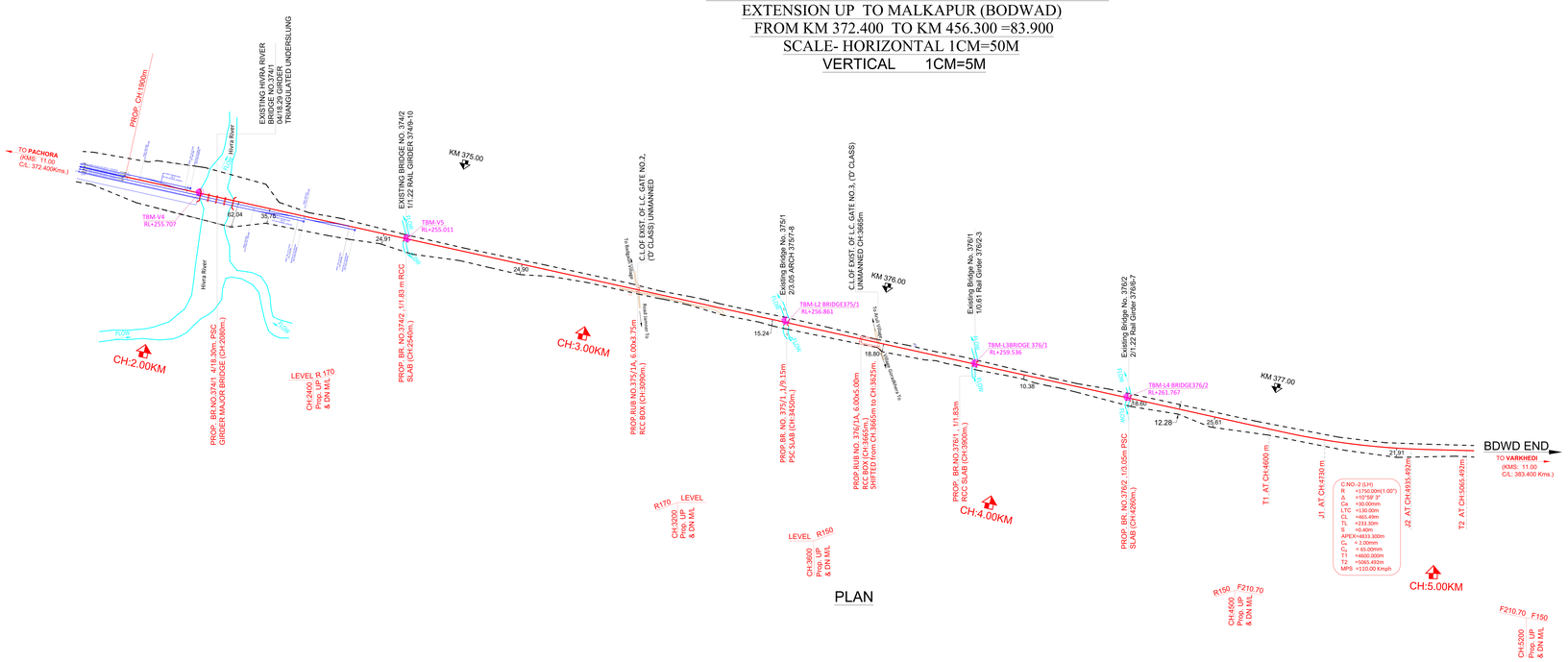
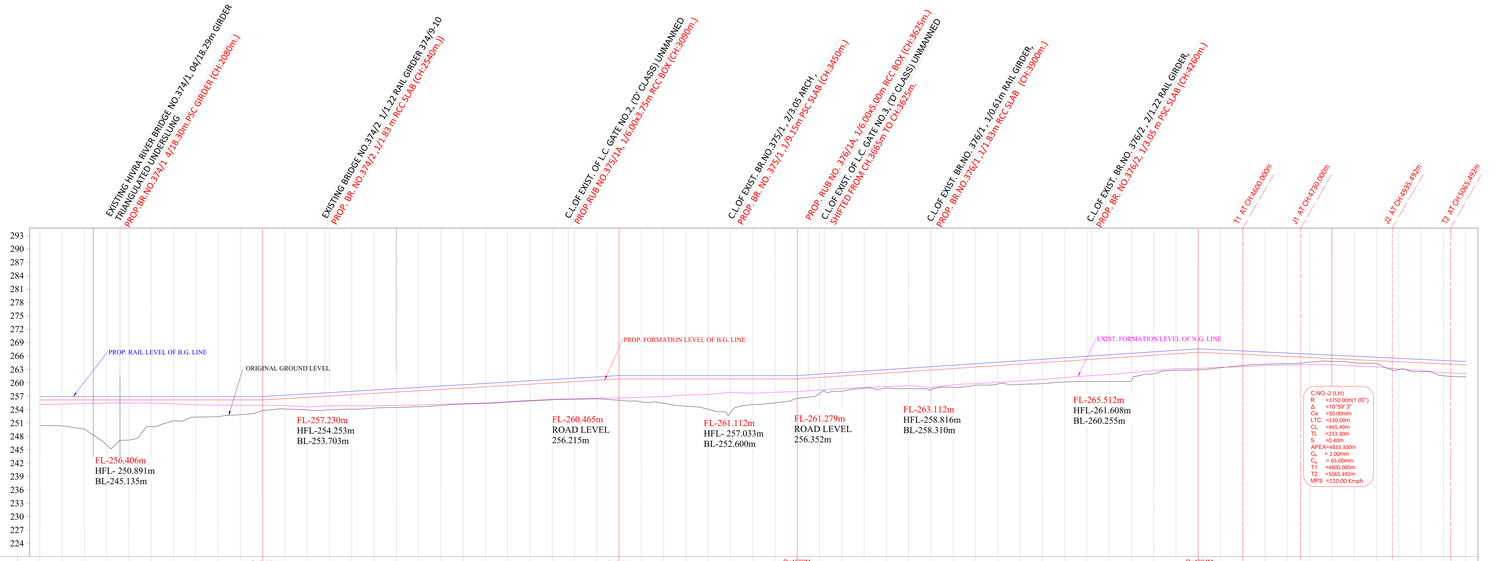
CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1CM=50M
VERTICAL 1CM=5M



PLAN

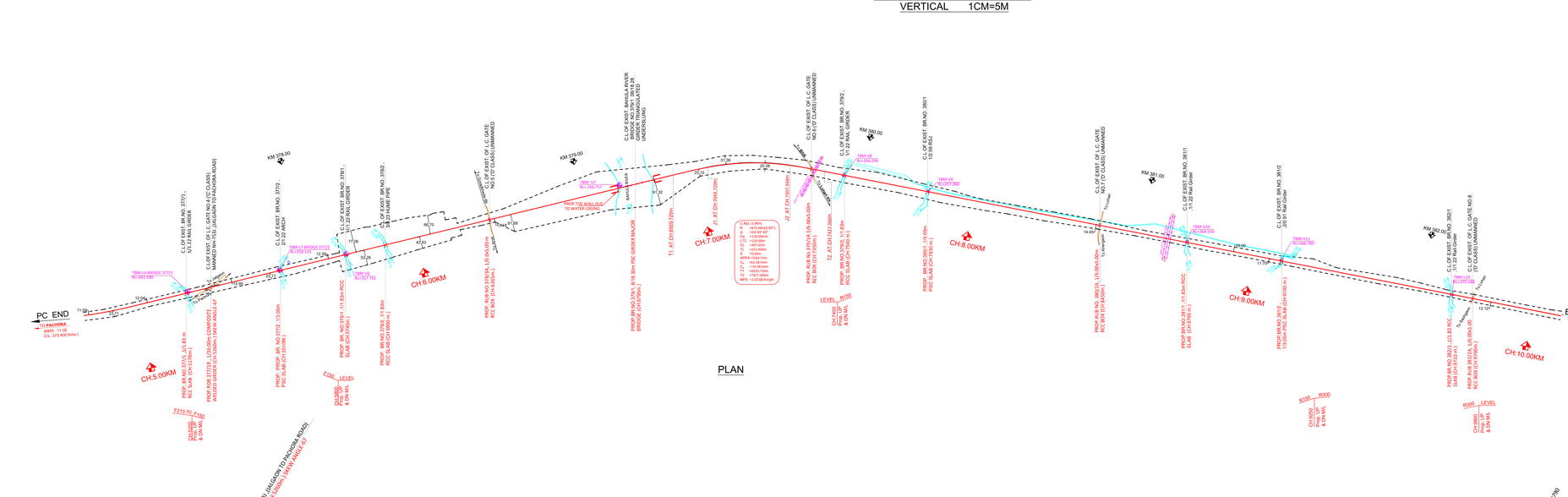


Datum: 221.0

| | | |

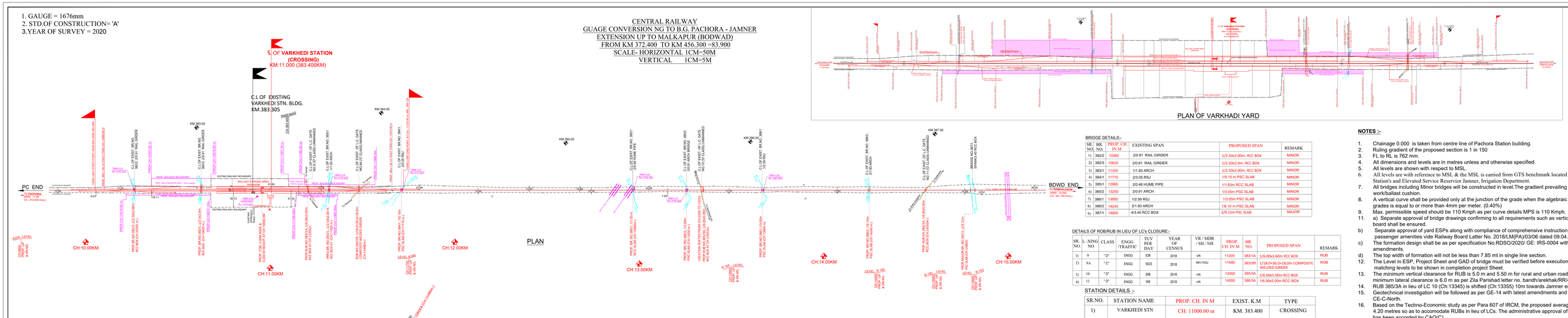
1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1CM=50M
VERTICAL 1CM=5M


PC END
TO PACHORA
(KMS.- 11.00
CL.- 372.400 Kms.)
BDWD END
TO KANNOD
(KMS.- 11.00
CL.- 383.400 Kms.)
CH:5.00KM
CH:6.00KM
CH:7.00KM
CH:8.00KM
CH:9.00KM
CH:10.00KM
KM 378.00
KM 379.00
KM 380.00
KM 381.00
KM 382.00
PROP. RUB NO.3791/A, 1/6.0x5.00m RCC BOX (CH:5150m.)
PROP. BR NO.3772/A, (2)1x60m COMPOSITE WELDED GIRDER (CH:5400m.) SKEW ANGLE-43°
PROP. PROP. BR. NO.3772, 1/3.05m PSC SLAB (CH:5510m.)
PROP. BR NO.3778/1, 1/1.83m RCC SLAB (CH:5745m.)
PROP. BR NO.3792, 1/1.83m RCC SLAB (CH:5895 m.)
PROP. RUB NO.3793/A, 1/6.0x5.00m RCC BOX (CH:6245m.)
PROP. BR NO.3795, 8/18.30m PSC GIRDER MAJOR BRIDGE (CH:4795m.)
PROP. RUB NO.3797/A, 1/6.0x5.00m RCC BOX (CH:7350m.)
PROP. BR NO.3797/2, 1/1.83m RCC SLAB (CH:7595 m.)
PROP. BR NO.3801/1, 1/3.05m PSC SLAB (CH:7830 m.)
PROP. RUB NO. 3802/A, 1/6.0x5.00m RCC BOX (CH:8450m.)
PROP. BR NO.3806/1, 1/1.83m RCC SLAB (CH:8765 m.)
PROP. BR NO.3812, 2/0.91 RAIL GIRDER (CH:9100m.)
PROP. BR NO.3821, 1/1.83 RCC SLAB (CH:9710 m.)
PROP. RUB NO.3827/A, 1/6.0x5.00m RCC BOX (CH:9790m.)
LEVEL R150
CH:7450 Prop. UP & DN MAL
CH:9500 Prop. UP & DN MAL
R300
R250
R200
F150
F210.70
F180
TRAVERSER
TRACK FOR BHILLI DUE TO WATER LOGGING
BANKA WATER
CL OF EXIST. BHAGLA RIVER BRIDGE NO.3795 (7-SPAN 30.48m GIRDER TRIANGULATED UNDERSLUNG)
CL OF EXIST. MANILA RIVER BRIDGE No.3797 (7-SPAN 30.48m GIRDER TRIANGULATED UNDERSLUNG)
CL OF EXIST. BR NO. 3778/1, 1/1.22 RAIL GIRDER
CL OF EXIST. BR NO. 3772, 2/1.22 RAIL GIRDER
CL OF EXIST. BR NO. 3772, 2/1.22 ARCH
CL OF EXIST. BR NO. 3778/2, 3/0.23 HUME PIPE
CL OF EXIST. BR NO. 3792, 3/0.23 HUME PIPE
CL OF EXIST. OF L.C. GATE NO.5 (07 CLASS) UNMANNED
CL OF EXIST. OF L.C. GATE NO.6 (07 CLASS) UNMANNED
CL OF EXIST. OF L.C. GATE NO.7 (07 CLASS) UNMANNED
CL OF EXIST. OF L.C. GATE NO.8 (07 CLASS) UNMANNED
CL OF EXIST. BR NO. 3792, 1/1.22 RAIL GIRDER
CL OF EXIST. BR NO. 3801/1, 1/2.59 RBJ
CL OF EXIST. BR NO. 3811/1, 1/1.22 RAIL GIRDER
CL OF EXIST. BR NO. 3812, 2/0.91 RAIL GIRDER
CL OF EXIST. BR NO. 3821, 1/1.22 RAIL GIRDER
CL OF EXIST. OF L.C. GATE NO.8 (07 CLASS) UNMANNED
TRAVERSER
TRAVERSER
TRAVERSER

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1CM=50M
VERTICAL 1CM=5M



PLAN OF VARKHADI YARD

BRIDGE DETAILS:-

SR. NO.	BR. NO.	PROP. CH. IN M	EXISTING SPAN	PROPOSED SPAN	REMARK
1)	382/2	10265	2/0.91 RAIL GIRDER	1/2.50x2.00m. RCC BOX	MINOR
2)	382/3	10825	2/0.91 RAIL GIRDER	1/2.50x2.0m. RCC BOX	MINOR
3)	383/1	11320	1/1.83 ARCH	1/2.50x2.00m. RCC BOX	MINOR
4)	384/1	11710	2/3.05 RSJ	1/9.15 m PSC SLAB	MINOR
5)	385/1	12965	2/0.46 HUME PIPE	1/1.83m RCC SLAB	MINOR
6)	385/2	13250	2/0.91 ARCH	1/3.05m PSC SLAB	MINOR
7)	386/1	13665	1/2.59 RSJ	1/3.05m PSC SLAB	MINOR
8)	386/2	14245	2/1.83 ARCH	1/6.10 m PSC SLAB	MINOR
9)	387/1	14805	4/3.40 RCC BOX	2/9.15m PSC SLAB	MAJOR

DETAILS OF ROB/RUB IN LIEU OF LC's CLOSURE:-

SR. NO.	L -XING NO	CLASS	ENGG /TRAFFIC	TUV PER DAY	YEAR OF CENSUS	VR / MDR / SH / NH	PROP. CH. IN M	BR. NO.	PROPOSED SPAN	REMARK
1)	9	" D"	ENGG	538	2018	VR	11205	383/1A	1/6.00x3.60m RCC BOX	RUB
2)	9A	" C"	ENGG	5523	2018	NH-753J	11480	383/2R	1/18.0+36.0+18.0m COMPOSITE WELDED GIRDER	ROB
3)	10	" D"	ENGG	298	2018	VR	13355	385/3A	1/6.00x5.00m RCC BOX	RUB
4)	11	" D"	ENGG	169	2018	VR	14550	386/3A	1/6.00x5.00m RCC BOX	RUB

