

EASTCOAST RAILWAY

WALTAIR DIVISION



STATION WORKING RULES

SRIKAKULAM ROAD

STATION

EAST COAST RAILWAY
WALTAIR DIVISION
INDEX OF SRIKAKULAM ROAD STATION

SL NO	DESCRIPTION	PAGES
1	Station Working Rules	1 to 24
2	Appendix-A	25 to 77
3	Appendix-B	78 to 106
4	Appendix-C	107
5	Appendix-D	108 to 109
6	Appendix-E	110
7	Appendix-F	111 to 122
8	Appendix-G	123 to 132

EAST COAST RALWAY

WALTAIR DIVISION

INDEX OF CORRECTION SLIPS

[illegible]

EAST COAST RAILWAY
WALTAIR DIVISION

STATION WORKING RULES OF SRIKAKULAM ROAD STATION
(BROAD GAUGE)

No.WTP/5/SWR/CHE

Date of Issue: _____

Date brought into force: _____

Ref: Railway Board's Letter No 2000/Safety (A&R) 19/36 Dated:27-10-2005

NOTE:-

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

1.0 STATION WORKING RULE DIAGRAM:

- a) Station Working Rule Diagram: SI/WRD/23043 Alt-G
- b) CSTE/E.Co.Rly/DRG No : SI/23043 Alt-G
- c) Date up to which corrected :

2 DESCRIPTION OF STATION:

SRIKAKULAM ROAD(Code: CHE) is a 'B' class station on the Howrah – Visakhapatnam Double line Electrified (BG) section of East Coast Railway on B route. It is situated at Km.748.882 from Howrah. The station is provided with VDU (Visual Display Unit) for operation of Points, signals and other controls in the SM's.

2.1 GENERAL LOCATION:

a.	Name of the Station:	:	SRIKAKULAM ROAD(Code: CHE)
b.	Class	:	'B'-Class
c.	Name of the section	:	Howrah- CHENNAI
d.	Double/Single/Multiple Line	:	Double Line
e.	Electrified/Non-Electrified	:	Electrified
f.	Gauge BG/MG/NG	:	BG
g.	Railway	:	East Coast Railway
h.	Route	:	'B'-Route
i.	Situated at	:	748.882 From HOWRAH
j.	No. of Cabins	:	Nil

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

i)	Block Station	Distance	Direction
	URLAM	10 Kms	HWH END
	DUSI	6.9 Kms	VSKP END

(P.S.BHATTACHARYYA)
DY.CSTE/ P/VSKP

(K.V.V.S.R.K.KISHORE)
SR.DOM(M)/WAT

ii) **IBH/IBS/OUT LYING SIDING/DK STATION:**

IBH signal is provided between CHE & ULM stations on both UP & DN lines at Km: 743.361 & Km: 743.000 respectively.
Details of working of IBH are given in appendix –‘F’.

iii) **AUTOMATIC SIGNALS:**

NIL

iv) **OUTLYING SIDINGS/DK STATIONS:**

Nil

2.3 **(a) BLOCK SECTION LIMITS ON EITHER SIDE OF THE STATION ON DIFFERENT DIRECTIONS :**

Between Stations	The Point from which the ‘Block Section’ Commences	The Point at which the ‘Block Section terminates
CHE-DSI UP Direction	From UP Advanced starter signal No 17 of CHE	Up to BSLB board of DSI.
CHE-DSI DN Direction	From Dn Advanced starter signal No 14 of DSI.	Up to facing point No 22A.
CHE-ULM UP Direction	a) From UP Advance starter No 11 of ULM. b) From UP IB Home signal no. 33 of ULM.	a) To a point 400M beyond UP IB Home signal no.33 of ULM. b) Up to BSLB of CHE Station.
CHE-ULM DN Direction	a) From DN Advance starter No.16 of CHE. b) From DN IB Home signal no. 30 of CHE.	a) To a point 400M beyond DN IB Home signal no. 30 of CHE. b) Up to BSLB of ULM Station.

(b) Station limits: DN distant to UP Distant signal.

(c) Station section:

UP Line: BSLB to UP Advanced starter.

DN Line: Outermost point no. 22A to DN Advanced starter.

2.4 **GRADIENTS WITHIN STATION LIMITS:
TOWARDS DSI END**

From	To	Inter Distance	Gradient
CSB	CH: 823.09M	823.09 M	1 in 803.7 Falling.
CH: 823.09 M	CH 1502.994 M	679.904 M	1 in 2186 Falling

CH 1502.994 M	CH 1767.24 M	264.246 M	1 in 332 Falling.
CH 1767.24 M	CH 2065.99 M	298.75 M	1 in 250 Falling.
CH 2065.99 M	Into Section	---	1 in 300 Falling

TOWARDS ULM END

From	To	Inter Distance	Gradient
CSB	CH: 44.80 M	44.8 M	1 In 803.7 R for L.No 4&5
	CH 135.63 M	90.83	Level for L. No 4&5
CH: 44.80 M	CH. 135.63 M	90.83	Level for L. No 4&5
	CH 157.58 M	21.95	Level on 1,2 & 3
CH; 135.63 M	CH.157.58 M	21.95	1in 400 Falling for L. No 1,2&3.
	CH 547.480 M	389.9	1in 400 Falling for L. No 4&5
CH 157.58 M	CH.547.480 M	389.9	1in 400 Falling for L. No 1,2&3
CH.547.480 M	CH.950.990 M	403.51	1 in 200 Falling for Up & Dn lines.
CH.950.990 M	CH 1587.290 M	636.3	1in700 Raising for Up & Dn lines
CH 1587.290 M	CH 1739.690 M	152.4	Level for Up & Dn lines.
CH 1739.690 M	In to section	---	1In165 Falling for Up & Dn lines..

C) IBS ZONE:

i) TOWARDS (DN LINE):

From km	To km	Stretch	Gradient
From section	744.56	--- ----	1 in 280 falling
744.56	744.14	420M	Level
744.14	743.44	700M	1 in 200 Falling.
743.44	742.09	1350M	Level
742.09	741.92	170M	1 in 500 Falling
741.92	Into section	---	Level

ii) TOWARDS (UP LINE):

From km	To km	Stretch	Gradient
From section	741.260	---	1 in 400 falling
741.260	742.01	821M	Level
742.01	743.51	687M	1 in 1000 raising
743.51	744.16	1223M	1 in 480 raising
744.16	744.61		Level
744.61	Into section	---	1 in 440 falling

2.5 LAYOUT:

This station is provided with free running with 25 KV AC traction

(P.S.BHATTACHARYYA)
DY.CSTE/ P/VSKP

(K.V.V.S.R.K.KISHORE)
SR.DOM(M)/WAT

Line No.	Description	Level of Platform
1	Down Loop	Island platform High level (601 Mts Long)
2	Down Main line.	
3	Up Main line	Island platform High level (600 x 11.58 Mts)
4	Common loop	
5	Common Goods loop	Rail level goods platform (753.5 mts x 15.24 mts)

2.5.1 **RUNNING LINES, DIRECTION OF MOVEMENT & HOLDING CAPACITY IN CSL:** **RUNNING LINES**

The station yard consisting of five running lines Dn loop, Dn Main, Up Main Common Loop and Common goods loop.

DIRECTION OF TRAFFIC:

The trains coming from ULM and proceeding towards DSI end are Up trains and the trains coming from DSI and proceeding towards ULM end are Down trains.

HOLDING CAPACITIES IN CSL:

Line No.1	Dn Loop	764 M	(Electrified).	From starter to SB
Line No.2	Dn Main	805M	(Electrified).	From starter to SB
Line No.3	Up Main	1285 M	(Electrified).	From starter to SB
Line No.4	Common Loop	967 M	(Electrified).	From starter to Starter
Line No.5	Common Goods loop	1035 M	(Electrified).	From starter to Starter

2.5.2 **NON RUNNING LINES:**

- i) Engineering siding (towards ULM end)
An engineering siding towards ULM end is provided with a CSL of 62 M (SH to SB). It is an extension of overrun line of line no. 5 and is isolated by derailing switch. SH5 shunt signal is provided from Engg. Siding.
- ii) Tower wagon siding:
Tower wagon siding takes off from line no. 1 towards ULM end with a CSL of 30M. It is isolated by a derailing switch 33A. SH-7 is provided from tower wagon siding.

2.5.3 **ANY SPECIAL FEATURES IN THE LAYOUT**

NIL

2.6 **LEVEL CROSSINGS**

SN	LC Gate No. with Classification and Department	Between stations with Location Km.	Type	Normal position	Whether interlocked	Provision of Telephone
1	ML-428 “C” Class Engineering	CHE-DSI 751/13-15	Lifting barrier	Close to Road traffic	Non- Interlocked	Provided
2	ML-426 “A” Class Engineering	CHE-ULM 748/5-7	Lifting barrier	Open to Road traffic	Interlocked	Provided
3	ML-425 “C” Class Engineering	CHE-ULM 746/15-17	Lifting barrier	Closed to Road traffic	Non- Interlocked	Provided
4	ML-424 “C” Class Engineering	CHE-ULM 74523-25	Lifting barrier	Closed to Road traffic	Non- Interlocked	Provided

3 **SYSTEM AND MEANS OF WORKING**

Trains are worked under Absolute Block System in accordance with GR Chapter VIII Rule No 8.01(1)(a)&(b), 8.01(2)(b), 8.03(1), Chapter-III Rule No 3.07(4)(5), 3.08(4) Chapter-XIV and BWM Chapter V.

SGE type Double Line Lock and Block Instruments with Block telephones are provided for CHE-ULM & CHE-DSI sections. The Block Instruments shall be operated by Station Master on duty and keys of the Block Instruments shall remain under personal custody of SM on duty. The authority for the locopilot to proceed is taking ‘OFF’ of the last stop signal. The Block Instruments are of non co-operative. [Refer Chapter XIV of GR & SRs, Chapter –V of Block Working Manual and GR 14.08(a)]

4 **SYSTEM OF SIGNALLING AND INTERLOCKING**

4.1 This Station is provided with Standard-II(R) interlocking with Multiple Aspect Colour Light Signalling having maximum equipment of signals. The aspects and indications of the MACLS is governed by GR.3.08 (4)(b)

The Station is provided with centrally operated Electronic Interlocking (EI) and having no end cabins. All signals and points are electrically operated from the VDU provided in SM’s Office. A stand by VDU is also provided to switch over the system in case of failure of working VDU. Calling-on signals are provided below Home signals (i.e. in both Up & Down directions) as per GR.3.13 (1)(b), (2)(3)(4) & (6) (b). Central VDU is provided in the Station Master’s office to electrically control all signals, points, siding, Gate key, etc., The VDU is provided with SM’s key user name and password which shall always remain with the Station Master on duty in terms of SR 3.36.03(a).

NOTE: No conventional Operating-cum indication Panel is provided at this station. All operation and Indications shall be carried out through VDU only .The details of operation from VDU is given under APPENDIX-‘B’

a) **CRANK HANDLE**

When any point fails to operate normally by the Route Setting operation through VDU it is inevitable to operate the points with crank handle. The SM on duty shall personally ensure clamping and padlocking of all facing and trailing points on the route. Crank handles are interlocked with signals and interlocking system. When points become defective, the signals controlling these points shall be considered defective and vice-versa and the procedure for use of crank handle for motor operated points shall be followed as per operating manual 2015 para 2.19.

<u>CRANK HANDLE</u>	<u>CONTROL POINTS</u>
CH-1	21 A/B
CH-2	22 A/B
CH-3	23A/B, 24 A/B,
CH-4	25 A/B, 26 A/B
CH-5	27 A/B, 28 A/B, 29 A/B
CH-6	33A/B

These crank handles are interlocked with the signaling and interlocking system at this station and normally locked inside the RKT instrument at the respective Crank Handles Locations. Crank handle keys can be taken out only when all signals on that route are not taken 'OFF' and the route is not locked for whatever the reasons may be. Crank Handle can be released by SM by tracking the mouse pointer on to the concerned crank handle button icon. This will enable two options to be displayed on the menu i.e. Crank handle Transmit control and Crank Handle Release control. To release the crank handle key, SM should click the Crank handle 'TRANSMIT' control option. After transmission the KEY IN indication will start flashing, now the key can be extracted from the EKT. After extracting the key from the EKT, the KEY IN indication will disappear. When the keys are taken out no signal can be taken "OFF" over the particular route on the points nominated by that Crank Handle. This key can be electrically transmitted at both ends locations of the yard for manual operation of the defective points.

SM on duty shall personally ensure the clamping and padlocking of all facing and trailing points. An emergency Crank handle register shall be maintained by the SM on duty at the station as per Para 2.19(j) of the Operating Manual 2015. Correct setting, clamping and padlocking of the points devolve on the SM on duty. (Details of use of Crank Handle as per Appendix-'B').

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

b) **TAKING OFF CALLING-ON SIGNAL**

Miniature colour light Calling-on signal is provided below the Home signals in terms of GR.3.13(6)(b). A Calling-on signal shows no light in the 'ON' position and White light when taken "OFF". A calling-on signal, will be taken 'OFF' for reception of a train when the Home signal above it cannot be taken 'OFF' due to

failure or any other reason or for admission of train on blocked line.

To take “OFF” Calling-on signal the train must come to a stop at the foot of the Home signal, occupying the track circuit in rear of the signal. When a train occupies the track circuit a RED light strip will appear on the VDU. The particular route on which train is intended to be received shall be set by tracking the pointer in VDU on to the signal below which the calling on signal is provided. Various options in terms of the total routes over which the signal will lead to will appear on the menu. Then the SM must drag the pointer and click over the particular Calling on route amongst the various options displayed in the menu by the left button of the mouse as a result of which the Calling-on signal will blink for 60 seconds. After a lapse of 60 seconds, the Calling-on signal clears i.e., a White light glows at the concerned calling-on signal on the VDU. Every such operation has to be recorded by the on duty SM along with the reasons to do so. The calling-on signal route can be released after complete arrival of the train or by emergency cancellation.

NOTE:

SM on duty to ensure that no through signals are given while receiving a train on Calling-on.

c) **SHUNT SIGNALS**

Back shunt signals SH 3A/B/C/D/E at HWH end, SH 4A/B/C are provided at VSKP end of the yard for shunting purpose. SH8 and SH12 are provided below down starter of L.No.1 and 5 respectively and independent SH5 and SH7 for Engineering siding and Tower wagon siding respectively.

d) **TRACK CIRCUITS:**

All five berthing lines are track circuited.

In addition there are short length track circuits in advance of Advanced Starter Signals and Home signal in both the directions are also provided. For Calling-on signals (91M Rail length) track circuits are also provided in rear of the Home signals in both directions. From last trailing point/fouling mark in either side of Yard to Advanced Starter Signals are also track circuited (i.e. 17AT and 12AT in Up and Down directions respectively). Indications for the above track circuits/Axle Counters are available on VDU at SM's office. White indication on the VDU indicates track clear and Red light indicates track occupied condition.

e) **AXLE COUNTER:**

Entire Block Section between CHE-DSI and CHE-ULM are provided with Digital axle counter.

For section CHE-DSI A pair of Digital axle counter is provided between CHE-DSI (UP LVV CHE-DSI) on UP line, one just beyond UP advanced starter No.17 of

CHE and another one on 1T2 track circuit beyond UP Home Signal No.1 of DSI station. Similarly a pair of Digital axle counter is provided between CHE-DSI (DN LVV CHE-DSI) on DN line, one beyond DN Advanced starter signal No.12 of DSI and another in 2T2 track circuit beyond DN Home signal of CHE (i.e. at Facing Point No. 22A).

For SEC: CHE-ULM,

A pair of digital axle counter is provided between **CHE-ULM** on DN line, one just beyond DN advanced starter No.16 of CHE and another one just beyond 400mts from the DN IB Home signal No. 30 of CHE for proving IB section and another pair of digital axle counter near DN IB home signal no. 30 of CHE and another one just near BSLB of ULM station for proving LVV section between CHE-ULM. A pair of digital axle counter is provided between **CHE-ULM** on UP line, one just beyond UP advanced starter No.11 of ULM and another one just beyond 400mts from the UP IB Home signal No. 33 of ULM for proving IB section and another pair of digital axle counter near UP IB home signal no. 33 of ULM and another one just near BSLB of CHE station for proving LVV section between CHE-ULM.

The position of the Block section whether cleared or occupied are reflected in the VDU provided in the Station Master's office which shows 'GREEN' when the Block Section is clear and 'RED' when occupied. Whenever a train enters in to the Block Section, "Block Section Clear" indication 'GREEN' for the particular block section disappears and 'RED' indication appears.

After complete arrival of the train the 'RED' indication will disappear and 'GREEN' indication will appear. 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 the particular section and necessary action as per GR.14.13 is to be followed. The axle counters are interlocked with the respective block instruments for that section. If axle counter fails, Advanced Starter signal shall not assume OFF and the concerned instrument shall remain locked in last operated position.

A resetting arrangement for resumption of the system in case of failure of axle counter has been provided in the SM office of the adjacent Block stations after being assured by both the SM that the last vehicle has arrived complete at the receiving station by exchanging Private Number then resetting to be complied with. (Details of resetting procedure given in APPENDIX-'B' under para 5.2 of this SWR).

In case of failure of analog Axle Counter the re-setting of axle counter must be done as per the procedure given in Appendix-"B" under para 5.1 of this SWR. In the event of failure of Axle Counter/ Track circuit the clearance of loop lines and concerned point zone and main lines will be ensured by physical check by the SM on duty and train shall be admitted as per GR.3.69 and SR there to.

NOTE:

Before taking off reception and dispatch signals for Up and Down directions the SM on duty shall ensure that the entire route including overlap and berthing portion is clear of all obstructions by observing the Track indication/Axle counter indication. The indication of track /Axle counter will exhibit Red Light when track is occupied

and White light when track is clear. There will be no track indication when any route is not set.

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

Relay room is provided with two independent locks. The key of one lock shall be in the personnel custody of Station Master on duty and the key of other lock shall be in the custody of S&T Maintainer. In the event of necessity such as for attending failure, or regular maintenance, on being requisitioned by S&T maintainer, SM shall hand over the key to the Maintainer with proper acknowledgement in the Relay room key register. On completion of the work, maintainer shall lock the relay room by using both the keys separately and designated key should be handed over to the Station Master. The details of the transaction is to be properly recorded in the Relay room key register maintained at the station and duly signed by the SM and Maintainer respectively vide OM 2015 para no. 13.15.

4.3 POWER SUPPLY

- i) Two changeover switches are provided in the Station Master's Office with the three power supplies viz., Up AT, Down AT and Local, for changing the switches to the required supply position.
- ii) Normally the change over switches will be kept towards AT supply position. Whenever power block is to be given on any of the lines, the on duty SM must ascertain that power is available on the other AT.

Eg: If power block is to be given on the Up line, Down AT must be available and vice-versa.

- iii) In case of failure of one of the AT supply without any power block, the on duty SM has to check whether the MCB in the cable box on AT mast has tripped or melting of DO fuse on 25 KV side. In case of tripping of MCB, the SM on duty will set the MCB in ON position. If the MCB is tripping even after resetting, no attempt shall be made to hold it by any other mean and a message shall be given to AEE(Genl), SSE/ELG and Electrical General Controller. In case of melting of 25 KV DO fuse of AT also, necessary message shall be given to AEE(TRD), SSE/PSI and CTPC for prompt rectification. In case of failure of both AT supplies, the Local supply shall be utilized by operating the switch.
- iv) For IPS system that provides to EI auto-change over has not been provided. There is a remote monitoring SM box provided at the station to monitor the health of IPS.

REMOTE MONITORING SM BOX:

Remote monitoring SM Box gives alarm to the ASM for the following fault conditions:-

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

5 **TELECOMMUNICATIONS:**

- a) The Station is connected to VSKP -PSA Main line Control Circuit.
- b) Telephone attached to SGE type Lock and Block Instruments for sections CHE-ULM and CHE-DSI.
- c) Railway Auto telephone is provided at the station.
- d) Hot line telephone communication is provided between CHE-ULM and CHE- DSI stations.
- e) Telephone communication is provided between Station Master and Up CH locations and to Dn CH Locations.
- f) Telephone attached to L.C.Gates ML-424, ML-425, ML-426 & ML-428.
- g) The station is connected to VSKP – PSA traction power control circuit.
- h) The station is connected to VSKP – PSA traction Loco control circuit.
- i) The station is provided with BSNL Telephone.
- j) VHF set is provided at the station.
- k) Magneto phone is provided on the post of DN IB home signal at KM: 743.00.

5.1 **PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF COMMUNICATION**

- i) In the event of failure of partial communication between Block stations line clear transactions shall be made in order of priorities on stipulated in SR 6.02.06.
- ii) In the event of total failure of communications between Block station line clear transactions shall be made as per SR 6.02.03.
- iii) In the event of single line working on double line section introduced during total failure of communications trans shall pass as per stipulation given under SR 6.02.02.
- iv) When telephone communication with L.C. Gates failed the same shall be intimated to the SM at the other end of the Block section concerned .All trains entering such Block section shall be issued with a caution order to the effect.

6 SYSTEM OF TRAIN WORKING:

The movement of trains is regulated by section controller on duty whose orders shall be complied with provided they do not contravene any provisions of General Rules, Subsidiary Rules, Station Working Rules, Block working manual and any other safe working instructions issued from time to time.

In the event of suspension of control working the SS/SM on duty shall work independently in conjugation with the SS/SM of adjoining Block Stations and shall be responsible for reception and dispatch of trains and to ensure that there is no undue delay to train operation in general.

6.1 DUTIES OF TRAIN WORKING STAFF IN EACH SHIFT:

COMPLEMENT OF STAFF

SMR	1
SS/SM	1
TPM/TP	1

NOTE: The above staff shall work as per roster issued from time to time by Divisional Railway Manager (P) and these rosters shall be conspicuously displayed in the Station Supdt's office and in Gate lodge for traffic gate man (details duties are given in APPENDIX-'D').

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

The SS/SM on duty is responsible to ascertain the clearance of the nominated line between first facing point and advanced starter signal in each direction.

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 SMR under locked condition. A register shall be maintained for this purpose.

6.1.3 ASSURANCE OF THE STAFF IN THE ASSURANCE REGISTER

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

6.2 CONDITIONS FOR GRANTING LINE CLEAR

Before granting line clear for a train the SM on duty shall ensure that:

- i) The whole of the last preceding train has arrived completely.
- ii) All necessary signals have been put back to 'ON' behind the said train.
- iii) All signal lights pertaining to the train are glowing.
[Ref GR.8.01 (1) (a) (b) and 8.01(2) (b) and 8.03 (1) (a) (b) & c (ii) SR 3.42.05 & SR 3.68.05]

For UP Trains the line clear can be given after ensuring that

- i) Whole of the last preceding UP train has arrived completely.
- ii) Up home signal is put back to ON.
- iii) Line is clear upto BSLB.

For DN Trains the line clear can be given after ensuring that

- i) Whole of the last preceding DN train has arrived completely.
- ii) DN home signal no. 2A/B/C is put back to ON.
- iii) Line is clear upto facing point no. 22A.
- iv) LC gates ML-425 & ML-426 to be closed.

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

6.2.1.1 SETTING OF POINTS AGAINST BLOCK LINE

When a running line is blocked by stabled load wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train, the points in rear shall be set against the blocked line except when shunting or any other movement is required to be done on that line. [Refer SR 3.51.06(a)].

If all the lines at a station happen to be blocked, when line clear has been granted to a train, the point should be set for the line occupied by a stabled load or a Goods train. [Refer GR 3.36.03(b) 5.04.01 & SR. 3.51.06 (b)].

