

Ref: AGICL/A.E/PKG-05/2024/98

Date: 08-03-2024

To,

M/S KAMAC Engineers Pvt. Ltd.

F0201, City Centre Office Block,

Uttrayon Matigara, Siliguri,

Dist: Darjeeling, West Bengal.

PIN: 734010

E-Mail- kamacengineers.ledobypass@gmail.com

SUB: Strengthening/Improvement to 2- Lane with Paved Shoulder from KM 27+150 (Golai Gaon) to KM 47+682 (Ledo) on existing Dibrugarh to Ledo section with proposed Digboi Bypass (Green Field and Brown Field) (2-Lane+PS) of NH-315 (Old NH-38) in Tinsukia District in the State of Assam on EPC mode. **(Pkg. 5): Plan & Profile – Final Approval - Regarding**

Ref:i) This office letter no.: AGICL/A.E/PKG-05/2024/81 dated 01.03.2024

Dear Sir,

Vide referenced letter, a **final Approval of Plan and Profile** which were in accordance with standard and specifications (schedule-D) for the following highway stretches was intended to be communicated to you:

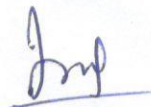
- (i) From Ch. 27+150 to Ch. 31+356
- (ii) From Ch. 31+910 to Ch. 36+370
- (iii) From Ch.37+104 to Ch. 39+237
- (iv) From Ch. 39+425 to Ch. 41+358
- (v) From Ch. 41+482 to Ch. 43+125
- (vi) From Ch. 43+240 to CH. 47+682

The word '**Provisional**' may be read as '**Final-Approval**' in the reference cited letter for the above mentioned stretches total Km. 18.817. The other contents of the earlier letter remain unchanged. You are requested to submit the three hard copies for signature of Authority Engineer 'Good for Construction' drawings for the above stated road portions .

The inadvertent error and inconvenience caused to you is highly regretted.

With regards

For, Almondz Global Infra Consultant limited in JV with Ayoleeza consultant Private Limited.



Pramod Kumar
Team Leader
(Authority Engineer)

Copy to:

- i) GM. (P) PMU, Dibrugarh (Assam) for kind information please.
- ii) The Almondz Global Infra-Consultant Limited in JV with Ayoleeza Consultant Private Limited.

Ind

You are required to submit the three hard copies for signature of Authority Engineer.

This is your information and further necessary action.

Thanking you and assuring our best services at all times.

With regards

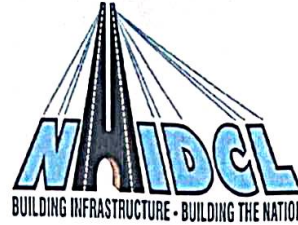
For, Almondz Global Infra Consultant limited in JV with Ayoleeza consultant Private Limited.



Pramod Kumar
Team Leader
(Authority Engineer)

Copy to:

- i) GM. (P) PMU, Dibrugarh (Assam) for kind information please.
- ii) The Almondz Global Infra-Consultant Limited in JV with Ayoleeza Consultant Private Limited



**NATIONAL HIGHWAYS & INFRASTRUCTURE
DEVELOPMENT CORPORATION LTD.**

**WIDENING/IMPROVEMENT TO 2-LANE LANE WITH PAVED SHOULDER FROM KM 27+150
(GOLAI GOAN) TO KM 47+682 (LEDO) ON DIBRUGARH TO LEDO SECTION WITH PROPOSED
MARGHERITA & LEDO BYPASS (BROWNFIELD AND GREEN FIELD) (2-LANE+PS) OF NH-38 IN
TINSUKIA DISTRICT IN THE STATE OF ASSAM ON EPC MODE.(PACKAGE-5)**

**HIGHWAY DRAWING
PLAN & PROFILE**

JAN(2024)

CLIENT:



**NATIONAL HIGHWAYS & INFRASTRUCTURE
DEVELOPMENT CORPORATION LTD.**

EPC CONTRACTOR:



KAMAC ENGINEERS PVT.LTD
F0201, CITY CENTER OFFICE BLOCK, 2ND
FLOOR, MATIGARA 734010

DESIGN CONSULTANT:



A.V. CONSTRUCTION

1ST FLOOR, WZ-1240, PALAM EXTENSION, BOSCO
ASHRAM WALI GALI, NEW DELHI 110045



WINST INFRA SOLUTION PVT.LTD

OFFICE: F-6, ISHAAN CORPORATE TOWER, PLOT
NO-C-23, SECTOR-13, VASUNDHRA, GHAZIABAD,
U.P-201012

TCS SCHEDULE AS PER DESIGN

SL NO	CHAINAGE FROM TO	LENGTH (M)	TCS TYPE	DESCRIPTION
1	27+150 27+230	80	TCS 9	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN BUILT-UP AREA (WIDENING)
2	27+230 27+424	194	TCS 4A	2-LANE CARRIAGEWAY WITH PAVED IN APPROACH OF ROB CUM ELEPHANT CORRIDOR FLYOVER WITH SERVICE ROAD ON BOTH SIDE (NEW CONSTRUCTION)
3	27+424 28+194	770	TCS 4B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN APPROACH OF ROB CUM ELEPHANT CORRIDOR FLYOVER (VIADUCT PORTION) WITH ROAD ON BOTH SIDE (NEW CONSTRUCTION)
4	28+194 28+275	81	STR	ROB RDSO STEEL COMPOSITE GIRDER
5	28+275 28+675	400	TCS 4B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN APPROACH OF ROB CUM ELEPHANT CORRIDOR FLYOVER (VIADUCT PORTION) WITH ROAD ON BOTH SIDE (NEW CONSTRUCTION)
6	28+675 29+023	348	TCS 4A	2-LANE CARRIAGEWAY WITH PAVED IN APPROACH OF ROB CUM ELEPHANT CORRIDOR FLYOVER WITH SERVICE ROAD ON BOTH SIDE (NEW CONSTRUCTION)
7	29+023 29+300	277	TCS 3A	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)
8	29+300 29+465	165	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
9	29+465 29+475	10	STR	MNB RCC BOX (1X10.0)m
10	29+475 30+100	625	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
11	30+100 30+120	20	STR	MNB RCC BOX (2X10.0)m
12	30+120 31+238	1118	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
13	31+238 31+245	7	STR	SVUP (1X7.0m)
14	31+245 31+679	434	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
15	31+679 31+730	51	STR	MNB RCC GIRDER (3X17.0)m
16	31+730 32+973	1243	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
17	32+973 32+980	7	STR	SVUP (1X7.0m)
18	32+980 33+898	918	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
19	33+898 33+905	7	STR	SVUP (1X7.0m)
20	33+905 33+961	56	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
21	33+961 33+976	15	STR	MNB RCC BOX (2X7.5)m
22	33+976 35+616	1640	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
23	35+616 35+628	12	STR	LVUP (1X12.0m) - RCC BOX
24	35+628 35+800	172	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
25	35+800 35+841	41	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
26	35+841 35+909	68	STR	MNB RCC GIRDER (SPAN 4X17.0m)
27	35+909 37+108	1199	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
28	37+108 37+148	40	STR	MNB RCC GIRDER (2X 20.0)m
29	37+148 37+274	126	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
30	37+274 37+281	7	STR	SVUP (1X7.0m)
31	37+281 37+454	173	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
32	37+454 37+464	10	STR	MNB RCC BOX (1X10.0)m
33	37+464 38+063	599	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
34	38+063 38+728	665	STR	MNB - PSC GIRDER (SPAN - 19X35.0)
35	38+728 39+791	1063	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
36	39+791 39+798	7	STR	SVUP (1X7.0m)

GOOD FOR CONSTRUCTION

37	39+798 39+857	59	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
38	39+857 39+872	15	STR	MNB RCC BOX (2X7.5)m
39	39+872 40+450	578	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
40	40+450 40+457	7	STR	SVUP (1X7.0m)
41	40+457 42+045	1588	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
42	42+045 42+052	7	STR	SVUP (1X7.0m)
43	42+052 42+739	687	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
44	42+739 42+746	7	STR	SVUP (1X7.0m)
45	42+746 43+194	448	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
46	43+194 43+209	15	STR	MNB RCC BOX (2X7.5)m
47	43+209 44+696	1487	TCS 8	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA IN HIGH EMBANKMENT ZONE (NEW CONSTRUCTION)
48	44+696 44+864	168	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
49	44+864 44+871	7	STR	SVUP (1X7.0m)
50	44+871 45+720	849	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
51	45+720 45+730	10	STR	MNB RCC BOX (1X10.0)m
52	45+730 45+821	91	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
53	45+821 45+828	7	STR	SVUP (1X7.0m)
54	45+828 46+945	1117	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
55	46+945 46+955	10	STR	MNB RCC BOX (1X10.0)m
56	46+955 47+262	307	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
57	47+262 47+269	7	STR	SVUP (1X7.0m)
58	47+269 47+498	229	TCS 3B	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)[ECCENTRIC CONSTRUCTION]
59	47+498 47+680	182	TCS 1	2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (WIDENING)
TOTAL LENGTH=		20530		

SAFETY AUDITOR
(As per Article 10.1 of EPC Agreement)

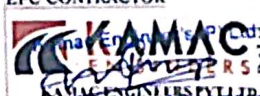
DESIGN AID, NEW DELHI

CLIENT:



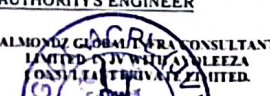
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

EPC CONTRACTOR



KAMAC ENGINEERING & CONSTRUCTION PVT. LTD.
BLOCK, 2ND FLOOR, MATIGARA 734010

AUTHORITY'S ENGINEER



ALMONDI GLOBAL INFRA CONSULTANT LIMITED (JV WITH SILEEZA CONSULTANTS LIMITED)
600 PATAKHA, KANAKPUR, BAHAMAN, NAGHAR, TIGRA, NO. 2, DIGBOI, DISTRICT ASSAM 788111

PROOF CONSULTANT:



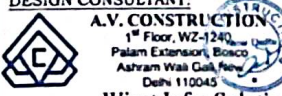
CREATIVE ENGINEERING SERVICES
OFFICE NO. 610, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHIZIABAD, U.P.-201010

SAFETY CONSULTANT:



DESIGN AID
PLOT NO. 54, 3rd FLOOR (FRONT), MASOODPUR DAIRY FARM, VASANT KUNJ, NEW DELHI-110070.

DESIGN CONSULTANT:



A.V. CONSTRUCTION
1st Floor, WZ-1240, Palam Extension, BOKRO, Ashram Was Gali, New Delhi 110045
Winst Infra Solution Pvt. Ltd.
OFFICE: P-8 BHANU CORPORATE TOWER, PLOT NO. C-23 SECTION 13, VASINDRA GROUND, U.P.-201012

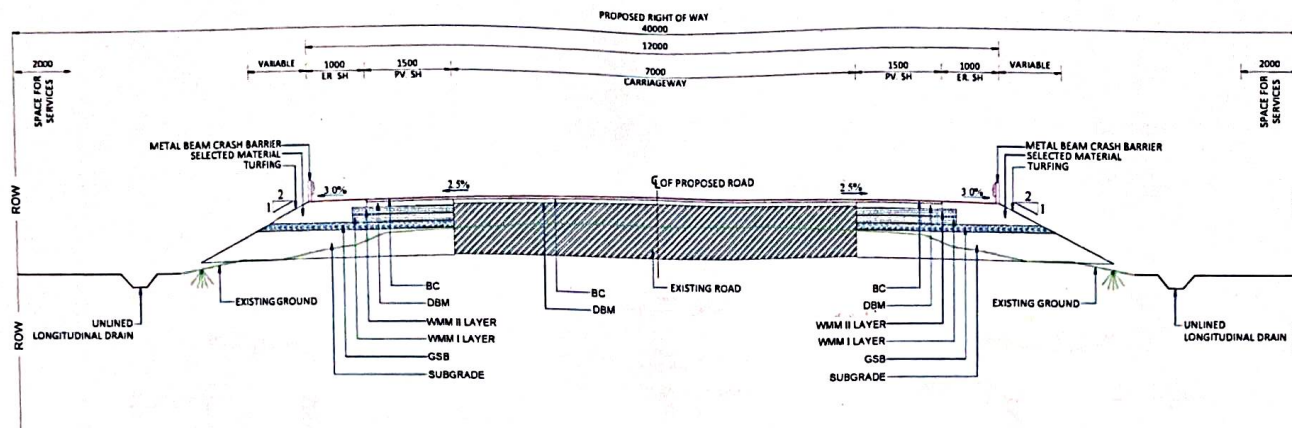
PROJECT: IMPROVEMENT TO 2-LANE LANE WITH PAVED SHOULDER FROM KM 87+100 TO KM 100+00 TO KM 100+00 ON DISRUPTED TO LEDO SECTION WITH PROPOSED MARGINALS & LEDO BYPASS (BROWNFIELD AND GREEN FIELD) (2-LANE-2PS) OF NH-38 IN TINSUKIA DISTRICT IN THE STATE OF ASSAM ON EPC MODE (PACKAGE-2)

DRAWING TITLE:

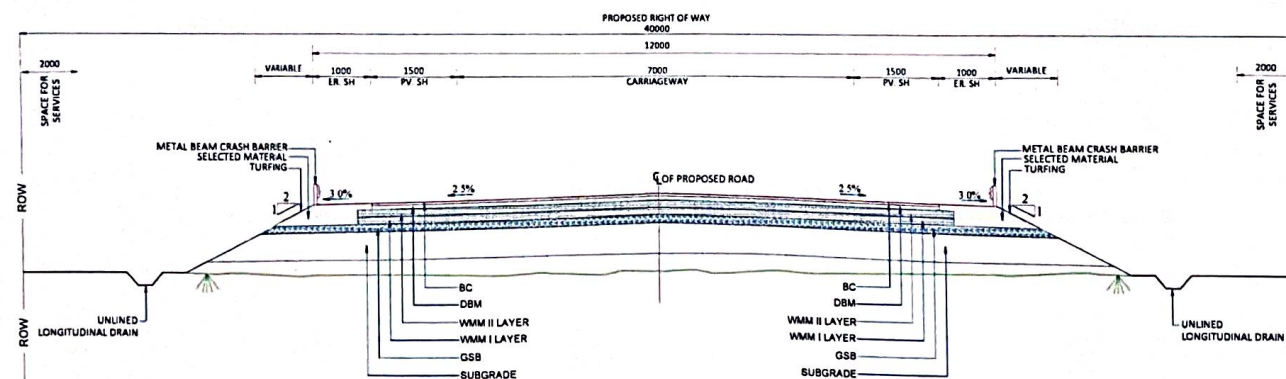
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Date	Drawn	Eng.	Chk.	App.	Scale	Drawing Status
JAN 2024	P.R.	R.R.	B.P.	A.P.		
Project No.	Drawing No.	Sheet No.	Rev.			
AV/NH-38/11W/TCS SCHEDULE		01/01	R1			

TYPICAL CROSS SECTION



TYPICAL CROSS SECTION -01
WIDENING TO 2- LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA



TYPICAL CROSS SECTION -3A
2- LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA (NEW CONSTRUCTION)

SAFETY AUDITOR
(As per Article 10.1 of EPC Agreement)

GOOD FOR CONSTRUCTION

DESIGN AID, NEW DELHI

NT:



NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

EPC CONTRACTOR



AUTHORITY'S ENGINEER

ALMOND CONSULTANTS
LIMITED IN JV WITH PIONEER
CONSULTANTS PRIVATE LIMITED.
(PKG-3,4,5)
C/O JAYANTA SAKIA, SARBANJAN
NAMGAR, BORHIL NO.2, DIGBOI,
TINSUKIA, ASSAM-786171

PROOF CONSULTANT:



CREATIVE ENGINEERING SERVICES
OFFICE NO 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U P-201010

SAFETY CONSULTANT:



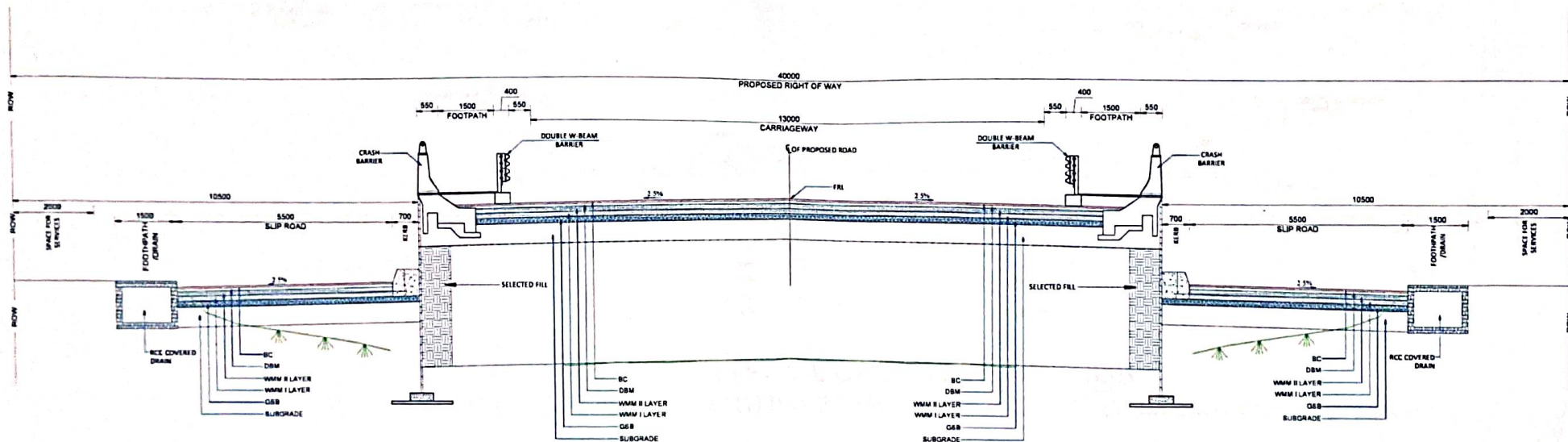
DESIGN AID
PLOT NO.54, 3rd FLOOR(FRONT),
MASOODPUR DAIRY FARM,VASANT KUNJ,
NEW DELHI-110070,

DESIGN CONSULTANT:



A.V. CONSTRUCTION
1st Floor, WZ-1240,
Palam Extension, Bosco
Ashram Wall Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE F-8, ISHAAN CORPORATE
TOWER, PLOT NO-C-23 SECTOR-13,
VASUNDHRA GHAZIABAD, U P-201012

PROJECT:				
WIDENING/IMPROVEMENT TO 2-LANE LANE WITH PAVED SHOULDER FROM KM 27-150 (DOLAI GOAN) TO KM 47-842 (LEDO) ON DIBRUGARH TO LEDO SECTION WITH PROPOSED MARGHERITA & LEDO BYPASS (BIRCHAPFIELD AND GREEN FIELD) (2-LANE+PS) OF NH-38 IN TINSUKIA DISTRICT IN THE STATE OF ASSAM ON EPC MODE (PACKAGE-5)				
DRAWING TITLE:- TYPICAL CROSS SECTION				
DETAILS:- TCS - 1 & 3A				
Date	Drw.	Eng.	Chk.	App.
JAN 2024	P.K.	R.K.	S.P.	A.B.
Project No.	Drawing No.	Scale	Drawing Status	
AV/NH-38/HW/TCS				Sheet No. 01/04
				Rev R1



TYPICAL CROSS SECTION -4A
 2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN APPROACH OF ROB CUM ELEPHANT CORRIDOR FLYOVER WITH SERVICE ROAD ON BOTH SIDE (NEW CONSTRUCTION)

GOOD FOR CONSTRUCTION

SAFETY AUDITOR
 (As per Article 10.1 of EPC Agreement)

DESIGN AID, NEW DELHI

NT:

ADDEL
 NATIONAL HIGHWAYS &
 INFRASTRUCTURE DEVELOPMENT
 CORPORATION LTD.

