HORIZONTAL CURVES DETAILS

CURVE NO	Δ	R	T	CL	Ca	TYPE
C1	2° 34' 31"	500M (D=3.5°)	11.239M	22.473M	0MM	NON-TRANSITION CURVE
C2	2° 30' 49"	2000M (D=0.875°)	43.878M	87.744M	0MM	NON-TRANSITION CURVE
C3	1° 34' 15"	800M (D=2.19°)	10.967M	21.932M	0MM	NON-TRANSITION CURVE
C4	1° 34' 38"	650M (D=2.69°)	8.947M	17.894M	0MM	NON-TRANSITION CURVE
C5	6° 42' 38.5"	250M (D=7°)	14.657M	29.300M	0MM	NON-TRANSITION CURVE
C6	7° 57' 44.9"	500M (D=3.5°)	14.657M	69.486M	0MM	NON-TRANSITION CURVE
C7	7° 57' 45.3"	250M (D=7°)	17.400M	34.700M	0MM	NON-TRANSITION CURVE
C8	1° 4' 10.5"	1100M (D=1.59°)	10.268M	20.500M	0MM	NON-TRANSITION CURVE
C9	1° 4' 14"	1100M (D=1.59°)	10.277M	20.600M	0MM	NON-TRANSITION CURVE
C10	7° 46' 45.5"	195M (D=8.97°)	13.258M	26.500M	0MM	NON-TRANSITION CURVE
C11	7° 46' 45.5"	195M (D=8.97°)	13.258M	26.500M	0MM	NON-TRANSITION CURVE
C12	14° 29' 17"	320M (D=5.47°)	40.675M	80.900M	0MM	NON-TRANSITION CURVE
C13	7° 46' 45.9"	175M (D=10°)	11.900M	23.800M	0MM	NON-TRANSITION CURVE
C14	14° 29' 17"	175M (D=10°)	22.244M	44.300M	0MM	NON-TRANSITION CURVE
C15	7° 46' 43.2"	300M (D=5.83°)	20.396M	40.700M	0MM	NON-TRANSITION CURVE
C16	7° 46' 42"	175M (D=10°)	11.897M	23.800M	0MM	NON-TRANSITION CURVE
C17	14° 29' 17"	200M (D=8.75°)	25.422M	50.600M	0MM	NON-TRANSITION CURVE
C18	14° 28' 37.6"	175M (D=10°)	22.227M	44.200M	0MM	NON-TRANSITION CURVE
C19	21°11' 55.9"	295M (D=5.93°)	55.205M	109.100M	0MM	NON-TRANSITION CURVE
C20	6°42' 37"	200M (D=8.75°)	11.725M	23.400M	0MM	NON-TRANSITION CURVE
C21	6°42' 33.1"	200M (D=8.75°)	11.723M	23.400M	0MM	NON-TRANSITION CURVE
C22	6°42' 33.1"	200M (D=8.75°)	11.723M	23.400M	0MM	NON-TRANSITION CURVE
C23	13°25' 8.6"	175M (D=10°)	20.587M	41.000M	0MM	NON-TRANSITION CURVE
C24	13°25' 8.8"	175M (D=10°)	20.587M	41.000M	0MM	NON-TRANSITION CURVE
C25	20°07' 43.8"	175M (D=10°)	31.060M	61.500M	0MM	NON-TRANSITION CURVE
C26	02°05' 38.4"	1000M (D=1.75°)	18.276M	36.547M	0MM	NON-TRANSITION CURVE
C27	05°11' 15.6"	250M (D=7°)	11.325M	22.636M	0MM	NON-TRANSITION CURVE
C28	18°22' 30"	300M (D=5.83°)	48.522M	96.211M	0MM	NON-TRANSITION CURVE
C29	06°42' 37.8"	175M (D=10°)	10.260M	20.500M	0MM	NON-TRANSITION CURVE
C30	13°21' 07.1"	300M (D=5.83°)	35.114M	69.911M	0MM	NON-TRANSITION CURVE

