

EAST COAST RAILWAY

KHURDA ROAD DIVISION

STATION WORKING RULES FOR BAGHUAPAL (BROAD GAUGE)

Serial No.....53.....

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NOTE: -

The station working Rules must be read in conjunction with General and subsidiary Rules, Block working manual and operating manual. These rules do not, in any way, supersede any rules in the above Books.

1. STATION WORKING RULES DIAGRAM

The Station Working Rule Diagram to suit S.I. plan No. 21002 shows the complete layout of the yard, normal position of the points, signals, sidings, gradients, and level crossing gate within Station Limits and all signaling features. This must be referred to for giving details of the point number and signals etc when reporting accidents.

2. DESCRIPTION OF THE STATION

BAGHUAPAL (code-BGPL) is a three lined 'B' class Station on Single line Section and Central Panel with standard II(R) interlocking equipped with Multiple Aspect Colour Light signals and worked in terms of General Rule 8.01(l) (a) (c), 8.01 (2)(b), 8.03, (2) (a) (b) (c-ii) 8.09,8.10,8.12 to 8.15 14.01 to 14.13 and Chapter IV of Block working Manual.

2.1. GENERAL (LOCATION)

The Station is situated at a distance of 562.383 KM from Howrah (via-Banspani) 8.450 Km. from Sukinda Road and 163.256 KM from Banspani, on Jakhapura Banspani Branch line (B.G.) Section. There is no outlying Siding in both Up and Down direction

2.2 BLOCK STATIONS ON EITHER SIDE AND THEIR DISTANCE.

The adjacent Block Stations are, Sukinda Road (Code-SKND) situated at a distance of 8.450 KM at Jakhapura end and Tomka (Code-TMKA) situated at a distance of 8.151 KM at Banspani end.

2.2.1 PASSENGER HALT

= NIL =

2.3. BLOCK SECTION LIMITS ON EITHER SIDE OF THE STATION:

- On Jakhapura end Block Section for Baghuapal – Sukinda Road section Commences from / terminates at up Advanced Starter Signal No. 9.
- On Banspani end Block Section for Baghuapal – Tomka section commences from / terminates at Down Advanced Starter Signal No. 10.

2.3.1. STATION SECTION

The station Section lies between UP and Down Advanced Starter Signals of the Stations.

2.3.2 STATION LIMIT

The Station Limit Line between UP and Down Distant Signals of the Station.

2.4. GRADIENTS (JAKHAPURA END)

From	To	Gradients
CSB	CH: 752 m	1 in 750 'F'
CH: 752 m	Towards Block Section	1 in 110 'F'

b. **BANSPANI END**

From	To	Gradients
CSB	CH: 1078 m	1 in 750 'R'
CH: 1078 m	To wards Block Section	1 in 200 'R'

2.5. LAY OUT

Running Line, Direction of movement and Holding Capacity

The Station is provided with three running lines and one Non-running line.

2.5.1. RUNNING LINES

Line No.	NOMENCLATURE	CSL	FROM	TO
Line No. 1	Common Loop Line	785 m	Starter	Starter
Line No. 2	Main Line	784 m	Starter	Starter
Line No. 3	Common Loop Line	785 m	Starter	Starter

2.5.2 DIRECTION OF MOVEMENT

The trains coming from Sukinda Road are Down Trains and the trains coming from Tomka are up trains.

2.5.3 NON-RUNNING LINES

Hot axle siding – CAL = 90 mts (From D.S. to D.S)

2.5.4. DESCRIPTION OF SIDINGS

The Hot axle siding at Banspani end of the yard with both side entries is taking off from Line No. 1 (Loop Line). The entrance and corresponding derailing switch are coupled and operated by an are lever at site. Entrance points are fitted with hand plunger locks.

These hand plunger Locks are unlocked by the key "S1 or S2" as the case may be released by pressing the Knob No. 25 provided on the panel at SM office. Reception Signals 2A, C 2A and shunt signal – 12A in Down Direction and 1 A, C- 1A and shunt signal No. IIA in up direction and Down Starter Signal No. 6 are electrically interlocked in such a way that these signals can not be taken "Off" if this siding Key "S1 or "S2" is taken "OUT" from RKT provided at SM's office.

2.6. LEVEL CROSSING

- i) There is a "C" class Interlocked level crossing Gate Situated at Km 162.650 at the Banspani end of the yard between Down Starter signal and Down Advanced Starter Signal of the Station. The Gate is interlocked with the Station Signals and directly operated by means of a winch from Gate Lodge. Telephone Communication is provided between the Gate Lodge and the Dy SS/SM on duty at the station.

(The details of Gate Working are given in Appendix. A)

3.0. SYSTEM AND MEANS OF WORKING

Trains are worked under Absolute Block System with Token Less Block Instrument for both the section- Baghuapal – Sukinda Road and Baghuapal – Tomka in terms of Chapter XIV of General and subsidiary Rules and Chapter IV of Block Working Manual. The Block Instruments shall be operated by the Dy. SS/SM on duty and Keys of the Block Instruments shall remain under the personal custody of the DYSS/ SM on duty " Taking off " of the Last Stop signal is the Authority to proceed for the Driver Vide GR 14.08 (b) (iv).

4.0 **SYSTEM OF SIGNALING & INTER LOCKING**

The Station is equipped with Multiple Aspect Colour Light Signals and “B” Class Standard II (R) inter locking having maximum equipment of Signals. The aspects and indications of the MACLS is governed by General Rules 3.08 4(b) The Station is provided with Central panel interlocking and having no end Cabins.

4.1 **STATION MASTER’S CONTROL**

a. **CONTROL PANEL.**

A push button Type Electric Control Apparatus Called Control – cum – indication Panel (referred here as Panel), is provided in the Station Master’s office to operate electrically the signals and points. The panel is provided with a lock up Key, which shall always remain in the personnel custody of the Dy. SS/SM on duty in terms of Subsidiary Rules 3.36.03(a). The position of all points and signals and running lines are available in the Panel. Reminder Block Collars are provided for use on push buttons, which will be placed on point button and / or route button to prevent operation of the button in case the concerned line is blocked.

b. **TRACK CIRCUIT**

the line from UP Home Signal to Down Home Signal, including all running lines, point zones are track circuited. Track circuits are also provided between outermost trailing points and Advanced Starters at either end (9AT on Up and 10AT on Down direction). In addition there is one short length track circuit beyond Home signals at either end for Calling-On signal (1AT and 2AT) and in side Home signals at either end (1T and 2T). indications are provided in the panel.

Normally the panel is dark except point and block section indications. The position of the running lines are indicated in the panel diagram. It shows “RED” when the line is occupied and “WHITE” when the route is set and signal cleared. Whenever a signal is cleared, the route Set indication “WHITE” appears for the particular route set. As the train occupies the track circuit, the white indication disappears and ‘RED’ indication appears..

In the event of failure of Track circuit the clearance of lines shall be ensured by physical check by the Dy. SS/SM on duty before piloting “IN” or piloting “OUT” a train.

c. **AXLE COUNTER**

Block Section between Baghuapal – Sukinda Road and Baghuapal - Tomka are Monitored by Axle Counter System. Electronic Axle Counters along with associated entrance and exit trolley suppression track are provided at both end of the block Section. A pair of electronic Axle Counter is provided between Baghuapal and Sukinda Road, one beyond up Advanced Starter signal of Baghuapal and another beyond the DN Advanced starter signal of Sukinda Road for counting the axles “IN” and axles “OUT” to indicate whether the Block section is clear of trains as well as to verify the last vehicle of the incoming train.

Similarly a pair of axle counter is provided beyond the Down Advanced Starter Signal of Baghuapal and another beyond the up Advanced Starter Signal of Tomka Station for Counting the axles “IN” and axles “OUT” to indicate whether the Block Section is Clear of trains as well as to verify the last vehicle and complete arrival of the incoming train.

The positions of the block Sections whether clear or occupied are 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 occupied. Whenever a train enters the Block Section, “Block Section Clear” indication “GREEN” for the particular block Section disappears and “RED” indication appears. If after the complete arrival of

the train, the "RED" indication does not change to "GREEN" it should be assumed as Block instrument failure for that particular Section and necessary action as per General Rule 14.13 is to be followed. The axle counters for Last vehicle checking are interlocked with TLBI. If axle counters fail, advanced starter shall not come to off and TLBI shall remain Locked in Last operated Position.

In case of failure of Axle Counters the resetting of axle counter must be done as Per the procedure given in Appendix "B". In the event of failures of Track Circuits the clearance of the nominated line shall be ensured by physical check by the Dy. SS/ S.M. on duty and trains shall be piloted in as per GR 3.69 and SR's there to and piloted out as per G.R. 3.70 and SR's there to.

- d) All points are power operated through motors and all signals are clour light signals. Electrical Key Transmission System with Crank Handle are provided in both end location for the operation of point in case of failure.
- e) **CALLING – ON SIGNAL**
Calling-on signals have been provided below UP & DN, Home Signals It shows no light when "ON" and "Yellow" light when taken off.
- f) Back Shunt signals are provided on the top point at both end of the yard.

5. **TELECOMMUNICATION**

The Details of Telecommunication facilities for train operation are as follows:

- i. Telephone attached to Token Less Block Instruments at either direction.
- ii. The Station is connected to BHC-BRAG Control Circuit by a telephone.
- iii. VHF Set and Station to Station Telephone are provided between both side adjacent stations.
- iv. Magneto Telephone is provided between Gate Lodges at Km 162.650 & the Station Master's Office.
- v. Magneto Telephone provided with both end Location Boxes and the Dy. S.S/ SM on duty at the Station.

6. **TRAIN WORKING**

The movement of trains is controlled by the Section Controller on duty whose orders shall be carried out, provided they do not contravene any General and Subsidiary Rules, Station Working Rules, Block Working Manual and Safe Working principles. In the event of suspension of Control Working, The Dy. S.S/ S.M on duty shall work independently in conjunction with the Station Masters of the adjacent Station and shall be responsible to ensure that there is no undue delay to train operation in general.

6.1. **TRAIN WORKING STAFF IN EACH SHIFT:**

The following are the complement of train passing staff provided at this station to work in each shift for train passing duties.

Dy. Station Superintendent	1 in day shift
Station master	1 in each night shift
Points Man	1 in each shift
Traffic Gate Man	1 in each shift

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 Dy Station Superintendent's Office and in Gate Lodge for Gate Man.

6.2. RESPONSIBILITY FOR ASCERTAINING CLEARANCE OF THE LINES.

Dy. S.S/ S.M. on duty shall be personally responsible to ensure the Clearance/dispatch of the nominated line between Up and Down Advanced Starter signals for reception of trains However the Dy. S.S. / S.M. on duty shall always be alert and watchful of any obstruction on any part of the line irrespective of the Zone under his responsibility .

