सत्यमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)

NATIONAL HIGHWAYS AUTHORITY OF INDIA

(Ministry of Road Transport and Highways, Govt. of India)

क्षेत्रीय कार्यालय / REGIONAL OFFICE

ई-6/47, स्मृति परिसर, सांईबोर्ड के पास, अरेरा कॉलोनी, भोपाल (म.प्र.)-462016

E-6/47, Smriti Parisar, Near Sai Board, Arera Colony, Bhopal (M.P.)-462016

दूरभाष/Phone: 0755-2426638, फैक्स/Fax: 0755-2426698, ई-मेल/E-mail ID: robhopal@nhai.org

NHAI/RO-MP/PIU-Katni/Rewa-Sidhi/NH39/Geology & Mining/2024/52563 20.12.2024

Invitation of Public Comments

Sub: Request for proposal for permission for installation of I-Check Gate AI Based system to curb illegal transportation of minerals- reg.

Ref: PD, PIU Katni e-file no. 267595.

1. PD, PIU Katni, NHAI vide e-file no. 267595 has submitted the proposal for installation of I-checkgate at the section of NH-39 from existing km 2.800 to km 33.200 and km 55.400 to 83.400 to NH-75 E (New NH-39) (Rewa Sidhi Section) in the State of MP".

2. As per Ministry vide OM No. RW/NH-33044 S&R (R) dated 22.11.2016, the application shall be put out in public domain for 30 days for seeking claims and objections (on ground of public inconvenience, safety and general public interest).

3. Accordingly, the public comments are hereby invited on the above proposal (copy of application enclosed) for seeking claims and objections within 30 days (i.e. by **19.01.2025**) on public portal {i.e. website of MoRTH (www.morth.nic.in)} beyond which no comments will be considered. The address of comments inviting authority is as under:

The Highway Administrator
O/o Regional Officer,
National Highways Authority of India
E-6/47, Smriti Parisar, Near Sai Board
Arera Colony, Bhopal (MP) - 462016
E-mail ID: robhopal@nhai.org

4. This is being issued with the approval of Regional Officer cum Highway Administration.

(Ramvilas Patel)
Manager (T)
RO - Bhopal

Copy to:

(i) Web Admin, NHAI-HQ-with request for uploading on the NHAI website.
(ii) The Senior Technical Director, NIC, Transport Bhawan, New Delhi-110001 for uploading on Ministry's Website.
(iii) The Project Director, NHAI, PIU- Katni (M.P.) for information.
(iv) Directorate of Geology & Mining, Bhopal (MP) (Email: dirgeomn@nic.in).

Siddhi Katha Kathar

SURVEY REPORT

AI-Based Smart Enforcement System to Curb Illegal Transportation of Minerals

The survey covered various aspects, including structural integrity, equipment functionality, safety measures, and Soil bearing capacity. Through on-site inspections, interviews with relevant stakeholders, and the examination of technical specifications, the report provides a detailed overview of the surveyed areas.

Site Name	KoshthaKothar, Sidhi		
Address/Location	KoshthaKothar, NH 39 Sidhi Madhya Pradesh		
District	Sidhi	**Tehsil**	KoshthaKothar
Site Visit Date	28-02-2024	**Survey Number**	04
Latitude	24.416283	**Longitude**	81.619961
Lane Type	4 Lane	**Nearby Outpost/Toll Plaza**	Koshtha Police Station and Sonawarsa Toll
Internet Connectivity	Yes	**Electricity Connectivity**	Need Permission from Govt. Officer
Temperature Condition	24 °c	**Dust Condition**	Normal
Wind Condition	11KM/H	**Rain Condition**	60% humidity

Survey Point

Sr. No.	Particular
#1	NH_39_4 Lane
#2	Normal Vehicle Traffic
#3	Average Speed 50-60KM/H
#4	13 Meter