The above precautions shall be taken in addition to the observance of other precautions. [Refer SR 5.04.01 & SR 5.23.01].

6.2.1.2 RECEPTION OF A TRAIN ON BLOCKED LINE

In the event of necessary to admit a train on an obstructed line the use of Calling ON signal may be resorted to vide GR 5.09 or in the event of failure of Calling ON signal, such train shall be admitted on the written authority on Form T/509 in terms of SR 5.09.01. However, in both the cases above, the locopilot shall be advised of the fact that his train is admitted on obstructed line. In such case the precaution given in GR 5.09 and SRs there to shall be observed scrupulously.

6.2.1.3 RECEPTION OF TRAIN ON NON-SIGNALLED LINE

Nil

6.2.1.4 DESPATCH OF TRAIN FROM NON-SIGNALLED LINE.

Nil

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

Nil

6.2.1.6 ANY OTHER SPECIAL CONDITIONS SHOULD BE MENTIONED GIVING REFERENCE TO THE G & SR.

A) Special Instructions: NIL

B) Special Restrictions: NIL

6.3 CONDITIONS FOR TAKING “OFF” APPROACH SIGNALS:-

The SM on duty shall nominate a clear line not only up to the starter but also for an adequate distance beyond it for reception of trains. [Refer GR 3.07(4)(5), 3.08(4)(b) 3.36, 3.38, 3.40, 4.17 and SR 3.36. 01, 3.36.02, 3.36.04, 3.40.01, 3.40.02, 3.47.01, 4.17.02, and Block Working Manual]

6.3(a) ADEQUATE DISTANCE:

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

FOR UP TRAINS:-		
Line number	From	To
3 (UP Main)	UP main line Starter No.15	UP Advanced Starter signal No.17
4 (Common Loop)	UP loop line Starter No.13	UP Advanced Starter signal No.17 or up to End of over run line
5 (Common Goods Loop)	UP loop line Starter No.11	UP Advanced Starter signal No.17 or up to End of over run line
FOR DN TRAINS:-		
Line number	From	To
1 (DN Loop)	DN Loop line Starter No.8	DN Advanced Starter signal No.16 or up to End of over run line
2 (UP Loop)	DN Main line Starter No.14	DN Advanced Starter signal No.16

4 (Common Loop)	DN Common loop line Starter No.10	DN Advanced Starter signal No.16 or up to End of DS 25.
5 (Goods Common Loop)	DN goods Common loop line Starter No.10	DN Advanced Starter signal No.16 or up to End of DS 29.

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

If in emergency a reception signal has to be put back to ON position when a train is approaching it, the route over which the train would pass shall not be altered until the train has come to a stand unless the route attention is inevitable to arrest an accident vide SR 3.36.02(a).

If, in emergency a departure signal has to be put back to ON position SR 3.36.02(b) is to be followed.

6.4 **SIMULTANEOUS RECEPTION/DESPATCH, CROSSING AND PRECEDANCE OF TRAINS:**

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

1.	Reception and/or dispatch of a down train on Line no.1 or.2.	And	Reception and/or dispatch of an UP train on Line no.3 or 4 or 5.
2.	Reception of a Down train on Line No. 1 or 5 (setting to over run line)	And	Dispatch of another DN train from Line No.2.
3.	Reception of an UP train on L/5 (setting to over run line).	And	Dispatch of another UP train from L/4 or 3.
4.	Reception of an Up train on line No.4 (Setting to over run line)	And	Dispatch of another up train from L/3.

6.5 **COMPLETE ARRIVAL OF TRAINS:**

The entire block section between CHE-ULM and CHE-DSI on both Up and Down Lines are monitored by axle counter system and the position of the block section whether ‘Occupied’ or ‘Clear’ is indicated on VDU at SM’s office. As soon as train enters in to that block section the RED indication appears on VDU. After whole train clears the block section YELLOW indication appears on the VDU. This confirms the complete arrival of train and the SM on duty shall give ‘Train Out of Block Section’ report on seeing the section clear indication YELLOW on the VDU.

In case of failure of Axle counter the 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 train. For through passing train the SM on duty shall satisfy himself the complete arrival of the train by verification of the Last Vehicle Indicator vide SR 4.16.05 that the train arrived complete.

In case a train passes incomplete, action shall be taken as per SR.4.17.02, he “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. Train passing on adjacent line shall be stopped and Guard and locopilot shall be issued with caution Order to proceed cautiously and stop short of any obstruction as per SR. 4.17.03. On occasions when motor trolley follows a train the points shall not be operated until the following motor trolley is admitted on the same line. In the event of motor trolley is delayed in the section the SM on duty shall take action in terms of SR.15.25.03(b)(vi).

6.6 DESPATCH OF TRAINS:

To dispatch a train, the Station master on duty having obtained line clear for that train, shall set the route for the outgoing train correctly and satisfy himself by observing the visual indication on the VDU. He shall suspend all non-isolated shunting and the Station Master will ensure that the Level crossing Gate is closed against road traffic and then shall take “OFF” the concerned route starter and advanced starter signal. The ‘OFF’ aspect of the route starter and advanced starter is the authority to proceed into the block section. [Refer GR 3.38, 3.42, SR 3.36.04(b), 3.42.01(a), 3.42.04 and BWM 2.07.5(a)]

The Station Master on duty shall watch the safe passage of the train with its last vehicle indicator. After the train passes the advanced starter complete, he shall send the train entering block section signal to the station in advance. If a train worked without Guard or Brake Van the instruction laid down in Subsidiary Rule shall be followed. The interlocked level crossing gate shall remain closed against road traffic for dispatch of trains. [Refer SR.4.23.02 & 4.25.02].

6.7 TRAINS RUNNING THROUGH:

The procedure detailed in Para 6.4, 6.5 shall be observed. The Station Master is responsible to observe/watch the condition of the vehicles on a passing train and shall wave green hand signal horizontally until any thing wrong is noticed on train. For this purpose the Station Master on duty shall stand in such a position that he sees a clear view of the passing train and that his hand signals can clearly be seen by the locopilot and Guard of the train.

He shall also depute the TPM on duty to the other side, for passing the train. The TPM on duty shall wave Green hand signal horizontally. He shall show danger hand signal if he notices anything is wrong and reports the same to the SM on duty

The Station Master on duty is responsible to see that a train passes complete with its last vehicle indicator. If a train passes without last vehicle indicator or its authorized substitute, action shall be taken as per General and Subsidiary Rule. [Ref GR 3.40,

3.42, 4.17, 4.42,& SR 4.42.02 (b) (i) ,(ii), (iii),c & (d)]

6.8 WORKING IN CASE OF FAILURE:

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

A TRACK CIRCUITS:

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

B AXLE COUNTER:

If the axle counter fails between the block sections, resetting procedure will be adopted as per para no. 27 (APP-B). if the axle counter indication does not appear 'Green & continues to show 'RED' condition after resetting, the concerned block section shall be suspended & failure intimation to be given to sectional signal Maintainer /JE/SE (signal) for rectification.

C BLOCK INSTRUMENTS

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

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

D RECEPTION OF TRAIN ON OBSTRUCTED LINE:

In the event of necessary to admit a train on an obstructed line the use of Calling ON signal may be resorted to vide GR 5.09 or in the event of failure of Calling ON signal, such train shall be admitted on the written authority on Form T/509 in terms of SR 5.09.01. However, in both the cases above, the locopilot shall be advised of the fact that his train is admitted on obstructed line. In such case the precaution given in GR 5.09 and SRs there to shall be observed scrupulously.

E RECEPTION OF A TRAIN ON NON-SIGNALLED LINE:

Refer GR 5.10 and SR's there to.

F DEFECTIVE SIGNALS:

When signals become defective, the procedure laid down in GR & SR shall be followed. A signal in the OFF position is the final indication that the points are correctly set for the route for which it applies and if it is found impossible to take OFF a signal, the setting of points on the route to which it applies shall be

inspected by the Station Master on duty before the signal is declared as defective irrespective of what is indicated by the position of the route, [Refer GR 3.68 to 3.71, 3.80, 3.81 and SR 3.68.01 (c)].

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

G INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE:

However, before declaring a signal is defective, the setting of the point on the route to which it applies shall be inspected by the Station Master irrespective of the position of the switches point laid down in GR with relevant SRs shall be followed. [Refer GR 3.68, 3.70 & SR 3.77.01(b)]

Initiate action in accordance with the procedure prescribed in GR and relevant Subsidiary Rules there to. [Refer GR 3.49(4) and 3.68, 3.77]

H DEFECTIVE INTERLOCKING

When interlocking becomes defective the SM on duty shall personally ensure the correct setting, clamping and padlocking of points for admission of train. [Refer SR 3.69.03(b) (i)].

I DEFECTIVE/DAMAGED POINTS

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

CRANK HANDLE

CH-1
CH-2
CH-3
CH-4
CH-5
CH-6

CONTROL POINTS

21 A/B
22 A/B
23A/B, 24 A/B,
25 A/B, 26 A/B
27 A/B, 28A/B, 29 A/B
33 A/B

These crank handle accessible keys are interlocked with the signaling and interlocking system at this station and normally locked inside the RKT instrument at the respective Crank Handles Locations. Crank handle accessible keys can be taken out only when all the relevant signals on the route are in Normal Position and the route is not locked for whatever the reason may be. Crank Handle accessible

keys can be released by SM by tracking the mouse pointer on to the concerned crank handle button icon. This will enable two options to be displayed on the menu i.e. Crank handle Transmit Control and Crank Handle Release Control. To release the crank handle accessible key, SM should click the Crank handle 'TRANSMIT' control option. When the keys are taken out no signal can be taken "OFF" over the particular route on the points nominated by that Crank Handle. This key can be electrically transmitted at both locations of the yard for manual operation of the defective points.

SM on duty shall personally ensure the clamping and padlocking of all facing and trailing points. An emergency Crank handle register shall be maintained by the SM on duty at the station as per Para 13.16 of the Operating Manual, 2015. Correct setting clamping and padlocking of the points devolve on the SM on duty. (Details of use of Crank Handle as per Appendix-'B').

The failures of the motor point should be promptly reported to the concerned signal maintainer/signal inspector for immediate rectification.

J PILOTING OF TRAINS IN TO STATION YARD.

(a) Whenever a home signal is defective, station master on duty shall advise the station in rear to issue written authority on Form T/369(1) and the procedure laid down in SR 3.69.02(a) and SR 3.64.05(c) shall be followed for piloting IN of a train.

Whenever a home signal has become defective and the station in rear have not been advised to issue written authority on Form T/369(1) the following procedure shall be followed for Piloting IN of a train vide SR 3.69.03.

The SM on duty shall nominate one clear line for admission of an incoming train. He shall then arrange to set the required points for correct route by means of crank handling the points, clamp and padlock the nominated route points including trailing points. He shall ensure closing of L.C.Gates if any against road traffic on the route for the admission of a train. After compliance of above procedure, the SM on duty shall then handed over the written authority T/369(3b) to the token porter for piloting the train from the defective home signal. While going to the home signal, the TP will satisfy himself that the points have been correctly set, clamped and padlocked. After the train has been brought to a dead stop at the home signal, TP shall handed over the pilot memo to the locopilot, board the engine and display proceed hand signal to pass the defective Home signal in defective position.

NOTE :-

1. The SM on duty shall personally supervise the correct setting, clamping and padlocking of the facing end and trailing end points and clearance on the nominated route for admission of trains.
2. The keys of padlocks of the clamps put on the points on the route for Piloting IN or piloting out shall be in the personal custody of the SM on duty.

K PILOTING OF TRAINS-OUT OF STATION YARD.

When starter signal has become defective, He shall then arrange to set the required points for correct route by means of crank handling the points, clamp and padlock the nominated route points including trailing points. He shall ensure closing of L.C.Gates if any against road traffic on the route for the dispatch of a train. After compliance of above procedure, the SM on duty shall then handed over the written authority T/369(3b) to the token porter for piloting the train from the defective starter signal. Token porter shall handed over the pilot memo T/369(3b) to the locopilot of the train and give proceed and signals at the foot of the defective starter signal vide SR 3.70.01. In case the advanced starter signal has become defective, such signal shall be passed on the written authority on the Form 369 (3b). Proceed hand signal shall be displayed only when the advanced starter protect any points vide SR 3.70.02. Token porter shall handed over the pilot memo on Form T/369(3b) to the locopilot after the train stopped.

6.9 PROVISIONS FOR WORKING OF TROLLIES/ MOTOR TROLLIES/MATERIAL LORRIES ETC

Motor trolleys shall be worked as per GR 15.25 and SRs there to and BWM 5.11(2), 5.12, 5.13 and 5.14(2)(b). Material Lorries shall be worked in accordance with GR.15.27 and SRs there to and BWM 5.11(2), 5.13 and 5.13(2)(b). Trolleys, Motor Trolleys, Lorries which are not insulated shall not be allowed to run except on Line clear.

- i) Motor Trolleys/Tower Wagon/material Lorries are not likely to actuate the Axle Counter correctly.
- ii) In all other respects the Working of a light motor trolley shall conform to the rules laid down for ordinary trolleys while running without block protection and to those laid down for motor trolleys while running under block protection or following another light motor trolley.

7.0 BLOCKING OF THE LINES:

Whenever a running line is blocked either by loose vehicles or by stabling train or by a train which is to cross or give precedence to another train, the points at either end should immediately be set against the blocked line except during shunting movement. 'Line Block' is to be activated on VDU by Dy. SS/SM on duty following procedures as laid down in para no. (Appendix-'B' Item No 4.4, 4.4.1, 4.4.2). A clear remark in 'RED' ink shall be made immediately in the train signal register and a record shall be made in the Station Master's diary also. Stable load register is also to be maintained. The stable load or loose vehicles are to be secured to prevent rolling down of vehicles. [Refer SR 3.36.3(b), GR 5.23, SR 5.04.01(a) and SR 5.23.01(a)]

A SECURING OF VEHICLES: -

As far as practical, loose vehicle shall not be allowed to stand on the running line. However under unavoidable circumstances, if it is necessary to detach vehicle from

a train or to stable a train and leave them standing on the running line, the SM on duty shall be responsible to secure the vehicle/stable loads to prevent rolling down of vehicles and arrest obstruction and fouling.

NOTE

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

8 SHUNTING

GENERAL PRECAUTIONS

- i) The rules laid down in GR 3.46, 3.52 to 3.56, 5.13 to 5.23, 8.05(2) (3), 8.06 and 8.14, 8.15 (c) with relevant SRs and OM 7.01, 7.07 and 7.08 shall be observed. All shunt moment shall be supervised by Guard/SS/SM, point man on duty vide SR 5.13.03 as the case may be.

In the event of any non-signaled movement has taken place, the S.S/SM. on duty shall ensure physical verification of the clearance of the crossover points.

8.2 SHUNTING IN FACE OF AN APPROACHING TRAIN:

Not applicable.

8.3 PROHIBITION OF SHUNTING SPECIAL FEATURES IF ANY:

- a) Hand shunting /Fly shunting is prohibited at both ends of the yard.
- b) While shunting towards ULM end on DN line, engine to be attached towards falling gradient i.e., towards ULM.

8.4 SHUNTING ON SINGLE LINE:

Not applicable.

8.5 SHUNTING ON DOUBLE LINE:

Shunting on double line governed by GR 8.05(2) & 3, 8.06, 8.14, 8.15, together with relevant SRs

- i) BLOCK BACK:- In the event of necessary to perform shunting in the Block section in rear BWM 5.15(1) (B) shall be followed.
- ii) BLOCK FORWARD:- In the event of necessary to perform shunting in the Block section in advance BWM 5.15(2) (B) shall be followed.

Note:-

- a) Shunting shall not be permitted in block section (i.e., in the block section in rear) unless it is clear and is blocked back.
- b) Shunting shall not be permitted in block section in advance unless it is clear and is block forward.
- c) When line clear is been given, no shunting shall be permitted in the block section rear vide GR. 8.05[2].
- iii) FOLLOWING A TRAIN TRAVELLING AWAY:-Shunting of a train in rear of traveling away train shall be governed by GR 8.06 (3)
- vi) (DURING FAILURE OF BLOCK INSTRUMENT:- In the event of failure of Block instrument shunting may be permitted with a great caution. A message shall be exchanged between SM of adjacent stations of concerned direction to this effect under exchange of private number. A lable with legeng train/trolley on line is hung conspicuously on Block instrument of concerned direction and lock the Block instrument if possible.

8.6 SHUNTING IN THE SIDING TAKING OFF FROM THE STATION YARD :

While performing shunting in the sidings it should be authorised by issuing T/806 unless same is governed by signals clearly mentioning the limits up to which shunting is permitted as also the lines, occupied in shunting. The relevant provisions of GR 5.14 and SR thereto shall be meticulously followed.

9.0 ABNORMAL CONDITION: -

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

- i) **PARTIAL FAILURE: -**

In the event of suspension of Lock and Block Instrument and during partial failure of other available means of communication, the procedures detailed below shall be followed for working of trains in different situations.(Refer BWM 5.16,5.23 and SR 6.02.06)

- ii) **THE AUTHORITY TO PROCEED IN OCCUPIED BLOCK SECTION IN CASE OF OBSTRUCTION OF LINE OR ACCIDENT.**

Rules and regulations for working trains on an obstructed line in case of

obstruction or accident on the authority of block ticket (T/A-602) when communications are available shall be followed in accordance with the provision of SR 6.02.05

iii) **TRAINS DELAYED IN BLOCK SECTIONS**

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

iv) **FAILURE /PASSING IBS AT 'ON'** - Detailed in Appendix F.

v) **FAILURE OF AXLE COUNTER BLOCK/BPAC** – Detailed in Appendix B. (Item 53.0 , 8.0)

vi) **FAILURE OF MRTC** - Not applicable

b) **PROCEDURE FOR EMERGENCY OPERATION OF POINTS BY CRANK HANDLE :-**

- i) The detailed Procedure for emergency operation of points by Crank Handle of motor operated points are given in Appendix –B (Item No 4.2.3)
- ii) The detailed procedure for emergency operation of points with point zone axle counter/Track circuits failure and emergency route release are given in Appendix 'B' (Item No 4.1, 4.2, 4.2.1 , 4.2.2)

c) **CERTIFICATION OF CLEARANCE OF TRACK CIRCUIT BEFORE CALLING ON SIGNAL OPERATION INITIATED :-**

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

d) **REPORTING OF FAILURE OF POINTS, TRACK CIRCUITS/AXLE COUNTERS AND INTERLOCKING:-**

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

The entries in failure registers to be done with message to the section controller.

9.1 TOTAL FAILURE OF COMMUNICATION: -

- a) In the event of total failure of communications train shall be worked in accordance with provision of SR 6.02.03.
- b During partial interruption of communication the rules laid down in SR 6.02.06 shall) be followed.

9.2 TEMPORARY SINGLE LINE WORKING ON DOUBLE LINE SECTION

During temporary single line working on one clear line when one line is obstructed either between CHE-DSI and CHE-ULM, trains shall be worked as per the procedure laid down in SR 6.02.02.

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

Rules and regulations for working trains on an obstructed line in case of obstruction or accident on the authority of block ticket (T/A-602) when communications are available shall be followed in accordance with the provision of SR 6.02.05, GR 6.09 and SRs thereto.

10 VISIBILITY TEST OBJECT:

The signal lights of down loop starter signal No.8 of Line No 1 and Up Main starter No15 of Line No 3 during day and night are the visibility test object vide GR 3.61.2(b)(iii)

11 ESSENTIAL EQUIPMENT AT THE STATION:

(Details are given in Appendix-‘E’)

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

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

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

12.1 STATION DETONATOR REGISTER (OPT/124)

A Register showing the stock of detonators is maintained at the station.

12.2 INSTRUCTIONS

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 in whenever detonators are used or received.
 Part – III: Periods of fogs, fog sign CHE on duty and details of detonators used.
 Part – IV: Particulars of issue and testing of fog signals at the station.

- b) In charge of the station shall ensure that the information maintained in the register is kept upto date and is accurate in all respects.
- c) Transportation inspectors shall check the registers and also the stock of detonators on hand each time they visit the station and initial with date as an indication having done so.

13**APPENDICES**

APPENDIX-A	:	WORKING OF LEVEL CROSSING GATES
APPENDIX-B	:	SYSTEM OF SIGNALLING AND INTERLOCKING AND COMMUNICATION ARRANGEMENTS AT THE STATION.
APPENDIX-C	:	ANTI COLLISION DEVICE (RAKSHA KAVACH)
APPENDIX-D	:	DUTIES OF TRAIN PASSING STAFF AND STAFF IN EACH SHIFT
APPENDIX-E	:	LIST OF ESSENTIAL EQUIPMENTS PROVIDED AT THE STATION
APPENDIX-F	:	RULES OF WORKING OF DK STATION, HALTS, IBH, IBS AND OUTLYING SIDINGS
APPENDIX-G		RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS

14 CERTIFICATE :

NOTHING IN THESE RULES SHALL BE READ AS CANCELLING AMENDING OR MODIFYING ANY GENERAL RULES AND SUBSIDIARY RULES. BLOCK WORKING MANUAL AND OPERATING MANUAL. THESE RULES CANCEL ALL PREVIOUS STATION WORKING RULES OF SRIKAKULAM ROAD STATION.

(P.S.BHATTACHARYYA)
DY.CSTE/ P/VSKP

(K.V.V.S.R.K.KISHORE)
SR.DOM(M)/WAT

**APPENDIX ‘A’ TO STATION WORKING RULES OF SRIKAKULAM ROAD
STATION LEVEL CROSSING GATES**

1. GENERAL:

1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

Following details shall be maintained at all manned level crossing gates:

1	No. of Level Crossing Gate	:	ML-426
2	Engineering or Traffic gate	:	Engineering Gate –“A” Class
3	Under control of station master or permanent way inspector.	:	SSE (P)-CHE
4	Location at Km.	:	KM. 748/5-7
5	At station	:	-
6	In between station	:	CHE-ULM
7	BG/MG/NG	:	BG
8	Single line/double line/multiple line	:	Double Line
9	Normal position	:	Open to Road Traffic
10	Interlocked/ Non-Interlocked	:	Interlocked
11	Means of Interlocking	:	Ground Lever Frame.
12	Provision of gate single at Km.	:	i) Up Line : 747/29-31 ii) DN Line : Nil
13	Signaling arrangement	:	MACLS
14	Means of communication Telephone.	:	Telephone connected with CHE Station
15	Width of the level crossing gate	:	11 M
16	Type of road	:	SH
17	Name of road	:	Alikambattili Road
18	Metalled /Non-Metalled	:	Metalled
19	Approach road	:	Metalled
20	Width of the road	:	11 M
21	Angle of road crossing (in case of the SKEW gates)	:	90 ⁰
22	Road gradients (if any)	:	[a]North/East Side: 1 in 35 [b]South/West Side: 1 in 35
23	Road alignment (straight/Curve)	:	[a] North/East Side : Straight [b] South/East Side : Straight
24	Provision of height gauges	:	Provided
25	Type of barriers	:	Lifting Barriers
26	Length of check rails	:	13 M

27	Road surface in between level crossing gates.	: Level C.C Block
28	Length of rumble strip/ speed breakers.	: 11 M
29	Road signs	: Provided
30	Speed breakers indication board	: Provided
31	TVU:	: 197141 Mar-2016
32	Census next due on	: 03/2019
33	Demarcation for placement of detonators.	: Provided
34	No. of gateman working	: Three
35	Nearest Railway Medical Assistance	: Rly Health Unit CHE
36	Nearest Private Medical Assistance available (if any)	: CHE
37	List of equipment available (Yes/No)	: Yes

1.2 EQUIPMENT:

Items	Quantity / Numbers
1. LED Tri colour hand signal lamps	3 (5 on Quadruple / Line or twin single line)
2. Hand Signal Flag Green	1 No with mounted stick
3. Hand Signal Flag Red	3 (6 Nos. on Quadruple / Line or Twin Single line and 7 in case Hexaple Section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple / Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q / Twin single line and 5 on Hexaple section)
6. Spare chains with padlocks	2 with stop marker
7. Detonators	10 in each case
8. Gate lamps	2 Nos.
9. Tommy Bar	1 No.
10. Mortar Pan	1 No.
11. Spade / Fowrah	1 No.
12. Rammer	1 No (In case of asphalted road this may not be provided)
13. Pick Axe	1 No (In case of asphalted road this may not be provided)
14. Tin case for flags	1 No.
15. Can for oil	1 No.
16. Water port / Bucket	1 No.
17. Canister for Muster Roll	1 No.
18. Set of spare spectacles of gateman wearing glasses	1 No.
19. Board demarcating protection of level crossing gate diagram in case of obstruction on gate	1 No.