CURVE NO .C31: Δ = 3° 07' 27.7"; R = 875M (D=2°); T = 23.863M; CCL = 47.711M; TL = 45M; Ca = 65MM

TRACK LENGTH IN PHASE WISE

SL.NO	TYPE OF TRACK	TOTAL TRACK LENGTH IN PHASE-1	TOTAL TRACK LENGTH IN PHASE-2
1.	BALLASTED TRACK	7175.425M	49.60M
2.	COLUMN TRACK AT IBL	810.00M	240.00M
3.	COLUMN TRACK AT HWP	160.00M	23.3M
4.	EMBEDDED TRACK AT WBL	495.628M	445.355M
5.	EMBEDDED TRACK AT IBL	210.496M	0.00M
6.	EMBEDDED TRACK AT HWP	53.853M	0.00M
7.	EMBEDDED TRACK AT PWAY & EMERGENCY LEAD LINE	65.488M	0.00M
8.	EMBEDDED TRACK AT TOWER WAGON LINE	40.00M	0.00M
9.	EMBEDDED TRACK AT SBL	56.250M	0.00M
10.	EMBEDDED TRACK AT PAVED AREA	6.00M	0.00M
11.	EMBEDDED TRACK AT COACH LOADING/UNLOADING	134.659M	0.00M
12.	EMBEDDED TRACK ATPIT WHEEL LATE	220.573M	0.00M

PROP.RETAINING WALL DETAILS

SL. NO.	START CH	END CH
01	25525 M	25675 M
02	25800 M	25872 M

PROP.TRACK STRUCTURE FOR DEPOT

SL. NO.	DESCRIPTION	VALUE
01	RAIL (BG-1676mm)	60 KG
02	BALLAST CUSHION FOR DEPOT LINES	250 mm
03	BALLAST CUSHION FOR TEST TRACK	300 mm
04	SLEEPER DEPTH	230 mm
05	RAIL HEIGHT	172 mm
06	RUBBER PAD	10 mm
	FOR TEST TRACK	712 mm
	FOR DEPOT TRACK	662 mm

LIST OF POINTS & CROSSINGS DETAILS

SL. NO.	SRJ NO.	TYPE	CHAINAGE
1.	TO-01	1 IN 8.5	25+488.103M
2.	TO-02	1 IN 8.5	25+550.560M
3.	TO-03	1 IN 8.5	25+833.289M
4.	TO-04	1 IN 8.5	25+895.589M
5.	TO-05	1 IN 8.5	25+911.603M
6.	TO-06	1 IN 8.5	25+999.203M
7.	TO-07	1 IN 8.5	26+009.203M
8.	TO-08	1 IN 8.5	26+111.103M
9.	TO-09	1 IN 8.5	26+285.568M
10.	TO-10	1 IN 8.5	26+113.594M
11.	TO-11	1 IN 8.5	26+158.103M
12.	TO-12	1 IN 8.5	26+202.403M
13.	TO-13	1 IN 8.5	26+046.303M
14.	TO-14	1 IN 8.5	26+083.803M
15.	TO-15	1 IN 8.5	26+132.703M
16.	TO-16	1 IN 8.5	26+171.203M
17.	TO-17	1 IN 8.5	26+209.403M
18.	TO-18	1 IN 8.5	26+153.703M
19.	TO-19	1 IN 8.5	26+193.703M
20.	TO-20	1 IN 8.5	26+232.303M
21.	TO-21	1 IN 8.5	26+287.003M
22.	TO-22	1 IN 8.5	26+262.803M
23.	TO-23	1 IN 8.5	26+190.303M
24.	TO-24	1 IN 8.5	26+226.903M
25.	TO-25	1 IN 8.5	26+263.403M
26.	TO-26	1 IN 8.5	26+304.403M
27.	TO-27	1 IN 8.5	26+263.403M
28.	TO-28	1 IN 8.5	26+312.903M
29.	TO-29	1 IN 8.5	26+362.503M