Attachment/Photo

Photo 1

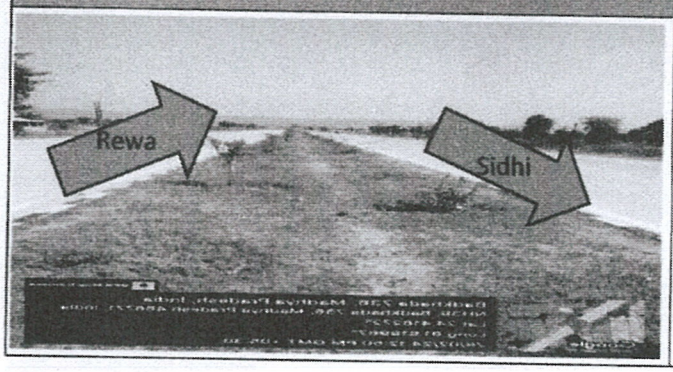
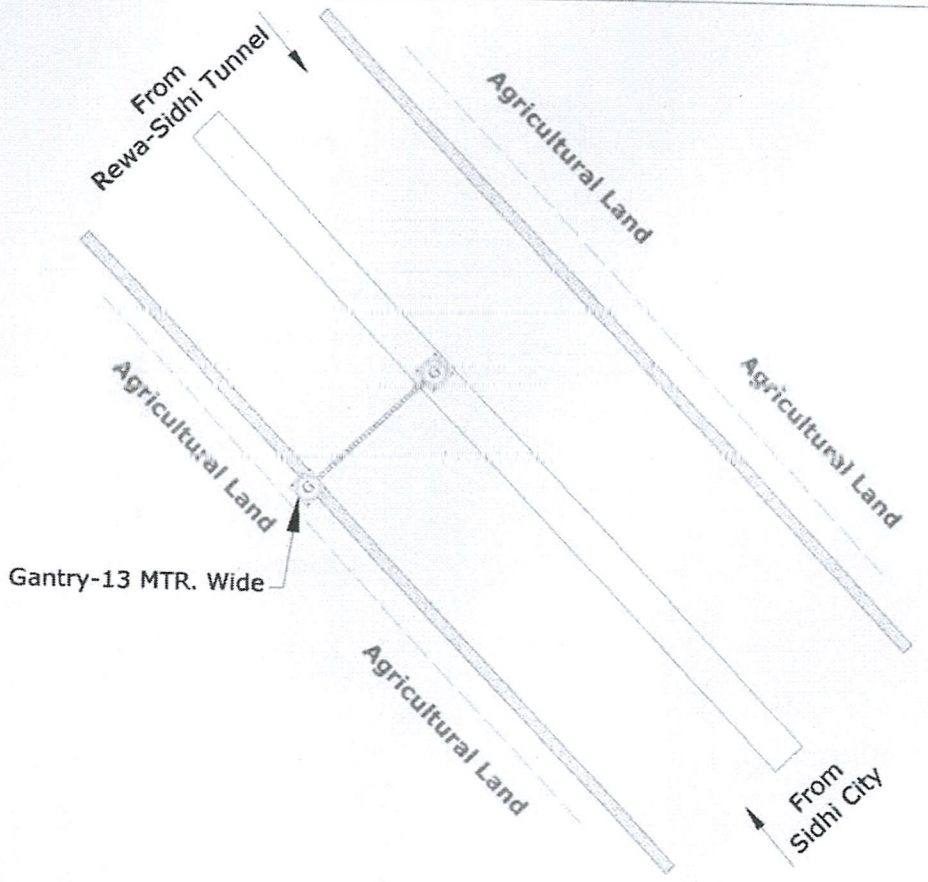
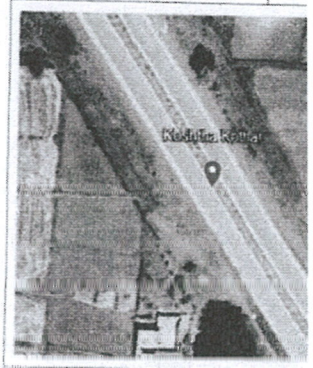


Photo 2

Dist.- Sidhi	Tehsil-Churhat	Junction Name- Koshtha Kothar.



LAT LONG:24.4165,81.63206



LEGEND	ITEM	QT
	ANPR CAMERA	
	[illegible]	
	PTZ CAMERA	
	JUNCTION BOX	
	SWITCH	
	STABILIZER	
	STRAIGHT POLE	
	GANTRY	
	EARTHING	
	CAT-6 CABLE	
	POWER CABLE	
	RFID READER	
	LPU	
	NVR	
	SOLAR PANEL & BATTERIES	