20.	Basket	1 No.
21.	Whistle	1 No.
22.	Wall Clock	1 No.
23.	A small size chin for use in case of failure of gate boom/Leaf Lock	2 No.

1.3 **RECORDS TO BE KEPT AT GATE LODGE:**

In addition to the above equipment, 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 as 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. Signal failure register

1.5 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

2. **COMPETENCY :**

Gateman working at this gate should have competency certificate applicable to perform duty at this gate issued by the sectional JE/SE (P.Way).

3. **POSITION DURING PASSAGE OF TRAINS:**

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

- i) Gateman will stand alternatively in front of the gate-lodge facing the approaching train.
- ii) In day time, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.

- iii) In night time, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. ROUTING DUTIES OF GATEMAN:

- i) Gateman shall ensure that red flag is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under Special Instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, and vehicle / wagons / train / battery box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also prepared to repeat any signal which guard may give to Loco Pilot on walkie-talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or SSE(P-Way) any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) At the gate whose signal have become defective, the gateman shall close and lock the lifting barriers on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco Pilot to report the defect at the next station.
- x) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- xi) Gateman shall ensure that he is having competency certificate in his possession while on duty.

- xii) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.
- xiii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xiv) Gateman shall see that the channel for the flange of the wheel is kept clean.
- xv) Gateman shall keep the road surface well watered and rammed in case of unmetalled roads.
- xvi) Gateman on electrified section shall watch that road vehicles / animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.
- xviii) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

4. ACTION IN CASE OF UNUSUAL OCCURRENCE ON TRAIN:

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

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

5. ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:

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

The gateman shall protect the line as under:-

a) On double line section:

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

- viii) Thereafter, he shall warn the Loco Pilot and stop the approaching train by waving his red flag by day and red hand signal lamp by night repeatedly.

b) **On single line section:**

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

c) **Other action to be taken by Gateman:**

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.

- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the nearest Station Master or SSE(P-Way) regarding the particulars and obstructions at the level crossing gate, through messenger or through means available.

1.6 **ENGINEERING ITEMS:**

Please see para 916, 918, 919 of IRPWM for visibility requirements at level crossings, provision of speed breakers on the approaching roads of level crossings and census of traffic at level crossings.

1.7 **SPECIAL INSTRUCTIONS FOR DIFFERENT TYPES OF LEVEL CROSSINGS:**

Instructions for different types of manned Level Crossing Gates are given in Annexures as follows:

- | | | |
|------|----------------|--|
| i) | Annexure – I | Engineering Level Crossing Gate, Interlocked with gate signals, provided with telephone, with normal position ‘Open to road traffic’. |
| ii) | Annexure – II | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Open to road traffic’. |
| iii) | Annexure – III | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Closed to road traffic’. |
| iv) | Annexure – IV | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Open to road traffic’. |
| v) | Annexure – V | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Closed to road traffic’. |
| vi) | Annexure – VI | Engineering Level Crossing Gate, non-interlocked, not provided with telephone, with normal position ‘Closed to road traffic’. |

ANNEXURE – I

**WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES
INTERLOCKED WITH GATE SIGNALS, PROVIDED WITH TELEPHONE WITH
NORMAL POSITION “OPEN TO ROAD TRAFFIC”****(General Instructions are common for all types of Manned Level Crossing Gates)****1.0 MODE OF OPERATION:**

Gate shall normally kept open to the road traffic when ever it is required to close the gate SM on duty shall inform the gate man on duty about the direction and description of the train intended to receive or dispatch supported by private number. Gate man on duty shall ensure clearance of road traffic close and lock the gate. There after he will perform the following procedure to take off the Gate home signals as the case may be.

- i) Key ‘G’ is obtained after closing the level crossing gate releases 2 GF..
- ii) 2 GF when reversed locks the level crossing boom and releases 1 GF, 3 GF and Key G1
- iii) Key G1 is transmitted electrically to station to release control
- iv) With 1GF in reverse transmits an electrical control to station to take ‘OFF’ DN Advanced starter signal.
- v) With 3 GF reverse Up Gate Home signal can be taken ‘OFF’.
- vi) On clearance of the gate by the trains, Control No 37 is transmitted electrically through VDU to release Key G1 to open the LC gate.
- vii) Immediately after departure of the train, Station Master shall advise the gateman through telephone connected at his end, the number, description, direction and expected time of passage of the train at the gate.
- viii) If the telephone is connected to the station at the receiving end, this advice shall be given by the Station Master to the gateman, under exchange of private number, as soon as he receives train entering section advice from the dispatching station.
- ix) If the actual running time of the train from either end of the section is less than 10 minutes, Station Master will convey this advice to the gateman before obtaining / granting line clear.
- x) It should be the duty of the gateman to ensure that the gate is closed in time, so that there is no detention to the train or excessive detention to road traffic.

2. Failure of Telephonic Communication:

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

- i) If the telephone falls at the gate connected with the station at the despatching end, Station Master shall issue a caution order to the driver of the departing train.
- ii) Station Master shall advise the driver to whistle continuously and proceed cautiously while approaching the gate.
- iii) In case the gate signal is ‘ON’ he should stop short of the gate signal and follow the procedure laid down under GR 3.73.
- iv) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number that the telephone at the gate has failed.
- v) The Station Master at the dispatching end shall then issue a caution order to the driver before dispatching a train in the block section from his end.
- vi) Station Master will also advise the gateman through Gangman / Patrolman / LP of the first train that the telephone has become defective.
- vii) Station Master should also advise S&T staff responsible for maintenance of the telephone to rectify the same at the earliest.
- viii) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection / fit memo for the same.

4. Failure of Lifting Barriers :

- i) When the gate cannot be closed due to failure of lifting barriers, the gateman shall immediately inform the Station Master on duty under exchange of private number, and ensure that lifting of barriers or leaf gates do not foul the track.
- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Gateman shall secure that gate against road traffic by means of safety chains and padlocks.
- iv) After securing the gate against road traffic, gateman shall show green hand signal flag by day and green light to the loco pilot of the approaching train.
- v) Station Master on duty shall issue caution order to the loco pilot of a departing train.

- vi) He shall also advise the Station Master at the dispatching end, under exchange of private number; to similarly issue a caution order to the driver before despatching a train in the block section.
- vii) Station Master shall advise maintenance staff responsible for maintaining the lifting barrier to rectify the same at the earliest.
- viii) Normal working will be resumed only after maintenance staff repair the lifting barrier and issue reconnection / fit memo for the same.

5. Failure of Gate Key with the gate in closed position, when Gate Key cannot be extracted for opening the gate:

- i) If the gate key cannot be extracted from the winch, gate signal lever or key transmitter then gateman must immediately inform the Station Master on duty on telephone, under exchange of private number.
- ii) If Emergency Key is available at the gate lodge / cabin, Gateman will take it out from the sealed box by breaking the seal and open the gate for road traffic.
- iii) The record of the date and time of breaking the sealed cover of Emergency key Box shall be recorded and signed with reasons.
- iv) Thereafter, the gate must be treated as non-interlocked and procedure for reception / despatch of trains as prescribed for non-interlocked gates, should be adopted.
- v) Station Master on duty shall issue caution order to the loco pilot of a departing train.
- vi) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train in the block section from his end.
- vii) Station Master shall advise S&T staff responsible for maintaining the key transmitter to repair the same at the earliest.
- viii) Normal working will be resumed only after S&T staff repair the key transmitter and issue reconnection / fit memo for the same.
- ix) After rectification, the Emergency key shall be replaced in the Emergency Key Box and resealed by the S&T maintainer.

6. Failure of the Gate Key with the gate in open condition:

- i) If the gate key cannot be extracted from the winch, gate signal lever or key transmitter then gateman must immediately inform the Station Master on duty on telephone, under exchange of private number.

- ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception / despatch of trains as prescribed for non-interlocked gates, should be adopted.
- iii) The gateman shall secure the gate against road traffic by means of chains and padlocks and pass trains on hand signals.
- iv) Station Master on duty shall issue a caution order to the driver of a departing train.
- v) He shall also advise the Station Master at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.
- vi) Station Master shall advise S&T staff responsible for maintaining the key transmitter to repair the same at the earliest.
- vii) Normal working will be resumed only after S&T staff repair the key transmitter and issue reconnection / fit memo for the same.
- viii) After rectification, the Emergency key shall be replaced in the Emergency Key Box and resealed by the S&T maintainer.

7. Defective Gate Signals:

- i) The gateman shall treat the gate as defective and must not lower them under following circumstances:
 - a) If gate signals can be taken ‘OFF’ without closing the gate, or
 - b) The key can be extracted from the operation winch when the gate is in open condition, or
 - c) The key can be extracted from the leaf gates when the gate is in open condition
- ii) If the Gate or the Gate Signal or Warner / Distant Signal becomes defective in ‘OFF’ position, the gateman will make all efforts to put it at ‘ON’ position even by cutting signal wires, if necessary.
- iii) The gateman will immediately advise the Station Master on duty, under exchange of private number, regarding defective gate signals.
- iv) Thereafter, the gate must be treated as non-interlocked and procedure for reception / dispatch as prescribed for non-interlocked gates should be adopted.
- v) He shall show green hand signal flag by day and green light by night to the passing train after closing the gate.

- vi) Station Master on duty will issue a caution order to the driver of a departing train.
- vii) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train in the block section from his end.
- viii) Station Master shall advise S&T staff responsible for maintaining the gate signal to repair the same at the earliest.
- ix) Normal working will be resumed only after S&T staff rectify the defective gate signal and issue reconnection / fit memo for the same,

8. Obstruction at the Gate:

- i) If the gate is broken by road vehicle which is fouling the track, or if lifting barriers / leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately put back gate signals to ‘ON’ position.
- ii) He shall fix red banner flag by day and red lamp by night on posts provided at both ends of the gate for this purpose.
- iii) Immediately after this, the gateman shall advise the Station Master on duty regarding the defects / obstructions at the gate, under exchange of private number.
- iv) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.
- v) Gateman shall then rush with detonators, fusee and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item no. 1.5(5).
- vi) Thereafter he shall protect the gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master who shall not start the train unless he has been assured by the gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master shall also inform the Station Master at the despatching end, under exchange of private number, asking him not to despatch any train in the block section from his end, until the track has been cleared of all obstruction.
- ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.

- x) Station Master shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the gate signal at ‘ON’ position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.
- xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks, and there after exhibit green hand signal, if the gate is not obstructed.
- xii) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- xiii) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers and issue reconnection / fit memo for the same.

9. Obstruction on the Track near Level Crossing Gate:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No.8 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

**APPENDIX ‘A’ TO STATION WORKING RULES OF SRIKAKULAM ROAD
STATION LEVEL CROSSING GATES**

1. GENERAL:

1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

Following details shall be maintained at all manned level crossing gates:

1	No. of Level Crossing Gate	:	ML-425
2	Engineering or Traffic gate	:	Engineering Gate (‘C’ Class)
3	Under control of station master or permanent way inspector.	:	SSE (P)-CHE
4	Location at Km.	:	KM. 746/15-17
5	At station	:	-
6	In between station	:	ULM-CHE
7	BG/MG/NG	:	BG
8	Single line/double line/multiple line	:	Double Line
9	Normal position	:	Closed to Road Traffic
10	Interlocked/ Non-Interlocked	:	Non-Interlocked
11	Means of Interlocking	:	-
12	Provision of gate single at Km.	:	i) Up Line : Nil ii) DN Line : Nil
13	Signaling arrangement	:	Nil
14	Means of communication Telephone.	:	Telephone connected with CHE Station
15	Width of the level crossing gate	:	7.5 M
16	Type of road	:	Others
17	Name of road	:	Village Road
18	Metalled /Non-Metalled	:	Metalled
19	Approach road	:	C.C Block
20	Width of the road	:	5.5 M
21	Angle of road crossing (in case of the SKEW gates)	:	90 ⁰
22	Road gradients (if any)	:	[a]North/East Side: 1 in 30 [b]South/West Side: 1 in 30
23	Road alignment (straight/Curve)	:	[a] North/East Side : Straight [b] South/East Side : Straight
24	Provision of height gauges	:	Provided
25	Type of barriers	:	Lifting Barriers

26	Length of check rails	:	9.5 M
27	Road surface in between level crossing gates.	:	Level
28	Length of rumble strip/ speed breakers.	:	5.5 M
29	Road signs	:	Provided
30	Speed breakers indication board	:	Provided
31	TVU:	:	16069, 10/2018
32	Census next due on	:	10/2021
33	Demarcation for placement of detonators.	:	Provided
34	No. of gateman working	:	Two
35	Nearest Railway Medical Assistance	:	Rly Health Unit CHE
36	Nearest Private Medical Assistance available (if any)	:	CHE
37	List of equipment available (Yes/No)	:	Yes

1.2 EQUIPMENT:

Items	Quantity / Numbers
1. LED Tri colour hand signal lamps	3 (5 on Quadruple / Line or twin single line)
2. Hand Signal Flag Green	1 No with mounted stick
3. Hand Signal Flag Red	3 (6 Nos. on Quadruple / Line or Twin Single line and 7 in case Hexaple Section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple / Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q / Twin single line and 5 on Hexaple section)
6. Spare chains with padlocks	2 with stop marker
7. Detonators	10 in each case
8. Gate lamps	2 Nos.
9. Tommy Bar	1 No.
10. Mortar Pan	1 No.
11. Spade / Fowrah	1 No.
12. Rammer	1 No (In case of asphalted road this may not be provided)
13. Pick Axe	1 No (In case of asphalted road this may not be provided)
14. Tin case for flags	1 No.
15. Can for oil	1 No.
16. Water port / Bucket	1 No.
17. Canister for Muster Roll	1 No.
18. Set of spare spectacles of gateman wearing glasses	1 No.
19. Board demarcating protection of level crossing gate diagram in case of obstruction on gate	1 No.
20. Basket	1 No.

- | | |
|---|-------|
| 21. Whistle | 1 No. |
| 22. Wall Clock | 1 No. |
| 23. A small size chin for use in case of failure of gate boom/Leaf Lock | 2 No. |

1.3 **RECORDS TO BE KEPT AT GATE LODGE:**

In addition to the above equipment, 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 as 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.

1.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

2. **COMPETENCY :**

Gateman working at this gate should have competency certificate applicable to perform duty at this gate issued by the sectional JE/SE (P.Way).

3. **POSITION DURING PASSAGE OF TRAINS:**

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

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

4. ROUTING DUTIES OF GATEMAN:

- i) Gateman shall ensure that red flag is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under Special Instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, and vehicle / wagons / train / battery box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also prepared to repeat any signal which guard may give to Loco Pilot on walkie-talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or SSE(P-Way) any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) At the gate whose signal have become defective, the gateman shall close and lock the lifting barriers on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco Pilot to report the defect at the next station.
- x) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- xi) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xii) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.
- xiii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.

- xiv) Gateman shall see that the channel for the flange of the wheel is kept clean.
- xv) Gateman shall keep the road surface well watered and rammed in case of unmetalled roads.
- xvi) Gateman on electrified section shall watch that road vehicles / animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.
- xviii) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

4. ACTION IN CASE OF UNUSUAL OCCURRENCE ON TRAIN:

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

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

5. ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:

- i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, if any, in the ‘ON’ position.

- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, if connected by telephone, regarding the defects / obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under:-

a) **On double line section:**

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

b) **On single line section:**

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

c) **Other action to be taken by Gateman:**

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.

- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the nearest Station Master or SSE(P-Way) regarding the particulars and obstructions at the level crossing gate, through messenger or through means available.

1.6 **ENGINEERING ITEMS:**

Please see para 916, 918, 919 of IRPWM for visibility requirements at level crossings, provision of speed breakers on the approaching roads of level crossings and census of traffic at level crossings.

1.7 **SPECIAL INSTRUCTIONS FOR DIFFERENT TYPES OF LEVEL CROSSINGS:**

Instructions for different types of manned Level Crossing Gates are given in Annexures as follows:

- | | | |
|------|----------------|--|
| i) | Annexure – I | Engineering Level Crossing Gate, Interlocked with gate signals, provided with telephone, with normal position ‘Open to road traffic’. |
| ii) | Annexure – II | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Open to road traffic’. |
| iii) | Annexure – III | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Closed to road traffic’. |
| iv) | Annexure – IV | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Open to road traffic’. |
| v) | Annexure – V | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Closed to road traffic’. |
| vi) | Annexure – VI | Engineering Level Crossing Gate, non-interlocked, not provided with telephone, with normal position ‘Closed to road traffic’. |

ANNEXURE – V**WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES,
NON-INTERLOCKED, PROVIDED WITH TELEPHONE, WITH NORMAL
POSITION ‘CLOSED TO ROAD TRAFFIC’**

(General Instructions are common for all types of Manned Level Crossing Gates)

1. MODE OF OPERATION:

For opening of this gate the following procedure to be followed.

2. EXCHANGE OF PRIVATE NUMBER:

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

Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag/red hand signal lamp ready in his hand to stop approaching train if any.
- (v) In case the gateman is not responding on the telephone or incase the telephone becomes defective or private number is not received from the gateman, the station master shall adhere to the procedure prescribed in SR 16.03.04 below.
- (vi) In the event of failure of telephone, if the gate is required to be opened for passage

of road traffic, the gateman shall lookout in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He shall thereafter, open the gate for passing the road traffic keeping a red flag/ red hand signal lamp ready in his hand to stop approaching train if any.

3. FAILURE OF TELEPHONE COMMUNICATION:

In the event of failure of telephone communication between the station and non-interlocked mid-section level crossing gate or of failure to get gateman's acknowledgement over the phone, the following procedure shall be adopted for passing trains:

- (a) The loco pilot and the guard of every train proceeding into the affected section shall be served with a caution order, giving the number and kilometreage of the level crossing and directing the loco pilot:-
 - (i) To whistle frequently to attract the attention of the gateman,
 - (ii) To proceed cautiously, and stop 30m short of the level crossing and be guided by hand signal.
- (b) (i) The loco pilot after stopping, if the gateman is available and apparently in a fit condition to continue his duty and the gates are closed, shall arrange to advise the station master/cabin master cabin man as the case may be of the fact using the telephone provided at gate. The station master on receipt of such an advise from the loco pilot shall discontinue issue of caution order to the following train provided the acknowledgement of the gateman is available over the phone.
 - (ii) In the above circumstance, the loco pilot should not stop his train at the next station to advise the station master.
- (c) (i) If the loco pilot does not find the gateman at the level crossing or if the gateman is apparently unfit for duty and the gates are not closed, he shall Depute his assistant to close the gates and give proceed hand signal. In the Absence of assistant, the loco pilot shall seek assistance of the assistant guard or guard of the train. The same should be informed to the station master on gate telephone.
 - (ii) The loco pilot, after being hand signaled, shall pass the level crossing and shall stop clear of it by at least 2 bogie length to pick up the assistant or assistant guard/guard, as the case may be. The railway servant deputed for closing the gate shall reopen it for road traffic after passage of the last vehicle of the train.
 - (iii) If, however, the telephone is out of order or the gateman is not available or is apparently unfit to continue his duty and intimation of the fact could not be

given to the station from the gate, the loco pilot shall stop his train at the next station (even if it is through passing station) and give a memo the station master indicating the condition of the gateman, gate and telephone.

- (iv) The station master on receipt of the loco pilot's report regarding absence or unfitness of the gateman, shall advise the station master in rear, the notice station, the section controller, JE/SE/SSE (Pway) and AEN concerned and the gangmate of the nearest gang for immediate posting of a gateman. He shall also inform the maintenance staff to attend and repair the telephone, if required. Issue of caution order should continue till normal working condition is restored.
- (d) Before giving line clear to a train, the station master shall advise the station master of the station in the rear of the facts by message supported by a private number, and obtain his acknowledgement with a private number. The latter shall issue a caution order to the loco pilot as detailed in para (a).
- (e) Necessary entries shall be made in the caution order register, station diary or signal failure register as the case may be by the station masters at either end of the affected section. The section controller also keep a note in his chart indicating action taken by him.

4. FAILURE OF LIFTING BARRIARS:

- (a) If a gate boom/barrier is damaged, the gateman shall:-
- (i) Close the level crossing against the road traffic with a chain and pad lock immediately or before allowing the movement of train as the case may be.
- (ii) Report the fact over telephone or through the loco pilot of a passing train through a gangman to the station master of the adjacent station and the nearest gangmate.
- (b) The Station master on duty on receipt of the above information shall arrange to issue caution orders to the loco pilots and guards of all trains entering into the section.
- (i) To whistle frequently.
- (ii) To stop 30mts short of the level crossing and be guided by the hand signal given by the gateman.
- (c) The Station master shall intimate the fact to the Station master at the other end of the block section for issue of caution order with the similar instructions as mentioned in (b) above. The caution order shall continue to be issued till the defect is rectified. The Station master shall also advise the JE/SE/SSE(Signal), JE/SE/SEE(P way) and other officials concerned for immediate rectification and other necessary action.
- (d) The loco pilots shall ensure that the level crossing is not obstructed and

On being hand signaled by the gateman, negotiate the level crossing cautiously.

- (e) Necessary entries shall be made in the caution order register and station diary by the Station masters at either end of the affected section.

5. OBSTRUCTION AT THE GATE:

In case of an obstruction on the line at the level crossing not protected by station signals, the gateman shall maintain the signals, if provided, in the ‘ON’ position, If unable to remove the obstruction forthwith, he shall protect the line in the following manner.

(a) ON DOUBLE LINE:

- (i) In case both the lines are obstructed, he shall during day light hours, first plant a banner flag across the track in the direction from which a train is expected arrive and then plant the second banner flag across the other track, against an train in the opposite direction. The banner flag shall be planted clear of the level crossing and at a distance of about 5 meters from the edge of the road/obstruction.
- (ii) He shall, thereafter, close and lock the gates.
- (iii) At level crossings provided with telephones, the gateman shall, if time permits, inform the Station master about the obstruction and ascertain the position of trains, after he has taken action as per clauses (i) and (ii) above.
- (iv) The gateman shall proceed in haste, exhibiting a red hand signal flag, towards the direction from which a train is expected first and place one detonator on the track at a distance of 600meters on BG and three detonators 10meters apart at a distance of 1200meters on BG from the level crossing. Having thus protected one line, he shall immediately return to the level crossing, picking up the intermediate detonator on the way and then proceed with the same haste in the opposite direction and protect the other line also in an identical manner. Having duly protected both the lines, the gateman shall return to the level crossing and endeavour to clear the obstruction, mobilizing any assistance locally available. He shall, however, not leave the level crossing, but shall remain in position to warn the loco pilot of any approaching train.
- v) In case of any one line is obstructed the aforesaid protection need be done only for the obstructed line.

b On single line section:

- i) Gateman shall plant a red banner flag by day and a red light by night 5 meters on posts duly provided for the purpose. He shall first protect the direction which a train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by towards the other direction 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators, fuses and flag by day and red hand signal lamp by night.