STATION DETAILS :-

SR.NO.	STATION NAME	PROP. CH. IN M	EXIST. K.M	TYPE
1)	VARKHEDI STN	CH: 11000.00 m	KM. 383.400	CROSSING

LEGEND :-

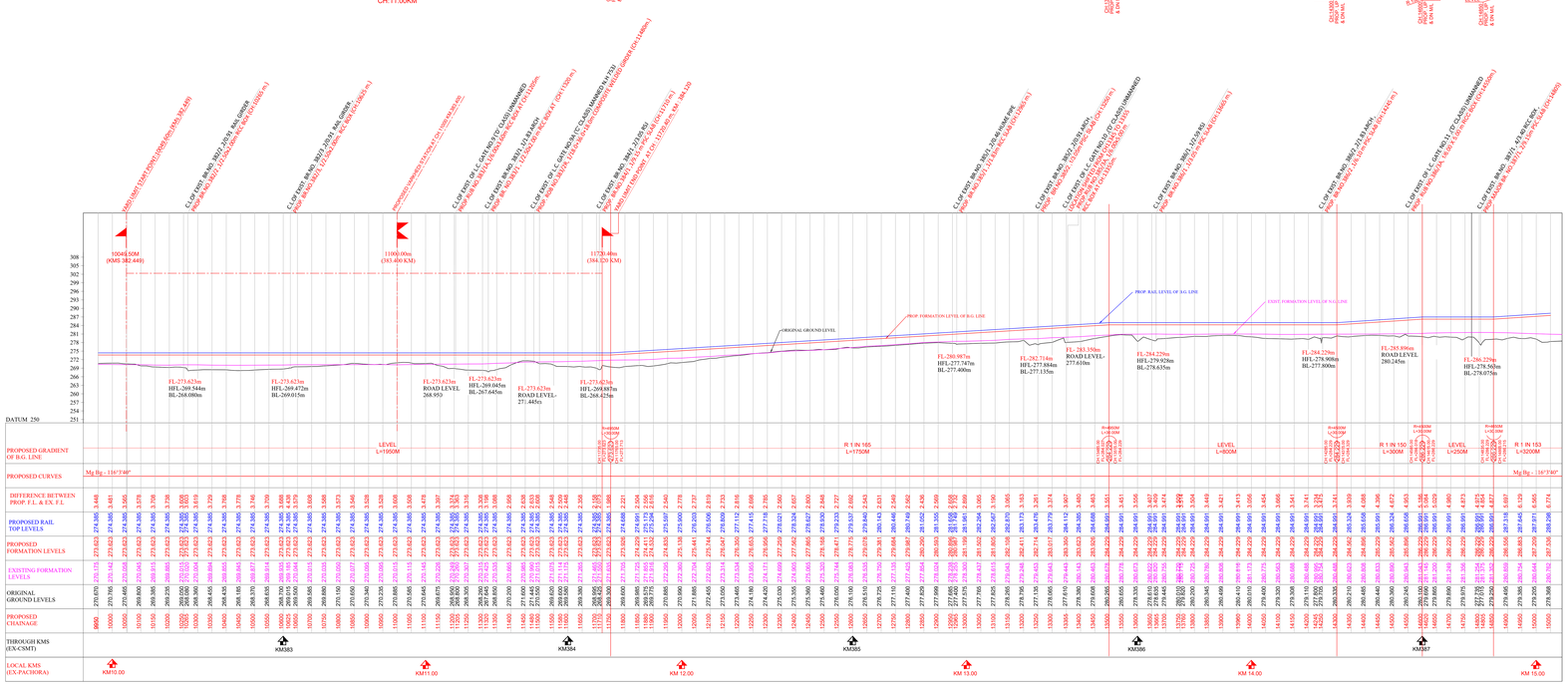
- PROPOSED NEW B.G. LINE WORK SHOWN IN
- EXISTING NG LINE
- EXISTING NG LINE FORMATION LEVEL
- EXISTING RAILWAY BOUNDARY
- PROPOSED RAILWAY BOUNDARY
- EXISTING BRIDGE
- PROPOSED BRIDGE
- PROPOSED RUB
- PROPOSED ROB
- NALLA
- PERMANENT STRUCTURE — PS
- GATE — (G=nos)
- ROAD
- TBM
- R.T.LINE
- L.T.LINE
- WELL

NOTES :-

1. Chainage 0.000 is taken from centre line of Pachora Station building.
2. Ruling gradient of the proposed section is 1 in 150
3. FL to RL is 762 mm.
4. All dimensions and levels are in metres unless and otherwise specified.
5. All levels are shown with respect to MSL.
6. All levels are with reference to MSL & the MSL is carried from GTS benchmark located near Pachora Railway Station's and Elevated Service Reservior Jamner, Irrigation Department.
7. All bridges including Minor bridges will be constructed in level.The gradient prevailing shall be adjusted in earth work/ballast cushion.
8. A vertical curve shall be provided only at the junction of the grade when the algebraic difference between the grades is equal to or more than 4mm per meter. (0.40%)
9. Max. permissible speed should be 110 Kmph as per curve details MPS is 110 Kmph.
11. a) Separate approval of bridge drawings confirming to all requirements such as vertical,lateral clearance & free board shall be ensured.
    b) Separate approval of yard ESPs along with compliance of comprehensive instruction of provision of passenger amenities vide Railway Board Letter No. 2018/LM(PA)/03/06 dated 09.04.2018
    c) The formation design shall be as per specification No.RDSO/2020/ GE: IRS-0004 with latest amendments.
    d) The top width of formation will not be less than 7.85 mt in single line section.
12. The Level in ESP, Project Sheet and GAD of bridge must be verified before execution and corrected matching levels to be shown in completion project Sheet.
13. The minimum vertical clearance for RUB is 5.0 m and 5.50 m for rural and urban roads respectively and the minimum lateral clearance is 6.0 m as per Zila Parishad letter no. bandh/arekhak/RR/466/2023 dt. 04.12.2023.
14. RUB 385/3A in lieu of LC 10 (Ch:13355) is shifted (Ch:13355) 10m towards Jamner end.
15. Geotechnical investigation will be followed as per GE-14 with latest amendments and it has been approved by CE-C-North.
16. Based on the Techno-Economic study as per Para 607 of IRCM, the proposed average height of embankment is 4.20 metres so as to accomodate RUBs in lieu of LCs. The administrative approval of Techno-Economic study has been accorded by CAO(C)

TBM DETAILS :-

SR NO.	TBM NO.	CHAINAGE	LOCATION OF TBM	RL
1	L12	10625.00	ON BRIDGE NO.382/3	270.242
2	L13	11205.00	AT VARKHEDI STATION PLATFORM	270.683
3	L14	11320.00	ON BRIDGE NO.383/1	270.656
4	L15	11710.00	ON BRIDGE NO.384/1	271.667
5	L16	12965.00	ON BRIDGE NO.385/1	278.283
6	L17	13250.00	ON BRIDGE NO.385/2	279.469
7	L18	13665.00	ON BRIDGE NO.386/1	280.903



L-SECTION

Signature Not Verified
Digitally signed by VIVEK PRAKASH
Date: 2024.04.26 15:45:21 +05'30'
Reason: RLPS-CIVIL
Location: India

Signature block

CE-PLG	DIVYAKANT L R CHANDRAKANT CHANDRAKAR Digitally signed by DIVYAKANT L R CHANDRAKANT CHANDRAKAR Date: 2024.04.30 16:04:06 +05'30'
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.04.25 11:15:25 +05'30'
SSE-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2024.04.24 11:02:36 +05'30'
CE-C-North	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2024.03.22 02:46:25 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2024.03.22 02:12:26 +05'30'
JE-C-PS-HQ	MANISH KUMAR Digitally signed by MANISH KUMAR Date:2024.03.21 04:33:03 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2023.08.30 01:01:27 +05'30'
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.09.04 06:48:53 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2022.10.08 03:34:04 +05'30'
XEN-C-BSL	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2022.10.08 03:27:34 +05'30'
SSE-C-WI-I-BSL	BRAJESH KUMAR Digitally signed by BRAJESH KUMAR Date:2022.10.08 03:16:51 +05'30'
SSE-C-DEI-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2022.10.08 03:08:09 +05'30'

C.RLY. / Dy. CE (C), BSL PLAN / R - 510/2-3 OF 17
C.RLY. / HQ PLAN PUCCA No. GM(E)M/ 31661/ 3 OF 17
C.RLY. / HQ PLAN PUCCA No. GM(W)66P -20708/3

CENTRAL RAILWAY / मध्य रेलवे
BHUSAVAL DIVISION / भुसावल मंडल
GAUGE CONVERSION NG TO B.G. PACHORA - JAMNER EXTENSION UP TO MALKAPUR (BODWAD)
गेज रूपांतरण एनजी से बी.जी. पचोरा- जामनेर विस्तार मलकापुर (बोडवाड) तक
KMs. 382.350 To 387.450
CH. 9950 M TO CH. 15050 M
(P.R. I. NO.16 OF YEAR - 2023-24)

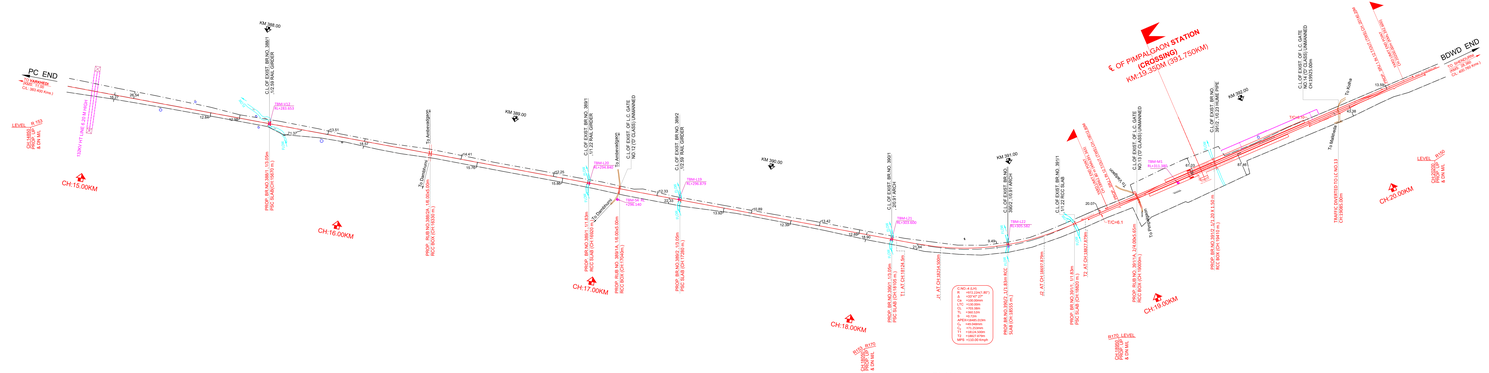
SCALE : H. 1CM = 50M, V. 1CM = 5M.

CONSULTANT:-	AERIAL DATA APPLICATIONS & MAPPING SERVICES 6-1-289/7, 1st Floor, Heritage Fresh, Padmarao Nagar Park Padmarao Nagar Secunderabad - 500025.	
	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

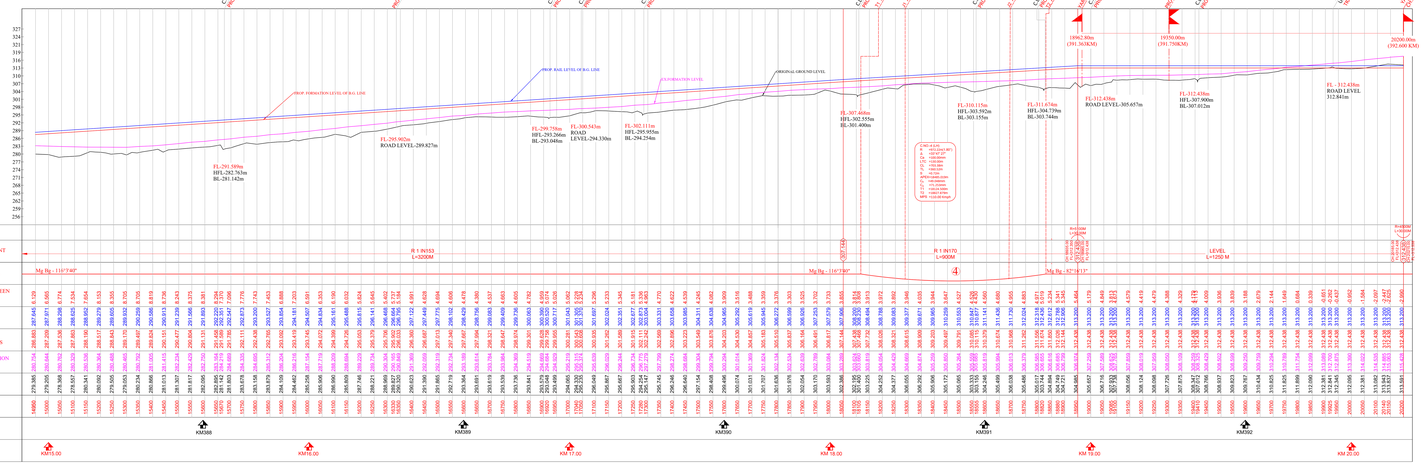
Drawing Size : 1800x 1000

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

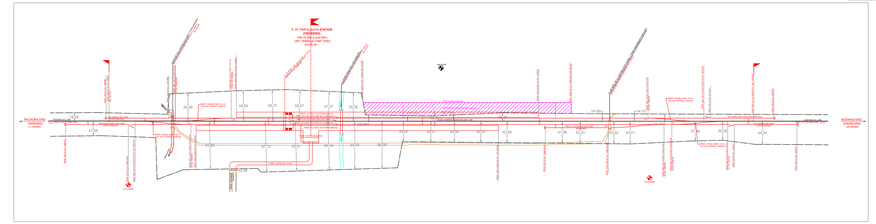
CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1CM=50M
VERTICAL 1CM=5M



PLAN

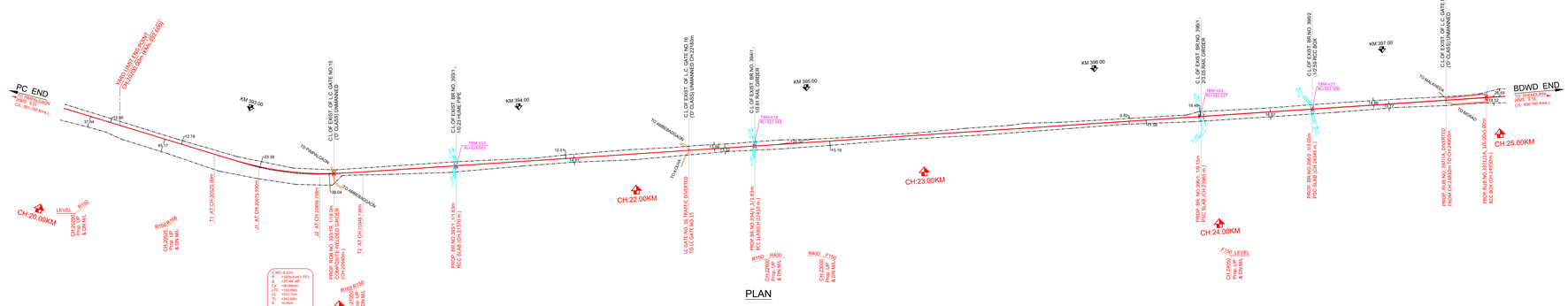


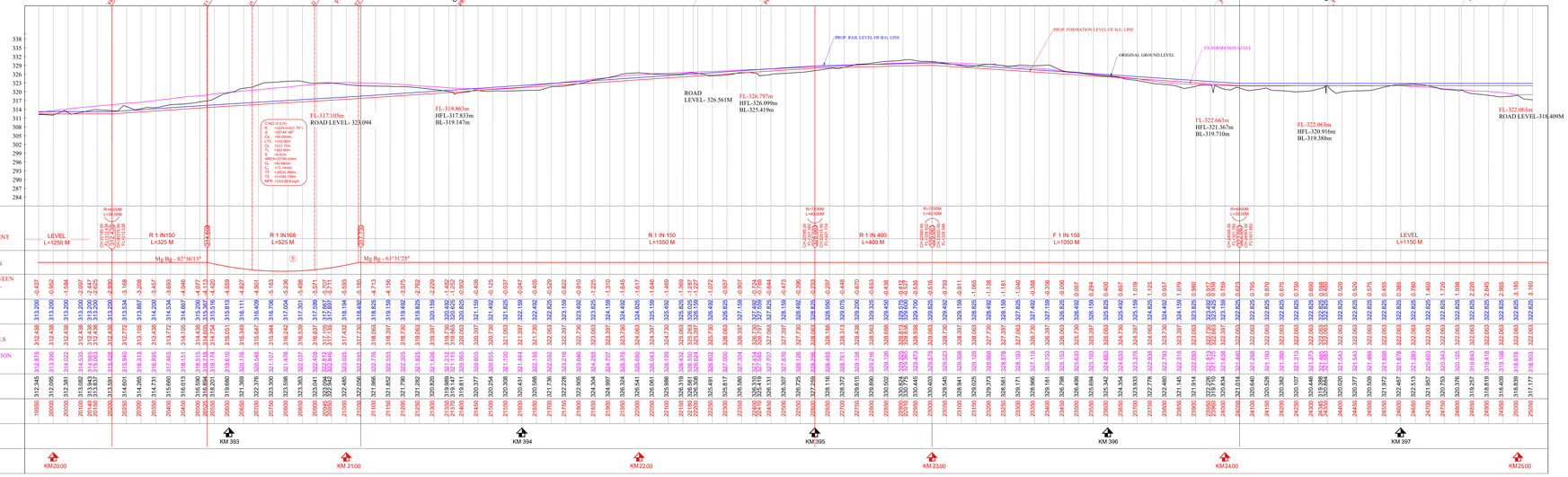
L-SECTION


℄ OF PIMPALGAON STATION (NG TO BG LINE) (CROSSING) KM 19.350M (391.750KM)
PROPOSED BG LINE
EXISTING NG LINE
PROPOSED NG LINE
PROPOSED BG LINE
PROPOSED RUB
PROPOSED ROB
PROPOSED PLATFORM
PROPOSED SHED
PROPOSED SIDING
PROPOSED STABLING LINE
PROPOSED SIDING
PROPOSED SHED
PROPOSED PLATFORM
PROPOSED RUB
PROPOSED BG LINE
EXISTING NG LINE
PROPOSED NG LINE
PROPOSED BG LINE
PROPOSED ROB

