossing, subject to conditions prescribed below.
- (ii) The Station Master / KDLR before permitting each train to enter into the block section, shall ask Gateman on the telephone by giving a Private Number whether, gate is closed against road traffic for the passage of train. The Gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a Private Number to the Station Master / KDLR in assurance of gate being closed and locked against road traffic.
- (iii) The Station Master / KDLR shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number.
- (iv) When the gateman desires to open the gate for passage of road traffic he should ensure that:
 - (1) He has not exchanged any private number with the SM / KDLR as per (ii) above.
 - (2) If he has exchanged private number with the Station Master / KDLR, the whole of the train with last vehicle indicator has passed over the level crossing gate and Station Master / KDLR has not exchanged private number with him for any other movement immediately in rear of the train or on the adjacent line.

Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.

- (v) In case the Gateman is not responding on the telephone or in case the telephone becomes defective or private number is not received from the Gateman, the Station Master/ KDLR shall adhere to the procedure prescribed in SR 16.03.04.
- (vi) In the event of failure of telephone, if the gate is required to be opened for the passage of road traffic, the gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.

3. FAILURE OF TELEPHONIC COMMUNICATION:

When Telephonic Communication fails or SM/ KDLR does not get any response from the Gateman despite 2 or 3 attempts, the following procedure shall be adopted:

- (i) SM/ KDLR shall serve a caution order to the Loco pilot and the Guard of every train proceeding into the affected section giving the number and kilometrage of the level crossing and directing the loco pilot:-
 - a) To whistle frequently to attract the attention of the gateman,
 - b) To proceed cautiously, and stop 30M. short of the level crossing and be guided by hand signal.

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- (ii) (i) The Loco Pilot after stopping, if the gateman is available and apparently in a fit condition to continue his duty and the gates are closed, shall arrange to advise the station master / KDLR as the case may be of the fact using the telephone provided at the gate. The Station Master/ KDLR on receipt of such an advice from the Loco Pilot shall discontinue issue of caution order to the following trains provided the acknowledgement of the gateman is available over the telephone.
- (ii) In the above circumstance, the Loco Pilot should not stop his train at the next station to advise the Station Master.
- (iii) (i) If the loco Pilot does not find the gateman at the level crossing or if the gateman is apparently unfit for duty and the gates are not closed, he shall depute his Assistant, the Loco Pilot shall seek assistance of the Assistant Guard or Guard of the train. The same should be informed to the Station Master/ KDLR on gate telephone.
- (ii) The Loco Pilot, after being hand signaled, shall pass the level crossing and stop clear of it by at least 2 bogie lengths to pick up the Assistant or Assistant Guard / Guard, as the case may be. The Railway servant deputed for closing the gate shall reopen it for road traffic after the passage of the last vehicle of the train.
- (iii) If, however, the telephone is out of order or the gateman is not available or is apparently unfit to continue his duty and intimation of the fact could not be given to the station/ KDLR from the gate, the Loco Pilot shall stop his train at the next station (even if it is through passing station) and give a memo to the Station Master/KSNG indicating the condition of the gateman, gate and telephone.
- (iv) The Station Master/ KDLR on receipt of the Loco Pilot's report regarding absence or unfitness of the gateman, shall advise the station Master/KSNG, the Notice Station, the Section Controller, JE/SE/SSE (P.Way) and AEN concerned and the Gangmate of the nearest gang for immediate posting of a gateman. He shall also inform the maintenance staff to attend and repair the telephone, if required. Issue of caution order should continue till normal working condition is restored.
- (iv) Before giving line clear to a train, the Station Master/ KDLR shall advise the Station Master/KSNG of the facts by message supported by a Private Number, and obtain his acknowledgement with a Private Number. The latter shall issue a caution order to the Loco Pilot as detailed in Para (a).
- (v) Necessary entries shall be made in the Caution Order Register, Station Diary or Signal Failure Register as the case may be by Station Masters at either end of the affected station. The Section Controller shall also keep a note in his chart indicating the action taken by him.

4. FAILURE OF LIFTING BARRIERS:

- i) When the Gate cannot be closed due to failure of lifting barriers, The Gateman will immediately inform the Station Master on duty/ KDLR, under exchange of Private number, and ensure that lifting barriers do not foul the track.
- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Gateman shall secure the Gate against road traffic by means of safety chains and padlocks.
- iv) After securing the Gate against road traffic, he shall show green hand signal flag by day and green light by night to the Loco Pilot of an approaching train.
- v) Station Master on duty/ KDLR shall issue caution order to the Loco Pilot of departing UP train.
- vi) SM/ KDLR shall also advise the Station Master/KSNG at the despatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching a train into the block section from his end.
- vii) SM/ KDLR should also advise maintenance staff responsible for maintenance of the lifting barriers to rectify the defect at the earliest.
- viii) Normal working will be resumed only after maintenance staff rectify the lifting barriers and issue reconnection/fit memo for the same.

5. OBSTRUCTION AT THE GATE:

- i) If the Gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the Gate foul the track, or if there is any other obstruction at the Gate, the Gateman shall Immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the Gate for this purpose.
- ii) Immediately after this, the Gateman shall advise the Station Master/ KDLR on duty regarding the defects/obstruction at the Gate under exchange of private number.
- iii) Stationmaster at KDLR on duty shall be advised to put the departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master / KDLR after two or three attempts, he shall first protect the Gate and then inform him on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the Gate as stipulated in General Instruction for duties of Gateman under item No.4.4. (5).
- vi) Thereafter he shall protect the Gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master/ KDLR who shall not allow the trains unless he has been assured by the Gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/ KDLR shall also inform the station Master/KSNG, under exchange of private number, asking him not to dispatch any train into the block section from his end, until the track has been cleared of all obstruction.
- ix) After the track has been cleared of all obstructions the Gateman shall inform the Station Master/ KDLR accordingly under exchange of private number.
- x) Gateman shall secure the Gate against road traffic by means of safety chains and padlocks and thereafter exhibit green hand signal, if the Gate is not obstructed.
- xi) Station Master/ KDLR shall advise maintenance staff responsible for maintaining the lifting barriers Gates to repair the same at the earliest.
- xii) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers and issue reconnection/fit memo for the same.

6. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment, which is visible to the Gateman, the Gateman and Station Master/ KDLR will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, Gateman must keep the Gates closed against road traffic till the track is cleared of obstructions.

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5.0 **GATE WORKING INSTRUCTIONS OF "C" CLASS ENGG. NON-INTERLOCKED LEVEL CROSSING GATE AT KM 225/14-15 (No.RV-184) BETWEEN KDLR-RPRD STATIONS.**

5.1 **GENERAL INSTRUCTIONS: -**

5.1.1 **DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-184.
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of Station Master/PWI:	PWI.
4.	Location KM	225/14-15(225.957)
5.	At. Station: -	---
6.	In between stations: -	KDLR-RPRD.
7.	BG/MG/NG: -	BG.
8.	Single line/Double line/Multiple line: -	Double Line.
9.	Normal Position: -	Closed to road traffic.
10.	Interlocked/Non Interlocked: -	Non-interlocked.
11.	Means of interlocking: -	NIL.
12.	Provision of Gate signal at Kms.	(i) Up line -NIL (iii) Dn line - NIL
13.	Signalling arrangement: -	NIL.
14.	Means of Communication:	Telephone connection from Gate Goomty to SM office/ KDLR.
15.	Width of level crossing Gate: -	7.50 Meters.
16.	Type of road. (NH/SH/Others): -	Others
17.	Name of Road: -	village road.
18.	Metaled/Non-Metaled:	Metaled
19.	Approach Road: -	Metaled
20.	Width of the road: -	5.50 m.
21.	Angle of road crossing (In case of the skew Gates)	----
22.	Road gradient (If any)	(i) North/East side.--Level. (iii) South/West side.- Level
23.	Road alignment (Straight/Curve): -	(i) North/East side. Straight. (ii) South/West side. Straight.
24.	Provision of height gauges: -	Not Provided
25.	Type of Barriers: -	winch Operated Lifting barriers.
26.	Length of check rails: -	9.5 Meter.
27.	Road surface in between Level Xings Gates: -	Hexagonal blocks.
28.	Length of speed breakers: -	7.50 Meters.
29.	Road signs: -	Available
30.	Speed breaker indication board: -	Provided.
31.	TVU: -	2068 on 03/2013.
32.	Census next due on: -	03/2016.
33.	Demarcation for placement of Detonators: -	Displayed.
34.	No. of Gateman working: -	02.
35.	Nearest Railway Medical Assistance: -	KDLR.
36.	Nearest Private Medical Assistance available (if any)-	RPRD.
37.	List of equipment available Yes//No: -	Yes.

