PRODUCED BY AN AUTODESK STUDENT VERSION

CHAKAND

GENERAL NOTES

1. THIS PLAN IS BASED ON SIGNAL INTERLOCKING PLAN NO. **ECR/SIP/DNR/298/2006, ALT-02.**
2. THIS PLAN IS BASED ON ENGINEERING SCALE PLAN (ESP) NO. **1-121-12017.**
3. THIS PLAN SUPERSEDES **ECR/SIP/DNR/298/2006, ALT-02.**
4. THIS STATION IS LOCATED IN 25 KV AC ELECTRIFIED SECTION.
5. ALL THE STOP SIGNALS ARE LOCATED CLEAR OFF NEUTRAL SECTION.
6. LIGHTING OF NEW SIGNALS TO BE ENSURED BY SIGNAL SIGHTING COMMITTEE SUBJECT TO LIGHTING OF SIGNALS.
7. SYSTEM OF WORKING IS ABSOLUTE BLOCK SYSTEM.
8. NO APPROACH WARNING IS PROVIDED FOR THE LC GATE .
9. THE GROUND MOUNTED LEVER FRAMES ARE PROVIDED FOR SIDING POINT OPERATION AND LC GATE BOOM LOCKING-**NIL**.
10. THE HPLS PROVIDED FOR SIDING POINT AND STANDS NORMALLY IN - **NIL**.
11. ALL THE WORKS ARE CARRIED OUT AS PER THE PROVISIONS IN THE IRSEM, GSR AND OTHER POLICY LETTERS.
12. THE NEW EQUIPMENT IS PLACED AS PER SITE SURVEY.
13. RECORD OF DESIGN DECISIONS ARE DETAILED IN SCHEME PLAN DESIGN LOG-**NIL**.
14. FOULING POINTS ARE REQUIRED TO BE MAINTAINED AS PER IRSEM.
15. SIGNAL AND SIGNAL POSTS ARE LOCATED AS PER IRSEM.
16. POINT ZONE POWERS ARE OPERATED BY PARALLEL OPERATION.
17. DEAD APPROACH LOCKING PROVIDED FOR INTERLOCKED GATES OF BLOCK SECTION WITH 60 SEC. TIME DELAY.
18. NON-STANDARD SYMBOLS USED ON THIS PLAN ARE - **NIL**
19. LIST OF ASSUMPTION BEING MADE WHILE SCHEME PLAN WAS IN PRODUCTION ARE
    (i) - .....
    (ii) - .....
20. SCHEME PLAN SPECIFIC ISSUES WHICH ARE STILL TO BE RESOLVED
    (i) - .....
    (ii) - .....
21. TYPE OF INTERLOCKING - **CENTRALISED ELECTRONIC INTERLOCKING.**
22. REFER **S&T/SIGNAL/ECR/CHAKAND/01** FOR DETAILS OF ALL SIGNAL ROUTES.
23. COMPLETION DETAILS TO BE INCORPORATED AFTER COMMISSIONING THE WORKS SUITING TO SITE CONDITIONS FOR GENERATING SIGNAL INTERLOCKING PLAN (RECORDS UPDATED).
24. SPECIAL NOTES RELATED TO SPECIFIC RAILWAY STATION LIKE SPT, EMERGENCY GATE KEY etc.
25. ALL MAIN SIGNALS, SUBSIDIARY SIGNALS, GROUND SHUNT SIGNALS, REPEATER SIGNALS, STANDARD AND MINIATURE INDICATORS, POSITION LIGHT JUNCTION INDICATORS ARE OF LED TYPE.

SIGNAL SPECIFIC NOTES – I

1. NUMBER GRID:

FUNCTIONS	LOCATION or DIRECTION	RANGE	SPARES
SIGNAL	RIGHT TO LEFT	01-29 (ODD NUMBERS)	13 to 29
	LEFT TO RIGHT	(02-30) (EVEN NUMBERS)	10,14 to 30
Calling-ON SIGNAL	RIGHT TO LEFT	CO1	
	LEFT TO RIGHT	C12	
SHUNT SIGNAL	RIGHT TO LEFT	201-259 (ODD NUMBERS)	205 to 259
	LEFT TO RIGHT	202-260 (EVEN NUMBERS)	202, 204 & 210 to 260
POINTS	RIGHT HAUF	51,52,53,54,	--
	LEFT HALF	55,56,57,58,59,	--
SIDING POINTS	RIGHT HALF	--	--
	LEFT HALF	--	--
LC GATE	RIGHT HALF	G-31	--
	LEFT HALF	--	--

2. BLOCK WORKING:

SECTION	TYPE OF BLOCK WORKING	BLOCK INSTRUMENT TYPE	BPAC	REMARKS IF ANY
'CKH'-BELA' SEC.	ABSOLUTE BLOCK	UPSB/BLOCK PANEL DOUBLE LINE	HASSDAC	LOCATED AT SM ROOM
'CKH'-GAYA' SEC.	ABSOLUTE BLOCK	UPSB/BLOCK PANEL DOUBLE LINE	HASSDAC	LOCATED AT SM ROOM