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

7. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and station master will adopt the procedure given under item no.5 above, if the obstruction fouls the level crossing gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

**APPENDIX ‘A’ TO STATION WORKING RULES OF SRIKAKULAM ROAD
STATION LEVEL CROSSING GATES**

1. GENERAL:

1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

Following details shall be maintained at all manned level crossing gates:

1	No. of Level Crossing Gate	:	ML-424
2	Engineering or Traffic gate	:	Engineering Gate (‘C’ Class)
3	Under control of station master or permanent way inspector.	:	SSE (P)-CHE
4	Location at Km.	:	KM. 745/23-25 (745.573)
5	At station	:	-
6	In between station	:	ULM-CHE
7	BG/MG/NG	:	BG
8	Single line/double line/multiple line	:	Double Line
9	Normal position	:	Closed to Road Traffic
10	Interlocked/ Non-Interlocked	:	Non-Interlocked
11	Means of Interlocking	:	-
12	Provision of gate single at Km.	:	i) Up Line : Nil ii) DN Line : Nil
13	Signaling arrangement	:	Nil
14	Means of communication Telephone.	:	Telephone connected with CHE Station
15	Width of the level crossing gate	:	7.5 M
16	Type of road	:	Others
17	Name of road	:	Village Road
18	Metalled /Non-Metalled	:	Metalled
19	Approach road	:	C.C Block
20	Width of the road	:	5.5 M
21	Angle of road crossing (in case of the SKEW gates)	:	90 ⁰
22	Road gradients (if any)	:	[a]North/East Side: 1 in 30 [b]South/West Side: 1 in 30
23	Road alignment (straight/Curve)	:	[a] North/East Side : Straight [b] South/East Side : Straight
24	Provision of height gauges	:	Provided
25	Type of barriers	:	Lifting Barriers
26	Length of check rails	:	9.5 M

27	Road surface in between level crossing gates.	: Level
28	Length of rumble strip/ speed breakers.	: 4.0 M
29	Road signs	: Provided
30	Speed breakers indication board	: Provided
31	TVU:	: 677, 10/2018
32	Census next due on	: 10/2021
33	Demarcation for placement of detonators.	: Provided
34	No. of gateman working	: Two
35	Nearest Railway Medical Assistance	: Rly Health Unit CHE
36	Nearest Private Medical Assistance available (if any)	: CHE
37	List of equipment available (Yes/No)	: Yes

1.2 EQUIPMENT:

Items	Quantity / Numbers
1. LED Tri colour hand signal lamps	3 (5 on Quadruple / Line or twin single line)
2. Hand Signal Flag Green	1 No with mounted stick
3. Hand Signal Flag Red	3 (6 Nos. on Quadruple / Line or Twin Single line and 7 in case Hexaple Section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple / Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q / Twin single line and 5 on Hexaple section)
6. Spare chains with padlocks	2 with stop marker
7. Detonators	10 in each case
8. Gate lamps	2 Nos.
9. Tommy Bar	1 No.
10. Mortar Pan	1 No.
11. Spade / Fowrah	1 No.
12. Rammer	1 No (In case of asphalted road this may not be provided)
13. Pick Axe	1 No (In case of asphalted road this may not be provided)
14. Tin case for flags	1 No.
15. Can for oil	1 No.
16. Water port / Bucket	1 No.
17. Canister for Muster Roll	1 No.
18. Set of spare spectacles of gateman wearing glasses	1 No.
19. Board demarcating protection of level crossing gate diagram in case of obstruction on gate	1 No.
20. Basket	1 No.
21. Whistle	1 No.

22. Wall Clock 1 No.
23. A small size chin for use in case of failure of gate boom/Leaf Lock 2 No.

1.3 **RECORDS TO BE KEPT AT GATE LODGE:**

In addition to the above equipment, 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 as 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.

1.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

2. **COMPETENCY :**

Gateman working at this gate should have competency certificate applicable to perform duty at this gate issued by the sectional JE/SE (P.Way).

3. **POSITION DURING PASSAGE OF TRAINS:**

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

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

4. **ROUTING DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red flag is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under Special Instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, and vehicle / wagons / train / battery box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also prepared to repeat any signal which guard may give to Loco Pilot on walkie-talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or SSE(P-Way) any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) At the gate whose signal have become defective, the gateman shall close and lock the lifting barriers on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco Pilot to report the defect at the next station.
- x) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- xi) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xii) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.
- xiii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.

- xiv) Gateman shall see that the channel for the flange of the wheel is kept clean.
- xv) Gateman shall keep the road surface well watered and rammed in case of unmetalled roads.
- xvi) Gateman on electrified section shall watch that road vehicles / animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.
- xviii) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

4. ACTION IN CASE OF UNUSUAL OCCURRENCE ON TRAIN:

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

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

5. ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:

- i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, if any, in the ‘ON’ position.

- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, if connected by telephone, regarding the defects / obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under:-

a) **On double line section:**

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

b) **On single line section:**

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

c) **Other action to be taken by Gateman:**

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.

- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the nearest Station Master or SSE(P-Way) regarding the particulars and obstructions at the level crossing gate, through messenger or through means available.

1.6 **ENGINEERING ITEMS:**

Please see para 916, 918, 919 of IRPWM for visibility requirements at level crossings, provision of speed breakers on the approaching roads of level crossings and census of traffic at level crossings.

1.7 **SPECIAL INSTRUCTIONS FOR DIFFERENT TYPES OF LEVEL CROSSINGS:**

Instructions for different types of manned Level Crossing Gates are given in Annexures as follows:

- | | | |
|------|----------------|--|
| i) | Annexure – I | Engineering Level Crossing Gate, Interlocked with gate signals, provided with telephone, with normal position ‘Open to road traffic’. |
| ii) | Annexure – II | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Open to road traffic’. |
| iii) | Annexure – III | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Closed to road traffic’. |
| iv) | Annexure – IV | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Open to road traffic’. |
| v) | Annexure – V | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Closed to road traffic’. |
| vi) | Annexure – VI | Engineering Level Crossing Gate, non-interlocked, not provided with telephone, with normal position ‘Closed to road traffic’. |

ANNEXURE – V**WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES,
NON-INTERLOCKED, PROVIDED WITH TELEPHONE, WITH NORMAL
POSITION ‘CLOSED TO ROAD TRAFFIC’**

(General Instructions are common for all types of Manned Level Crossing Gates)

5. MODE OF OPERATION:

For opening of this gate the following procedure to be followed.

6. EXCHANGE OF PRIVATE NUMBER:

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

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

- (v) In case the gateman is not responding on the telephone or incase the telephone becomes defective or private number is not received from the gateman, the station master shall adhere to the procedure prescribed in SR 16.03.04 below.
- (vi) In the event of failure of telephone, if the gate is required to be opened for passage

of road traffic, the gateman shall lookout in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He shall thereafter, open the gate for passing the road traffic keeping a red flag/ red hand signal lamp ready in his hand to stop approaching train if any.

7. FAILURE OF TELEPHONE COMMUNICATION:

In the event of failure of telephone communication between the station and non-interlocked mid-section level crossing gate or of failure to get gateman's acknowledgement over the phone, the following procedure shall be adopted for passing trains:

- (a) The loco pilot and the guard of every train proceeding into the affected section shall be served with a caution order, giving the number and kilometreage of the level crossing and directing the loco pilot:-
 - (i) To whistle frequently to attract the attention of the gateman,
 - (ii) To proceed cautiously, and stop 30m short of the level crossing and be guided by hand signal.
- (b) (i) The loco pilot after stopping, if the gateman is available and apparently in a fit condition to continue his duty and the gates are closed, shall arrange to advise the station master/cabin master cabin man as the case may be of the fact using the telephone provided at gate. The station master on receipt of such an advise from the loco pilot shall discontinue issue of caution order to the following train provided the acknowledgement of the gateman is available over the phone.
 - (ii) In the above circumstance, the loco pilot should not stop his train at the next station to advise the station master.
- (c) (i) If the loco pilot does not find the gateman at the level crossing or if the gateman is apparently unfit for duty and the gates are not closed, he shall Depute his assistant to close the gates and give proceed hand signal. In the Absence of assistant, the loco pilot shall seek assistance of the assistant guard or guard of the train. The same should be informed to the station master on gate telephone.
 - (ii) The loco pilot, after being hand signaled, shall pass the level crossing and shall stop clear of it by at least 2 bogie length to pick up the assistant or assistant guard/guard, as the case may be. The railway servant deputed for closing the gate shall reopen it for road traffic after passage of the last vehicle of the train.
 - (iii) If, however, the telephone is out of order or the gateman is not available or is apparently unfit to continue his duty and intimation of the fact could not

be given to the station from the gate, the loco pilot shall stop his train at the next station (even if it is through passing station) and give a memo the station master indicating the condition of the gateman, gate and telephone.

- (iv) The station master on receipt of the loco pilot's report regarding absence or unfitness of the gateman, shall advise the station master in rear, the notice station, the section controller, JE/SE/SSE (Pway) and AEN concerned and the gangmate of the nearest gang for immediate posting of a gateman. He shall also inform the maintenance staff to attend and repair the telephone, if required. Issue of caution order should continue till normal working condition is restored.
- (d) Before giving line clear to a train, the station master shall advise the station master of the station in the rear of the facts by message supported by a private number, and obtain his acknowledgement with a private number. The latter shall issue a caution order to the loco pilot as detailed in para (a).
- (e) Necessary entries shall be made in the caution order register, station diary or signal failure register as the case may be by the station masters at either end of the affected section. The section controller also keep a note in his chart indicating action taken by him.

8. FAILURE OF LIFTING BARRIARS:

- (a) If a gate boom/barrier is damaged, the gateman shall:-
- (i) Close the level crossing against the road traffic with a chain and pad lock immediately or before allowing the movement of train as the case may be.
- (ii) Report the fact over telephone or through the loco pilot of a passing train through a gangman to the station master of the adjacent station and the nearest gangmate.
- (b) The Station master on duty on receipt of the above information shall arrange to issue caution orders to the loco pilots and guards of all trains entering into the section.
- (i) To whistle frequently.
- (ii) To stop 30mts short of the level crossing and be guided by the hand signal given by the gateman.
- (c) The Station master shall intimate the fact to the Station master at the other end of the block section for issue of caution order with the similar instructions as mentioned in (b) above. The caution order shall continue to be issued till the defect is rectified. The Station master shall also advise the JE/SE/SSE(Signal), JE/SE/SEE(P way) and other officials concerned for immediate rectification and other necessary action.
- (d) The loco pilots shall ensure that the level crossing is not obstructed and

On being hand signaled by the gateman, negotiate the level crossing cautiously.

- (e) Necessary entries shall be made in the caution order register and station diary by the Station masters at either end of the affected section.

5. OBSTRUCTION AT THE GATE:

In case of an obstruction on the line at the level crossing not protected by station signals, the gateman shall maintain the signals, if provided, in the ‘ON’ position, If unable to remove the obstruction forthwith, he shall protect the line in the following manner.

(a) ON DOUBLE LINE:

- (i) In case both the lines are obstructed, he shall during day light hours, first plant a banner flag across the track in the direction from which a train is expected arrive and then plant the second banner flag across the other track, against an train in the opposite direction. The banner flag shall be planted clear of the level crossing and at a distance of about 5 meters from the edge of the road/obstruction.
- (ii) He shall, thereafter, close and lock the gates.
- (iii) At level crossings provided with telephones, the gateman shall, if time permits, inform the Station master about the obstruction and ascertain the position of trains, after he has taken action as per clauses (i) and (ii) above.
- (iv) The gateman shall proceed in haste, exhibiting a red hand signal flag, towards the direction from which a train is expected first and place one detonator on the track at a distance of 600meters on BG and three detonators 10meters apart at a distance of 1200meters on BG from the level crossing. Having thus protected one line, he shall immediately return to the level crossing, picking up the intermediate detonator on the way and then proceed with the same haste in the opposite direction and protect the other line also in an identical manner. Having duly protected both the lines, the gateman shall return to the level crossing and endeavour to clear the obstruction, mobilizing any assistance locally available. He shall, however, not leave the level crossing, but shall remain in position to warn the loco pilot of any approaching train.
- v) In case of any one line is obstructed the aforesaid protection need be done only for the obstructed line.

b On single line section:

- i) Gateman shall plant a red banner flag by day and a red light by night 5 meters on posts duly provided for the purpose. He shall first protect the direction which a train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by towards the other direction 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators, fuses and flag by day and red hand signal lamp by night.

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

7. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and station master will adopt the procedure given under item no.5 above, if the obstruction fouls the level crossing gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

**APPENDIX ‘A’ TO STATION WORKING RULES OF SRIKAKULAM ROAD
STATION LEVEL CROSSING GATES**

1. GENERAL:

1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

Following details shall be maintained at all manned level crossing gates:

1	No. of Level Crossing Gate	:	ML-428
2	Engineering or Traffic gate	:	Engineering Gate (‘C’ Class)
3	Under control of station master or permanent way inspector.	:	SSE (P)-CHE
4	Location at Km.	:	KM. 751/13-15
5	At station	:	-
6	In between station	:	ULM-CHE
7	BG/MG/NG	:	BG
8	Single line/double line/multiple line	:	Double Line
9	Normal position	:	Closed to Road Traffic
10	Interlocked/ Non-Interlocked	:	Non-Interlocked
11	Means of Interlocking	:	-
12	Provision of gate single at Km.	:	i) Up Line : Nil ii) DN Line : Nil
13	Signaling arrangement	:	Nil
14	Means of communication Telephone.	:	Telephone connected with CHE Station
15	Width of the level crossing gate	:	7.5 M
16	Type of road	:	Others
17	Name of road	:	Village Road
18	Metalled /Non-Metalled	:	Metalled
19	Approach road	:	C.C Block
20	Width of the road	:	5.5 M
21	Angle of road crossing (in case of the SKEW gates)	:	82 ⁰
22	Road gradients (if any)	:	[a]North/East Side: 1 in 30 [b]South/West Side: 1 in 30
23	Road alignment (straight/Curve)	:	[a] North/East Side : Straight [b] South/East Side : Straight
24	Provision of height gauges	:	Provided
25	Type of barriers	:	Lifting Barriers

26	Length of check rails	:	9.5 M
27	Road surface in between level crossing gates.	:	Level
28	Length of rumble strip/ speed breakers.	:	3.50 M
29	Road signs	:	Provided
30	Speed breakers indication board	:	Provided
31	TVU:	:	30906 Mar-2016
32	Census next due on	:	03/2019
33	Demarcation for placement of detonators.	:	Provided
34	No. of gateman working	:	Two
35	Nearest Railway Medical Assistance	:	Rly Health Unit CHE
36	Nearest Private Medical Assistance available (if any)	:	CHE
37	List of equipment available (Yes/No)	:	Yes

1.2 EQUIPMENT:

Items	Quantity / Numbers
1. LED Tri colour hand signal lamps	3 (5 on Quadruple / Line or twin single line)
2. Hand Signal Flag Green	1 No with mounted stick
3. Hand Signal Flag Red	3 (6 Nos. on Quadruple / Line or Twin Single line and 7 in case Hexaple Section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple / Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q / Twin single line and 5 on Hexaple section)
6. Spare chains with padlocks	2 with stop marker
7. Detonators	10 in each case
8. Gate lamps	2 Nos.
9. Tommy Bar	1 No.
10. Mortar Pan	1 No.
11. Spade / Fowrah	1 No.
12. Rammer	1 No (In case of asphalted road this may not be provided)
13. Pick Axe	1 No (In case of asphalted road this may not be provided)
14. Tin case for flags	1 No.
15. Can for oil	1 No.
16. Water port / Bucket	1 No.
17. Canister for Muster Roll	1 No.
18. Set of spare spectacles of gateman wearing glasses	1 No.
19. Board demarcating protection of level crossing gate diagram in case of obstruction on gate	1 No.
20. Basket	1 No.

- | | |
|---|-------|
| 21. Whistle | 1 No. |
| 22. Wall Clock | 1 No. |
| 23. A small size chin for use in case of failure of gate boom/Leaf Lock | 2 No. |

1.3 **RECORDS TO BE KEPT AT GATE LODGE:**

In addition to the above equipment, 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 as 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.

1.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

2. **COMPETENCY :**

Gateman working at this gate should have competency certificate applicable to perform duty at this gate issued by the sectional JE/SE (P.Way).

3. **POSITION DURING PASSAGE OF TRAINS:**

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

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

4. ROUTING DUTIES OF GATEMAN:

- i) Gateman shall ensure that red flag is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under Special Instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, and vehicle / wagons / train / battery box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also prepared to repeat any signal which guard may give to Loco Pilot on walkie-talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or SSE(P-Way) any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) At the gate whose signal have become defective, the gateman shall close and lock the lifting barriers on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco Pilot to report the defect at the next station.
- x) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- xi) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xii) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.
- xiii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.

- xiv) Gateman shall see that the channel for the flange of the wheel is kept clean.
- xv) Gateman shall keep the road surface well watered and rammed in case of unmetalled roads.
- xvi) Gateman on electrified section shall watch that road vehicles / animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.
- xviii) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

4. ACTION IN CASE OF UNUSUAL OCCURRENCE ON TRAIN:

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

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

5. ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:

- i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, if any, in the ‘ON’ position.

- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, if connected by telephone, regarding the defects / obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under:-

a) **On double line section:**

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

b) **On single line section:**

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

c) **Other action to be taken by Gateman:**

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.

- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the nearest Station Master or SSE(P-Way) regarding the particulars and obstructions at the level crossing gate, through messenger or through means available.

1.6 **ENGINEERING ITEMS:**

Please see para 916, 918, 919 of IRPWM for visibility requirements at level crossings, provision of speed breakers on the approaching roads of level crossings and census of traffic at level crossings.

1.7 **SPECIAL INSTRUCTIONS FOR DIFFERENT TYPES OF LEVEL CROSSINGS:**

Instructions for different types of manned Level Crossing Gates are given in Annexures as follows:

- | | | |
|------|----------------|--|
| i) | Annexure – I | Engineering Level Crossing Gate, Interlocked with gate signals, provided with telephone, with normal position ‘Open to road traffic’. |
| ii) | Annexure – II | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Open to road traffic’. |
| iii) | Annexure – III | Traffic Level Crossing Gate, Interlocked with stop signals of the station, provided with telephone, with normal position ‘Closed to road traffic’. |
| iv) | Annexure – IV | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Open to road traffic’. |
| v) | Annexure – V | Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position ‘Closed to road traffic’. |
| vi) | Annexure – VI | Engineering Level Crossing Gate, non-interlocked, not provided with telephone, with normal position ‘Closed to road traffic’. |

ANNEXURE – V**WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES,
NON-INTERLOCKED, PROVIDED WITH TELEPHONE, WITH NORMAL
POSITION ‘CLOSED TO ROAD TRAFFIC’**

(General Instructions are common for all types of Manned Level Crossing Gates)

1. MODE OF OPERATION:

- i) The normal position of the LC gate being closed to road traffic. It should be in closed condition against road traffic, except when it is opened for passage of road traffic over the level crossing, subject to conditions prescribed below.
- i) the SM before permitting each train enter into the block section, shall ask gateman on the telephone by giving a PN whether gate is closed against road traffic for the passage of train. The gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a PN to the SM in assurance of gate being closed and locked against road traffic.
- ii) The SM shall not permit any train to enter the block section unless he is assured if the closure and locking of the gate by the gateman supported by exchange of PN.
- iii) When the gateman desires to open the gate for passage of road traffic he should ensure that:
 - a) He has not exchanged any PN with the station for any train or
 - b) If he has exchanged PN with the SM, the whole of the train with last vehicle indicator has passed over the LC gate and the SM has not exchanged PN with him for any other movement immediately in rear of the train or on the adjacent lines.

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

2. EXCHANGE OF PRIVATE NUMBER:

- (i) The normal position of the level crossing gate being “ closed to road traffic” it should always be in closed condition against road traffic over the level crossing, subject to conditions prescribed below.
- (ii) The Station Master before permitting each train to enter into the block section, shall ask gateman on the telephone by giving a private number whether, gate is closed against road traffic for the passage of train. The gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a private number to the stationmaster/cabin master in assurance of gate being closed & locked against road traffic.
- (iii) The station master/cabin master shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number.

- (iv) When the gateman desires to open the gate for passage of road traffic he should ensure that:
 - (5) He has not exchanged any private number with the station/cabin as per (d) (ii) above or
 - (6) If he has exchanged private number with the station master/cabin master, the whole of the train with last vehicle indicator has passed over the level crossing gate and the station master has not exchanged private number with him for any other movement immediately in rear of that train or on the adjacent line(s).
- Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag/red hand signal lamp ready in his hand to stop approaching train if any.
- (v) In case the gateman is not responding on the telephone or incase the telephone becomes defective or private number is not received from the gateman, the station master shall adhere to the procedure prescribed in SR 16.03.04 below.
 - (vi) In the event of failure of telephone, if the gate is required to be opened for passage of road traffic, the gateman shall lookout in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He shall thereafter, open the gate for passing the road traffic keeping a red flag/ red hand signal lamp ready in his hand to stop approaching train if any.

3. FAILURE OF TELEPHONE COMMUNICATION:

In the event of failure of telephone communication between the station and non-interlocked mid-section level crossing gate or of failure to get gateman's acknowledgement over the phone, the following procedure shall be adopted for passing trains:

- (a) The loco pilot and the guard of every train proceeding into the affected section shall be served with a caution order, giving the number and kilometreage of the level crossing and directing the loco pilot:-
 - (i) To whistle frequently to attract the attention of the gateman,
 - (ii) To proceed cautiously, and stop 30m short of the level crossing and be guided by hand signal.
- (b) (i) The loco pilot after stopping, if the gateman is available and apparently in a fit condition to continue his duty and the gates are closed, shall arrange to advise the station master/cabin master cabin man as the case may be of the

fact using the telephone provided at gate. The station master on receipt of such an advise from the loco pilot shall discontinue issue of caution order to the following train provided the acknowledgement of the gateman is available over the phone.

(ii) In the above circumstance, the loco pilot should not stop his train at the next station to advise the station master.

(c) (i) If the loco pilot does not find the gateman at the level crossing or if the gateman is apparently unfit for duty and the gates are not closed, he shall Depute his assistant to close the gates and give proceed hand signal. In the Absence of assistant, the loco pilot shall seek assistance of the assistant guard or guard of the train. The same should be informed to the station master on gate telephone.

(ii) The loco pilot, after being hand signaled, shall pass the level crossing and shall stop clear of it by at least 2 bogie length to pick up the assistant or assistant guard/guard, as the case may be. The railway servant deputed for closing the gate shall reopen it for road traffic after passage of the last vehicle of the train.

(iii) If, however, the telephone is out of order or the gateman is not available or is apparently unfit to continue his duty and intimation of the fact could not be given to the station from the gate, the loco pilot shall stop his train at the next station (even if it is through passing station) and give a memo the station master indicating the condition of the gateman, gate and telephone.

(iv) The station master on receipt of the loco pilot's report regarding absence or unfitness of the gateman, shall advise the station master in rear, the notice station, the section controller, JE/SE/SSE (Pway) and AEN concerned and the gangmate of the nearest gang for immediate posting of a gateman. He shall also inform the maintenance staff to attend and repair the telephone, if required. Issue of caution order should continue till normal working condition is restored.