5.2. **EQUIPMENT:**
ITEMS

	<u>QUANTITY/NUMBERS</u>
1. Hand signal Lamp Tri Colour Torch	3 (5 on Quadruple/Line or twin single line)
2. Hand signal Flag Green	1 mounted on sticks
3. Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line & 7 in case Hexable section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q/Twin single line and 5 on Hexable section)

6.	Spare chains with padlocks	2 with stop mark
7.	Detonators	10 in tin case
8.	Gate Lamps	2
9.	Tommy Bar	1
10.	Motor Pan	1
11.	Spade/Fowrah	1
12.	Rammer	1 (in case of asphalted road this may not be provided)
13.	Pick Axe	1 (in case of asphalted road this may not be provided)
14.	Tin case for flags	1
15.	Can for oil	1
16.	Water pot/Bucket	1
17.	Canister for Muster Roll	1
18.	Set of spare spectacles of Gateman Wearing glasses.	1
22.	Board demarcating protection of level crossing Gate diagram in case of obstruction on Gate .	1
20.	Basket	1
21.	Whistle	1
22.	Wall clock	1
23.	Small size chains with padlocks to be used in case failure of gate boom lock.	02

5.3 **THE GATEMAN SHALL BE PROVIDED WITH FOLLOWING REGISTERS: -**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) Gateman Rule Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as gateman.
- vii) Bio-Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.

5.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:** The gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the gate shall be in his personal custody.

2. **POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:**

During passage of trains, gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the gate – lodge facing the approaching train.
- ii) In daytime, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In nighttime, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. **ROUTINE DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red banner flag by day and red light by night is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.

- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to Loco Pilot on walkie – talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

4. **ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN.**

In case gateman observes any thing unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the Loco Pilot/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the Loco Pilot/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If Loco Pilot/guard fails to take notice, gateman shall immediately inform the station Master to take appropriate action, under exchange of private number.
- iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Loco Pilot/Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.
- vi) In case the train does not stop, gateman shall immediately inform the Station Master to take appropriate action, under exchange of private number.

5. **ACTION IN EMERGENCY AT THE LEVEL CROSSING:**

- i) In case of an obstruction at the level crossing gate, he shall place banner flag/red light lamps on the stave on track at 5 m. away from the edge of the road at Level Crossing.
- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master after three attempts, he shall first protect the gate and then inform on phone.
The gateman shall protect the line as under: -

(A) ON DOUBLE LINE.

- i) If both the lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away from the line on which train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators and red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters on BG from the level crossing gate and place 3 detonators on the track 10 meters apart. Having thus protected the line, he shall return to the level crossing gate picking up the intermediate detonator on his way back.
- v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate detonators on his way back.
- vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the Loco Pilot of the approaching train.
- vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- viii) Thereafter, he shall stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

(B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the Driver, owner and relay these details to the Station Master/ KDLR and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

5.5 ENGINEERING ITEMS:

Visibility: -

Direction	Side	Visibility Distance
UP	Right	1500 m.
	Left	1000 m.
DN	Right	1500m
	Left	1000 m.

- i) Speed Breaker: - Speed Breakers of approved design are provided on either side of this Level Crossing gate.
- ii) Periodical Census of traffic has been taken and the latest TVU is 2068 on 03/2013.

5.6 SPECIAL INSTRUCTIONS:

1. **MODE OF OPERATION:** This is a Manned & Non-interlocked Engineering L.C.Gate situated at Km 225/14-15 in between KDLR-RPRD Stations. This gate is provided with winch operated coupled lifting barriers and the gate is closed/opened by the gateman manually by winch operation. Telephone communication is provided between the L C. gate lodge with SM office of KDLR station. The level

crossing gate is normally kept closed and locked against road traffic. The Station Master/ KDLR shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number. When the gateman desires to open the gate for passage of road traffic he should ensure that no PN has been exchanged with the Station Master/ KDLR for the passage of train or the whole of the train with last vehicle indicator has passed over the level crossing gate for which the gateman has exchanged private number with the SM/ KDLR. Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate.

2. EXCHANGE OF PRIVATE NUMBERS.

- (i) The normal position of level crossing gate being "Closed to Road Traffic" it should always be in closed condition against road traffic, except when, it is opened for passage of road traffic over the level crossing, subject to conditions prescribed below.
- (ii) The Station Master / KDLR before permitting each train to enter into the block section, shall ask Gateman on the telephone by giving a Private Number whether, gate is closed against road traffic for the passage of train. The Gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a Private Number to the Station Master / KDLR in assurance of gate being closed and locked against road traffic.
- (iii) The Station Master / KDLR shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number.
- (iv) When the gateman desires to open the gate for passage of road traffic he should ensure that:
 - (3) He has not exchanged any private number with the SM / KDLR as per (ii) above.
 - (4) If he has exchanged private number with the Station Master / KDLR, the whole of the train with last vehicle indicator has passed over the level crossing gate and Station Master / KDLR has not exchanged private number with him for any other movement immediately in rear of the train or on the adjacent line.

Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.
- (v) In case the Gateman is not responding on the telephone or in case the telephone becomes defective or private number is not received from the Gateman, the Station Master/ KDLR shall adhere to the procedure prescribed in SR 16.03.04.
- (vi) In the event of failure of telephone, if the gate is required to be opened for the passage of road traffic, the gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.

3. FAILURE OF TELEPHONIC COMMUNICATION:

When Telephonic Communication fails or SM/ KDLR does not get any response from the Gateman despite 2 or 3 attempts, the following procedure shall be adopted:

- (i) SM/ KDLR shall serve a caution order to the Loco pilot and the Guard of every train proceeding into the affected section giving the number and kilometreage of the level crossing and directing the loco pilot:-
 - a) To whistle frequently to attract the attention of the gateman,
 - b) To proceed cautiously, and stop 30M. short of the level crossing and be guided by hand signal.

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- (ii) (i)The Loco Pilot after stopping, if the gateman is available and apparently in a fit condition to continue his duty and the gates are closed, shall arrange to advise the station master / KDLR as the case may be of the fact using the telephone provided at the gate. The Station Master/ KDLR on receipt of such an advice from the Loco Pilot shall discontinue issue of caution order to the following trains provided the acknowledgement of the gateman is available over the telephone.
- (ii) In the above circumstance, the Loco Pilot should not stop his train at the next station to advise the Station Master.
- (iii) (i)If the loco Pilot does not find the gateman at the level crossing or if the gateman is apparently unfit for duty and the gates are not closed, he shall depute his Assistant, the Loco Pilot shall seek assistance of the Assistant Guard or Guard of the train. The same should be informed to the Station Master/ KDLR on gate telephone.
- (ii) The Loco Pilot, after being hand signaled, shall pass the level crossing and stop clear of it by at least 2 bogie lengths to pick up the Assistant or Assistant Guard / Guard, as the case may be. The Railway servant deputed for closing the gate shall reopen it for road traffic after the passage of the last vehicle of the train.
- (iii) If, however, the telephone is out of order or the gateman is not available or is apparently unfit to continue his duty and intimation of the fact could not be given to the station/ KDLR from the gate, the Loco Pilot shall stop his train at the next station (even if it is through passing station) and give a memo to the Station Master/RPRD indicating the condition of the gateman, gate and telephone.
- (iv) The Station Master/ KDLR on receipt of the Loco Pilot's report regarding absence or unfitness of the gateman, shall advise the station Master/ RPRD, the Notice Station, the Section Controller, JE/SE/SSE (P.Way) and AEN concerned and the Gangmate of the nearest gang for immediate posting of a gateman. He shall also inform the maintenance staff to attend and repair the telephone, if required. Issue of caution order should continue till normal working condition is restored.
- (iv) Before giving line clear to a train, the Station Master/ KDLR shall advise the Station Master/ RPRD of the facts by message supported by a Private Number, and obtain his acknowledgement with a Private Number. The latter shall issue a caution order to the Loco Pilot as detailed in Para (a).
- (v) Necessary entries shall be made in the Caution Order Register, Station Diary or Signal Failure Register as the case may be by Station Masters at either end of the affected station. The Section Controller shall also keep a note in his chart indicating the action taken by him.

4. FAILURE OF LIFTING BARRIERS:

- i) When the Gate cannot be closed due to failure of lifting barriers, The Gateman will immediately inform the Station Master on duty/ KDLR, under exchange of Private number, and ensure that lifting barriers do not foul the track.
- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Gateman shall secure the Gate against road traffic by means of safety chains and padlocks.
- iv) After securing the Gate against road traffic, he shall show green hand signal flag by day and green light by night to the Loco Pilot of an approaching train.
- v) Station Master on duty/ KDLR shall issue caution order to the Loco Pilot of departing UP train.
- vi) SM/ KDLR shall also advise the Station Master/ RPRD at the despatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching a train into the block section from his end.
- vii) SM/ KDLR should also advise maintenance staff responsible for maintenance of the lifting barriers to rectify the defect at the earliest.
- viii) Normal working will be resumed only after maintenance staff rectify the lifting barriers and issue reconnection/fit memo for the same.