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1CM=50M
VERTICAL 1CM=5M





L-SECTION

NOTES :-

1. Chainage 0.000 is taken from centre line of Pachora Station building.
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3. FL to RL is 762 mm.
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5. All levels are shown with respect to MSL.
6. All levels are with reference to MSL & the MSL is carried from GTS benchmark located near Pachora Railway Station's and Elevated Service Reservior Jamner, Irrigation Department.
7. All bridges including Minor bridges will be constructed in level.The gradient prevailing shall be adjusted in earth work/ballast cushion.
8. A vertical curve shall be provided only at the junction of the grade when the algebraic difference between the grades is equal to or more than 4mm per meter. (0.40%)
9. Max. permissible speed should be 110 Kmph as per curve details MPS is 110 Kmph.
11. a) Separate approval of bridge drawings confirming to all requirements such as vertical,lateral clearance & free board shall be ensured.
b) Separate approval of yard ESPs along with compliance of comprehensive instruction of provision of passenger amenities vide Railway Board Latter No. 2018/LM(PA)/03/06 dated 09.04.2018
c) The formation design shall be as per specification No.RDSO/2020/ GE: IRS-0004 with latest amendments.
d) The top width of formation will not be less than 7.85 mt in single line section.
12. The Level in ESP, Project Sheet and GAD of bridge must be verified before execution and corrected matching levels to be shown in completion project Sheet.
13. Geotechnical investigation will be followed as per GE-14 with latest amendments and it has been approved by CE-C-North.
14. Based on the Techno-Economic study as per Para 607 of IRCM, the proposed average height of embankment is 4.20 metres so as to accomodate RUBs in lieu of LCs. The administrative approval of Techno-Economic study has been accorded by CAO(C)

BRIDGE DETAILS:-

SR. NO.	BR. NO.	PROP. CH. IN M.	EXISTING SPAN	PROPOSED SPAN	REMARK
1)	393/1	21370.00	1/0.23 HUME PIPE	1/1.83m RCC SLAB	MINOR
2)	394/1	22410.00	1/0.61 RAIL GIRDER	1/1.83m RCC SLAB	MINOR
3)	396/1	23960.00	2/3.05 RAIL GIRDER	1/9.15m PSC SLAB	MINOR
4)	396/2	24345.00	1/2.59 RCC BOX	1/3.05m PSC SLAB	MINOR

DETAILS OF ROB/RUB IN LIEU OF LC's CLOSURE:-

SR. NO.	L -XING NO	CLASS	ENGG /TRAFFIC	TUV PER DAY	YEAR OF CENSUS	VR / MDR / SH / NH	PRO. CH. IN M	BR. NO.	PROPOSED SPAN	REMARK
1)	15	" D"	ENGG	167	2018	VR	20945.00	393/1R	1/18.0 COMPOSITE WELDED GIRDER	ROB
2)	16	" D"	ENGG	51	2018	VR	22180.00		Traffic Diversion through LC-15	
3)	17	" D"	ENGG	40	2018	VR	24950.00	397/1A	1/6.00x5.00m RCC BOX	RUB

CURVE DETAILS:-

SR. NO.	CURVE NO.	DEFLECTION ANGLE	DEGREE	RADIUS	CHAINAGE T1	CHAINAGE T2	LTC	LENGTH OF CURVE	SPEED POTENTIAL
1)	5(LH)	20° 44' 48"	1.70°	1029.41m	20525.990m	21048.738m	150m	522.75m	110.00 Kmph

TBM DETAILS :-

SR NO.	TBM NO.	CHAINAGE	LOCATION OF TBM	RL
1	V13	21370.00	ON BRIDGE NO.393/1	319.693
2	V14	22410.00	ON BRIDGE NO.394/1	327.561
3	V16	23960.00	ON BRIDGE NO.396/1	322.227
4	V17	24345.00	ON BRIDGE NO.396/2	322.306

LEGEND :-

- PROPOSED NEW B.G. LINE WORK SHOWN
- EXISTING NG LINE
- EXISTING NG LINE FORMATION LEVEL
- EXISTING RAILWAY BOUNDARY
- PROPOSED RAILWAY BOUNDARY
- EXISTING BRIDGE
- PROPOSED BRIDGE
- PROPOSED RUB
- PROPOSED ROB
- NALLA
- PERMANENT STRUCTURE — PS
- GATE
- ROAD
- TBM
- H.T LINE
- L.T LINE
- WELL

Signature block	
CE-PLG	DIVYAKANT L R CHANDRAKANT Digitally signed by DIVYAKANT L R CHANDRAKANT Date: 2024.04.30 18:08:40 +05'30'
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.04.30 11:35:58 +05'30'
SSE-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2024.04.24 11:03:47 +05'30'
CE-C-North	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2024.03.22 02:56:58 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2024.03.22 02:14:01 +05'30'
JE-C-PS-HQ	MANISH KUMAR Digitally signed by MANISH KUMAR Date:2024.03.21 04:37:50 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2023.08.30 01:03:37 +05'30'
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.09.04 06:50:25 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2022.10.08 03:38:00 +05'30'
XEN-C-BSL	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2022.10.08 03:31:25 +05'30'
SSE-C-W-I-BSL	BRAJESH KUMAR Digitally signed by BRAJESH KUMAR Date:2022.10.08 03:21:38 +05'30'
SSE-C-DDI-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2022.10.08 03:09:52 +05'30'

C.RLY. / Dy. CE (C), BSL PLAN / R-5102/ 5 OF 17

C.RLY. / HQ PLAN PUCCA No. GM(E)M/ 31661 05 OF 17

C.RLY. / HQ PLAN PUCCA No. GM(W,B)B/P - 20708/5

CENTRAL RAILWAY / मध्य रेलवे

BHUSAVAL DIVISION / भुसावल मंडल

GAUGE CONVERSION NG TO B.G.

PACHORA - JAMNER EXTENSION UP TO MALKAPUR (BODWAD)

गेज पुनांतरण एनजी से बी.जी. पचोरा- जामनेर

वसितार मलकापुर (बोडवाड) तक

KMs. 392.40 To 397.40

CH. 20000 M TO CH. 25000 M

(P.B. L NO. 16 YEAR - 2019-20)

SCALE : H: 1CM = 50M, V :1CM = 5M.

CONSULTANT:- AERIAL DATA APPLICATIONS & MAPPING SERVICES 6-1-289/7, 1st Floor, Heritage Fresh, Padmarao Nagar Park Padmarao Nagar Secunderabad - 500025.

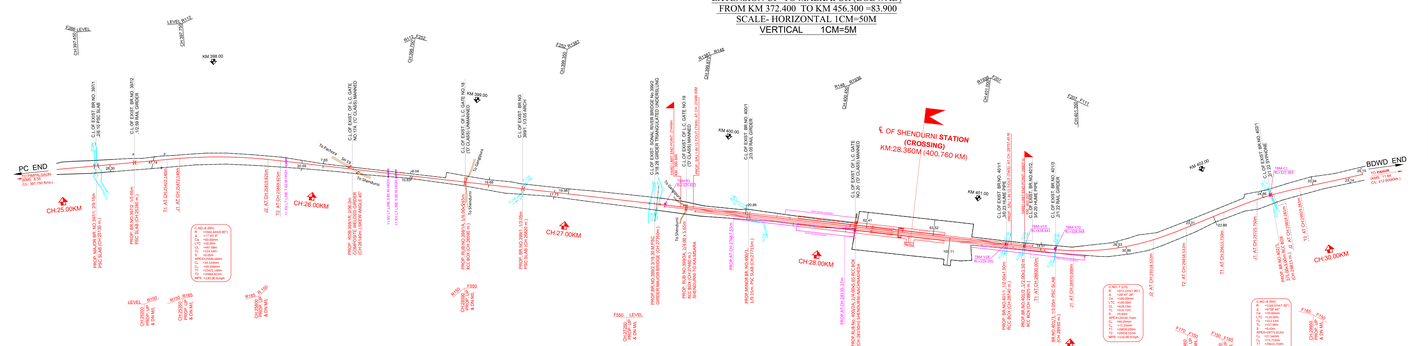
	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

Drawing Size : 1500x 900

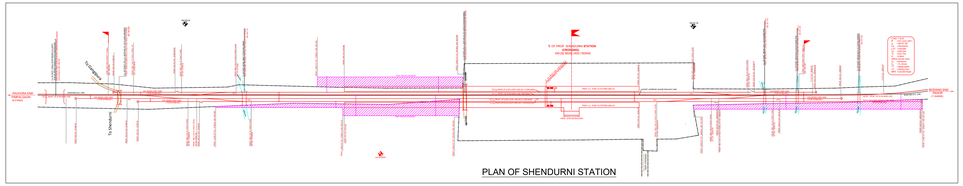
Signature Not Verified
Digitally signed by DIVYAKANT L R CHANDRAKAR
Date: 2024.04.30 13:21:51 +05'30'
Reason: Signed in CRIS
Location: India Delhi

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

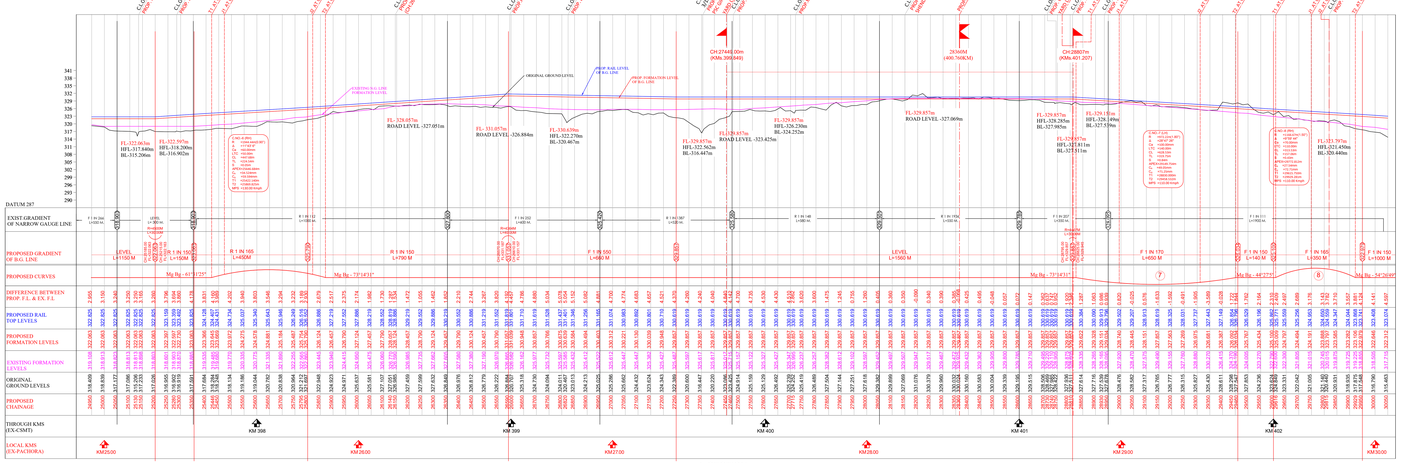
CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1CM=50M
VERTICAL 1CM=5M



PLAN



PLAN OF SHENDURNI STATION



L-SECTION

BRIDGE DETAILS:-

SR. NO.	BR. NO.	PROP. CH. IN M.	EXISTING SPAN	PROPOSED SPAN	REMARK
1)	39/71	25130.00	2/6.10 PSC SLAB	2/9.15m PSC SLAB	MAJOR
2)	39/72	25280.00	1/2.59 RAIL GIRDER	1/3.05m PSC SLAB	MINOR
3)	399/1	25820.00	1/3.05 ARCH	1/3.05m PSC SLAB	MINOR
4)	399/2	27350.00	3/18.28 GIRDER TRIANGULATED UNDERSLING	3/18.30m PSC GIRDER	MAJOR
5)	400/1	27715.00	2/3.05 RAIL GIRDER	1/6.15 m PSC SLAB	MINOR
6)	401/1	28740.00	3/0.23 HUME PIPE	1/2.00x1.50m RCC BOX	MINOR
7)	401/2	28805.00	3/0.20 HUME PIPE	1/2.00x1.50 m RCC BOX	MINOR
8)	401/3	28930.00	21/.22 RAIL GIRDER	1/3.05m PSC SLAB	MINOR
9)	402/1	29815.00	2/1.22 SYPHONE	2/5.00x3.00m RCC BOX	MINOR

DETAILS OF ROB/RUB IN LIEU OF LC's CLOSURE:-

SR. NO.	L..XING NO	CLASS	ENGG /TRAFFIC	TUV PER DAY	YEAR OF CENSUS	VR / MDR / SH / NH	PROP. CH. IN M	BR. NO.	PROPOSED SPAN	REMARK
1)	17A	"C"	ENGG	2372	2018	SH	26140.00	398/1R	2/36.0m COMPOSITE WELDED GIRDER	ROB
2)	18	"D"	ENGG	347	2018	VR	26580.00	398/1A	1/6.00x5.65 RCC BOX	RUB
3)	19	"D"	ENGG	638	2018	MDR	27460.00	399/5A	2/4.00x5.65m RCC BOX	RUB
4)	20	"D"	ENGG	846	2018	MDR	28100.00	400/2A	2/4.00x5.65 RCC BOX	RUB

CURVE DETAILS:-

SR. NO.	CURVE NO.	DEFLECTION ANGLE	DEGREE	RADIUS	CHAINAGE T1	CHAINAGE T2	LTC	LENGTH OF CURVE	SPEED POTENTIAL
1)	6(RH)	11° 43' 0"	0.90°	1944.44m	25422.240m	25869.825m	130m	447.68m	130.00 Kmph
2)	7(LH)	28° 47' 20"	1.80°	972.22m	26830.000m	26458.532m	140m	428.53m	110.00 Kmph
3)	8(RH)	9° 59' 44"	1.50°	1166.67m	29615.750m	29929.281m	110m	313.53m	110.00 Kmph

STATION DETAILS :-

SR.NO.	STATION NAME	PROP. CH. IN M	EXIST. K.M	TYPE	REMARK
1)	SHENDURNI STN	CH: 28360m	KM.400.760	CROSSING	

LEGEND :-

PROPOSED NEW B.G. LINE WORK SHOWN
EXISTING NG LINE
EXISTING NG LINE FORMATION LEVEL
EXISTING RAILWAY BOUNDARY
PROPOSED RAILWAY BOUNDARY
EXISTING BRIDGE
PROPOSED BRIDGE
PROPOSED RUB
PROPOSED ROB
NALLA
PERMANENT STRUCTURE
GATE
ROAD
TBM
H.T.LINE
L.T.LINE
WELL

NOTES :-

1. Chainage 0.000 is taken from centre line of Pachora Station building.
2. Ruling gradient of the proposed section is 1 in 150
3. FL to RL is 782 mm.
4. All dimensions and levels are in metres unless and otherwise specified.
5. All levels are shown with respect to MSL.
6. All levels are with reference to MSL & the MSL is carried from GTS benchmark located near Pachora Railway Station's and Elevated Service Reservior Jamner, Irrigation Department.
7. All bridges including Minor bridges will be constructed in level.The graphent prevailing shall be adjusted in earth work/ballast cushion.
8. A vertical curve shall be provided only at the junction of the grade when the algebraic difference between the grades is equal to or more than 4mm per meter. (0.40%)
9. Max. permissible speed should be 110 Kmph as per curve details MPS is 110 Kmph.
11. a) Separate approval of bridge drawings confirming to all requirements such as vertical,lateral clearance & free board shall be ensured.
    b) Separate approval of yard ESPs along with compliance of comprehensive instruction of provision of passenger amenities vide Railway Board Letter No. 2018/LM(PA)/03/06 dated 09.04.2018
    c) The formation design shall be as per specification No.RDSO/2020/ GE: IRS-0004 with latest amendments.
    d) The top width of formation will not be less than 7.85 mt in single line section.
12. The Level in ESP, Project Sheet and CAD of bridge must be verified before execution and corrected amtching level to be shown completion Project Sheet.
13. Geotechnical investigation will be followed as per GE-14 with latest amendmentsand it has been approved by CE-C-North.
14. Based on the Techno-Economic study as per Para 607 of IRCM, the proposed average height of embankment is 4.20 metres so as to accomodate RUBs in lieu of LCs. The administrative approval of Techno-Economic study has been accorded by CAO(C)