6.3. CONDITIONS FOR GRANTING LINE CLEAR.

The Conditions of G.R. 8.03 (2) (a) (b) (C-ii) shall be complied with by the Dy SS/ SM on duty before granting line clear for a train. The line shall not be considered clear and "LINE CLEAR" shall not be given unless: -

- i) The whole of the Last Preceding train has arrived complete inside the first facing point on both up and down directions clearing the fouling mark.
- ii) The relevant approach signals have been put back to "ON" Position behind the said train.
- iii) The line is clear up to the Down Advanced Starter Signal No. 10 for up trains and up to UP Advanced Starter Signal No. 9 for Down Trains.
- iv) All Signal lights pertaining to the train are burning properly.

NOTE:

1. If the light of the reception signal is not burning, line clear shall not be granted for train till such time it is ensured that the concerned Driver is notified of the fact in writing by the Station Master of the Station to which such line clear is to be granted.
2. Before granting line clear for a UP train the Gateman of Level Crossing Gate at Km.162.650 shall be informed supported by Private Number allowing a train to enter into the section. Before granting line Clear for a Down train the Gate men of respective level crossing gates at 162.650, shall be informed supported by private numbers allowing of train to enter into the section, The Dy. S.S/ SM must ensure the closure of these Level Crossing Gates supported by private numbers from the Gate men by individual private numbers

6.4. CONDITIONS FOR "TAKING OFF" APPROACH SIGNAL.

- a). Reception of trains is governed by General Rules 3.36, 3.38, 3.40, 3.47, 4.17, and SRs 3.36.02, 3.36.04 3.42.02 (a) (iv), 3.42.03 and other relevant provisions of General and Subsidiary Rules, Block Working Manual and Station Working Rules of the Station.

b) ADEQUATE DISTANCE

The Adequate distance to be kept clear for taking off Home Signal Vide GR. 3.40 has been reduced and reckoned from foot of the Starter Signal in Stead of Last Trailing Point in both direction.

The Adequate Distance to be kept clear for taking off Home Signal is as follows.:

LINE NO.	FOR UP TRAINS		FOR DOWN TRAINS	
	FROM	TO	FROM	TO
Line No.1 (Loop line)	UP Starter Signal No. 3.	To the end of over Run line when Point No. 18 is normal or up to the Up Advanced Starter signal No.9 when point No.18 is reversed.	Dn Starter Signal No. 6	To the End of the Over Run Line when Point No. 17 is Normal or upto the Dn Advanced starter signal No.10 when point No.17 is reversed.
Line No.2 (Main Line)	Trailing Point No. 20 A	To the Advanced Starter Signal No. 9	Trailing Point No. 17	To the Advanced Starter Signal No.10

Line No.3 (Loop line)	UP Starter Signal No.5	To the end of Over Run Line when Point No. 20 is Normal or up to the Up Advanced starter signal No.9 when point No.20 is reversed.	Dn Starter Signal No 4	To the end Of the over Run Line when Point No. 19 is Normal or upto the Dn advanced starter signal No.10 when point No.19 is reversed.
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- C. To receive a train for which line clear is given, the Dy. SS/ SM 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 verifying the track indication in the panel or by physical verification of the nominated route incase of failure of track Circuit / axle Counter. He shall suspend all non-isolated Shunting and there after set the points of the nominated route by means of push button switches provided in the control panel. He shall then verify from the visual indication available in the panel that points are set to the desired route.

Unless the Track Circuit / Axle Counter for the concerned line is "Clear", even with other condition satisfied the operation of panel button by the Dy SS/ S.M on duty will not permit the concerned Home Signal, to be taken off. However reception of train will be possible in such case with calling –on signal provided below Home Signals. Unless the first track circuit in advance of Home Signal does not show "RED" indication.

The Dy. S.S/ S.S. on duty shall ensure the closure of the interlocked Level Crossing gate against the road traffic and the Key is to be transmitted to panel through RKT, before taking off UP Home Signal.

After correct setting of points, the Dy. S.S/ S.M. shall then operate the concerned push button control panel for taking off the reception Signal he shall then verify on the panel that the correct reception signal is cleared. Alternatively point operation and signal clearing can be done by one operation by pressing signal button and route button. If for any reason after clearing the signals it is required to put back the signals and alter the route, interns of SR. 3.36.02 a time delay of 2 minutes shall be observed before the points can be altered.

6.4.1 **TAKING OFF CALLING-ON SIGNAL**

Miniature colour light Calling –on signals are provided below UP & Down home signals in terms of GR 3.13 (6) (b). A Calling-on Signal shows no light at on position and a Calling–on signal shows in light at "ON" position and "YELLOW" light when taken "OFF".

A Calling –on Signal is taken off for reception of train when the home signal above it cannot 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 home Signal occupying the track circuit in rear of the home 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 individually by panel push button and group button 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 switch shall be pressed simultaneously along with the concerned route button for 2-3 Seconds and released.

After a lapse of 120 seconds the Calling-on signal Clears is a "YELLOW" Light Glows at the concerned Calling-on signal on the panel. Every such operations has to be recorded by the on duty Dy S.S/ S.M along with the reason to do so.

6.5. SIMULTANEOUSLY RECEPTION / CROSSING OF TRAINS.

Reception of an up train on Line No. 1 (Loop Line)	Reception of a Down train in Line No. 3 (Loop Line) or Despatch of an up train from Line No. 2 (Main line) or line No. 3 (Loop line)
Reception of an up train on Line No. 3 (Loop Line)	Reception of a down train on Line No.1 (Loop Line) or Despatch of an up train from Line 1 (Loop Line) or Line No. 2 (Main Line)
Reception of a Down train on Line No.1 (Loop Line)	Reception of an up train on line No. 3 (Loop Line) OR Despatch of a Down train from Line No. 2 (Main Line) or Line No. 3 (Loop Line)
Reception of a Down Train on Line No. 3 (Loop Line)	Reception of an up train on Line No. 1 (Loop Line) OR Despatch of a Down train from Line No.1 (Loop Line) or Line No. 2 (main Line).

6.5.1. CROSSING OF TRAINS

Rules laid down in SR 3.39.01 (a), 3.47.01, 3.47.02 and other provisions shall be complied with by the Dy. SS/ SM. On duty while arranging crossing at the Station.

6.6.0 COMPLETE ARRIVAL OF THE TRAIN.

The entire Block Sections at both Side of the station is monitored by the axle counter System and the position of the Block Section whether clear or occupied is indicated on the panel. As soon as a train enters into the Block Section the "RED" indication appears on the panel. After the whole train clears the block section "GREEN" indication appears on the panel. This confirms the complete arrival of the train and the Dy. S.S./ S.M., on duty shall give "TRAIN OUT OF BLOCK SECTIION" REPORT on seeing the Section clear (GREEN) indication on the panel.

In case of failure of block section axle counter, the Dy S.S. / SM 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 train the Dy. S.S. / S.M on duty shall satisfy about the complete arrival of the train by verifying the last vehicle indication vide SR 4.16.05 that the train is complete.

In case a train passes incomplete action shall be taken as per SR. 4.17.02 and the train out of Block Section Report shall be withheld to the Station in rear until complete arrival certificate is received from the Station in advance supported by a private number.

On occasion when a Motor Trolley follows a train the point 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 Dy. S.S. / S.M. on duty shall take action as per SR 15.25.03 (b) (vi)

6.7. DESPATCH OF TRAINS

Despatch of Trains is governed by General Rules 3.38, 3.42, Subsidiary Rules 3.36.04 (b), Block Working manual 2.07 (5) (b) and Station working Rules.

To dispatch a train the Dy. S.S./ SM 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 control panel. He shall then take off the departure signal. The Driver shall start his train on seeing the "OFF" aspect of the starter and Advanced Starter.

NOTE: -

- 1) Before taking off the departure Signal for Dn. trains the Dy SS/ SM on duty shall ensure the closure of L.C. Gate at km. 162.650 supported by private Numbers from the Gateman. The Dy. SS/ SM. 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.

6.7.1 **PUTTING BACK SIGNALS TO "ON" IN AN 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 Subsidiary Rule 3.36.02 shall be followed.

In case of reception signals, the route over which the train would pass shall not be altered until after the train has come to a stand outside home signal unless the route has to be altered to avert an accident.

In case of departure signals before changing the route or allowing any other on movement the "Authority to proceed" if any, handed over to the Driver must be withdrawn and the Driver of the concerned train shall be advised of the change in writing and his acknowledgement is obtained in a memo.

6.8. **TRAINS RUNNING THROUGH**

The procedure detailed in para 6.4 and 6.7 above and General Rules 3.42. 4.17 and 4.42 and subsidiary Rules there to shall be followed.

The Dy. SS/ S.M. 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 any thing wrong is noticed on train. For this purpose the Dy. SS/ Station master on duty shall depute his Token Porter with hand signals to the other side of the passing train to observe the passing train and shall exhibit hand danger signal to draw the attention of the guard and Driver of a train should he notice any unsafe condition with the passing train. He shall also report to the Dy SS/ SM on duty for taking further suitable action in terms of subsidiary rules 4.42.02(d)

6.9. **SPECIAL PROVISION FOR WORKING OF MOTOR TROLLIES MATERIAL TROLLIES ETC.**

- a. Motor Trollies are run in accordance with Subsidiary Rule 15.25.03 to 15.25.07
- b. Material Trollies will in accordance with subsidiary Rule 15.27.05 to 15.27.08 and Rules 5.11 (2) 5.13(2) (b) of Block working Manual.

7.0. **BLOCKING OF LINES.**

A clear remark in "RED" ink shall be made immediately in the Train Signal Register indicating the Time and Number of running line blocked and a record shall be made in Station diary. Reminder collars must be placed on the Concerned route and Signal Button Controlling the blocked line vide SR 3.36.03. (b).

7.1. **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 and leave them standing on the running line, the Dy SS/SM on duty shall be responsible to secure the vehicles / stabled loads in accordance with General Rule 5.23 and Subsidiary Rule 5.23.01 to prevent the rolling down of vehicles and arrest obstruction and fouling.

7.2. USE OF REMINDER BLOCK COLLARS

When ever any running line is blocked or a train is stopped to cross another train or detained for any other reasons, even for a short while or during shunting operation reminder block Collars shall be used by the Dy SS / SM on duty on the push button concerned as per Subsidiary Rules 3.36.06 (b)

7.3. ALTERING OF POINTS TO A CLEAR LINE WHEN EVER RUNNING LINE IS BLOCKED.

- a). When a running line is blocked by stabled load, wagon, vehicle or by a train which is to cross or to give procedure to another train or immediately after the arrival of a train at the station etc., the points at either end should immediately be set against the blocked line except when shunting or any other movement is required to be done on that line.
- b). If all the lines at the 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 incase of any mishap the chances of causalities are minimized.

In case of all 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 consequence causalities. While doing so points may 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 for a loop occupied by a train where a passenger coach will incase of collision receive the impact.

8.0. SHUNTING

Shunting will be carried out at this station in accordance with general Rules 5.13, 5.14, 5.16, 5.19, 5.20 to 5.23, 8.09 to 8.11, 8.13 to 8.15 and relevant subsidiary rules there to and Block working manual. The Guard / Asstt. Guard / Dy. SS / SM on duty are authorized to supervise shunting operation and back shunt signals shall be used for shunting operations. The official supervising shunting shall ensure the correct setting, clamping and padlocking of the points and the closure of Level Crossing Gate. The Dy SS/ SM on duty and the official supervising shunting shall co-ordinate with each other regarding shunting operations. Neither reception signals nor the departure signal shall be taken off unless the shunting is isolated and the path of incoming / out going train is free from all obstruction. The over run line may be used as shunting neck.