EPC CONTRACTOR

KAMAC
 ENGINEERS
 KAMAC ENGINEERS PVT. LTD.
 Authorised Signatory
 BLOCK, 2ND FLOOR,
 MATIGARA 734010

AUTHORITY'S ENGINEER

ALYNDIA GLOBAL PVT. CONSULTANT
 AUTHORITY'S ENGINEER
 CONSULTANT PRIVATE LIMITED.
 20 JAYANTA SAKA, SARBAMANIN
 LANGMAN BORBI, NO.2, DIGBOI,
 TINSUKIA, ASSAM-786171

PROOF CONSULTANT

CREATIVE ENGINEERING SERVICES
 OFFICE NO. 620, SIGNATURE GLOBAL
 MALL, SECTOR-3,
 VAISHALI, GHAZIABAD, U.P-201010

SAFETY CONSULTANT

DESIGN AID
 PLOT NO.54, 3rd FLOOR(FRONT),
 MASOODPUR DAIRY FARM,VASANT KUNJ,
 NEW DELHI-110070,

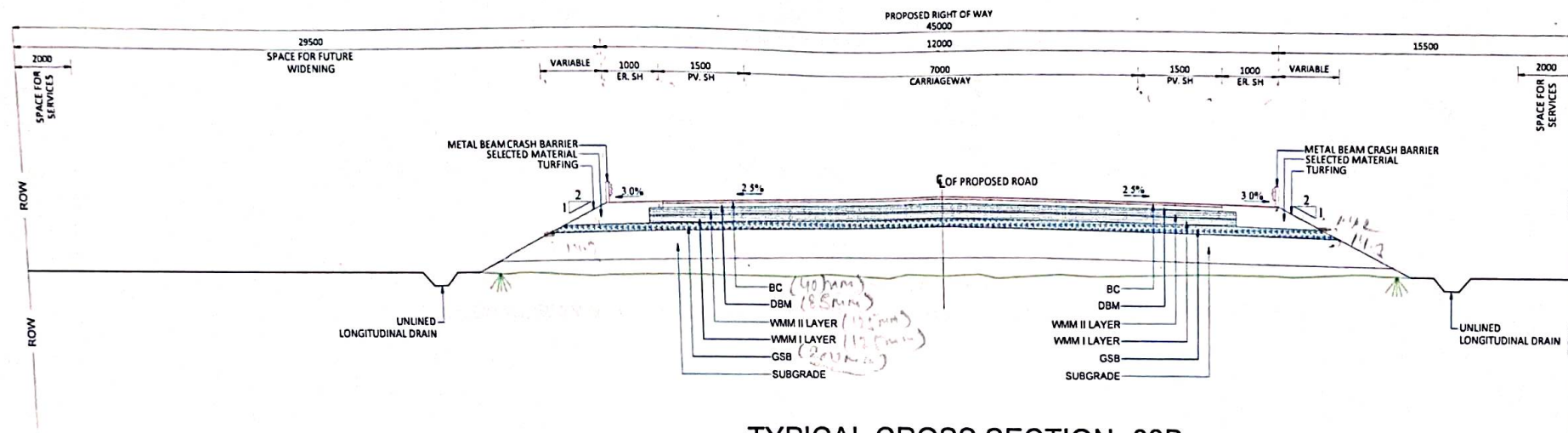
DESIGN CONSULTANT

A.V. CONSTRUCTION
 1st Floor, WZ-1240
 Palm Extension, BOSCO
 Ashram Wall Gali, New
 Delhi 110043
Winst Infra Solution
 Pvt. Ltd.
 OFFICE: F-8, BHANU CORPORATE
 TOWER, PLOT NO-C-23, SECTOR-13,
 VASINDHA, GHAZIABAD, U.P-201017

PROJECT
 UPGRADE/IMPROVEMENT TO 2-LANE LANE WITH PAVED SHOULDER FROM KM 27-150
 (DOLLA GOM) TO KM 47-682 (LEDO) ON DISRIGARH TO LEDO SECTION WITH
 PROPOSED MARGHERITA & LEDO BYPASS (BROWNFIELD AND GREEN FIELD)
 (2-LANE + PLS) OF NH-38 IN TINSUKIA DISTRICT IN THE STATE OF ASSAM ON EPC
 MODE (PACKAGE 2)
DRAWING TITLE:
 TYPICAL CROSS SECTION
DETAILS:
 TCS - 4A

Date	Drw.	Des.	Chk.	App.	Scale	Drawing Status
Project No.	P.K.	M.K.	S.P.	A.B.		
JAN 2024						

 Sheet No. 03/04 Rev R



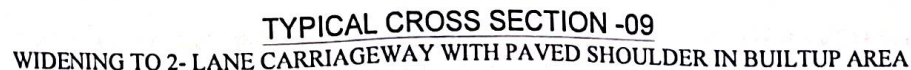
TYPICAL CROSS SECTION -03B
2- LANE CARRIAGEWAY WITH PAVED SHOULDER IN RURAL AREA(NEW CONSTRUCTION)

GOOD FOR CONSTRUCTION

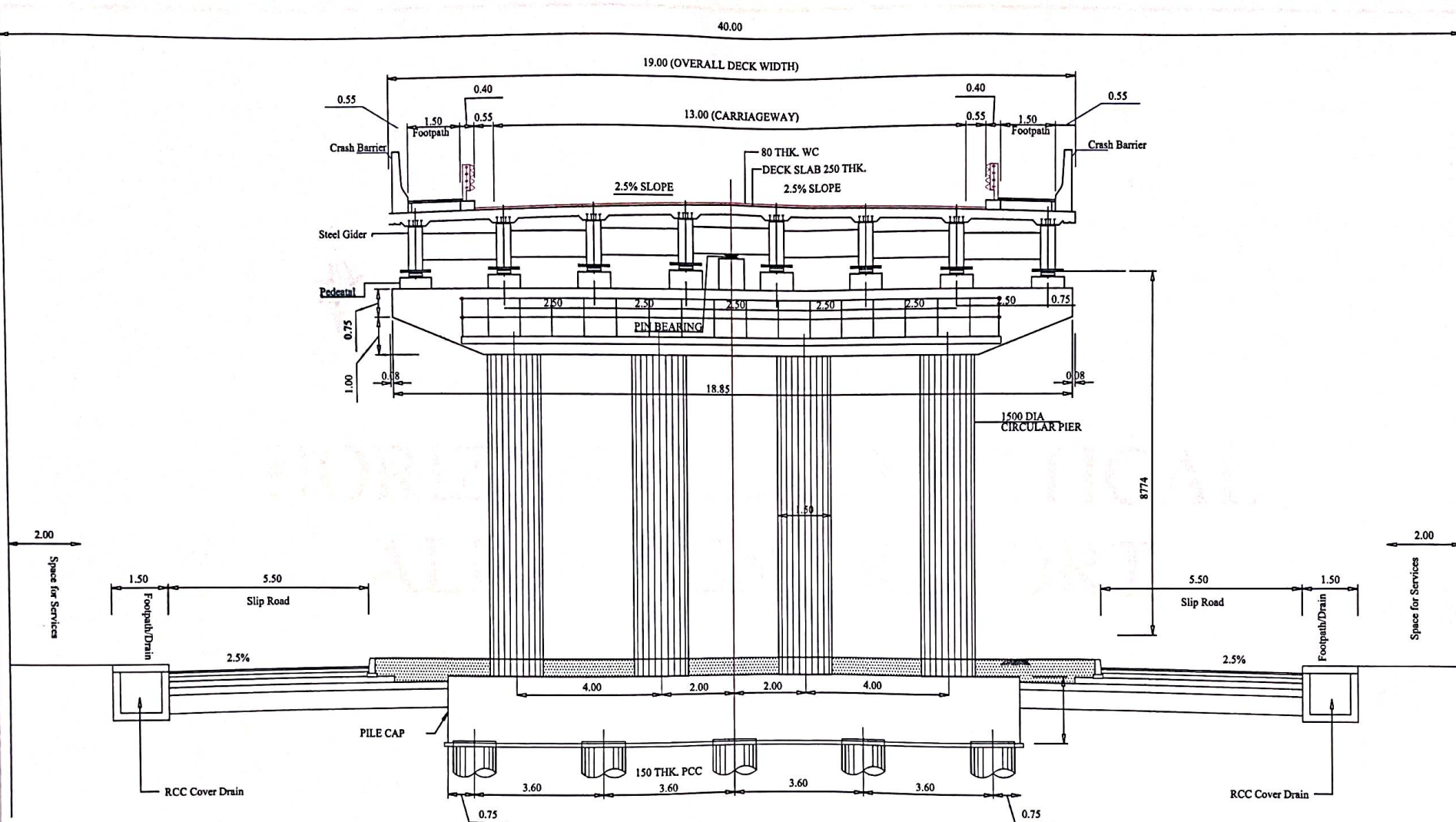
SAFETY AUDITOR
 (As per Article 10.1 of EPC Agreement)

DESIGN AID, NEW DELHI

CLIENT: NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.	EPC CONTRACTOR: KAMAC ENGINEERS & ARCHITECTS PVT. LTD. F0201, CITY CENTER OFFICE BLOCK, 2ND FLOOR, MATIGARA 734010	AUTHORITY'S ENGINEER: ALMONDA GLOBAL INFRA CONSULTANT LIMITED LIMITED IN CHARGE CONSULTANT PRIVATE LIMITED. C/O JAYANTA SAIKIA, BARBAJANIN NAGHAR, BORBIL NO 2, DIGBOI, INSUKIA, ASSAM-786111	PROOF CONSULTANT: CREATIVE ENGINEERING SERVICES OFFICE NO. 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHAZIABAD, U.P-201010	SAFETY CONSULTANT: DESIGN AID PLOT NO.54, 3rd FLOOR(FRONT), MASOODPUR DAIRY FARM, VASANT KUNJ, NEW DELHI-110070,	DESIGN CONSULTANT: A.V. CONSTRUCTION 1st Floor, WZ-1240, Palam Extension, Bosco Ashram Wali Gali, New Delhi 110045 Winst Infra Solution Pvt. Ltd. OFFICE: F-4, ISHAAN CORPORATE TOWER, PLOT NO-C-23 SECTOR-13, VASUNDHRA GHAZIABAD, U.P-201012	PROJECT: WIDENING/IMPROVEMENT TO 2 LANE LANE WITH PAVED SHOULDER FROM KM 27-150 (GOLAI GOAN) TO KM 47-682 (LEDO), ON DIBRUGARH TO LEDO SECTION WITH PROPOSED MARGHERITA & LEDO BYPASS (BIRCHFIELD AND GREEN FIELD) G-LANE-PEB OF NH-38 IN THIRUPUR DISTRICT IN THE STATE OF ASSAM ON EPC MODE (PACKAGE 8) DRAWING TITLE:- TYPICAL CROSS SECTION DETAILS:- TCS - 3B <table border="1"> <tr> <th>Date</th> <th>Drw.</th> <th>Eng.</th> <th>Chk.</th> <th>App.</th> <th>Scale</th> <th>Drawing Status</th> </tr> <tr> <td>JAN. 2024</td> <td>P.K.</td> <td>R.K.</td> <td>S.P.</td> <td>A.B.</td> <td></td> <td></td> </tr> <tr> <th>Project No.</th> <th>Drawing No.</th> <th>Sheet No.</th> <th>Rev</th> <th colspan="3"></th> </tr> <tr> <td></td> <td>AV/NH-38/HW/TCS</td> <td>02/04</td> <td>R1</td> <td colspan="3"></td> </tr> </table>	Date	Drw.	Eng.	Chk.	App.	Scale	Drawing Status	JAN. 2024	P.K.	R.K.	S.P.	A.B.			Project No.	Drawing No.	Sheet No.	Rev					AV/NH-38/HW/TCS	02/04	R1			
Date	Drw.	Eng.	Chk.	App.	Scale	Drawing Status																												
JAN. 2024	P.K.	R.K.	S.P.	A.B.																														
Project No.	Drawing No.	Sheet No.	Rev																															
	AV/NH-38/HW/TCS	02/04	R1																															



GOOD FOR CONSTRUCTION

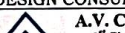


TYPE-04B: TYPICAL CROSS SECTION OF 2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN
APPROACH OF ROB CUM ELEPHANT CORRIDOR FLYOVER (VIADUT PORTION) WITH SERVICE ROAD
ON BOTH SIDE (NEW CONSTRUCTION)

GOOD FOR CONSTRUCTION

SAFETY AUDITOR
(As per Article 18.1 of EPC Agreement)

DESIGN AID, NEW DELHI

 NHIDCL NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.	EPC CONTRACTOR  KAMAC ENGINEERS (P) LTD KAMAC ENGINEERS (P) LTD F0201, CITY CENTER OFFICE BLOCK, 2ND FLOOR, MATIGARA 734010	AUTHORITY'S ENGINEER  ALMOSAZ GEOMATICS CONSULTANT LIMITED IN JV WITH APOLEEZA CONSULTANT PRIVATE LIMITED. C/O TAYANTA SAIKIA, BARBAJANIN MGHAR, BORBIL NO.2, DIGBOI, TINSUKIA, ASSAM-786171	PROOF CONSULTANT:  CREATIVE ENGINEERING SERVICES OFFICE NO: 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHAZIABAD, U.P-201010	SAFETY CONSULTANT:  DESIGN AID PLOT NO.54, 3rd FLOOR(FRONT), MASOODPUR DAIRY FARM,VASANT KUNJ, NEW DELHI-110070,	DESIGN CONSULTANT:  A.V. CONSTRUCTION 1st Floor, WZ-1240, Palam Extension, Bosco Ashram Wali Gali, New Delhi 110045 Winst Infra Solution Pvt. Ltd. OFFICE: P-4, BHAAAN CORPORATE TOWER, PLOT NO-C-23, SECTOR-13, VASUNDHRA, GHAZIABAD, U.P-201012	PROJECT: WIDENING/IMPROVEMENT TO 2-LANE WITH PAVED SHOULDER FROM KM 27+150 (SOULAI DOAH) TO KM 47+482 (LEDO) ON DIBRUGARH TO LEDO SECTION WITH PROPOSED MARGHERITA & LEDO BYPASS (BROWNFIELD AND GREEN FIELD) (2-LANE+PS) OF NH-38 IN TINSUKIA DISTRICT IN THE STATE OF ASSAM ON EPC MODE (PACKAGE 2) DRAWING TITLE:- TYPICAL CROSS SECTION DETAILS:- TCS - 4B <table><tr><th>Date</th><th>Drw. P.K.</th><th>Dag. R.K.</th><th>Chk. S.P.</th><th>App. A.B.</th><th>Scale</th><th>Drawing Status</th></tr><tr><td>FEB 2024</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><th>Project No.</th><th>Drawing No.</th><th>Sheet No.</th><th>Rev.</th><td colspan="3"></td></tr><tr><td></td><td></td><td>AV/NH-38/HW/TCS 05/05</td><td>R1</td><td colspan="3"></td></tr></table>	Date	Drw. P.K.	Dag. R.K.	Chk. S.P.	App. A.B.	Scale	Drawing Status	FEB 2024							Project No.	Drawing No.	Sheet No.	Rev.						AV/NH-38/HW/TCS 05/05	R1			
Date	Drw. P.K.	Dag. R.K.	Chk. S.P.	App. A.B.	Scale	Drawing Status																												
FEB 2024																																		
Project No.	Drawing No.	Sheet No.	Rev.																															
		AV/NH-38/HW/TCS 05/05	R1																															

HORIZONTAL & VERTICAL ALIGNMENT REPORT

HORIZONTAL ALIGNMENT REPORT

HIP No.	HIP Easting	HIP Northing	Radius	Transition Length	TS	SC/TC	CS/CT	ST	HIP Chainage	SPEED (V) in KMPH	D	Lc	Dc	SHIFT (S)	Ts(Deg)	EXTERNAL DISTANCE (Es)	K	Ts(m)	Super elevation (%)	Extra Widening	Included Angle
0	760284.4619	3029717.867	0	0																	
1	760446.615	3029644.63	350	60	27240.032	27300.032	27354.656	27414.656	27327.344	80	0.3275	54.62	0.1561	0.43	0.0857	5.181	29.99265	87.89	7.00	0.000	08 56 31.405
2	761071.0786	3029584.036	300	40	27868.205	27908.205	27997.96	28037.96	27953.083	65	0.4325	89.75	0.2992	0.22	0.0667	7.380	19.99704	85.95	6.26	0.600	17 08 30.452
3	761241.9344	3029484.102	170	70	28049.688	28119.688	28173.601	28243.601	28146.635	65	0.7290	53.93	0.3173	1.20	0.2059	13.239	34.95061	100.27	7.00	0.600	18 10 38.019
4	761610.5467	3029558.737	1200	35	28405.246	28440.246	28598.171	28633.171	28519.209	80	0.1608	157.92	0.1316	0.04	0.0146	3.928	17.49988	114.17	2.50	0.000	07 32 25.384
5	762977.9161	3029612.093	1020	30	29021.015	29051.015	30439.887	30469.887	29745.451	80	1.3911	1388.87	1.3616	0.04	0.0147	308.667	14.99989	866.39	2.79	0.000	78 00 58.169
6	763229.2082	3028481.697	2500	0		30593.357	30929.11		30761.234	100	0.1343	335.75	0.1343	0.00	0.0000	5.647	0	168.13	2.50	0.000	07 41 41.666
7	763285.9662	3027811.172	2500	0		31356.705	31511.053		31433.879	100	0.0617	154.35	0.0617	0.00	0.0000	1.192	0	77.20	2.50	0.000	03 32 14.637
8	763345.6436	3027405.852	2500	0		31776.122	31910.934		31843.528	100	0.0539	134.81	0.0539	0.00	0.0000	0.909	0	67.42	2.50	0.000	03 05 22.789
9	763383.913	3026992.232	1500	0		32101.744	32414.91		32258.327	80	0.2088	313.17	0.2088	0.00	0.0000	8.210	0	157.15	2.50	0.000	11 57 43.404
10	763625.2567	3026214.891	500	45	32865.515	32910.515	33217.473	33262.473	33063.994	80	0.7039	306.96	0.6139	0.17	0.0450	32.833	22.49848	206.19	5.69	0.000	35 10 29.504
11	764155.0935	3025878.383	900	45	33468.467	33513.467	33848.646	33893.646	33681.057	80	0.4224	335.18	0.3724	0.09	0.0250	20.547	22.49953	215.49	3.16	0.000	21 20 17.359
12	765059.9789	3024504.838	1000	30	35165.284	35195.284	35448.757	35478.757	35322.021	80	0.2835	253.47	0.2535	0.04	0.0150	10.170	14.99989	157.70	2.84	0.000	14 31 22.530
13	765285.991	3024312.612	800	30	35529.487	35559.487	35675.618	35705.618	35617.553	80	0.1827	116.13	0.1452	0.05	0.0188	3.398	14.99982	88.27	3.56	0.000	08 19 02.069
14	765491.6589	3024060.013	800	30	35865.914	35895.914	35989.996	36019.996	35942.955	80	0.1551	94.08	0.1176	0.05	0.0188	2.462	14.99982	77.17	3.56	0.000	06 44 17.440
15	765864.563	3023724.713	2500	0		36370.910	36517.665		36444.288	100	0.059	146.755	0.059	0.000	0.000	1.077	0.000	73.399	2.50	0.000	03 21 48.136
16	766291.717	3023292.702	600	45	36998.835	37043.835	37059.696	37104.696	37051.766	80	0.101	15.861	0.026	0.140	0.038	0.913	22.499	52.963	4.741	0.000	01 30 52.400
17	766397.588	3023205.391	500	45	37121.991	37166.991	37210.673	37255.673	37188.832	80	0.177	43.682	0.087	0.170	0.045	2.143	22.498	66.971	5.689	0.000	05 00 20.326
18	766665.071	3022890.270	400	55	37427.931	37482.931	37708.789	37763.789	37595.880	80	0.702	225.858	0.565	0.320	0.069	26.324	27.496	174.111	7.000	0.000	32 21 06.448
19	767035.261	3022828.690	300	75	37771.933	37846.933	38058.289	38133.289	37952.611	80	0.955	211.356	0.705	0.780	0.125	38.618	37.480	193.024	7.000	0.600	40 21 57.708
20	767392.070	3022092.745	200	60	38526.767	38586.767	38841.573	38901.573	38714.170	65.000	1.574	254.806	1.274	0.750	0.150	84.364	29.978	231.378	7.000	0.600	72 59 47.589
21	767986.105	3022383.128	1500	30	39237.221	39267.221	39395.444	39425.444	39331.333	80.000	0.105	128.223	0.085	0.030	0.010	2.119	15.000	94.186	2.500	0.000	04 53 51.991
22	768500.617	3022570.468	800	45	39756.724	39801.724	39954.862	39999.862	39878.293	80.000	0.248	153.138	0.191	0.110	0.028	6.284	22.499	122.092	3.556	0.000	10 58 03.586
23	768961.169	3022617.384	2000	0		40175.818	40504.849		40340.334	100.000	0.165	329.031	0.165	0.000	0.000	6.785	0.000	164.888	2.500	0.000	09 25 33.796
24	770003.887	3022901.517	2000	0		41358.921	41482.438		41420.680	100.000	0.062	123.517	0.062	0.000	0.000	0.954	0.000	61.778	2.500	0.000	03 32 18.561
25	770595.685	3023024.117	800	45	41872.940	41917.940	42129.843	42174.843	42023.892	80.000	0.321	211.903	0.265	0.110	0.028	10.536	22.499	152.084	3.556	0.000	15 10 34.973
26	771599.404	3023606.033	2000	0		43125.746	43240.155		43182.951	100.000	0.057	114.409	0.057	0.000	0.000	0.818	0.000	57.220	2.500	0.000	03 16 39.308
27	772064.920	3023841.446	700	35	43539.041	43574.041	43830.809	43865.809	43702.425	80.000	0.417	256.768	0.367	0.070	0.025	15.553	17.500	165.548	4.063	0.000	21 01 00.268
28	773592.990	3023920.039	1800	0		44801.019	45643.932		45222.476	80.000	0.468	842.913	0.468	0.000	0.000	50.493	0.000	429.331	2.500	0.000	26 49 50.741
29	775555.872	3023050.764	500	55	47019.917	47074.917	47580.357	47635.357	47327.637	80.000	1.121	505.440	1.011	0.250	0.055	90.599	27.497	341.435	5.689	0.000	57 55 09.105
30	775842.885	3023294.472	0	0																	

SAFETY AUDITOR
(As per Article 10.1 of EPC Agreement)

GOOD FOR CONSTRUCTION

DESIGN AID, NEW DELHI

CLIENT:

NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

EPC CONTRACTOR

KAMAC ENGINEERS & CONSTRUCTORS
PVT. LTD.
FOOT CITY CENTER OFFICE
MATICARA 734010

AUTHORITY'S ENGINEER

ALMOHA GIDHAWAR CONSULTANT
UNITED NATHAN VOLEEZA
CONSULTANT PRIVATE LIMITED.
(PKG-345)
C/O JANANTA SAKIA, BARABANJAN
NANGHAR, BOBEK NO 2, DIGBOI,
TINSUKIA, ASSAM-786171

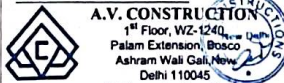
PROOF CONSULTANT:

CREATIVE ENGINEERING SERVICES
OFFICE NO 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P-201010

SAFETY CONSULTANT:

DESIGN AID
PLOT NO 54, 3rd FLOOR(FRONT),
MASOODPUR DAIRY FARM,VASANT KUNJ,
NEW DELHI-110070,

DESIGN CONSULTANT:

A.V. CONSTRUCTION
1st Floor, WZ-1240,
Palam Extension, Bosco
Ashram Wai Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE F-8 ISHAN CORPORATE
TOWER, PLOT NO-C-23 SECTOR-13,
VASUNDHRA GHAZIABAD, U.P-201012

PROJECT: IMPROVEMENT TO 2-LANE LANE WITH PAVED SHOULDER FROM KM 27+150
GOLAI SOAN TO KM 47+882 (LEDO) ON DIBRUGARH TO LEDO SECTION WITH
PROPOSED MARGHERITA & LEDO BYPASS (BROWNFIELD AND GREEN FIELD
(2-LANE+PS) OF NH-38 IN TINSUKIA DISTRICT IN THE STATE OF ASSAM ON EPC
MODE (PACKAGE-8)