TBM DETAILS :-

SR NO.	TBM NO.	CHAINAGE	LOCATION OF TBM	RL
1	R5	27350.00	ON BRIDGE NO.399/2	325.812
2	V18	28740.00	ON BRIDGE NO.401/1	329.205
3	V19	28805.00	ON BRIDGE NO.401/2	328.841
4	V20	28930.00	ON BRIDGE NO.401/3	328.368
5	C1	29815.00	ON BRIDGE NO.402/1	322.365

Signature block	
CE-PLG	DIVYAKANT L B (Digitally signed by DIVYAKANT L B CHANDRAKANT CHANDRAKANT CHAVAN Date: 2024.04.30 11:37:16 +05'30')
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.04.30 11:37:16 +05'30'
SSE-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2024.04.24 02:42:45 +05'30'
CE-C-North	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2024.03.22 03:01:37 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2024.03.22 02:14:56 +05'30'
JE-C-PS-HQ	MANISH KUMAR Digitally signed by MANISH KUMAR Date:2024.03.21 05:57:09 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2024.03.21 05:47:47 +05'30'
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2024.03.20 05:05:05 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2024.04.30 15:12:20 +05'30'
XEN-C-MMR	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2024.04.30 15:12:20 +05'30'
SSE-C-W-I-BSL	BRIJESH KUMAR Digitally signed by BRIJESH KUMAR Date:2024.04.26 08:41:09 +05'30'
SSE-C-DDI-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2022.10.14 01:31:45 +05'30'
C RLY. / Dy. CE (C) BSL PLAN / R - 510/2 K OF 17	
C RLY. CONST / HQ PLAN PUCCA No. GM(E)M/ 31661/ 06 OF 17	
C RLY. / HQ PLAN PUCCA No. GM/W/BRM/ -2077/05	

CENTRAL RAILWAY / मध्य रेलवे
BHUSAVAL DIVISION / भुसावल मंडल
GAUGE CONVERSION NG TO B.G. PACHORA - JAMNER EXTENSION UP TO MALKAPUR (BODWAD)
गेज रूपांतरण एनजी से बी.जी. पचोरा- जामनेर वसितार मलकापुर (बोडवाड) तक
KMs. 397.40 to 402.40
CH. 25000 M TO CH. 30000 M
(P.B. I. NO.16 YEAR - 2019-20)

CONSULTANT:-	AERIAL DATA APPLICATIONS & MAPPING SERVICES 6-1-2897/1, 1st Floor, Heritage Fresh, Padmarao Nagar Park Padmarao Nagar Secunderabad - 500025.	
	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

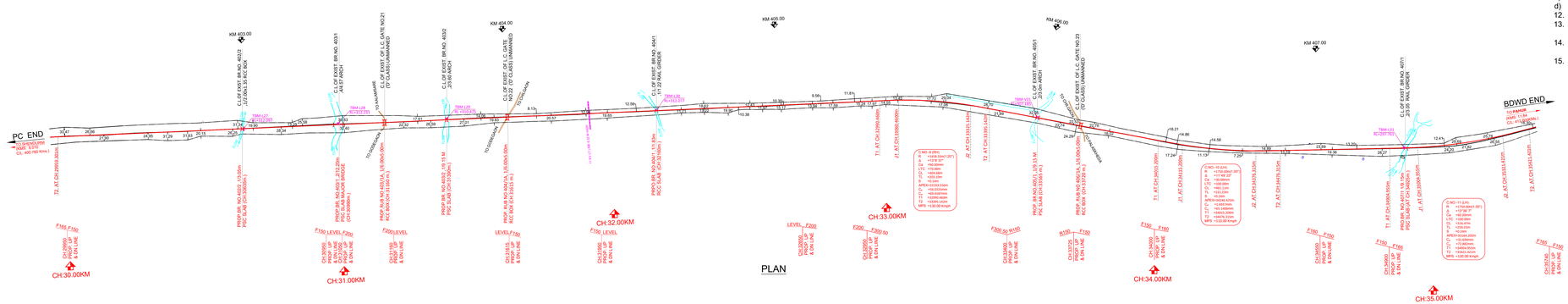
SCALE : H: 1CM = 50M; V: 1CM = 5M.

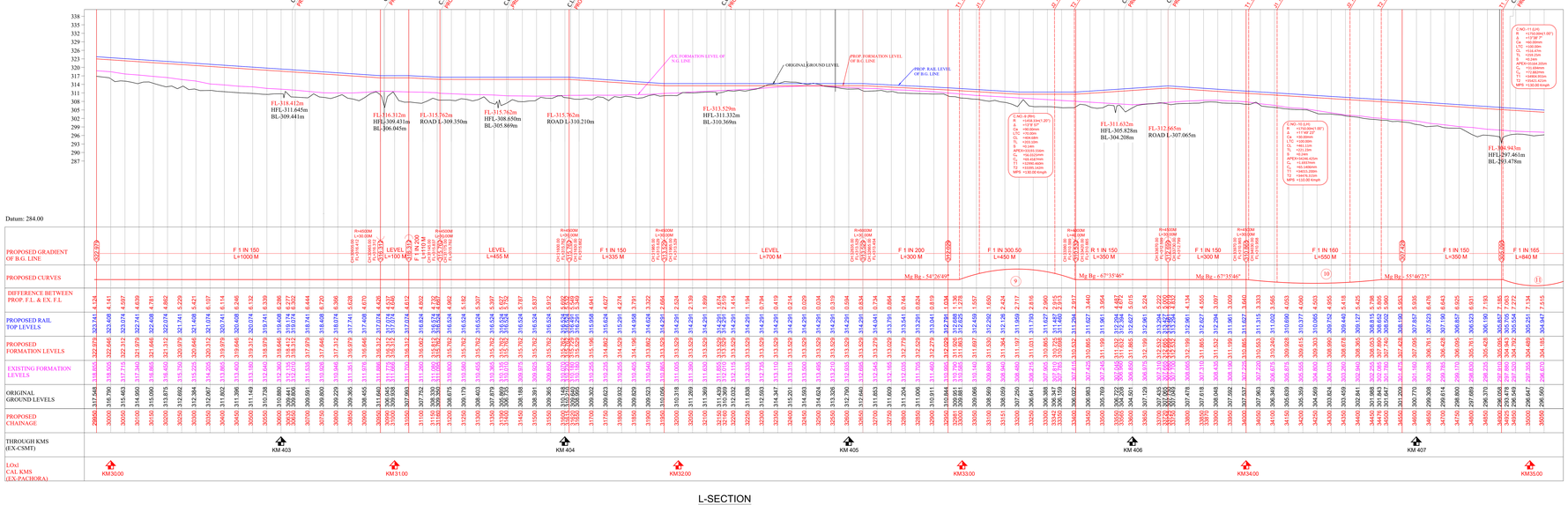
Drawing Size : 2000x 900

Signature Not Verified
Digitally signed by DIVYAKANT L B
Date: 2024.04.30 11:37:16 +05'30'
Reason: SE-PLG/HQ
Location: Delhi

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1CM=50M
VERTICAL 1CM=5M





NOTES :-

1. Chainage 0.000 is taken from centre line of Pachora Station building.
2. Ruling gradient of the proposed section is 1 in 150
3. FL to RL is 762 mm.
4. All dimensions and levels are in metres unless and otherwise specified.
5. All levels are shown with respect to MSL.
6. All levels are with reference to MSL & the MSL is carried from GTS benchmark located near Pachora Railway Station's and Elevated Service Reservior Jamner, Irrigation Department.
7. All bridges including Minor bridges will be constructed in level.The gradient prevailing shall be adjusted in earth work/ballast cushion.
8. A vertical curve shall be provided only at the junction of the grade when the algebraic difference between the grades is equal to or more than 4mm per meter. (0.40%)
9. Max. permissible speed should be 110 Kmph as per curve details MPS is 110 Kmph.
11. a) Separate approval of bridge drawings confirming to all requirements such as vertical,lateral clearance & free board shall be ensured.
    b) Separate approval of yard ESPs along with compliance of comprehensive instruction of provision of passenger amenities vide Railway Board Latter No. 2018/LM(PA)/03/06 dated 09.04.2018
    c) The formation design shall be as per specification No.RDSO/2020/ GE: IRS-0004 with latest amendments.
    d) The top width of formation will not be less than 7.85 mt in single line section.
12. The Level in ESP, Project Sheet and GAD of bridge must be verified before execution and corrected
13. The minimum clear vertical clear for RUB is 5.0 m and 5.50 m for rural and urban roads respectively and the minimum lateral clearance is 6.0 m as per Zila Parishad letter no. bandh/arekhak/RR/466/2023 dt. 04.12.2023
14. Geotechnical investigation will be followed as per GE-14 with latest amendments and it has been approved by CE-C-North.
15. Based on the Techno-Economic study as per Para 607 of IRCM, the proposed average height of embankment is 4.20 metres so as to accomodate RUBs in lieu of LCs. The administrative approval of Techno-Economic study has been accorded by CAO(C)

BRIDGE DETAILS:-

SR. NO.	BR. NO.	PROP. CH IN M	EXISTING SPAN	PROPOSED SPAN	REMARK
1)	402/2	30635.00		1/2.00x1.35 RCC BOX	MINOR
2)	403/1	30990.00		4/4.57 ARCH	MAJOR
3)	403/2	31390.00		2/3.60 ARCH	MINOR
4)	404/1	32160.00		1/1.22 RAIL GIRDER	MINOR
5)	405/1	33565.00		2/3.0m ARCH	MINOR
6)	407/1	34925.00		2/3.05 RAIL GIRDER	MINOR

L -XING DETAILS & PRO RUB LIST:-

SR. NO.	L -XING NO	CLASS	ENGG /TRAFFIC	TUV PER DAY	YEAR OF CENSUS	VR / MDR / SH / NH	PROP CH. IN M	BR. NO)	PROPOSED SPAN	REMARK
1)	21	" D "	ENGG	369	2018	VR	31160.00	403/1A	1/6.00x5.00m RCC BOX	RUB
2)	22	" D "	ENGG	2512	2018	VR	31615.00	404/1A	1/6.00x5.00m RCC BOX	RUB
3)	23	" D "	ENGG	1549	2018	VR	33720.00	406/1A	1/6.00x5.00m RCC BOX	RUB

CURVE DETAILS:-

SR. NO.	CURVE NO.	DEFLECTION ANGLE	DEGREE	RADIUS	CHAINAGE T1	CHAINAGE T2	LTC	LENGTH OF CURVE	SPEED POTENTIAL
1)	9(RH)	13° 8' 57"	0.90°	1458.33 m	32990.460m	33395.142m	130m	404.68 m	130.00 Kmph
2)	10(LH)	11° 49' 23"	1.00°	1750.00 m	34015.200m	34476.315m	100m	461.11 m	110.00 Kmph
3)	11(LH)	13° 38' 7"	1.00°	1750.00 m	34904.955m	35421.421m	100m	516.47 m	130.00 Kmph

BENCH MARK LIST

Sl No	TBM No	MSL Ht	APP. CH	DESCRIPTION
1	L27	312.097	30365 M	ON BRIDGE NO 402/2
2	L28	312.231	30990 M	ON BRIDGE NO 403/1
3	L29	310.475	31390M	ON BRIDGE NO 403/2
4	L30	312.077	32160 M	ON BRIDGE NO 404/1
5	V21	307.185	33565 M	ON BRIDGE NO 405/1
6	L31	297.761	34925 M	ON BRIDGE NO 407/1

LEGEND :-

- PROPOSED NEW B.G. LINE WORK SHOWN
- EXISTING NG LINE
- EXISTING NG LINE FORMATION LEVEL
- EXISTING RAILWAY BOUNDARY
- PROPOSED RAILWAY BOUNDARY
- EXISTING BRIDGE
- PROPOSED BRIDGE
- PROPOSED RUB
- PROPOSED ROB
- NALLA
- PERMANENT STRUCTURE — PS
- GATE
- ROAD
- TBM
- H.T.LINE
- L.T.LINE
- WELL

Signature block

CE-PLG	DIVYAKANT L R CHANDRAKANT CHANDRAKAR — Digitally signed by DIVYAKANT L R CHANDRAKANT CHANDRAKAR Date: 2024.05.13 18:45:20 +05'30"
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.04.30 11:38:49 +05'30"
SSE-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2024.04.24 11:04:24 +05'30"
CE-C-North	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2024.03.22 03:05:53 +05'30"
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2024.03.22 02:15:56 +05'30"
JE-C-PS-HQ	MANISH KUMAR Digitally signed by MANISH KUMAR Date:2024.03.21 05:58:47 +05'30"
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2023.08.30 01:07:08 +05'30"
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.09.04 06:53:28 +05'30"
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2022.10.14 03:40:38 +05'30"
XEN-C-BSL	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2022.10.14 03:31:11 +05'30"
SSE-C-W-I-BSL	BRAJESH KUMAR Digitally signed by BRAJESH KUMAR Date:2022.10.14 03:13:43 +05'30"
SSE-C-DO-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2022.10.14 01:30:44 +05'30"

C.RLY / Dy. CE (C), BSL PLAN / R - 5102/ 7 OF 17

C.RLY / CONST / HQ PLAN PUCCA No. GM(E)M/ 31661/ 7 OF 17

C.RLY. / HQ PLAN PUCCA No. GM(W)BB/P -20708/7

CENTRAL RAILWAY / मध्य रेलवे
BHUSAVAL DIVISION / भुसावल मंडल
GAUGE CONVERSION NG TO B.G.
PACHORA - JAMNER EXTENSION UP TO MALKAPUR (BODWAD)
गेज रूपांतरण एनजी से बी.जी. पचोरा- जामनेर वस्तिार मलकापुर (बोडवाड) तक
KMs. 402.40 to 407.40
CH. 31000 M TO CH. 35000 M
(P.B. I. NO.16 YEAR - 2019-20)

SCALE : H: 1CM = 50M, V :1CM = 5M.

CONSULTANT:- AERIAL DATA APPLICATIONS & MAPPING SERVICES
6-1-289/7, 1st Floor, Heritage Fresh, Padmarao Nagar Park
Padmarao Nagar
Secunderabad - 500025.

	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

Drawing Size : 1500x 900

Signature Not Verified
Digitally signed by DIVYAKANT L R CHANDRAKANT CHANDRAKAR
Date: 2024.05.13 18:45:20 +05'30'
Reason: CE-PLG
Location: Delhi

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

CENTRAL RAILWAY
GUAGE CONVERSION NG TO B.G. PACHORA - JAMNER
EXTENSION UP TO MALKAPUR (BODWAD)
FROM KM 372.400 TO KM 456.300 =83.900
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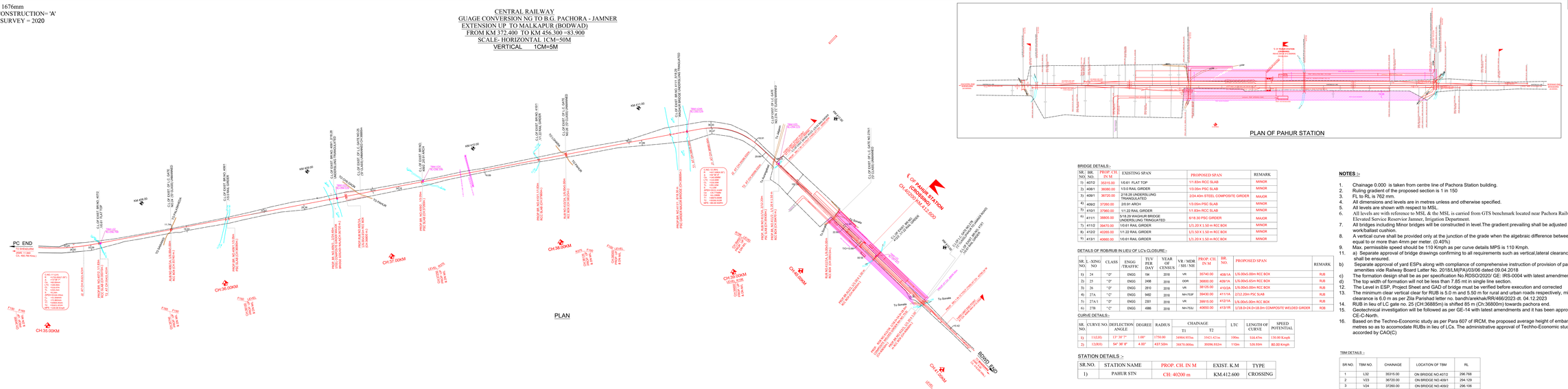
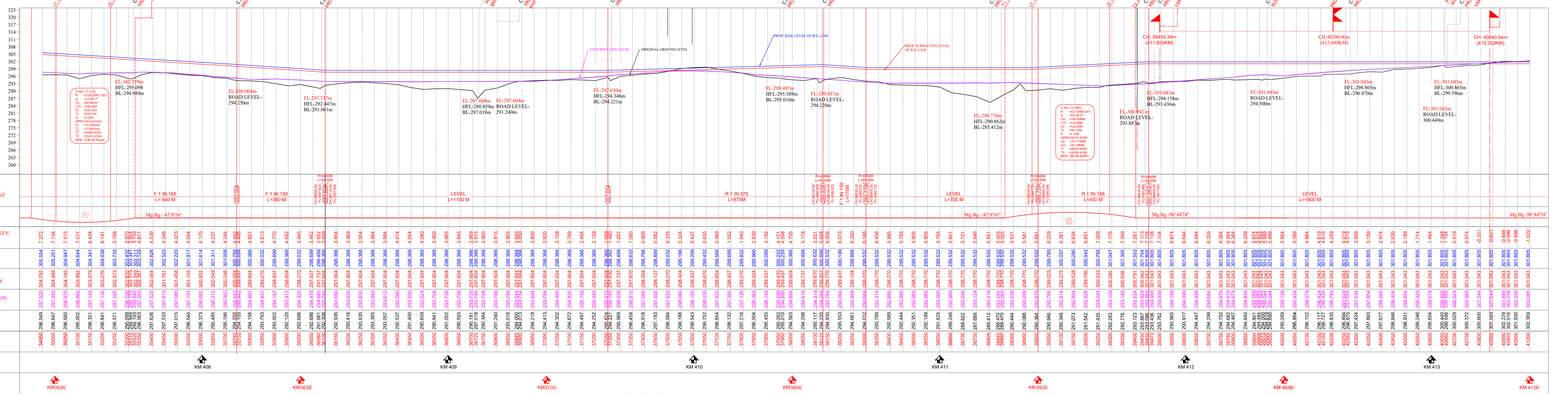