MSI: RAILTEL CORPORATION INDIA LIMITED

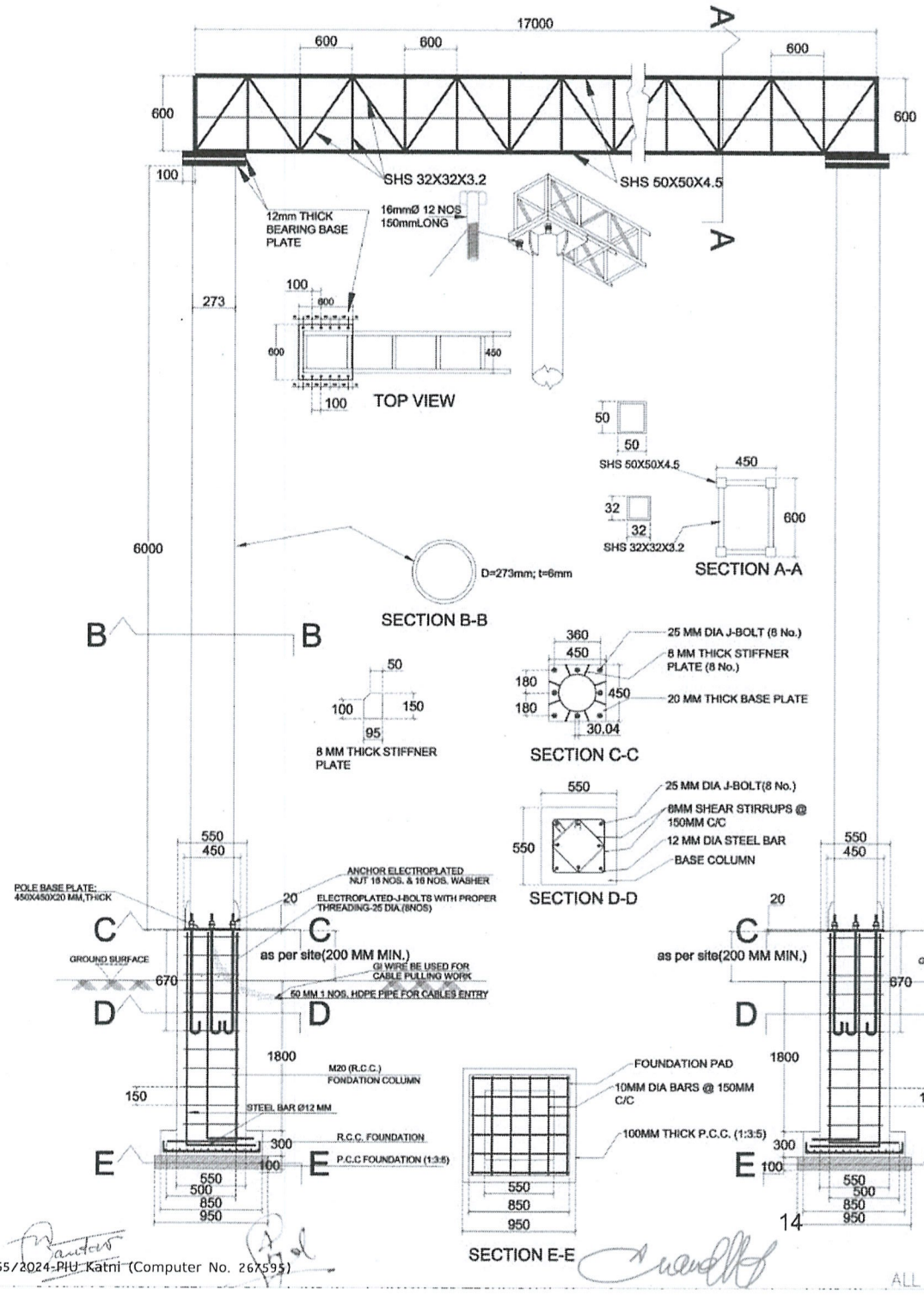
PROJECT:

TITLE: JUNCTION LAYOUT

Sheet size: A3

DRAWING NO.:

कार्यालय प्रमुख
संचालनालय भौमिकी तथा खनिकर्म
मध्यप्रदेश, भोपाल



ALL DIMENSIONS IN MM.

NOTES :

