



East Coast Railway Waltair Division



Station Working Rules *of* KARAKAVALASA (KVLS)

East Coast Railway / Waltair Division

**Station Working Rules of
KARAKAVALASA (KVLS)**



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EAST COAST RAILWAY
WALTAIR DIVISION

STATION WORKING RULES OF KARAKAVALASA [BROAD GAUGE]

Date of Issue:- **15 -09-2023**

Date brought in force:-

Ref:- Lr. No: 2000/Safety (A&R)/19/36 of Rly. Board dated 27.10.05.

NOTE: -

i) The Station Working Rules must be read in conjunction with General & Subsidiary rules, Block Working Manual and Operating Manual. These rules do not in any way supersede any rule in the above books.

1. STATION WORKING RULE DIAGRAM:

(i)The Station Working Rule diagram no: SI/WRD/23158 Alt'B'.

(ii)CSTE/East Coast Railway Signal Interlocking Plan No: SI/23158 Alt'B'..

(iii) Date up to which corrected: **15-09-2023**

2. DESCRIPTION OF STATION:

2.1 GENERAL : LOCATION:

a) Name of the station	:	KARAKAVALASA
b) Class of station	:	'B' class
c) Section	:	Kottavalasa-Kirandul
d) Double line/Single line	:	Single line
e) Electrified/Non Electrified	:	Electrified
f) Gauge BG/MG/NG	:	BG
g) Railway	:	East Coast Railway
h) Route	:	D
i) Situated at	:	Km 84.123
j) Reckoned from	:	Kottavalasa
k) Number of cabins	:	Centrally operated dual VDUs.

2.2. BLOCK STATIONS, IBH, IBS ON EITHER SIDE AND THEIR DISTANCE AND OUT LYING SIDINGS:

Sl no	Adjacent Block-section	Distance	Direction
a	BORRAGUHALU (BGHU)	11.256km	KTV end
	SHIMILIGUDA (SMLG)	9.000 km	KRDL end
b	Provision of IBS	Nil	
c	Automatic signal	Nil	
d	DK station/Outlying sidings	Nil	
e	Passenger halt	Nil	

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2.3 BLOCK SECTION LIMITS ON EITHER SIDE OF THE STATION ON DIFFERENT DIRECTIONS:

Between Stations	The Point from which the Block section commences	The Point at which the 'Block Section' ends
KVLS-BGHU DN Direction	From DN advanced starter signal no. 18 of KVLS	UP Advanced starter of BGHU.
KVLS-SMLG UP Direction	From UP advanced starter signal no.17 of KVLS	DN Advanced starter of SMLG.

2.4 GRADIENTS:

a) From the centre of the station building towards BGHU:

Chainage in Mtrs from CSB		Stretch	Gradient
From	To		
CH: 0.000	Ch: 596	596M	1 in 400 Falling
CH: 596	CH:2458	1862M	1 in 60 Falling
CH:2458	CH:2658	200M	Level
CH:2658	CH:3225	567M	1 in 60 Falling
CH: 3225	In to section	---	1 in 70 Falling

b) From the centre of the station building towards SMLG:

Chainage in Mtrs from CSB		Stretch	Gradient
From	To		
CH: 0.000	Ch: 475	475M	1 in 400 raising
CH: 475	CH: 2397	1922M	1 in 60 raising
CH: 2397	CH: 3358	961M	1 in 70 Raising
CH: 3358	CH: 3480	122M	1 in 60 Raising
CH: 3480	CH: 3957	477M	Level
CH: 3957	In to section	---	1 in 70 Raising

c) From catch siding point towards KVLS station:

Chainage in Mtrs from C/Sdg point		Stretch	Gradient
From	To		
From section	CH: 60.960	60.960M	1 in 70 Falling
CH: 60.960	CH: 91.440	30.48M	Level
CH: 91.440	CH: 167.440	76M	1 in 55.55 Raising
CH: 167.440	CH: 243.840	76.4M	1 in 12.67 Raising
CH: 243.840	CH: 304.800	60.96M	1 in 12.06 Raising
CH: 304.800	CH:411.480	106.68M	1 in 8.54 Raising
CH: 411.480	CH: 655.320	243.84M	1 in 51.36 Raising
CH: 655.320	Towards KVLS station	----	1 in 4.70 Raising

2.5 (A) LAY OUT:

Sl no	Running/Non Running line	Electrified/Non Electrified
1	Route-1 (1 st Loop line)	Electrified
2	Route-2 (Main line)	Electrified
3	Route-3 (2 nd Loop line)	Electrified

(B) PLATFORMS:

One Rail level passenger platform measuring 360MX 6.1M is provided on Line no.1 (1st Loop line).

2.5.1 DIRECTION OF MOVEMENT & HOLDING CAPACITY:

(a) DIRECTION OF MOVEMENT:-

The trains coming from BGHU end and proceed towards SMLG are Up Trains and The Trains coming from SMLG end and proceed towards BGHU are Down Trains.

(b) HOLDING CAPACITIES:

Line no	Designation	CSL	Electrified/ Non Electrified	CSL starting & Destination
Line No 1	1 st Loop line	734 Meters	Electrified	From Starter to Starter
Line No 2	Main line	727.46 Meters	Electrified	From Starter to Starter
Line No 3	2 nd Loop line	729.20 Meters	Electrified	From Starter to Starter

2.5.2 NON RUNNING LINES AND THEIR CAPACITY:

(A)HOT AXLE SIDING:

(i) One Hot axle Siding takes off from line no.1 (Electrified) at BGHU end of the yard and is isolated by derailing switch measuring 58M (GJ-GJ). The entrance point and corresponding derailing switch is coupled and operated by arc lever provided at site. Hand plunger lock is fitted at the entrance point unlocked by key 'B' & Key 'C' released from EKT provided in SM's office through control no. 37 from panel/VDU. When control 37 is transmitted from panel/VDU S1/C1, SH-3, S2/C2, SH-4, S12 & S15 signals of line no.1 will be locked in their normal position.

2.5.3 ANY SPECIAL FEATURES IN THE LAYOUT:

(a)SLIP SIDING:

Slip siding is provided towards KTV end of the yard beyond DN advanced starter signal no.18 and the slip siding point no. 31 which is interlocked with token less block instrument of section KVLS-BGHU. The slip siding point is normally set to slip siding. The slip siding point will be operated and set to main line through route initiation.

(b)CATCH SIDING:

Catch siding is provided towards KRDL end of the yard in mid section between KVLS-SMLG and UP advanced starter signal no. 17 and the catch siding point no.32 is controlled by single line token less block instrument of KVLS-SMLG section and automatically operated by the train through sequential operation of track circuits when the instrument for section SMLG-KVLS is in TCF position. The catch siding point is normally set to catch siding.

c) UP starter signals S-11, S-13 & S-15 are interlocked with DN Home signal no. S-4 'ON' aspect and also TLBI for section KVLS-SMLG is not in TCF position is proved.

(d) DN starter signals S-12, S-14 & S-16 are interlocked with UP Home signal no. S-1 'ON' aspect and also TLBI for section KVLS-BGHU is not in TCF position is proved.

(e) For taking off S-2 (DN catch siding home signal, S-4 should be taken off. (i.e., S-2 shall be released by S-4).

(f) For taking off S-19 (UP catch siding home signal) the catch siding to be set.

2.6 LEVEL CROSSINGS:

NIL

3.0 SYSTEM AND MEANS OF WORKING:-

(i)System of working: Absolute block system:

Trains are worked under Absolute block system in accordance with GR 7.01(1) (a), 8.01(1) (a) &(c), 8.01(2) (b), 8.03(2) (a), (b), (c) (ii), 14.01 to 14.07, 14.08(b) (iv), 14.09 to 14.13 and BWM chapter-IV part I.

(ii)Block instruments:

Single line Token less block instruments are provided for block sections KVLS-BGHU and KVLS-SMLG vide GR 14.01(a) and the 'OFF' aspect of the last stop signal is the authority for the Loco pilots of all trains to enter into the block section vide GR 14.08(b) (iv).

(iii)Co-operative/Non Co-operative: Co-operative.

(iv)Provision of Block Telephone: Telephone attached to block instrument connecting the adjacent block stations concerned.

(v)Custody of keys of block instrument: Block instrument is provided with double locking. One key will be with SM and other key will be with S&T maintainer.

3.1 CUSTODY OF RELAY ROOM KEY/RELAY HUBS/GOOMTIES/GATE GOOMTIES /CABIN HOUSING ETC. AND PROCEDURE FOR ITS HANDING OVER AND TAKING OVER BETWEEN STATION MASTER AND S&T MAINTENANCE STAFF:

Custody of Relay room key/relay hubs/goomties/Gate goomties/cabin housing and Procedure for its handover and taking over between SM and S&T staff has to follow the Procedure as per JPO issued by COM and CSTE vide No. JPO/02/2012 dated 29.08.2012 And JPO issued by AM/Traffic & AM/Signal vide No. 2021/Sig/21/Safety Performance Dated 10.06.2023.

Relay room/ relay hubs/goomties/Gate goomties/cabin housing are provided with Two independent locks. The key of one lock shall be in the personnel custody of Station Master on duty and the key of other lock shall be in the custody of S&T Maintainer. In the Event of necessity such as for attending failure, or regular maintenance, on being Requisitioned by S&T maintainer, SM shall hand over the key to the Maintainer.

On completion of the work, maintainer shall lock the relay room/ relay hubs/ Goomties / Gate goomties/cabin housing and shall return the key to SM. The particulars of Such transactions shall be entered by the SM in the relay room key register vide OM 2015 Para No.13.16 and in case of relay hubs/goomties/Gate goomties/cabin housing in the Register meant for this purpose.