BRIDGE DETAILS:-

SR. NO.	BR. NO.	PROP. CH. IN M	EXISTING SPAN	PROPOSED SPAN	REMARK
1)	4072	35315.00	10.61 FLAT TOP	1/1.83m RCC SLAB	MINOR
2)	4061	36060.00	1/3.0 RAIL GIRDER	1/3.05m PSC SLAB	MINOR
3)	4061	36720.00	2/18.28 UNDERSLUNG TRIANGULATED	2/24.40m STEEL COMPOSITE GIRDER	MAJOR
4)	4062	37060.00	2/0.91 ARCH	1/3.05m PSC SLAB	MINOR
5)	4101	37960.00	1/1.22 RAIL GIRDER	1/1.83m RCC SLAB	MINOR
6)	4151	38805.00	5/18.29 WAGHUR BRIDGE UNDERSLUNG TRINGULATED	6/18.30 PSC GIRDER	MAJOR
7)	4112	39470.00	1/0.61 RAIL GIRDER	1/1.20 X 1.50 m RCC BOX	MINOR
8)	4122	40265.00	1/1.22 RAIL GIRDER	1/1.50 X 1.50 m RCC BOX	MINOR
9)	4151	40660.00	1/0.61 RAIL GIRDER	1/1.20 X 1.50 m RCC BOX	MINOR

DETAILS OF ROB/RUB IN LIEU OF LCs CLOSURE:-

SR. NO.	L -XING NO	CLASS	ENGG /TRAFFIC	TUV PER DAY	YEAR OF CENSUS	VR / MDR / SH / NH	PROP. CH. IN M	BR. NO.	PROPOSED SPAN	REMARK
1)	24	"D"	ENGG	194	2018	VR	35740.00	4081A	1/6.00x5.00m RCC BOX	RUB
2)	25	"D"	ENGG	2498	2018	ODR	36900.00	4091A	1/6.00x5.65m RCC BOX	RUB
3)	26	"D"	ENGG	2810	2018	VR	38125.00	4102A	1/6.00x5.00m RCC BOX	RUB
4)	27A	"C"	ENGG	9482	2018	NH-753F	39430.00	4111A	2/12.20m PSC SLAB	RUB
5)	27A/1	"D"	ENGG	2301	2018	VR	39915.00	4121A	1/6.00x5.00m RCC BOX	RUB
6)	27B	"C"	ENGG	4986	2018	NH-753J	40950.00	4131/B	1/18.0+24.2+18.0m COMPOSITE WELDED GIRDER	ROB

CURVE DETAILS:-

SR. NO.	CURVE NO.	DEFLECTION ANGLE	DEGREE	RADIUS	CHAINAGE T1	CHAINAGE T2	LTC	LENGTH OF CURVE	SPEED POTENTIAL
1)	1(LH)	13° 36' 7"	1.00°	1750.00	34964.955m	35421.421m	100m	516.47m	130.00 K/ph
2)	1(RH)	54° 36' 8"	4.00°	437.50m	36870.000m	39396.932m	110m	526.93m	80.00 K/ph

STATION DETAILS :-

SR.NO.	STATION NAME	PROP. CH. IN M	EXIST. K.M	TYPE
1)	PAHUR STN	CH: 40200 m	KM.412.600	CROSSING

LEGEND :-

EXISTING L.O.F RAIL TRACK
PROPOSED NEW B.G. LINE WORK SHOWN IN EPC
EXISTING NG LINE FORMATION LEVEL
EXISTING RAILWAY BOUNDARY
PROPOSED RAILWAY BOUNDARY
EXISTING BRIDGE
PROPOSED BRIDGE
PROPOSED RUB
PROPOSED ROB
NALLA
PERMANENT STRUCTURE
GATE
ROAD
TBM
H.T.LINE
L.T.LINE
WELL

NOTES :-

1. Chainage 0.000 is taken from centre line of Pachora Station building.
2. Ruling gradient of the proposed section is 1 in 150
3. FL to RL is 762 mm.
4. All dimensions and levels are in metres unless and otherwise specified.
5. All levels are shown with respect to MSL.
6. All levels are with reference to MSL & the MSL is carried from GTS benchmark located near Pachora Railway Station's and Elevated Service Reservior Jamner, Irrigation Department.
7. All bridges including Minor bridges will be constructed in level.The gradient prevailing shall be adjusted in earth work/ballast cushion.
8. A vertical curve shall be provided only at the junction of the grade when the algebraic difference between the grades is equal to or more than 4mm per meter. (0.40%)
9. Max. permissible speed should be 110 Kmph as per curve details MPS is 110 Kmph.
11. a) Separate approval of bridge drawings confirming to all requirements such as vertical,lateral clearance & free board shall be ensured.

b) Separate approval of yard ESPs along with compliance of comprehensive instruction of provision of passenger amenities vide Railway Board Letter No. 2018/LML(P)A/03/06 dated 09.04.2018

c) The formation design shall be as per specification No.RDSO/2020/ GE: IRS-0004 with latest amendments.

d) The top width of formation will not be less than 7.85 mt in single line section.

12. The Level in ESP, Project Sheet and GAD of bridge must be verified before execution and correct.
13. The minimum clear vertical clear for RUB is 5.0 m and 5.50 m for rural and urban roads respectively, minimum lateral clearance is 6.0 m as per Zila Parishad letter no. bandhtarekhak/RR/460/2023 dt. 04.12.2023
14. RUB in lieu of LC gate no. 25 (CH:36885m) is shifted 85 m (Ch:36800m) towards pachora end.
15. Geotechnical investigation will be followed as per GE-14 with latest amendments and it has been approved by CE-C-North.
16. Based on the Techno-Economic study as per Para 607 of IRCM, the proposed average height of embankment is 4.20 metres so as to accomodate RUBs in lieu of LCs. The administrative approval of Techno-Economic study have been accorded by CAO(C)

TBM DETAILS :-

SR NO.	TBM NO.	CHAINAGE	LOCATION OF TBM	RL
1	L32	35315.00	ON BRIDGE NO.4072	296.768
2	V23	36720.00	ON BRIDGE NO.4061	294.129
3	V24	37260.00	ON BRIDGE NO.4062	296.106
4	V24A	38805.00	ON BRIDGE NO.4111	293.529
5	V25	39470.00	ON BRIDGE NO.4112	294.123
6	L33	40265.00	ON BRIDGE NO.4122	297.611

Signature block	
CE-PLG	DIVYAKANT L R CHANDRAKANT CHANDRAKAR Digitally signed by DIVYAKANT L R CHANDRAKANT CHANDRAKAR Date: 2024.04.26 10:14:36 +05'30'
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.04.30 11:41:53 +05'30'
SSE/-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2024.04.24 11:05:01 +05'30'
CE-C-North	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2024.03.22 03:10:37 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2024.03.22 02:17:04 +05'30'
JE-C-PS-HQ	MANISH KUMAR Digitally signed by MANISH KUMAR Date:2024.03.21 06:00:34 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2022.08.30 01:08:10 +05'30'
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.04.04 09:54:56 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2022.10.14 03:39:22 +05'30'
XEN-C-BSL	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2022.10.14 03:28:07 +05'30'
SSE-C-W-I-BSL	BRAJESH KUMAR Digitally signed by BRAJESH KUMAR Date:2022.10.14 02:57:54 +05'30'
SSE-C-DD-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2022.10.14 01:29:52 +05'30'
C.RLY. / Dy. CE (C) BSL PLAN / R - 51/23 & DF 17	
C.RLY. CONST./ HQ PLAN PUCCA No. GM/E/M/ 31561 / & DF 17	
C.RLY. / HQ PLAN PUCCA No. GM/W/BWP -20709/8	

CENTRAL RAILWAY / मध्य रेलवे
BHUSAVAL DIVISION / भुसावल मंडल
GAUGE CONVERSION NG TO B.G.
PACHORA - JAMNER EXTENSION UP TO MALKAPUR (BODWAD)
गेज रूपांतरण एनजी से बी.जी. पचोरा- जामनेर
विस्तार मलकापुर (बोडवाड) तक
KMs. 407.40 to 413.40
CH. 36000 M TO CH. 41000 M
(P.R. L NO.16 YEAR : 2019-20)
SCALE : H: 1CM = 50M. V: 1CM = 5M.

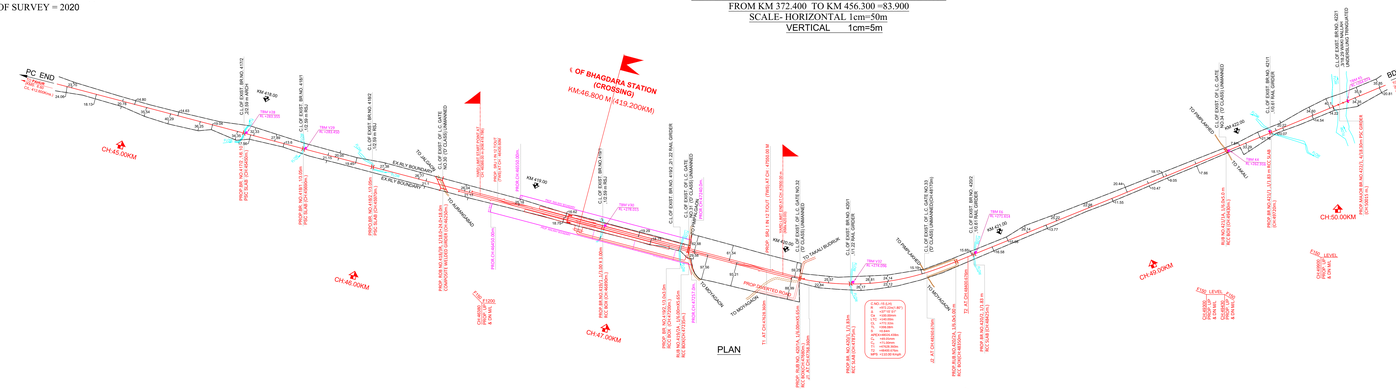
CONSULTANT:-	AERIAL DATA APPLICATIONS & MAPPING SERVICES 6-1-298/7, 1st Floor, Heritage Fresh, Padmarao Nagar Park Padmarao Nagar Secunderabad - 500025.	
	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

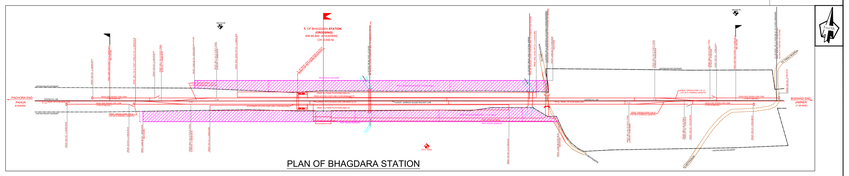
Drawing Size : 2000x 900

Signature Not Verified
Digitally signed by CHANDRAKANT L R CHANDRAKANT CHANDRAKAR
Date: 2024.04.26 10:14:36 +05'30'
Reason: TE-CIVIL
Location: Delhi

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3.YEAR OF SURVEY = 2020

CENTRAL RAILWAY
NEW ELECTRIFIED LINE BETWEEN PACHORA - BODWAD
FROM KM 372.400 TO KM 456.300 =83.900
SCALE- HORIZONTAL 1cm=50m
VERTICAL 1cm=5m





BRIDGE DETAILS:-

SR. NO.	BR. NO.	PROP. CH. IN M	EXISTING SPAN	PROPOSED SPAN	REMARK
1)	417/2	45450.00	22.59 ARCH	1/6.10 PSC SLAB	MINOR
2)	418/1	45690.00	1/2.59 RSJ	1/3.05m PSC SLAB	MINOR
3)	419/2	45970.00	1/2.59 RSJ	1/3.05m PSC SLAB	MINOR
4)	419/1	46080.00	1/2.59 RSJ	1/3.00 X 3.00m RCC BOX	MINOR
5)	419/2	47200.00	2/1.22 RAIL GIRDER	1/3.00 X 3.00m RCC BOX	MINOR
6)	420/1	47875.00	1/1.22 RAIL GIRDER	1/1.83m RCC SLAB	MINOR
7)	420/2	48435.00	1/0.61 RAIL GIRDER	1/1.83m RCC SLAB	MINOR
8)	421/1	49720.00	1/0.61 RAIL GIRDER	1/1.83 m RCC SLAB	MINOR
9)	422/1	50015.00	3/18.29 UNDERSLING TRIANGULATED	4/18.30 PSC GIRDER	MAJOR

DETAILS OF ROB/RUB IN LIEU OF LC's CLOSURE:-

SR. NO.	L-XING NO	CLASS	ENGG /TRAFFIC	TUV PER DAY	YEAR OF CENSUS	VR/MDR SH/NH	PRO. CH. IN M	HR NO.	PROPOSED SPAN	REMARK
1)	30	"-0"	ENGG	1638	2018	ODR	46250.00	418/3B	1/3.8.0+24.0+18.0m COMPOSITE WELDED GIRDER	ROB
2)	31	"-0"	ENGG	972	2018	ODR	47220.00	419/2A	1/6.00mX5.65m RCC BOX	RUB
3)	32	"-0"	ENGG	1106	2018	ODR	47680.00	420/1A	1/6.00mX5.65m RCC BOX	RUB
4)	33	"-0"	ENGG	772	2018	VR	48170.00	420/2A	1/6.00x5.00 m RCC BOX	RUB
5)	34	"-0"	ENGG	509	2018	VR	49430.00	421/1A	1/6.00x5.00 m RCC BOX	RUB

CURVE DETAILS:-

SR. NO.	CURVE NO.	DEFLECTION ANGLE	DEGREE	RADIUS	CHAINAGE		LTC	LENGTH OF CURVE
					T1	T2		
1)	15(EH)	37° 15' 5"	1.80°	972.22m	47628.360m	48400.676m	140m	772.32m