5. **OBSTRUCTION AT THE GATE:**

- i) If the Gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the Gate foul the track, or if there is any other obstruction at the Gate, the Gateman shall Immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the Gate for this purpose.
- ii) Immediately after this, the Gateman shall advise the Station Master/ KDLR on duty regarding the defects/obstruction at the Gate under exchange of private number.
- iii) Stationmaster at KDLR on duty shall be advised to put the departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master / KDLR after two or three attempts, he shall first protect the Gate and then inform him on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the Gate as stipulated in General Instruction for duties of Gateman under item No.5.4. (5).
- vi) Thereafter he shall protect the Gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the Driver, owner and relay these details to the Station Master/ KDLR who shall not allow the trains unless he has been assured by the Gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/ KDLR shall also inform the station Master/ RPRD, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been cleared of all obstruction.
- ix) After the track has been cleared of all obstructions the Gateman shall inform the Station Master/ KDLR accordingly under exchange of private number.
- x) Gateman shall secure the Gate against road traffic by means of safety chains and padlocks and thereafter exhibit green hand signal, if the Gate is not obstructed.
- xi) Station Master/ KDLR shall advise maintenance staff responsible for maintaining the lifting barriers Gates to repair the same at the earliest.
- xii) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers and issue reconnection/fit memo for the same.

6. **OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment, which is visible to the Gateman, the Gateman and Station Master/ KDLR will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, Gateman must keep the Gates closed against road traffic till the track is cleared of obstructions.

APPENDIX – ‘B’

DETAILS OF SIGNALLING AND INTERLOCKING INSTALLATIONS, INSTRUCTIONS FOR WORKING THEM NORMALLY AND IN EMERGENCIES ETC. INCLUDING POWER SUPPLY ARRANGEMENTS.

1.0 This is a ‘B’ Class Station with Standard III Interlocking (with isolations). The points and Signals are power operated from composite miniature central panel installed in the Station Master’s Office. The Station is equipped with manually operated Multi Aspect Colour Light Signalling.

1.1 DESCRIPTION OF PANEL:

The yard layout is depicted on the panel and the panel is fixed parallel to the track so that when SM on duty faces the panel, the yard drawing of the panel corresponds to the actual layout.

1.1.1 DESCRIPTION OF POINT PUSH BUTTON (RUNNING LINE POINT) :-

Srl No	Point No.	Colour	Description
1	15	BLACK	Crossover point between UP & DN Main Line at KSNG end.
2	16	BLACK	Crossover point between UP & DN Main Line at RPRD end.
3	17	BLACK	Crossover point between UP Main and Common Loop Line No.-1 at KSNG end.
4	18	BLACK	Crossover point between UP Main and Common Loop Line No.-1 at RPRD end
5	19	BLACK	Crossover point between DN Main and DN Loop Line No.-4 at KSNG end.
6	20	BLACK	Crossover point between DN Main and DN Loop Line No.-4 at RPRD end

1.1.2 DESCRIPTION OF POINT GROUP BUTTONS: -

There are two buttons at the top of panel, one for Normal and one for Reverse operation of points. These are coloured Black with red dot. The button is operated in conjunction with point button to operate the concerned point to the required setting.

1.1.3 OPERATION OF POINTS BY POINT PUSH BUTTONS: -

Points are operated for NORMAL to REVERSE or vice versa by operating concerned point push button along with common point group button for normal or reverse operation. When the points are required to be set from normal to reverse, the concerned point push button along with common point group button for reverse operation are to be pressed simultaneously. As soon as the operation is initiated the RED indication will start flashing till the point is correctly set to reverse at site and GREEN indication glows. Similar operation shall be done when the points are required to be set from reverse to normal. Only one point can be operated individually at a time.

1.2.0 POINT INDICATIONS: -

Points are normally operated automatically along with route setting operation. However, required points can also be operated individually. For this, POINT BUTTONS, which are BLACK in colour, are fitted over the point layout on the panel board. The individual operation of the electric point machine is controlled by these point push buttons in conjunction with the POINT GROUP BUTTON (which are BLACK with red dot on it) ‘N’ or ‘R’ as per requirement fitted on the top of panel board. These ‘N’ and ‘R’ positions are indicated on a small

nameplate written below point buttons. On the name plate three luminous indications are provided for each point as follows:-

- 1.2.1. When a point is set and locked in Normal position, a 'WHITE' indication appears suggesting that the point is set in NORMAL position.
- 1.2.2. When a point is set and locked in REVERSE position, a 'GREEN' indication appears suggesting that the point is set in REVERSE position.
- 1.2.3. When the points of any route have been correctly set and relevant signal taken 'OFF', RED indication appears indicating that the concerned points are locked either in NORMAL or REVERSE position as the case may be.
- 1.2.4. When the points are not set or locked either in NORMAL or in REVERSE correctly, the normal and reverse indication will not be there but the RED indication will start flashing till such time the point is housed & locked properly in one of the positions. In such case points are to be set at both ends by crank handle and clamped and padlocked. This RED indication will flash during operation of point also.
- 1.2.5. All points over running lines, except hand points leading to siding are operated by electric point machines

1.2.6 **NON SETTING OF POINTS:** -

The cause for non-setting of the point in the desired position shall be checked up by the SM on duty according to SR 3.68.01 (C). If there is a defect other than any obstruction, then the point shall be considered defective and action shall be taken for clamping and padlocking of these points in the desired position by Station Master on duty himself for all trains according to SR 3.69.03 (C). In such case both ends of the points shall be clamped and padlocked.

1.2.7 **DESCRIPTION OF CRANK HANDLE BUTTONS:**

All motor operated points in the yard have been grouped into four crank handle zones for emergency / manual operation of points by crank handles as follows:

SL NO.	CRANK HANDLE	COLOUR OF BUTTON	CONTROL POINTS
1	CH-01	BLUE	15A & 15B
2	CH-02	BLUE	16A & 16B
3	CH - 03	BLUE	17A, 17B & 18A, 18B
4.	CH - 04	BLUE	19A, 19B & 20A, 20B

Crank Handle buttons must be operated in conjunction with GROUP TRANS GROUP RELEASE button to transmit or receive the crank handle.

1.3.0 **SIGNAL PUSH BUTTON:**

Push buttons for operation of signals are provided near the signals on the panel. These are operated in conjunction with Route button (white coloured) to operate the signals.

1.3.1 **DESCRIPTION OF SIGNAL BUTTONS:**

SL.NO.	BUTTON NO.	COLOUR	DESCRIPTION
01	S1	RED	UP Home Signal for Line No. 1 & 2.
02	C1	RED with WHITE DOT	UP calling on Signal for line No. 1 & 2
03	S2	RED	DN Home Signal for Line No. 1, 3 & 4.
04	C2	RED with WHITE DOT	DN calling on Signal for line No. 1,3 & 4
05	S3	RED	UP starter from line No. 1
06	S4	RED	DN starter from line No. 4.
07	S5	RED	UP main line starter from line No.2
08	S6	RED	DN main line starter from line No.3
09	S8	RED	DN starter from line No. 1
10	SH 9	YELLOW	UP back shunt signal for shunting from top point at KSNG end to UP starter signal on line No.1 or 2 or up to stop Board provided on line No.3 or 4.
11	S 10	YELLOW	DN back shunt signal for shunting from top point at RPRD end to DN starter signal on line No.1 or 2.
12	S 11	RED	UP Advanced starter signal towards RPRD.
13	S12	RED	DN Advanced starter signal towards KSNG

1.3.2 **SIGNAL INDICATIONS:** -

All signals in the yard are depicted on the panel along side the track as per their respective position in the yard. The aspect of all signals in the yard, at any time, are shown on the signal indications depicted on panel.

2.0 **ROUTE BUTTONS:-**

Route buttons are provided separately on each running line on the panel for initiation of route (viz. UM, UN, DM UN, CL UN, CL UN1,DL UN, DN UN1). Common route buttons are also provided for taking off starters (viz.: 11AT UN, 12AT UN). An individual route button is provided for taking off Advance starter (Viz.: 11T UN, 12T UN). For clearing the signals it is necessary to operate the signal buttons and the concerned route button concurrently. In the panel, the routes are set automatically by operation of entry and exit button and exit button.

2.1 DESCRIPTION OF ROUTE BUTTONS

Srl. No.	Button No.	Colour	Description
1	UM UN	WHITE	UP main line common route button for Home/Calling on (S1/C1) or back shunt (SH 9 or SH 10) for UP Main line setting overlap for S1/C1 up to Advance starter towards RPRD..
2	DM UN	WHITE	DN main line common route button for Home/Calling on (S2/C2) or back shunt (SH 9) for DN Main line setting overlap for S2/C2 up to Advance starter towards KSNG..
3	CL UN	WHITE	DN and UP common route button for Home/Calling on (S1/C1& S2/C2) for Common loop line No.-1. Setting overlap for S1/C1 or (S2/C2) up to Advance starter for respective direction.
4	CL UN1	WHITE	DN and UP common route button for Home/Calling on (S1/C1& S2/C2) for back shunt (SH 9 or SH10) for common loop line No.-1. Setting overlap for S1/C1 or (S2/C2) up to the end of ORL in respective direction.
5	DLUN	WHITE	DN and UP common route button for Home/Calling on (S2/C2) for DN loop line No.4 setting overlap for S1/C1 or up to ADV. Starter towards KSNG direction.
6	DLUN1	WHITE	DN and UP common route button for Home/Calling on (S1/C1 or back shunt (SH9) for DN loop line No. 4 setting overlap for S1/C1 up to end of ORL towards KSNG direction.
7	11AT UN	WHITE	Common route button for UP starter No.S3/SH3, S5/SH 5.
8	12AT UN	WHITE	Common route button for DN Starter No S4/ SH4, S6/ SH6 and S8/SH8.
11	11 UN	WHITE	Route button for UP Advanced starter No. 11
12	12 UN	WHITE	Route button for DN advanced starter No. 12

3.0 TRAIN ARRIVAL INDICATION THROUGH AXLE COUNT:-

The system provides for automatic check for last vehicle arrival through provision of axle counter. Axle counters are provided in KDLR - KSNG, KDLR-RPRD sections to check the complete arrival of trains. The system is interlocked with the respective Block Instruments. When the Axle counter provided for each direction on the panel individually for sections indicates 'RED' i.e. occupied even after the complete arrival of train, the Block instrument of the respective section can be normalized after ensuring complete arrival of trains by means of physical verification of last vehicle for stopping as well as run through trains (refer resetting procedure of Axle counter).