4.0 SYSTEM OF SIGNALLING AND INTERLOCKING:

- 4.1.0 **a) Standard of Interlocking:** This Station is provided with Standard-II (R) Electronic Interlocking.
- B) Type Of Signals:** Multiple Aspect Colour Light Signals. The aspects and indications of the MACLS is governed by GR.3.08 (4) (b).
- c) The Station is provided with Electronic Interlocking (EI).** All signals and points are electrically operated from the central VDU provided at SM's office.
- d) Method of operation:** Central VDU is provided in the Station Master's office to electrically control all signals and points.
- e) Provision of axle counter/Track circuits on running lines:**
Track circuits are provided in the yard as 1AT, 1T, 31T, 18AT, 33AT, L3T1, L3T2, L3T3, 33BT, 35BT, L1T1, L1T2, L1T3, L2T1, L2T2, L2T3, 34AT, 34BT, 36BT, 17AT, 4T, 4AT in yard and 19AT, 32T, 2T, 2AT, 2AT2, 2AT1 in catch siding. Axle counters are provided for KVLS-BGHU as BAXT and KVLS-SMLG as BAXT. Normally the panel is blank except point and Block section indications for the above track circuits/ Axle counters are available on VDU at SM's office. When a signal is cleared the route indication 'Yellow' appears for the particular route set and 'Red' light appears as the train occupies the track circuit.
- f) Calling on Signals/IBS:** Calling-on signals are provided below Home signals of yard and catch siding (i.e. in both Up & Down directions) as per GR.3.13 (1) (b), (2) (3) (4) & (6) (b).

g) **IBS is not applicable at this station.**

h) The position of all points, signals on running lines are available in the VDU. Remainder Block collars are provided for use which shall be placed to prevent operation in case of concerned line is blocked. The VDU is provided with SM's key user name and password which shall always remain with the personal memory of the Station Master on duty.

i) **CRANK HANDLE:**

When any point fails to operate normally by the Route Setting operation through VDU 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. CH-1 controls 31, **33A/B** 35A/B; CH-2 controls 34A/B 36A/B; CH-3 controls 32.

(The details of standby operation from VDU is given under Appendix-'B')

These crank handles are interlocked with the signaling and interlocking system at this station and normally locked inside the RKT instrument at the respective Crank Handles Locations. Crank handle keys can be taken out only when all signals are not taken 'OFF' and the route is not locked for whatever reasons. Crank Handle can be released from VDU by common 'TRANS' icon and concerned Crank handle control icon simultaneously. When the keys are taken out no signal can be taken 'OFF' over the particular route on the points nominated by the crank handle.

This key can be electrically transmitted at both ends locations of the yard for manual operation of the defective points. The failure of motor operated points must be ensured by physical checking that there is no obstruction. SM on duty shall personally ensure the clamping and padlocking of all facing and trailing points. An emergency crank handle register shall be maintained by the SM on duty at the station as per para 20.06(d) of the Operating Manual. Correct setting, clamping and padlocking of the points devolve on the SM on duty.

(Details of use of Crank Handle as per Appendix-'B')

In cases of failure of motor point, it should be promptly reported to the concerned signal maintainer/signal inspector for immediate rectification.

j) **Catch siding and slip siding:**

The station is equipped with catch siding at SMLG to protect station section from unauthorized movement of vehicles/Trains from SMLG-KVLS block section. A slip siding is provided towards BGHU end beyond DN advanced starter signal no.12 to protect KVLS-BGHU block section from unauthorized movement of vehicles/train from station yard.

(i) Slip siding:-

The slip siding is interlocked with block instrument for section KVLS-BGHU so that it will not be possible to set the slip siding point no. 31 to running line unless the handle of the block instrument is either in receiving or in sending position. Similarly, the handle of the block instrument for section KVLS-BGHU cannot be made normal unless the slip siding point no. 31 is set to its normal position i.e. to slip siding.

In case of failure of slip siding point No.31 for whatever reason, SM shall use crank handle CH-1 for slip siding point operation. There is no facility of emergency operation of slip siding point no. 31 from VDU/Panel in case of failure of slip siding point track circuit no 31T. There is no independent operation of slip siding point from VDU/Panel.

(ii) Catch Siding:-

Catch siding point no. 32 is provided at SMLG end of the yard to protect the station yard from unauthorized movement of trains/vehicles from the block section SMLG-KVLS. Catch siding point no. 32 is interlocked with block instrument for section SMLG-KVLS, so that it will not be possible to set the catch siding point no.32 to running line unless the handle of the block instrument is in TCF or in TGT position. Similarly, the handle of the block instrument cannot be made normal unless the catch siding point is set to its normal position.

(Details are given in Appendix-‘B’)

In case of failure of catch siding point No.32 for whatever reason, SM shall use crank handle CH-3 for catch siding point operation. There is no facility of emergency operation of catch siding point no. 32 from VDU in case of failure of catch siding point track circuit no 32T. There is no independent operation of catch siding point from VDU/Panel.

4.1.1 TAKING OFF CALLING-ON SIGNAL:

Miniature colour light Calling-on signal is provided below the Home signals of yard and catch siding in terms of GR.3.13 (6) (b). A Calling-on signal shows no light in the ‘ON’ position and Yellow light when taken “OFF”. A calling-on signal, will be taken ‘OFF’ for reception of a train when the Home signal above it cannot be taken ‘OFF’ due to failure or any other reason or for admission of train on blocked line.

Before taking ‘OFF’ Calling on signal during failure of track circuit the route and clearance of the track over which the train will be admitted must be checked physically by SM on duty.

(The detailed procedure is given in Appendix-B)

4.1.2 SHUNT SIGNALS:

Shunt signals Sh-3 (A-C) are provided towards BGHU end of the yard for shunting purpose & SH-4(A-C) are provided towards SMLG end for shunting purpose.

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

Relay room is provided with two independent locks. The key of one lock shall be in the personnel custody of Station Master on duty and the key of other lock shall be in the custody of S&T Maintainer. In the event of necessity such as for attending failure, or regular maintenance, on being requisitioned by S&T maintainer, SM shall hand over the key to the Maintainer. On completion of the work, maintainer shall lock the relay room and shall return the key to SM. The particulars of such transactions shall be entered by the SM in the relay room key register vide OM 1.14.

4.3 (A) POWER SUPPLY:

Normal: AT Supply-230v, 50Hz

Stand by:- 1st standby power supply: Andhra Pradesh State Electricity Board Supply.

2nd stand by power supply: DG set.

(i) A changeover switch is provided in the Station Master's Office with the three power supplies viz., AT, Local and DG for changing the switch to the required supply position. A luminous indicator above the circuit breaker for each supply indicates the availability of the supply.

(ii) For IPS system that provides to EI, auto-change over has been provided.

(iii) There is a remote monitoring ASM box provided at the station to monitor the health of IPS.

(B) REMOTE MONITORING SM BOX: Remote monitoring SM Box gives alarm to the ASM for the following fault conditions:-

- (a) 50% depth of discharge (DoD) of battery. In this condition audio/visual alarm comes, which can be acknowledged with audio cut-off.
- (b) 60% DOD, which warns for emergency. The alarm for this condition is same as for condition 1.
- (c) 70% DOD, which signals system, shut-down. In this condition signal feed is cut-off and all DC-DC converters continue working. Audio alarm continues till power supply is restored.
- (d) Any of the module fails, which calls for 'call S&T'.
- (e) Whenever there is a failure of power supply in AT or Local the SM shall take prompt action to inform to all concerned for the rectification. The SM himself, during his daily checks, shall test the availability of power supply AT and Local and make an entry in the Station Diary duly initiating action for rectification of failure, if any.

5. TELECOMMUNICATIONS:

- (a) Telephone attached to Token less Block Instruments is connected to adjacent stations on either side.
- (b) Hot line Telephone communication is provided between adjacent stations i.e. BGHU and SMLG stations.
- (c) The station is connected to KTV-KRPU control Circuit.
- (d) The station is connected to KTV-KRPU traction power control circuit.
- (e) Telephone communication is provided between Station Master on duty to UP CH locations and to DN CH Locations & catch siding.
- (f) Telephone communication is provided between Station Master on duty and slip siding location.
- (g) 25w VHF set is provided at the station for emergency communication.
- (h) Auto Rly telephone is provided

5.1 FAILURE OF COMMUNICATION: -

- a. In the event of failure of communications between the adjacent block stations SR 6.02.06 shall be observed, for working the train.
- b. In the event of total failure of communications between the adjacent block stations SR 6.02.04 shall be observed, for working the train.

6. SYSTEM OF TRAIN WORKING:

6.1 DUTIES OF TRAIN WORKING STAFF:

The movement of trains is controlled by section controller on duty whose orders shall be complied with provided they do not contravene any provisions of General Rules, Subsidiary Rules, Station Working Rules, Block working manual and any 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 adjoining Block Stations and shall be responsible to ensure that there is no undue delay to train operation in general.

6.1.1 TRAIN WORKING STAFF IN EACH SHIFT:

The following is the complement of operating staff provided at the station in each shift for train passing duty.

Cadre	Staff in each Shift
Station Master	1
TPM / TP	1

The above staff shall work as per roster issued from time to time by Divisional Railway Manager (P) and these rosters shall be conspicuously displayed in the Station Master's office

6.1.2 RESPONSIBILITY FOR ASCERTAINING CLEARANCE OF LINES AND ZONES OF RESPONSIBILITY:

The SM on duty is responsible to ascertain the clearance of the nominated line between first facing point and advanced starter signal in each direction. The private number book should be under the custody of SM on duty who is authorized to use it.