STATION DETAILS :-

SR.NO.	STATION NAME	PROP. CH. IN M	EXIST. K.M	TYPE
1)	BHAGDARA STN	CH: 46800m	KM.419.200	CROSSING

LEGEND :-

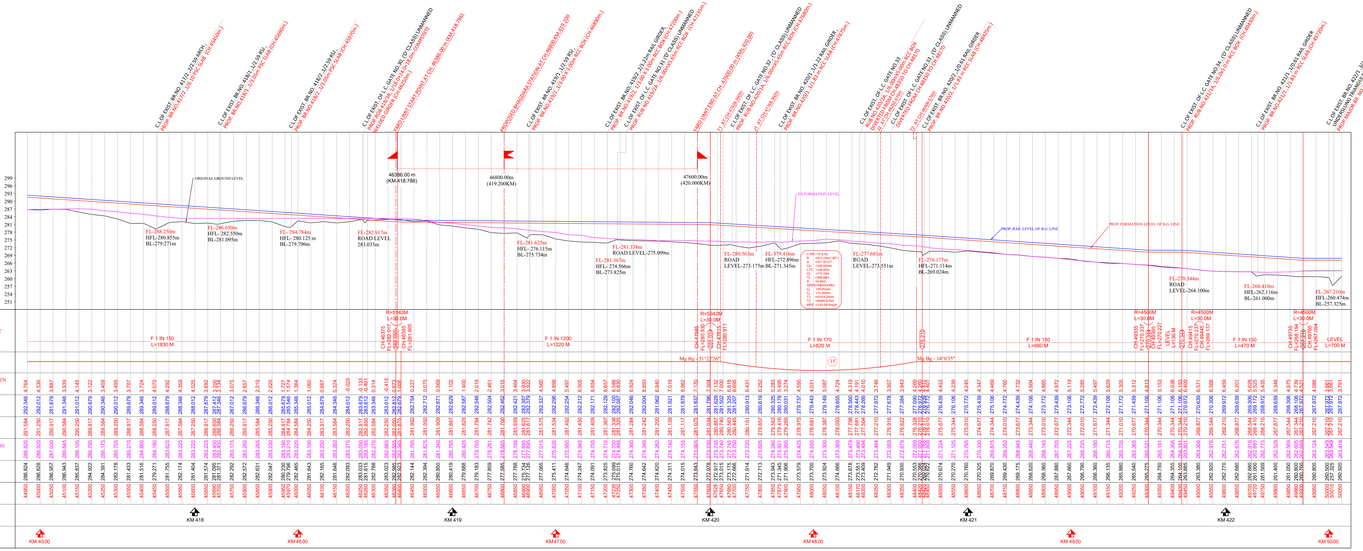
PROPOSED NEW B.G. LINE WORK SHOWN IN EPC
EXISTING NG LINE FORMATION LEVEL
EXISTING RAILWAY BOUNDARY
PROPOSED RAILWAY BOUNDARY
EXISTING BRIDGE
PROPOSED BRIDGE
PROPOSED RUB
PROPOSED ROB
NALLA
PERMANENT STRUCTURE
GATE
ROAD
TBM
H.T.LINE
L.T.LINE
WELL

NOTES :-

1. Chainage 0.000 is taken from centre line of Pachora Station building.
2. Rulling gradient of the proposed section is 1 in 150
3. FL to RL is 762 mm.
4. All dimensions and levels are in metres unless and otherwise specified.
5. All levels are shown with respect to MSL.
6. All levels are with reference to MSL & the MSL is carried from GTS benchmark located near Pachora Railway Station's and Elevated Service Reservior Jamner, Irrigation Department.
7. All bridges including Minor bridges will be constructed in level.The gradient prevailing shall be adjusted in earth work/ballast cushion.
8. A vertical curve shall be provided only at the junction of the grade when the algebraic difference between the grades is equal to or more than 4mm per meter. (0.40%)
9. Max. permissible speed should be 110 Kmph as per curve details MPS is 110 Kmph.
11. a) Separate approval of bridge drawings confirming to all requirements such as vertical,lateral clearance & free board shall be ensured.
b) Separate approval of yard ESPs along with compliance of comprehensive instruction of provision of passenger amenities vide Railway Board Latter No. 2018/LM(PA)/03/06 dated 09.04.2018
c) The formation design shall be as per specification No.RDSO/2020/ GE: IRS-0004 with latest amendments.
d) The top width of formation will not be less than 7.85 mt in single line section.
12. The Level in ESP, Project Sheet and GAD of bridge must be verified before execution and corrected
13. The minimum vertical clearance for RUB is 5.0 m and 5.50 m for rural and urban roads respectively and the minimum lateral clearance is 6.0 m as per Zila Parishad letter no. bandh/arekhah/RR/466/2023 dt. 04.12.2023
14. RUB in lieu of LC 33 (Ch:48170) is shifted (Ch: 48350) 180 m towards Jamner end.
15. Geotechnical investigation will be followed as per GE-14 with latest amendments and it has been approved by CE-C-North.
16. Based on the Techno-Economic study as per Para 607 of IRCM, the proposed average height of embankment is 4.20 metres so as to accomodate RUBs in lieu of LCs. The administrative approval of Techno-Economic study has been accorded by CAO(C)

TBM DETAILS :-

SR NO.	TBM NO.	CHAINAGE	LOCATION OF TBM	RL
1	V28	45450.00	ON BRIDGE NO.417/2	283.355
2	V29	45690.00	ON BRIDGE NO.418/3	283.450
3	V30	46890.00	ON BRIDGE NO.419/1	278.015
4	V32	47875.00	ON BRIDGE NO.420/1	274.096
5	E6	48425.00	ON BRIDGE NO.420/2	271.614
6	K4	49430.00	ON BRIDGE NO.421/1A	262.916
7	K5	50015.00	ON BRIDGE NO.422/1	264.074



	Signature block
CE-PLG	
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.04.30 11:45:20 +05'30'
SSE/YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2024.04.30 05:48:08 +05'30'
CE-C-North	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2024.03.22 03:20:20 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2024.03.22 03:03:45 +05'30'
JE-C/PS-HQ	MANISH KUMAR Digitally signed by MANISH KUMAR Date:2024.03.22 02:57:23 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2023.08.30 11:09:36 +05'30'
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.09.04 07:05:03 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2022.10.14 03:36:14 +05'30'
XEN-C-BSL	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2022.10.14 03:21:17 +05'30'
SSE-C-W-I-BSL	BRIJESH KUMAR Digitally signed by BRIJESH KUMAR Date:2022.10.14 02:57:25 +05'30'
SSE-C-DD-I-BSL	KOMALKUMARI D TAKSANDE Digitally signed by KOMALKUMARI D TAKSANDE Date:2022.10.14 01:27:34 +05'30'

C.RLY. / Dy. CE (C), BSL PLAN / R - 0102 10 OF 17
C.RLY. / HQ PLAN PUCCA No. GM(E)M 31661 / 10 OF 17
C.RLY. / HQ PLAN PUCCA No. GM/W/BRP -20170810

CENTRAL RAILWAY / मध्य रेलवे
BHUSAVAL DIVISION / भुसावल मंडल
GAUGE CONVERSION NG TO B.G.
PACHORA - JAMNER EXTENSION UP TO MALKAPUR (BODWAD)
गेज रूपांतरण एनजी से बी.जी. पचोरा- जामनेर
वस्तिार मलकापुर (बोडवाड) तक
KMs. 417.40 to 422.40
CH. 45000 M TO CH. 50000 M
(P.R.T. NO.16 YEAR - 2019-20)

SCALE : H: 1CM = 50M. V :1CM = 5M.

Drawing Size : 1900x 900

CONSULTANT:-	AERIAL DATA APPLICATIONS & MAPPING SERVICES G-1-2/8/7, 1st Floor, Heritage Fresh, Padmarao Nagar Park Padmarao Nagar Secunderabad - 500025.	
	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

Signature Not Verified
Digitally signed by CENTRAL RAILWAY
Date: 2024.04.30 15:46:20 IST
Reason: SignDocs 1.5.2 CCG
Location: India

1. GAUGE = 1676mm
2. STD.OF CONSTRUCTION= 'A'
3. YEAR OF SURVEY = 2020

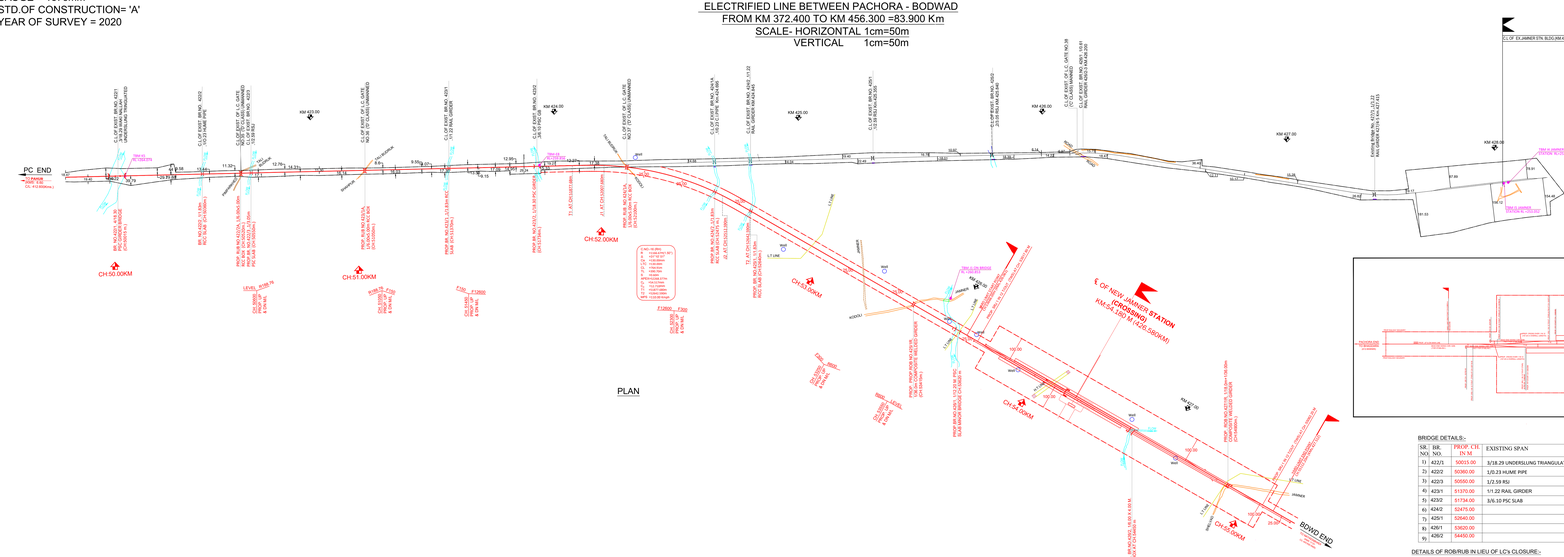
CENTRAL RAILWAY

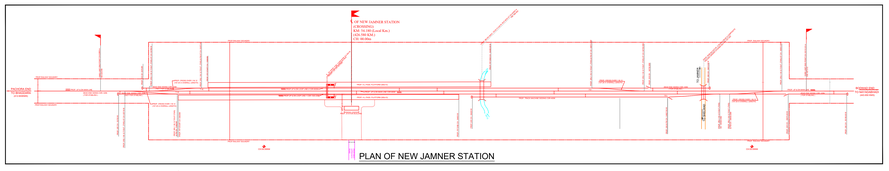
ELECTRIFIED LINE BETWEEN PACHORA - BODWAD

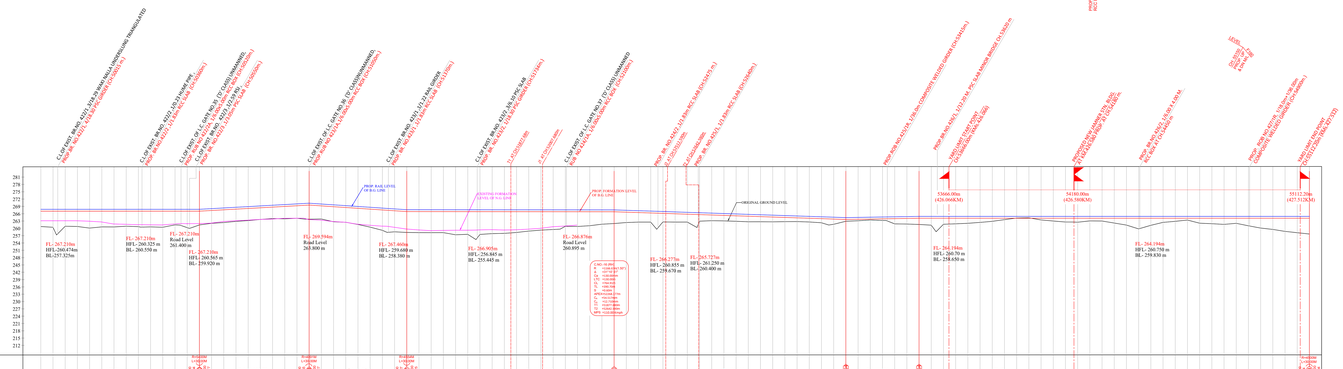
FROM KM 372.400 TO KM 456.300 =83.900 Km

SCALE- HORIZONTAL 1cm=50m

VERTICAL 1cm=50m







BRIDGE DETAILS:-

SR. NO.	BR. NO.	PROP. CH IN M	EXISTING SPAN	PROPOSED SPAN	REMARK
1)	422/1	50013.00	3/18.29 UNDERSLUNG TRIANGULATED	4/18.30 PSC GIRDER	MAJOR
2)	422/2	50360.00	1/0.23 HUME PIPE	1/1.83m RCC SLAB	MINOR
3)	422/3	50550.00	1/2.59 RSJ	1/3.05m PSC SLAB	MINOR
4)	423/1	51370.00	1/1.22 RAIL GIRDER	1/1.83m RCC SLAB	MINOR
5)	423/2	51734.00	3/6.10 PSC SLAB	1/18.30 PSC GIRDER	MAJOR
6)	424/2	52475.00		1/1.83m RCC SLAB	MINOR
7)	425/1	53043.00		1/1.83m RCC SLAB	MINOR
8)	426/1	53620.00		1/12.20m PSC SLAB	MINOR
9)	426/2	54450.00		1/8.00 X 4.00 M. RCC BOX	MINOR

DETAILS OF ROB/RUB IN LIEU OF LC's CLOSURE:-

SR. NO.	LC NO.	CLASS	ENGG /TRAFFIC	TUV PER DAY	YEAR OF CENSUS	VR/MDR SH/NH	PROP. CH IN M	BR. NO.	PROPOSED SPAN	REMARK
1)	35	"D"	ENGG	222	2018	VR	50520.00	422/2A	1/6.00x5.00 RCC BOX	RUB
2)	36	"D"	ENGG	495	2018	VR	51090.00	423/1A	1/6.00x5.00 RCC BOX	RUB
3)	37	"D"	ENGG	464	2018	VR	52105.00	424/1A	1/6.00x5.00 RCC BOX	RUB
4)						VR	53415.00	425/1R	1/36.0 COMPOSITE WELDED GIRDER	ROB
5)						VR	54900.00	427/1R	1/18.0m+1/36.00m COMPOSITE WELDED GIRDER	ROB

CURVE DETAILS :-

SR. NO.	CURVE NO.	DEFLECTION ANGLE	DEGREE	RADIUS	CHAINAGE T1	CHAINAGE T2	LTC	LENGTH OF CURVE	SPEED POTENTIAL
1)	16(RH)	31° 10' 51"	1.50°	1166.67 m	51877.680m	52042.990m	150m	764.91m	110.00 Kmph

STATION DETAILS :-

SR.NO.	STATION NAME	PROP. CH. IN M	EXIST. K.M	TYPE
1)	NEW JAMNER STN	CH: 54180m	KM.426.580	CROSSING

LEGEND :-

EXISTING C.L. OF RAIL TRACK
PROPOSED NEW B.G. LINE WORK SHOWN IN EPC
EXISTING NG LINE FORMATION LEVEL
EXISTING RAILWAY BOUNDARY
PROPOSED RAILWAY BOUNDARY
EXISTING BRIDGE
PROPOSED BRIDGE
PROPOSED RUB
PROPOSED ROB
NALLA
PERMANENT STRUCTURE
GATE
ROAD
TBM
H.T.LINE
L.T.LINE
WELL

NOTES :-

1. Chainage 0.000 is taken from centre line of Pachora Station building.
2. Ruling gradient of the proposed section is 1 in 150
3. FL to RL is 762 mm.
4. All dimensions and levels are in metres unless and otherwise specified.
5. All levels are shown with respect to MSL.
6. All levels are with reference to MSL & the MSL is carried from GTS benchmark located near Pachora Railway Station's and Elevated Service Reservoir Jamner, Irrigation Department.
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11. a) Separate approval of bridge drawings confirming to all requirements such as vertical,lateral clearance & free board shall be ensured.
    b) Separate approval of yard ESPs along with compliance of comprehensive instruction of provision of passenger amenities vide Railway Board Latter No. 2018/LM/PA)/03/06 dated 09.04.2018
    c) The formation design shall be as per specification No.RDSO/2020/ GE: IRS-0004 with latest amendments.
    d) The top width of formation will not be less than 7.85 mt in single line section.
12. The Level in ESP, Project Sheet and GAD of bridge must be verified before execution and corrected .
13. The minimum vertical clearance for RUB is 5.0 m and 5.50 m for rural and urban roads respectively and the minimum lateral clearance is 6.0 m as per Zila Parishad letter no. bandh/arekhak/RR/466/2023 dt. 04.12.2023
14. Geotechnical investigation will be followed as per GE-14 with latest amendments and it has been approved by CE-C-North.
15. Based on the Techno-Economic study as per Para 607 of IRCM, the proposed average height of embankment is 4.20 metres so as to accomodate RUBs in lieu of LCs. The administrative approval of Techno-Economic study has been accorded by CAO(C)

TBM DETAILS :-

SR NO.	TBM NO.	CHAINAGE	LOCATION OF TBM	RL
1	K5	50015.00	ON BRIDGE NO.422/1	264.074
2	E8	51734.00	ON BRIDGE NO.423/2	259.856
3	I5	KM.428.00	ON OLD JAMNER STATION	253.052
4	J1	53415.00	ON BRIDGE NO.425/1R	260.853
5	I4	KM.428.100	ON OLD JAMNER STATION	252.838

Signature block	
CE-PLG	
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.04.25 11:59:16 +05'30'
SSE-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2024.04.26 10:47:07
CE-C-North	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date: 2024.03.22 03:26:22 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2024.03.22 03:04:43 +05'30'
JE-C-PS-HQ	MANISH KUMAR Digitally signed by MANISH KUMAR Date:2024.03.22 02:59:22 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2023.10.11 04:52:26 +05'30'
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.10.06 11:38:46 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAMANE Digitally signed by PANKAJ MAHADEV DHAMANE Date:2023.08.10 05:20:05 +05'30'
XEN-C-BSL	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2023.06.11 03:14:13 +05'30'
SSE-C-W-I-BSL	BRAJESH KUMAR Digitally signed by BRAJESH KUMAR Date:2023.05.10 06:44:29 +05'30'
SSE-C-DD-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2023.05.10 05:07:23 +05'30'
C.R/L / Dy. CE (C), BSL PLAN / R - 5102/ 11 OF 17	
C.R/L / HQ PLAN PUCCA No. CRE/CW/ 2180 / 11 OF 17	
C.R/L / HQ / PLAN PUCCA No. CRW/0180/P - 20708/11	

CENTRAL RAILWAY / मध्य रेलवे

BHUSAVAL DIVISION / भुसावल मंडल

GAUGE CONVERSION NG TO B.G.