LIST OF FOULING MARK DETAILS

SL. NO.	TYPE	CHAINAGE
1.	FM-01	25+497.218M
2.	FM-02	25+541.836M
3.	FM-03	25+842.124M
4.	FM-04	25+886.773M
5.	FM-05	25+948.872M
6.	FM-06	25+959.059M
7.	FM-07	26+063.552M
8.	FM-08	26+103.757M
9.	FM-09	26+159.919M
10.	FM-10	26+237.261M
11.	FM-11	26+206.903M
12.	FM-12	26+263.103M
13.	FM-13	26+233.003M
14.	FM-14	26+229.497M
15.	FM-15	26+252.603M
16.	FM-16	26+277.903M
17.	FM-17	26+279.703M
18.	FM-18	26+331.551M
19.	FM-19	26+305.651M
20.	FM-20	26+311.403M
21.	FM-21	26+279.703M
22.	FM-22	26+247.803M
23.	FM-23	26+352.703M
24.	FM-24	26+361.503M
25.	FM-25	26+408.503M
26.	FM-26	26+166.234M
27.	FM-27	26+312.349M

LIST OF CROSS-OVERS

SL. NO.	DESCRIPTION	FROM CHAINAGE (M)		TO CHAINAGE (M)	
1.	X-OVER (1 IN 8.5)	25+488.103	TOWARDS CHIKKABANAVARA RLY. STN.	25+550.603	TOWARDS CHIKKABANAVARA RLY. STN.
2.	X-OVER (1 IN 8.5)	25+835.803	TOWARDS CHIKKABANAVARA RLY. STN.	25+898.103	TOWARDS CHIKKABANAVARA RLY. STN.

NOTES:

1. ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE STATED.
2. CHAINAGES ARE RECKONED FROM BSRP ALIGNMENT.
3. CHAINAGE AND EXISTING LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE C4 CORRIDOR DRAWING .
4. PROPOSED PHASE-I W.R.T. SINGLE LINE SHOWN IN RED.
5. PROPOSED PHASE-II IN ORANGE.
6. IN FORMATION, SUB BANK FOR EMBANKMENTS AND BERMS ARE TO BE PROVIDED AS PER RDSO GUIDELINES.
7. THE CURVES ARE PROVIDED WITH TRANSITION CURVES WHEREVER REQUIRED.
8. 60 KG/90 UTS CLASS-I RAILS, PSC SLEEPER 1660 Nos/KM
9. EQUILIBRIUM DESIGN SPEED HAS BEEN CONSIDERED AS 25 KMPH
10. THE LAYOUT HAS BEEN PREPARED BASED ON THE LAND BOUNDARY DETAILS PROVIDED BY K- RIDE.
11. ALL TURNOUTS ARE TO 1 IN 8.5 :R:232.32
12. ALL CURVES ARE NOT LESS THAN 175M RADIUS.
13. THE MAXIMUM GRADIENT AT THE DEPOT LEVEL.
14. FM DISTANCE PROVIDED AT 4.265M METERS AS PER IR PWAY MANUAL .
15. DEPOT RAIL LEVEL 869.172M.
16. SLEEPER SPACING SHALL BE 600 MM FOR THE TEST TRACK AND 650 MM FOR THE DEPOT LINES.
17.CONCRETE CATWALK OF 0.6 M WIDTH PROVIDED BETWEEN SBL LINES.

REVISION-5 NOTE : FINALIZED BASED ON PHYSICAL DISCUSSION BETWEEN KRIDE,GC AND BARSYL DATED:06.11.2025.
REVISION-4 NOTE: FINALIZED DRAWING BASED ON KRIDE AND GC OBSERVATIONS RECEIVED MAIL - DATED:20.09.2025
REVISION-3 NOTE : RAIL LEVEL 869.170 FINALIZED BASED ON PHYSICAL DISCUSSION BETWEEN KRIDE,GC AND BARSYL DATED:05.08.2025.
REVISION-2 NOTE : RAIL LEVEL 869.170 FINALIZED BASED ON PHYSICAL DISCUSSION BETWEEN KRIDE,GC AND BARSYL DATED:05.08.2025.
REVISION-1 NOTE : RAIL & FORMATION LEVEL FINALIZED BASED ON PHYSICAL DISCUSSION BETWEEN GC AND BARSYL DATED:09.04.2025.