3. DETAILS OF TRACK CIRCUITS:

TRACK CIRCUIT NOS.	TYPE OF TRACK CIRCUITS	REMARKS IF ANY
C-017, 17, 027, 51AT, 51BT, 53T, 47, 68T, 68T1, 047, 047T1, 047T2, 067, 067T1, 067T2, 077, 077T1, 077T2, 081, 081T, 087, 87AT, 87BT, 87AT, 87BT, 097, 97AT, 97BT, 99AT, 99BT, 0117, 127, C-127.	DC-SINGLE RAIL TRACK CIRCUIT	-

4. DETAILS OF AXLE COUNTERS:

AXLE COUNTER SECTION	TYPE OF AXLE COUNTER	TYPE OF REPEATER	LOCATION OF REPEATER	LOCATION OF CO OPERATION PLUNGER/LV BOX
SECTION: GAYA-CKH (DN)	HASSDAC	PREPARATORY	AT STATION GAYA	AT STATION CKH
SECTION: GAYA-CKH (UP)	HASSDAC	PREPARATORY	AT STATION GAYA	AT STATION CKH
SECTION: BELA-CKH (DN)	HASSDAC	PREPARATORY	AT STATION BELA	AT STATION CKH
SECTION:CKH-BELA (UP)	HASSDAC	PREPARATORY	AT STATION CKH	AT STATION BELA

5. DETAILS OF MOTOR OPERATED POINTS WITH CRANK HANDLE GROUPING:

GROUP	POINTS	TYPE OF POINT MACHINE	CH EKT KEPT AT
CH1	51	IRS POINT MACHINE	SM ROOM
CH2	52	IRS POINT MACHINE	SM ROOM
CH3	53	IRS POINT MACHINE	SM ROOM
CH4	54	IRS POINT MACHINE	SM ROOM
CH5	55	IRS POINT MACHINE	SM ROOM
CH6	56	IRS POINT MACHINE	SM ROOM
CH7	57	IRS POINT MACHINE	SM ROOM
CH8	58	IRS POINT MACHINE	SM ROOM
CH9	59	IRS POINT MACHINE	SM ROOM

6. DETAILS OF SIDING POINTS (IF ANY):-**NIL**
i. POINT NO. is LOCALLY OPERATED WITH SUCCESSIVE KEY RELEASE ARRANGEMENT
ii. SIDING POINT KEY LOCKED IN POSITION CAN'T BE TAKEN OUT TO SITE BY SM FOR OPERATION
iii. SIDING POINT KEY A IS EXTRACTED FROM EKT LOCATED AT SITE
iv. THIS KEY IS INSERTED TO UNLOCK A END POINT
v. SIDING POINT IS SET TO REVERSE AND KEY B IS EXTRACTED
vi. KEY C IS ENSURED TO BE TAKEN OUT BY SM AFTER SIDING IS SET TO REVERSE
vii. SIDING IS READY FOR SHUNTING

SIDING POINT DETECTION TABLE(Bnk)-**NIL**

SIDING POINT NO.	DETECTS POINT NORMAL/REVERSE	PROVED IN SIGNAL NO.	LEADING TO
NIL	-	-	-
NIL	-	-	-

SPECIAL INSTRUCTION / APPROVED SPECIAL INSTRUCTION

SL.NO.	INSTRUCTION	ISSUED BY	AUTHORITY	REMARKS
1.	UNDER THE PROVISION OF GR PARA 3.47 FOR TAKING OFF SIGNALS FOR MORE THAN ONE TRAINS AT A TIME IN A SECTION WITH ONE RECEPTION OF TRAINS THE INTERLOCKING AND THE LAYOUT OF CHAKAND YARD PERMITS ALREADY INSTALLED SIGNALS AS PER DETAILS OF PROVISION MENTIONED IN SWR.	COMECR/HJP		TO BE OBTAINED

CONDONATION PARTICULARS OF EXISTING INFRINGING GRADIENTS

SIGN.	SECTION	KILOMETERAGE FROM	KILOMETERAGE TO	STRUCTURE INFRINGING	RAILWAY BOARD/ CRS CONDONATION PARTICULARS
NIL					

SIGNAL SPECIFIC NOTES – II

7. INTERLOCKED LC GATE DETAILS:
I. LC NO. 58 IS ELECTRICALLY OPERATED WITH EOLB
II. WHEN IS OPERATED TO CLOSE THE LC GATE AND WINCH KEY IS TAKEN OUT:- **NIL**
III. BOOM LOCK & INTERLOCKING IS PROVIDED WITH STATION MASTER'S PANEL AND IS REFERRED- **NIL**
IV. BOOM LOCK & INTERLOCKING IS PROVIDED IN RELEVANT LC PANEL AND BOOM TO STATION MASTER
8. COMM/INCATION DETAILS:
TELEPHONE COMMUNICATION IS PROVIDED BETWEEN SM AND LC NO 58 & 58
SIDING POINT:-**NIL**
9. DETAILS OF SIGNAL ROUTES HAVING ALTERNATE OVERLAPS