PACHORA - JAMNER EXTENSION UP TO MALKAPUR (BODWAD)

गेज पुनर्संरचना पाचोरा से बी.जी. पचोरा- जामनेर

परिसर मलकापुर (बोदवाड) तक

KMs. 422.40 to 427.40

CH. 50000 M TO CH. 55000 M

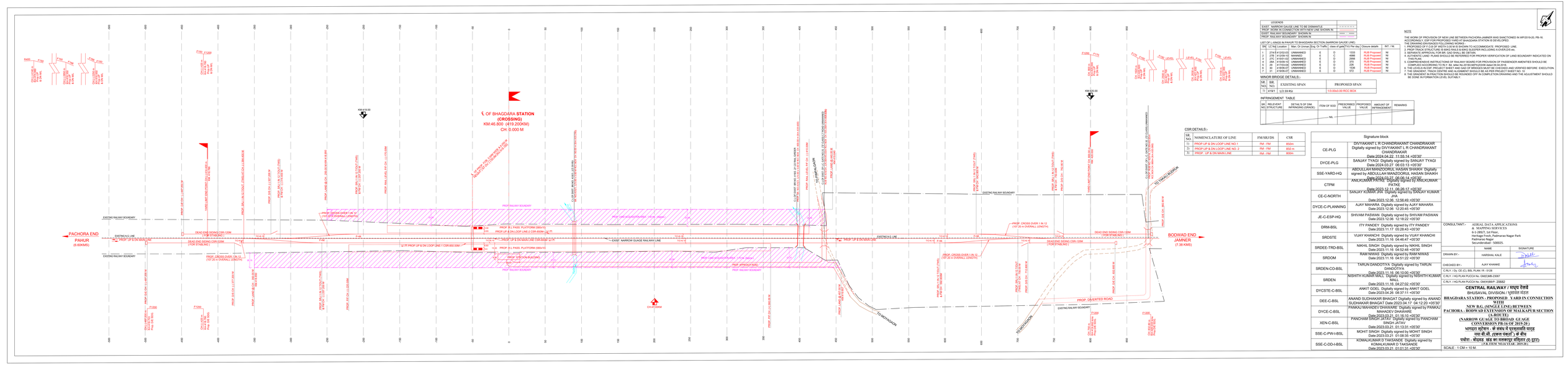
(P.B. I. NO.16 YEAR - 2019-20)

CONSULTANT:-	AERIAL DATA APPLICATIONS A. MAPPING SERVICES 6-1-285/7, 1st Floor, Ameerpet Hills, Padmarao Nagar Park Pathrikanagar, Secunderabad - 500025.	
	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

SCALE : H: 1CM = 50M, V -1CM = 5M.

Drawing Size : 1900x 900

Signature Not Verified
Digitally signed by Central Railway
Date: 2024.04.26 11:59:16 IST
Reason: SE-TG-CRIS
Location: CRIS



LEGENDS	
EXIST. NARROW GAUGE LINE TO BE DISMANTLE	
PROP. WORK IN CONNECTION WITH NEW LINE SHOWN IN	
EXIST. RAILWAY BOUNDARY SHOWN IN	
PROP. RAILWAY BOUNDARY SHOWN IN	

LIST OF L.WAGS IN PAHUR TO BHAGDARA SECTION (NARROW GAUGE LINE)

SNo	LC No	Location	Man, On Unman [Eng. On Traffic]	class of gate	TVU Per day	Closure details	INT. / NI
1	274	419202.03	UNMANNED	E	O	1533	RUB Proposed
2	275	419208.55	MANNED	E	C	4985	RUB Proposed
3	272	419301.02	UNMANNED	E	O	2956	RUB Proposed
4	271	419401.00	UNMANNED	E	O	1533	RUB Proposed
5	29	417/00.040	UNMANNED	E	O	235	RUB Proposed
6	30	418/66.0/T	UNMANNED	E	O	1536	RUB Proposed
7	31	418/66.6/T	UNMANNED	E	O	572	RUB Proposed

MINOR BRIDGE DETAILS:-

SR NO	BR NO.	EXISTING SPAN	PROPOSED SPAN
71	418/1	1/2.59 RU	1/3.0X3.00 RCC BOX

INFRINGEMENT TABLE

SR NO	RELEVENT STRUCTURE	DETAILS OF DM. INFRINGING (CROVE)	ITEM OF SOD	PRESCRIBED VALUE	PROPOSED VALUE	AMOUNT OF INFRINGEMENT	REMARKS
			NIL				

CSR DETAILS:-

SR NO.	NOMENCLATURE OF LINE	FM/SRJ/DS	CSR
1)	PROP UP & DN LOOP LINE NO.1	FM - FM	850m
2)	PROP UP & DN LOOP LINE NO. 2	FM - FM	850 m
3)	PROP. UP & DN MAIN LINE	FM - FM	850m

NOTE

THE WORK OF PROVISION OF NEW LINE BETWEEN PACHORA-JAMNER WAS SANCTIONED IN WP/2019-20, PB-16 ACCORDINGLY, ESP FOR PROPOSED YARD AT BHAGDARA STATION IS DEVELOPED.
THE DRAWING DIVISAGE FOLLOWING WORKS.
1. PROPOSED OF 1.0 B.OF WIDTH 3.00 M IS SHOWN TO ACCOMMODATE PROPOSED LINE.
2. PROP.TRACK STRUCTURE IS 60KG RAILS & 60KG SLEEPER INCLUDING X-OVER,DTS etc.
3. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE.
4. AUTHENTIC LAND PLANS SHOULD BE REFERRED FOR PROPER VERIFICATION OF LAND BOUNDARY INDICATED ON THIS PLAN.
5. ALL PASSENGER AMENITIES INSTRUCTIONS OF RAILWAY BOARD FOR PROVISION OF PASSENGER AMENITIES SHOULD BE COMPLIED ACCORDING TO R.V. Bd. letter No.2018/AUP/GUIDE dated 09.04.2019.
6. THE LEVELS IN ESP, PROJECT SHEET AND GAD OF BRIDGES MUST BE CHECKED AND VERIFIED BEFORE EXECUTION.
7. THE ALIGNMENT IN FRACTION SHOULD BE ROUNDED OFF IN COMPLETION DRAWING AND THE ADJUSTMENT SHOULD BE DONE IN FORMATION LEVEL SUITABLY.

Signature block	
CE-PLG	DIVYAKANT L R CHANDRAKANT CHANDRAKAR Digitally signed by DIVYAKANT L R CHANDRAKANT CHANDRAKAR Date:2024.04.22 11:55:14 +05'30'
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date:2024.03.27 06:03:13 +05'30'
SSE-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date:2023.03.27 06:06:14 +05'30'
CTPM	ANILKUMAR PATNI Digitally signed by ANILKUMAR PATNI Date:2023.12.11 06:26:17 +05'30'
CE-C-NORTH	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2023.12.06 12:56:49 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2023.12.06 12:20:45 +05'30'
JE-C-ESP-HQ	SHIVAM PASWAN Digitally signed by SHIVAM PASWAN Date:2023.12.06 12:16:22 +05'30'
DRM-BSL	ITY PANDEY Digitally signed by ITY PANDEY Date:2023.11.17 05:28:43 +05'30'
SRDSTE	VIJAY KHANCHI Digitally signed by VIJAY KHANCHI Date:2023.11.16 06:46:47 +05'30'
SRDEE-TRD-BSL	NIKHIL SINGH Digitally signed by NIKHIL SINGH Date:2023.11.16 04:52:49 +05'30'
SRDOM	RAM NIWAS Digitally signed by RAM NIWAS Date:2023.11.16 04:51:22 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2023.11.16 06:10:00 +05'30'
SRDEN	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.11.16 04:27:02 +05'30'
DYCSTE-C-BSL	ANKIT GOEL Digitally signed by ANKIT GOEL Date:2023.04.26 08:37:11 +05'30'
DEE-C-BSL	ANAND SUDHAKAR BHAGAT Digitally signed by ANAND SUDHAKAR BHAGAT Date:2023.04.17 04:12:20 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2023.03.21 01:35:10 +05'30'
XEN-C-BSL	PANCHAM SINGH JATAV Digitally signed by PANCHAM SINGH JATAV Date:2023.03.21 01:13:31 +05'30'
SSE-C-PW-I-BSL	MOHIT SINGH Digitally signed by MOHIT SINGH Date:2023.03.21 01:09:35 +05'30'
SSE-C-OD-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2023.03.21 01:01:31 +05'30'

CONSULTANT:- AERIAL DATA APPLICATIONS
A- MAPPING SERVICES
6-b-289/3, 2nd Floor,
Padmavathi Nagar, Ramarao Nagar Park
Padmarao Nagar
Secunderabad - 500025.

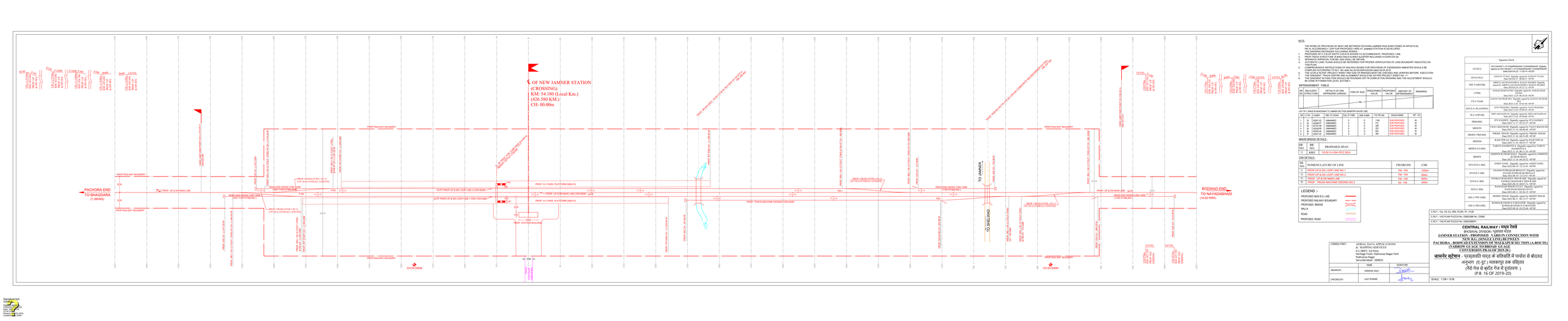
	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHARE	

C.RLY. / Cy. CE (C), BSL PLAN / R - 5128
C.RLY. / HQ PLAN PUCCA No. GWE/MB-20007
C.RLY. / HQ PLAN PUCCA No. GWV/BSP- 20662

CENTRAL RAILWAY / मध्य रेलवे
BHUSAVAL DIVISION / भुसावल डिवीजन
BHAGDARA STATION - PROPOSED YARD IN CONNECTION WITH
NEW B.G. (SINGLE LINE) BETWEEN
PACHORA - BODWAD EXTENSION OF MALKAPUR SECTION
(A-ROD-TE)
(NARROW GUAGE TO BROAD GUAGE CONVERSION PB-16 OF 2019-20.)
भागदरा स्टेशन - में संबंध में यार्डसहायी यादृच्छ
नया बी.जी. (एकल खंडों) के बीच
पचोरा - बोडवड़ खंड का मालकापुर सेक्शन (ए-ड्रूटर)
(P.B.ITEM NO.16 YEAR - 2019-20)

SCALE : 1 CM = 10 M

Signature Not Verified
Digitally signed by DIVYAKANT L R CHANDRAKANT CHANDRAKAR
Date: 2024.04.22 11:55:14 +05'30'
Reason: CE-PLG


PACHORA END
TO BHAGGARA
(7.39KMS)
BODWAD END
TO NAYAGAMBHADI
(16.62 KMS)
CENTRE OF NEW JAMNER STATION
(CROSSING)
KM: 54.180 (Local Km.)
CH: 00.00m
PROP. UP & DN MAIN LINE
PROP. RAILWAY BOUNDARY
PROP. UP & DN LOOP LINE
PROP. STATION BUILDING
PROP. TRACK MACHINE SIDING CSR-400M
PROP. CROSS OVER 1 IN 12 (52T) ON UP & DN MAIN LINE
PROP. CROSS OVER 1 IN 12 (52T) ON UP & DN LOOP LINE
PROP. 1 IN 12 TO 52KG (72RM) TURN OUT ON UP & DN LOOP LINE
PROP. 1 IN 12 TO 52KG (72RM) TURN OUT ON UP & DN MAIN LINE
PROP. #1:8.5 & #1:8.5 RCC BOX ON UP & DN LOOP LINE
PROP. #1:8.5 & #1:8.5 RCC BOX ON UP & DN MAIN LINE
PROP. #1:8.5 & #1:8.5 RCC BOX ON DEADEND SIDING
PROP. #1:8.5 & #1:8.5 RCC BOX ON TRACK MACHINE SIDING
PROP. #1:8.5 & #1:8.5 RCC BOX ON STATION BUILDING
PROP. #1:8.5 & #1:8.5 RCC BOX ON TRACK MACHINE SIDING
PROP. #1:8.5 & #1:8.5 RCC BOX ON DEADEND SIDING
PROP. #1:8.5 & #1:8.5 RCC BOX ON UP & DN MAIN LINE
PROP. #1:8.5 & #1:8.5 RCC BOX ON UP & DN LOOP LINE
PROP. PLATFORM-1 (550x10)
PROP. PLATFORM-2 (550x10)
PROP. PLATFORM-3 (550x10)
PROP. PLATFORM-4 (550x10)
PROP. PLATFORM-5 (550x10)
PROP. PLATFORM-6 (550x10)
PROP. PLATFORM-7 (550x10)
PROP. PLATFORM-8 (550x10)
PROP. PLATFORM-9 (550x10)
PROP. PLATFORM-10 (550x10)
PROP. PLATFORM-11 (550x10)
PROP. PLATFORM-12 (550x10)
PROP. PLATFORM-13 (550x10)
PROP.

NOTE:

1. THE WORK OF PROVISION OF NEW LINE BETWEEN PACHORA-JHANKER WAS SANCTIONED IN WP/2019-20, PB-16, PACHORA-JHANKER NEW BG LINE INCLUDING PAHUR STATION IS DEVELOPED.
2. THE DRAWING EMPHASES FOLLOWING WORKS:
   1. PROPOSED OF 2 CB OF WIDTH 3.00 M SHOWN TO ACCOMMODATE PROPOSED LINE.
   2. PROPOSED OF 1 CB OF WIDTH 3.00 M SHOWN TO ACCOMMODATE OTHER INCLUDING 5.0 KM 25K ms.
   3. SEPARATE APPROVAL FOR MV. GAD SHALL BE OBTAIN.
3. AUTHENTIC LAND PLANS SHOULD BE REFERRED FOR PROPER VERIFICATION OF LAND BOUNDARY INDICATED ON THIS PLAN.
4. COMPREHENSIVE INSTRUCTIONS OF RAILWAY BOARD FOR PROVISION OF PASSENGER AMENITIES SHOULD BE COMPLIED ACCORING TO RLY. Bd. letter No.2018/AM/PU/0/DE dated 09.04.2018.
5. THE LEVELS IN B.ESP, PROJECT SHEET AND GAD OF BRIDGES MUST BE CHECKED AND VERIFIED BEFORE EXECUTION.
6. THE GRADIENT, TRACK CENTRE AND ALIGNMENT SHOULD BE AS PER PROJECT SHEET NO.9
7. THE ADJUSTMENT OF LEVELS SHOULD BE REVISED OFF IN COMPLETION DRAWING AND THE ADJUSTMENT SHOULD BE DONE IN FORMATION LEVEL SUITABLY.
8. DRAINAGE WITH REQUIRED BLOPE WILL BE PROVIDED FOR YARD.