ABBREVIATIONS OF CURVE

- Δ = DEFLECTION ANGLE
- R = RADIUS OF CURVE
- D = DEGREE OF CURVATURE
- T = TANGENT LENGTH
- CL = CURVE LENGTH
- CCL = CIRCULAR CURVE LENGTH
- TL = TRANSITION LENGTH
- Ca = CANT
- TP = TANGENT POINT
- TS = TANGENT TO SPIRALS
- SC = SPIRAL TO CURVE
- CS = CURVE TO SPIRAL
- ST = SPIRAL TO TANGENT

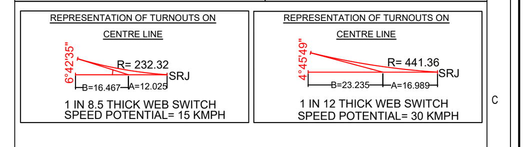
ABBREVIATIONS:

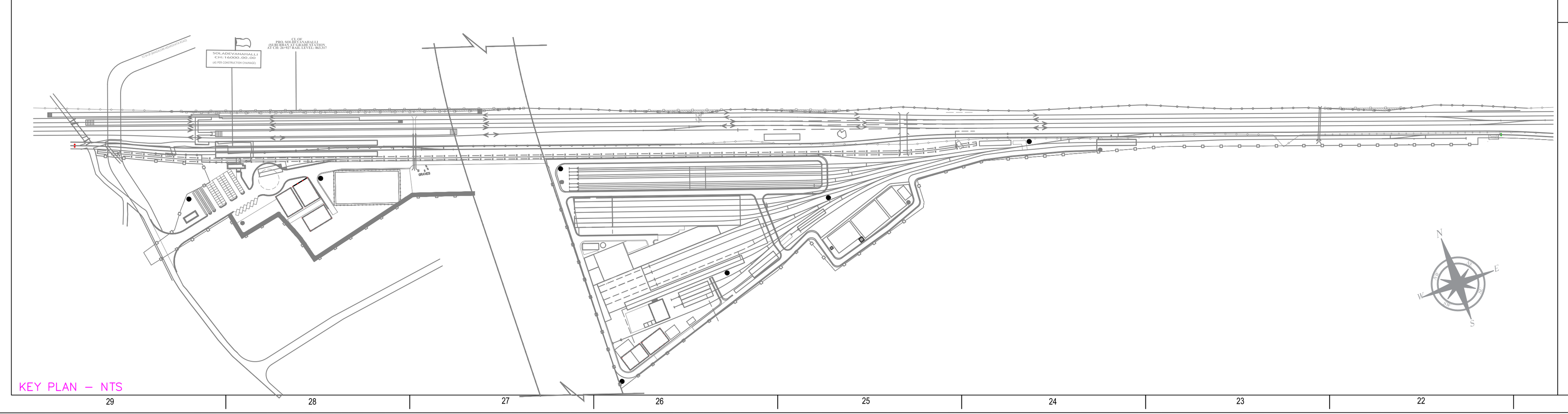
- SRJ = STOCK RAIL JOINT
- TO = TURN OUT
- FM = FOULING MARK
- DE = DEAD END
- BS = BUFFER STOP
- BS = FRICTION BUFFER STOP
- CSR = CLEAR STANDING ROOM
- GP = GRADIENT POST
- TP = TANGENT POINT

LEGEND

EXISTING IR
PROPOSED SUBURBAN LINE
PROPOSED SUBURBAN LINE LAND BOUNDARY
EXISTING IR BOUNDARY
PROPOSED DEPOT TRACK
HIGH MAST
BUFFER STOP
PROPOSED ROAD
PROPOSED BUILDINGS
PROPOSED SHEDS
BANYAN TREE
PROPOSED RETAINING WALL
FENCING
CONCRETE CAT WALK 0.6M
PROPOSED BSRP LAND BOUNDARY
EXISTING BUILDINGS
GREENARY
PAVED AREA
GRAVE
FM
PROPOSED PERIPHERAL RING ROAD PIER