(d) Before giving line clear to a train, the station master shall advise the station master of the station in the rear of the facts by message supported by a private number, and obtain his acknowledgement with a private number. The latter shall issue a caution order to the loco pilot as detailed in para (a).

(e) Necessary entries shall be made in the caution order register, station diary or signal failure register as the case may be by the station masters at either end of the affected section. The section controller also keep a note in his chart indicating action taken by him.

4. FAILURE OF LIFTING BARRIARS:

(a) If a gate boom/barrier is damaged, the gateman shall:-

(i) Close the level crossing against the road traffic with a chain and pad lock

immediately or before allowing the movement of train as the case may be.

(ii) Report the fact over telephone or through the loco pilot of a passing train through a gangman to the station master of the adjacent station and the nearest gangmate.

(b) The Station master on duty on receipt of the above information shall arrange to issue caution orders to the loco pilots and guards of all trains entering into the section.

(i) To whistle frequently.

(ii) To stop 30mts short of the level crossing and be guided by the hand signal given by the gateman.

(c) The Station master shall intimate the fact to the Station master at the other end of the block section for issue of caution order with the similar instructions as mentioned in (b) above. The caution order shall continue to be issued till the defect is rectified. The Station master shall also advise the JE/SE/SSE(Signal), JE/SE/SEE(P way) and other officials concerned for immediate rectification and other necessary action.

(d) The loco pilots shall ensure that the level crossing is not obstructed and On being hand signaled by the gateman, negotiate the level crossing cautiously.

(e) Necessary entries shall be made in the caution order register and station diary by the Station masters at either end of the affected section.

5. OBSTRUCTION AT THE GATE:

In case of an obstruction on the line at the level crossing not protected by station signals, the gateman shall maintain the signals, if provided, in the ‘ON’ position, If unable to remove the obstruction forthwith, he shall protect the line in the following manner.

(a) ON DOUBLE LINE:

(i) In case both the lines are obstructed, he shall during day light hours, first plant a banner flag across the track in the direction from which a train is expected arrive and then plant the second banner flag across the other track, against an train in the opposite direction. The banner flag shall be planted clear of the level crossing and at a distance of about 5 meters from the edge of the road/obstruction.

(ii) He shall, thereafter, close and lock the gates.

(iii) At level crossings provided with telephones, the gateman shall, if time permits, inform the Station master about the obstruction and ascertain the position of trains, after he has taken action as per clauses (i) and (ii) above.

- (iv) The gateman shall proceed in haste, exhibiting a red hand signal flag, towards the direction from which a train is expected first and place one detonator on the track at a distance of 600meters on BG and three detonators 10meters apart at a distance of 1200meters on BG from the level crossing. Having thus protected one line, he shall immediately return to the level crossing, picking up the intermediate detonator on the way and then proceed with the same haste in the opposite direction and protect the other line also in an identical manner. Having duly protected both the lines, the gateman shall return to the level crossing and endeavour to clear the obstruction, mobilizing any assistance locally available. He shall, however, not leave the level crossing, but shall remain in position to warn the loco pilot of any approaching train.
- v) In case of any one line is obstructed the aforesaid protection need be done only for the obstructed line.

b On single line section:

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

7. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and station master will adopt the procedure given under item no.5 above, if the obstruction fouls the level crossing gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

APPENDIX 'B'

APPENDIX 'B' TO STATION WORKING RULES OF SRIKAKULAM ROAD STATION

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

1 BRIEF DESCRIPTION OF THE SIGNALLING AND INTERLOCKING INSTALLATIONS:

This is a 'B' class station provided with Standard –II R interlocking. The station is provided with Route setting type Electronic Interlocking between points, signals, track circuits and other signalling gears. The Station is equipped with Multiple Aspect Colour Light Signaling. All points and Signals etc. are power operated through a central **Visual Display Unit (VDU)** with a standby installed in the SS/SM Office.

2.0 DESCRIPTION OF OPERATOR CONSOLE CUM VISUAL DISPLAY UNIT (VDU):

The Operator Console cum Visual Display Unit (VDU) is provided for operation of Signals, Points, L.C Gates, Crank Handles, Siding & other controls etc. A Mimic yard diagram based on SI plan no. SI/23043 Alt-'G' will be displayed on the VDU. The VDU is used for controlling and monitoring the station. Indications on the Station yard mimic diagram of VDU will be dynamically updated.

2.1 SYSTEM OVERVIEW:

An Operator Console consisting of a VDU (a high-resolution 48'' color monitor), with keyboard and pointing device (mouse) connected with a computer (CPU) is provided. The CPU is connected to the Electronic Interlocking (E.I) equipment to exchange control and indication messages. The system is programmed to display the Station Yard Mimic VDU diagram on the VDU and that it allows access to all functions through pop-up menus. When a particular function is selected, an appropriate Menu will appear on the screen. A function (clearance of Signal or cancellation, Route release, Point operation, Gate release etc.) can be executed through selecting the required operation by clicking the Left button of the pointing device (mouse) on the desired function.

2.2 An additional VDU connected with a computer is provided as stand by arrangement in case of failure of the working operator console. In case of failure of the working operator console the system shall switch over to the stand by VDU automatically.

2.3 ICONS AND INDICATIONS PROVIDED ON THE VDU

In addition to mimic yard diagram including signal, points, track circuit, Axle counters, L.C.gates, sidings as indicated in the WRD, various other ICONS and indications have been provided on the VDU. A brief description of the same are described below.

SL. NO.	ICONS	INDICATIONS	FUNCTIONS	REMARKS
1	SS/SM Key	Yellow light when key is 'IN'	Ensures operation of VDU by authorized person	Protected by pass word
2.	---	Emergency Route release - UP & DN	Flashing indication appears when Emergency route release operation is initiated.	
3.	---	Emergency Gate release	Flashing indication appears when Emergency gate release operation is initiated.	
4.	Emergency Point operation key	Yellow light when key is 'IN'	Ensures emergency point operation by authorized person	For each operation concerned counter shall register one count higher.
5.	---	System indication Central – On/Off	Indicates System 'A' or 'B' is in working mode	
6.	---	System indication End – On/Off	Indicates End system is in working mode or not	
7.	Point failure Ack. Option/ Menu	Yellow	Flashing indication appears when any point fails. SS/SM has to left click on the icon to acknowledge.	Buzzer will sound. On acknowledgement buzzer stops. After verification at site inform S&T staff Immediately.
8.	Signal failure Ack. Display option/ Menu	Yellow	Flashing indication appears when any signal fails. SS/SM has to left click on the icon to acknowledge.	Buzzer will sound. On acknowledgement buzzer stops. Inform S&T staff Immediately.

SL. NO.	ICONS	INDICATIONS	FUNCTIONS	REMARKS
9.	---	Main Filament Failure Indication	Flashing indication appears when Main filament of any signal fails.	
10.	CH-1, CH2, CH3 CH-4, CH5 and CH-6 display	Yellow lamp indicates 'KEY IN'. Red lamp indicates 'CH LOCKED'	In normal condition yellow lamp will be lit. Whenever the crank handle is locked in route or otherwise red indication will glow.	
11.	DN Reset key and button (ULM end)	Yellow-Power on Green-prep reset	SS/SM has to follow 'Key In' procedure followed by left click on the button icon to reset LVCD Axle counter.	This operation is required for Resetting of LVCD Axle Counter of Concerned Section. For each operation concerned counter shall register one count higher.
12.	UP Reset key and button (ULM end)	Yellow-Power on Green-prep reset		
13.	DN Reset key and button (CHE end)	Yellow-Power on Green-prep reset		
14.	UP Reset key and button (CHE end)	Yellow-Power on Green-prep reset		
15.	'DN Train Entering Section' muting button	Yellow - acknowledged	On getting alarm/buzzer SS/SM shall left click on the button icon to acknowledge it.	
16.	'UP Train Entering Section' muting button	Yellow - acknowledged	On getting alarm/buzzer SS/SM shall left click on the button icon to acknowledge it.	

SL. NO.	ICONS	INDICATIONS	FUNCTIONS	REMARKS
17.	UP Block release button	Yellow –Prepared for Block release.	On getting indication SS/SM shall left click on the button icon which shall release Block Handle.	After complete arrival of train this will be activated
18.	DN Block release button	Yellow –Prepared for Block release.		
19.	L.C.Gate control-32 & 37 buttons	Yellow lamp indicates 'Gate Closed'. Red lamp indicates 'Gate LOCKED'.	SS/SM shall right click on the button icon to select menu to Transmit / Receive/ emergency operation of gate as required.	In case of emergency operation 'Emergency gate release' indication will appear. For each operation concerned counter shall register one count higher.
20.	Counter	-	As and when required SS/SM shall point the cursor on the counter icon and right click on it. A drop down menu will appear indicating all the counters available in the system. SS/SM shall select the required counter on the menu and can read the latest counter reading.	-
21.	Line Block button	Pink when blocked	SS/SM shall point the cursor on the icons provided on the berthing track and right click . One drop menu will appear indicating line blocked and un-blocked, SS/SM has to select the required menu.	When line block is selected the concerned berthing portion of track will appear as thick Pink line.

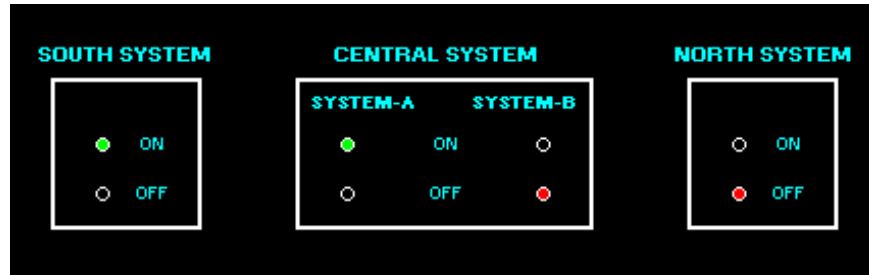
3.0 OPERATIONAL PROCEDURE THROUGH VDU AND INDICATIONS

In addition to the mimic yard diagram various other indications will be available on the VDU. The implications of different indications provided and the operational procedure for

different functions shall be strictly followed as per the following description.

3.1 ELECTRONIC INTERLOCKING (E.I) SYSTEM INDICATIONS

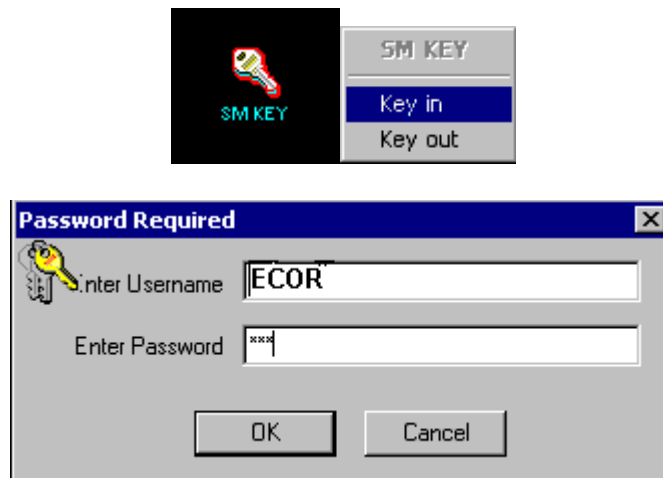
Electronic Interlocking Equipment (E.I) at the center can work in either of the two modes i.e, System-‘A’ or System-‘B’. On the VDU (Computer), there are two system indications in which Green indication mentioning the On-line system and the Red indication mentioning that the system is in power off condition. Similarly ‘ON’ and ‘OFF’ indications have been provided for the end E.I equipments.



* Key board operation of changing the VDU at Annexure-1 at page-92.

3.2 OPERATION PROCEDURE OF SS/SM KEY

To prevent the unauthorized operation by any person other than SS/SM on duty this facility is provided on VDU. On duty SS/SM needs to track the pointer to the “SM KEY” icon and click the ‘KEY IN’ menu by the clicking left button of the mouse, by this a Password window will appear. SS/SM on duty needs to enter the User name & password and press the ‘OK’ Button provided on the Password window. The user name is ECOR and pass word is CHE. This will allow operating all the controls e.g., Signals, Points, and Crank handles Etc. through VDU. In case incorrect password or user name is entered, no operation can be made. In such cases the same procedure is to be repeated till correct password is entered.

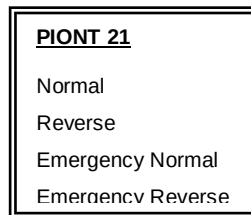


Enter the USER NAME and PASSWORD and click the OK button. Now the VDU is ready for use & the entire yard can be controlled from the VDU

Similarly select the KEY OUT when the Station Master to Prevent the Unauthorized Operation with User name and password.

3.2 OPERATION AND INDICATION OF POINT

To Operate the Point the SS/SM /ASS needs to track the mouse pointer to concerned point's Normal/Reverse indications on the VDU, after clicking by the left button on the mouse a pop-up menu will appear as below:



3.3.1 REVERSE TO NORMAL OPERATION

Track the pointer to NORMAL menu and click. A Normal flashing indication will appear and the indication will be steady after the point is set to Normal.

3.3.2 NORMAL TO REVERSE OPERATION

Track the pointer to REVERSE menu and click. A Reverse flashing indication will appear and the indication will be steady after the point is set to Reverse.

3.3.3 POINT INDICATIONS

When the point is free a steady strip of light will appear in the point zone (In case of cross-over at both ends) indicating the point is in normal/reverse condition. When the point is operated the same strip of light starts flashing till the point is set and becomes steady when the point is set and detected. When the point is engaged in a route a Red light will appear near the point indicating that the point is locked and cannot be operated now.

3.3 PROCEDURE FOR SETTING OF ROUTES AND TAKING OFF SIGNALS

To Take-Off a Signal on the desired route the SS/SM on duty needs to track the mouse pointer over the concerned Signal on the VDU, after clicking by the left button of the mouse a pop-up menu will appear as below:

<u>SIGNAL S1</u>
S1 – S13 (ML)
S1 – S15
C1 – S13
C1 – S15
MAIN SIGNAL CANCEL
MAIN ROUTE RELEASE
CALLING ON SIGNAL CANCEL
CALLING ON ROUTE RELEASE

SS/SM on duty will select the route as per the requirement by moving the mouse pointer on the appropriate menu & left clicking on the menu. It will set the route and clear the signal provided all the conditions required to clear the signal is satisfied. Similarly by following the similar procedure operation of other signals can be done.

3.4.1 SETTING A ROUTE AND ITS INDICATIONS

To set a route of a signal, click on a possible route of the signal, after doing so the route gets initiated & Red-flashing indication will appear on the replacement track of the signal. Point operation is initiated as per the requirement of the desired route and Normal/Reverse set indications will start flashing if favorable point detection is not available. After setting of points in the route, overlap & isolation Flashing indication will be replaced by steady indication and a complete yellow 'Route set' indication will appear from the replacement track of the signal to the last track of overlap section of the route. Also the points lock indication will appear. A Point locked can be ensured from the Red Steady indication will appear near the point. Finally a Route locked Yellow Steady indication will appear on the immediate rear of the signal. Now the signal will be Taken-off. The yellow route set indication will turn to red when different track circuit portion within the route is occupied during passage of a train.

3.4.2 SHUNT SIGNAL OPERATION:

The same procedure as main signal has to be followed as explained above. To set the signal route for shunt signals SS/SM on duty shall put the pointing device on the Shunt signal icon and left click on the same. A drop down menu will appear indicating different actions that can be selected. After selecting the desired route SS/SM on duty shall left click on it. Desired will be initiated and the Shunt signal will be taken off.

3.4 CALLING ON SIGNAL OPERATION

The same procedure as main signal has to be followed as explained above. To set the signal route for CALLING ON signals SS/SM on duty shall select the desired route and left click on the same after a train occupies the approach track circuit in immediate rear

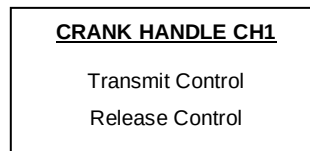
of the stop signal. The signal is cleared after a lapse of 120 seconds provided other conditions are fulfilled.

3.5 CRANK HANDLE CONTROL OPERATION

Normally a 'KEY IN' (Yellow) indication will appear on the VDU indicating that the crank handle is free. To Transmit or Receive control of the Crank Handle, click on the crank handle control button icon provided like the following on VDU.



The appearing pop-up menu gives details of the possible commands on the Crank Handle



To Transmit the Crank Handle KEY to the field personnel SS/SM on duty has to click transmit control menu. After transmission the 'KEY IN' indication will start flashing, now the KEY can be extracted from the RKT at site. After extracting the key from the RKT, the 'KEY IN' indication will disappear. When the Manual point operation is over, after putting the Siding control key in the RKT, 'KEY IN' flashing indication will appear on the VDU, Now the SS/SM on duty has to Release the control for the Steady indication by clicking release control menu.

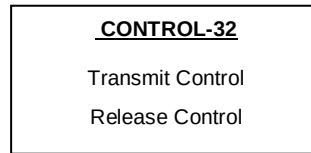
A Crank handle locked indication (Red) will appear when the particular point is on the signal route set over it or engaged in route setting in any other way.

3.6 SIDING CONTROL OPERATION:

Normally a 'KEY IN' (Yellow) indication will appear on the VDU indicating that the siding key is in condition. To Transmit or Receive of the Siding Control, click on the Siding control button icon provided like the following button on the VDU.



The appearing pop-up menu gives details of the possible commands on the Siding Control

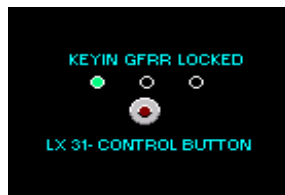


For Transmitting the Siding Control KEY to the field personnel SS/SM on duty has to click transmit control menu. After transmission the KEY IN indication will start flashing, now the KEY can be extracted from the RKT. After extracting the key from the RKT, the key IN indication will disappear. When the Siding point operation is over, after putting the KEY in the RKT, A KEY IN flashing indication will appear on the VDU, Now the SS/SM has to Release the control for the Steady indication by clicking release control menu

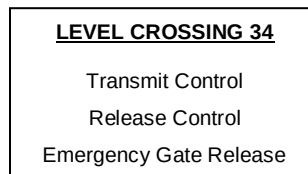
A Siding Control locked indication (Red) will appear when a route is set over the particular Siding point or in some manner it is involved in route setting procedure.

3.7 LEVEL CROSSING GATE OPERATION

To Transmit or Release control of the Level crossing gate, click on the Level crossing control button icon provided like the following button on the VDU.



The appearing pop-up menu gives details of the possible commands on the Level crossing gate.



Normally no indication will be available on the VDU indicating that the gate control key is out and gate is open. When it is required to close the gate SS/SM on duty shall intimate the gate man to close the gate supported by exchanging PN. Upon instructed by the SS/SM on duty the gate man shall close and lock the gate and after reversing the concerned slot lever he shall transmit the gate control key to station by inserting and transmitting the key in the RKT. A flashing yellow indication will appear on the VDU seeing which SS/SM on duty receive the control by clicking on the L.C. Gate control button icon and select 'Receive'. The flashing indication shall become steady.

When the key is required to be transmitted to the Gate man, SS/SM on duty has to transmit the control by clicking, after transmission the KEY IN indication will start flashing, now the KEY can be extracted from the RKT. When the gate has been closed, locked & slot lever is in reverse position, After putting the key in the RKT, A KEY IN flashing indication will appear on the VDU. Now the SS/SM /ASS/SM has to release the control for the steady indication.

The locked indication will appear when the LC Gate has locked by initiation of any of the possible signal routes.

3.8 OVERLAP TIME RELEASE (WHITE LIGHT):

Separate indications (White Light) for each overlap is provided near the starter signal to indicate the free or locked condition of overlap. This indication light will glow when overlap is locked by any Home Signal route and there will be no light when overlap is free. The locked indication starts flashing when the approaching train clears the rear end point zone track and occupies the berthing track. After a time release of 120 seconds the white flashing light will disappear indicating concerned overlap is free.

4.0 EMERGENCY OPERATIONS:

To carry out different emergency operations the following procedures are to be followed.

4.1 CANCELING A ROUTE/ EMERGENCY ROUTE RELEASE

To cancel a signal route when the route is set and the signal is taken-off, click on the signal. After clicking by the left button on the mouse a pop-up menu will appear as shown in Para 3.4 above. Click on the cancellation menu (Main/ Calling on) of the concerned signal, the signal will immediately go to 'ON' aspect, after doing so click on the Route release menu the route locked indication will start flashing for 120 sec & the Emergency Route Release Indication (UP / DN as the case may be) will flash for the entire time interval. After the completion of 120 sec, the locked route will be released. This action will be recorded in a counter. The counter will increment the number for each and every such action and also, this number should be recorded by the SS/SM on duty who shall record the details of the Route cancellation along with the latest counter no. in a register.

4.2 EMERGENCY NORMAL OPERATION OF POINTS

When the Point zone Track circuits/ Axle counters failed without any Point lock condition by any signal routes, a point can be operated by the Emergency Point operation.

Note: Before resorting to this operation SS/SM on duty shall verify that the point zone is clear of any vehicle occupying the track section and the same is clear of any obstruction.

4.2.1 NORMAL OPERATION

Before doing the emergency operation the Emergency Point Operation Key is to be made "KEY IN" by clicking the 'KEY IN' menu. The user name and password is to be logged in. The user name of this station is 'ECOR' and password of this station is CHE. Track the pointer to 'EMERGENCY NORMAL' menu and click. A Normal flashing indication will appear and the indication will be steady after the point is set to Normal. This action will be recorded in a counter. The counter will increment the number for each and every such action and also, this number should be recorded by the SS/SM on duty who shall record the details of the Emergency Point Operation along with the latest counter no. in a register.

After the completion of the Emergency point operation, the Key to be 'KEY OUT' by clicking 'KEY OUT' menu. The user name and password is to be given for "KEY OUT" also.

4.2.2 EMERGENCY REVERSE OPERATION OF POINTS

Before doing the emergency operation an Emergency Point Operation Key is to be made 'KEY IN' by clicking the 'KEY IN' menu. The user name and password is to be logged in. The user name of this station is 'ECOR' and password of this station is CHE. Emergency reverse menu to be clicked. Track the pointer to 'EMERGENCY REVERSE' menu and click. A Reverse flashing indication will appear and the indication will be steady after the point is set to Reverse. The counter will increment the number for each and every such action and also, this number should be recorded by the SS/SM on duty who shall record the details of the Emergency Point Operation along with the latest counter no. in a register.

After the completion of the Emergency point operation, the Key to be 'KEY OUT' by clicking 'KEY OUT' menu. The user name and password is to be given for 'KEY OUT' also.

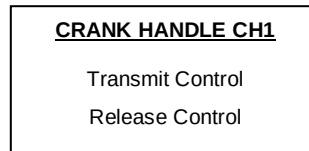
4.2.3 EMERGENCY CRANK HANDLE RELEASE OPERATION

When a crank handle is locked due to route set earlier is not released or otherwise to Transmit or Release control of the Crank Handle, SS/SM on duty shall cancel the relevant signal first and then click on the crank handle control button icon provided like the following on the VDU.



On clicking, the appearing pop-up menu gives details of the possible commands on the Crank Handle

:



For Transmitting the Crank Handle KEY to the field personnel SS/SM on duty has to click transmit control menu. After transmission the 'KEY LOCKED' (Red) indication will start to flash for 120 seconds & 'KEY IN' remains steady. After a lapse of 120 seconds the 'KEY LOCKED' indication will vanish & 'KEY IN' indication will start to FLASH. After extracting the key from the RKT, the 'KEY IN' indication will disappear. When the Manual point operation is over, after putting the emergency crank handle key in the RKT, flashing 'KEY IN' indication will appear on the VDU, Now the SS/SM on duty shall Release the control for the Steady indication by clicking 'RELEASE CONTROL' menu.