6.1.3 ASSURANCE OF THE STAFF IN THE ASSURANCE REGISTER:

Any staff before taking of independent charge of duties connected to train working or any staff who is away from his duty for the period of 15 days or more shall sign in the Assurance Register which is token of having understood the contents. However, in the event of any corrections or modifications in the SWR is involved, the assurance of all the staff who even is entrusted the work of train passing duty shall be obtained afresh in the assurance register by the in-charge of the station before they are allowed to work vide SR 5.01.02.

6.2 CONDITIONS FOR GRANTING LINE CLEAR:

- a. The conditions laid in GR 8.03(2)(a) (b) (c) (ii) shall be complied with the SM on duty before line is considered clear and line clear is granted.
- b. Before granting a line clear for a train the SM on duty shall personally ensure that the reception signals pertaining to a train are in the 'ON' position and burning properly vide GR 3.49(4).
- c. Line shall not be considered clear and line clear shall not be granted to an UP train unless:
 - i) Whole of the last preceding UP train has arrived completely.
 - ii) UP Home signal /calling-on signal No. 1A/B/C and/or C-1A/B/C is put back to 'ON' and
 - iii) Line is clear up to DN advanced starter signal no.18.
- d. Line shall not be considered clear and line clear shall not be granted to a DN train unless:
 - i) Whole of the last preceding DN train has arrived completely.
 - ii) DN Home signal /calling-on signal No. 4A/B/C and/or C-2A/B/C is put back to 'ON' and
 - iii) Line is clear up to UP advanced starter signal no.17.

e. ADEQUATE DISTANCE: (SIGNAL OVERLAP)

To take off the Home signals for admission of a train, the adequate distance (overlap) as mentioned below shall be kept clear. [Refer GR.3.40 (3) (b) and SR thereto]

CLEARANCE OF ADEQUATE DISTANCE (SIGNAL OVERLAP):

FOR UP TRAINS		
Line no.	From	To
1.	UP starter Signal No.11	Up to the end of sand hump when point no. 36 is Normal.
2.	UP starter signal No.15	Up to the end of sand hump when point no. 34 is Normal.
3.	Up Main line starter signal No. 13	Up to UP advanced starter signal no. 17, when points no. 34 and 36 are Normal.

FOR DOWN TRAINS		
Line no.	From	To
1.	DN starter Signal No.12	Up to the end of over run line when point no. 35 is normal.
2.	DN starter signal No.16	Up to the end of sand hump when point no. 33 is normal.
3.	DN Main line starter signal no. 14	Up to DN advanced starter signal no. 18. when points no. 33 and 35 are Normal.

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

After every train movement over slip siding point no. 31 & catch siding point no. 32 SM shall ensure point no. 31 is to be set to slip siding and point no. 32 is to be set to catch siding.

6.2.1.1 SETTING OF POINTS AGAINST BLOCKED LINE:

When a running line is blocked by stabled load, wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train at the station etc., the points at either end should be immediately set against the blocked line except when shunting or any other movement is required to be done on that line vide **SR.3.51.06**

Safety Point Alarm:-

A safety point alarm is provided on the Table of the Duty SM with different indications.

- 1) On complete arrival of a train at the station, the SM has to set the points against the occupied line.
- 2) In case the SM forgets to alter the points, after the time lag of two minutes, an audible buzzer will be heard from this instrument along with the RED indication of the line on which the train has arrived.
- 3) The SM shall then 'ACK' button to mute the buzzer, and immediately set the required points against the line on which the train has arrived.
- 4) On setting the points against the occupied line, the RED indication will disappear.
- 5) In case the SM fails to set the required points against the occupied line, a fault message will be triggered, SMS will be sent to the concerned Station Mobile and all concerned staff. Action will be taken against.

If all the lines of a station happen to be blocked, when line clear has been granted to a train, **then the Safety Point Alarm will not work.** Then, the points should be set for the line occupied by a stabled load or a goods train in that order so that, in case of mishap, the chances of causalities are minimized. In case of all the lines are occupied by passenger train, points should be set for a loop line to negotiate which the speed of incoming train would be reduced which in turn, would minimize the consequences / causalities vide SR 3.51.06(b). These precautions shall be taken in addition to the observance of other precautions as contained in SR 5.04.01 and SR 5.23.01. Block Collars to be placed on the concerned button of blocked line.

To Block / Unblock a particular line, displays 'Block' 'Unblock' option on the menu. Select line block option. After selecting the line block option, that particular line will be blocked and Red color indication will be displayed on the line.

6.2.1.2 RECEPTION OF A TRAIN ON BLOCKED LINE:

Whenever trains are to be admitted on an obstructed line it is necessary that the train is piloted IN on a written authority given by the SM on duty and delivered by a competent Railway servant to the Loco Pilot of the train or by taking off calling-on signal. [Refer GR 5.09 & SRs there to].

6.2.1.3 RECEPTION OF TRAIN ON NON-SIGNALLED LINE:

Not Applicable

6.2.1.4 DESPATCH OF TRAIN FROM NON-SIGNALLED LINE.

Not Applicable

6.2.1.5 DESPATCH OF TRAIN FROM LINE PROVIDED WITH COMMON STARTER SIGNAL:

NIL.

6.2.1.6 ANY SPECIAL CONDITIONS:

(a)SPECIAL RESTRICTIONS:

- (i) Shunting in face of approaching train is prohibited vide SR 8.09.02 (6)(ii)(a) towards SMLG end.
- (ii) Engine to be attached towards falling gradient while shunting at BGHU end.

(b)SPECIAL INSTRUCTIONS:

- (i) **Motor trolleys are not permitted on the following line clear on KVLS-BGHU & SMLG-KVLS block sections** vide SR 15.25.03 (b) (iii) due to sharp curves and steep gradients.
- (ii) Push trolleys should be worked under block protection without interference of train service vide SR 15.26.07(ii).
- (iii) DN trains shall stop in rear of DN catch siding stop signal S-2, unless the conditions stipulated are satisfied along with slip siding point no. 31 is set and locked towards main line.
- (iv)For piloting IN or P/OUT a train, the slip/catch siding should be clamped and padlocked and ensured by SM on duty.
- (v)For DN train reception catch siding point no. 32 can be set to main line after 2 minutes time delay on occupation of 2AT1 & 2AT2 track circuit to ensure 15KMPH speed restriction.
- (vi)Repeater signal to DN catch siding stop signal no.S-2 is provided due to severe curvature and cutting.

6.3 CONDITIONS FOR TAKING “OFF” APPROACH SIGNALS:-

- i) Conditions for taking off approach signals are governed by GR 3.40(1) (b), 3.40(2) (b), 3.40(3) (b)
- ii) Calling-on signal may be taken off for the admission of train in the event of failure of Home signal in terms of SR 3.69.02(a) or for the admission of a train on obstructed line in terms of GR 5.09 and SRs thereto.

6.3.1 RESPONSIBILITY OF STATION MASTER FOR RESTORATION OF SIGNALS TO “ON”:

Station master should ensure that signal is put back to ‘ON’ after passage of the train as per GR 3.36 (2) (B), 14.01 and SR 4.17.01.

6.4 SIMULTANEOUS RECEPTION/DESPACTH, CROSSING AND PRECEDANCE OF TRAINS:

The following simultaneous reception and dispatch facilities are provided at this station.

1	Reception of an UP train on line No.1 setting overlap to sand hump.	And	Dispatch of another UP train from line No.2 or 3. OR Reception of a DN train on line no.3 setting overlap to sand hump.
2	Reception of an UP train on line No.3 setting overlap to sand hump.	And	Dispatch of another UP train from line No.1 or 2. OR Reception of a DN train on line no.1 setting overlap to overrun line.
3	Reception of a DN train on line No. 1 setting overlap to overrun line.	And	Dispatch of another DN train on L-2 or L-3. OR Reception of an UP train on L-3 setting overlap to sand hump.
4	Reception of a DN train on line No.3 setting overlap to sand hump.	And	Dispatch of another DN train from L-1 or L-2. OR Reception of an UP train on line no.1 setting overlap to sand hump.

6.5 COMPLETE ARRIVAL OF TRAINS:

For section KVLS-SMLG & KVLS-BGHU:

Entire block section between KVLS-SMLG & KVLS-BGHU is provided with digital axle counter.

For section KVLS-SMLG:

A pair of digital axle counter is provided between KVLS-SMLG one just beyond UP advanced starter signal no. 17 of KVLS and another on 1T track circuit of SMLG for last vehicle verification.

For section KVLS-BGHU:

A pair of digital axle counter is provided between KVLS-BGHU one just beyond DN advanced starter signal no. 18 of KVLS and another on DN Home signal of BGHU for last vehicle verification. The position of the block section whether 'clear' or 'occupied' is reflected on the axle counter reset box provided in the Station Master's office which shows 'GREEN' when the block section is clear and 'RED' when block section is occupied.

Whenever a train enters into the block section "Block section clear" indication 'GREEN' for the particular block section disappears and 'RED' indication appears.

After complete arrival of the train the 'RED' indication disappears and 'GREEN' indication appears. If after complete arrival of the train 'RED' indication does not change to 'GREEN' it should be assumed as Block instrument failure for the particular section and necessary action as per GR 14.13 is to be followed. The axle counters are interlocked with the respective block instruments for that section. If axle counter fails, advanced starter signal cannot be taken off for next train and the concerned instrument shall remain locked in last operated position.