PHASE WISE LEGEND
PHASE-1
PHASE-2





KEY PLAN - NTS

REVISIONS

REV.NO	DATE	DESCRIPTION
5	17.11.2025	REVISED AND ISSUED FOR GFC DRAWING BASED ON KRIDE AND GC OBSERVATIONS RECEIVED LETTER NO:GC/84- DATED:06.11.2025
4	17.10.2025	REVISED AND ISSUED FOR GFC DRAWING BASED ON KRIDE AND GC OBSERVATIONS RECEIVED MAIL - DATED:20.09.2025
3	12.08.2025	REVISED AND ISSUED FOR GFC DRAWING BASED ON KRIDE OBSERVATIONS RECEIVED MAIL DATED:12.08.2025
2	11.08.2025	REVISED AND ISSUED FOR GFC DRAWING BASED ON PHYSICAL MEETING BETWEEN KRIDE,GC AND BARSYL DATED:05.08.2025
1	13.05.2025	REVISED AND ISSUED FOR GFC DRAWING BASED ON VIRTUAL MEETING BETWEEN GC AND BARSYL DATED:28.04.2025
0	19-04-2025	ISSUED AS GOOD FOR CONSTRUCTION

DETAILED DESIGN CONSULTANT DDC

BARSYL we innovate
BALAJI RAILROAD SYSTEMS (P) LIMITED

PROOF CONSULTANT (PC):

DETAILED DESIGN CONSULTANT DDC — PREPARED,CHECKED AND APPROVED

	DESIGNATION	SIGNATURE	DATE
PREPARED BY	ALIGNMENT EXPERT	(signed)	17.11.2025
CHECKED BY	PROJECT MANAGER	(signed)	17.11.2025
APPROVED BY	PROJECT HEAD	(signed)	17.11.2025
IGBC CONSULTANT			

PC | CONSULTANT | APPROVED BY | ISSUED BY

GENERAL CONSULTANT (AECOM-EGIS-WSP) — CHECKED AND APPROVED

DEPARTMENT	DESIGNATION	SIGNATURE	DATE
ALIGNMENT	CTE		
ALIGNMENT	ALIGNMENT EXPERT		
SIGNALING	CHIEF SIGNALING EXPERT		
TRACTION	CHIEF TRACTION EXPERT		
TELECOM	CHIEF TELECOM EXPERT		
ROLLING STOCK	SR.ROLLING STOCK ENGINEER		
RESIDENT ENGG.	DEPOT RE		
E&M	SR. E&M		

COUNTER SIGN — PROJECT DIRECTOR: SIGNATURE / NAME / DATE

KRIDE — CHECKED AND APPROVED

DEPARTMENT	DESIGNATION	SIGNATURE	DATE
ALIGNMENT	ALIGNMENT EXPERT		
PLANNING	GM/PLANNING		
CIVIL/DEPOT	GM/CIVIL/DEPOT		
ROLLING STOCK	GM/ROLLING STOCK		
TRACTION	GM/TRACTION		
SIGNALING	GM/SIGNALING		
SIGNALING	DGM/SIGNALING		

EMPLOYER : K RIDE — RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

PROJECT : BENGALURU SUBURBAN RAILWAY PROJECT (BSRP) KRIDE SOLADEVANAHALLI DEPOT

DRAWING TILE : SOLADEVANAHALLI DEPOT TRACK LAYOUT DRAWING

DRAWING NO : SDH-DP-ALG-07-TRC-DD-001

DRAWING NO : 1:1000 AS SHOWN	SHEET NO.	DATE	REVISION	DWG STATUS
	1 OF 2	17.11.2025	4	C

PRELIMINARY DWG(P), DEFINITIVE DWG(D),CONSTRUCTION DWG(C) AS BUILT DWG(B), SHOP DWG(S), MANUFACTURED DWG(M) — SHEET SIZE A0