The counter will increment the number for each and every such action and also, this number should be recorded by the SS/SM on duty who shall record the details of the Emergency Crank Handle Operation along with the latest counter no. in a register.

4.2 EMERGENCY GATE OPERATION

L.C. Gate control can be released and the gate can be opened by this operation when LC gate control remains in locked condition due to setting of any of the signal routes over it or otherwise. For releasing the gate by the Emergency operation the SS/SM on duty has to cancel the signal by signal cancellation control of the relevant signal. Then he has to click the Emergency Gate release control in the Gate pop-up menu. Now the 'LOCKED' (Red) indication will flash for 120 seconds & after the time has elapsed the 'LOCKED' (Red) indication will vanish. Now the SS/SM on duty shall transmit the 'GATE CONTROL' in this condition and 'KEY IN' indication starts flashing. Now the KEY can be extracted from the RKT at Gate Lodge and gate can be opened. This action will be recorded in a counter. The counter will increment the number for each and every such action and also, this number should be recorded by the SS/SM/ASS/SM manually in a register.

4.3 The counter will increment the number for each and every such action and also, this number should be recorded by the SS/SM on duty who shall record the details of the Emergency Gate Operation along with the latest counter no. in a register.

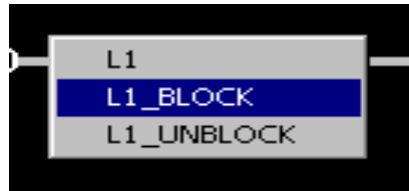
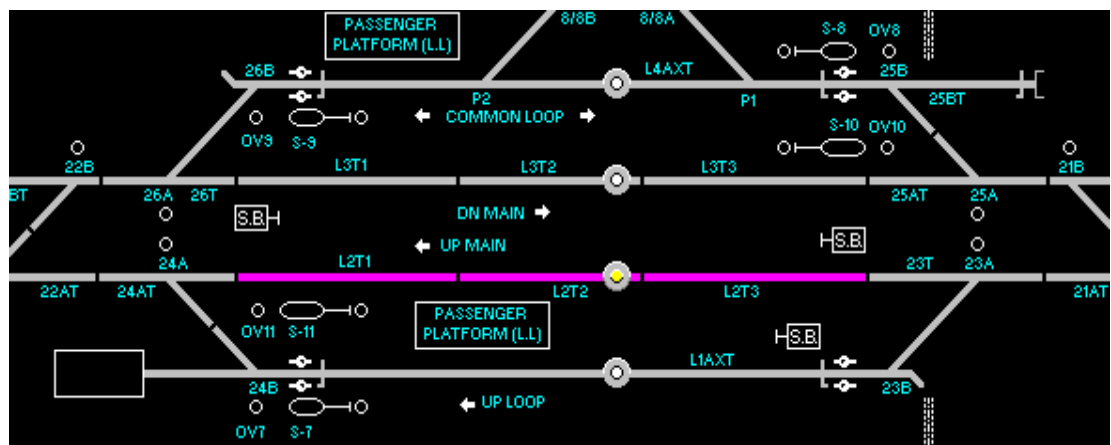
4.4 LINE BLOCK AND UNBLOCK (REMINDER COLLAR):

When SS/SM on duty requires demarcating a berthing/stabling line as BLOCKED /

FREE line he shall adopt the following procedure:

4.4.1 LINE BLOCK

To set the 'LINE BLOCKED', the SS/SM on duty shall select "L. No. ___ BLOCK" command using the left mouse button, after selecting the Line Block that particular line will be blocked for all the possible Track circuit section on that particular line. The 'TRACK BLOCK' Pink colour indication will be displayed after the successful application of such a blocking process on the VDU.



4.4.2 LINE UNBLOCK

To release the set block of any particular line, the SS/SM/ASS/SM should select "L. No. ___ UNBLOCK" command using the left mouse button. After selecting the "L. No. ___ UNBLOCK" that particular line will be available for the train movement leading to all the possible L1 Track circuit section.

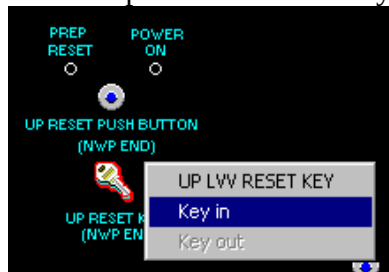
5.0 PROCEDURE FOR RESETTING OPERATION OF LVCD (DIGITAL) AXLE COUNTER IN SECTION CHE-ULM AND CHE-CHE.

5.1 Digital Axle Counters are provided on both Up & Down Block sections between CHE-ULM and CHE-DSI. The occupation and clearance of the axle counter section are indicated on VDU by RED & GREEN light respectively. When after arrival of a train the LVCD Axle counter does not show clear indication and the 'Section Occupied' indication continues to glow SM on duty shall initiate resetting procedure for the LVCD Axle Counter, monitoring the Block section. Before initiating Resetting procedure

SS/SM on duty shall ensure that the train which has left the sending station arrived completely at receiving station and block section is clear [free] of trains. If the track indication of that particular block section is showing 'Red' then the following actions are to be performed by the SS/SM on duty.

The SS/SM on duty at SRIKAKULAM ROAD Station shall verify with on duty SS/SM at receiving station over phone, to ensure the complete arrival of the train in his station.

Resetting of Digital Axle Counter Cooperation is necessary from adjacent station.



On duty SS/SM shall track the pointer to the “ **Axle Counter Reset key** ” icon and click left button of the mouse and select “**KEY IN**” option.



Move the Curser pointer near to the Axle Counter Reset push button icon, and click left button of the mouse and select “**Reset**”. In VDU VDU ‘**Power on**’ indication will appear above the reset push button and it will remain for 10 sec. This action will be recorded in a counter. The counter will increment the number for each and every such action and also, this number should be recorded by the SS/SM/ASS/SM manually in a register.



The on duty SS/SM shall inform the SS/SM on duty at adjacent to carryout aforesaid resetting procedure. After completing reset operation in both side “**PREP RESET**” indication will appear above the reset push button icon.



The Piloting In or out is mandatory for completion of Axle counter reset operation.

Number changed for resetting, shall be recorded in the TSR and in the register provided for this purpose.

6.0 **MAIN SIGNAL LAMP FAILURE INDICATION AND BUZZER ACKNOWLEDGMENT:**

Double filament signal lamps have been used for main signals at this station. In case main filament fuses auxiliary filament will automatically lit up with same intensity. However failure of main filament will be indicated by the appearance of 'RED' light on VDU along with audible buzzer, which can be acknowledged and muted by pressing the 'SIGNAL FAILURE ACKNOWLEDGEMENT' button icon. However the RED light will continue to glow until the lamp is replaced by a new lamp. For rectification of failure SS/SM on duty should inform the concerned S&T staff about the group which has failed. For the purpose of giving main filament failure indication the following groups are formed on either side.

- Down starters
- Up Starters

6.1 **POINT FAILURE INDICATION (RED), POINT FAILURE BUZZER AND POINT FAILURE ACKNOWLEDGEMENT**

Whenever there is failure of point due to non-setting, point failure indication flashing light appears near the point button icon along with point failure Buzzer. The buzzer stops when the point failure acknowledgement button icon is clicked, but the flashing light above the ACK button shall continue to glow. The flashing light at the concerned point zone can identify the defective point. After the failure is rectified, the flashing light above the 'POINT FAILURE ACK' button will disappear.

6.2 **SHOWING OF COUNTERS**

One counter icon has been provided on the VDU. When selected a drop down menu will appear indicating the following counters.

1. Emergency Route Release.
2. Emergency Point Operation.
3. Emergency Crank handle release.
4. Emergency Gate release.

5. LVCD axle counter resetting for section CHE-DSI
6. TRAR/11XT Reset permission granting counter.
7. LVDDAXT reset permission granting counter.
8. UP LVV reset counter
9. DN IBS reset counter.

When the pointing device is placed any one of the menu the latest counter number will pop-up on VDU.

7.0 **TRACK CIRCUITS**

All the five berthing Lines are track circuited from Home signal to Advance starter signals at either direction of the yard. Approach Track Circuit (7 Rail lengths) for Calling-on signal are also provided in rear of the Home signals in both directions. In addition there are (5 Rail length) track circuits beyond Advanced starter Signals in both the directions for replacement of Last Stop Signal. Indications for the above track circuits are available on VDU at SS/SM office. Yellow strip on VDU indicates 'ROUTE IS SET AND TRACK CLEAR' and Red strip indicates 'TRACK OCCUPIED CONDITION'.

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

8.0 **AXLE COUNTER**

For SEC: CHE-ULM,

A pair of digital axle counter is provided between **CHE-ULM** on DN line, one just beyond DN advanced starter No.16 of CHE and another one just beyond 400mts from the DN IB Home signal No. 30 of CHE for proving IB section and another pair of digital axle counter near DN IB home signal no. 30 of CHE and another one just near BSLB of ULM station for proving LVV section between CHE-ULM. A pair of digital axle counter is provided between **CHE-ULM** on UP line, one just beyond UP advanced starter No.11 of ULM and another one just beyond 400mts from the UP IB Home signal No. 33 of ULM for proving IB section and another pair of digital axle counter near UP IB home signal no. 33 of ULM and another one just near BSLB of CHE station for proving LVV section between CHE-ULM.

SECTION CHE-DSI

A pair of Digital axle counter is provided between CHE - DSI on UP line one just beyond UP Advanced starter signal no.17 of CHE and another in FVT track circuit beyond the UP Home Signal at DSI. Similarly a pair of Digital axle counter is provided

between CHE-DSI on DN line one just beyond Down Advanced starter Signal of DSI and another in 2T2 track circuit beyond Dn Home signal of CHE. The position of the Block section whether cleared or occupied are reflected in the VDU 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 into the Block Section, "Block Section Clear" indication 'GREEN' for the particular block section disappears and 'RED' indication appears

After complete arrival of the train the 'RED' indication will disappear and 'GREEN' indication will appear. If after the complete arrival of a train the 'RED' indication does not change to 'GREEN' it should be assumed as Block Instrument failure for the particular section and necessary action as per GR.14.13 is to be followed. The axle counters are interlocked with the respective block instruments for that section. If Axle Counter fails, Advanced Starter signal shall not come to 'OFF' and the concerned instrument shall remain locked in last operated position for section CHE – ULM .and CHE – DSI.

A resetting arrangement for resumption of the system, in case of failure of Axle Counter, has been provided in the SS/SM office of the adjacent Block stations. After being assured by both the SS/SM that the last vehicle has arrived completely at the receiving station, the resetting procedure shall be initiated after exchanging Private Number vide G&SR 4.17, 4.17.01.

(Details of resetting procedure given in APPENDIX-'B' under Para 5.1 of this SWR)

NOTE:

Before taking off reception and dispatch signals for UP and DN directions the SS/SM on duty should ensure that the entire route including overlap and berthing portion is clear of all obstructions by observing the Track indication/Axle counter indication. The indication of track circuit / Axle counter shall exhibit Red Light when track is occupied and Yellow light when track is clear and route is set. There will be no track indication when any route is not set.

9.0 TAKING OFF CALLING-ON SIGNAL

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

- 9.1** To take off Calling-on signal the train must come to stop at the foot of the home signal, occupying the track circuit (1AT, 2AT as the case may be) in rear of the Home signal. When a train occupies the track circuit, a RED light strip will appear on the VDU. The particular route on which the train is intended to be received shall be set by selecting

and setting desired route through VDU by SS/SM on duty. After a lapse of 120 seconds, the Calling-on signal clears i.e. white light glows at the concerned Calling-on signal on the VDU.

NOTE:

SS/SM on duty to ensure that no through signals are given while receiving a train on Calling-on.

9.2 RELEASE/CANCELLATION OF ROUTE

Normally when a train is received on any route or dispatched, the route illumination will disappear automatically after passage of the train suggesting that the route is released. When the route is not released automatically after passage of train over it or when SM on duty intends to cancel the route set by him shall follow procedure for cancellation of route described under Para 4.1 of APPENDIX-B above.

NOTE:

UP and DN Calling-on signals and UP and DN Advanced starters are to be manually cancelled after the passage of the train to release the route.

9.3 REPLACEMENT OF SIGNALS TO 'ON'

Signals are replaced to 'ON' automatically by the passage of a train beyond the signal. It will not be possible to re-clear the signal again unless the due process for clearing the signal is repeated again. For replacement of any signal to 'ON' position manually, the SS/SM shall follow para no. 3.4 of APPENDIX-B.

9.4 INTERLOCKING OF SIGNALS

DN IB is interlocked with DLBI of section CHE – ULM and Up advanced starter signal is interlocked with DLBI of section CHE – DSI in Line Clear position.

Up Advanced starter is interlocked with DLBI of section CHE – DSI and Up advanced starter signal is interlocked with DLBI of section CHE – DSI in Line Clear position.

The Block Instruments cannot be made normal unless the respective Home signal is put back to 'ON'. and the respective Block Section monitored by Axle Counter is clear of trains(LVCD). Signals once taken 'OFF' can be put back to danger in case of emergency by following Para no. 3.4 of APPENDIX-B even when the SM's Key is withdrawn from VDU.

9.5 PILOTING OF TRAINS IN TO STATION YARD

Whenever Home signal becomes defective, trains can be admitted by taking off Calling-on signal. Whenever both Home signal and Calling-on signal failed, all trains will be piloted in vide SR. [Refer SR 3.69.03(a) & (c)].

The SS/SM on duty shall nominate a clear line and shall advise the TPM on duty at station to set the nominated route with the help of crank handle if the points cannot be set from the VDU. Then the TPM shall set the facing and trailing points and clamp and padlock the same under the supervision of SS/SM on duty.

The SS/SM on duty shall then hand over the written authority (T/369(3b)) to the TPM for piloting the train. While going towards Home signal the TPM shall check the points and satisfy him self that the route is correctly set.

After the train has brought to a dead stop at the Home signal the TPM shall hand over the pilot memo to the locopilot, board the engine and display proceed hand signal to pass the Home signal.

NOTE:

- i) The Station Master on duty shall personally supervise the correct setting, clamping and padlocking of the facing points, if any and ensure clearance on the nominated route vide SR [Ref. SR 3.69.03(c)]
- ii) The keys of padlock of the clamps put ON to the points on the route for piloting In or piloting OUT shall be in the personally custody of the SS/SM on duty or any other authorized operating officials till such time the train / engine / vehicle has utilized the route or alternatively such movement is cancelled.

9.6 PILOTING OF TRAINS - OUT OF STATION YARD

When the starter signal has become defective, the Station Master on duty shall advise the on duty TPM to set all points correctly for the outgoing trains. Then he shall clamp and padlock the same under the supervision of SS/SM on duty. Then the SS/SM on duty shall hand over the pilot memo T/369(3b) (along with the other authority if necessary) to the on duty TPM. The TPM on duty shall hand over the authority to the locopilot of the train and display proceed hand signal at the foot of the starter vide SR. [Refer SR 3.70.01].

In case the advanced starter signal has become defective, such signal shall be passed on the written authority on the form T/369(3b). The TPM shall hand over the pilot memo in form T/369(3b) to the locopilot after the train stopped. [Refer SR 3.70.02]

9.7 SHUNTING:

Caution aspect of starter signals for shunting up to Advance Starter. For back shunting individual shunt signal No.3 and 4 are provided at North and South side of the yard respectively for shunting back to the station yard in desired direction. For taking OFF Shunt signals please refer Para No. 3.4.2 of APPENDIX-B.

11 VERIFICATION OF LINE CLEARANCE BY STATION MASTER ON DUTY FOR RECEPTION OF TRAIN INTO STATION YARD

In the Station yard, a route on the running line comprises of entrance, berthing and dispatch portion of the yard shall be kept clear of any obstruction for the passages of any train or for any other movements. The clearance of the route including overlap must be ensured by the DY.SS/SM on duty personally through VDU indications and/or physical verification of track before any movement of trains are permitted on the concerned route subject to the other conditions such as locking of the point's etc.

12 CRANK HANDLING/EMERGENCY OPERATION OF POINTS:

Crank handle operation is interlocked with the Signalling and interlocking system at this station. Key for Crank handles are normally locked inside the RKT instrument inside Location boxes in the yard and can be taken out only when all the signals leading are in the 'normal' position and the route is not locked for whatever reasons. Crank handle can be transmitted or released by following procedure as laid down in Para no.3.5 of Appendix-'B'. When this key is taken out, no signal to the concerned point can be taken 'OFF' in the yard. This key can be electrically transmitted at both ends of the yard.

13 OBSERVATION OF TRACK CIRCUIT AFTER STABLING OF TRAINS ON RUNNING LINES

When a train is stabled on a running line for a 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 Master 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 stabled, the signals leading on the line shall be suspended and the S & T maintenance staff be informed to attend.

14 LOCKING OF RELAY ROOM

THE Relay Room at the station is provided with double locks (two independent locks) as necessary vide Optg. Manual - 1.14. One key shall be kept with the signal maintainer of the station and the other key shall be with SM on duty. The Relay room cannot be opened unless both keys are used.

SM on duty shall ensure that the Relay room key is given to S&T maintenance staff under clear signature as and when required for normal maintenance and for special works and that the key should be returned by the S&T staff immediately after completion of the work and documentation shall be made in the Relay Room key register maintained at the station according to SR 3.51.05 and OM 1.14.

15 MAINTENANCE OF S & T INSTALLATION AND ADHERENCE TO MAINTENANCE SCHEDULES

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

The tests, checks and replacements etc., shall confirm to the schedules of maintenance as indicated in the Signal Engineering Manual as also as per the current and extant instructions/circulars on the subject.

16 PROCEDURE TO BE FOLLOWED INCASE OF FAILURE OF AN INTERLOCKING GEAR

In case of failure of any interlocking gear at the station, the failure report should be communicated by the Station Master to the sectional Maintainer, the signal inspector of the section and others through a memo as per GR and SR 3.51.04 and 3.68.04 and document all such transactions.

17 INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE

Before declaring a point as defective, the setting of the point on the route to which it applies shall be inspected by the Station Master on duty irrespective of the position of the buttons.

18 RECTIFICATION AND CHECK BEFORE RESUMING NORMAL WORKING

After receipt of the failure information, the sectional Maintainer shall attend to the failure after giving a 'Disconnection Memo'. After rectification of the fault, the Sectional Maintainer shall give 'Reconnection Memo' detailing the rectification. Thereafter the Station Master on duty shall personally check this defective apparatus. After satisfying him self that the gear is in good and proper working order, he shall resume the normal working of the said defective apparatus in terms of SR.3.68.04 (C) and (D).

19 PROCEDURE FOR CARRYING OUT PLANNED MAINTENANCE WORK:

Whenever any normal maintenance or special works for major renewals etc., are involved, the Signal and Telecom department should preplan these works. Field staff and the Inspector of the section should give to the Station master in writing 'Advance Intimation' about this work in terms of G and SR.15.08.01.

20 EMERGENCIES:

Notwithstanding, anything contained in the aforesaid para as when equipment is found 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's 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 equipment's according to extant instructions as contained in GR and SR.3.77.

**21 PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF SIGNAL
POINTS AND USE OF EMERGENCY CRANK HANDLE**

- 21.1** Whenever a Signal or a Point become defective any movements over the Points on the running lines should be made after clamping and padlocking both the facing and trailing Points by Station Master on duty personally for all trains at the Station.
- 21.2** In case of failure of 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 system has to be extracted and the following procedure has to be observed
- 21.3** One common emergency Crank Handle is provided for all the Motor operated Points. This is mechanically riveted to the Key of RKT. This Key along with Crank Handle can be released from the RKT by pressing the Common RKT Push Button after cutting the seal between RKT and the Crank Handle. The Station Master on duty in case of Point Motor failure will take out the Crank Handle set the Point manually by inserting Crank Handle on the Motor.
- 21.4** When the Crank Handle is removed from RKT for operation of the defective Motor Operated Points, the responsibility for its safe custody re-sets with the SM on duty till it is replaced back in RKT and sealed by Signal Maintainer
- 21.5** The case of failure of Motor Operated Points should be promptly reported to the concerned Signal Inspector/ESM for immediate rectification
- 21.6** Whenever an emergency Crank Handle is required to be used by a Signal Official for maintenance of work 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 acknowledgement of the Signal Official in the emergency Crank Handle Register and than handover to him the emergency Crank Handle for the Points concerned. All the Points will be treated as defective till the Emergency Crank Handle is returned back to Station Master on duty.
- 21.7** 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 of all the lines should be treated as Non-interlocked and the Station Master on duty is responsible for introduction of Non-interlocked working and the trains will piloted IN and OUT duly clamping and Padlocking the Points, both in facing and trailing directions over which the train is to pass, as per GR 3.69 and 3.70 with relevant SR's. The Station Master on duty will be personally responsible for setting and locking of Points, for reception and dispatch of all trains.

21.7.1 The Emergency Crank Handle Register is to be maintained in the following proforma by the Station Master on duty wherein the particulars of usage of the Emergency Crank Handle must be recorded

- 1 Date:
- 2 Point Number which failed or required to be tested
- 3 Time failure
- 4 Disconnection memo number received from S&T Staff
- 5 Signature of SM/Signal Official to whom the Emergency Crank Handle is handed over
- 6 Time Emergency Crank Handle is sent out
- 7 Individual Point numbers, and Line number nominated for admission of dispatch for which Points are set, Clamped and Padlocked
- 8 Train number to be admitted or dispatched
- 9 Signature of the Station Master on duty to ensure correct setting, Clamping and Padlocking of the Points
- 10 Date and Time fault rectified
- 11 Time of Emergency Crank Handle received back by SM on duty
- 12 Signature and Designation of the Signal Official who rectified the fault

IMPORTANT NOTE:

When performing shunting operations in the sidings it must be clearly noted that the siding Points are interlocked with the system in the NORMAL position of the Points and in REVERSED position they are not interlocked. The Official responsible for

shunting operation must clamp the Points at the both ends before permitting any movement

22.0 INTERLOCKING OF SIGNALS WITH BLOCK INSTRUMENTS

22.1 INTERLOCKING WITH HOME SIGNALS

All the UP and DOWN HOME Signals are Electrically interlocked with the respective DLBI so that before the handle of the DLBI Instrument can be turned from TRAIN COMING FROM position to LINE CLOSED position of UP or DOWN direction as the case may be must be in their NORMAL position.

22.2 The DN IB Signal is Electrically interlocked with DLBI of section CHE-ULM so that this Signal can not be taken OFF until the Handle of the concerned Block Instrument is in 'LINE CLEAR' position

22.3 The UP advanced starter signal is controlled and interlocked with DLBI of section between CHE-DSI & Down IB signal is interlocked with DLBI of section CHE-ULM so that this Signal can not be taken OFF until the Handle of the concerned Block Instrument is in 'LINE CLEAR' position

22.4 SUSPENSION OF LAST STOP SIGNALS

When the Double line block instrument for section SRIKAKULAM ROAD-URLAM is suspended with its handle in any position for whatever reason the concerned IB Stop Signal controlled by the DLBI must be treated as suspended and trains shall be Piloted Out.