4.0 **POWER FAILURE:**

Normal power supply to the signalling and interlocking installations at this station is drawn from WESCO power supply source (AC 230 Volt / 50 Hz). Whenever the normal supply connected to WESCO power supply fails, WHITE indication on the panel will be off and a RED indication will appear on the panel along with an audible buzzer. The SM on duty shall press the power acknowledgment button (RED) positioned on the top of panel. The SM now has to start the diesel Generator for standby (Auxiliary) power supply. After stable run of the Diesel generator, the SM on duty has to operate the change over switch for connecting the Auxiliary supply to the signalling installation. On resumption of power supply, SM on duty has to acknowledge by pressing power acknowledgement button. This will make the panel operative again. Now the Diesel Generator shall be stopped by SM on duty after isolating Diesel Generator by change over switch. Each time the power supply goes OFF or ON, SM on duty shall acknowledge by pressing power supply acknowledgement button to make the panel operative.

Inverters are provided to prevent possibility of blank signals in case of WESCO power supply failure. Whenever WESCO power supply fails inverter will immediately extend power supply to signals thereby preventing blank signals. SM on duty shall immediately start Diesel Generator and operate the change over switch for connecting the Auxiliary power supply to the signalling installation in case of WESCO power failure.

5.0 **LEVEL CROSSING GATE CONTROL BUTTON ('C' CLASS AT KM: 223.641) :**

A chocolate colour button with two indications, one RED and one GREEN, provided for L.C.gate control No.7 which controls L.C.gate at Km 223.641 towards KSNG end. Steady GREEN indication indicates that the gate is closed and the RED indication indicates that the gate is locked. When the gate is opened there shall not be any indication. To open the gate SM has to transmit the gate control key to gate lodge by pressing control button No. 7 (chocolate) along with Group Trans button on the panel. A flashing green indication will appear on the panel indicating that the control key has been transmitted. When the control key is required to be withdrawn, the gateman has to transmit the control key to panel after closing the gate. A flashing green indication will appear on the panel on seeing this SM on duty shall receive the control key by pressing gate control button and Group release button on the panel. A steady green indication will appear on the label indicating that the gate is closed.

5.1 **EMERGENCY GATE RELEASE OPERATION:**

Emergency gate release operation facility is provided in the panel to transmit the Gate when the route gets locked out of some failure. A button coloured CHOCOLATE WITH RED DOT has been provided for emergency release of gate. Whenever emergency gate release operation is required SM on duty shall press emergency gate release button and concerned gate button no.7 simultaneously. A flashing light will appear on the top of the emergency gate release button. After a lapse of 120 secs, a steady indication will glow over the emergency gate release button indicating that the operation is matured. The SM on duty shall then operate concerned gate button no.7 or 14 and group Trans button to release the key from RKT at gate lodge. All such operation will be registered in the emergency gate operation counter. SM shall record this and all such operations in the station diary & in the register meant for it. Normally the emergency gate release button is in sealed condition. The concerned S&T staff should be advised immediately to get the emergency gate release button sealed after rectification of fault if any.

- 6.0 **SIGNAL LAMP FAILURE INDICATION (RED) & MUTTING BUTTON (RED WITH WHITE DOT):**
 An 'AUDIO VISUAL' Indication is provided on the panel to indicate that a signal lamp is fused. Whenever such failures occur, flashing red indication appears on the panel with an audible alarm. When the mutting button is pressed for 2 to 3 seconds and released, the alarm stops but the flashing red indication continues to glow till the particular signal lamp is replaced or the aspect of the signal is changed or point is rectified. The concerned signal on the panel / the red light on point nameplate will start flashing in order to indicate the failure. In case of failure of main filament of signal lamp, Aux . Filament lights the aspect .Following indications are provided on each side of the panel which indicated signal:
- i) Distant at either end.
 - ii) Home / Advanced Starter at either end.
 - iii) Starters at either end.
- 7.0 **EMERGENCY ROUTE RELEASE COUNTER:**
 This counter is provided to register the number of operations made for emergency cancellation of route. The SM on duty must record the last number registered on the counter while taking over/ handing over duty.
- 8.0 **EMERGENCY ROUTE RELEASE INDICATION (WHITE) / EMERGENCY ROUTE RELEASE BUTTON (WHITE WITH RED DOT):**
 This panel interlocking is based on the principle of 'DEAD APPROCH LOCKING'. As such when a route is set and signal is taken off on the route, the route gets locked. Normally the route is released by the passage of the train over the route. When it becomes necessary to alter the route after the signal has been taken off vide SR 3.36.02 (a), the concerned signal must be put back to danger by pressing the Signal cancellation button and the concerned signal button. Then the emergency route release button (white with red dot) positioned on the top of panel to be pressed and subsequently the concerned signal button pertaining to the route is to be pressed. A white light will flash (Up or Down) indicating that the timer is working. After 120 seconds, the white light along with the white strip of light will disappear suggesting the route has been released. In case the route illumination (a white strip of lights) does not disappear, it suggests that the route is not released/cancelled. In such case the emergency cancellation of route has to be resorted to. The concerned S&T staff should be advised immediately to get the emergency route release button resealed after rectification of fault if any. Each operation of emergency cancellation of route is recorded in the emergency route release counter by registering the next higher number. All such operations and the new number should be recorded in the station diary and in the train signal register.
- 8.1 **EMERGENCY POINT OPERATION (BLACK WITH RED DOT):**
 Emergency point operation facility is provided to operate point from the panel in the event of failure of track circuit controlling the point. A push button (BLACK WITH RED DOT) is provided on the top of panel. If such operation is necessary, the SM on duty, after ensuring that no vehicle is standing on the concerned point track circuit, shall insert SM's emergency point operation key in, turned and shall push the emergency Point operation button by breaking the seal and then operate the required point button. Retaining the point button pressed, SM shall release the emergency point operation button and press the point group button (N or R). After pressing the emergency point operation button and point button and indication will appear near emergency point operation button and a number will increase in the emergency point operation counter. Each operation of emergency point operation shall be recorded in the station diary and in the register meant for this purpose. Before initiating emergency point operation when the concerned point zone track circuit is showing occupied, SM on duty must carry out physical verification at site to ascertain that the said track circuit is clear of vehicles. The concerned S&T staff should be advised immediately to get the emergency point operation button resealed after rectification of fault if any.

- 8.2 **BUTTON HELD ACKNOWLEDGEMENT BUTTON (WHITE WITH RED DOT):**
All push button are self-restoring type. A button held acknowledgement push button (white with red dot) along with a white strip is positioned at the top of the panel. When any button gets stuck in pressed condition, a buzzer will sound along with flashing white light Indication. The Station Master shall stop the buzzer by pressing the button held acknowledgement button (white with Red dot). The buzzer will stop but the flashing white light will continue to glow till the pressed button is normalised. SM on duty shall try to find out the pressed button for normalisation or otherwise inform the maintenance staff to rectify.
- 9.0 **OVERLAP TIME RELEASE INDICATION (WHITE LIGHT) : -**
These are two indications (white lights) for UP overlap time release and DN overlap time release to indicate the release of overlap. These indications will flash during releasing of overlap
- 10.0 **TRACK CIRCUITS: -**
The station yard is fully track circuited from Home signal to Home signal and also for 7 rail lengths in rear of the Home signals on either side. Track circuits 1AT and 2AT are calling-on track circuits. 15 AT,15 BT,16AT,16BT,17AT,17BT,18AT,18BT,19AT, 19BT, 20AT & 20BT are Point zone track circuits. L1T1, L1T2, L1T3, L2T1, L2T2, L2T3, L3T1, L3T2, L3T3, L4T1, L4T2, L4T3 are berthing track circuits. Other track circuits namely 1T, 1T1 11T, 11AT, 12AT, 12T, 2T and 2T1 are for signal replacement, route holding and trolley suppression. Indications for all track circuits are indicated on the panel. Normally these are not lit when the track circuits are clear. And RED light appears when the track circuit is occupied /failed. White lights for the track indications appear when the relevant route is set. In case of failure of any track circuit, the controlled signals or points are to be treated as non-interlocked and trains shall be worked as per relevant rules.
- 11.0 **STATION MASTER'S PANEL CONTROL KEY: -**
The panel is fitted with Station Master's lock up key to prevent any unauthorized operation of the Panel. The SM on duty is the only authorised person to operate the panel and the panel Key must always remain in his personal custody vide SR 3.36.03 & GR 5.08. The key locks the panel board and no operations are possible. In case of emergency, signals can be put back to danger by operating concerned signal button and Signal cancel button without releasing the panels lock also. However, the provisions of SR 3.36.02 shall be followed while replacing the signals to 'ON'.
- 12.0 **CRANK HANDLE CONTROL KEY AND OPERATION:**
When any point fails to operate normally by the route setting operation or through the concerned Point button from control panel, it is inevitable to operate the points with crank handle. SM on duty shall personally ensure clamping and padlocking of all facing and trailing points enroute. Crank handle keys are interlocked with signals and interlocking system. Crank handles are for all motor operated points at the station. The Crank Handle push button no. CH1, CH2, CH3 & CH4 (BLUE) and Group Trans/Release button (WHITE WITH BLACK DOT) is provided at the top of the panel board. The CH button has three indications, viz. WHITE, GREEN and RED. The GREEN indication suggests that the crank handle key is in its interlocked position of the panel. This is called Crank Handle Key 'IN' indication. The Red indication suggests that the crank handle key is locked and not free for extraction form RKT. This is called 'Crank handle key LOCKED' indication. The WHITE indication suggests that the KEY is OUT of RKT. The crank handle key in RKT in the end locations can be released from the RKT. This is called KEY OUT indication. The key out indication of the crank handle locks all those reception and departure signals in their normal position for which the affected point(s) are required.