A resetting arrangement is provided in the SM office to reset the system to normal position in case of failure of axle counter. The resetting is to be initiated by the SM at the receiving station only after physical verification of complete arrival of train by exchanging private number. The resetting can be accomplished only with the co-operation of SMs at either end of the block section.

NOTE:

Before taking off reception and dispatch signals for UP or DN directions the SM on duty shall ensure that the entire route including overlap and berthing portion is clear of all obstructions by observing the Track indication/Axle counter indication.

6.6 DISPATCH OF TRAINS:

a) To dispatch a train, the Station master on duty having obtained line clear for that train, shall set the route for the outgoing train correctly and satisfy himself by observing the visual indication on the Panel Board/VDU. He shall suspend all non-isolated shunting and then shall take "OFF" the concerned route starter and advanced starter signal. The 'OFF' aspect of the advanced starter is the authority to proceed into the block section. As soon as the train passes the advanced starter signal, Train entering section indication will appear on the panel. The SM will then send the train entering given section signal to the station in advance.

[Refer GR 3.38, 3.42, SR 3.36.04(b), 3.42.04 and BWM 2.07.5(a)]

b) ISSUE OF CAUTION ORDERS:

Whenever in consequent of the line being under repairs or for any other reasons special precautions are necessary, a caution order detailing the kilometer and speed at which train should run with reasons for taking such precautions shall be handed over to the Guard and Loco pilot in terms of GR 4.09 and SRs thereto.

6.7 TRAINS RUNNING THROUGH:

The procedure detailed in Para 6.4, 6.5 shall be observed. The Station Master is responsible to observe/watch the condition of the vehicles on a passing train and shall wave green hand signal horizontally until anything wrong is noticed on train. For this purpose the Station Master on duty shall stand in such a position that he sees a clear view of the passing train and that his hand signals can clearly be seen by the Loco Pilot and Guard of the train. He shall also depute the TPM on duty to the other side, for passing the train. The TPM on duty shall wave Green hand signal horizontally. He shall show danger hand signal if he notices anything is wrong and reports the same to the SM on duty. 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 and Subsidiary Rule. [Ref GR 3.40,3.42, 4.17, 4.42, & SR 4.42.02 (b) (i), (ii), (iii), c & (d)]

6.8 WORKING IN CASE OF FAILURE:

PROCEDURE TO BE FOLLOWED FOR WORKING OF TRAINS DURING FAILURE /SUSPENSION OF INTERLOCKING /SIGNALS/ POINTS:

a) TRACK CIRCUITS:

In case of failure of track circuits, the clearance of the concerned line should be ensured physically before a train is piloted.

b) AXLE COUNTER:

If the axle counter fails between the block sections, resetting procedure will be adopted as per Para 25 of SWR (APP-B) if the axle counter indication does not appear 'GREEN' & continues to show 'RED' condition after resetting, the concerned block section shall be suspended & failure intimation to be given to sectional signal Maintainer /JE/SE (Signal) for rectification.

c) BLOCK INSTRUMENTS:

In the event of partial/total failure of block instrument, the concerned block instrument shall be suspended till its rectification and trains shall work as per GR (Refer SR 6.02.03 & 6.02.06)

a) RECEPTION OF A TRAIN ON BLOCKED LINE:

Whenever trains are to be admitted on an obstructed line it is necessary that the train is piloted IN on a written authority given by the SM on duty and delivered by a competent Railway servant to the Loco Pilot of the train or by taking off calling-on signal. [Refer GR 5.09 & SRs there to]

b) RECEPTION OF A TRAIN ON NON-SIGNALLED LINE: NIL

c) **DEFECTIVE SIGNALS:**

Whenever signals become defective, the procedure laid down in GR & SR shall be followed. [Refer GR 3.68 to 3.71, 3.80 and SR 3.68.01(c)] In the event of signal showing no lights, station master on duty shall before giving line clear initiate action in accordance with the procedure laid down in GR and relevant SRs.

[Refer GR 3.51, 3.69, 3.49(4), 3.68 to 3.77]

d) **DEFECTIVE INTERLOCKING:**

When interlocking becomes defective the SS/SM on duty shall be responsible for correct setting, clamping, padlocking of points for admission of train. [Refer SR 3.69.03 (a) & (c).

e) **DEFECTIVE/DAMAGED POINTS:**

When any point fails to operate normally by route setting operation through VDU, it is inevitable to operate the points with crank handle. The SS/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 shall be followed as per operating manual para 20.06.

Station master on duty shall personally ensure the clamping and padlocking of all facing and trailing points. An emergency crank handle register shall be maintained by SM at the station as per para 20.06(d) of the Operating manual.

Correct setting, clamping and padlocking of the points devolve on SM on duty. (Details of use of crank handle as per Appendix-'B'). The cases of the failures of the point should be promptly reported to the concerned signal maintainer/JE/SE (signal) for immediate rectification.

6.9 PROVISIONS FOR WORKING OF TROLLIES/ MOTO TROLLIES/ MATERIAL LORRIES ETC:

a) Motor trolleys shall be worked as per GR 15.25 and SRs there to, BWM 5.11(1) (2), 5.12, 5.13, 5.14(2) (a) and circulars and orders issued from time to time. Material trolleys shall be worked as per GR 15.27 and SRs there to and in accordance with the provisions of Block Working Manual.

b) Tower wagons shall be worked as per GR 17.08 and SRs there to and BWM 4.39 and other circulars and orders issued from time to time.

c) Push trolleys shall run under Block Protection only vide SR 15.25.09(e).

d) Shunting key of token less block instrument at dispatch station as well as receiving station of the motor/push trolley shall be taken out and kept in the personal custody of SM on duty in addition "trolley on line" board shall be hung up on the handle of the block instrument. Special instructions contained in the circular No.19 of 6.4.88 should be followed.

Note: Trolleys which are to be run on track circuit area shall be insulated as per SR 15.20.02.

7. **BLOCKING OF THE LINES:**

Whenever a running line is blocked either by loose vehicles or by stabling train or by a train which is to cross or give precedence to another train, the points at either end should immediately be set against the blocked line except during shunting movement. A clear remark in 'RED' ink shall be made immediately in the train signal register and a record shall be made in the Station Master's diary also. Stable load register is also to be maintained. The stable load or loose vehicles are to be secured to prevent rolling down of vehicles. [Refer SR 3.36.3(b), GR 5.23 and SR 5.23.01]

A) **SECURING OF VEHICLES:-**

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

NOTE:

Special care should be taken to secure special type vehicles fitted with roller bearing while standing in siding or in running lines. [Refer GR 5.23 & SR 5.23.01]

B) **USE OF REMINDER BLOCK COLLARS:-**

Whenever any running line is blocked or when a train is stopped to cross another train or detained for any other reason, even for a short while or during shunting operations, reminder block collars can be used.

Line block option is provided on VDU shall be operated as described in Appendix-B vide para no. 3.2.1.

8.0 **SHUNTING:**

8.1 **GENERAL PRECAUTIONS.**

(i) Shunting in the face of an approaching Train is Strictly Prohibited at both ends.

(ii) While shunting towards DN advanced starter signal no. 18, an engine is to be attached towards falling side of the gradient vide GR 5.20.

NOTE:

For any non signaled movement physical verification of the clearance of the crossover points shall be ensured by the Guard/SM on duty for supervising shunting operations.

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

Shunting in the face of an approach train towards SMLG end is strictly prohibited at KVLS on both ends BGHU and SMLG, vide GR 8.09 and SR thereto.

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

(i) Hand shunting is prohibited at both ends of the yard vide GR 5.20.

(ii) Fly shunting is prohibited at both ends of the yard vide SR 5.21.01 (c)

(iii) For shunting at BGHU end of the yard, engine should be leading towards the falling gradient.

8.4 **SHUNTING ON SINGLE LINE:**

i) Within station section: Governed by GR 8.10.

ii) Between last stop signal and opposite first stop signal: Governed by GR 8.12.

iii) Beyond opposite first stop signal: Unless the line is blocked back, the line outside the first stop signal shall not be obstructed vide GR 8.13.

iv) During failure of Block instrument: Block back messages shall be exchanged between Station master at either end of the section which is intended to be obstructed supported by private number. Both the Station Masters shall fix line block collars on respective Block Instruments and shall continue shunting provided the Block section is clear.

8.5 **SHUNTING ON DOUBLE LINE:**

Not applicable.

9.0 **ABNORMAL CONDITION:-**

(a) RULES TO BE OBSERVED IN THE EVENT OF ABNORMAL CONDITIONS:

(i) During partial interruption of communication between the adjacent block stations, SR 6.02.06 shall be observed.

(ii) In the event of occupation of block section due to accident or obstruction the authority for the train to work up to obstruction as and when required is T/A 602 & SR 6.02.05 shall be observed.

(iii) In the event of trains delayed in the block section, GR 6.04 and relevant SRs shall be followed.

(iv) Failure/passing of Intermediate Block stop signal at 'ON' position:
Not applicable.

(v) Failure of Axle counter Block/BPAC: Procedure to be followed vide GR 14.13 & 14.14.

(vi) Failure of MTRC: Not applicable.

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

The detailed Procedure for emergency operation of points by Crank Handle of motor operated points shall be followed.

Crank handle operation is interlocked with the signaling and interlocking system at this station. Key of crank handles normally locked inside the RKT instrument at the respective Crank Handles Locations. Crank handle keys can be taken out only when all signals leading over the points are in the Normal position and the route is not locked for whatever reasons.

Crank Handle can be released from VDU by operating common 'TRANS' icon and concerned Crank handle control icon simultaneously. When this key is taken out, no signal to the concerned point can be taken 'OFF' in the yard. This key can be electrically transmitted at both ends of the yard.