When the Double line block instrument for section CHE-DSI is suspended with its handle in any position for whatever reason the concerned Last stop Signal controlled by the DLBI must be treated as suspended and trains shall be Piloted Out

23.0 NORMALISATION OF THE BLOCK AXLE COUNTER AND OF BLOCK WORKING BY RESETTING FEATURE

23.1 Digital Axle Counters are provided on both Up and Down line Block Sections between CHE-DSI and CHE-ULM

23.2 The occupation and clearance of the axle counter section are indicated on the VDU by 'RED' and 'GREEN' light

23.3 If any Block proving Axle Counter [LVCD] section fails, the Last Stop Signal at the rear station cannot be taken 'OFF' and Block instrument at Advance Station cannot be turned to 'Line Closed' position after arrival of a train and in such case, resetting of last Vehicle Checking Device is to be resorted to either Section.

- 23.4** No train shall be allowed on signal to leave a station in any particular direction unless Track clear indication is available for the relevant Axle Counter track circuited portion and Last Stop Signal is taken OFF. [Refer Para No:5 of appendix 'B' for procedure of resetting of LVCD Axle counter].

24.0 TELECOMMUNICATIONS:

- a) The Station is connected to VSKP-PSA Control Circuit
- b) Telephone attached to SGE type Lock and Block Instruments for sections CHE - DSI and CHE - ULM
- c) Railway Auto telephone is provided at this station
- d) Telephone communication is provided between SS/SM at station with adjacent stations
- e) Telephone communication is provided between SM on duty to UP & DN Crank Handle locations
- f) Telephone attached to L.C Gate ML-ML-424, ML-425, ML-426 & ML-428.
- g) The station is connected to VSKP-PSA traction power control circuit
- h) The station is connected to VSKP-PSA traction Loco control circuit
- i) VHF set is provided at the station
- j) The station is provided with BSNL telephone.
- k) Magneto phone is provided on the post of DN IBS Home signal.

NOTE

- 1 For obtaining line clear VHF should be used as a last alternative and not as a sole means of communication
- 2 VHF & Walkie-Talkie sets should not be used for unnecessary discussion with locopilot, Guards and any other staff.

25.0 POWER SUPPLY ARRANGEMENT FOR SIGNALLING INSTALLATIONS

Power signaling and interlocking installations and the ancillary field units are fed from the following sources of power supply

- i) Normal supply from UP AT/ DN AT connected to OHE traction

distribution.[230V 50HZ

- ii) Stand by supply – From AP Transco [Single-phase 230V-50 HZ

Normal power supply [Single-phase 230V-50 HZ]. to the signalling and interlocking installation at the station is drawn from the traction power sources. Whenever traction power supply fails the SS/SM on duty shall operate the change over switch provided in the SM's office connecting the power supply from the healthy sources to the installation.

The SS/SM on duty however maintain the record of power failures either of the traction supply or local supply and he must promptly report the failure of any one or both the power sources immediately through the section controller and to the concerned Elect. Staff and S&T maintenance staff

- i) A change over switch is provided in the SM's office with the three power supplies viz., UP AT , DN AT and local for the changing the switch to the required supply position. The availability of the supply is indicated by luminous indicator above the circuit breaker for each supply
- ii) Normally the switch will be kept towards UP AT/DN AT position. Whenever power block is to be given on the line the on duty SS/SM on duty must ascertain that power is available on the other AT and change over the switch to the desired position

NOTE: If power block is to be given on the UP line DN AT must be available and vice versa

- iii) In case of failure of one of the AT supply without any power block the on duty SS/SM has to check whether the circuit breaker has tripped [Three circuit breakers are provided in the change over switch board, one for each supply and their normal position is down and when tripped it goes UP.]

In case of failure of both AT supplies without any power block the local supply shall be utilized by operating the change over switch. If the circuit breaker is tripping even after resetting, no attempt shall be made to hold it by any means and a message shall be given to concerned SSE[Elect.] and SSE/PSI[OHE] for prompt rectification

- iv) When ever there is failure of power supply in one AT the SS/SM on duty shall take prompt action to inform to all concerned for rectification

The on duty SS/SM himself during each shift shall check & test the availability of power supply on both AT.s and make an entry in the station dairy duly initiating for rectification of failure if any

26.0 **WORKING OF INTEGRATED POWER SUPPLY [IPS, INDICATIONS & ACTION TO BE TAKEN BY SS/SM ON DUTY:**

Power supply to the signalling installation is fed through Integrated Power Supply System [IPS] installed in the S&T power supply room. The IPS is normally fed through Up AT/Down AT traction power selected SS/SM on duty. Standby power supply is through AP TRANSCO local supply. One change over switch is provided in the SM's room for selection of out put of either traction power supply or local power supply. The available traction/local supply is fed to the IPS through auto-change over switch provided in IPS

The IPS system is connected with battery as a backup power source for safe working during transition of power and in case no 230 AC supply is available due to any reason

In the event of failures all the sources of 230V 50HZ AC supply, the signalling system shall be fed by power generated by backup battery bank connected to IPS for a limited power of 4 hours. The health of the battery bank is monitored through one IPS Monitoring Panel provided in the SM's room which shall display the voltage of 110 V.DV battery bank provided as backup source of power supply. Depending up on the health of the battery bank and the system the following indications/alarm will appear on the remote monitoring panel. The indications/alarm, their implications and action to be taken by SS/SM on duty is tabulated below

SN	Instruc- tion	Health of Battery Bank/Equipment.	Visual Indication	Audio Indication	Action to be taken by SS/Dy. SS on duty
A	-	50% DOD	Red	Alarm	Alarm shall beacknowledged by SM on duty.
B	-	60% DOD	Red	Alarm	-do-
C	System shutdown	70% DOD	Red	Alarm	Signal feed cut off and all DC-DC converters to Work. Audio alarm will continue till power Supply is restored.
D	Call S&T staff.	Equipment fault.	Red,	Alarm	Failure of any module will give the alarm in ASM's panel. Alarm shall be acknowledged by SM on duty for audio cut off.

On duty SS/SM in each shift shall check and record the readings, indications, etc. in the station dairy duly initiating rectification of failures of IPS System, if any

In the event of failure of Remote monitoring ASM console due to any reason when both traction power and local power failed the SM on duty shall inform concerned Electrical staff immediately. In case 'call S&T staff' or 'system shut down' indication appear on the remote monitoring panel of IPS and/ or mal functioning of the remote monitoring panel SM on duty shall inform the same to concerned S&T staff immediately.

NOTE:

- i) DOD indicates depth of discharge of battery bank of IPS
- ii) In case of failure of all AC supply sources IPS battery bank can provide power supply maximum up to 8 to 10 hours before system shut down indication of IPS

26 RESETTING OF LVCD AXLE COUNTER (DIGITAL):

After complete arrival of train, if the Last vehicle axle counter of the section does not clear or Last vehicle Axle counter section free indication (Green) does not appear in the panel, The receiving station SM shall apprise the sending station SM through telephone for resetting giving details of last train that has arrived complete at his station and the block section is clear.

The receiving station shall inform the sending station as to whether the last train that entered into the section has arrived or not. And, if arrived fully shall so intimate authenticated by exchanging Private number with the sending station.

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

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

- a) On being advised by SM of CHE Station, SM of ULM/DUSI Station inserts the key in the Reset Box, turns right and presses both the key and the Push Button (Red) simultaneously with the SM of CHE. The Counter on the Reset Box at CHE Station and ULM/DUSI Station registers the next higher number and after five seconds miniature green Preparatory Reset indication appears on the Reset Box both at CHE and ULM/DUSI Station. The step by step procedure shall be followed as given in "b" to "i".
- b) SM of CHE Station and ULM/DUSI Station shall then Insert SM's LV reset key, and turn right.
- c) Press LV reset button provided on the panel.

- d) Release SM's LV reset key and reset button.
- e) Turn left the SM's LV reset key and remove it.
- f) The system obtains preparatory reset state and preparatory reset indication (Green) glows on the panel. The counter reading increases by one count after a gap of 5 seconds approximately.
- g) The counter reading should be recorded.
- h) One train is to be piloted in the section to make the system normal.
- i) The SM on duty shall record it in the Train Signal Register indicating the resetting operations in detail i.e. train number, time, Private Number exchanged with SM of sending station and giving reasons for the resetting operation.
- j) If the axle counters functioning properly now, then Block Section cleared indication 'G' will appear on the panel and the concerned Block working will be normalized.
- k) If the LV axle counter section indication does not appear 'Green' and continues to show 'RED' indication, the concerned Block section shall be suspended and failure intimation to be given to sectional signal Maintainer/JE/SE (Signal) for early rectification.

APPENDIX 'C' TO STATION WORKING RULES OF SRIKAKULAM ROAD STATION**ANTI COLLISION DEVICE [[RAKSHA KAVACH]**

Not applicable to this station

(P.S.BHATACHARYYA)
DY.CSTE / P/VSKP

(K.V.S.R.K.KISHORE)
SR. DOM /M/ WAT

APPENDIX-‘D’ TO STATION WORKING RULES OF URLAM STATION.

The following staffs are concerned with the movement of the trains whose duties are given below:
DUTIES TO BE PERFORMED BY THE STAFF AT URLAM STATION.

1) STATION MANAGER:

- i) Station incharge is responsible for the efficient discharge of duties by different members of staff at his station. (General Rules 5.01) and OM Para No. 2.02.
- ii. Ensuring that the general working of the Station is being carried out in strict accordance with the current rules, procedures and instructions.
- iii. Providing prompt and courteous service with utmost safety and security of passengers and employees.
- iv. Availability, helpfulness and good conduct of station porters.
- v. He shall be responsible for general up-keep of the station.
- vi. He shall be responsible for keeping the safety and operating literature including circulars, pamphlets, gazette etc. up to date and these must be explained to the staff working under him and got noted by them.
- vii. He shall maintain complete and up to date record of Engg/S&T/TRD restrictions. He shall be responsible for bringing forward the caution order register every Monday.
- viii. He shall be responsible for maintaining Accident Register and Accident Charts and keeping these up to date.
- ix. He shall maintain figures in respect of the stock and get them relayed to the control in time.
- x. He shall investigate all public complaints and send the extracts of the complaint with explanation of the staff and his own remarks to Divisional Office in time. In case of complaints concerning the other department, intimation may be given to the subordinate In-Charge of that department immediately so that action may be taken to avoid recurrence.

2. SM/ASM

- i) He shall come on duty after taking complete rest and shall not perform his duty under the influence of drugs or intoxicants.
- ii) When on duty or when called upon to do so, in case of emergency, he shall be responsible for obtaining and granting line clear to trains as per SWR & OM Para No. 2.02 (e).
- iii) He shall handle the control panel himself when on duty and shall not permit any unauthorized person to manipulate panel.
- iv) He shall keep the SM's control keys of control panel in his personal custody whenever, he is required to leave his office even for a short duration.
- v) While coming on duty, he shall ensure that all points and signals are in good working order and all the registers, records, pertaining to train passage are completed in all respect before taking over the charge.
- vi) He shall personally ensure that conditions for taking 'off' the reception signals are fulfilled and the clearance of line is verified as per SWR before actually pressing the relevant button for taking off the signals.
- vii) He shall ensure from indications available in the panel that the signals are burning brightly and are giving correct indications.

- viii) He shall ensure that proper indications of points, signals, track circuits, crank handle, level crossing gate etc., are displayed at their proper places.
- ix) He shall ensure that all Shunting operations are carried out as per extant orders and GR 5.19 and SRs thereof.
- x) He shall inform the Technician/JE/SE(sig) in writing or through a written message, any failure of track/signals/points/keys or panels etc. and shall invariably enter these failures in Signals Failure Register.

3. TRAFFIC POINTSMAN/TOKEN PORTERS:

- i) He shall obey all lawful orders of the ASM/SM/SS on duty or official in-charge supervising the shunting during the course of shunting operations including coupling or uncoupling of vehicles, wagons, fixing rubber washers, closing wagon doors, displaying hand signals etc.
- ii) He shall exhibit danger signal to the official supervising the shunting if vehicles are fouled during the shunting operation.
- iii) He shall pilot the trains in case of abnormal working and when ordered by the SS on duty.
- iv) He shall be in proper neat and clean uniform while on duty.
- v) He shall come on duty after taking complete rest and shall not perform duty under the influence of liquor, drugs, or intoxicants.
- vi) Neither shall he absent himself from duty nor shall he exchange his duty without prior permission of his superiors.
- vii) He shall not leave his duty unless properly relieved or authorized by his superiors.
- viii. He shall set the points properly in non-interlocked yard and man them for all shunting movements and shall not interfere with the points while the vehicles are standing and or passing over them.
- ix) He shall be responsible to see that fouling marks are kept clear after completion of shunting.
- x) He shall always commence his duty equipped with hand signal lamps during night and flags during day.
- xi) He shall verify the correct setting of route before delivering required papers to the Loco Pilot either through taking 'OFF' the relevant shunt signal or by personal observation.

4. TRAFFIC GATE MAN:

He is responsible to operate L.C. Gate at his end. He shall attend to the call of the SS/Dy. SS on duty and do the work entrusted by the SS/Dy. SS on duty connected to gate operation. He shall promptly report any abnormality to SS/Dy. SS on duty. He shall also verify the complete arrival of train if visible from the gate and confirm it to the SS/Dy. SS on duty supported by private number vide SR.4.17.01[c][iv]. He shall also protect the gate when required as given in gate working rules. He shall do all necessary functions related to gate working as stated in gate working rules.

NOTE: All staff should be in uniform while on duty and follow the rosters issued by Sr.DPO/WAT from time to time.

APPENDIX 'E' TO STATION WORKING RULES OF SRIKAKULAM ROAD STATION**ESSENTIAL EQUIPMENT**

A list of essential equipment's is given below which shall be maintained in good Working order as per OM 2015, Para no. 11.15.

Sl. No	Description	Station
1.	Detonators	20
2.	LED based tri colour flashing light	3(1 Spare)
3.	Hand Signal Flags	3(1 Spare)
4.	Clamps with Padlocks	8
5.	Safety chains with Pad locks	6
6.	Fire & Sand buckets	5
7.	Minimax Fire Extinguishers DCPT	2
8.	Iron Skids	2
9.	Motor trolley on line board	2
10.	Block suspension board	2

**APPENDIX 'F' TO STATION WORKING RULES OF SRIKAKULAM ROAD
STATION**

1. RULES FOR WORKING INTERMEDIATE BLOCK SIGNALLING

BETWEEN CHE-ULM:

(i) The block section between CHE-ULM has been split into two block sections by providing Intermediate block stop signals at km: 743.000 (controlled by CHE station) for DN line and on UP line at km: 743.361 (controlled by ULM station). Intermediate block stop signals are controlled through Double line lock and block instruments at the respective receiving ends.

(a) The block working for section between CHE-ULM on UP and DN lines is controlled by the provision of DLBI (SGE type) and are provided at CHE and at ULM stations. The DN advanced starter signal no. 16 of CHE and UP advanced starter signal no. 11 of ULM are controlled by the clearance of IB section through respective IB section monitoring axle counters and the IB home signals are controlled in turn through the line clear position of respective DLBIs at the receiving stations.

(b) Trains between intermediate block signal to respective home signal of station in advance in both sides are worked by means of SGE type lock and block instruments vide G & SR 4.09, 5.07, 14.01 to 14.14 and chapter V of BWM.

(c) Last stop signal to the intermediate block stop signal in both sides are controlled by Electronic axle counter and are worked under absolute block system in terms of G & SR 14.01, 14.13. Indications on VDU provided at CHE station.

2. INDICATIONS PROVIDED ON VDU FOR I.B. SECTION:

The indications of signals, IB and Block sections in both up and down directions are shown in the following table:

2.1 SECTION CHE-ULM (UP DIRECTION):

Sl. No	Signal Aspect [S-11]	IB Section Indication [11 AXT]	IB Home Aspect [S-33]	Block Section Indication	Remarks.
1	Green	While Illuminated	-	-	Advance starter No:11 is taken off to dispatch a train up to IB Home.
2	Red	Red	-	-	IB Section is occupied.
3	-	-	Green	While illuminated.	IB Home taken off for train up to home of CHE.
4	-	-	Red	Red	Block section is occupied or IB Home passed at danger.

2.2 SECTION CHE-ULM (DN DIRECTION):

Sl. No	Signal Aspect [S-16]	IB Section Indication [16 AXT]	IB Home Aspect [S-30]	Block Section Indication	Remarks.
1	Green.	While Illuminated.	-	-	Advance starter No: 16 is taken off to dispatch a train up to IB Home.
2	Red.	Red.	-	-	IB section occupied.
3	-	-	Green	While illuminated.	IB Home taken off for train up to home of ULM.
4	-	-	Red	Red	Block section is occupied or IB Home passed at danger.

2.5 Buzzer/Bell:- One audio buzzer is provided in the SM room at CHE to detect Train Entering section for outgoing trains. After train passes the intermediate block stop signal, the buzzer/bell will start ringing at CHE station. On hearing the buzzer/bell the Dy. SS/SM must acknowledge the same by clicking on train entering section [TES] muting button to stop the buzzer/bell and then send train entering section report to the station master of the station in advance who shall turn commutator of the Double Line Lock and Block Instrument from the Line Clear position to 'Train On Line position' and acknowledge train entering section following the procedures laid down vide Block Working Manual.

Train Run-Away buzzer:

When a train passes IB signal at ON position SM/SNM of dispatching station receives the train run away buzzer and displays flashing indication on the VDU. The SM/CHE by acknowledging the train run away button, the buzzer stops and the indication remains steady and after train passes IB signal and beyond 400mts the indication also disappears.

b) In the event of failure of I.B. track circuit [i.e. track clear indication not available] which shall not permit taking 'OFF' last stop signal, it should be ensured by Dy. SS/SM on duty at the dispatching station through exchange of private number with the Dy. SS/SM of the receiving station that the last train that passed the last stop signal of his station has fully arrived at receiving station, before allowing the next train to enter in to

the section, such permission to the next train shall be granted and the section CHE-ULM shall be shall be treated as single section.

c) By issuing the pilot memo when normalization of the system is not possible, in such case, line clear has to be taken on lock and block instrument. Trains are to be dispatched from the station only after obtaining line clear till such time track circuit or last stop signal is restored to normal.

d) NORMALIZATION OF THE TRACK CIRCUIT AND OF BLOCK WORKING BY RESETTING FEATURE:

i] No train should be allowed to leave station in any particular direction unless I.B. track clear indication is available for the relevant track circuited portion of I.B. section and last stop signal cannot be taken off and provision stipulated in Para g.III to be followed.

ii] A Resetting arrangement for the resumption of I.B. Axle counter under failure condition through co-operative features of both the Dy. SS/SM on duty at either end station of the Block section is provided, which should only be resorted to after the train that was lastly sent arrives fully at the receiving station and is certified in this respect by the Dy. SS/SM at the receiving station through exchange of private number.

iii] For monitoring of I.B. section working & re-setting of I.B. Axle counters, Track Indications and Re-setting arrangements are provided with button icons on the VDU at CHE station and at ULM station. Counters are also provided for the purpose of recording the re-settings for the I.B. Axle Counters in case of failures in IB section. The Re-setting icon and permission granting icon on the VDU at ULM should normally be kept sealed by the S&T staff and Dy.SS/SM will inform the Maintainer for resealing the same whenever the seal has been broken.

iv] The Dy.SS/SM on duty at CHE station shall maintain a separate register for use of resetting at IB Axle Counters wherein every operation of the resetting button shall be recorded giving details of date of use, train, number, time, number registered in the counter on VDU and reasons for resetting and initial each such entry.

v] The procedure for resetting of the I.B. Axle counters in terms of clause g.II above shall be as follows:

2.4 SECTION CHE-ULM ON DN LINE:

	DISPATCHING STATION [CHE]		RECEIVING STATION [ULM]
1	Dy.SS/SM on duty shall call the attention of SS/Dy.SS of ULM station through Telephone for re-setting I.B. Axle counter zone giving details of last train left the	1	SS/Dy. SS on duty at ULM after verifying that the said dispatched train arrives fully, shall exchange private number with Dy.SS/SM on

	station into the section.		duty at CHE and gives permission to re-set by clicking the 'Permission Granting' button provided on the re-set panel.
2	On getting re-set permission on VDU Dy. SS/SM on duty shall acknowledge by clicking on 'Permission received from ULM' acknowledgement button icon. For each such operation the reset counter provided in VDU shall increase by one digit. Dy. SS/SM on duty shall make an entry of changed Reset counter number in re-setting register.	2	SS/Dy. SS on duty at ULM shall continue to press the 'Permission Granting' button.
3	Dy. SS/SM on duty then shall re-set the I.B. Axle counter by clicking on 'DN Re-set Key' and select 'Key In'. After which he shall click on the 'Re-set button' icon, which will reset the Axle Counter.	3	SS/Dy. SS ULM shall also press 'Re-set' button provided on re-set panel at ULM station simultaneously at the same time for re-setting of I.B. Axle counter.
4	On completion of re-setting process I.B. section clear indication will appear on VDU.	4	The SS/Dy. SS on duty at ULM shall record in his train register the re-setting operation giving train number, time and private number exchanged with the Dy. SS/SM of CHE station giving reasons for the re-setting operation.

2.5 SECTION ULM-CHE ON UP INE:

	DISPATCHING STATION [ULM]		RECEIVING STATION [CHE]
1	SS/Dy .SS on duty shall call the attention of SS/Dy. SS of CHE station through Telephone for re-setting I.B. Axle counter zone giving details of last train left the station into the section.	1	Dy. SS/SM on duty at CHE after verifying that the said dispatched train arrives fully, shall exchange private number with SS/Dy. SS on duty at ULM and gives permission to re-set by clicking the 'Permission Grant' push button [To ULM] provided on the VDU.
2	On getting re-set permission on re-set Panel SS/Dy.SS on duty shall	2	Dy. SS/SM on duty at CHE shall continue to click the 'Permission

	acknowledge by pressing 'Permission received from CHE' acknowledgement button. For each such operation the reset counter provided in Operating Panel shall increase by one digit. SS/Dy. SS on duty shall make an entry of changed Reset counter number in re-setting register.		Granting' button'.
3	SS/Dy. SS on duty then shall re-set the I.B. Axle counter by turning 'UP Re-set Key' and press the 'Re-set button' on the re-set panel, which will reset the Axle Counter.	3	Dy. SS/SM CHE shall also click 'Re-set' button provided on VDU at CHE station simultaneously at the same time for re-setting of I.B. Axle counter.
4	On completion of re-setting process I.B. section clear indication will appear on re-set panel.	4	The /Dy. SS/SM on duty at CHE shall record in his train register the re-setting operation giving train number, time and private number exchanged with the SS/Dy. SS of ULM station giving reasons for the re-setting operation.

2.6 DISPATCH OF TRAINS:

Dispatch of trains is governed by the provision of G & SR 3.42, 3.70 and Block working manual rules.

a) From CHE towards ULM.

Train will be dispatched in accordance with the General Rules 3.42, 3.70., 3.75, 4.35 and 8.01 and subsidiary Rules thereto.

b) CHE TO IBS ON UP AND DOWN LINES:

The Dy. SS/SM on duty shall ensure that the portion of line between Advanced Starter and 400 Mtrs beyond IBS at their respective ends is clear of obstruction and indication to this effect is available in the VDU and shall also ensure any non-isolated shunting at their respective ends suspended and shunting authority issued if any is withdrawn and kept in his custody.

Advise the Station Master at the station in advance, of the train No. and description of such intended train to be dispatched and shall take his assent supported by Private Number and shall then set and lock the route and take off the Starter and Advanced Starter.

c) IBS SIGNAL TO THE STATION IN ADVANCE:

The Dy. SS/SM on duty shall obtain line clear over lock & Block instruments from the station in advance to dispatch a train pass the IBS signal at the respective ends and shall take off the IBS signal by means of taking of signal No.30 of CHE.

