



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(परियोजना कार्यान्वयन इकाई, पटना)
Project Implementation Unit, Patna



शिवपुरम कॉलोनी, हनुमान मंदिर के पास, सैनिक कॉलोनी रोड, गोला रोड, दानापुर, पटना - 801503
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No. NHAI/PIU-Patna/Ara-Patna-P2/Forest/2024/Vol-I/1023

Date: 20.05.2025

To,

The Divisional Forest Officer
 Bhojpur, Bihar

Sub: 4 Laning of Patna-Ara-Sasaram corridor Package2 section 1-Garhani at Ch. Km 73+700 Patar at Ch. Km 84+300 & section2- Greenfield from Sadisopur at Patna ring road (NH-131G) Ch Km 0+000 to Asani at Ch km 35+800, of total length 46+400 km at NH-119A in the state of Bihar on HAM mode: EDS raised by MoEFCC Ranchi on forest proposal 22.716 hec. - Reg.

Ref:- (i) MoEFCC letter no. FP/BR/Road/157384/2022/242 dated 16.04.2025
 (ii) Your office letter no.1233 dt. 02.05.2025.
 (iii) DPR Consultant M/s MSV letter no. C-265 dt. 19.05.2025

Sir,

This has reference to the subject and letter referred above vide which EDS was raised by MoEFCC, RO, Ranchi on the proposal for diversion of 22.716 hec. forest land for construction of 4/6 laning of Patna-Ara-Sasaram section of NH-119A.

2. Further, in compliance to your letter u/r(ii), the documents required is as under:-

Sl.no.	Documents required	Compliance
1	Cost Benefit analysis may be revised.	Annexure-I
2	Certified copy of area calculation by the concerned DFO.	Annexure-II
3	Cross-section layout/map of the road.	Annexure-III
4	High resolution toposheet map of the forest land proposed for diversion & raising CA with latitude & longitude and duly signed by DFO and user Agency.	Annexure-IV
5	As per the chapter-11 para 11.2 of consolidated guidelines and clarifications issued under Van rules, 2023, project proponent needs to upload the map indicating alignment of the entire project, highlighting in the portion passing through forest land, along with salient features of the entire project and details of approval already obtained and sought under the Act for other sections of the project. Hence project proponent is requested to upload KML file of the entire project along with the supporting documents.	Annexure-V

3. In this regard, the requisite documents have been uploaded on the Parivesh portal for your kind perusal and further necessary action please.

Encl: As above

Your's faithfully

(Arbinda Kumar)
 Project Director

Copy to:-(i) The Regional Officer, NHAI, Patna, Bihar - for kind information
 (ii) Authorised Signatory, DPR Consultant M/s MSV- for information & coordinate with forest dept. to expedite.

COST BENEFITS ANALYSIS

Name of Project: Construction of 4/6 Laning of Arrah-Sasaram-Patna Road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II).

Nature of Proposal: Diversion of 22.716 hectare of forest land for non- forest purpose for the project "Construction of 4/6 Laning of Arrah-Sasaram-Patna Road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)."

Forest Proposal No.: FP/BR/ROAD/157384/2022

Total Length of Project: 43.850 Km

Number of districts involve: 01

Number of forest division involve: 01

S. No.	Division Name	Proposed Forest Area for Diversion (Hectare)
1.	Forest Division Bhojpur	22.716
Total Forest Area for Diversion (Ha)		22.716

Purpose: The cost Benefit Analysis is being undertaken as the required forest land is > 20 hectares for proposed diversion of forest land being affected due to construction of new national highway for above said project.

Guidelines for conducting cost-benefit analysis for projects involving forest diversion:

- 1) While considering proposal for diversion of forest land for non-forestry use, it is essential that ecological and environmental losses and eco economic distress caused to the people who are displaced are weighted against economic and social gains.
- 2) Whenever the forest land is involved in the development projects, the cost of ecosystem services and fragmentation of habitat of wildlife and economic distress caused to the people dependent on forests and the cost of settlement of people dependent on forest should also be added as the cost of forest diversion in addition to the standard project cost which would have been

incurred by the user agencies without involvement of forest land while conducting the cost benefit analysis of the project. Similarly, the benefits from the project accruing due to diversion of forest land and used in the project should also be accounted for in the benefits component in addition to the standard benefits of the project which would have been accrued without involvement of forest land while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).

- 3) The cost of Compensatory afforestation and its maintenance in future and soil & moisture conservation at present discounted value and future benefits from such compensatory forestation accruing over next 50 years monetized and discounted to the present value should be included as cost and benefits respectively of compensatory afforestation while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- 4) **Table A** list the details the types of projects involving forest land for which cost benefit analysis will be required, **Table-B** Lists the parameters according to which the cost aspect of forest land diverted for the development projects will be determined, while **Table C** lists the parameters for assessing the benefits accruing to the project using forest land.
- 5) A cost benefits analysis as above should be accompanying the proposals sent to central Government for forest clearance under the Forest Conservation Act.