DRAWING TITLE: HORIZONTAL ALIGNMENT REPORT

DATE: JAN. 2024
Project No. Drawing No. AV/111-38/11W/11AR

Drawn By: P.K. R.K. Chk. S.P. App. A.B. Scale: Drawing Status: Sheet No. 01/01 Rev. R1

PLAN & PROFILE

VERTICAL ALIGNMENT REPORT

S.N O	VIP CHAINAGE	VIP LEVEL	CURVE START CHAINAGE	CURVE END CHAINAGE	CURVE LENGTH	IN GRADE(%)	OUT GRADE (%)	CURVE TYPE	K Value
1	27274.759	151.200	27234.759	27314.759	80.000	0.279	3.291	Sag	26.560
2	27622.962	162.659	27562.962	27682.962	120.000	3.291	0.000	Hog	36.464
3	28432.348	162.659	28342.348	28522.348	180.000	0.000	-2.489	Hog	72.331
4	28854.240	152.160	28744.240	28964.240	220.000	-2.489	0.150	Sag	83.366
5	29366.930	152.931	29306.930	29426.930	120.000	0.150	0.653	Sag	238.540
6	29690.252	155.044	29630.252	29750.252	120.000	0.653	0.144	Hog	235.733
7	30517.720	156.239	30427.720	30607.720	180.000	0.144	0.619	Sag	379.356
8	30838.261	158.223	30748.261	30928.261	180.000	0.619	1.031	Sag	436.525
9	31255.513	162.526	31080.513	31430.513	350.000	1.031	-1.554	Hog	135.363
10	31609.786	157.019	31519.786	31699.786	180.000	-1.554	-0.032	Sag	118.245
11	31991.483	156.897	31816.483	32166.483	350.000	-0.032	-2.420	Hog	146.544
12	32440.000	146.040	32380.000	32500.000	120.000	-2.420	-0.309	Sag	56.827
13	32619.535	145.486	32579.535	32659.535	80.000	-0.309	1.867	Sag	36.766
14	32983.517	152.282	32723.517	33243.517	520.000	1.867	-2.035	Hog	133.248
15	33390.000	144.009	33350.000	33430.000	80.000	-2.035	0.816	Sag	28.052
16	33907.037	148.230	33732.037	34082.037	350.000	0.816	-1.894	Hog	129.138
17	34217.820	142.344	34157.820	34277.820	120.000	-1.894	-0.267	Sag	73.775
18	34530.000	141.510	34470.000	34590.000	120.000	-0.267	0.240	Sag	236.348
19	34740.000	142.015	34680.000	34800.000	120.000	0.240	-0.025	Hog	452.728
20	34980.000	141.956	34920.000	35040.000	120.000	-0.025	0.293	Sag	377.685
21	35369.961	143.099	35309.961	35429.961	120.000	0.293	1.701	Sag	85.244
22	35709.662	148.877	35509.662	35909.662	400.000	1.701	-1.363	Hog	130.565
23	36042.965	144.335	35962.965	36122.965	160.000	-1.363	0.172	Sag	104.230
24	36743.209	145.542	36633.209	36853.209	220.000	0.172	-0.155	Hog	672.169
25	37190.000	144.849	37080.000	37300.000	220.000	-0.155	-0.093	Sag	3568.686

VERTICAL ALIGNMENT REPORT

S.NO	VIP CHAINAGE	VIP LEVEL	CURVE START CHAINAGE	CURVE END CHAINAGE	CURVE LENGTH	IN GRADE(%)	OUT GRADE (%)	CURVE TYPE	K Value
26	37621.165	144.447	37481.165	37761.165	280.000	-0.093	0.785	Sag	318.945
27	37957.397	147.085	37832.397	38082.397	250.000	0.785	-0.006	Hog	316.147
28	38667.880	147.041	38577.880	38757.880	180.000	-0.006	-0.272	Hog	677.064
29	39296.989	145.330	39171.989	39421.989	250.000	-0.272	0.820	Sag	229.019
30	39805.959	149.501	39630.959	39980.959	350.000	0.820	-0.981	Hog	194.340
31	40223.228	145.406	40173.228	40273.228	100.000	-0.981	1.168	Sag	46.535
32	40467.616	148.259	40337.616	40597.616	260.000	1.168	-0.989	Hog	120.578
33	40729.081	145.674	40639.081	40819.081	180.000	-0.989	0.202	Sag	151.164
34	41150.680	146.525	41010.680	41290.680	280.000	0.202	-0.133	Hog	836.651
35	41707.082	145.787	41597.082	41817.082	220.000	-0.133	0.682	Sag	269.930
36	42021.000	147.929	41891.000	42151.000	260.000	0.682	-0.702	Hog	187.758
37	42397.699	145.283	42297.699	42497.699	200.000	-0.702	0.714	Sag	141.197
38	42725.000	147.620	42615.000	42835.000	220.000	0.714	-0.598	Hog	167.718
39	43161.767	145.010	43051.767	43271.767	220.000	-0.598	0.576	Sag	187.446
40	43712.900	148.184	43587.900	43837.900	250.000	0.576	-0.711	Hog	194.202
41	43970.000	146.355	43910.000	44030.000	120.000	-0.711	0.221	Sag	128.720
42	44217.987	146.903	44142.987	44292.987	150.000	0.221	-0.213	Hog	346.018
43	44483.423	146.339	44393.423	44573.423	180.000	-0.213	2.208	Sag	74.361
44	44883.473	155.172	44683.473	45083.473	400.000	2.208	-1.473	Hog	108.675
45	45245.368	149.843	45155.368	45335.368	180.000	-1.473	-0.136	Sag	134.662
46	45514.655	149.476	45424.655	45604.655	180.000	-0.136	1.620	Sag	102.493
47	45803.903	154.163	45628.903	45978.903	350.000	1.620	-1.619	Hog	108.041
48	46165.723	148.304	46075.723	46255.723	180.000	-1.619	0.817	Sag	73.879
49	46778.554	153.312	46668.554	46888.554	220.000	0.817	1.877	Sag	207.575
50	47217.317	161.547	46917.317	47517.317	600.000	1.877	-2.367	Hog	141.377

GOOD FOR CONSTRUCTION

SAFETY AUDITOR
(As per Article 10.1 of EPC Agreement)

DESIGN AID, NEW DELHI

NHIDCL
NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

EPC CONTRACTOR
KAMAC
KAMAC ENGINEERS PVT. LTD.
FOOTPATH BUILDING
BLOCK, 2ND FLOOR,
MATIGARA 734010

AUTHORITY'S ENGINEER
ALMONDZ GLOBAL INFRA CONSULTANT
LIMITED IN JV WITH AYOLEEZA
CONSULTANT PRIVATE LIMITED.
(Dib. Ledo 215)
C/O JAYANTA SAKIA, SARKAJANIN
NANGHAR, BORBIK NO.2, DIBGOI,
TINSUKIA, ASSAM 786171

PROOF CONSULTANT:
CES
CREATIVE ENGINEERING SERVICES
OFFICE NO: 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P-201010

SAFETY CONSULTANT:
DESIGN AID
PLOT NO.54, 3rd FLOOR(FRONT),
MASOOPUR DAIRY FARM, VASANT KUNJ,
NEW DELHI-110070,

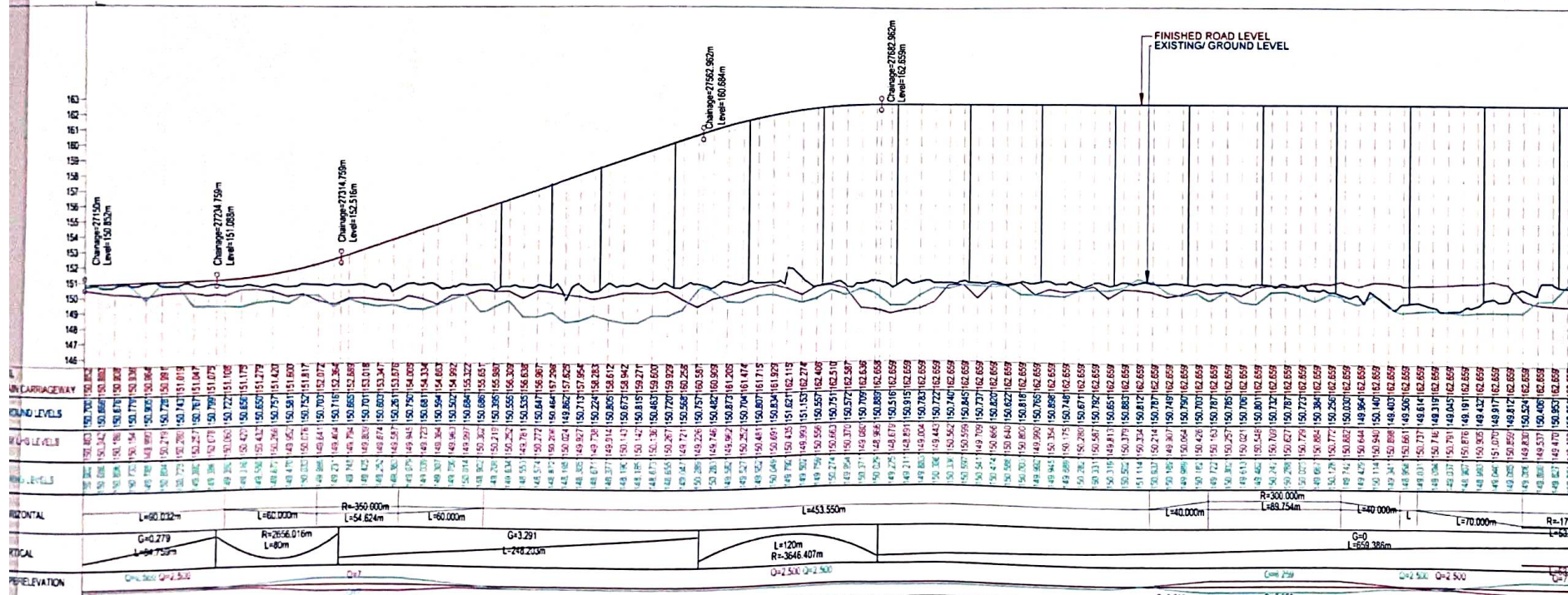
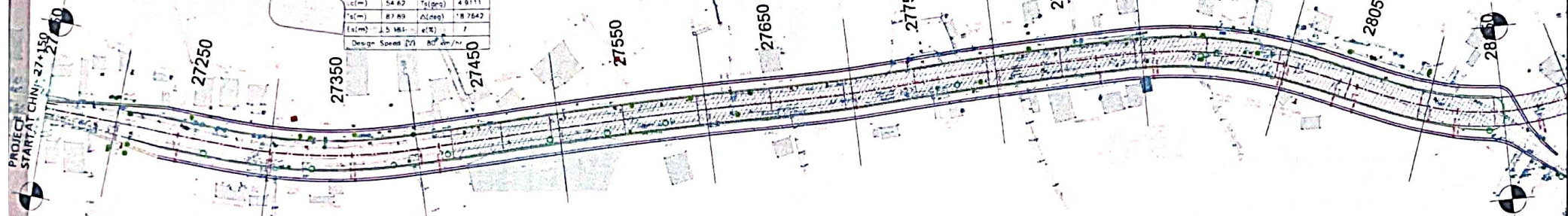
DESIGN CONSULTANT:
A.V. CONSTRUCTION
1st Floor, WZ-1240,
Palam Extension, Boreo
Ashram Wall Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE: P.A. ISHAAN CORPORATE
TOWER, PLOT NO-C-23, SECTOR-13,
VASUNDHRA GHAZIABAD, U.P-201012

PROJECT:
WIDENING/IMPROVEMENT TO 2-LANE LANE WITH PAVED SHOULDER FROM KM 27+150
(DIBGOI) TO KM 47+882 (LEDO) ON DIBRUGARH TO LEDO SECTION WITH
PROPOSED MARGHERITA & LEDO BYPASS (BROWNFIELD AND GREEN FIELD)
(2-LANE+PB) OF NH-38 IN TINSUKIA DISTRICT IN THE STATE OF ASSAM ON EPC
MODE (PACKAGE-5)

DRAWING TITLE:- VERTICAL ALIGNMENT REPORT

DETAILS:-

Date JAN 2024	Drw. P.K	Dwg. R.K	Chk. S.P	App. A.B	Scale	Drawing Status
Project No.	Drawing No.				Sheet No.	Rev. R2
AV/NH-38/HW/VAR						01/01



GOOD FOR CONSTRUCTION



**NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.**



KAMAT PAPERES INT. LTD
F020, CITY CENTER OFFICE
MATIGARA 734010

AUTHORITY'S ENGINEER
 ALMOND / GLOBAL PRA CONSULTANT
 LIMITED IN JALPAIGRAH OLLEZA
 CONSULTANT PRIVATE LIMITED.
 CO. JAYANTA SAIKIA, BARBARJANIN
 NANGHAR, BORBIL NO 2 TIGBOI,
 TINSUKIA, ASSAM, 786171



CREATIVE ENGINEERING SERVICES
OFFICE NO. 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P-201010



SAFETY CONSULTANT
SAFETY AUDITOR
(As per Article 10.1 of EPC Agreement)
DESIGN
DESIGN AID NEW DELHI
PLOT NO.54, 3rd FLOOR(FRONT),
MASOODPUR DAIRY FARM,VASANT KUNJ,
NEW DELHI-110070,

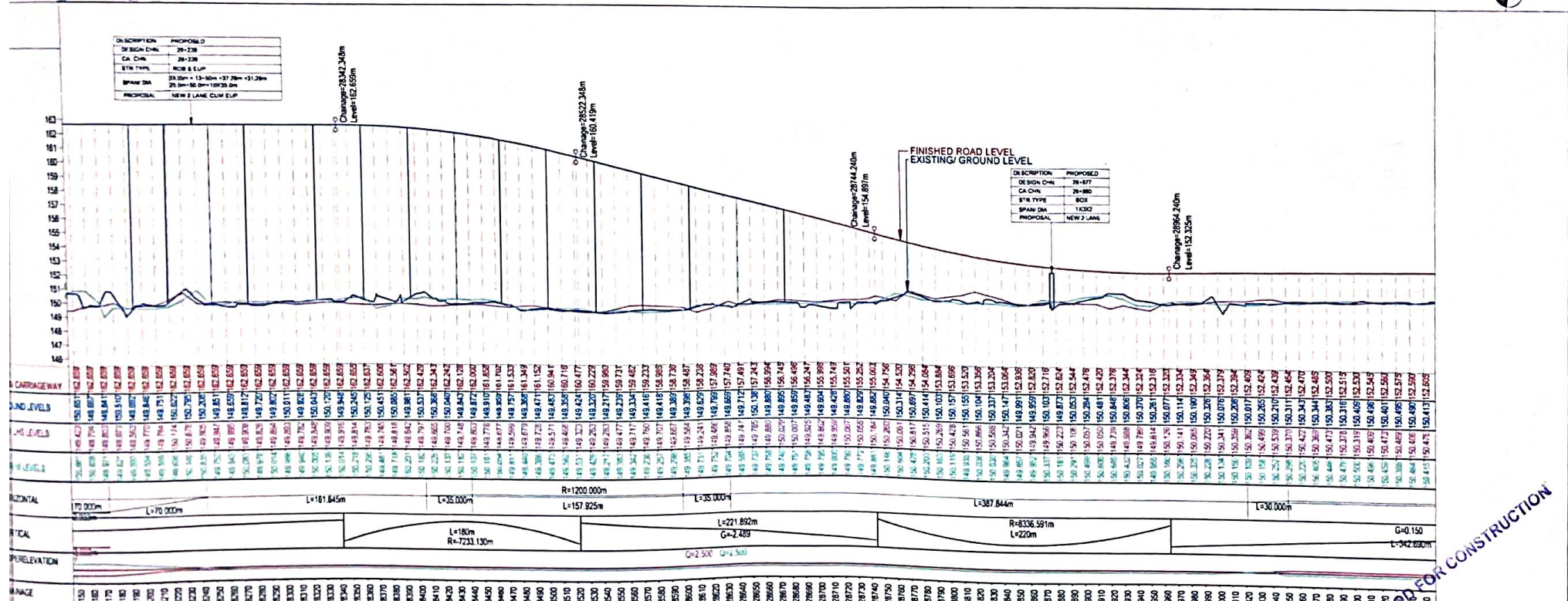
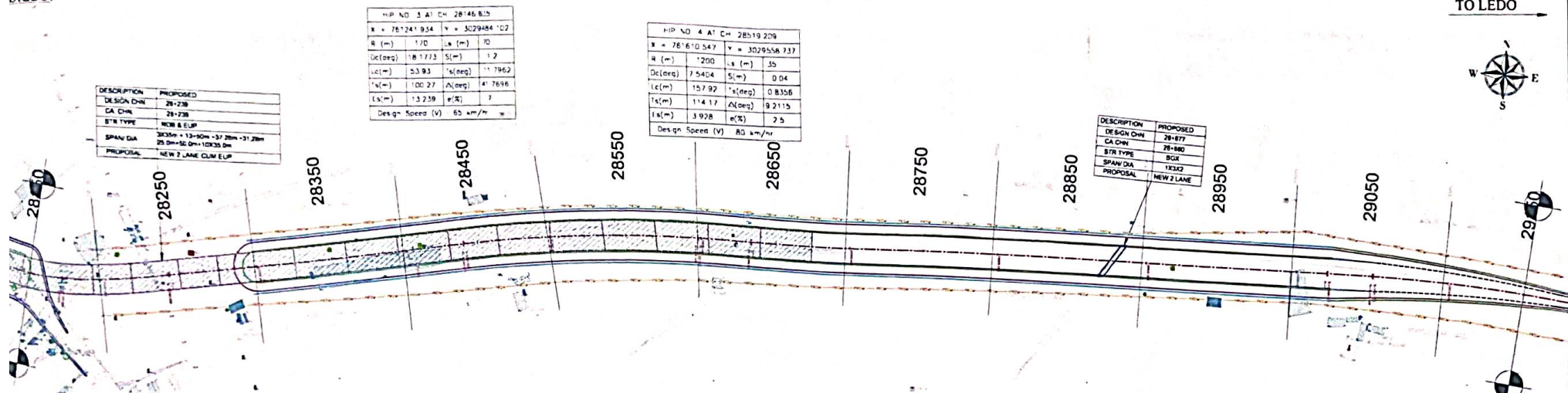


DESIGN CONSULTANT:

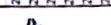
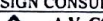
A.V. CONSTRUCTION
 1st Floor, W-1240,
 Palm Extension, Bosco
 Ashram Wali Gali, New
 Delhi 110045

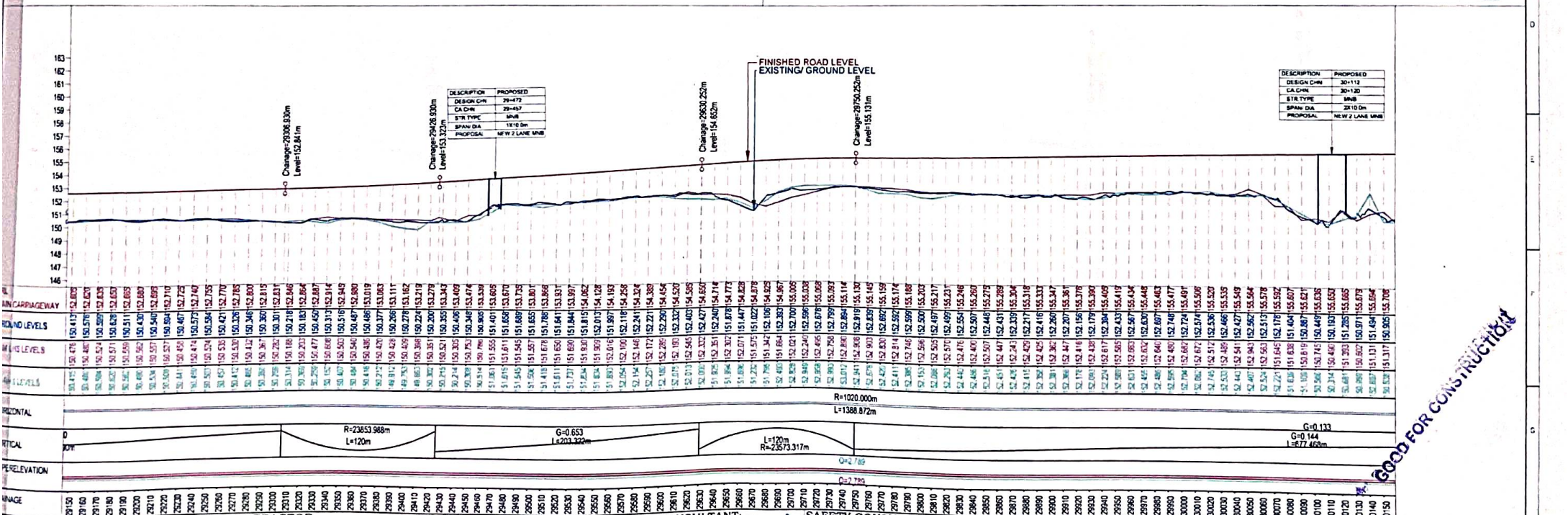
Winst Infra Solution
Pvt. Ltd.
 OFFICE: F-8, ISHAN CORPORATE
 TOWER, PLOT NO-C-23 SECTOR-13,
 VASU INDIAN CHAUNDAWAL, U.P. 201013

PROJECT DESCRIPTION: Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Color Guard) to 28+150 (Landed) on Diagonal to Lendo section with proposed Marghanta & Lendo Bypass (Brownsfield and Green Field) (2-Lane-EP) of NH-36 in Tinsukia District in the State of Assam on EPC drawing (Package-5)									
DRAWING TITLE:-					PLAN & PROFILE				
DETAILS:- AT CHN:-27+150 TO 28+150									
Date Jan 2024		Drw. P K	D.K R K	Chk. S.K	App. A B	Scale	Drawing Status		
Project No.		Drawing No.				AV/NH-36/27+150/28+150		Sheet No.	Rev
								A/1 (A)	B/1



$G=0.150$
 $L=342.690\text{m}$

 NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.		EPC CONTRACTOR  KAMAC ENGINEERING PVT. LTD. Authorised Signatory BLOCK, 2ND FLOOR, MATIGARA 734010		AUTHORITY'S ENGINEER  ALMONDZ CHHRYNG (EPC CONSULTANT) LIVING & WORKING AT HOME CONSULTANT PRIVATE LIMITED. Engineer 6/2 JAYANTA SAIKIA, SARABAN NING LANGKAR, BORSTI NO.1, DICUOI, TINGLAKA, ASSAM-786471		PROOF CONSULTANT  CREATIVE ENGINEERING SERVICES OFFICE NO. 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHAZIABAD, U.P-201010		SAFETY CONSULTANT: (As per Article 10.1 of the Agreement)  DESIGN & INFRA PLOT NO. 54, 3rd FLOOR(FRONT), MASOODPUR DAIRY FARM, VASANT KUNJ, NEW DELHI-110070		DESIGN CONSULTANT:  A.V. CONSTRUCTION 1st Floor, WZ-1240, Palam Extension, Boreo, Ashram Wala Gas, New Delhi 110045 Winst Infra Solution Pvt. Ltd. OFFICE F-4 USMAN CORPORATE TOWER, PLOT NO-C-23 SECTOR-13, VASUNDHRA GHANSHYAM, U.P-201012		PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Golee Gola) to km 47+662 (Leda) on Dispurang to Leda section with proposed Margherita & Lado Bypass (Brownfield & Green Field) and Green Field (2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package-5) DRAWING TITLE: PLAN & PROFILE DETAILS:- AT CHN-28+150 TO 29+150 <table border="1"> <thead> <tr> <th>Date</th> <th>Drawn</th> <th>Checked</th> <th>Appr.</th> <th>Scale</th> <th>Drawing Status</th> </tr> <tr> <th>JAN 2024</th> <th>P K</th> <th>R K</th> <th>S P</th> <th>A B</th> <th></th> </tr> </thead> <tbody> <tr> <td>Project No.</td> <td colspan="4">Drawing No.</td> <td>Sheet No.</td> </tr> <tr> <td colspan="5"></td> <td>02/21</td> </tr> </tbody> </table> AV/NH-38/11W/P&P		Date	Drawn	Checked	Appr.	Scale	Drawing Status	JAN 2024	P K	R K	S P	A B		Project No.	Drawing No.				Sheet No.						02/21
Date	Drawn	Checked	Appr.	Scale	Drawing Status																																
JAN 2024	P K	R K	S P	A B																																	
Project No.	Drawing No.				Sheet No.																																
					02/21																																



EPC CONTRACTOR

KAMAC ENGINEERS

KAMAC ENGINEERS PVT. LTD.