8.1. SHUNTING OUT SIDE HOME SIGNAL

The concerned section shall be blocked back for shunting outside home signal provided the section is clear.

8.2. SHUNTING IN FACE OF AN APPROACHING TRAIN.

Shunting in face of an approaching train is prohibited.

8.3. SHUNTING OUTSIDE STATION SECTION

Shunting outside Advanced starter signal and up to the first stop signal of the opposite direction is permitted vide para 4.36 (2) of Block Working manual Provided the block Section is clear and home signal is kept at "ON" position.

8.4. PROHIBITION OF SHUNTING – ANY SPECIAL FEATURE :

9. GENERAL INSTRUCTIONS FOR WORKING OF TRAINS IN ABNORMAL CONDITIONS.

9.1.(a) PARTIAL FAILURE

In the event of suspension of the Electrical Block Instrument and during failure of other available means of communications trains shall be worked in terms of SR 6.02.06 and Chapter III of Block working Manual. The Authority to proceed for the Driver of a train is a paper line clear ticket and T/369 (3b) to pass the Last Stop Signal at "ON" position.

9.2. **TOTAL FAILURE OF COMMUNICATIONS.**

In the event of total failure of Communications either between Baghuapal – Sukinda Road or between Baghuapal - Tomka Station as the case may be, trains shall be worked between these Sections in terms of SR 6.02.04, which is summarized in brief as follows.

- i. The train which is to be dispatched to the effected section will be stopped and the Driver and Guard of the Train shall be informed of the Situation.
To open communication of the affected Block Section the Dy. SS/ SM on duty may send any one of the modes of transport.

a) Light engine	d) Tower Wagon with Guard/ SM
b) Train Engine	e) Trolley with Guard/ SM.
c) Motor Trolley with Guard/ SM	f) Diesel Car/ Rail Motor Car/ Emty.DMU/ Rake detaining passengers
- ii. The train shall be brought to a stand. DRIVER and GUARD are to be apprised of the situation, then engine to be detached.
- iii. The following documents shall be handed over to Driver and Guard.
 - a. An authority to proceed without line clear on prescribed form.
 - b. A caution order restricting the speed of the train to 15 KMPH by day or when view ahead is clear and 10 KMPH during Night or when the view ahead is obstructed in addition to other restriction enforce
 - c. A written authority on form T/ 369 (3b) to pass the last stop Signal at “ON” Position.
 - d. A line clear enquiry message asking line clear for the waiting train.
 - e. A conditional Line Clear Message for the light engine to return with or without a train attached supported by private number.

On arrival of the engine at the next station the conditional line clear message and enquiry message shall be collected by the Dy SS/ S.M. on duty who shall prepare a conditional line clear ticket for engine to return either light or a train attached to it, and conditional line clear reply message for the enquiry message giving the line clear for the train waiting at other and shall be handed over to the Driver of Light engine on return trip the driver will come on booked speed subject to any other speed restriction in force.

If there be an even flow of trains in both directions, enquiry and conditional line clear message for each succeeding train may be sent through the guard of preceding train. If the Station master at one end has more than one train to dispatch in the same direction he may ask line clear not only for one train but also for following trains. It must be stated that these Later trains will be dispatched after the first train at an interval of 30 minutes. When dispatching, the second and subsequent trains particulars of last preceding train along with its departure time will be endorsed on the line Clear ticket and the train which will follow and a caution order restricting the speed to 25 KMPH over straight when view ahead in clear and 10 KMPH when view ahead is obstructed is to be issued while adopting this produce the guard and the Driver should be instructed to keep a sharp look out and be prepared to stop short of any obstruction. Trains must continue to work on this system until any one of the means of communication is restored. As soon as any one of the means of communication has been restored, the conditional line clear working of trains shall be cancelled when there is no trains in the affected block section and message shall be exchanged supported by Private Number keeping section controller informed.

9.3. **DESPATCH OF TRAINS UNDER BLOCK TICKET TO ASSIST CRIPPLED TRAINS.**

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 Subsidiary Rules 6.02.05 Absolute Block System on the affected block section shall be suspended and concurrence of the station master at other end shall be obtained and recorded in Caution Order Register and Train Signal Register.

The Block Ticket (T/A 602 shall clearly detail the place of obstruction, 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 lighting hours where the visibility is good and 10 KMPH at night or whenever clear view of 800 meters is not available.

On arrival at the station the block ticket shall be collected with necessary endorsement from Driver / Guard, then cancelled and pasted to its record foil, or shall be sent to the issuing station for cancellation.

Incase of accident/ Engineering Block assurance from S.E (P.Way) concerned shall be obtained that the line is safe for movement of trains before resumption of normal working. Where the obstruction is removed and assurance in writing is obtained from P.W.I or Guard / Driver the Dy. S.S/ Station Master on duty may resume normal working after exchanging proper messages supported by private number.

9.4. **PROCEDURE TO BE FOLLOWED FOR WORKING OF TRAINS DURING FAILURE / SUSPENSION OF INTER LOCKING / SIGNALS / POINTS.**

A). **DEFECTIVE SIGNALS**

When Signals become defective, the procedure laid down in G.R 3.68 to 3.71, 3.80, 3.81 and SRs there to 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 and if it is found impossible to take off a signal, the setting of points as the route to which it applies shall be inspected by the Dy SS/ SM on duty before the signal is declared as defective irrespectively of what is indicated by the position of the route vide subsidiary Rule. 3.68.01 ©. Incase of disconnection of signaling and interlocking gears for repairs and maintenance, procedure laid down in general Rule 3.51, 3.69 and relevant subsidiary Rules shall be followed. In the event of signal shaving no lights and if signal lights cannot be kept burning the Dy S.S/ S.M. on duty shall before granting line clear initiate action in accordance with the procedure prescribed in General Rules 3.49(4), and 3.68 to 3.72 and relevant subsidiary Rules there to.

B. **DEFECTIVE INTERLOCKING**

When inter locking becomes defective the Dy SS/ SM on duty shall be responsible for setting, clamping and padlocking of points for admission of train vide subsidiary rules 3.69.03(b)(i).

C. **DEFECTIVE / 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 Dy SS/SM on duty shall personally ensure clamping and padlocking of all facing and trailing points enroute. 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

Crank Handle	Control Points
CH.1	17, 19
CH.2	18, 20

CH1 and CH2 are Crank handle keys and are normally locked in RKT and are electrically interlocked with signals. The Crank Handle key is in the point machine to unlock Crank handle operation and to facilitate insertion of Crank handle in that point machine. The Crank Handle is normally kept in a locked glass fronted box is to be taken along with the CH key for manual operation of points. In order to enable the manual operation of motor operated points due to failure, nominated Crank Handle key provided at station may be taken out for manual operation of point mechanism of motor at site. Before taking out the Crank Handle key, the Dy.SS/SM on duty must make an entry in crank Handle Register detailing the purpose of use of Crank Handle as laid down in para 20.06 of Operating Manual. Crank Handle keys can be taken out only when all signals are in 'NORMAL' position and the route is not locked for what ever reasons. Crank Handles can be released by obtaining common 'TRANS' push button and controlled push button simultaneously. When the keys are taken out no signal can be taken "OFF".

Dy. SS/ 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 Dy. SS. / 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 Dy SS/ SM on duty.

(Details of use of Crank handle as per Appendix "B")

The cases of the motor points should be promptly reported to the concerned signal maintainer/ Signal Inspector and other S&T officials for immediate rectification.

9.5. **PILOTING "IN" TRAINS IN TO STATION YARD. :-**

Whenever Home Signal becomes defective train can be admitted by taking off calling-on signal as per para 6.04.01 of this SWR, when calling – on signal also could not be take "OFF" the Dy. SS/ SM. On duty shall advise the station in rear to issue written authority to proceed on form T/369 (3b) and the procedure laid down in Subsidiary Rules 3.69.02 (a), 3.69.03 (c) and 3.69.05(c) shall be followed during "PILOTING IN " a train

The Dy.SS/SM on duty shall nominate a clear line and shall advise the TPM on duty to set the nominated route with the help of Crank Handle. The TPM on duty shall set the facing and trailing points and clamp and padlock the same and shall give a Private Number to the Dy.SS/SM on duty as an assurance of having done so.

The Dy SS. / S.M. on duty shall then hand over the written authority T/369 (3b) to the TPM for piloting the train for the defective Home Signal. While going to the Home Signal, the TPM will satisfy himself that the points have been correctly set, clamped and pad locked. After the train has brought to a dead stop at the Home Signal, the TPM shall hand over the pilot – memo to the Driver, board the engine and display proceed hand signal to pass the defective Home Signal.

The Dy. SS./ S.M. on duty shall personally supervise the correct setting, clamping and padlocking the points for the admission of a passenger train or a goods train when a passenger train is standing on the adjacent line.

NOTE

Before allowing a UP train to enter in to the section, the Dy.SS/SM on duty should ensure the closure of LC gate at Km.162.650.

9.6. **PILOTING OF TRAINS OUT OF STATION YARD.**

When the starter signal has become defective, the Dy. SS./S.M.on duty shall advise the TPM to set all points concerned for out going train, clamp and padlock the same. He shall also advise to close the level crossing gate / gates on the route for dispatch of a train. After compliance of the above procedure the TPM on duty shall give one private number to the Dy SS/ S.M. on duty as an assurance. The Dy SS./S.M. on duty shall then hand over the pilot memo T/369 (3b) along with other Authority to proceed to the Driver of the Train and display proceed hand signal at the foot of the starter signal vide subsidiary Rule. 3.71.01

In case of Advanced Starter Signal becomes defective, such signal shall be passed on the written authority on the Form T/369 (3b) Proceed hand signal shall not be displayed vide subsidiary Rule. 3.70.02. The TPM shall hand over the pilot memo in Form T/369 (3b) to the Driver after the train stopped along with paper line clear ticket.

NOTE:

1. The Dy. S.S/ S.M. on duty shall personally supervise the correct setting, clamping and padlocking of the facing points and ensure the clearance of any obstruction including level crossing gate (s) on the concerned route for dispatch of a train.
2. The keys of the padlocks used for clamps on the points shall be kept in the personal custody of the Dy. S.S. / S.M. on duty or any other authorized operating official till such time the train has utilized the route or alternatively such a movement in cancelled.

10. **VISIBILITY TEST OBJECT.**

Lights of the Starter Signals of Line No. 1 (Loop Line) of both end are nominated as visibility test object to enable the Dy S.S/ S.M. on duty to take action in terms of General Rules 3.61 and relevant Subsidiary Rules there to. The lights of these signals shall be verified by Dy. S.S./ S.M. on duty from the observation post as V.T.O. on the platform at the center of both side starters and to take action as stated above.