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

II. PROCEDURE FOR EMERGENCY OPERATION OF POINTS WITH POINT ZONE AXLE COUNTER/TRACK CIRCUITS FAILURE AND EMERGENCY ROUTE RELEASE:

Emergency point operation facility is provided to operate the point from the VDU in case of failure of point controlling track circuit. If such operation is necessary, the SM on duty, after ensuring that SM's point Key is 'IN' and no vehicle is standing on the concerned point zone shall operate the emergency point operation icon along with relevant point icon simultaneously. After then the point group normal or point group reverse icons are to be pressed for operating the point to 'NORMAL or REVERSE. Every emergency point operation shall be recorded in the station diary and in the register meant for this purpose.

No emergency point operation for slip siding and catch siding is provided in this yard in the event of failure of slip siding or catch siding point track circuit failure. Rules regarding locking of points and damaged points vide GR 3.39 and GR 3.77 to be followed.

(c)Certification of clearance of track before Calling –On Signal operation in initiated:-

Before taking off Calling –On signal during failure of track circuit/axle Counter, the route and the clearance of the track over which train would pass to be verified by SM on duty.

(d)Reporting of failure of points, Track circuits/axle counter and interlocking:-

Whenever there is a failure of points, Track circuits/axle counter or any interlocking gear at station, the failure should be reported by SM on duty to the concerned Signaling Maintenance Staff on duty responsible for attending to the failure and only after receipt of the written memo from the Signaling Maintainer for rectification of the fault, SM should restore the normal working. The entries in failure register to be done with message to the section controller.

9.1 TOTAL FAILURE OF COMMUNICATION:

Rules and regulations for working of trains during total interruption of communication on single line section shall be followed vide SR 6.02.04 and instructions laid down in BWM.

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

Not applicable

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

(i) In the event of total failure of communication, trains shall run on the authority to proceed without line clear in terms of SR 6.02.03.

(ii) In the event of necessity to send a train to assist the crippled trains, SR 6.02.05 shall be followed.

10. **VISIBILITY TEST OBJECT:**

The signal lights of UP starter signal No.15 and DN starter signal No.12 of Line No.1 are ear marked to serve as visibility test object during day and night vide GR 3.61.2(b)(iii).

11. **ESSENTIAL EQUIPMENT AT THE STATION:**

(Details are given in Appendix-‘E’)

12. **FOG SIGNAL MEN NOMINATED TO BE CALLED IN CASE OF FOG:**

In case of thick, foggy or tempestuous weather impairing visibility, whenever it is necessary to indicate to the Loco Pilot of an approaching train the locality of a signal, the SM on duty at station shall arrange for signaling in terms of General Rules 3.61 and Subsidiary Rules thereto. The assurance of the staff shall be obtained in the month of OCTOBER every year in the Fog signal Register vide SR.3.61 as a token of their acknowledgement in fog signaling Rules.

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.

12.1 **STATION DETONATOR REGISTER (OPT/124):**

A Register regarding detonator is maintained at the station.

12.2 **INSTRUCTIONS:**

(a) This register contains the following parts.

Part – I: Particulars of fog signal men 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 up to date and is accurate in all respects.

©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.

APPENDICES:

- APPENDIX-A : WORKING OF LEVEL CROSSING GATES
- APPENDIX-B : SYSTEM OF SIGNALLING AND INTERLOCKING AND COMMUNICATION ARRANGEMENTS AT THE STATION.
- APPENDIX-B1 WORKIING OF MID SECTION CATCH SIDING.
- APPENDIX-C : ANTI COLLISION DEVICE (RAKSHA KAVACH)
- APPENDIX-D : DUTIES OF TRAIN PASSING STAFF AND STAFF IN EACH SHIFT
- APPENDIX-E : LIST OF ESSENTIAL EQUIPMENT 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'

WORKING OF LEVEL CROSSING GATES AT KARAKAVALASA STATION

-NIL-

APPENDIX 'B' TO STATION WORKING RULES OF KARAKAVALASA STATION**VISUAL DISPLAY UNIT (VDU)****1. SYSTEM OVERVIEW**

The PC-based (**operator VDU**) for the operation of Signals, Points, L.C Gates, Crank Handles and Siding Controls, etc. The SM of a station (*hereinafter referred as operator*) required to be familiar on the specific station's SWR (station working rules).

Operator VDUs consists of CPU with a color monitor, keyboard and pointing device (mouse). Through communication the exchange of control and indication messages takes place with operator VDU. The Software is installed to display the Station Yard Mimic Panel diagram on the operator VDU and it allows access to all functions by selecting menus with a right click of mouse on the corresponding function icon. By selecting the menu, the function (Signal clear and cancellation, Route release, Point operation, Gate release etc.,) can be executed. The operator VDU is used for controlling and monitoring the station, however, indications on the Station yard mimic diagram of operator VDU will be dynamically updated.

2. DUAL VDUs – MODE OF SELECTION:

The privilege has been given with the operator to control the station through VDU by selection through switch provided on the SM's table.

The operator VDU is having controls to operate the field gears from the Mimic panel diagram. A Mimic panel diagram displayed on the operator VDU will be an exact replica of yard suits SI plan.

2.1 SM KEY:

SM KEY IN operation can be achieved through operator PC as follows:

Operator shall right click on the SM KEY icon, and shall select the SM KEY IN option in the menu, which will enable the password window to appear. After the valid entry of user name and password the SM KEY IN operation will be enabled. SM KEY OUT operation can be achieved through operator PC as follows: Operator shall right click on the SM KEY icon, and shall select the SM KEY OUT option in the menu, which will enable the confirmation window for SM KEY OUT. After providing the confirmation, SM KEY OUT operation will be enabled. This will lock all the controls in operator VDU except the Signal cancellation facility.

3. CONTROL(S) & INDICATION(S):

3.1 VDU FAILURE INDICATIONS:

a) Vital Interlocking Computer Status:

In EI, two Vital Interlocking Computer cards are available normally. The status of each of the VIC is provided on VDU as following.

VIC – A Indications



VIC-A is Active



VIC-A is Stand By



VIC-A is Not Available

VIC –B Indications



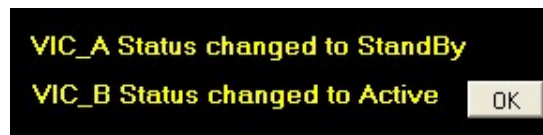
VIC-B is Active



VIC-B is Stand By



VIC-B is Not Available



If there is any change in VIC's status, its changed status will be displayed along with OK button and a buzzer is turned on to alert the operator. The Buzzer stops and the indication message disappear when the OK button is pressed by the Operator.

Action by SM: If at least one VIC is available it will be in Active State and EI shall continue to function. On observing the fault, SM shall acknowledge the fault and immediately inform EI Maintainer.

b) Link Status Indication:

The EI VDU receives the data from EI Room through two OFC channels. The Link Status Indication for the same is provided on the VDU.

When Channel – A or Channel – B link is healthy, corresponding yellow indication will be flashing continuously. When Channel – A or Channel – B link is faulty, corresponding red indication will be shown steady.



Channel –A Link Status is Healthy



Channel – A Link Status is Faulty



Channel – B Link Status is Healthy



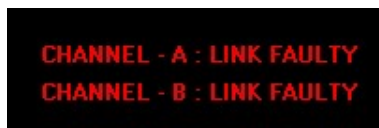
Channel – B Link Status is Faulty

Buzzer and Acknowledgment:

When Channel A link or Channel B Link fails, a Buzzer is turned on to alert the operator. To acknowledge the fault, right click on this control, a pop- up menu is displayed and then click on the Ack menu option. The Buzzer stops when the fault is acknowledged by the Operator.



When any of the channels link fails, an indication is shown in red color.



When any of the links is recovered, the indication is shown in yellow color along with one OK button. The indication message disappears if OK button is pressed.



Action by SM: If at least one of the Communication Channels is Healthy, EI VDU shall continue to provide Indications. On observing any communication channel faulty indication, SM shall acknowledge the fault and immediately inform the EI Maintainer.

C) EI Equipment Critical Fault:

If EI is shutdown due to any critical fault, a message is displayed in red color along with OK button and a buzzer is turned on to alert the operator. The Buzzer stops and the indication message disappear when the Operator presses the OK button.



Action by SM: SM shall acknowledge the fault, inform the EI Maintainer.

3.2 Function Lock & Unlock Operation Details:

Lock/Unlock Operation and Indication:

Lock Operation allows disabling of operation for the selected functions. The operations can be enabled again by unlocking the locked function operation.

Lock Indication:



Default Indication (When nothing is locked or no menu item is checked)



Lock Indication (When any one item is locked or menu item is checked)

Lock or Unlock Operation:

Right Click on this image, a pop- up menu is displayed this menu is called Button

Lock/Unlock Menu. To Lock or Unlock the required button go to the required menu and click on it. This shall be explained in detail below.

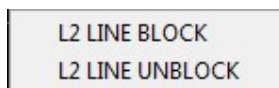
Lock/Unlock Menu:

<u>OPERATION</u>
Main Signal
Shunt signal
Calling-on signal
Point
Route

- Click on this menu option to lock /unlock all the items in the menu.
- When a menu option is clicked, it will be checked i.e. a tick mark will be shown if it is previously unchecked or else it will be unchecked if it is previously checked.
- If a menu item is checked its main menu or parent menu will also be checked as shown below and color of Lock/Unlock image will be changed to yellow.