The crank handle key in RKT in the end locations can be released from the RKT. The SM has to press concerned crank handle button and Trans button. This will enable SM/TP to extract crank handle key CH-1/CH-2/CH-3/CH-4 from RKT at end location. SS/SM/TPM on duty after extracting the crank handle key from RKT at end-location, insert it in the slot provided for it on the point machine and turn it to open up the slot for insertion of crank handle in the point machine. After inserting the crank handle in the point machine he shall operate it to set the point in the desired position. After completion of point work the crank handle key is to be inserted in the RKT at end location and transmitted to station. Station Master on getting 'Key IN' flashing indication that will appear on panel, shall press relevant CH button & Group Release button to get the steady key "IN" indication. SS/SM on duty shall personally ensure clamping and padlocking all facing and trailing points en-route. The cases of failure of Motor operated points should be promptly reported to the concerned ESM/Signal Inspector for immediate rectification. SS/SM on duty as per OM 20.06 (d) shall maintain an emergency crank handle register. The procedure for use of crank handle for Motor operated points shall be followed in terms of operating Manual 20.06.

13.0 **SETTING OF ROUTE AND TAKING 'OFF' RECEPTION SIGNALS: -**

For setting a route all the concerned points must be set by operation of relevant point button and group button one at a time in the desired position or by operating signal button and route button. As soon as the points on route, overlap and isolation are set to the required position, the concerned signal for the route will clear and a white strip of light will appear on the entire route confirming that the Route is set & locked. The signal 'off' indication will appear on the panel provided other conditions for taking 'OFF' reception signals are satisfied.

13.1 **TAKING OFF CALLING-ON SIGNAL: -**

Miniature colour light Calling on signal is provided below the Home signals in terms of GR 3.13(6) (b). A Calling on signal shows no light in the 'ON' position. A calling on signal is taken 'OFF' for reception of a train when the Home signal above cannot be taken 'OFF' due to failure or any other reason or for admission of train on blocked line.

To take off Calling-on signal the train must come to a stop at the foot of the home signal, occupying the track circuit in rear of the signal. When a train occupies the track circuit a RED light strip will appear on the panel. The particular route on which train is intended to be received shall be set by operating by point push button and group button individually or by signal and route button pressing or by crank handling in the event of failure of operation of points through panel. After the route is set, the calling-on signal switches 'C1'/'C2' (RED WITH WHITE DOT as the case may be), shall be pressed simultaneously along with the concerned route button for few seconds and released. After a lapse of 120 seconds, the calling on signal clears i.e., a white light glows at the concerned calling on signal on the panel. For loop lines, route button UN or UN1 shall be pressed for respective setting of the overlap points. Each operation of Calling On signal shall be registered in respective Calling On signal counter (UP or DN) by registering next higher number. A separate register is to be maintained for this purpose

14.0 **SETTING OF ROUTE AND TAKING OFF DEPARTURE SIGNALS:**

For setting a particular route for departure of a train, all the concerned points must be set by operation of point button and point group button one at a time in the desired position or by operating signal button and route button. To take off Advanced starter signal, line clear must be obtained from the concerned block station in advance. Then the concerned Advanced starter signal button shall be pressed along with the Advanced starter route button to be

pressed for two to three seconds and released. This will clear the Advanced starter signal and a white strip of light will appear on the panel up to the foot of the Advanced starter signal.

- 14.1 To take off the starter signal the concerned signal button to be pressed and at the same time common Route button to be pressed for two to three seconds and released. This will clear starter signal and a white Strip of light will appear on the route from the concerned Starter to the Advanced starter signal.
- 14.2 **RELEASE / CANCELLATION OF ROUTE:**
Normally when a train is received on any route and dispatched, the route illumination will disappear automatically after passage of the train suggesting that the route is released.
- 14.3 **REPLACEMENT OF SIGNALS TO 'ON':**
Signals are replaced to 'ON' automatically by the passage of a train past the signal. It will not be possible to re-clear the signal again unless the due process for clearing the signal is repeated again. For replacement of any signal to 'ON' position manually, the respective signal button and the signal cancellation button (RED) to be pressed simultaneously.
- 15.0 **INTERLOCKING OF SIGNALS/POINTS:**
All running line points are fitted with facing point locks in the point machine and are electrically detected by the relevant home signal and starters.
- 15.1 Advanced starter is interlocked with respective block instrument in sending position i.e., 'TRAIN GOING TO' position and by axle counter for last vehicle check.
- 15.2 The block instrument cannot be made normal unless the respective Home signal is put back to 'ON'.
- 15.3 Signals once taken 'OFF' can be put back to danger in case of emergency by pressing concerned signal button and signal cancellation button even when the panel is locked up with Station Master's key.
- 15.4 **PILOTING OF TRAINS: -**
In the event of failure of both Home signal and Calling ON signal simultaneously, it is inevitable to pilot the train 'IN'. For piloting the train, the setting of route must be ensured by SM on duty personally and the points en-route must be clamped & padlocked at both facing & trailing end by Operating staff. Same procedure shall be adopted when route illumination fails to disappear. Facing and trailing ends of the all motor operated points must be clamped and padlocked while piloting 'IN' or 'OUT' and during non-signalled movement.
- 15.5 **SHUNTING:**
For shunting, OFF aspect of starter signals shall be used. For back shunting, shunt signals provided on each side of the yard shall be used.
- 16.0 **NON RUNNING LINE: -**
- 16.1 **GOODS SIDING: -**
A goods siding of CAL 40 M at RPRD end of the yard takes off from common loop Line No.1 with both side entry and exit facility. The entrance points and corresponding derailing switches are coupled and operated by an arc lever at site. For performing shunting in / out of the siding SS/SM on duty shall transmit siding control key, by operating Group Trans and siding control push buttons No.13 (BLACK) simultaneously, which shall be extracted from the RKT provided in SM room. The hand plunger lock provided on the siding points shall be unlocked by the control key at entrance/exit end of the siding and after setting the point by

the arc lever and clamping and padlocking the concerned point shunting can be performed. After completion of shunting the control key for the siding shall be restored to the RKT provided in the SM room and SM on duty shall receive the control key by pressing the siding control button along with Group release button. A steady KEY IN indication GREEN shall appear on the panel. Signaled movements on Line No.1 shall not be possible unless the siding control key is restored to the RKT and the KEY IN indication is available on the panel. A "RED" indication is provided above the siding control button that indicates that the siding points are locked whenever route has been set for signaled movement on this line.

SIDING CONTROL	COLOUR	DESCRIPTION
13	BLACK	Control over goods siding

17.0 VERIFICATION OF LINE CLEARANCE BY STATION MASTER ON DUTY FOR RECEPTION OF TRAIN INTO STATION YARD: -

In the Station yard, a route on the running line comprises of entrance, berthing and dispatch portion of the yard and this portion of the yard should be clear of any obstruction for the passages of any train or for any other movements. The clearance of the route including overlap must be ensured by the SM on duty personally through panel indications of track before any movement of train is permitted on the concerned route subject to the other conditions such as locking of the points etc.

18.0 CRANK HANDLING EMERGENCY OPERATION OF POINTS:

Crank handle operation is interlocked with the signalling and interlocking system. When a route is not released after passage of a train or the Crank handle is in locked condition due to any failure, the "CH key" can also be extracted by applying emergency Crank Handle operation. The procedure is same for transmitting the CH key. In key "in" and lock condition, when the CH button and group trans button are pressed simultaneously, both the lock indication and key "in" indication start flashing. After 120 seconds the lock indication disappears and the key in indication continues to flash. At this position the key can be extracted from the RKT. The procedure for receiving the CH key is same like the normal operation of Crank handle.