FOUNDER SIGNATORY

2ND FLOOR, MATIGARA 734010

AUTHORITY'S ENGINEER

ALMOND CHOWDHURY CONSULTANT LIMITED

10/1, JALPAIGURI, TINSUKIA, ASSAM 786117

PROOF CONSULTANT

CREATIVE ENGINEERING SERVICES

OFFICE NO. 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHAZIABAD, U.P-201010

SAFETY CONSULTANT

SAFETY AUDITOR (As per Agreement)

DESIGN AID

PLOT NO. 34, MID NEW DELHI MASOOPUR DAIRY FARM, VASANT KUNJ, NEW DELHI-110070,

DESIGN CONSULTANT

A.V. CONSTRUCTION

1st Floor, WZ-1240, Palam Extension, Bosco Ashram Wali Gali, New Delhi 110045

Winst Infra Solution Pvt. Ltd.

OFFICE F-8, ISHAAN CORPORATE TOWER, PLOT NO-C-23, SECTOR-13, VASUDHRA GHAZIABAD, U.P-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Old Goan) to km 47+682 (Ledo) on Digboi to Ledo section with proposed Margherita & Ledo Bypass (Brownfield and Green Field) (2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package-B)

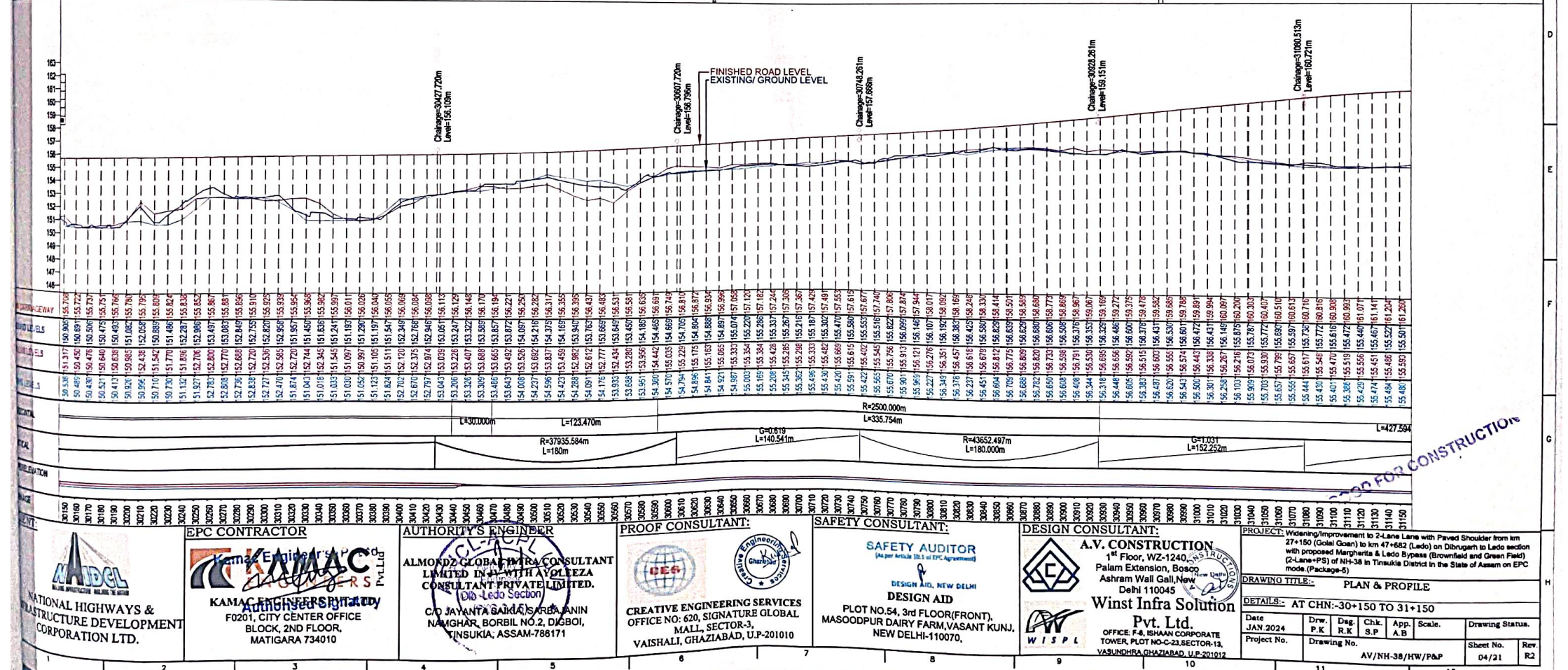
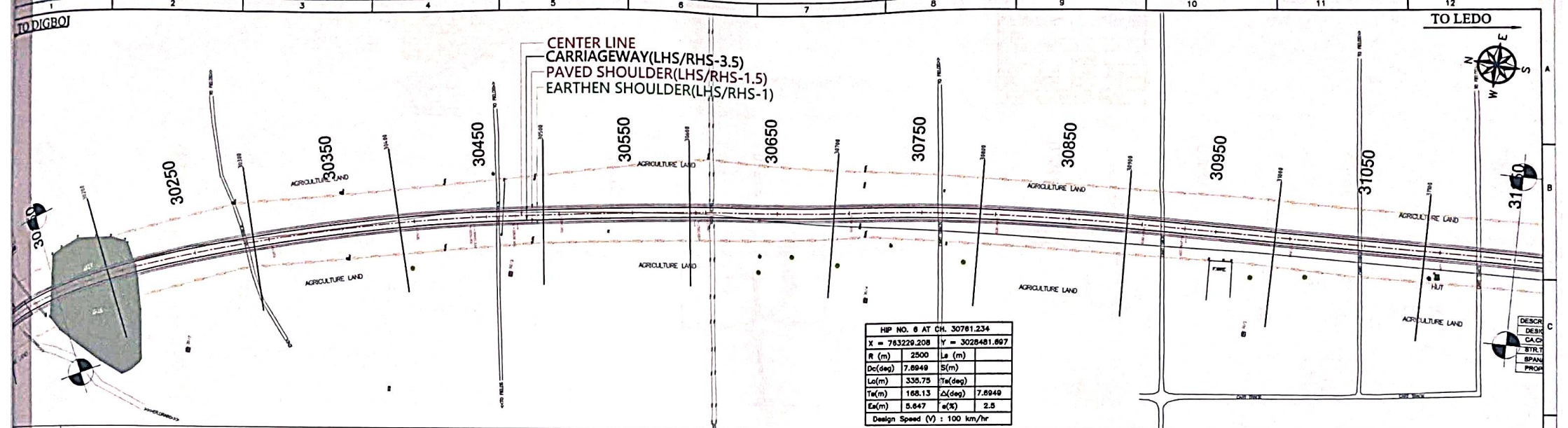
DRAWING TITLE:- PLAN & PROFILE

DETAILS:- AT CHN: 29+150 to 30+150

Date	Drw. P.K.	Dwg. R.K.	Chk. S.P.	App. A.H.	Scale	Drawing Status
JAN. 2024						

Project No. Drawing No. Sheet No. 03/21 Rev R1

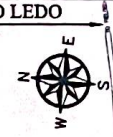
AV/NH-38/ITW/P&P



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R (m) 2500 La (m)
De(deg) 3.5374 S(m)
Lc(m) 154.35 Td(deg)
Ta(m)/ 77.2 Δ(deg) 3.5374
Ea(m) 1.192 e(K) 2.5
Design Speed (V) : 100 km/hr

X = 763345.844 Y = 3027405.852
R (m) 2500 La (m)
De(deg) 3.0897 S(m)
Lc(m) 134.81 Td(deg)
Ta(m) 67.42 Δ(deg) 3.0897
Ea(m) 0.908 e(K) 2.5
Design Speed (V) : 100 km/hr

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)



DESCRIPTION	PROPOSED
DESIGN CHN	31+242
CACHN	31+266
STR TYPE	BVLP
SPAN DIA	137.004.0m
PROPOSAL	NEW 2 LANE BVLP

DESCRIPTION	PROPOSED
DESIGN CHN	31+718
CACHN	31+740
STR TYPE	MNB
SPAN DIA	3X17.0m
PROPOSAL	NEW 2 LANE MNB

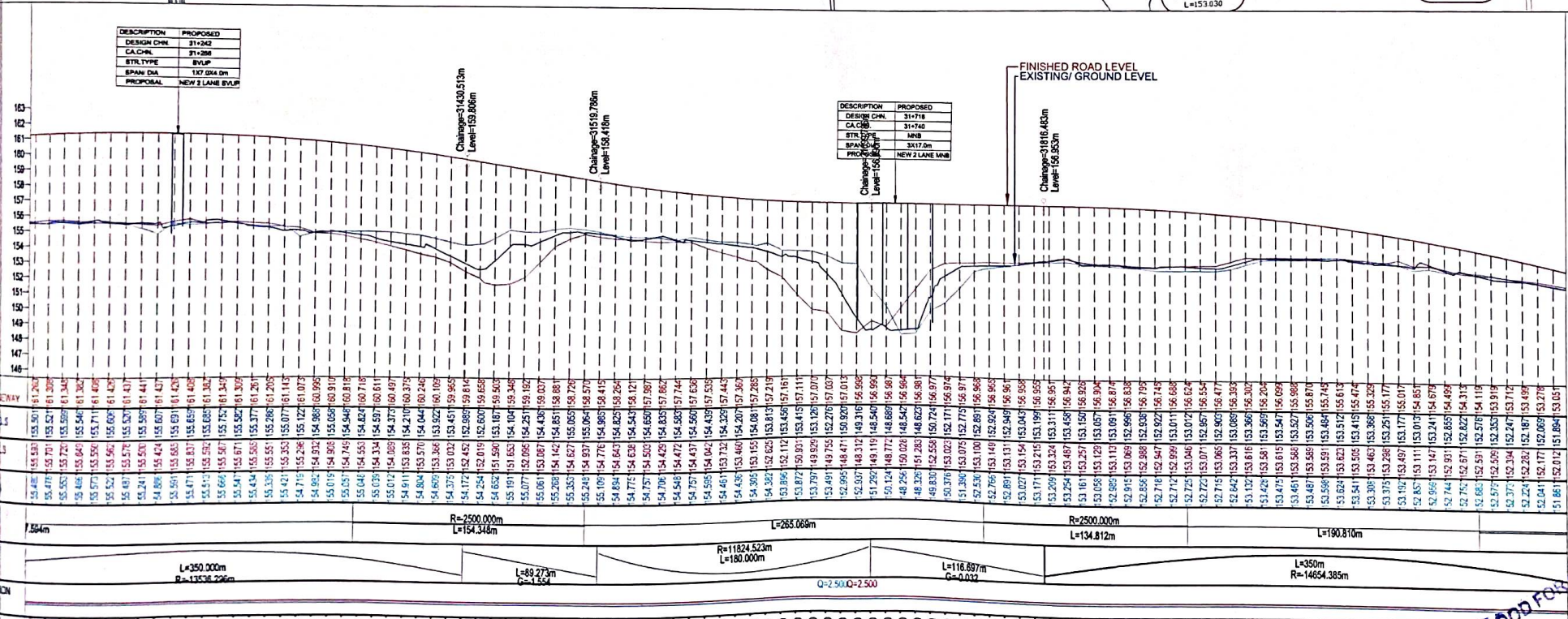
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N=3027200.639
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GPS-32A
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N=3027200.639
L=153.030

DESCRIPTION	PROPOSED
DESIGN CHN	31+242
CACHN	31+266
STR TYPE	BVLP
SPAN DIA	137.004.0m
PROPOSAL	NEW 2 LANE BVLP

DESCRIPTION	PROPOSED
DESIGN CHN	31+718
CACHN	31+740
STR TYPE	MNB
SPAN DIA	3X17.0m
PROPOSAL	NEW 2 LANE MNB

FINISHED ROAD LEVEL
EXISTING/ GROUND LEVEL



NADCL
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

KAMAC ENGINEERS
KAMAC ENGINEERS PVT. LTD.
F-11, MARKET STREET,
BLOCK 2ND FLOOR,
MATIGARA 734010

AUTHORITY ENGINEER
ALMOND GLOBAL INFRA CONSULTANT
LIMITED IN JV WITH VOLEEZA
CONSULTANT PRIVATE LIMITED.
C/O JAYANTA SAIKIA, SARBANJANIN
NAMGHAR, BORBIL NO.2, DIGBOI,
TINSUKIA, ASSAM-786171

PROOF CONSULTANT:
CREATIVE ENGINEERING SERVICES
OFFICE NO: 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P.-201010

SAFETY CONSULTANT:
SAFETY AUDITOR
DESIGN AID, NEW DELHI
PLOT NO.54, 3rd FLOOR(FRONT),
MASOODPUR DAIRY FARM,VASANT KUNJ,
NEW DELHI-110070,

DESIGN CONSULTANT:
A.V. CONSTRUCTION
1st Floor, WZ-1240,
Palam Extension, Bosco
Ashram Wall Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE: F-8, BHAWA CORPORATE
TOWER, PLOT NO-C-23, SECTOR-13,
VASUNDHRA GHAZIABAD, U.P. 201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Golei Gauri) to km 47+682 (Ledo) on Dibrugarh to Ledo section with proposed Margherita & Ledo Bypass (Brownfield and Green Field) (2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode.(Package-6)
DRAWING TITLE: PLAN & PROFILE
DETAILS: AT CHN:-31+150 TO 32+150
Date JAN 2024
Project No.
Drw. P.K.
Dag. R.K.
Chk. S.P.
App. A.B.
Scale.
Drawing Status.
Sheet No. 05/21
Rev. R2

ROAD FOR CONSTRUCTION

HP 40 10 A7 CM 33083 994	
X = 763625 257	Y = 3026214 B
R (m) 500	is (m) 45
Dc(deg) 35 1748	S(m) 0 17
Lc(m) 306 96	Is(deg) 2 578
Is(m) 206 19	Δ(deg) 40 331
Es(m) 32 833	e(%) 3 69
Design Speed (V) 85 km/hr	

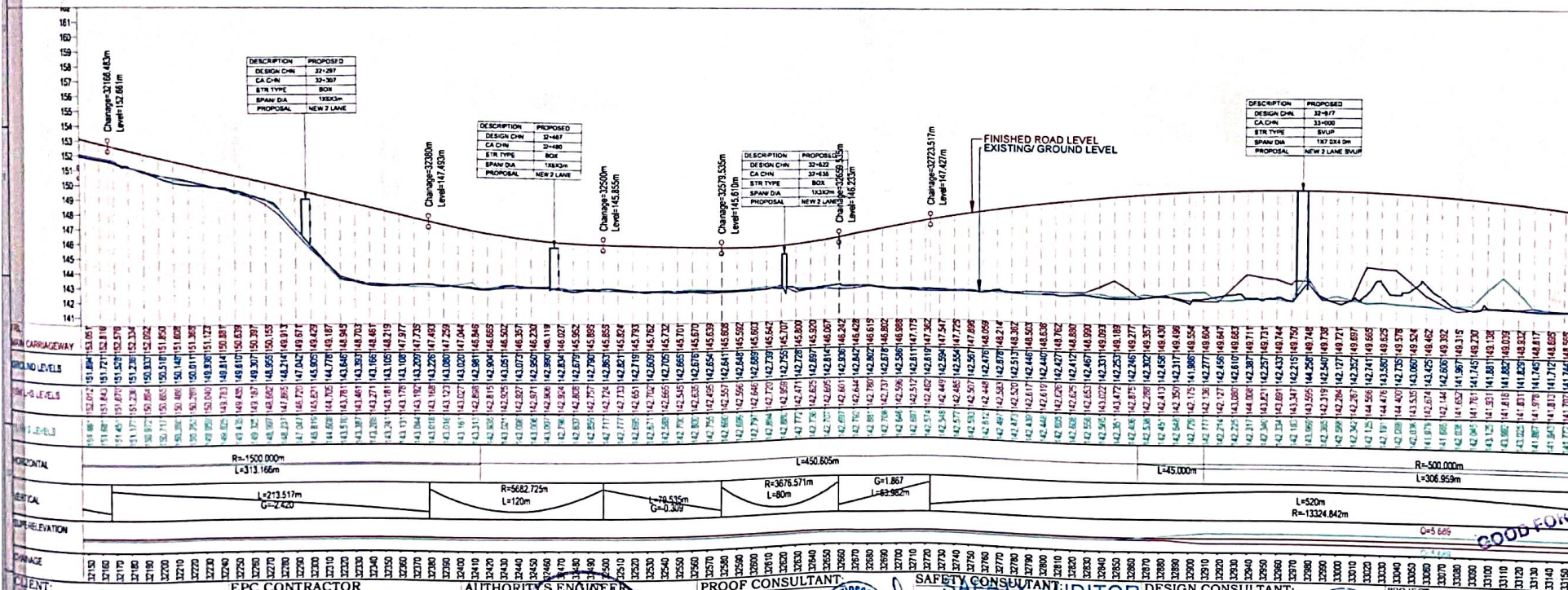
- CENTER LINE
- CARRIAGEWAY(LHS/RHS-3.5)
- PAVED SHOULDER(LHS/RHS-1.5)
- EARTHEN SHOULDER(LHS/RHS-1)

DESCRIPTION	PROPOSED
DESIGN CHN	32-297
CA CHN	32-307
STR TYPE	BOX
SPAN DIA	1X8X3m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	32+467
CA CHN	32+480
STR TYPE	BOX
SPAN DIA	1X6X3m
PROPOSAL	NEW 2 LANE

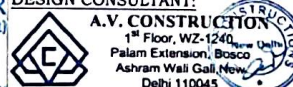
DESCRIPTION	PROPOSED
DESIGN CHN	37+622
CA CHN	32+635
STR TYPE	BOX
SPAN/DIA	1X12m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	32-877
CA CHN	33-000
STR TYPE	SVUP
SPAN/ DIA	1X7.0X4.0m
PROPOSAL	NEW 2 LANE SV