3.2.1 LINE BLOCK COLLARS:

To provide Line block collar, single right click on the concerned route button on the VDU ex: L1UN, L2UN, L3UN, 18AT UN, 18-UN, 17AT UN, 17UN, 19UN, 2UN



3.3 VDU ACTIVE INDICATIONS:

Whenever the VDU is in active condition a RBG sequence will be running in the bottom left corner of the screen. That is in a flashing sequence in the screen.

44. SIGNAL OPERATION:

The Software is installed to display the Station Yard Mimic Panel diagram on the operator VDU and it allows access to all functions by selecting menus with a right click of mouse on the corresponding function icon. By selecting the menu, the function (Signal clear and cancellation, Route release, Point operation, Gate release etc.,) can be executed.

In order to take-off a signal with the desired route the operator needs to click the mouse on the concerned signal on the operator VDU. After clicking the Signal, the menu will appear for route set, signal cancellation and route cancellation operations.

a) SETTING A ROUTE:

To set a route, select the required route on route set sub menu. The route initiated indication will appear over the route. All the relevant points Normal/ Reverse set indications will start flashing if it is not available in the required position. After setting of point in the route required condition (flashing indication will be steady) a complete yellow route set indication will appear over the route. Also the point lock indication will appear through yellow indication. Finally a route lock yellow steady indication will appear on just below the signal. The signal will be taken-off now. The yellow route set indication will turn to red when the train occupies the concerned track circuit.

b) CANCELLING A ROUTE/ EMERGENCY ROUTE RELEASE:

To cancel a signal route when the route is set and the signal is taken-off, right click on the signal and select the signal cancellation in the menu. The signal will immediately go to ON aspect. Again right click the signal and select the route cancellation in the menu. The concerned signal route locked indication will start flashing for 120 sec, after the completion of 120 sec the locked route will be released and counter for the route release on VDU will change to next higher digit number.

5. CALLING ON/SHUNT SIGNAL OPERATION:

Calling on/Shunt signal route set and cancel operation follows the same procedure as mentioned for the main signal.

6. POINT OPERATION:

To operate the point, the operator needs to click the concerned points and select the Normal/Reverse in the menu appearing at the point in the operator VDU.

a) REVERSE TO NORMAL OPERATION:

Click on the **NORMAL** in the menu appearing at the point in the operator VDU, Normal flashing indication will appear, the indication will be steady after the point is set to Normal.

b) NORMAL TO REVERSE OPERATION:

Click on the **REVERSE** in the menu appearing at the point in the operator VDU, a Reverse flashing indication will appear, The indication will be steady after the point is set to Reverse.

c) EMERGENCY POINT OPERATION:

When the point zone track circuits failed without any point lock condition through respective signal route(s), a point can be operated by the Emergency Point operation. Before doing the emergency operation, SM on duty shall right click on the Emergency point operation in the menu appeared and shall provide password for the same. Then point operation can be done to either normal or reverse as per requirement.

i) EMERGENCY NORMAL OPERATION:

Right click on the point, so that a menu will appear, select the emergency point normal from the menu then normal flashing indication will appear at the point. Flashing will stop and steady indication will appear after the point is set to Normal. After the Emergency point operation the counter value will get incremented.

(ii) EMERGENCY REVERSE OPERATION:

Right click on the point, so that a menu will appear, select the emergency point reverse from the menu then reverse flashing indication will appear at the point. Flashing will stop and steady indication will appear after the point is set to Reverse. After the Emergency point operation the counter value will get incremented. The SM on duty shall record the respective counter numbers by observing the counter box provided on SM's table.

7. CRANK HANDLE & SIDING CONTROL OPERATION:

To Transmit or Release control of the Crank Handle, right click on the concerned Crank handle / Siding control button provided on the operator VDU. For Transmitting the Crank Handle KEY to the field personnel, right click on the Crank Handle and select the **Transmit control** in the menu appeared. After transmission, the KEY IN indication will start flashing; now the KEY can be extracted from the EKT. After extracting the key from the EKT, the key IN indication will disappear. When the Manual point operation is completed, after putting the KEY in the EKT, corresponding Crank Handle KEY IN flashing indication will appear on the VDU.

Now the operator has to Release the control for the steady indication, for that right click on the Crank Handle and select the **Release control** in the menu appeared. A Crank handle locked indication will appear, when the particular point is locked through respective possible signal route(s).

8. WORKING OF SLIP SIDING:

The slip siding is provided at KTV end of the yard beyond the DN advanced starter signal no.S-18. This slip siding point no.31 is normally set to the slip siding and is interlocked with block instrument for section KVLS-BGHU so that it shall not be possible to set the slip siding point no.31 to running line unless the handle of the block instrument is either in receiving (Train coming From) or sending (Train Going To) position.

The slip siding point gets set for running line by the operation of Signal no.S-18 when the handle of the block instrument for the section KVLS-BGHU is in 'Train Going To' position or by the operation of S1/C1 when the block instrument of the above section is in receiving position i.e., 'Train coming From' position. The slip siding point sets to its normal position automatically after the complete passage of the train cleared by track circuit 1AT for DN trains and on clearance of 18AT track circuit by UP trains.

In case of failure of slip siding point No.31 for whatever reason, SM shall use crank handle CH-1 for slip siding point operation. There is no facility of emergency operation of slip siding point no. 31 from VDU's in case of failure of slip siding point track circuit no 31T. There is no independent operation of slip siding point from VDU's.

9. RESETTING OPERATION FOR DIGITAL AXLE COUNTER:

After complete arrival of train, if the Last vehicle axle counter of the section does not clear or Last vehicle Axle counter section free indication (Green) does not appear in the panel, The receiving station SM shall apprise the sending station SM through telephone for resetting 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. The status of the section LVCD i.e. Clear (GREEN), occupied (RED), preparatory reset (GREEN) and power on indications (WHITE) are provided in the reset box.

The procedure to be followed for re-setting by both of sending end and receiving end individually is as follows:-

- a) On being advised by SM of KVLS Station, SM of BGHU /SMLG Station inserts the key in the Reset Box, turns right and presses both the key and the Push Button (Red) simultaneously with the SM of KVLS. The Counter on the Reset Box at VLS Station and BGHU /SMLG Station registers the next higher number and after five seconds miniature green Preparatory Reset indication appears on the Reset Box both at KVLS and BGHU/SMLG Station. The step by step procedure shall be followed as given in “b” to “i”.
- b) SM of KVLS Station and BGHU/SMLG Station shall then Insert SM’s LV reset key, and turn right.
- c) Press LV reset button provided on the panel.
- d) Release SM’s LV reset key and reset button.
- e) Turn left the SM’s LV reset key and remove it.
- f) The system obtains preparatory reset state and preparatory reset indication (Green) glows on the panel. The counter reading increases by one count after a gap of 5 seconds approximately.
- g) The counter reading should be recorded.
- h) One train is to be piloted in the section to make the system normal.
- i) The SM on duty shall record it in the Train Signal Register indicating the resetting operations in detail i.e. train number, time, Private Number exchanged with SM of sending station and giving reasons for the resetting operation.
- j) If the axle counters functioning properly now, then Block Section cleared indication ‘G’ will appear on the panel and the concerned Block working will be normalized.
- k) If the LV axle counter section indication does not appear ‘Green’ and continues to show ‘RED’ indication, the concerned Block section shall be suspended and failure intimation to be given to sectional signal Maintainer/JE/SE (Signal) for early rectification.

9. Working of Automatic Fire detection and Alarm System:-

- In case of any Alarm Zone Number on the LCD Display chart can be seen
- Note down the Zone number and Panel Display name by referring display chart
- Then open the keypad and press the 'Off' button and enter the code 1111 (1 digit Four times)
- Automatically it will get reset
- Once you find the Zone number rush to the particular area where the detector gives alarm
- The moment the detection detects any smoke particles, the RED LED will blink along with the Alarm.
- Once you reach the area where the detector gives the Alarm, Check whether the alarm is due to the Fire or for any other reason.
- To alert the people in case of emergency, press * sign of the ne which is present inside the keypad together for few seconds. This will enable you to here the panel alarm.
- To rest the panel, press 'Off' button and enter the code 1111 (1 digit Four times)
- If the power fails on this will enable us to see the Red indicator on the panel.
- In case of failure in power and if the battery is fully charged, the panel can function effectively as long as the charge in the battery is present.

Auto Dialing:-

If you here the alarm from the panel, this system will dial the Railway auto phones as assigned to the All concerned.

Appendix-B1

WORKING OF MID SECTION CATCH SIDING

Working instructions of mid-section catch siding situated at KM 87.125 between KVLS-SMLG.

1.1 LOCATION:

A mid-section catch siding is situated at KM 87.125 between SMLG-KVLS facing the falling gradient in the down direction of the traffic to absorb the velocity of a down train due to continuous falling gradient from SMLG station. The installations (including engineering fixed signals) conform to SI plan No. 23158 Alt-'A'.

1.2 DESCRIPTION:

The catch siding point no.32 will be normally set to the catch siding. The point is operated by a electric point machine and is interlocked with Tokenless block instrument at KVLS for section KVLS-SMLG. The catch siding is protected by colour light home signals with relevant distant signals at both directions. A telephone is provided at Goomty to communicate with SM/KVLS along with the RKT with the Key as in locked position at catch siding Goomty. The key shall be kept in the personal custody of the SM on duty at KVLS.

1.3 CATCH SIDING OPERATION:

The catch siding point is interlocked with Tokenless block instrument at KVLS for section KVLS-SMLG such that the point could not be set to running line unless the block instrument is in 'receiving' or 'sending' position and the block instrument could not be turned to normal unless the catch siding point is put to normal position.