11. **ESSENTIAL EQUIPMENTS OF THE STATION.**

The list of essential equipments is mentioned in Appendix "E", which should be kept ready on hand in good condition with necessary relief stock.

12. **NAME OF THE FOG SIGNAL MEN NOMINATED TO BE CALLED INCASE OF FOG: -**

"Refer Appendix "F"

13. **SPECIAL RESTRICTIONS**

- i. Shunting in face of an approaching Train is prohibited.
- ii. Hand Shunting / Loose shunting / Fly Shunting is not permitted over the outer most facing point at both ends.
- iii. While performing shunting, engine shall be leading towards falling gradient ie. Towards Block Section.
- iv. It is for bidden to obstruct the over-run line which is a substitute for the adequate distance for taking off home signal at anytime whether a train is expected or not. If it is obstructed through an accident or unavoidable causes it ceases to be a substitute for the adequate distance. The trains shall be passed as per SR. 3.69.02 or 3.69.03. The over run line shall not be utilized for the purpose of stabling of vehicles or harboring an engine with or without vehicle. The over run line may however be utilized as a shunting neck.
- v. "No load should be stabled on the Main Line with out a live engine attached".

13.1. **SPECIAL INSTRUCTIONS**

- a) All the lines of the Station are track circuited. In case of failure of track circuit the clearance of the nominated line/zone should be ensured by the Dy.SS/ SM. on duty physically before admission of a train.

- b) In case of failure of Axle counter provided for monitoring the Block Section at both end the resetting should only be initiated for normalizing the block instrument after ensuring complete arrival of the train by physical verification of last vehicle by Dy. SS/ S.M. on duty.
- c) After a non-signal movement has taken place over a point / points operated by motor whether facing or trailing direction Dy S.S/ S.M. on duty shall operate the point / points to normal and reverse setting. The point /points shall ensure that the indication regarding the normal and reverse setting are correctly available, further movement may be permitted over the point / points.

13. C. **APPENDICES**

Appendix – A : Shows the detailed working of level crossing gates.

Appendix – B : Shows the signaling and interlocking installations.

Appendix – C : Shows the details of Telecommunications.

Appendix – D : Shows the details of duties of Operating Staff.

Appendix – E : Shows the details of essential equipments.

Appendix – F : Shows the names of Fog Signal men nominated at the station.

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APPENDIX - "A"

APPENDIX – "A" TO STATIONS WORKING RULE OF BAGHUAPAL STAION.

Note: - These instructions should be read together with provisions in General and Subsidiary Rules.

1. DESCRIPTION OF THE LEVEL CROSSING GATE 162.650

1.	Number of level crossing gate.	:	16
2.	Engineering or Traffic	:	Traffic
3.	Under control of	:	Dy SS/ Baghuapal.
4.	Location at Km	:	162.650
5.	At station	:	Baghuapal
6.	In between station	:	BGPL-TMKA
7.	BG/MG/NG	:	BG
8.	Single line / Double line	;	Single Line
9.	Normal Position	:	Open.
10.	Interlocked/ Non-interlocked	:	Interlocked with Station Stop Signal
11.	Means of interlocking	:	R.K.T
12.	Provision of gate Signal at Km.	:	a) Up line - b) Down Line-
13.	Signaling arrangement	:	Station Stop Signal
14.	Means of communication – Telephone/ Bell etc.	:	Megneto Telephone with Dy. SS / Baghuapal.
15.	Width of Level crossing gate	:	
16.	Type of Road	:	
17.	Name of Road	:	Duburi-JK Road
18.	Metal led/ non Metal led	:	Metal.
19.	Approach Road	:	
20.	Width of the Road	:	
21.	Angle of Crossing (incase of the SKEW Gates)	:	
22.	Gradient (if any)	:	a) North –East side b) South / West side
23.	Alignment (straight/ curve)	:	Straight.
24.	Provision of height gauge	:	No
25.	Type f Barrier	:	Lifting
26.	Length of Check Rail	:	11.5
27.	Surface in between level crossing gate.	:	Metal.
28.	Length of Rumbled strip/ speed breaker	:	11.5m
29.	Road Signs	:	Yes
30.	Speed breakers indication board.	:	Yes
31.	TVU	:	44149 on July 2002
32.	Census next due on	:	July 2007.
33.	Demarcation for placement of detonators	:	
34.	No. of gateman working	:	Two.
35.	Nearest Railway Medical Assistance	:	
36.	Nearest Private medical Assistance (if any)	:	
37.	List of equipment available yes/No.	:	

EQUIPMENT TO BE AVAILABLE AT THE GATE:

1.	Hand signal lamp Tri Colour	:	3
2.	Hand signal Flag Green	:	1 mounted on sticks
3.	Hand signal Flag Red	:	3
4.	Banner Flag Red	:	
5.	Posts for exhibiting red banner flag	:	2
6.	Spare chains with padlocks	:	2 with stop mark
7.	Detonators	:	10 in tin case
8.	Fusee	:	1
9.	Gate lamps	:	2
10.	Tommy Bar	:	1
11.	Mortar Pan	:	1
12.	Spade/Fowrah	:	1
13.	Hammer	:	1
14.	Pick Axe	:	1
15.	Tin case for flag	:	1
16.	Can for oil.	:	1
17.	Water Poy / Bucket.	:	1
18.	Canister for Muster Roll	:	1
19.	Set of spare spectacles	:	1
20.	Board demarcating protection of level crossing gate diagram in case of obstruction on gate.	:	1
21.	Basket.	:	1
22.	Whistle.	:	1
23.	Wall Clock.	:	1

C. RECORDS TO BE KEPT AT GATE LODGE:

In addition to the above equipments, following records shall also be kept at the Gate Lodge.

1. Gate Working Instructions in Hindi/English.
2. Gate Working, Instructions in local vernacular language.
3. Gateman Rule Book in local vernacular language.
4. List for tools and books.
5. Duty Roster.
6. Certificate for working gateman.
7. Bio-data particulars of Gatemen, including date of passing vision test, initial/ refresher course, safety camp, etc.
8. Accident Register.
9. Record of last census of road traffic at Level Crossing gate.
10. Public Complaint Book.
11. Inspection Book.
12. S & T Inspection Register in case of Interlocked Engineering gate.

1.1. NORMAL WORKING

The Gate is normally kept open to Road traffic. For reception of Up Train or dispatch of Down Train, or during shunting/operation the Dy.SS/SM on duty shall inform the Gateman to close the gate supported by a private Number. Then the Gateman shall clear the Road traffic and close the Gate by operating the winch and extract Key “P” from the winch. This key “P” shall be inserted into lever No. GF-2 and turned which when reversed locks the boom of the gate and releases GF-1 and key ‘Q’. This Key “Q” will be inserted in RKT and transmitted electrically to panel in conjunction with GF –1 to be reversed. Transmission of key ‘Q’ and reversal of GF-1 will release UP reception and Down dispatch signal. The gateman on duty shall give one Private Number to the Dy.SS/SM on duty as an assurance of closing the gate. Gate close indication will appear in the panel.

After taking off reception/ Dispatch signal, if the Gateman noticed any obstruction on the level crossing or on the track, which is danger for the passage of Train, he shall immediately put back Lever No. GF-1 to raise back the signal and inform the SS on duty accordingly.

After passage train or completion of shunting the SS on duty shall press the Gate Button No. 27 along – with common Trans button and keep it pressed till such time the Gateman extract key “Q” from the RKT instrument. After obtaining the key the Gateman shall open the Gate for the passage of Traffic.

The level crossing gate shall be also worked as to cause least inconveniences to vehicular traffic consistence with safety according to SR 16.03.01 (a)&(b).

1.2. **FAILURE OF INTERLOCKING.**

- i. In the event of the Gate booms becoming defective/ damaged in any way, it should be treated as non-interlocked. For the passage of traffic, the level crossing shall be closed by means of chains and padlocks under exchange of Private Number between the Gateman and the SM on duty. All Up and Down trains shall be piloted passed in terms of SR 3.69.02, 3.69.03 or 3.70.01 after closing the gate against Road Traffic till the restoration of normal working Rules laid down in Subsidiary Rule. 16.06.01, 16.06.02 and 16.06.03 shall be followed.
- ii. In the event of Gate control key being Jamed/ locked in the RKT instrument, the fact shall be brought to the notice of SM on duty. The following procedure shall be followed for the passage of trains/ road traffic after personally examined by SM on duty for passage of traffic the level crossing shall be closed by means of chains and padlocks under exchange of Private Number between the gateman and the SM on duty.

1.3 **FAILURE OF TELEPHONE COMMUNICATION.**

In the even of failure of Telephone communication between Station Master's office and Gate Lodge or failes to get Gateman's acknowledgement the SM on duty shall send a manuscript memo to the gateman to close the level Cossing gateand transmit the control key for passage of train. The SM on duty shall arrange for early repairs of the defective phone.

1.4 **OBSTRUCTION AT THE LEVEL CROSSING GATE.**

The gateman on duty as noticing any obstruction on the railway track at the level crossing gate or in the vicinity shall at once remove it, or if unable to do so, he shall put back the gate lever Frame No. GF-1 to raise back the signal and do his best to stop the train and shall protect the obstruction in accordance with General Rule 16.07 and 3.62,

1.5. **RECTIFICATION OF FAILURES**

In case of failure of Telephonic Communication/ Gate mechanism, the SM on duty shall inform the concerned maintainer for necessary rectification through a memo. On rectification the SM on duty has to get a written memo from the maintainer in token of having rectified the fault.

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APPENDIX – “B1” TO STATIONS WORKING RULE BAGHUAPAL STATION.