GOOD FOR CONSTRUCTION

DESIGN CONSULTANT

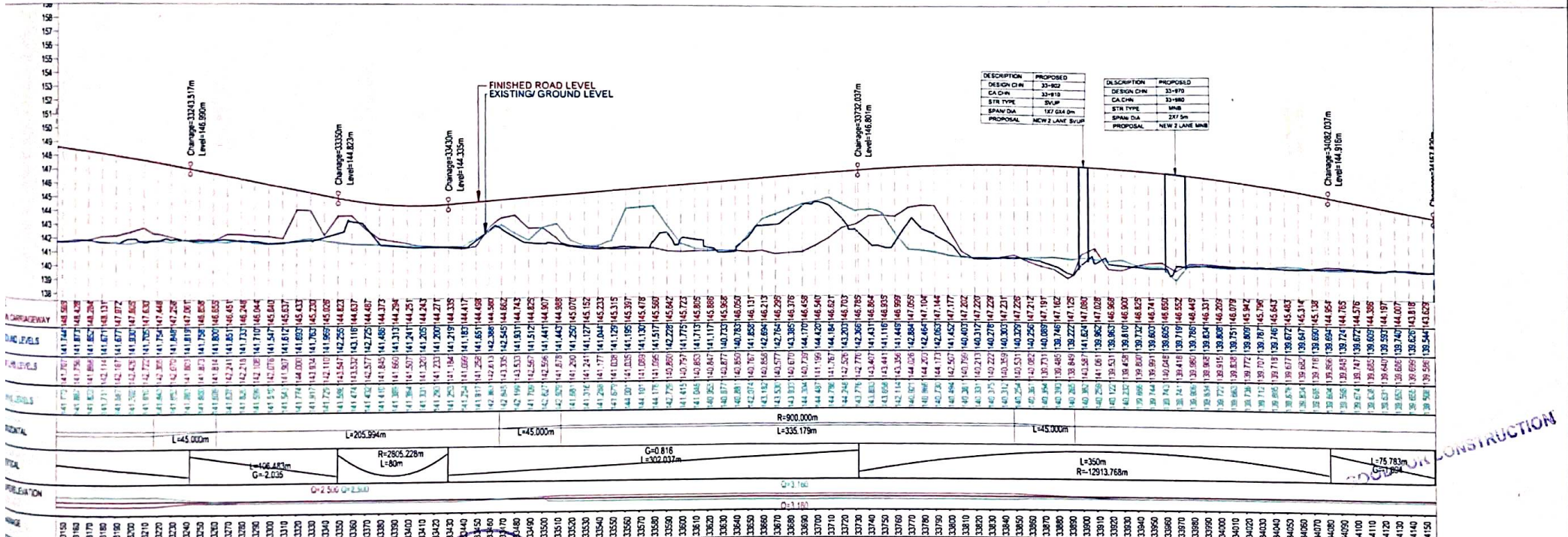
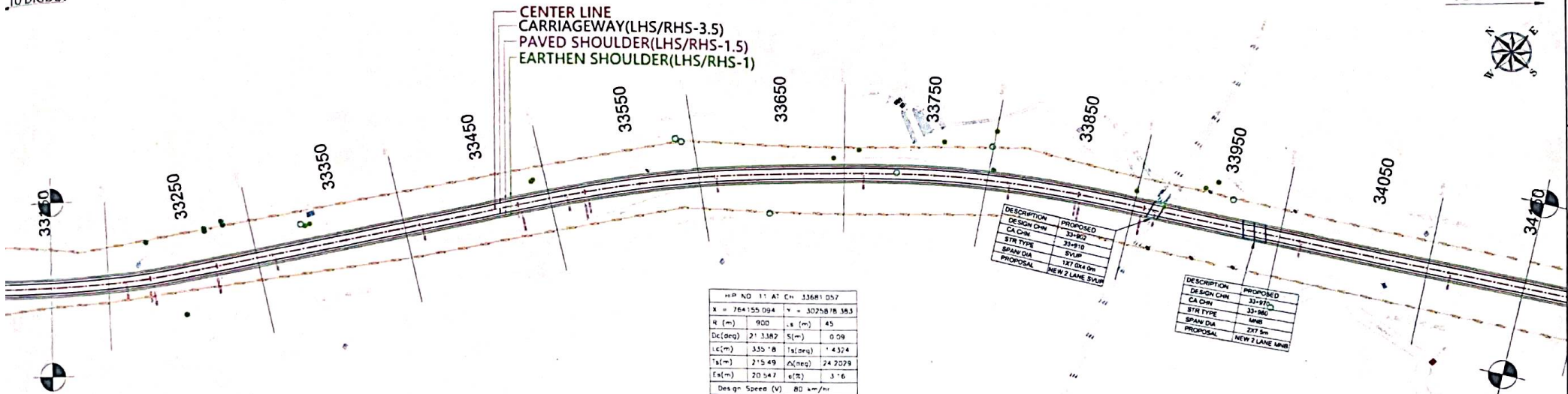


Winst Infra Solution
Pvt. Ltd.
OFFICE F-8 ISHAAN CORPORATE

PROJECT:	Widening/Improvement of 2-Lane Lane with Paved Shoulder from sm 27+150 (Goole County) to sm 47+682 (Lisles) on Disgrague to Ledsa assem- with proposed Marginalia & Leado Bypass (Broomfield and Green Forest) (2-Lane) of NH-38 in Town of Axtell District in the State of Assam on EPC mode (Package-5)							
DRAWING TITLE:-	PLAN & PROFILE							
DETAILS:-	AT CHN.-32+150 TO 33+150							
Date	P.W.	D.R.K	C.H.P.	S.App.	A.R	Scale:	Drawing Status	
JAN 2024	D/R	R/K	K/S	App	A/R			
Project No.	Drawing No.						Sheet No.	N
	AV/NH-38 /PW/P&P						06/21	

TO DIGBOI

TO LEDO



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

KAMAC Engineering Pvt. Ltd.
KAMAC ENGINEERING PVT. LTD.
BLOCK, 2ND FLOOR,
MATIGARA 734010

ALMONDZ GLOBAL INFRA CONSULTANT
LIMITED (A MAJEEZA
CONSULTANT PRIVATE LIMITED).

CREATIVE ENGINEERING SERVICES
OFFICE NO. 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHIAZIABAD, U.P.-201010

SAFETY AUDIT
DESIGN AGREEMENT
DESIGN AID NEW DELHI
PLOT NO. 54, 3rd FLOOR (FRONT),
MASOODPUR DAIRY FARM VASANT KUNJ,
NEW DELHI-110070,

Winst Infra Solution
Pvt. Ltd.
OFFICE F-4 ISHAN CORPORATE
TOWER PLOT NO-C-23 SECTOR-13,
VASUNDHRA GHAZIABAD, U.P.-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Gole Goan) to km 47+682 (Ledo) on Dibrugarh to Ledo section with proposed Marginalia & Ledo Bypass (Brownfield and Green Field) (Q-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package S)

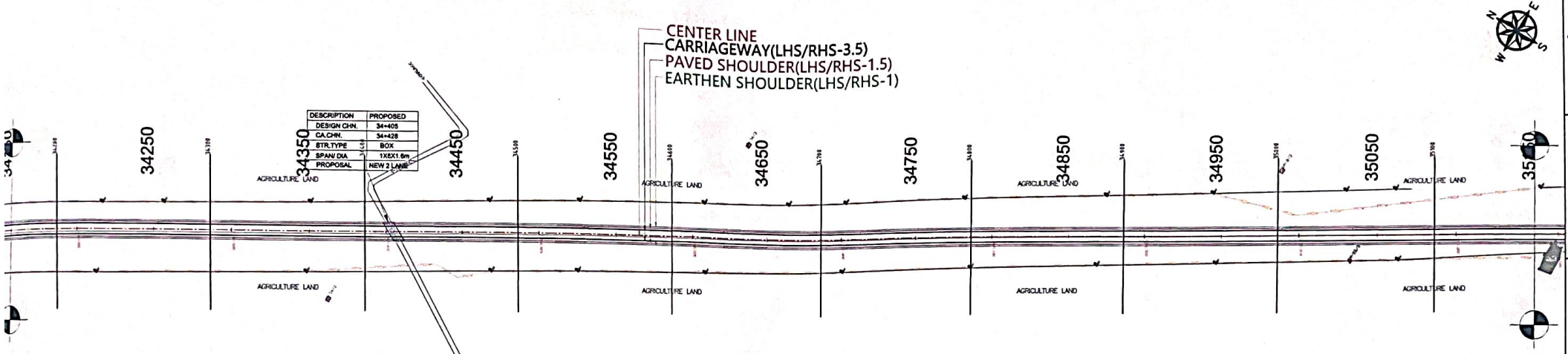
DRAWING TITLE: PLAN & PROFILE

DETAILS: AT CHN: 33+150 TO 34+150

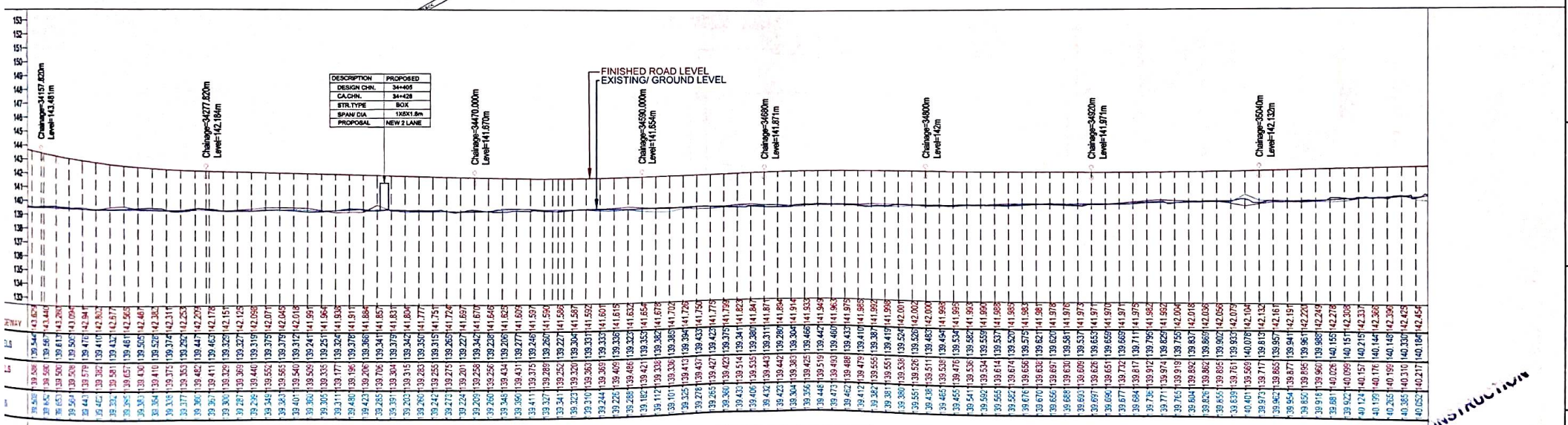
Date	Draw	Eng	Chk	App	Scale	Drawing Status
JAN 2024	P.K	R.K	S.P	A.B		

Project No. Drawing No. Sheet No. Rev R1

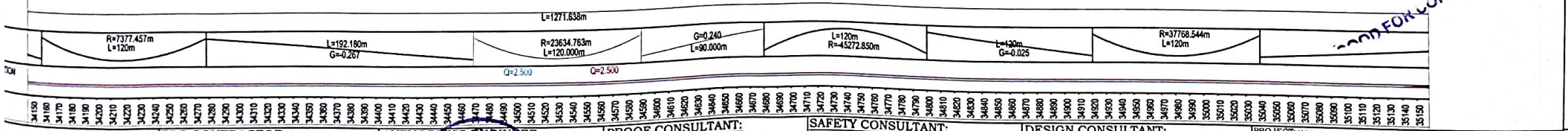
AV/NI-38/11W/P&P 07/21



DESCRIPTION	PROPOSED
DESIGN CHN.	34+428
C.A.CHN.	34+428
ESTR. TYPE	BOX
SPAN DIA.	1X61.8m
PROPOSAL	NEW 2 LANE



DESCRIPTION	PROPOSED
DESIGN CHN.	34+428
C.A.CHN.	34+428
ESTR. TYPE	BOX
SPAN DIA.	1X61.8m
PROPOSAL	NEW 2 LANE



NADCL
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

KAMAC
KAMAC ENGINEERS PVT. LTD.
FOUNDER/CHIEF ENGINEER
BLOCK, 2ND FLOOR,
MATIGARA 734010

ALMONDZ GLOBAL INFRA CONSULTANT LIMITED
LIMITED IN LAW WITH AYOREEZA CONSULTANT PRIVATE LIMITED.
OO JAYANTA SAIKIA, SARBAJANIN NAMGHAR, BORBIL NO.2, DIGBOI, TINSUKIA, ASSAM-786171

CREATIVE ENGINEERING SERVICES
OFFICE NO: 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHAZIABAD, U.P.-201010

SAFETY AUDITOR
DESIGN AID, NEW DELHI
PLOT NO.54, 3rd FLOOR(FRONT), MASOODPUR DAIRY FARM, VASANT KUNJ, NEW DELHI-110070.

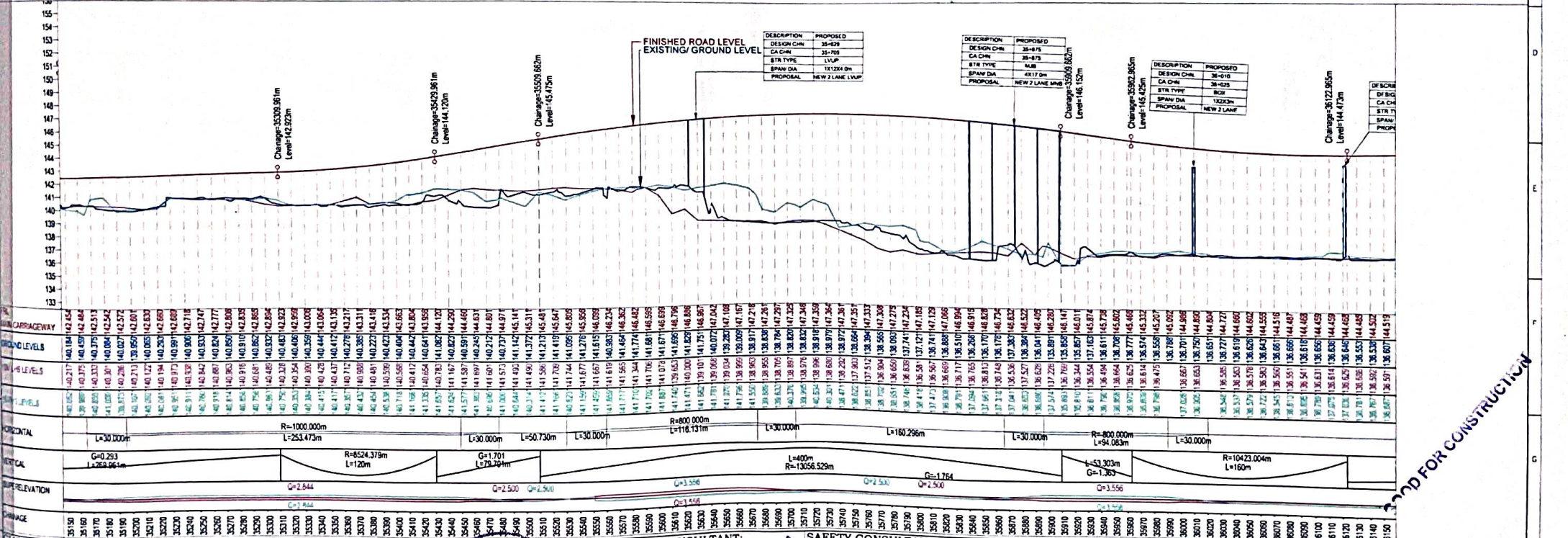
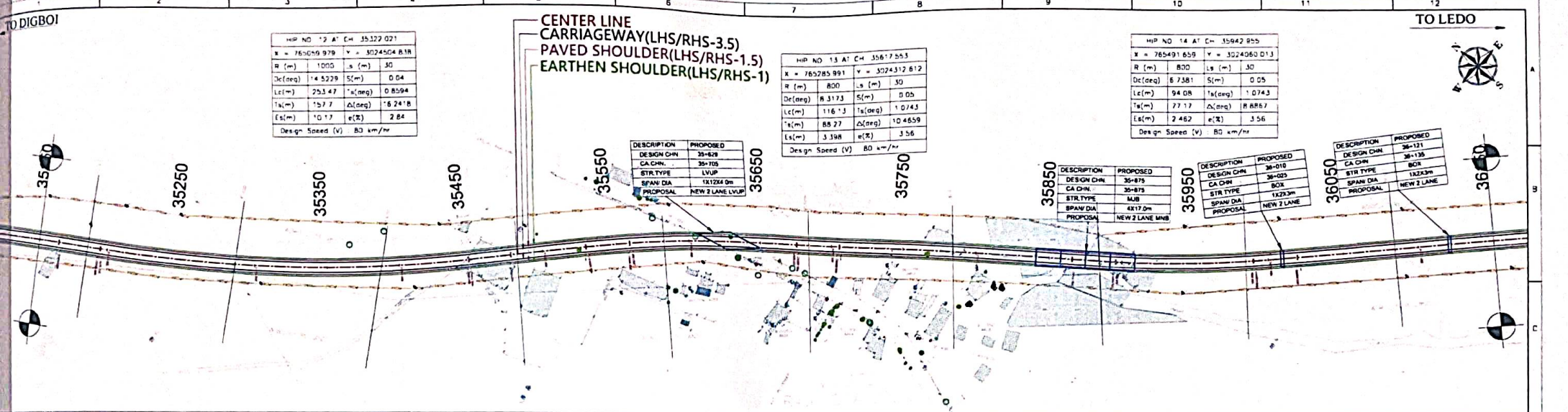
Winst Infra Solution Pvt. Ltd.
OFFICE: P-8, ISHAN CORPORATE TOWER, PLOT NO-C-23, SECTOR-13, VASUDDHRA CHAZIABAD, U.P.-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Gooli Gaon) to km 47+682 (Ledo) on Dibrughat to Ledo section with proposed Margherita & Ledo Bypass (Brownfield and Green Field) (2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode. (Package-6)

DRAWING TITLE: PLAN & PROFILE

DETAILS: AT CHN:-34+150 TO 35+150

Date	Drw. P.K.	Dwg. R.K.	Chk. S.P.	App. A.B.	Scale.	Drawing Status.
JAN 2024						
Project No.	Drawing No.				AV/NH-38/HW/P&P	Sheet No. 08/21
						Rev. R2



CLIENT:

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

EPC CONTRACTOR:

KAMAC ENGINEERS PVT. LTD.

FO201, CITY CENTER, MATIGARA 734010

AUTHORITY'S ENGINEER:

ALMOND GLOVER CONSULTANTS LIMITED IN INDIA OFFICE CONSULTANT PRIVATE LIMITED.

CO. JAYANTA SARKA, BARBAJANIN NANGHAN, BORBIL NO.2, DIGBOI, INSUKIA, ASSAM-786171

PROOF CONSULTANT:

CREATIVE ENGINEERING SERVICES

OFFICE NO. 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHAZIABAD, U.P.-201010

SAFETY CONSULTANT:

SAFETY AUDITOR

(As per Andhra Pradesh Agreement)

DESIGN AID

PLOT NO.54, 3rd FLOOR, FRONT MASOODPUR DAIRY FARM, VASANT KUNJ, NEW DELHI-110070,

DESIGN CONSULTANT:

A.V. CONSTRUCTION

1st Floor, WZ-1240, Palam Extension, Bosco Ashram Wali Gali, New Delhi 110045

Winst Infra Solution Pvt. Ltd.

OFFICE F-4 BHANU CORPORATE TOWER, PLOT NO-C-23 SECTOR-13, VASUDHRA GHAZIABAD U.P. 201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Gola Gaon) to km 47+682 (Ledo) on Dibrugarh to Ledo section (2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package-6)

DRAWING TITLE: PLAN & PROFILE

DETAILS: AT CHN-35+150 TO 36+150

Date	Drw. P.K.	Dag. R.K.	Chk. S.P.	App. A.B.	Scale.	Drawing Status.
Jan 2024						
Project No.						
Drawing No.						

Sheet No. 09/21 Rev R1

TO DIGBOI

TO LEDO

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)

HP NO 15 A' C= 36444.788
X = 76584.563 Y = 3023724.713
R (m) 2500 Ls (m)
Dc(deg) 3.3634 S(m)
Lc(m) 46.75 l(deg) 0.14
Ts(m) 15.4 Δ(deg) 3.3634
W (m) 0.77 e(deg) 2.5

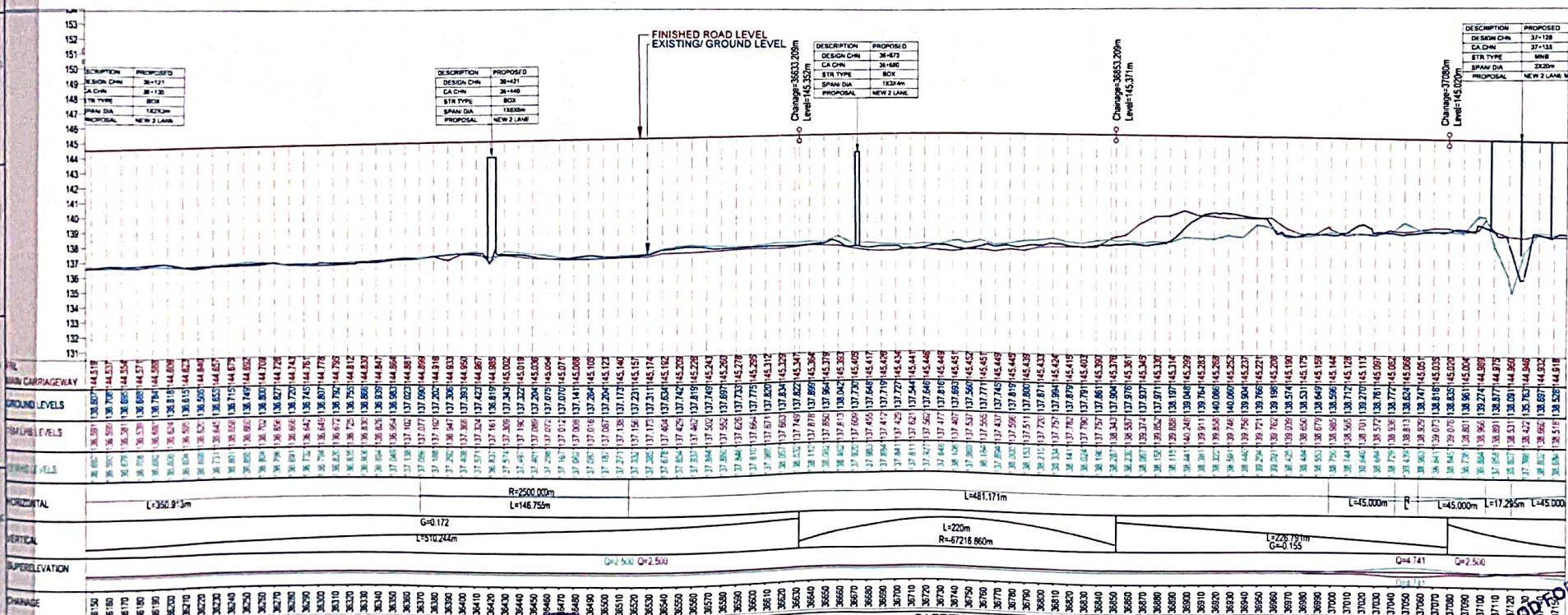
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X = 766291.717 Y = 3023292.702
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Lc(m) 15.88 l(deg) 2.1486
Ts(m) 52.98 Δ(deg) 5.8118
W (m) 0.913 e(deg) 4.74

HP NO 17
X = 766397.25
R (m) 500
Dc(deg) 5.005
Lc(m) 43.68
Ts(m) 56.9
W (m) 2.14

DESCRIPTION	PROPOSED
DESIGN CHN	36+421
CA CHN	36+440
STR TYPE	BOX
SPAN DIA	13.63m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	36+613
CA CHN	36+600
STR TYPE	BOX
SPAN DIA	13.33m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	37+128
CA CHN	37+135
STR TYPE	W&B
SPAN DIA	23.00m
PROPOSAL	NEW 2 LANE W&B



CLIENT:

AMDC
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

EPC CONTRACTOR

KAMAC
KAMAC ENGINEERS PVT. LTD.
KAMAC ENGINEERS PVT. LTD.
FOOT CITY CENTER OFFICE
AUTOMATED LABORATORY
MATIGARA 734010

AUTHORITY'S ENGINEER

ALMOND & GILBERT CONSULTANTS
LIMITED IN PRIVATE LIMITED.
CONSULTANTS IN THE FIELD
C/O JAYANTA SARKA, JARABANIN
NAGHAR, BORBIL NO.2, DIGBOI,
TINSUKIA, ASSAM-786171

PROOF CONSULTANT

CREATIVE ENGINEERING SERVICES
OFFICE NO. 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P-201010

SAFETY CONSULTANT:

SAFETY AUDITOR
(As per Art 117 of the Agreement)
DESIGN
DESIGNER: NEW DELHI
PLOT NO.54, 3rd FLOOR(FRONT),
MASOODPUR DAIRY FARM, VASANT KUNJ,
NEW DELHI-110070,

DESIGN CONSULTANT:

A.V. CONSTRUCTION
1st Floor, WZ-1240
Palam Extension, Bosco
Ashram Wali Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE F-8, ISHAAN CORPORATE
TOWER, PLOT NO-C-23, SECTOR-13,
VAS. INDRA GHAZIABAD, U.P-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Golei Goan) to km 47+682 (Ledo) on Dibrugarh to Ledo section with proposed Margherita & Ledo Bypass (Brownfield and Green Field) (Q-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package-5)

DRAWING TITLE: PLAN & PROFILE

DETAILS: AT CHN: 36+150 TO 37+150

Date	Drawn	Design	Checked	Approved	Scale	Drawing Status
JAN 2024	P.K.	R.K.	S.P.	A.B.		
Project No.	Drawing No.					