- ALL DIMENSIONS ARE IN M.M. WRITTEN DIMENSION SHOULD ONLY BE FOLLOWED.
- ALL WORKS SHALL BE CARRIED OUT AS PER IS 800-2013.
- FILLET WELD HAVING THROAT THICKNESS 6MM SHALL BE USED.
- PIPE IN THE DRAWING FOR SIZE OF PIPES INDICATE INTERNAL NOMINAL BORE) DIAMETER FOR LIGHT, MEDIUM AND HEAVY SECTIONS.
- STEEL TUBES FOR STRUCTURAL PURPOSES SHALL BE USED AS PER IS-1161:1998
- HAVING AXIAL STRESS IN TENSION SHALL BE USED.
- THROAT THICKNESS OF FILLET WELD SHALL BE 5 MM.
- ALL PIPE SHALL BE CONNECTED DIRECTLY BY WELDING WITHOUT USING GUSSET PLATE.
- J-HOOKS SHALL BE FITTED SNUGLY LEST THE COVERING SHEETS BLOWN OF DURING STORM
- CLEAR COVER OF FOUNDATION SHOULD BE 50MM AND GRADE SHOULD BE M20 AND Fe500 AS PER IS 456.
- WIND LOAD IS CALCULATED AS PER IS 875 PART 3:1987. BASIC WIND SPEED IS TAKEN AS 150 KMPH
- STEEL STRUCTURE IS DESIGNED AS PER IS 800:2007.
- THE GRADE OF STEEL FOR ALL THE SECTIONS SHALL BE YSt 250.
- SOIL BEARING CAPACITY IS TAKEN AS 100 KN/MSQ AS PER SOIL REPORT.
- POLES & GANTRY SHOULD BE HOT DIP GALVANIZED WITH 86 MICRON SILVER COATING AS PER IS: 2629
- POLE IS DESIGNED FOR 6 NOS TYPICAL CAMERA OF WEIGHT NOT MORE THAN 70 KG AND USED TO HANG SOLAR PANELS

CLIENT	RailTel Corporation India Limited
MANUFACTURE BY - SENSECURE INTEGRATED SOLUTIONS PVT. LTD.	
TITLE	Gantry Design for MP.
Drawing Prepared By:-	ER. LOMESH N TAUNK

20-Feb-24

ER. LOMESH NARENDRA TAUNK
M. Tech (Structure),
Chartered Engineer, BE (Civil)
Lic No.-SEO/0471/STR/037/2021
TNCP ER No.-11/20
Mob. - 9407844101

Engineer	Date
ER. LOMESH N TAUNK	20/02/2024

Drawing Approved By:-

Engineer	Signature	Date
MA		

DWG. NO.	Scale:-
GDA/GAT17/REV01	NTS

Check List - Sidhi - Churhat - Koshtha Kothar - Madhya Pradesh

Project - AI Based system to curb illegal transportation of Minerals

Sr No	Description	As per Site	Remarks
1	State Highway No	NH-39	
2	Crossing Name	Koshtha Kothar	
3	System of suppply (i.e. Volatage) frquesncy, no of phases wheather	2 kilo watts	
4	Position of Tower	Latitude-24.416283,Longitude-81.619961	
5	Normal / Basic Span of gantry	13 Mtr	
6	Maximum Sag at Normal Span of gantry	18 Mtr	2.5 Mtr both side will be spared from the shoulder of the road. (As per MORTH Norms)
7	Crossing Span of gantry	Single Side of Road	
8	Preceding Span with LOC	Single Side of Road	
9	Successing Span With LOC	Single Side of Road	
10	Height of structure above ground and Below Ground Separately	Above=7mtr & Below=2.30 mtr	both sides of gantry structure
11	gantry height & weidth	height= 6.5 mtr & weidth=18 mtr	
12	Clearance Over Road	7.0 mtr	
13	Hegiht of lower base / founduation of gantry	2.65 mtr	
14	Height / Difference of Lower foundation from level of NH at LOC	2.65 mtr	
15	Angle of Road crossing	90 degree	with respect to ground
16	Distance from NH Boundry from center of tower/ gantry	500 mtr	Location comes under NHAI juridiction
17	Perndicular distance from center of Tower to Center of Road	6.5 mtr	
18	Protection of gantry	GI with 86 micron	
19	Foundation Type	square foundation with M-25 grade	
20	No of Stay required	NA	
21	Minimum factor of Safety	2	
22	Two legs of Toweer earthend	Yes as per specification	
23	Plain paper digram	profile enclosed	
24	Earthing	Pipe Type	
25	Praposal to lay underground electrical cable/OFC/Water-Pipeline	Yes as per specification	
25A	Left side from central line towards increasing chainage/km direction.	NA	
25B	Right side from centre line towards increasing chainage/km direction	NA	
26	Proposal to aquire Land		
26A	Left side from centre Line	9 Mtr	Includes 2.5 meters from shoulder of road as spare
26B	Right side from centre line	9 Mtr	Includes 2.5 meters from shoulder of road as spare
27	Whether proposal is in the same side where land is not to be acquired	Yes as per specification	
27 A	if not then where to lay the cable	NA	
28	Details of already laid services, if any, along with the proposed route	NA	
29	Number of Existing Lanes (2/4/6/8 Lanes)	4 Lane	
30	Proposed number of Lanes (2 Lanes with paved shoulders/4/6/8 lanes)	NA	
31	Service road existing or not	NA	
	if yes then which side	NA	
31A	Left side from centre line	NA	
31B	Right side of centre line	NA	
32	Proposed service road	NA	
32A	Left side from centre line	NA	
32B	Right side of centre line	NA	
33	Whether proposal to lay water pipeline is after the service roador between the service road or main carriageway	NA	