CENTRAL PANEL

SL. No.	PUSH BUTTON	COLOUR OF PUSH BUTTON SIGNAL BUTTONS	FUNCTION
01	S1	RED	Press to take “OFF” Up Home Signal No. S1 A/B/C (3-Aspect signal with Route) along with respective Route Button (From TMKA end)
02	C1	RED WITH WHITE DOT	Press to take “OFF” Up Calling “ON” signal below Up Home Signal, No. C1 A/B/C/ along with respective Route Button (From TMKA end)
03	S2	RED	Press to take “OFF” Down Home Signal, No. S2 A/B/C/ (3- Aspect with Route)along with respective Route Button (From SKND end)
04	C2	RED WITH WHITE DOT	Press to take “OFF” Down Calling “ON” signal below Down Home Signal, No. C2 A/B/C/ along with respective Route Button (From SKND end)
05	S3	RED	Press to take “OFF” Up starter Signal No. S3 along with respective Route Button (Towards SKND end)
06	S4	RED	Press to take “OFF” Down L3 starter Signal, No. S4 (Two Aspect) along with respective Route Button (Towards TMKA end)
07.	S5	RED	Press to take “OFF” Up Starter Signal No. S5 of L-3 (Two Aspect) along with respective Route Button (towards SKND end)
08.	S6	RED	Press to take “OFF” Down Starter Signal No. S6 of loop Line –1 (Two Aspect Signal) along with respective Route Button) towards TMKA end.
09	S7	RED	Press to take “OFF” Up Main Starter Signal No. S7 of L-2 (3 Aspect) along with respective Route Button (Towards SKND end)
10.	S8	RED	Press to take “OFF” Down main Starter Signal No. S8 (Three Aspect Signal) along with respective Route Button (towards TMKA end) .
11.	S9	RED	Press to take “OFF” Up Advanced Starter Signal No. S9 (Two Aspect) along with respective Route Button (Towards SKND end)
12.	S10	RED	Press to take “OFF” Down Advanced Starter Signal No. S10 (Two Aspect Signal) along with Respective Route Button (Towards TMKA end)
13.	SH-11	YELLOW	Press to take “OFF” Independent Shunt Signal No. SH-11A/B/C/ along with respective Route Button (up to Up Starter)
14.	SH-12	YELLOW	Press to take “OFF” Independent Shunt Signal No SH-12 A/B/C along with Respective Route Button (up to Dn. Starter)

RECEPTION ROUTE BUTTONS

15.	L1-UN1	WHITE WITH BLACK DOT	Press to receive an UP train from TMKA end or Dn. Trains from SKND end on Signal/ Calling “ON” Signal /Shunt signal 11 or 12 on Line No. 1 set to over run line along with respective Signal Button.
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16	L1-UN	WHITE	Press to receive an UP train from TMKA end or a DN Train from SKND end on Signal/ Calling "ON" Signal on Line No. 1 set to Main Line along with respective Signal Button.
17	L2-UN	WHITE	Press to receive an UP train from TMKA end or a DN Train from SKND end on Signal/ Calling "ON" Signal/shunt Signal No. 12 or Shunt Signal No 11 on line No.2 along with respective Signal Button.
18.	L3-UN1	WHITE WITH BLACK DOT	Press to receive a DN Train from SKND end on or an Up train from TMKA end on Signal/ Calling "ON" Signal/shunt Signal No. 12, SH-11 on line No.3 set to over run line along with respective Signal Button.
19.	L3-UN	WHITE	Press to receive an UP train from TMKA or a DN train From SKND on Signal/ Calling "ON" Signal/on Line No. 3 set to Main line along with respective Signal Button.
20.	9-UN	WHITE	Press to take off UP Adv. Starter Signal towards SKND end along with respective Signal Button.
21	9AT-UN	WHITE	Press to take off UP Starter Signals on line No. 1,2&3 towards SKND end along with respective Signal Buttons.
22.	10-UN	WHITE	Press to take off DN Adv. Starter Signal towards TMKA end along with respective Signal Button.
23.	10AT-UN	WHITE	Press to take off DN Starter Signals towards TMKA end of line No. 1,2 &3 along with respective Signal Buttons.
24.	17 WN	BLACK	Crossover point button to be pressed for operating the point "NORMAL" or "REVERSE" position along with respective point Group "NORMAL" or "REVERSE" Button between Main and L.1 at TMKA end
25.	20 WN	BLACK	Crossover point button to be pressed for operating the point "NORMAL" or "REVERSE" position along with respective point Group "NORMAL" or "REVERSE" button between Main Line and L-3 at SKND end.
26	19-WN	BLACK	Crossover point button to be pressed for operating the point "NORMAL" or "REVERSE" position along with respective point Group "NORMAL" or "REVERSE" button between Main Line and L-3 at TMKA end.
27	18-WN	BLACK	Crossover point button to be pressed for operating the point "NORMAL" or "REVERSE" position along with respective point Group "NORMAL" or "REVERSE" button between Main Line and L-1 at SKND end.

CRANK HANDLE PUSH BUTTON

28.	CH-1	BLUE	To be pressed to extract Crank Handle Key for operation of Point No. 17 & 19 along with "TRANS" Push Button
29.	CH-2	BLUE	To be pressed to extract Crank Handle Key for operation of Point No. 18 & 20 along with "TRANS" Push Button.

MISCELLANEOUS PUSH BUTTONS

30	SM'S EMERGENCY POINT / KEY		This Key is to be inserted and operated in the event of Emergency Point operation.
31.	SM'S PANEL KEY.		To lock the control panel to prevent unauthorised operation.

32.	GROUP TRANS BUTTON	WHITE WITH BLACK DOT.	To be pressed to initiate Slot of Crank Handle Or L.C. Gate operation along with concerned Slot / Crank Handle / L.C. Gate Button.
33.	GROUP RELEASE PUSH BUTTON	WHITE WITH BLACK DOT.	To be pressed to withdraw / Normalise the control of slot / Crank Handle/ L.C Gate operation along with concerned Slot/ Crank Handle/L.C Gate push Button.
34.	POINT GROUP NORMAL PUSH BUTTON	BLACK WITH RED DOT.	To be pressed to initiate "NORMAL" setting of point along with concerned point push button.
35.	POINT GROUP REVERSE PUSH BUTTON	BLACK WITH RED DOT.	To be pressed to initiate "REVERSE" setting of point along with concerned point push button.
36.	EMERGENCY ROUTE RELEASE PUSH BUTTON	WHITE WITH RED DOT.	To be pressed for emergency Route Release.
37.	SIGNAL CANCELLATION PUSH BUTTON	RED	To be pressed for canceling a signal which is already then "OFF" or to release a Rout after passage of train.
38.	SIGNAL LAMP FAILURE/ POINT FAILURE ACKNOWLEDGEME NT	RED WITH WHITE DOT	To be pressed for acknowledging signal lamp failure/ point failure Buzzer.
39.	BUTTON HELD ACKNOWLEDGEME NT PUSH BUTTON	WHITE WITH RED DOT.	To be pressed for silencing button Held Buzzer in case of any push button remains pressed after the button is released.
40.	EMERGENCY GATE RELEASE BUTTON FOR L.C. GATE AT KM 162.650	CHOCOLATE WITH RED DOT.	To be pressed for emergency Gate Release at KM 162.650
41.	L.C. GATE CONTROL 27 PUSH BUTTON	CHOCOLATE	To be pressed for extending Control to open L.C. Gate at 162.650
42.	UP BLOCK RELEASE PUSH BUTTON	CHOCOLATE WITH WHITE DOT	To be pressed for releasing UP Block Instrument Handle Baghuapal-Sukinda Road section) on arrival of Up train.
43.	DN BLOCK RELEASE PUSH BUTTON	CHOCOLATE WITH WHITE DOT.	To be pressed for releasing Down Block Instrument Handle. Baghuapal-Tomaka. On arrival of Dn. Train.
44.	RESET PUSH BUTTON FOR LVV TMKA- BAGHUAPAL	RED	To be pressed for initiating reset for normalizing Block Instrument TMKA-BGPL.
45.	POWER ACKNOWLEDGEME NT PUSH BUTTON	RED	To be pressed for acknowledging power failure buzzer.
46.	RESET PUSH BUTTON FOR LVV SKND- BAGHUAPAL	RED	To be pressed for initiating Reset for normalizing Block Instrument SKND-BGPL.

47.	RESET KEY TMKA	---	Reset Key to be inserted on the panel for resetting the Axle Counter Section TMKA end.
48.	RESET KEY SKND END	----	Reset Key to be inserted on the Panel for resetting the Axle Counter Section SKND-end.)
49.	Siding point control- 25 Push Button	BLACK	To be pressed for extending control to operate siding point No.25.

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APPENDIX – “B”-2 ‘

APPENDIX – ‘B-2’ TO STATIONS WORKING RULE OF BAGHUAPAL STATION SYSTEM OF SIGNALLING AND INTERLOCKING AT BAGHUAPAL

Details of Signaling and interlocking installation, instruction for working them in normal and emergencies etc. including Power Supply Arrangement.

BRIEF DESCRIPTION OF SIGNALLING AND INTERLOCKING INSTALLATIONS.

This is a “B” class station on Branch single line with standard II(R) interlocking (with isolations) on the JKPR-BSPX section equipped with Panel operated Multi Aspect Color Light Signaling.

1. DESCRIPTION OF PANEL

The yard layout is depicted on the panel. All the points and Signals of station are operated from the Control Panel Located at the station. The Control panel consists of an inclined console on which there is a clear geographical representation of the entire track layout with signals and points. The track layout is subdivided according to the track circuits configuration with distinctive colours for each track circuit on the track line adjacent to each signal. There exists an entrance Push Button at the center of the berthing of each route. The entrance Push Button (Signal Button) is coloured with “RED” for running signals with the number of relevant signal printed just by the side of the button. The entrance Route Push Buttons are coloured with “WHITE”. The signal buttons are to be operated in conjunction with Route buttons. All the various Push buttons on the panel are spring loaded and required Push buttons are pressed for operation. Common Route buttons for taking “OFF” common starters and individual Route buttons for taking of Advanced Starters are provided.

- 1.1.a). Down Home Signal No. 2/A/B/C from SKND end is interlocked with Block Instrument at station for section Baghuapal-Sukinda Road in such a way that unless the Down Home Signal No. 2/A/B/C is put back to “ON” position after the preceding train has arrived inside all the facing & trailing points at that end, the Block Instrument can not be normalized.
- 1.1.b) The Single line Block instrument at station for section Tomka-Baghuapal in Up direction can be normalized after the preceding train has arrived inside all the facing and trailing points at that end and after putting back the respective Up Home Signal No. 1A/B/C to “ON” position.
- 1.2.a) Up Advanced Starter Signal for Section Baghuapal-Sukinda Road is interlocked with TLBI and DN Advanced Starter signal for section Baghuapal-Tomaka is interlocked with TLBI in such a way that unless “Line Clear” is received for a train on the respective Block Instruments, the respective Advanced Starter Signals can not be taken “OFF”.
- 1.2.b) “ON” aspect of First Stop Signal and Last Stop Signals are proved in the interlocking of respective Block instruments in such a way that it is not possible to close the line and grant or receive “Line Clear” unless these signals assume “ON” aspect.

1.3. TRACK CIRCUITS / AXEL COUNTERS

The entire station yard is continuously track circuited between respective up & Down Home Signals and Advanced Starters in both the direction except Hot Axle Siding Track circuits between FM to FM on berthing tracks are :-

L2T1 & L2T2, L2T3, L1T1, L1T2, L1T3, L3T1, L3T2 AND L3T3.

- Point Zone Train circuits
17BT, 18BT, 17/19 AT, 19BT, 18/20AT, 20BT.
- FM to Zone Track Circuits are :
9AT & 10AT
- Home Signal to FM straight portion are :
1T & 2T, 9AT & 10AT.
- Advanced Starter Replacement track Circuits are :
1T & 2T
- Calling on approach track circuits are :
1AT & 2AT

1.4. AXLE COUNTERS

The Station is provided with Axle Counters with adjacent Station for Last vehicle verification.

1.5. PUSH BUTTONS

Various coloured Push Buttons are provided on the Panel to carryout operations which are mentioned in Appendix B-1

1.6. POINT PUSH BUTTON

Points are normally operated automatically during route setting operation. However, required points can be operated individually also. For this point, point push buttons, which are BLACK in colour are fitted over the point layout in the panel board. The individual operation of the electric point machine is controlled by these point push buttons in conjunction with the electric point group button (Black with Red Dot) (N) or (R) as per requirement. These "N" and "R" positions are indicated on a small name plate below point buttons. On the name plate three luminous indications are provided for each point as follows. :

1.6.1. When a point is set and locked in "NORMAL" position, a "WHITE" indication appears suggesting that the point is in NORMAL position.