Sheet No. 10/21 Rev R1

HP NO	19	Alt	CM	37952	611		
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R (m)		300		s (m)		75	
Dc(deg)		40	366	S(m)		0	78
Lc(m)		21*	36	s(deg)		7	162
m)		19	02	A(deg)		54	69
(m)		38	618	e(%)		7	
Design Speed (V)		80	km/mi				

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)

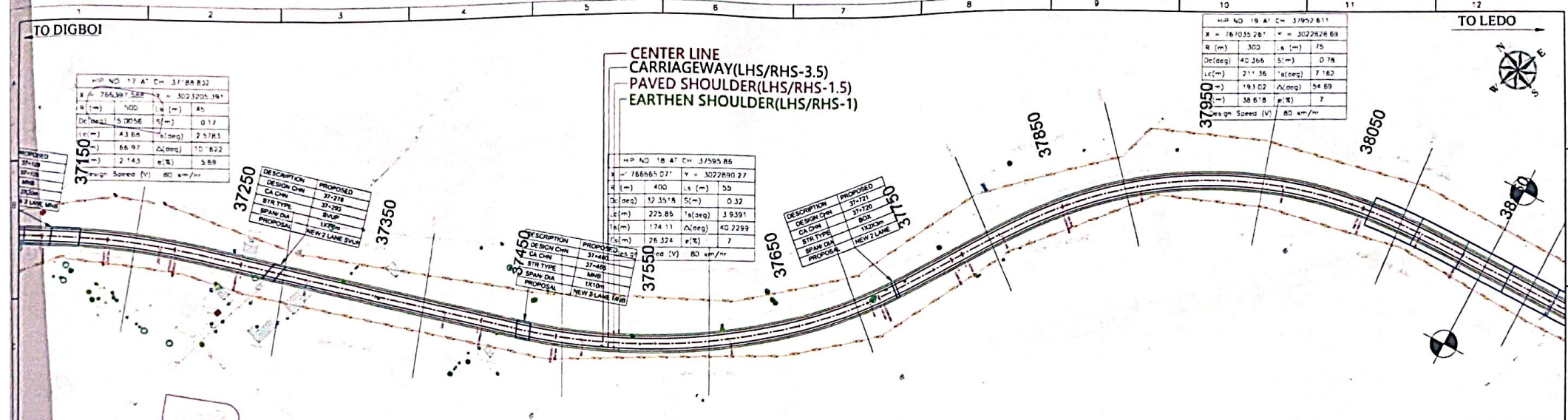
WD NO	17 A	CM	37.88 R32
X	765.397.528	Y	502.3205.191
W (m)	500	W (m)	45
D (deg)	5.0056	S (m)	0.17
U (m)	43.68	n (deg)	2.5783
	66.97	Δ (deg)	10.622
	2.143	e (%)	5.89
even Scored (V)	80 km/hr		

HP NO 18 AT CH 3/595 86	
X = 766665.07	Y = 3072890.27
q (m) 400	LS (m) 55
Dc (deg) 52.35.8	S (-) 0.32
LC (m) 225.85	Is (deg) 3.9391
Lk (m) 174.11	Δ (deg) 40.7299
Ls (m) 26.324	e (%) 7
50	ca (V) 80 km/hr

DESCRIPTION	PROPOSED
DESIGN CHN	37+721
CA CHN	37+720
STR TYPE	BOX
SPAN DIA	1X23m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	37-600
CA CHN	37-605
STR TYPE	MINB
SPAN DIA	1X10m
PROPOSAL	NEW 2 LANE 1X10m

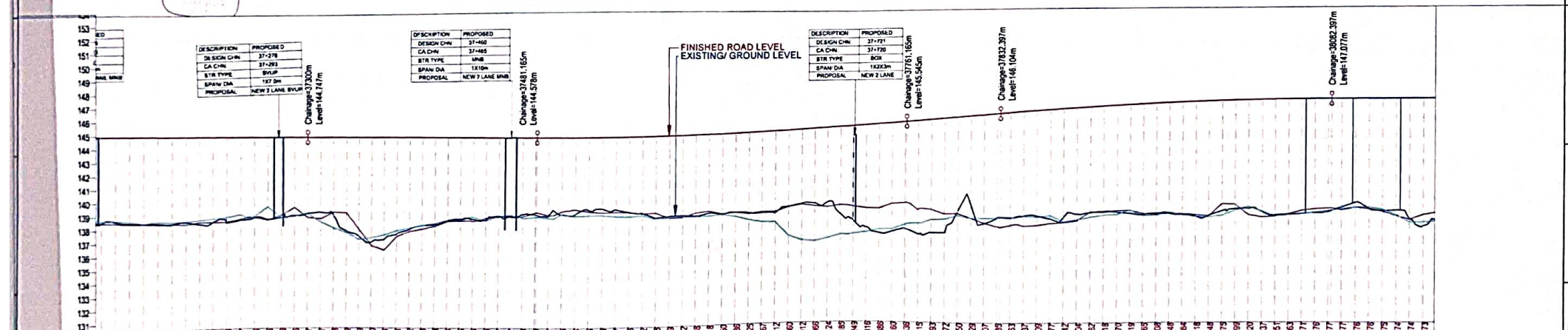
DESCRIPTION	PROPOSED
DESIGN CHN	37-278
CA CHN	37-293
STR TYPE	SVUP
SPAN DIA	1375
PROPOSAL	NEW 2 LANE SVUP



DESCRIPTION	PROPOSED
DR SIGN CHIN	37+278
CA CHIN	37+293
STR TYPE	SVLP
SPAW DIA	137 Dm
PROPOSAL	NEW 2 LANE SVLP

DESCRIPTION	PROPOSED
DESIGN CHN	37-460
CA CHN	37-465
STR TYPE	MNB
SPAN OA	1X10m
PROPOSAL	NEW 2 LANE MNB

DESCRIPTION	PROPOSED
DESIGN CHN	37+721
CA CHN	37+720
STR TYPE	BOX
SPAN/DIA	1 X 23.3m
PROPOSAL	NEW 2 LANE



STATION	MAIN CARRIAGEWAY	GROUND LEVELS	15M LYS LEVELS	30M LYS LEVELS	HORIZONTAL	VERTICAL	SUPERELEVATION
10	138.520	138.520	138.520	138.520	$R=500.000m$ $L=43.683m$ $L=172.258m$ $L=55.000m$	$R=350686.649m$ $L=220m$ $L=181.105m$ $G=0.093$	$G=0.093$ $G=2.500$ $G=2.500$ $G=7$
11	138.530	138.530	138.530	138.530			
12	138.540	138.540	138.540	138.540			
13	138.550	138.550	138.550	138.550			
14	138.560	138.560	138.560	138.560			
15	138.570	138.570	138.570	138.570			
16	138.580	138.580	138.580	138.580			
17	138.590	138.590	138.590	138.590			
18	138.600	138.600	138.600	138.600			
19	138.610	138.610	138.610	138.610			
20	138.620	138.620	138.620	138.620	$R=400.000m$ $L=225.868m$ $R=31694.451m$ $L=280m$ $R=350686.649m$ $L=220m$ $L=181.105m$ $G=0.093$	$G=0.093$ $G=2.500$ $G=2.500$ $G=7$ $G=2$ $G=7$	
21	138.630	138.630	138.630	138.630			
22	138.640	138.640	138.640	138.640			
23	138.650	138.650	138.650	138.650			
24	138.660	138.660	138.660	138.660			
25	138.670	138.670	138.670	138.670			
26	138.680	138.680	138.680	138.680			
27	138.690	138.690	138.690	138.690			
28	138.700	138.700	138.700	138.700			
29	138.710	138.710	138.710	138.710			
30	138.720	138.720	138.720	138.720	$R=300.000m$ $L=211.366m$ $L=75.000m$ $R=250m$ $R=31614.716m$ $G=0.093$ $G=2.500$ $G=2.500$ $G=7$	$G=0.093$ $G=2.500$ $G=2.500$ $G=7$ $G=2$ $G=7$	
31	138.730	138.730	138.730	138.730			
32	138.740	138.740	138.740	138.740			
33	138.750	138.750	138.750	138.750			
34	138.760	138.760	138.760	138.760			
35	138.770	138.770	138.770	138.770			
36	138.780	138.780	138.780	138.780			
37	138.790	138.790	138.790	138.790			
38	138.800	138.800	138.800	138.800			
39	138.810	138.810	138.810	138.810			
40	138.820	138.820	138.820	138.820	$R=300.000m$ $L=211.366m$ $L=75.000m$ $R=250m$ $R=31614.716m$ $G=0.093$ $G=2.500$ $G=2.500$ $G=7$	$G=0.093$ $G=2.500$ $G=2.500$ $G=7$ $G=2$ $G=7$	
41	138.830	138.830	138.830	138.830			
42	138.840	138.840	138.840	138.840			
43	138.850	138.850	138.850	138.850			
44	138.860	138.860	138.860	138.860			
45	138.870	138.870	138.870	138.870			
46	138.880	138.880	138.880	138.880			
47	138.890	138.890	138.890	138.890			
48	138.900	138.900	138.900	138.900			
49	138.910	138.910	138.910	138.910			
50	138.920	138.920	138.920	138.920			

GOOD FOR CONSTRUCTION

GOOD FOR CONSTRUCTION

CLIENT:


NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

EPC CONTRACTOR

KAMAC ENGINEERING LTD

ENGINEERS

KAMAC ENGINEERING LTD

FOR AUTHORIZED SIGNATORY

BLOCK, 2ND FLOOR,

MATIGARA 734C10

AUTHORITY'S ENGINEER
 ALMOND GLOBAL PRA CONSULTANT
 LIMITED 11, WILHELMSTRASSE
 CONSULTING PRIVATE LIMITED.
 (PKG-3.4.5)
 *
 C/O JAYANTA SAIKIA, SARBAJANIN
 NAMCHAR, BORSIL NO.2, DIGBOI,
 TINSUKIA, ASSAM-786171

PROOF CONSULTANT:

CREATIVE ENGINEERING SERVICES
OFFICE NO 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U P-201010

SAFETY CONSULTANT:
SAFETY AUDITOR
(As per Arrangement Agreement)
DESIGN AID
DESIGN AID NEW DELHI
PLOT NO.54, 3rd FLOOR(FRONT).
MASOODPUR DAIRY FARM,VASANT KUNJ
NEW DELHI-110070.

DESIGN CONSULTANT:

A.V. CONSTRUCTION
 1st Floor, WZ-1240
 Palam Extension, Bosco
 Ashram Walk Gali, New
 Delhi 110045

Winst Infra Solution
Pvt. Ltd.
 OFFICE F-8 SHAMAN CORPORATE
 TOWER, PLOT NO-C-23, SECTOR-13
 VASUPOHRA GHANASHYAM, U.P-201012

PROJECT	Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Golden Gate) to km 47+682 (Leda) on Dhangshur to Leda section with proposed Margherita & Leda Bypass (Brownfield and Green Field)									
	(2-Lane P&P) of 10x-3.8 m Trapezia District in the State of Assam on EPC mode (Package-5)									
DRAWING TITLE:-		PLAN & PROFILE								
DETAILS:-		AT CHN-37+150 TO 38+150								
Date	D/P	D/R	D/S	Chk	App	Scale	Drawing Status:-			
JAN.2024	PWK	RAG	CHP	AH						
Project No.	Drawing No.						Sheet No.	R/K		
	AV/NI1-38/11W/P&P						11/21			

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)

DESCRIPTION	PROPOSED
DESIGN CHN	38+13
CA CHN	38+100
STR TYPE	M.B
SPAN DIA	1833mm
PROPOSAL	NEW 2 LANE M.B

DESCRIPTION	PROPOSED
DESIGN CHN	38+13
CA CHN	38+100
STR TYPE	M.B
SPAN DIA	1833mm
PROPOSAL	NEW 2 LANE M.B

FINISHED ROAD LEVEL
EXISTING GROUND LEVEL

Change: 35377.80m
Level: 147.00m

DESCRIPTION	PROPOSED
DESIGN CHN	38+13
CA CHN	38+100
STR TYPE	M.B
SPAN DIA	1833mm
PROPOSAL	NEW 2 LANE M.B

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)

Change: 35377.80m
Level: 146.75m

GOOD FOR CONSTRUCTION

EPC CONTRACTOR

KAMAC
Engineering & Construction Pvt. Ltd.
KAMA Authorized Signatory
F0201, CITY CENTER OFFICE
BLOCK, 2ND FLOOR,
MATIGARA 734010

AUTHORITY'S ENGINEER

ALMOYDZ GLOBAL INFRA CONSULTANT
LIMITED IN AMBATHI OFFICE
CONSULTANT PRIVATE LIMITED.
Dig Ledo Section
P.O. SANTAKA, BARBAININ
NANGHAR, BORBIL NO.2, DIGBOI,
TINSUKIA, ASSAM-786771

PROOF CONSULTANT

CREATIVE ENGINEERING SERVICES
OFFICE NO. 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P.-201010

SAFETY CONSULTANT

SAFETY AUDITOR
(As per Agreement)
DESIGN & CONSTRUCTION
PLOT NO. 54, 3rd FLOOR (FRONT),
MASOODPUR DAIRY FARM, VASANT KUNJ,
NEW DELHI-110070,

DESIGN CONSULTANT

A.V. CONSTRUCTION
1st Floor, WZ-1240
Palam Extension, BOSCO
Ashram Waili Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE F-4, ISMAN CORPORATE
TOWER, PLOT NO-C-23, SECTOR-13,
VASUDDHRA CHAZIABAD, U.P.-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km
27+150 (Golden Gate) to km 47+682 (Ledo) on Dibrugarh to Ledo section
with proposed Margherita & Ledo Bypass (Brownfield and Green Field)
(2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC
mode (Package-5)

DRAWING TITLE: PLAN & PROFILE
DETAILS: AT CHN: 38+150 TO 39+150

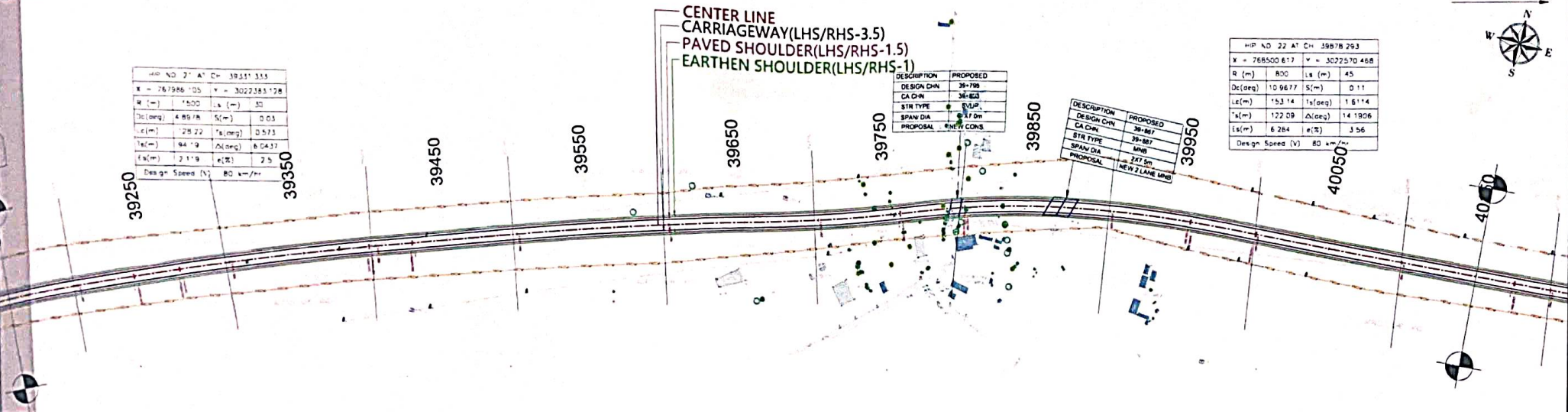
Date	Drw.	Deg.	Chk.	App.	Scale	Drawing Status
JAN 2024	P.K	R.K	S.P	A.B		
Project No.	Drawing No.	Sheet No.	Rev			
		12/21	R1			

AV/NH-38/11W/P&P

NADCL
NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

TO DIGBOI

TO LEDO

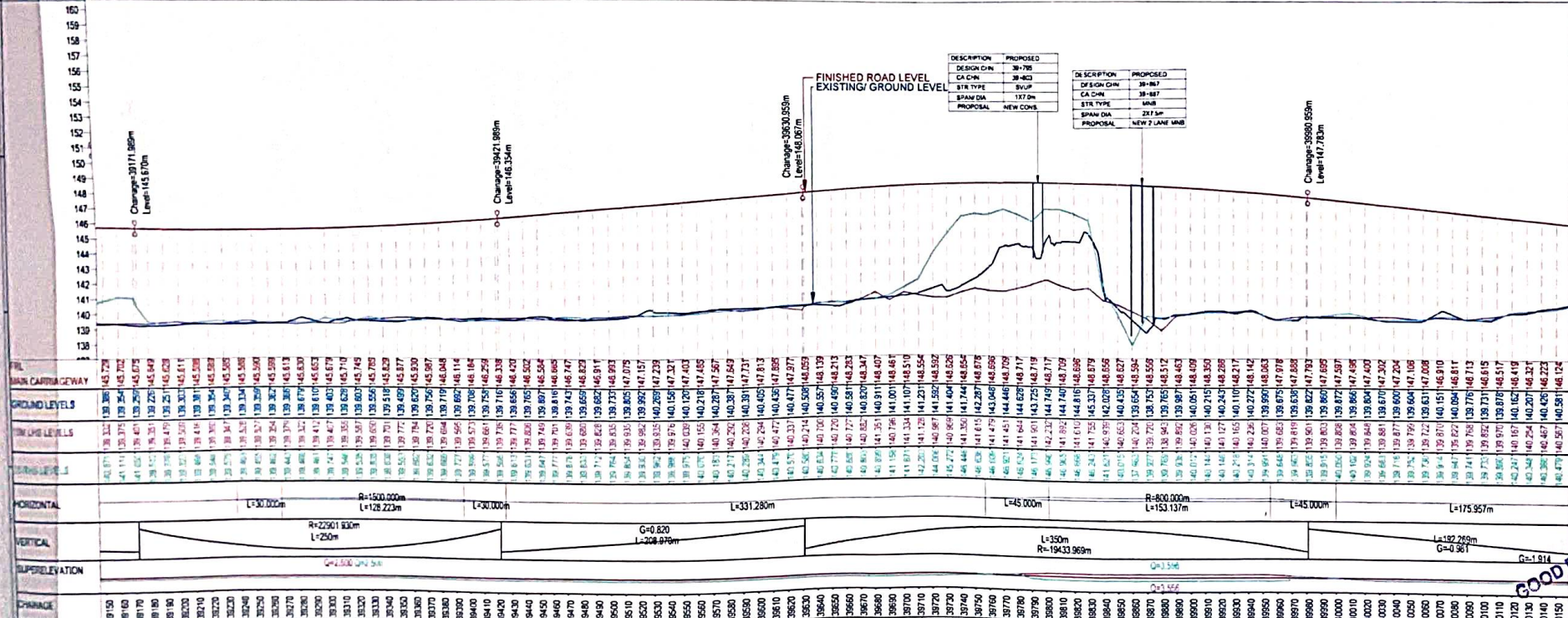


H/O NO. 2' AT CH 39351.315	
X = 767956.105	Y = 3022383.128
M = 1500	S = 50
Ca (deg) = 4.8518	S (deg) = 0.03
e (deg) = 28.22	ts (deg) = 0.573
ts (deg) = 94.19	Δ (deg) = 8.0437
ts (deg) = 2.119	e (deg) = 2.5
Design Speed (V)	80 km/hr

DESCRIPTION	PROPOSED
DESIGN CHN	39-708
CA CHN	38-863
STR TYPE	SVLP
SPAN DIA	107.0m
PROPOSAL	NEW CONS.