FOR DOWN TRAINS:

A speed sensing device connected to short length track circuits through 2AT1, 2AT2. A 15 Kmph speed board before catch siding home signal No. 2 is provided. When a down train passes over these track circuits at a speed not exceeding 15 Kmph, the speed sensing device triggers and operate the catch siding point to running line.

FOR UP TRAINS:

Whenever an UP train has to be sent, line clear is taken by the SM on duty from SMLG. UP advanced starter no. S-17 assumes 'Green' aspect and UP catch siding stop signal No. S-19 of the catch siding assumes OFF aspect on setting of catch siding point to running line.

1.4 PROVISIONS OF INTERLOCKING AND OTHER DETAILS:

The catch siding point is interlocked and protected by multi aspect colour light home signals in either direction with the addition of a starter.

- 1.5 The following are the details of the signalling and interlocking installations installed at this catch siding.

Sl.No	Gear Lever No.	Description
1	Point No.32	Catch siding point interlocked with down home signal No. 2 and up home signal No. 19 and track locked by point zone track circuits between down home signal No. 2 and up home signal No. 19 and controlled by speed sensing device. AS and when the trains comes from SMLG.
2	DN home signal No. 2	Protecting the catch siding points in the Dn direction and takes off through 'OFF' aspect of signal no. S-4/C-4.
3	DN calling-on signal no. C-2	Provided below signal no. S-2 and takes off when signal no. S-2 above it fails on occupation of calling-on track circuit through 'OFF' aspect of signal no. S-4/C-4.
4	Repeater to S2	Provided due to curvature and restricting the visibility of signal no. S-2.
5	Distant signal with (P) marker	Permanent caution aspect is displayed at site.
6	DN Goods warning board	Provided at 1.4 km from signal no. S-2.
7	UP home signal No. 19	Protecting the catch siding points in the UP direction.
8	UP calling-on signal no. C-19	Provided below signal no. S-19 and takes off when signal no. S-19 above fails & on occupation of calling-on track cct19AT.
9	UP Distant signal (P).	Provided at 1 km from UP home signal no. S-19 and follows the aspects of signal no.S-19.
10	UP Goods warning board	Provided at 1.4km from signal no. S-19.
11	Engineering fixed signals i.e. caution board, and speed termination board as per SR 15.09.02(a) (b) and (c)	Provided at site as per approved SIP.
12	Two short length track circuits 2AT ₁ & 2AT ₂ for operating the speed sensing device	Provided and on sequential operation of these track circuits through speed sensing, signal no. S-2/C-2 shall be taken-off.
15	Location RKT with a telephone connected to SM/KVLS.	Provided and shall be extracted through transmission from VDU by SM for operation of catch siding point in case of emergency or for maintenance purpose.
16	An emergency socket at the location.	Provided for communicating with SM/KVLS in case of emergency.

1.6 **PROVISIONS OF INTERLOCKING AND OTHER DETAILS – SIGNIFICANCE OF SIGNAL ASPECTS:**

The significance of the various signal aspects and indications is as follows.

Dn distant signal: – This signal permanently shows ‘Yellow’

Dn home signal No. S-2 – The signal normally shown ‘Red’ and when the catch siding point is set to running line, this shows ‘Yellow’ through ‘OFF’ aspect of signal no. S-4/C-4.

UP home signal No. S-19 – The signal normally shows ‘Red’ and when the catch siding point is set to reverse (running line), this shows ‘Green’ aspect

1.7 In addition to these multi aspect colour light signal there are engineering fixed signals according to G&SR 15.09.02(a) (b) & (d). These are also shown in the station working rule diagram.

1.8 **CONTROL OF SIGNALLING APPARATUS THROUGH SPEED SENSING DEVICE:**

The down trains need not come to a stop at this catch siding i.e. in the loaded direction travelling down the gradient according to the standard catch siding installations.

1.9 The catch siding point set automatically after sensing the approaching speed of a train between the pre-determined points and if the speed does not exceed 15 Kmph or if the train has not over-shoot down home signal No.2, the catch siding point would automatically set to the reversed position connecting to the main running line for the through passes of down train where after the down home signal no. 2 shown OFF aspect through ‘OFF’ aspect of signal no. S-4/C-4.

1.9.1 **SPECIAL SANCTION:**

The provision of speed sensing devices and the automatic operation of catch siding point has been specially sanctioned by CRS vide his sanction No. 165, dt 6.5.78 and No. 371/III/A/VIII/5 dt. 10.5.79 and to this extent neither there is need for the Dn trains to stop short of this catch siding point nor there is any occasion for the down trains to go over these catch siding points at a speed in excess of 15 Kmph and thereby the necessity of taking a certification, etc. from Sr. DME/DME and DEE (R&D) in terms of G&SR 3.50.02(b) is dispensed with.

1.9.2 **INTERLOCKING WITH TOKENLESS BLOCK INSTRUMENTS:**

The catch siding point including the speed sensing device, etc. are directly interlocked with the Tokenless block instruments at KVLS station for section SMLG-KVLS. This interlocking while controlling the signals (including departure signal) of catch siding in conformity with the direction of the train movement, it at once affords a discrimination which has been necessitated for exclusive operation of over shooting indications and the records there of to trains running on proper line clear on token less block instruments.

1.9.3 DEFECTS OF FAILURES OF TOKENLESS BLOCK INSTRUMENTS:**CATCH SIDING OPERATION:**

In case of failure of Tokenless block instruments, however, the catch siding points are to be manually operated by crank handle at site by transmitting key through RKT both for up and down trains and the trains passed past the catch siding point by crank handling and padlocking them on proper authority.

2.0 SPECIAL AUTHORISATION FOR T.P.M TO CLAMP AND PADLOCK THE CATCH SIDING POINTS:

The catch point is situated at about 2.99 Kms away from the KVLS towards SMLG end hence the TPM of KVLS has been specially authorised to crank handle this catch siding point clamp and padlock it as a special case for all trains during failure of the point to set automatically.

2.1.1 OPERATION FOR MOVEMENT OF DOWN TRAINS – SENSING OF SPEED TRAINS RUNNING AT 15 KMPH OR BELOW BETWEEN SPEED RESTRICTION BOARD AND THE DOWN HOME SIGNAL NO. 2 WITHIN COUNT DOWN OF 120 SECONDS (ON THE APPROACH OF CATCH SIDING POINTS):

The catch siding point is normally set to the catch siding so that when a DN train exceeds a speed of 15 KMPH while approaching this catch siding over-shooting the Dn home signal No. 2, it enters the catch siding.

2.1.2 However, when a DN train passes the 15 kmph speed restriction board at a speed not exceeding 15 kmph if the loco pilot does not over-shoot this speed while approaching the down home signal no S- 2 the catch siding point controlling apparatus is triggered by the speed sensing device and set the catch siding point to reverse position and the home signal no. S-2 assumes off aspect after 120 seconds time delay through 'OFF' aspect of signal no. S-4/C-4. The distance between the 15 kmph speed restriction board and track circuit no. 2AT1, 2AT2 being the function for shown the speed of that train in which an element of 120 second count down time maintained.

2.1.3 SENSING THE SPEED OF PASSING 15 KMPH BOARD IN EXCESS OF 15 KMPH AND WHEN THE LOCOPILOT IS ABLE TO CONTROL HIS TRAIN AT DOWN HOME SIGNAL NO. 2 WITHIN A COUNT DOWN TIME OF 120 SECONDS:

When a down train passes the 15 kmph speed restriction board at a speed in excess of 15 kmph but if the loco pilot is able to control his train at Dn home signal no. 2 before countdown of 120 seconds, the occupation of 2AT by the stopping train would trigger 'OFF' another count down of sixty seconds time after which the catch siding point operation is initiated and the DN home signal No. S-2 assumes OFF after the catch siding point is housed and locked to the main running line through 'OFF' aspect of signalno. S-4 towards KVLS.

2.1.4 LOCOPILOT OVER SHOOTING SIGNAL NO. 2 AND EMERGENCY KEY OPERATIONS:

If the Loco pilot of DN train passes 15 kmph speed restriction board and travels the length of the track between 15kmph speed board & Home signal no.S-2 in excess speed and unable to stop train at Home signal no.S-2, the train will enter into the catch siding. In such cases an overshooting indication along with an audible and visual 'RED' indication appears in VDU. These indications continue to appear unless the SM acknowledges the button. The SM on duty can then initiate emergency operation of catch siding point by transmitting the crank handle control-CH3 for the point no.32.

- 2.1.7 The RKT key is interlocked in the normal position and can be extracted only when the SM on duty at KVLS transmits through VDU.

3.0 OPERATION OF CATCH SIDING POINT WHEN IT FAILS TO SET FOR UP TRAINS:

The SM on duty shall depute the station TPM giving the keys of the catch siding goomty to catch siding point. The SM on duty shall transmit the catch siding point crank handle through RKT to the TPM who shall extract the same and set, clamp and padlock the catch siding point of running line and exchange a private number with SM on duty as an assurance that the catch siding point is correctly set and clamped to main line. On receipt of the private number from the TPM the SM on duty shall issue piloting out order T/369(3b) to the loco pilot of the UP train to pass signal No. 19 of the catch siding at ON position. After passage of the train, the ESM shall attend the failure and rectify.