1.6.2. When a point is set and Locked in REVERSE position, a "WHITE" indication appears suggesting that the point is in REVERSE position.

1.6.3. 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.

1.6.4. When the points are either not set or not locked either in NORMAL or in REVERSE correctly, the normal and reverse indication will not be there but the RED induction will start flashing till such time the point is set & locked properly in one of the positions. This RED indication will flash during operation of point also.

1.6.5. OPERATION OF POINTS

Points are operated for NORMAL to REVERSE or vice versa by operating concerned point push button along with common point group (N or R) buttons. When the points are required to set to reverse, the point buttons along with point group (R) push buttons to be pressed simultaneously. The Red indication will start flashing till the point is set to reversed and locked. Then the WHITE indication will glow. Only one point can be operated at a time. Red indication glows when the points are electrically locked i.e. after taking "OFF" signal for the set route. In this position points can not be operated unless, special recourse is taken for operation through emergency crank handle.

1.6.6. ALL POINTS OVER RUNNING LINES ARE OPERATED BY ELECTRIC POINT MACHINES.

1.6.7. The cause for not setting of the point in the desired position shall be checked up by the Station Master on duty according to G & SR 3.68-1 (C) If there is a defect other than obstruction, then point shall be considered defective and action shall be taken for clamping and pad locking of these points in the desired position by Station Master on duty himself for all trains according to SR 3.69.03 (c).

2. SIGNALS AND ROUTE PUSH BUTTONS

- i). Each stop signal is provided with a RED coloured push button very close to the signal and on the track route to be operated in conjunction with route button.
- ii). Each route push button (WHITE COLOURED) is provided on the track layout and to be operated in conjunction with signal button.
- iii). Each aspect of each signal is repeated on the panel.
- iv). All signals will however go back to danger automatically on occupation of the track circuit ahead of the signal by a train.

3. TRAIN ARRIVAL INDICATION THROUGH AXLE COUNTER.

The system provides for automatic check for last vehicle arrival through provision of axle counters. Axle counters are provided with adjacent station Sukinda Road and Tomka to check the complete arrival of trains. The system is interlocked with respective TLBI. When the axle counter section indication provide on the bottom side of the panel individually for either side direction indicates (R) RED i.e. occupied even after the complete arrival of trains, the Block Instrument of respective section can only be normalized after ensuring complete arrival of the trains by physical verification of Last Vehicle either for stopping or through train (Refer rest procedure)

4. POWER FAILURE.

Normal power supply to the signaling and Inter locking Installations at this station is drawn from the OSEB Power supply source (At 230V, 50 Hz). Whenever the normal supply connected to OSEB power supply fails, “WHITE” indication on the panel will disappear and “RED” indication will appear on the panel with an audible buzzer. The SM has to start the Diesel Engine for stand by (Auxiliary) power supply. After stable run of the Diesel Engine, the SM has to operate the change over switch for connecting the standby Auxiliary power supply to the signaling Installation. On resumption of power supply, SM has to acknowledge by pressing power acknowledgement push button on the panel that will make the panel operative again.

The Station Master on duty must maintain the record of power failure and he must promptly report the failure to the Section Controller and the concerned Electrical & S & T maintenance staff.

5.A L.C. GATE CONTROL BUTTON (“C” CLASS KM. 162.650

The Level Crossing control button No. 27 of “CHOCOLATE” colour with two indication “WHITE” for gate closed and “RED” for gate locked are provided on station panel layout just below the L.C Gate. The gate control push button is to be pressed along with group “TRANS” button for transmitting the control to open the gate and when gate is closed, control is withdrawn by pressing gate control button and group “RELEASE” button.

5.B. EMERGENCY GATE / RELEASE

This is a control provided with a button coloured “CHOCOLATE” with RED DOT on the top of the station panel. Gate is locked when signal is given. Locking is released after train comes and signal route is cancelled. For some reason, if gate remains locked, emergency operation is required. This emergency operation is to be carried in the following manner.

Emergency gate “RELEASE” push button and group “TRANS” button are pressed, Flashing light will come on the top of Emergency Gate Release Button. When the flashing light becomes steady (i.e. after 120 seconds), the gate key is transmitted to open the gate.

6. POINT FAILURE INDICATION (RED)/ POINT FAILURE BUZZER/ POINT FAILURE MUTING/ ACK BUTTON (RED WITH WHITE DOT.)

Whenever there is failure of point due to non setting, point failure indication flashing RED appears near the point name plate and a RED light on the panel besides AUDIBLE BUZZER. The buzzer stops when the point muting button is pressed, but the flashing RED of the concerned nameplate and a RED light above the muting button shall continue to glow. The defective point can be identified by the flashing RED light at the concerned point nameplate. After the failure is rectified, the flashing RED and the RED light above the muting button will disappear.

7. **SIGNAL LAMP FAILURE/ POINT FAILURE INDICATION (RED) AND ACK/ MUTING BUTTON RED CLOUR WITH WHITE DOT.**

An "AUDIO VISUAL" indication is provided on the panel to indicate that a signal lamp is fused or a point has failed. In such case, flashing RED indication appears on the panel with an audible alarm. When the muting 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 flashig in order to indicate the failure.

8. **EMERGENCY ROUTE RELEASE COUNTER**

This counter is provided to register the number of operations made for emergency cancellation of route. The SM must record the last number registered on the counter while taking over / handing over duty.

9. **EMERGENCY ROUTE RELEASE INICATION (WHITE)/ EMERGENCY RELEASE BUTTON (WHITE WITH RED DOT)**

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 pressing the signal cancellation button and the concerned signal button. Then the emergency route release button (White with Red Dot) positioned in the top of panel to be pressed and subsequently the concerned signal button pertaining the route is to be pressed. A "WHITE" light will glow (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 the event of normal passage of train, the route gets released automatically and the route lights disappear. 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 sealed 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.

10. **EMEGRENCY POINT OPERATION**

Emergency point operation facility is provided to operate point in the event of failure of point controlling track circuit. 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 SMs emergency point key is "IN" and no vehicle is standing on the concerned point track circuit, shall push the emergency point operation button and then operate the required point button and the point group button (Normal or Reverse). 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.

11. **BUTTON HELD ACK**

All push buttons are self-restoring type. A button held acknowledgement push button (White with Red Dot) along with a White indication 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 for normalization or otherwise inform the maintenance staff for rectification.

12. STATION MASTER'S PANEL CONTROL KEY

The panel is fitted with Station Master lock up key to prevent any unauthorized operation of the panel. The Station Master on duty is the only authorized person to operate the panel and the panel key must always remain in his personal custody vide Subsidiary Rule 3.36.03 and General Rule 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 inserting the SMs key. However the provisions of Subsidiary Rule 3.36.02 shall be followed while replacing the signals to "ON".

12.1. CRANK HANDLES

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 superintendent on duty shall personally ensure clamping and pad locking of all facing and trailing points enroute. Crank handles are interlocked with signals and interlocking system.

Normally the crank handle is locked in the RKT instrument in the location boxes provided of either end of the yard. These crank handles are for all motor operated points of the station. The CH push button Nos CH1 & CH2 and group button (White with Black Dot) are provided at the top of the panel board. Each button has two indications, viz WHITE AND RED. The WHITE 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 handles key is locked and not free for extraction from RKT. This is called "Crank Handle Key Locked Indication". The White indication, when extinguished suggests that the 'CRANK HANDLE' key is extracted from RKT. This is called "KEY OUT" indication. The key out White indication of the crank handle locks all reception and departure signals in their normal position. The crank handles are attached to the key in RKT in the end locations. The Station Master has to press CH1 & CH2 buttons and Trans button. This will enable Station superintendent to extract key from RKT, at end location and crank handle there. After completion of point work, the crank handle to be inserted in the end location RKT and transmitted to station, key IN indication will appear on panel on pressing release button in the group. The TPM after extracting the crank handle (attached to the RKT key) will operate the required points to the desired position. After the work is over, the TPM shall transmit the key back to Station Master on duty through RKT. "ON" pressing the release button on the group along with CH1 & CH2, steady WHITE light glows indicating Key "IN". The cases of failure of motor operated points should be promptly reported to the concerned Signal Maintainer/ Signal Inspector for immediate rectification. Station Master as per Operating Manual 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

After any non-signaled movement has taken place over a point/ points operated by an electric point machine, whether in the facing or trailing direction, the SM on duty shall operate point / points to "NORMAL" or " REVERSE" settings for the purpose of testing the points and after ensuring correct indications of "NORMAL" or "REVERSE" setting of points, further movement shall be permitted over the points.

12.2. 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. For route setting operation, as soon as the required points are set to the required position, the concerned signal of the route will clear and a White strip of light will appear on the entire route confirming that the route is set and locked. The signal "OFF" indication will appear on the panel. The indication turns to RED when track is occupied. When train movement is completed, WHITE route lit disappears.

12.3. SETTING OF ROUTE AND TAKING OFF DEPARTURE SIGNAL

For setting a particular route for departure of a train, all the concerned points must be set by operation of point button and group button one at a time in the desired position or by operating signal button and route button.

To take “OFF” Advanced Starter, “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 Home Signal in case of single line.

To take “OFF” 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.

12.4. TAKING OFF CALLING ON SIGNAL

Miniature Colour Light Calling on signal is provided below Up & Down, Home Signals in terms of General Rules 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 it 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 occupy 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 point push button and group button individually or by route 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 switch C1 & C2 (Red with White Dot) (as the case may be) shall be pressed simultaneously along with the concerned route button for 2-3 seconds and release. After a lapse of 120 seconds the calling on signal clears a White light glows at the concerned Calling on signal on the panel.

12.5. 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.

12.6. REPLACEMENT OF SIGNALS TO “ON”

Signals are replaced to “ON” automatically by the passage of a train past the signals. It will not be possible to reclear the signals 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.

12.7. INTERLOCKING OF SIGNAL/ POINTS

All the running line points are fitted with facing point locks in the point machine and are electrically detected by the relevant Home signal and starters. 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 superintendent’s key.

12.8. PILOTING OF TRAINS

In the event of failure of both Home 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 Station superintendent on duty personally and the points on route must be clamped and padlocked at both facing and trailing end.

Facing and corresponding trailing ends of the all motor operated points must be clamped and pad locked while piloting “IN” or “OUT” and during non-signaled- movement.

13. NON-RUNNING LINE

=== Nil ===

13.1. DESCRIPTION OF SIDING**13.1.1 PROCEDURE FOR OPERATION HOT AXLE SIDING.**

Hot Axle Siding with double entry/ Exit takes "off" from Loop Line No.1 at TMKA end and connected by each cross over with derailing switches at both ends for shunting movements. The facing points are provided with HPL and electrical detections in normal settings. The controlling keys of siding points are S1 and S2.