DESCRIPTION	PROPOSED
DESIGN CHN	39-867
CA CHN	38-867
STR TYPE	SVLP
SPAN DIA	107.0m
PROPOSAL	NEW CONS.

H/O NO. 22 AT CH 39878.293	
X = 768500.617	Y = 3022570.468
R (m) = 800	LS (m) = 45
Ca (deg) = 10.9677	S (deg) = 0.11
e (deg) = 153.14	ts (deg) = 1.6114
ts (deg) = 122.09	Δ (deg) = 14.1906
ts (deg) = 6.284	e (deg) = 3.56
Design Speed (V)	80 km/hr



DESCRIPTION	PROPOSED
DESIGN CHN	39-708
CA CHN	38-863
STR TYPE	SVLP
SPAN DIA	107.0m
PROPOSAL	NEW CONS.

DESCRIPTION	PROPOSED
DESIGN CHN	39-867
CA CHN	38-867
STR TYPE	SVLP
SPAN DIA	107.0m
PROPOSAL	NEW CONS.

CLIENT: NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

EPC CONTRACTOR: KAMAC ENGINEERS PVT. LTD. (Authorized Signatory)

AUTHOR'S ENGINEER: ALYONIA CONSULTANTS LIMITED, IN-VA, KHELEZA CONSULTANT PRIVATE LIMITED.

PROOF CONSULTANT: CREATIVE ENGINEERING SERVICES OFFICE NO. 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GIZIABAD, U.P-201010

SAFETY AUDITOR: SAFETY AUDITOR DESIGN (As per Indian Standards)

DESIGN CONSULTANT: Winst Infra Solution Pvt. Ltd. OFFICE: F-8 SHAN CORPORATE TOWER, PLOT NO. C-23, SECTION-13, VASINDHRA, HAZARBAZ, U.P-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Gola Goan) to km 47+682 (Ledo) on Dibrugarh to Ledo section with proposed Margherita & Ledo Bypass (Brownfield & Green Field) (2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package-5)

DRAWING TITLE: PLAN & PROFILE

DETAILS: AT CHN: 39+150 TO 40+150

Date: JAN 2024
Project No.:
Drawn By: P.K. R.K.
Checked By: R.K. S.P.
App. By: A.B.
Scale: 1:1000
Drawing Status: Sheet No. 13/21 Rev. RI

TO DIGBOI

TO LEDO

HWP NO. 23 A' CH 40340.334	
W = 76.966' 16.9	Y = 5227617.364
R (m)	2000
Δ (deg)	9.428
L (m)	329.03
Δ (deg)	9.428
Δ (deg)	9.428
Δ (deg)	9.428
Design Speed (V)	100 km/h

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)

DESCRIPTION	PROPOSED
DESIGN CHN	41-022
CA CHN	41-000
STR TYPE	BOX
SPAN DIA	1320mm
PROPOSAL	NEW 2 LANE

41050

40250

40350

40450

40550

40650

40750

40850

40950

DESCRIPTION	PROPOSED
DESIGN CHN	40-324
CA CHN	40-300
STR TYPE	BOX
SPAN DIA	1320mm
PROPOSAL	NEW 2 LANE

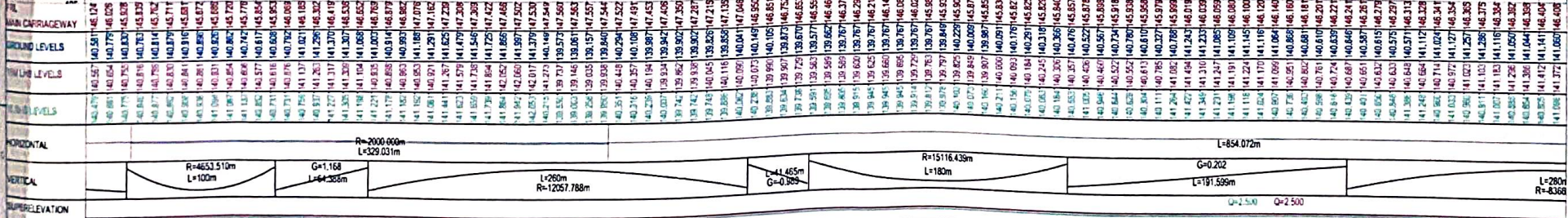
DESCRIPTION	PROPOSED
DESIGN CHN	40-454
CA CHN	40-400
STR TYPE	SVUP
SPAN DIA	137.5 m
PROPOSAL	NEW 2 LANE SVUP

DESCRIPTION	PROPOSED
DESIGN CHN	40-324
CA CHN	40-300
STR TYPE	BOX
SPAN DIA	1320mm
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	40-454
CA CHN	40-400
STR TYPE	SVUP
SPAN DIA	137.5 m
PROPOSAL	NEW 2 LANE SVUP

DESCRIPTION	PROPOSED
DESIGN CHN	41-022
CA CHN	41-000
STR TYPE	BOX
SPAN DIA	1320mm
PROPOSAL	NEW 2 LANE

GOOD FOR CONSTRUCTION



CHN	40150	40160	40170	40180	40190	40200	40210	40220	40230	40240	40250	40260	40270	40280	40290	40300	40310	40320	40330	40340	40350	40360	40370	40380	40390	40400	40410	40420	40430	40440	40450	40460	40470	40480	40490	40500	40510	40520	40530	40540	40550	40560	40570	40580	40590	40600	40610	40620	40630	40640	40650	40660	40670	40680	40690	40700	40710	40720	40730	40740	40750	40760	40770	40780	40790	40800	40810	40820	40830	40840	40850	40860	40870	40880	40890	40900	40910	40920	40930	40940	40950	40960	40970	40980	40990	41000	41010	41020	41030	41040	41050	41060	41070	41080	41090	41100	41110	41120	41130	41140	41150
GROUND LEVEL	140.561	140.571	140.581	140.591	140.601	140.611	140.621	140.631	140.641	140.651	140.661	140.671	140.681	140.691	140.701	140.711	140.721	140.731	140.741	140.751	140.761	140.771	140.781	140.791	140.801	140.811	140.821	140.831	140.841	140.851	140.861	140.871	140.881	140.891	140.901	140.911	140.921	140.931	140.941	140.951	140.961	140.971	140.981	140.991	141.001	141.011	141.021	141.031	141.041	141.051	141.061	141.071	141.081	141.091	141.101	141.111	141.121	141.131	141.141	141.151	141.161	141.171	141.181	141.191	141.201	141.211	141.221	141.231	141.241	141.251	141.261	141.271	141.281	141.291	141.301	141.311	141.321	141.331	141.341	141.351	141.361	141.371	141.381	141.391	141.401	141.411	141.421	141.431	141.441	141.451	141.461	141.471	141.481	141.491	141.501						
FINISHED ROAD LEVEL	140.561	140.571	140.581	140.591	140.601	140.611	140.621	140.631	140.641	140.651	140.661	140.671	140.681	140.691	140.701	140.711	140.721	140.731	140.741	140.751	140.761	140.771	140.781	140.791	140.801	140.811	140.821	140.831	140.841	140.851	140.861	140.871	140.881	140.891	140.901	140.911	140.921	140.931	140.941	140.951	140.961	140.971	140.981	140.991	141.001	141.011	141.021	141.031	141.041	141.051	141.061	141.071	141.081	141.091	141.101	141.111	141.121	141.131	141.141	141.151	141.161	141.171	141.181	141.191	141.201	141.211	141.221	141.231	141.241	141.251	141.261	141.271	141.281	141.291	141.301	141.311	141.321	141.331	141.341	141.351	141.361	141.371	141.381	141.391	141.401	141.411	141.421	141.431	141.441	141.451	141.461	141.471	141.481	141.491	141.501						
EXISTING GROUND LEVEL	140.561	140.571	140.581	140.591	140.601	140.611	140.621	140.631	140.641	140.651	140.661	140.671	140.681	140.691	140.701	140.711	140.721	140.731	140.741	140.751	140.761	140.771	140.781	140.791	140.801	140.811	140.821	140.831	140.841	140.851	140.861	140.871	140.881	140.891	140.901	140.911	140.921	140.931	140.941	140.951	140.961	140.971	140.981	140.991	141.001	141.011	141.021	141.031	141.041	141.051	141.061	141.071	141.081	141.091	141.101	141.111	141.121	141.131	141.141	141.151	141.161	141.171	141.181	141.191	141.201	141.211	141.221	141.231	141.241	141.251	141.261	141.271	141.281	141.291	141.301	141.311	141.321	141.331	141.341	141.351	141.361	141.371	141.381	141.391	141.401	141.411	141.421	141.431	141.441	141.451	141.461	141.471	141.481	141.491	141.501						

CLIENT:

NADCL

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

EPC CONTRACTOR

KAMAC ENGINEERS

KAMAC ENGINEERS PVT. LTD.

2ND FLOOR, MATIGARA 734010

AUTHORITY'S ENGINEER

ALMONDZ GLOBAL CONSULTANT LIMITED (N JV) AYOL PZ CONSULTANT PRIVATE LIMITED

C/O JAYANTA SARKAR, 69B JAMUN NARAYAN, BORBIL NO. 2, DIGBOI, TINSUKIA, ASSAM-786171

PROOF CONSULTANT

CES

CREATIVE ENGINEERING SERVICES

OFFICE NO. 620, SIGNATURE GLOBAL MALL, SECTOR-3, VAISHALI, GHAZIABAD, U.P-201010

SAFETY CONSULTANT:

SAFETY AUDITOR

(As per A Design Agreement)

DESIGN AID

PLOT NO. 55, 1ST FLOOR, FRONT, MASOODPUR DAIRY FARM, VASANT KUNJ, NEW DELHI-110070.

DESIGN CONSULTANT:

A.V. CONSTRUCTION

1st Floor, WZ-1240, Palam Extension, Bosco Ashram Wasti Gali, New Delhi 110045

Winst Infra Solution Pvt. Ltd.

OFFICE: F-8, ISHAAN CORPORATE TOWER, PLOT NO-C-23 SECTOR-13, VASUNDHRA GHAZIABAD, U.P-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Golei Gori) to km 47+652 (Ledo) on Dibrugarh to Ledo section with proposed Margherita & Ledo Bypass (Brownfield and Green Field) (G-Lane-PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package-5)

DRAWING TITLE: PLAN & PROFILE

DETAILS: AT CHN-40+150 TO 41+150

Date	JAN 2024	Drw.	P.K.	Deg.	R.K.	Chk.	A.H.	App.	A.H.	Scale:	Drawing Status:
Project No.		Drawing No.									

Sheet No. 14/21 Rev. R1



TO DIGBOI

TO LEDO

HP NO. 24 AT CH = 41420.88	
X = 770003.887	Y = 3022901.517
R (m)	2000
Δ (deg)	3.5385
Lc (m)	123.52
Δs (m)	61.78
Δs (deg)	3.5385
Δs (m)	5.954
Design Speed (V)	100 km/h

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)

HP NO. 25 AT CH = 42023.892	
X = 770595.685	Y = 3023024.117
R (m)	800
Δ (deg)	15.1764
Lc (m)	211.9
Δs (m)	152.08
Δs (deg)	18.3993
Δs (m)	10.536
Design Speed (V)	80 km/h

DESCRIPTION	PROPOSED
DESIGN CHN	42+000
CA CHN	42+000
STR TYPE	BOX
SPAN DIA	1X7.00m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	42+100
CA CHN	42+000
STR TYPE	BOX
SPAN DIA	1X7.00m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	41+400
CA CHN	41+470
STR TYPE	BOX
SPAN DIA	1X6.00m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	42+000
CA CHN	42+000
STR TYPE	BOX
SPAN DIA	1X7.00m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	42+100
CA CHN	42+000
STR TYPE	BOX
SPAN DIA	1X7.00m
PROPOSAL	NEW 2 LANE

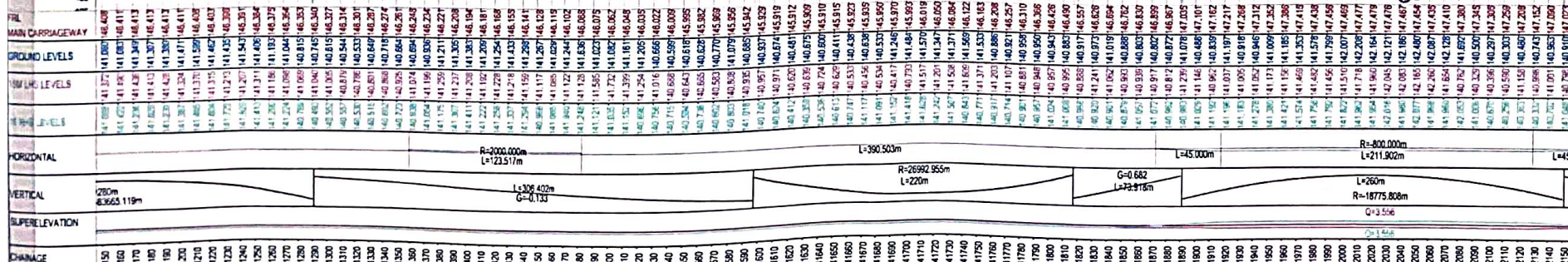
DESCRIPTION	PROPOSED
DESIGN CHN	41+400
CA CHN	41+470
STR TYPE	BOX
SPAN DIA	1X6.00m
PROPOSAL	NEW 2 LANE

FINISHED ROAD LEVEL
EXISTING/ GROUND LEVEL

Change: 1187.08m
Level: 145.53m

Change: 1187.08m
Level: 145.53m

GOOD FOR CONSTRUCTION



CLIENT: NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

EPCC CONTRACTOR: KAMAC ENGINEERS (P) LTD.

AUTHORITY ENGINEER: ALMONDZ GLOBAL INFRASTRUCTURE CONSULTANTS PRIVATE LIMITED.

PROOF CONSULTANT: CREATIVE ENGINEERING SERVICES.

SAFETY AUDITOR: SAFETY AUDITOR (As per Article 10.1 of EPC Agreement).

DESIGN CONSULTANT: A.V. CONSTRUCTION.

DATE: JAN 2024

DRAWING NO: AV/111-38/1/PW/P&P

SCALE: 1:1000

DRAWING STATUS: R1

TO DIGBOI

TO LEDO

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)



42250

DESCRIPTION	PROPOSED
DESIGN CHN	42+378
CA CHN	42+380
STR TYPE	BOX
SPAN DIA	12000
PROPOSAL	NEW 2 LANE

42350

42450

42550

42650

42750

42850

42950

43050

43150

DESCRIPTION	PROPOSED
DESIGN CHN	42+454
CA CHN	42+425
STR TYPE	BOX
SPAN DIA	12000
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	42+433
CA CHN	42+432
STR TYPE	SWP
SPAN DIA	12000
PROPOSAL	NEW 2 LANE SWP

DESCRIPTION	PROPOSED
DESIGN CHN	42+970
CA CHN	43+000
STR TYPE	BOX
SPAN DIA	12000
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	42+378
CA CHN	42+380
STR TYPE	BOX
SPAN DIA	12000
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	42+434
CA CHN	42+432
STR TYPE	BOX
SPAN DIA	12000
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	42+433
CA CHN	42+432
STR TYPE	SWP
SPAN DIA	12000
PROPOSAL	NEW 2 LANE SWP

DESCRIPTION	PROPOSED
DESIGN CHN	42+970
CA CHN	43+000
STR TYPE	BOX
SPAN DIA	12000
PROPOSAL	NEW 2 LANE

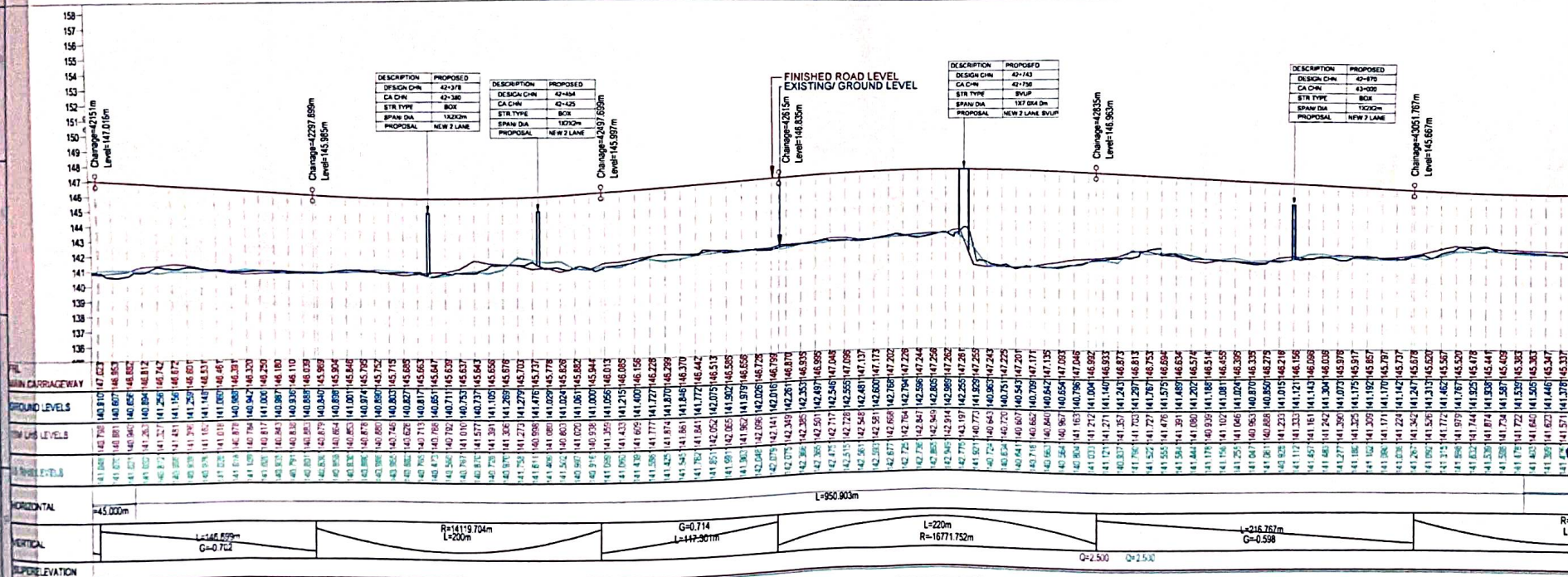
FINISHED ROAD LEVEL
EXISTING/ GROUND LEVEL

Change=428.5m

Level=146.93m

Change=435.76m

Level=145.60m



GOOD FOR CONSTRUCTION

NADCL
NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

KAMAC
ENGINEERING & CONSTRUCTION
PVT. LTD.
MATIGARA 734010

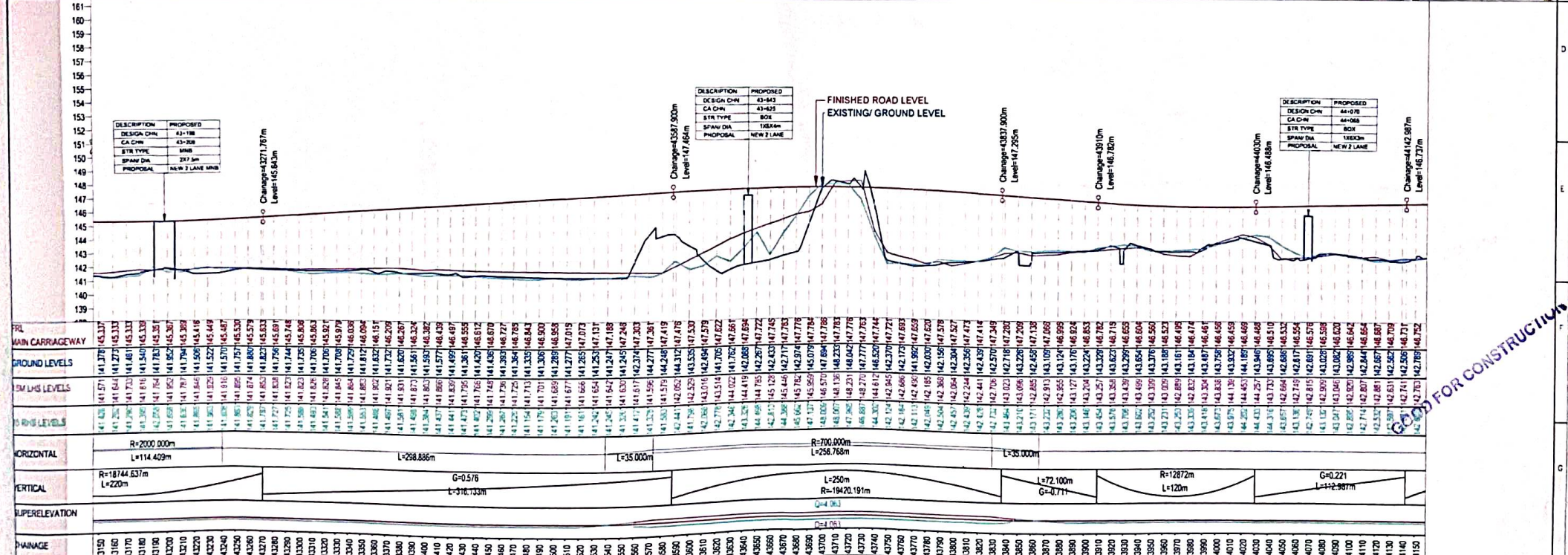
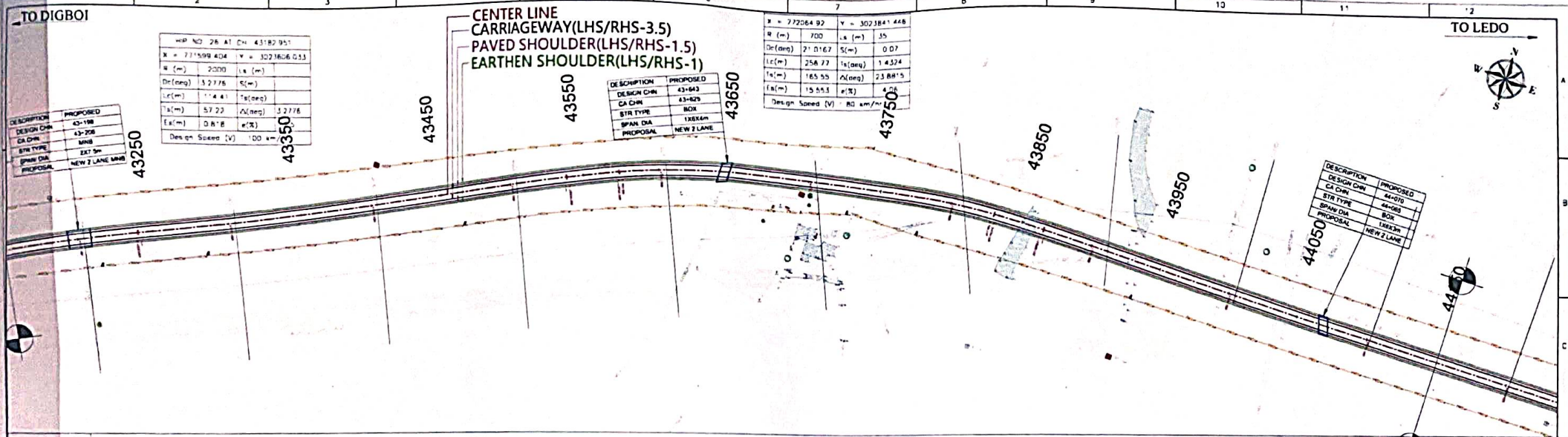
ALMONDZ GLOBAL INFRA CONSULTANT
LIMITED IN INDIA
CONSULTANTS LIMITED.
C/O JAYANTA SARKAR, SARBANAN
NAMGHAR, BORBIL NO.2, DIGBOI,
TINSUKIA, ASSAM-786071