No attempt should be made under any circumstances to rectify the failure in face of the approaching train. If the Tokenless block instrument at KVLS for section KVLS-SMLG is suspended with its handle in sending position (not due the failure of catch siding point) the UP train allowed on proper line clear from KVLS need not be piloted out at catch siding past signal No.19

3.1 OPERATION OF CATCH SIDING POINT WHEN IT FAILS TO SET FOR DOWN TRAINS:

Even after the train has stopped at the DN home signal no.S-2/C-2for more than a minute, if the catch siding point does not set to running line and consequently the DN home signal also does not assures OFF, the loco pilot of the DN train will whistle at once to draw the attention of the Station staff when the SM on duty on seeing in the VDU, that the catch siding point is not cleared within the specified time, the SM on duty shall

depute the TPM giving him the location keys and piloting memo

T/369(3b) with instructions to pilot the train only after setting, clamping and padlocking the catch siding point to running line and exchange of a private No. with SM on duty as an assurance of having done so. The SM on duty shall arrange to depute the sectional ESM (if available) along with TPM.

In case of passenger trains, as an additional precaution the loco pilot/guard shall bring his train to a dead stop short of the catch siding point and satisfy himself personally that the catch siding point is correctly set to main running line through to KVLS, clamped and padlocked before passing the catch siding point.

4.0 SETTING THE CATCH SIDING POINT WITH CRANK HANDLE BY TPM:

The TPM shall set and clamp the catch siding point to the running line with crank handle on receipt of the same through RKT at the goomty for UP and DN trains as ordered by the SM on duty.

- 4.1 The TPM checks the point, and remove obstructions if any found between the tongue and stock rails and report to the SM on duty if otherwise, the SM on duty shall release the crank handle at the catch siding goomty by transmitting RKT control in VDU at KVLS station. This should be done only after exchange of private number.

4.2 SETTING THE CATCH SIDING POINT:

The TPM shall remove the crank handle from the RKT and with it, manually set the catch siding point to the running line and return the same back through the RKT. He will then clamp the catch siding point and exchanging private No. as an assurance of having done so. The SM on duty shall then authorize the TPM to pilot IN/OUT the train over the catch siding point by exchanging a private No.

- 4.3 The TPM is personally responsible to keep the keys of the padlock (which is put on the catch siding point) in his personal custody till the movement over the catch siding point is completed in either direction and he should restore the catch siding point to the normal position after consulting the SM on duty.

- 4.4 After the complete passage of the train and clearance of the point zone track circuits between signal No. 2 & 19 the TPM will unlock and remove the clamp and advise the SM on duty. The SM on duty will once again release the crank handle with which the TPM will manually reset the point to catch siding. He will then return the crank handle with the exchange of the private No.

- 4.5 In the event of DN train overshooting the catch siding signal No. S-2, an audible alarm and visual indication appears in VDU KVLS station. The SM of KVLS after acknowledging the alarm by pressing the Overshot Muting button will record the particulars of the DN train which overshoot the catch siding. The counter will register a higher number. SM/KVLS must record this number in a separate register for catch siding and as also in the train signaling register with the reason in RED ink.

5.0 MOVEMENT OF TRAINS:

Whenever an UP train has to be sent, line clear is taken by the SM on duty from SMLG. UP advanced starter no. S-17 assumes 'Green' aspect and UP home signal No. S-19 of the catch siding assumes OFF aspect on setting of catch siding point to running line.

As soon as this UP train passes past the catch siding point fouling track circuit, the catch siding point goes back to the NORMAL position automatically protecting the KVLS Yard.

- 5.1** Whenever it is necessary to operate catch siding point with crank handle, in case of emergency, 'due to over shooting or in case of failure due to any other cases it is necessary that emergency crank handle of this catch siding point, which is at KVLS station is transmitted to the traffic pointsman at the catch siding goomty.

- 5.1a** When UP train leaves the yard & approached to Catch siding the point in the yard to be kept in favorable condition till such time the entire train crosses the catch siding to protect the yard in case of rolling down.

- 5.2** The crank handle has to be used for operating catch siding point manually at this station in the following cases:
- a) When the DN train overshoots the down home signal No. 2.
 - b) When the catch siding point become defective.

In these cases when the point is operated manually by means of crank handling, the point is to be set in the desired position and after that this point is to be clamped and padlocked. Further it is stipulated that in the first case i.e. due to failure of trains due to over-shooting, the point can be set in the reversed position, clamped and padlocked and after the passage of the trains after piloting 'out' or piloting 'IN', the crank handle shall be transmitted to the station where after the normal working may be resumed. In the second case the catch siding point is to be operated by crank handle and the trains piloted past the catch siding point in either direction clamping and padlocking it and this procedure should continues till the rectification is reported by the S&T staff.

6.0 AUTHORISATION BY SM TO ESM:

In no case shall the ESM attend the failure unless he is authorized to do so by the SM on duty serving with a failure message and the ESM giving a disconnection memo to the SM on duty shall take special precaution to see the conditions for giving such a memo are consistent with the safety of the train movement according to the instructions.

7.0 POWER SUPPLY TO THE INSTALLATIONS:

This catch siding signalling and interlocking installations are fed from IPS with Battery Back up at the catch siding location.

APPENDIX 'C' TO STATION WORKING RULES OF KARAKAVALASA STATION

ANTI COLLISION DEVICE [RAKSHA KAVACH]:

-NIL-

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

The following staffs are concerned with the movement of the trains whose duties are given below:

COMPLEMENT OF STAFF	STAFF IN EACH SHIFT
SS/SM	01
TRAFFIC POINT MAN	01

1. STATION SUPERINTENDENT/STATION MASTER (IN CHARGE):

- i) He is responsible for trains passing during his shift.
- ii) He is responsible for the general and satisfactory working of the station and for the efficient discharge of duties by staff working under him.
- iii) He shall keep all Rule books, Registers, Files and documents neat and up to date.
- iv) He shall ensure that all equipment, apparatus, and instruments including signaling and interlocking gears and fittings are kept clean and oiled by S&T officials.
- v) His special attention is drawn to Chapter-II of G&SR and GR 5.01 to 5.08 with relevant SRs and O.M. Chapter-2.
- vi) He shall follow the instructions laid down in SR.3.68.01 (c) and (d) and SR 14.07.01 and B.W.M.2.09 (e).
- vii) He shall promptly attend to accidents and report them.
- viii) He shall ensure that firefighting equipment at the station such as fire extinguisher, fire buckets etc. are in good fettle and ready for use.
- ix) He must ensure that the essential safety equipment at his station is the same complete and in good condition. If there is any deficiency it should be made good without delay.
- x) He shall see that TSR, SM's Diary, Inspection Note Book, Reference Books and other station record is properly maintained and preserved for a minimum period as prescribed in the Operating Manual.
- xi) He shall ensure that all correction slips of Manuals and SWR are posted and changes are made in respective pages.
- xii) He shall supervise the work of safe working staff and conduct night inspections and report lapses of staff working under him.

2. STATION MASTER:

- a) He is responsible for trains passing during his shift.
- b) He shall promptly bring to the notice of SM in-charge all irregularities and accidents in course of his shift duties.
- c) During the absence of SM, I/C, the duties of the Station Master will devolve on him.
- d) He shall follow SR 3.68.01(c) and (d) SR 14.07.1 and OM Chapter-2.
- e) His special attention is drawn to Chapter-2 of G&SR 1976 and GR 5.01 to 5.08 with relevant SRs.
- f) He shall not consider himself relieved of duty unless he has completed transactions of trains for which he has given/obtained line clear till the complete arrival of such trains.
- g) He shall always obey the lawful orders of his superiors so long as they do not contravene any of the extant rules in force.
- h) He shall keep the Station Master's control keys of Block Instruments/Control Panel in his personal custody whenever, he is required to leave his office even for a short duration.
- i) He shall be responsible for correct issuance of caution order, whenever required.
- j) As an assistant to SM, I/C, he shall carry out the instructions given from time to time.

3. TRAFFIC POINTSMAN:

- i) He shall work under the orders SM on duty.
- ii) He shall be in proper neat and clean uniform while on duty.
- iii) He shall always commence his duty equipped with hand signal lamps during night and flags during day.
- iv) He shall couple and uncouple vehicles under the supervision of SM.
- v) He shall watch and guard the packages and other Railway property lying in the Station premises.
- vi) He shall report any irregularities coming to his notice.
- vii) He shall do loading and unloading of parcels, smalls and Guard's boxes. He shall do piloting IN and OUT.
- viii) He shall deliver any official message to the proper person/office. He shall carry out any other duties entrusted to him by the SM on duty.
- ix) He shall not leave his duty unless properly relieved or authorized by his superiors.
- x) He shall follow OM Chapter-2.

NB: - All staff should be in uniform while on duty and follow their rosters issued by DPO/WAT from time to time.

APPENDIX 'E' TO STATION WORKING RULES OF KARAKAVALASA STATION:**ESSENTIAL EQUIPMENT:**

A list of essential equipment's is given below which shall be maintained in good Working order.

Sl. No	Description	Station
1	Detonators	20
2	LED based Tri-Color flashing Torches	3(1 spare)
3	Hand Signal Flags	3(1spare)sets
4	Safety chains with Pad locks	6
5	Clamps with Padlocks	8
6	Skids	6
7	Wedges	4
8	Fire & Sand buckets	6
9	Fire Extinguishers DCPT	2
10	Line Block Collars	2
11	Motor Trolley online Boards	2
12	Block Suspension Boards	2

APPENDIX 'F' TO STATION WORKING RULES OF KARAKAVALASA STATION

WORKING OF D.K.STATIONS, HALTS, IBS AND OUTLYING SIDINGS:

---NIL---

APPENDIX- 'G'

KARAKAVALASA STATION

**RULES FOR WORKING OF TRAINS IN ELECTRIFIED
SECTIONS:**

**DETAILS OF WORKING RULES
OF 25KV AC TRACTION**