After the train passes the intermediate Block Stop signal of CHE a buzzer will ring in the VDU. On hearing the buzzer/bell the Dy. SS/SM must acknowledge the same by clicking train entering section [TES] muting button to stop the buzzer/bell and then send train entering section report to the cabin master of the station in advance who in turn will turn commutator of the Double line Lock and Block Instrument from the line clear position to Train On Line position and acknowledge train entering section. After dispatch of a train from CHE into the Block section between CHE and intermediate Block Post in case when the intermediate stop signal is not taken 'off' but the buzzer has started ringing, this may be either due to the train passing intermediate Block stop signal at 'ON' position or due to failure of the track circuit in advance of that intermediate Block Signal and shall exchange Private Number with the Cabin Master in advance indicating the occurrence and the number of the train. On getting the information from the Station Master/ULM, the Dy. SS/SM on duty at CHE in turn will inform SCR on duty about this.

The procedure must be rigidly followed irrespective of the fact whether line clear for train has been received from station in advance or not and this must be recorded in the Train Register and Dy. SS/SM's diary book of both the Stations/Cabins.

d)(i) Dispatch of trains towards CPP/PDU in case of failure of the Down/UP Advanced Starter signal at CHE Station due to failure of "Axle Counter" device or otherwise. If the failure of the Advanced starter of CHE due to the failure of axle counting device or the indication lamp (repeated by indication lamp) showing 'Red' light either due to power failure or due to any other causes, the re-setting "Push Button" provided with counter at the Dy. SS/SM's office for resorting the normal function of the signal, should be operated accordingly to the following instruction whenever the Advance starter signal of CHE is found defective by the Station Master and the following procedure shall be adopted.

On receipt of this information, the Dy. SS/SM on duty after ensuring that all trains which had left his Block Station had arrived complete and intact at **ULM** station (by exchange Private Number with the Dy. SS/SM **CHE** confirming this), shall press the resetting button of the axle counter. When the resetting is successful, it shall be indicated by a green light in the resetting panel provided in the Dy. SS/SM's office at **CHE**. The use of this resetting button is registered on the counter and the Dy. SS/SM should record this giving the details of the occasion with timings in the counter register kept in the station.

If it is not possible to restore normal working of the counter by use of the resetting button, the ESM-in-charge of the section shall be served with a written memo to attend

the defective signal and rectify the same. The ESM-in-charge of the section on being served with a memo by the Dy.SS/SM, shall attend the failure and rectify the fault. The ESM after ensuring that all S&T gears relating to defective signal have been attended to and are in working order except the axle counter which needs re-setting shall establish communication with Dy. SS/SM concerned and ask him to reset the axle counter by pressing the reset push button. Where after the Dy. SS/SM on duty, after ensuring that all the trains which had left his Block Station had arrived complete and intact at **ULM** (by exchanging of P.N with **SS/DY SS ULM** confirming this) shall press the resetting button provided in the VDU at **CHE** station and resume the normal working.

e) DESPATCH OF TRAINS IN CASE OF FAILURE OF INTERMEDIATE BLOCK STOP SIGNAL:

[a]When a driver finds an intermediate Block Stop signal at 'ON' Position he shall stop his train in rear of the signal and advise the guard of the fact by sounding long continuous whistle and shall then contact the Station Master of the Block Station in rear over the signal post telephone provided for the purpose vide SR.3.75.01[i].

[b]If the Dy.SS/SM of CHE station, on being contacted over Telephone by the driver, finds that the signal is defective, he shall, after obtaining "Line Clear" for the train from the station in advance, authorized the driver on the telephone to pass intermediate Block Signal at "ON" and enter the block section ahead. He shall give Driver the Private Number and identification Number under which he has received "Line Clear" for the train from the station in advance.

The Loco pilot shall then sound one short, one long and one short whistle and, on receipt of Guard's signal shall proceed ahead duly exchanging signals with him.

The station Master on being contacted by the Loco pilot on signal post telephone if he is unable to obtain "Line Clear" for the train due to total interruption of communications, shall call for the Guard's through the Loco pilot and on being contacted by guard, he shall advise the guard of the circumstances and give a Private Number for the train to proceed up to the next block station.

The guard shall prepare a memo in duplicate authorizing the Loco pilot to proceed with the Private Number received from the Station Master. In such case the speed of the train shall be restricted as prescribed in GR 3.75(3).

[c]In such case the Loco pilot shall pass the IB signal at "ON" and proceed cautiously and be prepared to stop short of any obstruction, at a speed not exceeding 15 Kilometers an hour if he has a good view of the line ahead, otherwise at a speed not exceeding 8 kilometers an hour and report the failure to the Station Master at the block station ahead.

While complying with the instructions contained in GR 3.75(3), when the Loco pilot has to pass IB signal at "ON" after waiting for 5 minute at the signal, he shall proceed cautiously preparing to stop short of any obstruction at a speed not exceeding 15KMPH when view ahead is clear and 8 KMPH when view ahead is not clear due to curve, obstruction, rain, fog or any other cause until he reaches the foot of the next stop signal

and even the signal is “OFF” the Driver shall continue to look out for possible obstruction short of the same and will act upon its indication only after he has reached it. Before starting, the Loco pilot shall sound one long whistle which may be repeated as necessary and shall then start his train on receipt of Guard’s signal. Thereafter he shall exchange signals with the Guard.

On reaching the block station ahead the Loco pilot shall report the failure of the signal to the Station Master. If, the telephone is provided at the intermediate Block Stop signal Post is out of order the Loco pilot ck station ahead, the Loco pilot shall report the failure of the signal to the Dy. SS/SM, Following train shall not be allowed to leave **CHE** unless the complete arrival of the receiving train is certified by the SM on duty at **ULM** under exchange of Private Numbers.

The station Master of the block station working the intermediate block stop signal on becoming aware that such a signal is defective shall, before dispatching the train, treat the entire section up to the block station immediately ahead of the intermediate block post as one block section and issue a written authority to the Loco pilot to pass the defective intermediate Block Stop Signal at “ON” without stopping at the signal. In accordance with the procedure prescribed by special instruction.

A written authority as mentioned in GR 3.75(4) shall be in Form T/369[3b] in which the Private Number and identification Number obtained from the station in advance in support of the “Line Clear” shall be recorded. Display of “Proceed hand signal at the foot of defective Intermediate Block Stop Signal may be dispensed with.

[d]However, if the DY.SS/SM on the Block station immediately in rear of an intermediate Block Signal is aware that UP/DN intermediate Block Signal is defective shall before Dispatching a train shall verify that all trains which had left his Block Station had arrived complete and intact at **ULM** station (by exchanging Private Number with SM- **ULM**) shall press the resetting button of Axle counter equipment. Thereafter Loco pilot shall be handed over the authority of T-369[3b] to pass IBS Signal at “ON” position where in, the Private Number and indication number obtained for line clear, shall also be written. The use of this re-setting push button is registered on the counter and DY.SS/SM should record this usage giving details of the occasion with timings in the Counter/register and also train registers.

(e) INDICATION CUM RESETTING PROVISION IN THE VDU AT SGDM:

The VDU provided for following light indications:

- (i)Two green indications for the track- circuited portion by Axle Counter, which remain normally lit to indicate that the track is clear. These lamps extinguish no sooner the train passes the last stop signal and their place two red indications are lit to indicate that the track is occupied.
- (ii)Two red indications for the last stop signal replacement track circuit which remain lit so long this track- circuit is occupied or in under failure condition.
- (iii)Two red indications ahead of the IBS Signal, which are lit if the train passes the said signal in “ON” Position. These indications continue to glow till such time the lock and block working is resumed through emergence re-setting feature.

(iv) Two red indications just ahead of IBS Signal for the IBS signals replacement track circuit. These indications normally remain dark and are lit either during occupation by a train or during failure of this track circuit.

(v) Two red indications for the block section for receiving trains. These indications shall normally remain no indications and shall be lit only when the incoming train passes the IBS signal. It remains lit till such time train arrives fully and Block Instrument is normalized.

f) RE SETTING PROVISION IN THE VDU AT CHE STATION:

For resetting of I.B. Axle counter please refer Para No: 5.2 of Appendix 'B' of this SWR

g) SPECIAL INSTRUCTION IN CASE OF A TRAIN PASSING IBH AT 'ON' POSITION:

i] In case train run away indication appears the Dy.SS/SM/Cabin Master receiving Station shall not turn the block instrument handle to line clear position and Dy.SS/SM at sending station shall not take any action to dispatch the third train unless the second train which passed the IB signal in the 'ON' position has actually arrived and its complete arrival is verified by the receiving station.

ii] Every case of a train passing IB signal at 'ON' position without strictly following the provision of GR 3.75 should be treated as a breach of block rule by the Loco pilot and action to be taken accordingly.

iii] When train run away indication appears at the Dispatching Station without any train in the section, the IBS system should be treated as failed and Signal Maintainer should be advised. All the subsequent trains shall be Piloted OUT after duly taking line clear treating entire section as one Block section as per GR 3.75(4).

iv] Whenever a train after having obtained line clear passes IBS (when not taken off) in "ON" position the train run away indication appears at the Dispatching station and train entering section indication appears at the receiving station, under such circumstances no further train shall be allowed in the section till the said train arrives completely at the receiving station i.e., station in advance, and its complete arrival received at the receiving station i.e. station in rear supported by Private Number treating the entire block section as single section.

v] If any train passes IB Signal at 'ON' position when there is a train in the Section between IBS and the station ahead, the train run away indication will appear at both receiving and Dispatching station. Under such circumstances the Dy.SS/SM in the receiving station shall not turn the Block instrument to Line Clear position and Dy.SS/SM at sending station shall not take action to dispatch the (3rd) train, unless the 2nd train which passes the IBS in the 'ON' position has actually arrived and its complete arrival is verified by the receiving station.

vi] Permission button to be pressed for the runaway train by break opening the seal only after verifying that the last vehicle of the runaway train has arrived in -tact and ensured by exchange of private number with the Dy.SS/SM of the sending station. In case of failure of Axle Counter equipment at the sending station, permission button may also be pressed for normalizing the system only after verifying that there is no train in the section and after duly exchanging Private number with the Dy.SS/SM of the sending station.

vii] Whenever a train run away indication appears when there is a train in the section, no further train should be allowed in the section till resetting is done as per item No.30.3 above.

viii] Before any re-setting operation is done, the Dispatching station should advise the receiving station giving details of the last train that has entered the section and should ensure by exchanging of private number that the last train has arrived complete at receiving station.

Every Case of re-setting shall be entered in a register in the following proforma.

Date and time	Train No. Last entered the block section	Private No. of station ahead for Complete Arrival of the train Under Col.2	Counter No Before resetting operation completed	Train No. Entering Block section Immediately after the resetting operation	Remarks	Signature of Dy. SS/SM
1	2	3	4	5	6	7

ix] If resetting is not possible under item as mentioned above, the system should be treated as failed and train will work treating the entire section up to the Block Station immediately ahead of the IBS Post as one block section as per GR 3.75(4).

x] Action to be taken when a train passes Intermediate Block Stop Signal at 'ON'

a) By Dy.SS/SM of Block Station in advance of the Intermediate Block Stop signal:

i] Shall not turn the Block Instrument commutator to "Line Closed" Position Unless the complete arrival of the train which passed IBS at "ON" position is ensured, without any exception even for such a train which leaves the rear station after obtaining line clear and passes IBS at "ON" position, since there is a chance of leaving a vehicle or vehicles in the Axle Counter area where the function of Axle Counter also fail when IBS is passed at "ON" position.

ii] In case the bottom needle of the SGE type block instrument is in its 'Line closed' position, action should be taken to turn the block instrument commutator to 'TOL' Position vide BWM 5.16(2)(iv) and must not turn to "Line closed" and then to "Line clear" position unless the train which had passed the "Intermediate Block Stop Signal" in the 'ON' position arrives complete and its complete arrival is verified.

b] By the Dy.SS/SM/ASM of Block Station in rear of the intermediate Block Stop Signal must ensure that last stop signal controlling entry of trains into the section between the last stop signal and the intermediate Block Stop Signal is in its 'ON' position and shall under no circumstances take 'OFF' or attempt to take 'OFF' the said last Stop signal even if the Axle counter/Track circuit section from his block station up to and including the adequate distance beyond the Intermediate Block Stop signal shows 'clear' unless the train which had passed the intermediate Block Stop signal in the 'ON' position arrives complete the block station in advance and its complete arrival

is verified, and intimate the Dy.SS/SM/ASM of the block station in advance the number, description and the departure time of the last train Dispatched from his block station under exchange of Private number.

c] By the Dy.SS/SM of both the block stations in rear and in advance of the intermediate Block Stop Signal:

i] After the complete arrival of the last train, according to the information received vide sub-para (b) above, the Dy. SS/SM of the block station in advance shall communicate the same to the Dy. SS/SM of the station in rear supported by a Private Number which shall be acknowledged by the later by issuing Private Number. Thereafter the Dy. SS/SM of the dispatching station and the Dy. SS/SM of the receiving station shall operate the 'Resetting' and 'reset' panel respectively in conjunction with the Dy. SS/SM of the Block Station in advance shall then take steps or authorized Dy. SS/SM of the receiving station supported by a Private Number to normalize the block instrument.

ii] Record of Private Number exchange and the number shown in the counters shall be maintained by the concerning Dy. SS/SM in the train signal (Cum log) Register/Trine Log Register.

It is to be noted that in terms of GR3.75 whenever intermediate block stop; signal is at 'on' the Loco pilot must stop his train in rear of the signal and contact the Dy.SS/SM of the block Station in rear on the telephone provided on the signal post who will authorize him to pass the signal in 'ON' position supported by Private Number and identification number which were taken for the line clear from the station in advance. If the telephone is not provided or is out of order, the Loco pilot, after waiting for 5minutes shall pass it at "ON" but he must report the failure to the DY SS/SM at the Block Station ahead after following the provision in GR.3.75(3). This would mean that the Loco pilot shall either get an authority on telephone from the station master or must report at the station ahead about the failure of the telephone. If none of those provisions are complied with, it should be taken as breach of Block Rules.

iii] In the event of failure of IBS signal in the "OFF" position or cannot resume to "ON" position immediately after it has been passed by a train, the station master controlling the signal shall take steps to put back the IBS signal to "ON" position and treat IBS signal failed and train shall be dispatched treating entire section between his station and station in advance as one Block section.

2.7 RUNNING OF MOTOR TROLLYS ON IBS ZONE:

i) While allowing motor trolley/4 wheeler tower wagon/material trolley etc., entire section between **CHE-ULM** shall be treated as one block section and shall be issued **T-369 [3B]** for passing IBS at "ON" position.

ii) After the complete arrival of the said Moto Trolley/4 wheeler tower wagon/material trolley etc., at the station ahead, Station Master at adjacent station shall exchange

Private Number in token of complete arrival and then shall resume normal working by resetting the Axle Counter as stated in the SWR.

iii) Motor Trolleys shall not be allowed on following line clear.

NOTE: - Backing of train on the portion of line after passing the intermediate Block Stop signal normally shall not be allowed, however, if it becomes inevitable to back, such backing may be done with great caution as mentioned in SR 3.75.04.

2.8 SIGNAL POST TELEPHONE:

A telephone socket (RE Type portable telephone kept with Loco pilots) with a RED Press button at the bottom is provided at the foot of each IB signal and is meant for Loco pilot to contact the DY.SS/SM in rear by pressing the RED button. The Loco pilot of the train encountering the IB signal at 'ON' position shall contact the station in rear to find out the occupancy or otherwise of the block section ahead.

3. NORMAL POWER SUPPLY TO IBS GOOMTY:

Normal power supply to the Signaling and Interlocking installation at the IBS goomty is drawn from the traction power sources (230V-50 HZ, AT1 and AT2) with auto-change over arrangement in IB Goomty through a panel. Whenever any traction power supplies fails, the auto-change over unit will automatically connected to the other available 'AT' supply.

EAST COAST RAILWAY

WALT AIR DIVISION

APPENDIX 'G'

SRIKAKULAM ROAD STATION

RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS

(P.S.BHATTACHARYYA)
DY.CSTE/P/VSKP

(K.V.S.R.K.KISHORE)
SR.DOM/M/WAT

Station Working rules for 25kv A.C. Electric traction for “ SRIKAKULAM ROAD” station.

1. These rules shall be read with the main working rules and appendices.
2. These rules apply only to ELECTRIC trains or ELECTRIC engines, considered as such and indicated the protection required to prevent them
from entering a sector, sub-sector OR an elementary section, over which a POWER BLOCK exist.

Sl no	Description of Electrified section	Steps/Precautions to be taken		Sequence of switching operations	
		Longitudinal Protection	Transverse Protection	For granting Power block.	For restoring Power block.
1.	2.	3.	4.	5.	6.
1	<u>A.SECTOR</u> 1) Between Ponduru/FS – Urlam/SP on UP & DN line. (10202,10602,10604&10606 and 10301,10303,10501 10503, 10505, X-214 and X-363)	1) Movement of Electric trains/Electric locos shall not be permitted into section of Srikakulam Road– Urlam sections on UP & DN lines.	Nil	1) Ensure no electric loco is stabling with its panto-raised position. 2) Ensure BM-109 & 110 are in open position at Urlam/SP. 3) Open BM-102 & 103 at Ponduru/FS.	1) Close BM-102 & BM-103 at Ponduru/FS.
2	<u>B.SUB-SECTORS</u> 1) UP Sub -sector between Dusi/SSP to Urlam/SP on UP line. (E/S Nos. 10501,10503, 10505, X-214&X-363).	1) Line clear shall not be granted to Urlam for trains on. UP Line 2) Line clear shall not be obtained from Dusi for trains on. UP Line 3) There shall not be any shunt movement at both ends of the yard on UP lines 4) Necessary UP reception, dispatch & shunt signals shall be kept at “ON”.	1) Points No.21A&B and 22 A&B shall be kept in normal Position.	1) Ensure BM-109 is in open position at Urlam/SP. 2) Open BM-108 at Urlam/SP. 3) Open BM-105 at Dusi/SSP	1) Close BM-105 at Dusi/SSP 2) Close BM-108 at Urlam/SP.

1.	2.	3.	4.	5.	6.
3	2) DN Sub -sector between Dusi/SSP to Urlam/SP on DN line. (E/S Nos. 10602, 0604, 10606)	1) Line clear shall not be granted to Dusi for trains on. DN Line 2) Line clear shall not be obtained from Urlam for trains on. DN Line 3) There shall not be any shunt movement at both ends of the yard on DN lines 4) Necessary DN reception, dispatch & shunt signals shall be kept at "ON".	1) Points No.21A&B and 22A&B shall be kept in normal Position.	1) Ensure BM-110 is in open position at Urlam/SP. 2) Open BM-108 at Urlam/SP. 3) Open BM-106 at Dusi/SSP	1) Close BM-106 at Dusi/SSP 2) Close BM-108 at Urlam/SP.
C 4.	<u>Elementary Sections</u> 1) UP E/S No. 10505 between SM-135 at location No.748/15 of Srikakul;am Road to Urlam/SP on UP line.	1) Line clear shall not be granted to Urlam for trains on UP line. 2) There shall not be any shunt movement at north end of the yard on UP lines 3) UP reception & shunt signals shall be kept at "ON".	NIL	1) Ensure BM-109 is in position at Urlam/SP. 2) Open BM-108 at Url;am/SP. 3) Open BM-105 at Dusi/SSP. 4) Open SM-135 at location No.748/15 of Srikakulam Road yard 5) Close BM-105 at Dusi/SSP.	1) Close BM-108 at Urlam/SP 2) Close SM-135 at Srikakulam Road
5	2) UP ES No. 10503 between SM-135 at location No.748/15 of Srikakul;am Road to SM-132 at location No.751/3 of Srikakul;am Road on UP main line and common loop and goods loop. (ES No. X-214 & X363 also gets blocked)	1) Line clear shall not be obtained from Dusi for trains on. UP line 2) Line clear shall not be granted to Urlam I for trains on UP line 3) UP trains shall not be admitted on UP main , common loop& goods loop 4) UP trains shall not despatched from Srikakul;am Road /yard. 5) DN trains shall not be admitted / despatched to / from common loop.& goods loop 6) There shall not be any shunt movement in goods siding. 7) Necessary UP reception & UP despatch signals shall be kept at "ON". 8) DN reception & despatch signals for common loop & goods loop shall be kept at "ON".	1) Points No.21A&B and 22A&B shall be kept in normal Position.	1) Ensure BM-109 is in position at Urlam/SP. 2) Open BM-108 at Url;am/SP 3) Open BM-105 at Dusi/SSP 4) Open SM-135 at location No.748/15 of Srikakulam Road yard 5) Open SM-132 at location No.751/3 of Srikakulam Road 6) Close BM-105 at Dusi/SSP 7) Open BM-108 at Url;am/SP.	1) Open SM-132 at location No.751/3 of Srikakulam Road 2) Close SM-135 at location No.748/15 of Srikakulam Road.

1.	2.	3.	4.	5.	6.
6	3) ES No. X-214 on Goods siding.	1) There shall not be any shunt movement in Goods siding.	1) Point leading to goods siding shall be set against the entry of trains on ES No. X-214.	1) Open SS-214 at loc. No. CHE/1003.	1) Close SS-214 at loc. No. CHE/1003.
7	UP ES No. 10501 between CHE – DSI on UP line.	1) Line clear shall not be obtained from DSI for trains on UP line. 2) UP trains shall not be despatched from yard. 3) UP despatch signals shall be kept at “ON”.	NIL	1) Open BM-105 & 107 at DSI/SSP. 2) Open SM-132 at South end of the yard at 749/35.	1) Close BM-105 & 107 at DSI/SSP. 2) Close SM-132 at South end of the yard at 749/35.
8	DN ES No. 10606 between CHE – ULM on UP line.	1) DN trains shall not be despatched from yard. 2) Line clear shall not be obtained from ULM for trains on DN line. 3) DN despatch signals shall be kept at “ON”.	1) Cross over points No.9 of North cabin shall be kept in normal position.	1) Ensure BM-110 is in open position at ULM/SP. 2) Open BM-108 at ULM/SP. 1) Open SM-134 at North end of the CHE yard at loc. No. 748/18.	2) Close SM-134 at North end of the CHE yard. 3) Close BM-108 at ULM/SP.
9	DN ES No.10604 on DN main line.	1) Trains shall not be admitted on DN main line. 2) Trains shall not be despatched from DN main. 3) Necessary DN main reception / despatch signals shall be kept at “ON”.	1) Cross over points No.12 of North cabin shall be kept in normal position.	1) Open SM-134 at loc. No. 748/18. 2) Open SM-133 at loc. No. 749/16.	1) Close SM-133 at loc. No. 749/16. 2) Close SM-134 at loc. No. 748/18.
10	DN ES No. 10602 (on DN loop and between CHE – DSI section on DN line including Hot axle siding.	1) Line clear shall not be granted to DSI for trains on DN line. 2) Necessary DN reception signals shall be kept at “ON”.	1) Cross over points No.8 of South cabin shall be kept in normal position. 2) Cross over points No.12 of North cabin shall be kept in normal position.	1) Open BM-106 & 107 at DSI/SSP. 2) Open SM-133 at South end of the yard at 749/16.	1) Close SM-133 at 749/16. 2) Close BM-106 & 107 at DSI/SSP.

NOTE: -

- 1) For any UN-usual movement of Electric locos, the Station Master on duty must refer to the working rule diagram from 25 kV AC traction of his station and ensured that there is no chance of energizing the section where power block has been sanctioned.
- 1) Points leading to unwired tracks shall not be used for the movement of electric loco with pantograph raised.
- 3) Refer modified Drg. No. WAT/TRD/SWR/238/12

DOM (G) / WAT

SR.DEE/TRD/WAT