PROOF CONSULTANT:
CREATIVE ENGINEERING SERVICES
OFFICE NO. 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHIAZIABAD, U.P-201010

SAFETY AUDITOR
(As per A.I.E. Agreement)
DESIGN AID
PLOT NO. 34, 3RD FLOOR (FRONT),
MASOODPUR DAIRY FARM, VASANT KUNJ,
NEW DELHI-110070,

DESIGN CONSULTANT:
A.V. CONSTRUCTION
1st Floor, WZ-1240,
Palam Extension, Bosco
Ashram Wali Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE: F-8, ISHAAN CORPORATE
TOWER, PLOT NO-C-23 SECTOR-13,
VASUNDHRA GHAZIABAD, U.P-201012

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km
27+150 (Gola Gola) to km 47+682 (Ledo) on Digboi to Ledo section
with proposed Margherita & Ledo Bypass (Broomfield and Green Field)
(2-Lane+PS) of NH-38 in Tinsukia District in the State of Assam on EPC
mode (Package-5)
DRAWING TITLE: PLAN & PROFILE
DETAILS: AT CHN: 42+150 TO 43+150
Date: JAN. 2024
Project No:
Drw. P.K.
Ung. R.K.
Chk. S.P.
App. A.B.
Scale:
Drawing No:
Sheet No: 16/21
Rev: R1
AV/NIH-38/11W/P&P



CLIENT:

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

EPC CONTRACTOR:

KAMAC ENGINEERS & CONSULTANTS PVT. LTD.

AUTHORITY'S ENGINEER:

ALMONDZ GLOBAL INFRA CONSULTANTS LIMITED

PROOF CONSULTANT:

CREATIVE ENGINEERING SERVICES

SAFETY AUDITOR:

SAFETY AUDITOR (As per MoU & Agreement)

DESIGN CONSULTANT:

A.V. CONSTRUCTION

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Gola Goan) to km 47+682 (Lado) on Dibrugarh to Lado section with proposed Margherita & Lado Bypass (Brownfield and Green Field) (2-Lane-PS) of NH-38 in Tinsukia District in the State of Assam on EPC mode (Package-5)

DRAWING TITLE:- PLAN & PROFILE

DETAILS:- AT CHN:-43+150 TO 44+150

Date	Drw. P.K.	Dwg. R.K.	Chk. S.P.	App. A.B.	Scale.	Drawing Status.
JAN-2024						
Project No.						

Sheet No. 17/21 Rev R1

TO DIGBOI

TO LEDO

CENTER LINE
CARRIAGEWAY(LHS/RHS-3.5)
PAVED SHOULDER(LHS/RHS-1.5)
EARTHEN SHOULDER(LHS/RHS-1)

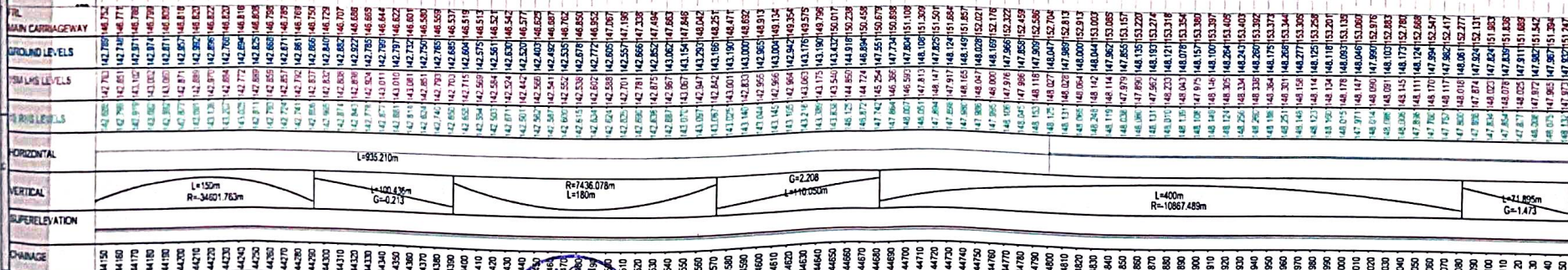
DESCRIPTION	PROPOSED
DESIGN CHN	44-526
CA CHN	44-515
STR TYPE	BOX
SPAN DIA	10.84m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	44-868
CA CHN	44-880
STR TYPE	BVUP
SPAN DIA	1X7.0X4.0m
PROPOSAL	NEW 2 LANE BVUP

DESCRIPTION	PROPOSED
DESIGN CHN	44-888
CA CHN	44-880
STR TYPE	BVUP
SPAN DIA	1X7.0X4.0m
PROPOSAL	NEW 2 LANE BVUP

DESCRIPTION	PROPOSED
DESIGN CHN	44-526
CA CHN	44-515
STR TYPE	BOX
SPAN DIA	10.84m
PROPOSAL	NEW 2 LANE

GOOD FOR CONSTRUCTION



CLIENT:

EPC CONTRACTOR

AUTHORITY'S ENGINEER

PROOF CONSULTANT

SAFETY CONSULTANT

DESIGN CONSULTANT

PROJECT

Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Gola Gola) to km 47+682 (Ledo) on Digboi to Ledo section with proposed Margherita & Ledo Bypass (Brownfield and Green Field) (2-Lane+PS) of NH-36 in Tinsukia District in the State of Assam on EPC mode (Package-5)

DRAWING TITLE:- PLAN & PROFILE

DETAILS:- AT CHN-44+150 TO 45+150

Date	Drawn	Checked	Appr.	Scale	Drawing Status
JAN.2024	P.K.	R.K.	S.P.	A/B	
Project No.	Drawing No.	Sheet No.	Rev.		
		AV/Nil-38/1W/P&P	18/21		RI

NADCL
NATIONAL HIGHWAYS &
INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

KAMAC
KAMAC ENGINEERS PVT. LTD.
F0201, CITY CENTER CHALAN,
BLOCK, 2ND FLOOR,
MATIGARA 734010

ALMONDZ GLOBAL INFRA CONSULTANT
LIMITED, 8/A, WARDHA NOLLEZA
CONSULTANT PRIVATE LIMITED,
(P&S-3,4,5)
C/O JAYANTA SAIKIA, SARBODHANIN
NAMCHAR, BORBIL NO 2, DIGBOI,
TINSUKIA, ASSAM 786171

CREATIVE ENGINEERING SERVICES
OFFICE NO 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P-201010

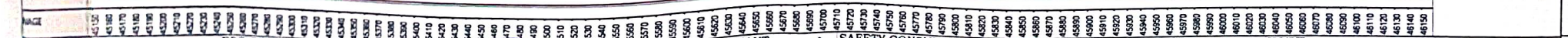
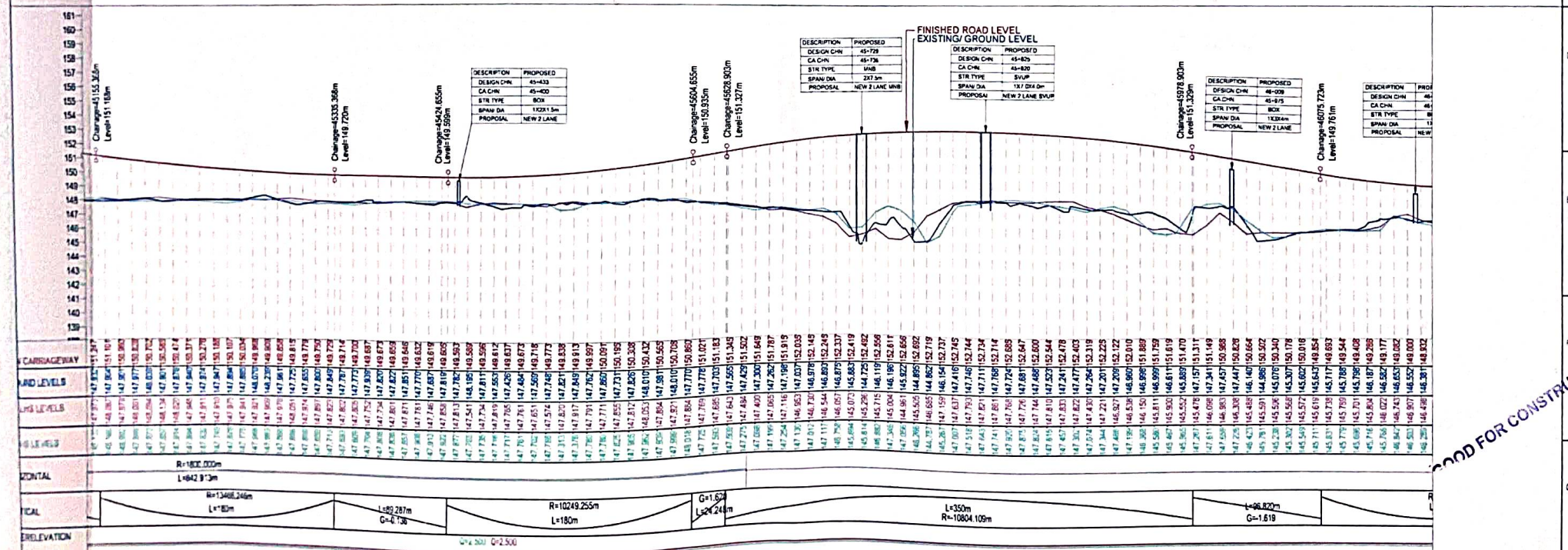
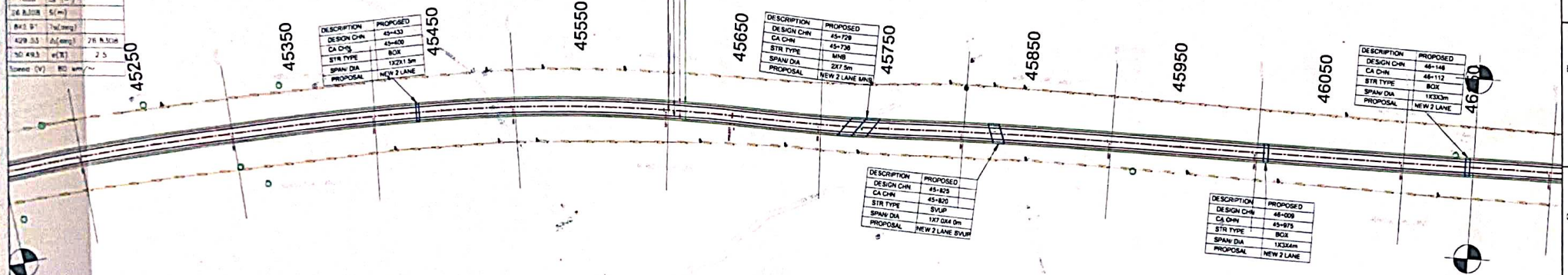
DESIGN AND SAFETY AUDITOR
PLOT NO 54, 3rd FLOOR(FRONT),
MASOODPUR DAIRY FARM,VASANT KUNJ,
NEW DELHI-110070,

A.V. CONSTRUCTION
1st Floor, WZ-1240
Palam Extension, Bosco
Ashram Wali Gali, New
Delhi 110045
Winst Infra Solution
Pvt. Ltd.
OFFICE F-6, USMAN CORPORATE
TOWER, PLOT NO-C-23 SECTOR-13,
VASUKHRA CHANDABAD, U.P-201012

TO DIGBOI

TO LEDO

Q. 28.47 CH 45222.476
362.99 * W 508.1920.019
1.8300
24.8.308 5(m)
84.12 91 74(mg)
429.33 26(mg) 78.8.308
NO.493 4(m) 2.5
Speed (V) 80 km/h



CONTRACTOR
NATIONAL HIGHWAYS & RASTRUCTURE DEVELOPMENT CORPORATION LTD.

ENGINEER
KAMAC ENGINEERS PVT. LTD.
KAMAC ENGINEERS PVT. LTD.
FOR CHIEF ENGINEER OFFICE
BLOCK, 2ND FLOOR
MATIGARA 734010

PROOF CONSULTANT
ALMONDZ GLOBAL INFRA CONSULTANT
LIMITED IS AN INDIAN PRIVATE LIMITED.
Q. JAYANTA SARKA, SARBAJANIN
NANGHAR, BORAIL NO. 2, DIGBOI,
TINSUKIA, ASSAM-786171

DESIGN CONSULTANT
CREATIVE ENGINEERING SERVICES
OFFICE NO. 620, SIGNATURE GLOBAL
MALL, SECTOR-3,
VAISHALI, GHAZIABAD, U.P-201010

SAFETY CONSULTANT
SAFETY CONSULTANT
(As per Article 10.1 of EPC Agreement)

AUDITOR
A.V. CONSTRUCTION
1st Floor, WZ-1240
Palam Extension, Bosco
Ashram Wali Gali, New
Delhi 110045

DESIGN CONSULTANT
Winst Infra Solution
Pvt. Ltd.
OFFICE - F-8 SHAMU CORPORATE
TOWER, PLOT NO-C-23 SECTOR-13,
VASUKI PHASE-2, GHAZIABAD, U.P-201012

PROJECT
Widening/Improvement to 2-Lane Lane with Paved Shoulder from km
27+150 (Gola Goan) to km 47+682 (Ledo) on Digboi to Ledo section
with proposed Margherita & Ledo Bypass (Brownfield and Green Field)
(2-Lane+PS) of NH-35 in Tinsukia District in the State of Assam on EPC
mode (Package-5)

DRAWING TITLE
PLAN & PROFILE

DETAILS
AT CHN: 45+150 TO 46+150

Date
JAN. 2024

Drawn
P.K.

Checked
D.R.K.

Appr.
S.P.

Scale
A.B.

Drawing Status
A.B.

Project No.
Drawing No.

Sheet No.
19/21

Rev
R1

DESCRIPTION	PROPOSED
DESIGN CHN	48-956
CACN	48-957
STR TYPE	MNB
SPAN/ DIA	1X10 Om
PROPOSAL	NEW 2 LANE MNB

DESCRIPTION	PROPOSED
DESIGN CHN	48+858
CA CHN	48+957
STR TYPE	MBG
SPAN DIA	1X16 Dm
PROPOSAL	NEW 2 LANE MBG

DESCRIPTION	PROPOSED
DESIGN CHN	48+858
CA CHN	48+957
STR TYPE	MBG
SPAN DIA	1X16 Dm
PROPOSAL	NEW 2 LANE MBG

DESCRIPTION	PROF
DESIGN CHN	41
CA CHN	4
STR TYPE	
SPAN/DIA	
PROPOSAL	

α	
R (m)	
D (deg)	
L_c (m)	
i_s (m)	
E_s (m)	
Design	



PROJECT:	Welding/Improvement to 2-Lane Freeway with Paved Shoulder from km 27+150 (Lado) to km 47+882 (Lado) on Oshana to Lado section with proposed Margherite & Lado Bypass (Brownfield and Green Field) (2-Lane+PS) in Km 34 in Tuluks District (The State of Assam on EPC mode (Package-5)						
DRAWING TITLE:	PLAN & PROFILE						
DETAILS:	AT CHN:-46+150 to 47+150						
Date	Draw.	Desig.	Chk.	App.	Scale.	Drawing Status	
Jan 2024							

TIGBOI

- CENTER LINE
- CARRIAGEWAY(LHS/RHS-3.5)
- PAVED SHOULDER(LHS/RHS-1.5)
- EARTHEN SHOULDER(LHS/RHS-1)



47550

47650

47810

DESCRIPTION	PROPOSED
DESIGN CHN	47-268
CA CHN	47-267
STR TYPE	SVLP
BRAN/DIA	1X70m
PROPOSAL	NEW CONS

47250

DESCRIPTION	PROPOSED
DESIGN CHN	47+487
CA CHN	47+315
STR TYPE	BOX
SPAN DIA	1X53cm
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	47-864
CA CHN	47-830
STR TYPE	BOX
SPAN DIA	1X2X2m
PROPOSAL	NEW 2 LANE

mP NO 78 A' C= 4752763	
x = 775555 872	y = 552300
W (m)	500
LS (m)	55
Do (deg)	57.9152
Lo (m)	505 Ad
Is (m)	341.48
Do (deg)	64
Fs (m)	80.599
m (%)	5
Design Speed (V) : 40 km/hr	

DESCRIPTION	PROPOSED
DESIGN CHN	47-208
CR CHN	47-300
STR TYPE	BOX
SPAN/DIA	1X20m
PROPOSAL	NEW CONS

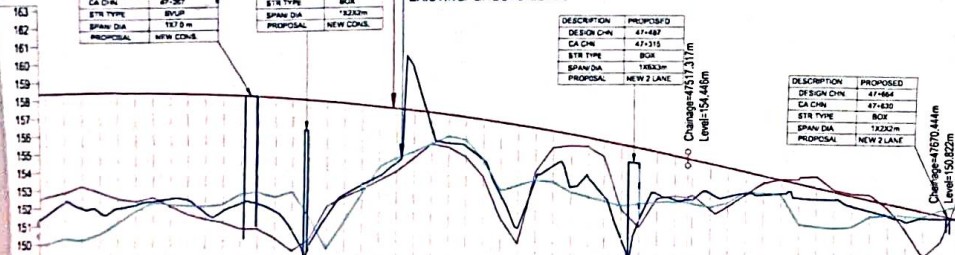
DESCRIPTION	PROPOSED
DESIGN CHN	47-288
CA CHN	67-267
STR TYPE	BYUP
SPAN DIA	187.0 m
PROPOSAL	NEW CONS.

DESCRIPTION	PROPOSED
DESIGN CH	67-298
CA CH	67-300
STN TYPE	BOX
SPAN DIA	12.32m
PROPOSAL	NEW CONCL

FINISHED ROAD LEVEL
EXISTING/ GROUND LEVEL

DESCRIPTION	PROPOSED
DESIGN CHN	47+487
CA CHN	47+315
BTR TYPE	BGR
SPAN/DA	1KBC3m
PROPOSAL	NEW 2 LANE

DESCRIPTION	PROPOSED
DESIGN CHN	47-664
CA CHN	47-630
STR TYPE	BOX
SPAN DIA	1X202m
PROPOSAL	NEW 2 LANE

[illegible]

GOOD FOR CONSTRUCTION

CLIENT:


NIDEL
NATIONAL INFRASTRUCTURE DEVELOPMENT
CORPORATION LTD.

EPC CONTRACTOR
 **KAMAC** PVT. Ltd.
 KAMAC ENGINEERS PVT. LTD.
 KAMAC ENGINEERS PVT. LTD.
 4001, CITY CENTER OFFICE
 MATIGARA 734010
 Authorized Signatory

ALMONDZ GLOBAL TRADING CONSULTANT
LIMITED IN WILAYATUL AJLALAH
CONSULTANT PRIVATE LIMITED.

PROOF CONSULTANT:

CREATIVE ENGINEERING SERVICES
OFFICE NO. 620, SIGNATURE GLOBAL
MALL, SECTOR-3,

SAFETY CONSULTANT:
SAFETY AUDITOR
(As per **DESIGN** Agreement)
DESIGN AID
PLOT NO.54, 3RD FLOOR(FRONT)
MASOODPUR DAIRY FARM,VASANT KUNJ,
NEW DELHI 110072

DESIGN CONSULTANT:

A.V. CONSTRUCTION
1st Floor, WZ-1240
Palam Extension, Posco
Ashram Wali Gali, New
Delhi 110045

Winst Infra Solution
Pvt. Ltd.
OFFICE F-4 ISHAAN CORPORATE

PROJECT: Widening/Improvement to 2-Lane Lane with Paved Shoulder from km 27+150 (Kuala Gombak) to km 47+682 (Lado) on Dinurgam to Lado section with proposed Margherita & Ledge Bypass (Brownfield and Green Field) (2-Lane+PS) of NH-38 in Tinukus District in the State of Assam on EPC mode (Package-5)									
DRAWING TITLE:- PLAN & PROFILE									
DETAILS: AT CHN - 47+150 TO 47+680									
Date	Drw.	Dwg.	Chk.	App.	Scale.	Drawing Status			
Jan 24	P K	R K	S P	A B					
Project No.	Drawing No.					Sheet No.	Rev.		