On account of the doubtful operation of any track circuit by a light vehicle including self-propelled vehicle such as motor trolley or light steam/Diesel shunting engine or tower wagon, indicating the occupancy of track, it is necessary that the SM on duty satisfies himself that the said vehicle has cleared the point zone track circuits by observing the track indications of the track on either side of the crossovers by positively checking the "entrance" and "exit" track circuits are showing occupancy and clearance in accordance with the train movement.

19.0 INSTRUCTIONS REGARDING STABLING OF TRAINS ON RUNNING LINES:-

When a train is stabled on a running line for duration, the use of the said running line for passing the trains at the station shall be done with a lot of care and diligence. Station Master on duty shall carefully observe the proper functioning of the relevant track circuits (occupancy/clearance) while admitting a train. Such observance should continue for a minimum of four to five trains thereafter. If the Station Master on duty is not satisfied with the proper functioning of the track circuits on which the train is/was stabled, the signals leading on the line shall be suspended and the S & T maintenance staff shall be informed for attending to this.

20.0 EMERGENCY OPERATIONS: The following are the instructions for emergency operations.

20.1 EMERGENCY ROUTE CANCELLATION BUTTON AND VEEDER COUNTER: -

For the purpose of emergency operations there is an emergency 'Route cancellation'. There is a 'VEEDER COUNTER' for counting emergency operations involving operation of the emergency route cancellation button (provided at the top of the panel). The SM on duty must press the emergency route cancellation button and the signal button conforming to the section for which emergency route release is desired. A flashing indication will appear indicating that the cancellation operation has been initiated and after lapse of 120 seconds, the desired route will release provided all other conditions are favourable for route release.

20.2 The Veeder counter registers the number of such emergency cancellation operations. SM on duty should specify the cause for its usage giving the particulars of causes and the time of operation as related to a particular train etc. in the train signal register as well as in a separate register meant for this purpose.

20.3 **EMERGENCY OPERATIONS – CANCELLATION OF THE LOCKING OF POINTS NOT RELEASED AFTER THE PASSAGE OF THE TRAIN FOR WHATEVER REASON:** - If the locking of the route does not get released for one reason or the other after passage of the train, it is necessary to take recourse to the following emergency operations.

- a) Firstly, it must be ensured that the Signal is in the normal position.
- b) Operation as detailed in para 8.0 of Appendix-B to be followed.

In case route is not released even after emergency route cancellation, facility of crank handling of points shall be used. For releasing the crank handle even when lock indication of crank handle appears on the panel, press Group Trans button and crank handle button. After two minutes, key from RKT can be extracted. For further operation 14.0 of Appendix 'B' shall be followed.

20.4 **EMERGENCY GATE RELEASE OPERATION:**

Emergency gate release operation facility is provided in the panel when the route gets locked out of some failure. For emergency release of gate, the SM on duty shall press emergency gate release button and concerned gate button. After a lapse of 120 secs, a red light will glow over the emergency gate release button indicating that the operation is matured. The SM on duty shall then operate concerned gate button and group Trans button to release the key from RKT on gate. All such operations will be registered in the emergency gate operation counter. SM shall record all such operations in the station diary & in the register meant for it. Normally the emergency gate release button is in sealed condition. The concerned S&T staff should be advised immediately to get the emergency gate release button resealed after rectification of fault if any.

20.0 **LOCKING OF RELAY ROOM:** -

The relay room should be kept locked with two separate locks, the arrangement should be such that one key is kept with the SM on duty in his custody and the other key with the signal maintainer. Whenever required, the key in the custody of Station Master shall be given to the signal staff with proper acknowledgement in the relay room key register. The maintainer on receipt of the key from the SM may use the same and the key in his custody to open the relay room by inserting the keys one after another separately in to the earmarked locks. After completion of work, the signal staff shall return the key to SM on duty. The details of the transaction should be properly recorded in the relevant register at the Station duly signed by the SM on duty and the signal staff concerned. If the relay room key is handed over to the Signal staff regarding the interference in safety gears, the train shall be piloted in & piloted out.

22.0 **MAINTENANCE OF S&T INSTALLATION & ADHERENCE TO MAINTENANCE SCHEDULES:**

Regular maintenance of the S&T installations, adherence to schedules of maintenance, testing of points, track circuits, ground frames, associated interlocking apparatus, cables and the interlocking functional tests is must for safe and satisfactory working of these installations at this station.

The tests, checks and replacements etc., including overhauling shall conform to the schedules of Maintenance as indicated in the Signal Engineering Manual as also as per the current and extant instructions/circulars on the subject. During checking/ testing or during day to day as well as regular maintenance of S&T gears, SM on duty shall co-operate with S&T staff for safe and satisfactory maintenance.

23.0 PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF A SIGNAL INTERLOCKING INSTALLATION: -

In case of failure of any interlocking gear at the station, the failure report should be communicated by the SM on duty to the signal Maintainer, the JE/SE/SSE (SIG) of the Section and others through a memo as per SR 3.51.04 and 3.68.04 and the SM shall document all such transactions.

24.0 INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE:-

However, before declaring a signal or any other S&T gear as defective, SM on duty shall verify them and setting of points on the route and overlap for a signal to which it applies shall be inspected by the SM on duty irrespective of the position of buttons and indications on the panel and will work vide GR 3.68.

25.0 RECTIFICATION AND CHECK BEFORE RESUMING NORMAL WORKING: -

On receipt of information, the sectional Maintainer shall attend to the failure after giving a Disconnection Memo. After rectification of the fault, the Sectional Maintainer shall give a Reconnection Memo detailing the rectification. Thereafter, the SM on duty shall personally check the defective apparatus. After satisfying himself that the gear is in good and proper working order, he shall resume the normal working of the said defective apparatus in terms of SR 3.68.04 (c), (d), & (e)

26.0 PROCEDURE FOR CARRYING OUT PLANNED MAINTENANCE WORK: -

Whenever any normal maintenance or special works for major renewals etc., are involved, the signal & Telecom should pre plan these works. Field staff and the JE/SE/SSE (SIG) should give 'Advance Intimation' to the SM on duty in writing about this work in terms of SR 15.08.01.

27.0 EMERGENCIES:-

Notwithstanding anything contained in the aforesaid paras when equipment is found to be defective and unsafe for passage of trains, the Signal & telecom. Staff must at once suspend the working of the equipment and associated installations and issue 'Suspension Memo' explaining the seriousness of defect or damage to the interlocking installation to the SM on duty and take the Station Master's acknowledgement. After this, the usual practice of exchange of disconnection memo and reconnection memo can follow. The SM on duty must act promptly on such messages and take adequate precautions treating the S&T installation as defective and pass trains over the affected interlocking equipment according to extant instructions as contained in SR 3.77.

28.0 PROCEDURE TO BE FOLLOWED IN THE CASE OF FAILURE OF SIGNALS AND

POINTS AND USE OF EMERGENCY CRANK HANDLE: -

Whenever a signal or a point becomes defective, any movement over the points on the running lines shall be made after clamping and padlocking of both facing and trailing points supervised by SM on duty personally for all trains.

- 28.1 In case of failure of a signal or a point and in case the point can not be operated from the panel, emergency crank handle, which is interlocked with system is to be extracted and the following procedure is to be adopted.
- 29.1 Emergency crank handle is provided for all motor operated points. This is mechanically attached to the key on RKT and can be released by pressing Crank Handle control push button CH1/CH2/CH3/CH4 and Group Trans button simultaneously. All signals will be locked in normal position as soon as the key is released. SM on duty shall transmit the key to required end of the yard and operate the point manually.
- 29.2 When the crank handle key is removed from RKT for operation of the defective motor operated points, the responsibility for its safe custody rests with the Station Master on duty, till it is replaced back in RKT.
- 29.3 The case of failure of motor operated points should be promptly reported to the concerned Signal maintainer or JE/SE/SSE (Sig.) for rectification.
- 29.4 Whenever an Emergency Crank Handle is required to be used by a signal official for maintenance work or attending a failure, the signal official will give a disconnection memo to the SM on duty .The SM on duty will obtain the acknowledgement of the signal official in the Emergency Crank Handle Register and then hand over to him the Emergency Crank Handle.. The points will be treated as defective till the Emergency Crank Handle is returned back to the SM on duty.
- 29.5 Before parting with the Emergency Crank Handle either for attending failures or for maintenance work by Signal maintenance officials, the SM on duty will ensure that the reception and departure signals are put back to 'ON' position. The points for the affected lines should be treated as non-interlocked. The SM on duty is responsible for introduction of non-interlocked working and the trains will be piloted 'IN' and 'OUT' after duly clamping and padlocking both facing and trailing points over which the train is to pass, as per GR 3.69 and 3.70 with relevant SRs. The SM on duty will be personally responsible for correct setting, clamping and padlocking of points for reception or despatch of all trains.
- 29.6 The Emergency Crank Handle Register is to be maintained vide OM 20.06 Note (d) by the SM on duty wherein the particulars of the usage of the Emergency Crank Handle must be recorded.
- 30.0 **SUSPENSION OF LAST STOP SIGNALS: -**
When the Block instrument is suspended with its handle in 'TRAIN ON LINE' position or "TRAIN GOING TO" position as the case may be for whatever reason, the concerned last stop signal controlled by the Block Instruments must be treated as suspended and trains shall be piloted 'OUT'.