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34	Whether carrying of sewage / water pipeline has been proposed on highway bridges, if yes then mention the methodology proposed for same	NA	
35	Whether carrying of sewage / water pipeline has been proposed on the parapet/any part of the bridges, if yes then mention the methodology proposed for the same	NA	
36	if crossing of the road involved	Yes	
37	if yes it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expenses of the agency owning the line	Yes as per specification	
38	whether exisiting drainage structure are allowed to carry sewage / water pipeline	NA	
39	is it on a line Normal to NH	Yes	
40	What is the distance of crossing the sewage /water pipeline from the existing structures, shall not be too near the existing structure on the national highway, the minimum distance being 15 meters.	NA	
41	the casing pipe (or conduit pipe in the case of electric / OFC cable) carrying the utility line shall be of steel. Cast iron or reinforced cement concerete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable, Mention type of casing	Yes	
42	Ends of the casing conduit pipe shall be sealed from the outside so that it does not act as a drainage path	Yes	
43	the casing/conduit pipe should be at least 1.2 meter below the surface of the road subject to being atleast 0.3 meter below the drain inverts, Mention the proposed details	Yes as per specification	
44	Mention the methodology proposed for crossing of road for the proposed water pipeline crossing shall be by boring method (Trench less technology) especially where the existing road Pavement is of cement concerete or dense bituminous concerete type	NA	
45	The casing /conduit pipe shall be installed with an even bearing throughout its length and in such a manner as to prevent the formation of a waterway along it.	Yes	
46	Document / Drawing to be enclosed with the proposal	Yes , Enclosed	
47	gross section showing the size of trench for open trenching method (is it normal sizeof 1.2 m deep X0.3m wide	Yes	
48	Should not be greater than 60cm wider than the outer diameter of the pipe	Yes as per specification	
49	Located as close to the extreme edge of the right of way as possible but not less than 10meters from the centrelines of the nearest carriageway	Yes as per specification	
50	shall not be permitted to run along the national highways when the road formation is situated in double cutting nor shall these be laid over the existing culverts and bridges	NA	
51	These should be so laid that their top is atleast 0.6 meter below the ground level so as not to obstruct drainage of the road land	Yes as per specification	
52	Cross section showing the size of pit and location of cable for HDD method	Yes as per specification	
53	Strip plan / route plan showing water pipeline chainage width of ROW, distance of Proposed water pipeline with OFC from the edge of ROW inportant milestone intersection, cross drainage works etc	Yes as per enclosed Drawing	
54	Methodology for laying of water pipeline	NA	
55	open trenching method (may be allowed in utility corridor only where pavement is neither cement concerete nor dense bituminous concerete type if if yes what is the methodology of refilling of trench	NA	
56	The trench width should be at least 30cm but not more than 60cm wider than the outer diameter of the pipe	NA	

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भोपाल (म.प्र.)

57	for filling of the trench, bedding shall be to a depth of not less than 30cm it shall consist of granular material free of lumps, clods and cobbles and graded to yield a firm surfacewithout sudden change in the bearing value, unsuitable soil and rock edged should be excavated and replaced by selected material	NA	
58	the backfill shall be completed in two stages 1) side fill to the level of the top to the pipe and 2) overfill to the bottom of the road crust	Yes as per enclosed Drawing	
59	the side fill shall bconsist of granular material laid in 15cm layesrs each consolidated by mechanical tampering and controlled addition of moisture to 95% of the proctors density, over fill shall be compacted to the same density as the material thathad been removed, consolidation by saluration of pending will not be permitted	Yes as per enclosed Drawing	
60	The road crust shall be built to the same strength as the exisiting crust on either side of the trench, care shall be taken to avoid the formation of dip at the trench	Yes	
61	The excavation shall ve protected by flagman signs and baricades and red light during night hours	Yes as per specification	

Gautam

PD, Katni

कार्यालय प्रमुख
संचालनालय भौमिकी तथा खनिकर्म
भोपाल (म.प्र.)