SIGNAL NO.	LEADING TO	DETAILS OF OVERLAP
S01	ROAD 1(UN-1)	UP TO TO TRACK CIRCUIT 87A/87 WHEN POINT 55 REVERSE. STNORMAL & 58NORMAL
S01	ROAD 2 (UN-2)	UP TO TO TRACK CIRCUIT 87A/87 WHEN POINT 55 NORMAL. STNORMAL & 58REVERSE
S01	ROAD 4 (UN-4)	UP TO LSS 511 WHEN POINT 56 NORMAL & 59 NORMAL
S01	ROAD 5(UN-5)	UP TO TO DEAD END WHEN POINT 56 NORMAL
		UP TO LSS 511 WHEN POINT 56 REVERSE & 59 NORMAL

SIGNAL NO.	LEADING TO	DETAILS OF OVERLAP
S12	ROAD 1(UN-1)	UP TO TO DEAD END WHEN POINT 54 REVERSE & 52 NORMAL
		UP TO LSS 502 WHEN POINT 54 REVERSE, 52 REVERSE & 51 NORMAL
S12	ROAD 2(UN-2)	UP TO TO DEAD END WHEN POINT 54 NORMAL & 52 NORMAL
		UP TO LSS 502 WHEN POINT 54 NORMAL, 52 REVERSE & 51 NORMAL
S12	ROAD 3(UN-3)	UP TO LSS 502 WHEN POINT 52 NORMAL & 51 NORMAL

10. 60 SEC. TIME DELAY PROVIDED FOR C-0/& C-12 SIGNAL.
11. ALL ANGLE OF XINGS ARE 1 IN 12 EXCEPT AS MENTIONED.
12. LC GATE NO. 58 IS INTERLOCKED WITH ADJACENT STATION BY TWOSIN.
13. LC GATE NO. 58 IS INTERLOCKED WITH ADJACENT STATION AT KM-43/28-29 AND LC GATE NO. 58'B' IS SITUATED AT KM-43/26-31 CH:1416.0M, AND BOTH GATES ARE ELECTRICALLY OPERATED BY ELECTRICAL LIFTING BARRIER.
14. TWO CPU & VDU (ONE SET STAND BY) PROVIDED FOR VDU OPERATION IN ASM/SM ROOM AND ONE COLOUR MONITOR PROVIDED IN MAINTENANCE ROOM.
15. ACCIDENT TRIPPING PROVIDED AT 1000m.
16. ROAD SIGNAL SHALL DISPLAY RED ASPECT WHEN SLIDING BOOM IS USED TO CLOSE THE ROAD TRAFFIC.
17. DEAD APPROACH LOCKING PROVIDED FOR INTERLOCKED GATES OF BLOCK SECTION WITH 60 SEC. TIME DELAY.
18. POINT MACHINE TO BE OUT SIDE OF TRACK WHERE IS FEASIBLE.
19. V.D.U. DETAILS:-
    MAIN SIGNAL – 01, 02, 03, 04, 05, 06, 07, 08, 09, 11, 12
    CALLING -ON SIGNAL – C26, C-12
    SHUNT SIGNAL – 101,103,105,106,107,108,109, 201, 203, 205, 209,
    DEAD SHUNT SIGNAL – 302, 304, 305,
    POINTS – 51, 52, 53, 54, 55, 56, 57, 58, 59,
    CRANK HANDLE CONTROL – CH-1, CH-2, CH-3, CH-4, CH-5, CH-6, CH-7, CH-8, CH-9,
    L/X ING GATE CONTROL – G-31.
20. L-XING DETAILS BETWEEN CHAKAND TO BELA STATION.

SL. NO	L.C. NO	KM	MKUM	CLASS	BLOCK SECTION	TELE.CONNECTIVITY WITH STA.	INTERLOCKED/ NON-INTERLOCKED	TVU	ANGLE OF XING
1.	48	73/17-18	(M)	C	BLA-CKH	BELA	NON-INTERLOCKED	24223/01-2021	90°
2.	52	77/07-08	(M)	C	BLA-CKH	CKH	NON-INTERLOCKED	22462/11-2020	90°

21. L-XING DETAILS BETWEEN CHAKAND TO GAYA STATION.

SL. NO	L.C. NO	KM	MKUM	CLASS	BLOCK SECTION	TELE.CONNECTIVITY WITH STA.	INTERLOCKED/ NON-INTERLOCKED	TVU	ANGLE OF XING
1.	63	86/21-22	(M)	B	CKH-GYA	CKH	INTERLOCKED	142794/12-2020	90°
2.	65	86/27-28	(M)	B1	CKH-GYA	GYA	INTERLOCKED	83158/12-2020	90°
3.	64	86/21-23	(M)	C	CKH-GYA	CKH	NON-INTERLOCKED	43807/11-2020	90°

22. STANDARD COLOUR SCHEME NEEDS TO BE ADOPTED FOR DEPICTING
INTENDED ALTERATIONS IN THE SSP.
I) FOR NEW WORK:-RED COLOUR
II) FOR DELETION WORK:-GREEN COLOUR.
23. FOULING TRACK CIRCUIT:-**NIL**.