- 30.1 The SM on duty shall not grant 'LINE CLEAR' unless he has ensured that the lamps of fixed signals, which apply, to the train are burning. If the signal lights can not be kept burning, the SM on duty before giving 'LINE CLEAR' shall initiate action in accordance with the procedure prescribed in GR 3.68 to 3.72 & relevant SRs vide GR 3.49 (4).
- 30.2 The SM on duty shall not grant or ask 'LINE CLEAR', if the Axle Counter Section indicates section is occupied and will treat the Block Instrument as suspended.
- 31.0 **SIGNAL LIGHTS: -**
The SM on duty must also ensure from panel board that all the signal lights are burning properly and brightly. This fact must be recorded in the SM's Diary under a separate entry and confirm to the Section Controller on duty.
- 32.0 **CORRECTING TIME IN STATION CLOCK: -**
The SM shall set the time in his clock according to the time signal given by the Section Controller on duty at 16.00 hours every day according to SR 4.01.01 and 4.01.02.
- 33.0. **NORMAL POWER SUPPLY: -**
The Station works on 230 volts AC single-phase power supply. The normal power supply is drawn from the WESCO. Stand-by power is supplied by the diesel generators.
- 33.1 **POWER FAILURE AND REPORTING SUCH FAILURES: -**
Normal power supply to the Signalling and Interlocking installations at this station is drawn from the WESCO Power supply source (at 230 V, 50 Hz). Whenever WESCO (Main) power supply fails, a buzzer on the panel will buzz on. SM on duty has to press the power acknowledgement button (RED coloured) positioned on the top of panel. The SM on duty shall start the Diesel engine for stand by (Auxiliary) power supply. After run of the Diesel generator and on resumption of power supply, SM shall acknowledge the same by pressing the power acknowledgement button. This will make the panel operative again.
- 33.2 The SM on duty must maintain record of power failure and he must promptly report the failure to the section controller and the concerned electrical and S&T maintenance staff.
- 34.0 **AXLE COUNTER AS LAST VEHICLE CHECKING DEVICE (LVCD):-**
- (a) Axle Counter as LVCD has been provided for the section KDLR-KSNG and KDLR-RPRD as last vehicle checking device. The axle counter will also have control over the UP/DN last stop signals and block instrument of respective direction of KDLR station.
 - (b) The occupation and clearance of the axle counter section is indicated by RED and GREEN indication respectively provided on the panel.
 - (c) UP last stop signal of KDLR cannot be taken OFF if axle counter of block section KDLR-RPRD fails. Similarly DN last stop signal of KDLR cannot be taken OFF if axle counter of block section KDLR-KSNG fails. On the other hand on arrival of a train at station if the axle counter continues to show occupied the block instruments of concerned block section cannot be turned to line closed position

- 35.0 NORMALISATION OF AXLE COUNTER AND BLOCK WORKING BY RESETTING OF AXLE COUNTER**
- (A) After the train has been received by the receiving station or after a block back operation or when no train has entered into the block section and the axle counter displays RED, then the following procedure shall be adopted to reset the axle counter.
- (B) **VERIFY THE BLOCK SECTION IS CLEAR OF ANY VEHICLES-**
- (C) Procedure laid down in GR 4.17 & relevant SRs thereto shall be followed for the purpose.
- (D) By checking the train register, the detail of the train passed through the block section and finding out from the station at other end of the concerned block section or from Controller that last train has passed and arrived complete. SM on duty shall exchange private number with the SM at other end of the concerned block section or with the Controller or from whom the complete arrival has been confirmed.
- (E) If the failure has occurred after arrival of a train, SM on duty shall also obtain intact position from the guard of stopping train or by exchanging all right signal with the guard of through train, so that he can ensure that the train has arrived completely before resorting to the reset of LVCD axle counter.
- (F) **RESETTING PROCEDURE:-**
 After complete arrival of train, if the axle counter of the section does not clear or Axle counter section free indication (GREEN) does not appear in the panel, The receiving station SM shall call the attention of the station in rear through telephone for resetting and shall establish communication with the said station if resetting of equipment is considered necessary giving details of last train that has arrived complete at his station and the block section is clear.
- The receiving station shall inform the sending station as to whether the last train that entered into the section has arrived or not. And, if arrived fully shall so intimate authenticated by exchanging Private number with the sending station.
- As digital Axle counters are provided as LVCD in KSNG-TIG Block section, resetting is to be done by both of sending end and receiving end individually.
- The status of the section LVCD i.e. Clear (GREEN), occupied (RED), preparatory reset (Miniature yellow) and power on indications (YELLOW) are provided in the reset box in section KDLR-KSNG and KDLR –RPRD.
- (I) The procedure to be followed in section KDLR-KSNG and KDLR-RPRD for re-setting by both sending end and receiving end individually is as follows: -
- a. Insert SM's LV reset key, turn right and keep pressed.
 - b. Press LV reset button provided on the panel for 5 seconds.
 - c. Release SM's LV reset key and reset button.
 - d. Turn left the SM's LV reset key and remove it.
 - e. The system obtains preparatory reset state and preparatory reset indication (miniature Yellow) glows on the panel.
 - f. The counter reading increases by one count after a gap of 5 seconds approximately.
 - g. The counter reading should be recorded.

- h. One train after resetting is to be piloted to the section to make the system normal. The system will be normal after the train reaches the station in advance.

The SM shall record in his Train Register the resetting operation giving details of train number, time, PN exchanged with SM in rear, giving reasons for the resetting operation.

If the axle counters functioning properly now, then Block Section clear indication 'Green' will appear on the panel and the concerned Block instrument of the section will be normalized.

If the axle counter section indication does not appear 'Green' and continues to show 'RED' indication, the concerned Block instrument of the section shall remain suspended and failure intimation to be given to sectional signal Maintainer/JE/SE (Signal) for early rectification.

36.0 TELECOMMUNICATIONS:

- 1) Telephone attached to the block instruments connected to the adjacent block stations on either side.
- 2) Station to station fixed telephone (Hot line) has been provided.
- 3) Station has been connected with Auto telephone connected to Railway Exchange.
- 4) BSNL telephone has been provided.
- 2) Station to station 25 Watt VHF communication has been provided.
- 3) The Station is connected to SPRD-BLGR Control circuit.
- 4) Magneto Telephone connection has been provided between station and both end Crank handle locations.
- 5) Magneto telephone connection is provided between station and LC gates at Km. 223.641 in station yard at KSNG end, at KM 220/6-7 in KDLR-KSNG section and at KM 225/14-15 in KDLR- RPRD section.

Note :

- (i) For obtaining line clear, VHF should be used as a last alternative and not as a sole means of communication.
- (ii) VHF and Walkie-Talkie sets should not be used for unnecessary discussions with Loco Pilots Guards or any other staff.
- (iii) The on duty SM shall obtain Line Clear by the means of communication stated in above Para-36.0 from item No. (1) to (6) in order of preference. In case of failure of any of the above means of communication the SM on duty shall work vide SR 6.02.06.

37.0 FAILURE OF COMMUNICATION / FAILURE OF BLOCK INSTRUMENTS:

- 1) In the event of failure/suspension of block instrument, Track circuit & Axle Counter 'Line Clear' shall be obtained over telephone attached to the block instrument or station to station telephone by exchanging identification number and supported by private number as per SR 6.02.06 (a) and Chapter-III Part-I of Block Working Manual.
- 2) In the event of failure/suspension of block instrument and block telephone attached to the block instrument, or the Station to station fix telephone 'Line Clear' shall be obtained on Railway auto phone or BSNL phone, by exchanging identification number supported by private number vide SR 6.02.06 (1)(b) and Chapter-III Part-I of Block Working Manual.
- 3) In the event of failure/suspension of block instrument, block telephone and station to station fixed telephone or Railway auto phone or BSNL phone, Line Clear shall be obtained over the control phone exchanging identification number and supported by 'Private Number' vide SR 6.02.06(1) (c) and Chapter-III Part-I of Block Working Manual.
- 4) In the event of failure / suspension of block instrument or block telephone attached to the block instrument, or station to station fixed telephone or Railway auto telephone or BSNL phone or control telephone line clear shall be obtained on the VHF set exchanging ID number supported by PN provided that the instructions contained in SR 14.01.02 are followed vide SR 6.02.06 (1) (d) Chapter-III Part-I of Block Working Manual.
- 5) In the event of total failure of all communications trains shall be worked vide SR 6.02.03

APPENDIX - 'C'**ANTI COLLISION DEVICE (RAKSHA KAVACH)**

NIL

APPENDIX - 'D'

1.0 **STATION SUPERINTENDENT (IN-CHARGE):-**

He is the over all In-charge of the station; He is responsible for the efficient discharge of duties devolving upon all the Staff employed at the station whether permanent or temporary according to Station Working Rules, Manuals & safe working Instructions. He shall get himself well conversant with the detailed working of Station and panel, points and signals etc.

He is responsible for maintaining the Assurance Register up-to-date. He shall conduct surprise night inspection and safety meetings/fire drills etc. as per instructions issued from time to time. He shall see that all the staff under his control working safely according to the rules in force.