For performance of shunting in Hot axle siding, the SMs on duty shall initiate to press the point button No. 25 (BLACK IN COLOUR) along with group "TRANS" button at a time for extracting both the siding keys S1 & S2 from RKTs during Which period, a flashing "WHITE" indication appears and disappears after extracting the keys from RKTs. The extracted keys are to be taken and inserted in the HPL and after unlocking, the arc liver connected by rodding are to be operated for reverse setting.

Before allowing the movements, the facing points are to be clamped and padlocked.

After completion of shunting, the cross over points are to be normalized and HPL to be inserted and keys S1& S2 to be extracted from HPL. Now the key S1, S2 are to be inserted into respective RKTs and turned. The SM on duty shall press Group "RELEASE" Button along with point Button No. 25 and the steady "WHITE" KEY 'IN' indication will appear above the point button.

When the points of any route have been correctly set and relevant signal taken "OFF" "RED" indication appears indicting that concerned points are locked wither in NOMRAL OR "REVERSE" Position as the case may be.

14. VERIFICATION OF LINE CLEARANCE BY STAITON MASTER ON DUTY FOR RECEPITON OF TRAIN IN STATION YARD.

In the station yard, a route on the running line compresses of entrance, berthing and dispatch portion of the yard and this portion of the yard should be clear of any obstruction for the passage of any train or for any other movements. The Clearance of the route including overlap must be ensured by the Station Master on duty personally through panel indication of track before any movement of trains are permitted on the concerned route subject to the other conditions such as locking the points etc.

14.1 CRANK CHANDLING IN EMERGENCY OPERATION OF POINTS

Crank handles are interlocked with the Signaling and Interlocking System at this station. Crank handles which are normally locked inside the RKT instrument at the station, can be taken out only when all the signals are in the "NORMAL" position and the route is not locked for whatever reasons.

Crank handles can be released by operating common "TRANS" push button and control push button No. CH1 & CH2 simultaneously. When the key is taken out, no signal 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 Steam/ Diesel shunting engine or Tower Wagon, Indicating the occupancy of track, it is necessary that the Station superintendent on duty satisfies himself that the said vehicle has cleared the point zone track circuits by observing the track indications or the track on either side of the cross over by positively checking the "Entrance" and "Exit" track circuits are showing occupancy are clearance in accordance with the train movement.

14.3. INSTRUCTIONS REGARDING STABLING OF TRAINS ON RUNNING LINES.

When a train is stabled on a running line for duration exceeding ten hours, the use of the said running line for passing the trains "IN" "THROUGH" or "OUT" at the station shall be done with a lot of care and diligence. Station superintendent on duty shall meticulously 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 was earlier stable, the signals leading on the line shall be suspended and the S&T maintenance staff be informed for attending to this.

15. EMERGENCY OPERATIONS

The following are the instructions for emergency operations.

15.1. CANCELLAITON BUTTON AND VEEDER COUNTER

For the purpose of the emergency operation, there is an emergency route release. There is a "VEEDER COUNTER" for the purpose of the emergency operations involving operation of the emergency route release button (Provided at the left of the panel). The Station Master on duty must press the emergency route release button conforming to the section for which emergency route release is desired. An indication will appear indicating that the timer has started operation and after lapse of 120 seconds, the desired route will release provided all other conditions are favorable for route release.

15.2 The Veeder counter registers the number of such emergency release operations. Station Master 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 separate Register meant for this purpose. The detailed operational instructions are as follows.

16. EMERGENCY OPERATIOINS-CANCELLAITON OF THE LOCKING OF POINTS NOT RELEASED AFTER THE PASSAGE OF THE TRAIN FOR WHATEVER MAY BE THE 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 resource to the following emergency operations.

- a. Firstly, it must be ensured that the signal is in the "NORMAL' position.
- b. Operations as detailed in Para 9 to be followed.
- c. 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. Further operation shall be as Para 12.2.

17. LOCKING OF REALY ROOM

The relay room should be kept locked with a double lock, which can be opened only after both the keys are used. One key of the lock shall be kept with the Station Master on duty in his custody and the other with Signal Maintainer. Whenever asked, the key in the custody of Station Master shall be given to the Maintainer. After completion of work, the Maintainer will return the key to Station Master. The details of the transaction should be properly recorded in the relevant Register at the station duly signed by Station Master on duty and the Maintainer concerned.

18. MAINTENANCE OF S&T INSTALLATION &ADHERENCE TO MAINTENANCE SCHEDULES .

- 18.1 Regular maintenance of the S&T Installations, adherence to Schedules of Maintenance, testing of points, track circuits, ground frames, level crossing gates, associated interlocking functional tests is must for satisfactory working of these installations at this station.
- 18.2 The tests, checks and replacements etc. including overhauling shall confirm to the Schedules of Maintenance as indicated in the Signal Engineering Manual and also as per the current and Extant Instructions/ Circulars on the subject.

19. **PROCEDURE TO BE FOLLOWED INCASE OF FAILURE OF A SIGNAL INTERLOCKING INSTALLATION.**
- 19.1 In case of failure of any interlocking gear at the station, the Failure Report should be communicated by the Station superintendent to the Sectional Maintainer, the Section. Engineer / Signal of the section and others through a Memo as per General and subsidiary Rules 3.51.04 and 3.68.04 and documents of all such transactions.
- 19.2 **INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE.**
However, before declaring a signal as defective, the setting of the point on the route to which it applies shall be inspected by the Station superintendent on duty irrespective of the position of the buttons.
- 19.3 **RECTIFICAITON AND CHECK BEFORE RESUMING NORMAL WORKING.**
After receipt of this 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 Station Master on duty shall personally check this 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 subsidiary Rules 3.68.04 (c) & (d).
20. **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 Section Engineer/ Signal should give to the Station superintendent in writing an advance intimation about this work in terms of General and Subsidiary Rule 15.08.01.
21. **EMERGENCIES**
Notwithstanding anything contained in the aforesaid Paras when equipment is found to be defective and unsafe for passage of trains, the Signal and Telecom staff must at once suspend the working of the equipment and associated installations and issue “Suspension Memo” explaining the seriousness of the defect or damage to the interlocking installation to the Station Master and take the Station Master acknowledgement. After this, the usual practice of exchange of Disconnection Memo and Reconnection Memo can follow. The Station Master must act promptly on such messages and take adequate precaution treating the S&T installation as defective and pass trains over the affected interlocking equipments according to Extant Instructions as contained in General and Subsidiary Rules 3.77.
22. **WORKING OF POINTS-POSITION OF POINTS**
The normal position of all points is shown in the Station Working Rule Diagram and also in the panel provided in the Station Master Office.
- 22.1. All cross over points are independent points on the running line and are worked by electric point machines. The point machines have in built locking and detection arrangements. Those points are remotely controlled form the panel installed in the Station Master Office.
- 22.2. The operation and indication on the point and the route locking over them is already explained in earlier Para’s of Appendix “B2”
23. **PROCEDURE TO BE FOLLOWED IN THE CASE OF FAILURE OF SIGNALS AND POINTS AND USE OF EMERGENCY CRANK HANDLE**
- 23.1. Whenever a signal or a point becomes defective, any movement over the points on the running lines should be made after clamping and padlocking of both the facing and trailing points supervised by Station superintendent on duty personally for all trains at this station.
- 23.2 In case of failure of a signal or a point and in case the point can not be operated from the panel, the emergency crank handle which is interlocked with the interlocking system is to be extracted and the following procedure has to be observed.

- 23.3 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 the common push buttons CH1 & CH2 and TRANS BUTTON. All signals will be locked in the NORMAL position as soon as this key is released from the RKT. The Station superintendent on duty in case of point motor failure will take out the key and transmit to each end of the yard to operate the point manually by inserting crank handle on the motor.
- 23.4 When the crank handle key is removed from RKT for operation of the defective motor operated points, the responsibility for its safe custody vests with the Station superintendent on duty
- 23.5 The cases of failure of motor operated points should be properly reported to the concerned Signal Maintenance/ Section Engineer/ Signal for immediate rectification.
- 23.6 Whenever an Emergency Crank Handle is required to be used by signal officials for maintenance work or attending to failure the Signal officials for maintenance work or attending to failure the Signal official will give a Disconnection memo to the Station Master on duty and after making necessary entries in the Emergency Crank Handle Register. The Station Master 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. After completion of the work, the S&T staff will give a Reconnection Memo and return back the Emergency Crank Handle to SM on duty with due signature to that affect in the Emergency Crank Handle Register.
- 23.7 Before parting with the Emergency Crank Handle either for attending failure or for maintenance work by Signal Maintenance Officials, the Station Master on duty will ensure that the reception and departure signals are put back to "ON" position. The points for the affected line should be treated as non-interlocked. The Station Master on duty is responsible for introduction of non-interlocked working and the trains to be piloted "IN" and "OUT" duly clamping and pad locking both facing and trailing points over which the train is to pass as per General Rules 3.69 and 3.70 with relevant Subsidiary Rules. The Station Master on duty will be personally responsible for setting and locking of points for reception or dispatch of all trains.
- 23.8. The emergency Crank Handle Register is to be maintained vide Operating Manual 20.00 Note (d) by the Station Master on duty where in the particulars of the usage of the Emergency Crank Handle must be recorded.
24. **SUSPENSION OF LAST STOP SIGNALS**
When the Block Instrument is suspended with its handle in "TRAIN GOING TO" for whatever reason, the concerned Last Stop Signal Controlled by the Block Instrument must be treated as suspended and trains shall be piloted "OUT".
- 24.1. The Station Master 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 Station Master on duty before giving "LINE CLEAR" shall initiate action in accordance with the procedure prescribed in General Rules 3.61 to 3.72 and relevant Subsidiary Rules vide General Rule 3.40 (4).
- 24.2. The Station Master on duty shall not grant or ask "LINE CLEAR" if the axle counter section indicates section occupied and will treat the Block Instrument as suspended.
25. **SIGNAL LIGHTS**
The Station superintendent on duty at 00.00 hours (2nd night shift) must also ensure from panel that all the signal lights are burning properly and brightly. This fact must be recorded in the diary under a separate entry and confirmed to the section Controller on duty.
26. **CORRECTING TIME IN STATION CLOCK**
The Station Master shall set the time in the clock according to the time signal given by the Station Master Controller on duty at 16.00 hours every day according to General and Subsidiary Rules 4.01, 4.01.01, 4.01.02.
- 26.1. The Station Master on duty shall verify the visual indication of the correct setting of the required route on the panel and thereafter he shall receive and replace the emergency crank handle to its normal position locked in the RKT instruments.

27. RESETTING OF AXLE COUNTER FOR LAST VEHICLE VERIFICATION

If the indication of the axle counter panel continuous to show "RED" indication after the complete arrival of the train, the procedure for resetting the equipment is to be followed as given in 27.1.

27.1. THE PROCEDURE FOR RESETTING OF THE EQUIPMENT SHOULD BE AS FOLLOWS:

After complete arrival of train, if the axle counter of the section does not clear or Axle counter section free indication (G) does not appear in the panel, 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 Block section, resetting is to be done by both of sending end and receiving end individually. (No co-operation or permission is required from the other station).

The status of the section LVCD i.e. Clear(GREEN), occupied(RED), preparatory reset(YELLOW) and power on indications(YELLOW) are provided in the reset box.