EXIST. NARROW GUAGE LINE TO BE DISMANTLE	
PROP. WORK IN CONNECTION WITH NEW LINE SHOWN IN	
EXIST. WORK IN BROWN IN	
EXIST. RAILWAY BOUNDARY SHOWN IN	
EXISTING ROAD SHOWN IN	
APPROACH ROAD SHOWN IN	

CSR DETAILS:

SR. NO.	NOMENCLATURE OF LINE	FM/SIG/TDS	CSR
1)	PROP UP & DN LOOP LINE NO.1	FM - FM	832.075m
2)	PROP. UP & DN MAIN LINE	FM - FM	904.400m
3)	PROP TOWER SIDING	FM/SIG - SIG	181.000m
4)	PROP UP & DN LOOP LINE NO. 2	FM - FM	900.000m
5)	PROP UP & DN LOOP LINE NO. 3	FM - FM	900.000m

INFRINGEMENT TABLE

SR. NO.	RELEVENT STRUCTURE	DETAIL'S OF DW. INFRINGING (GRADE)	ITEM OF WAY	PRESCRIBED VALUE	PROPOSED VALUE	AMOUNT OF INFRINGEMENT	REMARKS

NIL

Signature block	
CE-PLG	DIVYAKANT I. R CHANDRAKANT CHANDRAKAR Digitally signed by DIVYAKANT I. R CHANDRAKANT CHANDRAKAR Date: 2024.04.12 09:38:10 +05'30'
DYCE-PLG	SANJAY TYAGI Digitally signed by SANJAY TYAGI Date: 2024.04.06 15:21:50 +05'30'
SSE-YARD-HQ	ABDULLAH MANZOORUL HASAN SHAIKH Digitally signed by ABDULLAH MANZOORUL HASAN SHAIKH Date: 2024.04.04 12:15:27 +05'30'
CTPM	ANILKUMAR PATNI Digitally signed by ANILKUMAR PATNI Date: 2023.12.26 15:30:30 +05'30'
CE-C-NORTH	SANJAY KUMAR JHA Digitally signed by SANJAY KUMAR JHA Date:2023.12.21 09:08:21 +05'30'
DYCE-C-PLANNING	AJAY MAHARA Digitally signed by AJAY MAHARA Date:2023.12.02 13:11:08 +05'30'
SSE-C-ESP-HQ	SHIVAM PASWAN Digitally signed by SHIVAM PASWAN Date: 2023.12.21 09:08:46 +05'30'
DRM-BSL	ITY PANDEY Digitally signed by ITY PANDEY Date: 2023.12.21 09:28:11 +05'30'
SRDSTE-BSL	VIJAY KHANCHI Digitally signed by VIJAY KHANCHI Date:2023.11.15 09:42:11 +05'30'
SRDEE-TRD-BSL	NIKHIL SINGH Digitally signed by NIKHIL SINGH Date:2023.11.17 12:51:14 +05'30'
SRDOM-BSL	RAM NIWAS Digitally signed by RAM NIWAS Date:2023.11.17 10:31:38 +05'30'
SRDEN-CO-BSL	TARUN DANDOTIYA Digitally signed by TARUN DANDOTIYA Date:2023.11.16 08:13:13 +05'30'
SRDEN-N-BSL	NISHITH KUMAR MALL Digitally signed by NISHITH KUMAR MALL Date:2023.11.16 04:26:09 +05'30'
DYCSTE-C-BSL	ANKIT GOEL Digitally signed by ANKIT GOEL Date:2023.04.26 08:44:42 +05'30'
DEE-C-BSL	ANAND SUDHAKAR BHAGAT Digitally signed by ANAND SUDHAKAR BHAGAT Date:2023.04.17 09:10:20 +05'30'
DYCE-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2023.03.15 09:53:13 +05'30'
XEN-C-BSL	PANKAJ MAHADEV DHAWARE Digitally signed by PANKAJ MAHADEV DHAWARE Date:2023.03.15 09:49:+05'30'
SSE-C-PW-I-BSL	MOHIT SINGH Digitally signed by MOHIT SINGH Date:2023.03.15 09:14:15 +05'30'
SSE-C-DD-I-BSL	KOMALKUMAR D TAKSANDE Digitally signed by KOMALKUMAR D TAKSANDE Date:2023.03.15 09:16:36 +05'30'

LIST OF L.H/NGE.R- SCHEDURE TO PAHUR SECTION (NARROW GAUGE LINE)

SR. NO.	C.Ng Location	Nbr. Of Unmen [Eng. Or Traffic]	Uses of gang	TCs Per day	Closure Details	R/T / NI
1	2/1	#1005-06	UNMANNED	0	0	369	RUB PROPOSED	NI
2	2/2	#2016-15	UNMANNED	0	0	2212	RUB PROPOSED	NI
3	2/3	#2631-02	UNMANNED	0	0	1549	RUB PROPOSED	NI
4	2/4	#3246-03	UNMANNED	0	0	1947	RUB PROPOSED	NI
5	2/5	#3833-03	UNMANNED	0	0	2498	RUB PROPOSED	NI
6	2/6	#4169-06	UNMANNED	0	0	2972	RUB PROPOSED	NI
7	2/7	#4703-08	UNMANNED	0	0	3810	RUB PROPOSED	NI
8	2/8	#5245-03	UNMANNED	0	0	1333	RUB PROPOSED	NI

LIST OF L.H/NGE.R- SCHEDURE TO BHAGDARA SECTION (NARROW GAUGE LINE)

SR. NO.	C.Ng Location	Nbr. Of Unmen [Eng. Or Traffic]	Uses of gang	TCs Per day	Closure Details	R/T / NI
1	2/9	#1039-10	MANNED	8	C	4986	ROB PROPOSED	NI
2	2/10	#1577-15	UNMANNED	0	O	2116	RUB PROPOSED	NI
3	2/11	#1926-10	UNMANNED	0	O	870	RUB PROPOSED	NI
4	2/12	#1703-04	UNMANNED	0	O	229	RUB PROPOSED	NI
5	2/13	#1896-07	UNMANNED	0	O	1222	RUB PROPOSED	NI
6	2/14	#1909-07	UNMANNED	0	O	372	RUB PROPOSED	NI

MINOR BRIDGE DETAILS:-

SR. NO.	NA	EXISTING SPAN	PROPOSED SPAN
1)	#1039	1(3.23) MG GIRDER	1 X 20.0 + 1.65m RCC BOX
2)	#1703	1(3.23 MG GIRDER	1(1.00 X 1.60 m RCC BOX
3)	#1931	1 (3.23 MG GIRDE	1(1.00 X 1.60 m RCC BOX

CONSULTANT:- AGRAWAL DATE & APPEICATIONS
& MAPPING SERVICES
6-1-285/7, 1st Floor,
Hemlata Finals, Pathnarasi Nagar Park
Pathnarasi Nagar
Secunderabad - 500025.

	NAME	SIGNATURE
DRAWN BY:-	HARSHAL KALE	
CHECKED BY:-	AJAY KHANKE	

C.RLY. / Dy. CE (C) BSL PLAN - R - 9125

C.RLY. / HQ PLAN PUCCA No. GM/EIB/B-2006

C.RLY. / HQ PLAN PUCCA No. GM/WSB/P- 20681

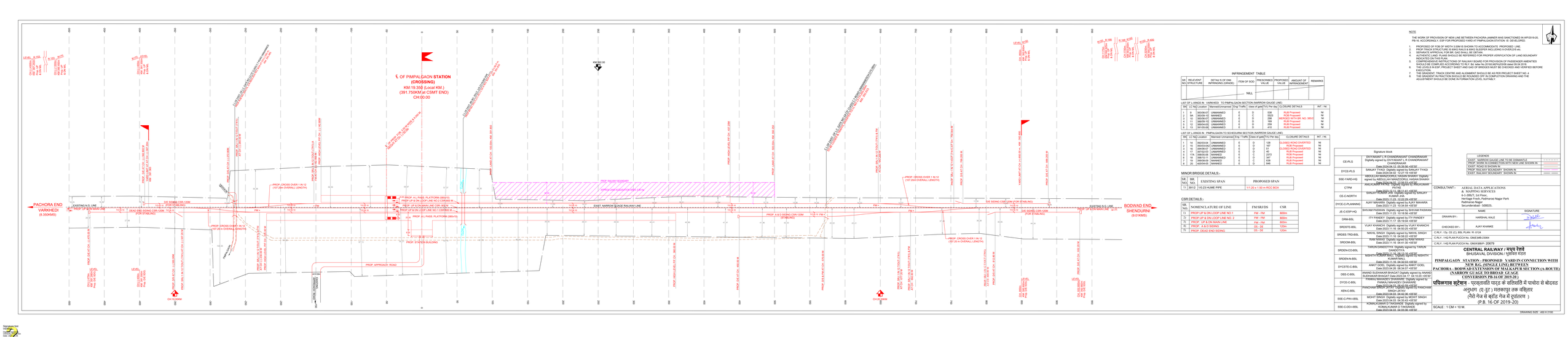
CENTRAL RAILWAY / मध्य रेलवे
ENGINEERING DEPARTMENT / इंजीनियरिंग विभाग
PAHUR STATION, PROPOSED YARD IN CONNECTION WITH NEW B.G. (SINGLE LINE) BETWEEN PACHORA - BODWAD EXTENSION OF MALKAPUR SECTION (A-ROUTE) (NARROW GUAGE TO BROAD GUAGE CONVERSION PB-16 OF 2015-20)

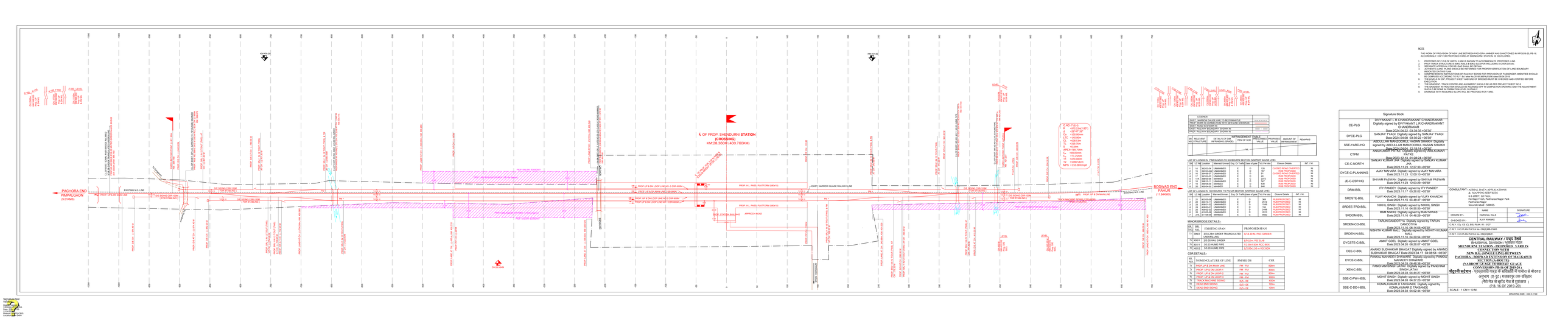
पाहुर स्टेशन - परसावली पारड के सहिसाि में पाचोरा से बोदवड
अनुभाग (ए-रूट) मलकापुर तक वसिार
(मेरी गेज से बरॉड गेज में रूपांतरण)
(P.B. 16 OF 2019-20)

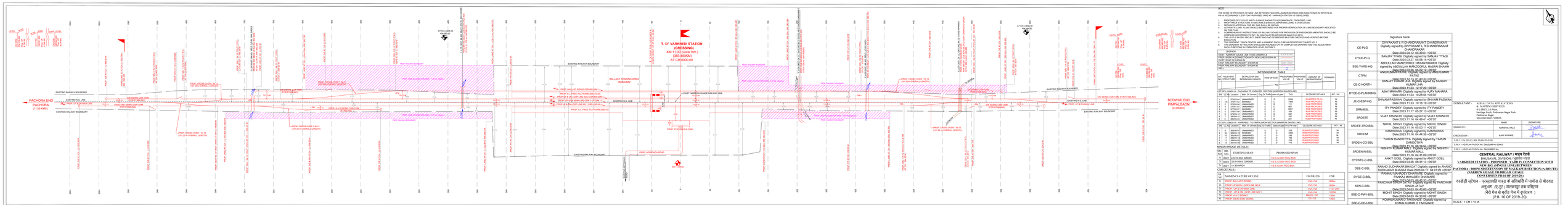
SCALE : 1 CM = 10 M.

DRAWING SIZE : 820 X 2610

PACHORA END
SHENDURNI
(11.840KM)
BODWAD END
BHAGDARA
(6.600KM)
EXISTING N.G LINE
PROP. UP & DN MAIN LINE
PROP. UP & DN LOOP LINE NO.1
PROP. UP & DN LOOP LINE NO.2
PROP. UP & DN LOOP LINE NO.3
PROP. TOWER SIDING
PROP. APPROACH ROAD
PROP. SYSTEM BUILDING
PROP. PASS. PLATFORM ONLY
PROP. GOODS PLATFORM ONLY
PROP. SIGNAL
PROP. POINT
PROP. LC GATE
PROP. RUB PIER
PROP. RUB ABUT
PROP. RUB WING WALL
PROP. RUB RETURN WALL
PROP. RUB APPROACH
PROP. RUB SLOPE
PROP. RUB FOOTPATH
PROP. RUB PARAPET
PROP. RUB STEPS
PROP. RUB RAMP
PROP. RUB WATER TABLE
PROP. RUB CUTWATER
PROP. RUB STRING COURSE
PROP. RUB COPING
PROP. RUB PLINTH
PROP. RUB SPRING
PROP. RUB SPRING COURSE
PROP. RUB SPRING BLOCK
PROP. RUB SPRING STONE
PROP. RUB SPRING WALL
PROP. RUB SPRING WALL
PROP. RUB SPRING WALL


PACHORA END
VARKHEDI
(8.350KMS)
BODWAD END
SHENDURNI
(9.01KMS)
% OF PIMPALGAON STATION (CROSSING)
KM:19.359 (Local KM.)
(391.750KM)at CSMT END)
CH:00.00
KM:353.00
EXIST. NARROW GUAGE RAILWAY LINE
PROP. UP & DN MAIN LINE CSR-60M
PROP. UP & DN LOOP LINE NO.1 CSR-60 M
PROP. UP & DN LOOP LINE NO.2 CSR-60 M
PROP. UP LOOP LINE NO.1 CSR-60 M
PROP. 01 PASS. PLATFORM (585*10)
PROP. 02 PASS. PLATFORM (585*10)
PROP. A & D SIDING CSR-52M (FOR BLOCK)
PROP. A & D SIDING CSR-52M (FOR T.MACHAN)
PROP. A & D SIDING CSR-52M (FOR STABLING)
PROP. A & D SIDING CSR-52M
PROP. STATION BUILDING
PROP. APPROACH ROAD
PROP. GOODS SHED
PROP. CROSS OVER 1 IN 12 (107.2M OVERALL LENGTH)
PROP. CROSS OVER 1 IN 8.5 (107.2M OVERALL LENGTH)
PROP. CROSS OVER 1 IN 12 (107.2M OVERALL LENGTH)
PROP. CROSS OVER 1 IN 12 (107.2M OVERALL LENGTH)
PROP. 1RH 1:8.5 TCOUT (139.5 M)
PROP. 1LH 1:8.5 TCOUT (139.5 M


PACHORA END
PIMPALGAON
(9.01KMS)
BODWAD END
PAHUR
(11.84KMS)
EXISTING N.G. LINE
EXIST. NARROW GUAGE RAILWAY LINE
% OF PROP. SHENDURNI STATION
(CROSSING)
KM:28.360KM (402.760KM)
PROP. 1X1.25 SWR
PROP. 1X1.25 SWR
PROP. 1X1.25 SWR


PACHORA END
PACHORA
(11.00 KMS)
BOOWAD END
PIPALGAON
(8.39KMS)
EXISTING RAILWAY BOUNDARY
EXISTING NARROW GAUGE RAILWAY LINE
EXISTING N.L.LINE
EXISTING BUILDING
PROP. APPROACH ROAD
PROP. PASS. PLATFORM (960X10)
PROP. FOOT OVER BRIDGE
PROP. SIGNAL
PROP. LINE FOR DEVELOPMENT
PROP. LINE FOR DEVELOPMENT (FOR NEW TRACK)

Indicative alignment of Pachora Jamner BG line can be viewed on Google earth through link provided below :

https://drive.google.com/drive/folders/1nl2ooHjhPbIt7VJ7j5MaCuMwXbv7Q_Kp?usp=sharing

Signature Not Verified
Digitally signed by VAISHALI PATERIA
Date: 2024.06.05 14:52:27 IST
Reason: IREPS-CRIS
Location: New Delhi