He shall see that all signals, points, level crossing gates and the whole machinery at the station are in proper working order. He shall report all the defects to the concerned officials.

He shall satisfy himself that the staff employed under him are well conversant with Station Working Rules and perform their duties correctly. He is responsible for maintaining SWR, other Rule books and Assurance Register up to date.

He shall see that all safety records are maintained properly and all rules prescribed in G & SR, Block Working Manual, Operating Manual and other relevant directions issued from time to time by competent authorities are followed rigidly by all concerned and any irregularities if noticed are reported promptly to the authorities concerned.

He shall see that all accidents are promptly reported, attended to and GA-3 along with accident message is submitted to the concerned officers in time. He shall see that the staff is civil and helpful to all users of railway.

He shall frequently visit the platform, Station, LC gate etc. in order to maintain an effective supervision over the said staff and their working. He shall see that station premises are kept neat and clean.

He is responsible for booking all staffs working under him for PME and Refresher Course / Safety camp in their due time. His Special attention is drawn out to chapter II of General and Subsidiary Rules and GR 5.01 to 5.08 with relevant Subsidiary Rules, Chapter – XXII of Operating Manual.

He shall see that all equipment, apparatus and instruments including signal and interlocking gears are in proper working order and all failures are promptly reported to officials concerned for repairs/rectifications.

He shall pay special attention towards passenger amenities & coaching trains punctuality and yard feasibility. He shall endeavor for minimizing detention to freight trains by judicious planning of trains staff. He shall pay attention to smooth functioning of goods train to eliminate detentions. He shall attend to all compliance by traveling/trading public.

He shall see that the law and order in the station area is taken care of with the help of G.R.P. and R.P.F and civil authorities as per need.

He shall ensure compliances of all Operating, Safety and Commercial records maintained at the station. He is responsible for overall supervision of the station.

His special attention is drawn to chapter No.II of G & SR (Amendment) 2000 and GR 5.01 to 5.08 with relevant SRs. He shall follow the instruction laid down in SR 3.68.01© & (d) and SR 14.07.01 and BWM 2.09 (e). He shall conduct surprise night inspection, safety meetings and fire drills. He shall maintain good public relation as well as look after passenger's amenities and be helpful to travelling public.

2.0 **ASSURANCE REGISTER:**

All staff before taking up independent charge of their duties at this station shall make a

written declaration in the assurance register that they have read and thoroughly understood the system in force and must sign such declaration.

- 2.1 No Railway servant shall be entrusted with any duty involving safety of the public unless the station in-charge is satisfied that the concerned staff is competent for the post. No Railway servant unless duly examined and certified shall be allowed to work the points and signals. The SMR is responsible to see that all the staff are conversant with the Station Working Rules and their signature obtained in the Assurance register, after he is satisfied that they have thoroughly understood the working rules of the station. In case of Group 'D' staff, their signature/thumb impression must be obtained after explaining them fully about their duties and responsibilities.
- 2.2 The Station Manager is responsible personally for maintaining the Assurance Register and for obtaining declaration of the staff working under him. The Assurance of staff must be maintained in two parts, one for Group 'C' and the other for Group 'D' staff. A duplicate copy of the Assurance Register must be maintained and kept in personal custody of the Station Manager.
- 2.3 The declaration shall be renewed in the following cases:-
- (i) Whenever there is a change in the Station Working Rules.
 - (ii) For any staff who have not worked at the station or were away from the station for a period of 15 days or more.
- 3.0 **USE OF PRIVATE NUMBER BOOKS & IDENTIFICATION NUMBER SHEET:** -
Sufficient Private Number books and I.D number sheets in sealed covers shall be kept always in the stock by Station Manager under lock and key. He shall maintain a register for this purpose.
- 4.0 **ACCIDENTS:**
Accidents shall be reported and immediate action shall be taken by the Station Manager in-charge in accordance with the instructions laid down in the Accident Manual. Whenever the Station Manager receives report of an accident, he shall take all necessary precautionary measures to protect the traffic and shall arrange earliest possible assistance as required at the site of accident. He shall frame the accident message/reports and follow up all safety principles without delay.
- 5.0 **TESTING OF POINTS AND SIGNALS:**
The Station Manager shall test the working of the reception signals daily during the day when there is no train due to arrive/leave the station. He shall also test the working of points, crossings etc. and record the result in the Station Master's diary.
- 6.0 **DY.SS/STATION MASTER/ASSISTANT STATION MASTER:**
He shall work in 8 hrs. shift for train passing and booking of traffic etc. Coaching returns and other statements shall be prepared and submitted by him in time under the direction of the Station Manager. He shall assist the Station Manager for the up keep of the station in all aspects.
Station Master on duty who makes an entry in the train signal register must continue on duty till all the entries pertaining to the trains are completed vide Subsidiary Rule 14.07.01.
He is responsible for working beyond this period when called upon to do so in the exigencies of services. He will follow SR 14.07.01. Their special attention is drawn to Chapter II of General(Amendment) & SR 2000 and GR 5.01 to 5.08 with relevant SRs. As an assistant to the SMR, he shall follow the instructions given to him by the Station Manager.
- 7.0 **HANDING OVER AND TAKING OVER CHARGE:**
The Dy.SS/Station Master/Assistant Station Master on duty shall record in the SM's diary the

condition of all the running lines, the caution orders in force at the time of handing over and taking over of charge. These entries must be counter signed by the SMR/Dy.SS/Station Master/Assistant Station Master coming on duty while taking over charge. This will not, however, relieve any one of the Dy.SS/SM/ASM of his responsibility to ensure by physical check that the nominated line is clear of all obstructions before admission of any train on it.

8.0 **TRAFFIC POINTSMAN:**

He shall work under the instructions of SM on duty and follow the GR 02.05 to 2.11 and other relevant rules laid down in GR and SR. He shall remain responsible for:

- (i) Delivery of authority to proceed and caution order etc. to the Loco Pilot of train.
- (ii) Correct setting and locking and crank handling of points for reception/dispatch and shunting operation under the supervision of Station Master/Guard.
- (iii) To couple and uncouple vehicles under the supervision of Station Master/Guard when shunting operation is in progress.
- (iv) Piloting and hand signalling of trains when necessary.
- (v) Knowledge of hand signals, detonators and their use.
- (vi) Protection of line in emergency and fog signalling.
- (vii) Exchange of signals with the Loco Pilot and Guard of passing trains as directed by the Station Master.
- (viii) Cleaning, Oiling and lighting of lamps.
- (ix) Loading/unloading of parcels, luggage, Guard boxes and packages to and from the train and watching the packages and other materials by properly stacking in the station premises.
- (x) Dusting of station office, filling up the fire buckets with sand/water and getting train interact arrival register (T/1410) signed by the Guard as and when required.
- (xi) Serving messages and any other duties entrusted to them by the SS/SM from time to time.
- (xii) Uses of emergency crank handle for setting of points.
- (xiii) To supervise shunting as per SR 5.13.03.
- (xiv) They must be thoroughly conversant with the GR 3.38, 3.46, 3.77(I), 5.09, 3.52 to 3.60, 3.62, 5.13, 5.15, 5.16, 5.21, 5.23 & SRs there to and their special attention is drawn to chapter No.II of G & SR (Amendment) 2000 also.
- (xv) When necessary, they will work in the Goomties for observing and reporting the complete/incomplete arrival/departure of trains as per the order of the SM on duty in case of failure of Axle Counter/Track Circuit.

9.0 **DUTIES OF TRAFFIC GATEMAN:**

Mentioned in Gate working instructions of concerned L.C.gates in Appendix-A. In addition to that he shall follow the GR 2.05 to 2.11 and other relevant rules laid down in GR & SR.

GENERAL

- i. All staff should be in uniform while on duty and follow the rosters issued by DPO/SBP from time to time.
- ii. A set of Red and Green flags and Tricolor hand signal lamps will be part of the essential equipments of staff while on duty. They shall not leave the station except when required by the SM on duty or with his permission. They shall comply with SR 4.42.02 (b) & (c).

APPENDIX - 'E'

ESSENTIAL EQUIPMENTS OF THE STATION

Below is the list of essential safety equipments, which shall be readily available in good working order with necessary relief stock.

Srl No.	Description	Quantity
1.	Detonators	10 in tin case
2.	Hand signal lamps/Tri colour torch	06 Nos.
3.	Hand signal flags	05 sets.
4.	Safety chains with pad locks	06 Nos.
5.	Wedges	06 Nos.
6.	Skids	06 Nos.
7.	Fire buckets (with sand and water)	05 Nos.
8.	Clamps with padlocks	08 Nos.
9.	Reminder collars	06 Nos.
10.	"Motor Trolley on Line" boards	02 Nos.
11.	Block suspension Boards	02 Nos
12.	First aid Box	01 No.
13.	Stretcher	01No.
14.	Fire extinguisher	01 No.
15	Blanket	01 No.

APPENDIX - 'F'

RULES FOR WORKING OF DK STATIONS , HALTS, IBH, IBS AND OUTLYING SIDING

NIL.

APPENDIX - 'G'

RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS

NIL