The procedure to be followed for re-setting is as follows:-

- a. Insert SM's key, turn right and keep pressed.
- b. press reset button provided on the panel.
- c. Release SM's key and reset button.
- d. Turn left the SM's key and remove it.
- e. The system obtains preparatory reset state and preparatory reset indication(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 is to be piloted in the section to make the system normal.

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

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 normalised.

If the 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.

(P. NASKAR)
DSTE/CON/BBS

(S.K. MISHRA)
Sr. DOM/KUR

APPENDIX "C" TO THE STATION WORKING RULES OF BAGHUAPAL STATION

1. TELECOMMUNICATION

The following Telecommunication facilities are provided at this station.

- i) Telephone attached to Token Less Block Instrument at either side
- ii) The station is connected to BHC-BRAG control circuit by a telephone.
- iii) VHF set / station to station Telephone provided between both side adjacent stations
- iv). Magneto telephone provided between the Station Master's office and Gate lodge at Km 162.650.
- v) Magneto Telephone provided with both end location Box and the Station master's office.

2. FAILURE OF COMMUNICATIONS

In the event of partial failure of Telecommunication the procedure detailed below shall be followed for working of trains.

- a) Failure / Suspension of Token Less Block Instrument :
Line Clear shall be obtained on the Block Phone exchanging identification number and supported by Private Number.
- b) In the event of failure of Block Phone line clear shall be obtained on station to station Telephone / VHF Set/ Control Phone using identification Number and supported by Private Number.

- 3. In the event of failure of all the Telecommunications the train shall be worked as per SR 6.02.04 and detailed in para 9.1 of the main station working Rules.

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APPENDIX "D"

DUTIES TO BE PERFORMED BY THE STAFF AT BAGHUAPAL STATION

1. DEPUTY STATION SUPERINTENDENT.

He is the in -charge of the station. He performs day shift duty for train passing duties in turn with his assistants. He is responsible for the efficient discharge of duties devolving upon all the staff employed at the station, according to rules, safe working instructions and station working rules. 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 defects to the concerned officials. He shall satisfy himself that the Staff employed at this station are thoroughly conversant with Station Working Rules, and perform their duties correctly. It is his personal responsibility to maintain Station Working Rule, all Rule Books and Assurance Register up-to-date. He shall see that all records are properly maintained and due statements and returns are up-to-date. He shall see that the staff are civil, courteous and help full. He shall see that all station premises are kept clean and tidy and all Group "C" and "D" staff are booked for PME and Refresher course / safety camp in their due time.

His Special attention is drawn to chapter – II of General and subsidiary Rules and G.R. 5.01 to 5.08 with relevant subsidiary Rules, Chapter XXII of operating manual. He shall follow the instructions laid down in SR 3.68.01 © & (d) and S.R. 14.07.01 and para 2.09 (e) of Block working manual. He shall supervise the work of Staff and conduct surprise night inspections safety, meetings and Fire drills and report lapses of Staff working under him. He shall also ensure that the safety equipments in the Station and gate lodge as mentioned in Station working Rules are supplied in full and they are in good working order with necessary relief stock.

The Dy. SS's special attention is drawn to the GR 5.01 to 5.23 where details are indicated.

1.1. ASSURANCE REGISTER

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

No Railway Servant shall be entrusted with any duty involving the safety of the public unless the Dy SS is satisfied that the concerned staff is competent for the post. No Railway Servant unless duty examined and certified shall be allowed to work the points and signals. The Dy. Station Superintendent is responsible to see that all the staff are well conversant with the Station working Rules of the Station and there Signature obtained in the Assurance Register after he is satisfied that they have thoroughly understood the working rules of the Station. Incase of class IV staff, their signature/ thumb impression must be obtained after explaining fully about their duties and responsibility.

The Dy. Station Superintendent is personally responsible for maintaining the assurance Register and for obtaining declaration from the staff working under him. The Assurance Register must be maintained in two parts, One for group "C" staff and the other for Group "D" Staff. A duplicate Copy of the Assurance Register must be maintained and kept in the personal custody by the Dy. SS.

The declarations are to be renewed in the following cases :-

- i) Wherever 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 and over.

- 1.2 USE OF PRIVATE NUMBER BOOKS AND IDENTIFICATION NUMBER SHEETS.
Sufficient Private Number Books and Identification Number Sheets in Sealed covers shall always be kept in Stock by Dy. S.S. under Lock and Key by maintaining one register for this purpose.
- 1.3. ACCIDENTS
Accidents shall be recorded reported and immediate action shall be taken by the Dy. S.S. in accordance with the instructions laid down in the Accident manual. Whenever the Station Superintendent, 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 messages and report and follow up all safety principles without delay.
- 1.4. TESTING OF POINTS AND SIGNALS.
The Dy. S.S. 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.
2. STATION MASTER
He shall work for train passing duties and looking of Coaching returns and other statements shall be prepared and submitted by him in time.

The Station Master on duty shall record in the diary, the condition of all the running lines, sidings, the Caution Orders in force and at the time of handing over charge. These entries shall be countersigned by the Station Master coming on duty and taking over charge. This will not however relieve the Station Master of his responsibility to ensure by Physical Check, that the respective line is clear of obstruction before admission of any train on it. The Station Master on duty who makes an entry in the Train Signal register shall continue till all the pertaining to the trains are completed vide SR. 14.07.01. The Station Master is responsible for Safe reception and dispatch of trains, operation of panel, operation of Block Instruments Strictly in accordance with the procedure and rules as laid down in Chapter IV of the Block Working Manual. He is responsible for ensuring that the work is carried out in safe and proper manner. He shall report any defect or deficiency to the concerned official for early rectification. He shall not allow any unauthorized person to enter into the Station nor allow him to interfere in the Panel, and Block Instrument. He shall not leave his duty spot till relieved by a competent Railway Servant. He shall Exchange Signals with the train Staff to take action as required under rules. He shall see that Safely equipments are available in good working order. Inspection Register, Failure Register and Safely equipment chart are to be maintained up to date.

He shall promptly bring to the notice of Dy S.S. all irregularities and accidents in course of his shift duties. During the absence of Dy. S.S. the duty of Dy. S.S. will devolve on him. His Special attention is drawn to chapter II of G & SR and GR 5.01 to 5.08 with relevant SRs.

3. HANDING OVER AND TAKING OVER CHANGE.
The Dy. S.S. / S.M. on duty shall record all the movements in the diary. The condition of running lines, the caution Orders in force and the private number used last at the time of handing over charge. These entries must be checked and counter signed by the Dy S.S./ S.M. coming on duty and taking over charge. Thus will not however relieve any one of the Dy. SS/SM of his responsibility to ensure by Physical check that the nominated line is clear of all obstructions before admission of any train on it.

4. POINTS MAN/ TOKEN PORTER

He shall work under the instructions of Dy SS/SM on duty and follow the GR 2.05 to 2.11 and other relevant rules laid down in G & SR. H shall remain responsible fore.

- a). Correct Setting and locking and Crank Handling of points for reception / despatch and shunting operation.
- b). Coupling and uncoupling of Vehicles.
- c). Protection of line in an emergency.
- d). Piloting and hand signaling of trains when necessary and handing over Caution orders and / or any other line clear authorities to the Drivers and guards of the trains.
- e). Attending off side to observe safe sunning of run through trains at Stations and correct display of hand signals and ringing the Station Bell.
- f). Securing of vehicles as directed protection of vehicles on a train.
- g). Being conversant with the layout of the yard and compliance of rules relating to shunting operations.
- h). Observing General Rules 5.13 to 5.21 and relevant Subsidiary Rules during shunting.
- i). Cleaning, oiling and lighting of hand signal lamps, if required.
- j). Loading and unloading of parcels and luggage packages, Goods and Guards Boxes to and from the trains and watching the packages and other materials by properly stocking in the station premises.
- k). Cleaning and dusting off Station Master's office room, furniture and equipments.
- l). Carrying messages, call books etc where a separate call boy/ messengers are not posted.
- m). Working as fog signal man as and when required.
- n). Filling up the Fire buckets with Sand / Water
- o). Setting Train Intact Arrival Register (T/1410) signed by the Guard as and when required.
- p). Any other duties entrusted to him by the Dy SS/ SM on duty from time to time.

GENERAL

1. A set of Flags and tri-colour hand signal lamps will be part of the essential equipment of the staff while on duty. He shall not leave the station except when required by the Dy SS/ SM an duty or with his permission and shall comply with Subsidiary Rules 4.42.02 (b) (i) and (d).
2. Staff working at the station must be able to distinguish up and Down Line Clear tickets and educated in distinguishing other operational forms and documents, delivered to Drivers and Guards and must also know how and when to ring the station bell.

5. TRAFFIC GATE MAN

- i. The Gateman on duty is responsible to work under the direction of the Dy Station Superintendent / Station master on duty and for observance of the rules laid down in XVI of General and Subsidiary Rules and the Level Crossing Gate Working Rules/ Instructions.
- ii. He shall be present at the Gate as per roster and shall not leave his place of duty till relived by a competent person.
- iii. He shall observe all passing trains and exhibit hand danger signal if any unsafe or unusual conditions on a passing train is noticed by him and report to the Dy Station Supdt. / S.M on duty.
- iv. He shall promptly report to the Dy SS/ SM on duty about the defects to the gate of the level crossing or to any of the signals within his view and about any obstruction either on the Level crossing or an the track.
- v. On noticing any obstruction either on the level crossing or the track he shall remove it and if unable to do so he shall protect the obstruction.
- vi. He shall light up all Gate lamps in time and ensure that they are burning brightly throughout the night. He shall discharge any other work entrusted on him by the Dy SS/ Sm on duty.

APPENDIX “E” TO STATION WORKING RULE OF BAGHUAPAL STATION

A list of essential equipments is given below which shall be maintained in good working orders with necessary relief stock.

Sl. no.	Description	Quantity
1.	Detonators	20
2.	Hand signal lamps	04
3.	Hand Signal Flag	04 Sets.
4.	Safety chain with pad locks	06+06
5	Clamps with padlocks	04+04 04 clamps at station 04 clamps with padlocks in Up Goomty and 04 clamps with pad locks in Down Goomty
6.	Fire and Sand Buckets	5
7.	Reminder Collar	8
8.	Motor Trolley on Line Board	2
9.	Block Suspension Board	2
10	First aid Box	1
11.	Stretcher	1
12.	Fire extinguisher	2
13.	Wedges/ Skids	4

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APPENDIX “F” TO STATION WORKING RULES

FOG SIGNALLING:-

In case of thick, foggy or tempestuous weather impairing visibility, whenever it is necessary to indicate to the Driver of an approaching train the locality of a signal, the Dy.SS on duty at station shall arrange for signalling 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 Gangman and must not be substitute or casual labour but regular employees of the railway.

STATION DETONATOR REGISTER (OPT/124)

A Register regarding detonator is maintained at the station.

(a) **INSTRUCTIONS:**

1. 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. The in charge of the station shall ensure that the information maintained on the register is kept up to 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.

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