Table A: Cases under which a Cost -benefit analysis for forest diversion are required

S. No.	Nature of Proposal	Applicable/ Not Applicable	Remarks
1	All Categories of proposal involving forest land up to 20 hectares in plains and up to 5 hectares in hills	Not Applicable	These proposals may be considered a case-to-case basis and value judgments.
2	Proposed for defense installation purpose and oil prospecting only	Not Applicable	In view of national priority accorded to these sectors, the proposal would be critically assessed to help ascertain that the utmost minimum forest land is diverted for non-forest use
3	Habitation, establishment of industrial units, tourist lodge complex and other	Not Applicable	These activities being detrimental in protection and conservation of

	building construction		proposals would be rarely entertained.
4	All other proposal involving forest land more than 20 hectares in plain and more than 5 hectares in hills including roads, transmission line, minor, medium and major irrigation projects, hydro projects, mining activity, railway line, location specific installations like microwave stations, auto repeater centres, TV tower etc.	Applicable	These are cases where a cost benefit analysis is necessary to determine when diverting the forest land to non-forest use in the overall public interest.

Since the proposal is for diversion of forest land measuring more than 20 hectare in plain area for the road project cost benefit analysis report is applicable

Table B: Estimation of Cost of forest diversion

S. No.	Parameters	Given Guideline	Evaluation
1	Ecosystem services loss due to proposed forest diversion	Economic value of loss of ecosystem services due to diversion of forest shall be the Net Present Value (NPV) of the forest land being diverted as prescribed by Central Government (MoEF & CC) Note: In case of National parks, the NPV shall be ten (10) times the normal NPV and in case Wildlife sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the ministry or any other competent authority	NPV value has been Calculated as Rs 217.57 lakh.
2	Loss of animal husbandry productivity,	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is	Loss of Animal husbandry due to proposed diversion is

	including loss of fodder	maximum	very, moderate and calculated below. Gross Loss @ 5 ton/Ha/Year @ Rs 100/- per tonne. Therefore, loss of fodder as estimated for about 22.716 Ha. will be $22.716 \times 5 \times 100 \times 100 \text{ Years} = \text{Rs } 1,135,800/-$ $10\% \text{ of NPV} = 0.1 \times 217.57 = 21.757 \text{ Lakh.}$ So, considered amount is Rs 21.757 Lakh.
3	Cost of human resettlement	To be quantified and expressed in monetary terms as per approved R & R plan.	NIL human resettlement is required since no family residing in forest land.
4	Loss of public facilities and administrative infrastructure (Roads, buildings, School, dispensaries, electric lines, railways etc.) on forest land, or which would require forest land if these facilities were diverted due to the project.	To be quantified and expressed in monetary terms on actual basis at the time of diversion.	No Loss of public Infrastructure and administrative infrastructure (roads, buildings, railways, etc.) on the forest land. All public utilities affected will be shifted by NHAI at cost of Rs 631.65 Lakh.
5	Possession value of forest	30% of environmental cost (NPV) due to loss of forest or	Possession Value of forest land will be

	land diverted	circle rate of adjoining area in the district should be added as a cost component as possession value of forestland whichever is maximum.	(considering 30% of NPV) = $0.3 \times 217.57 =$ Rs 65.27 lakh. Average Per hectare land rate along the project highway in district Bhojpur Rs 33.40 lakh per hectare. So, possession value of forest land (as per average circle rate) = $22.716 \times 33.40 \text{ lakh} =$ Rs 758.71 lakh. So Considered amount (maximum one) is Rs 758.71 lakh.
6	Cost of Suffering to oustees	The social cost of rehabilitation of Oustees (in addition to the cost likely to be incurred in providing residence, occupation and social services as per R & R plan) be worked out as 1.5 times of what oustees should have earned in two years had he not been shifted	Nil as no Resettlement and Rehabilitation is required in forest land. Which is proposed to be diverted.
7	Habitat fragmentation Cost	While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as a thumb rule.	Habitat fragmentation Cost is 50% of NPV i.e. $0.5 \times 217.57 =$ Rs 108.79 Lakh.
8	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value	Total 45.50 Hectare of degraded forest land proposed for CA in lieu of 22.716 Ha Forest land. Cost of CA is Rs 105.15 lakh.

Table C: Existing Guidelines for estimating benefits of forest land diversion in CBA

S. No.	Parameters	Given Guideline	Evaluation
1	Increase in productivity attributable to the specific project	To be quantified and expressed in monetary terms avoiding double counting	The proposal project for which diversion of forest land is sought is for construction of new national highway. The project road will improve accessibility to the region. This will help in both economic & social development in the region. The project will enable smooth accessibility in the region by which people of the region will be directly benefited. This will accelerate industrialization /commercialization in region and the same will directly generate maximum employment opportunities in these areas and boosting up the economy of the region and state. Again, directly the project will have the potential for employment generation for local people 900000-man days during the construction period. The proposed project does not involve any manufacturing or production. Hence, this section is not applicable. Monetary benefits due to increase in productivity is NIL.
2	Benefits of economy due to the specific project	The incremental economic benefit in monetary terms due to the activities attributed to the specific project.	Economic benefit in terms of increase in trade, saving in vehicular operation and maintenance cost better connectivity, safer journey to commuter and saving of travel time. Improved road connectivity helps in better implementation and management of government schemes. It will provide last and economical transport of goods, after completion of project, the local people and industries situated in the area will be greatly benefited. The construction of project road will provide safe and fast,

			economical and environment friendly transportation to the State, which in term will accelerate the rate of growth in this area. Average Annual Daily Traffic (2023): 13433 Passenger Car Unit. <table><tr><th>Current Scenario</th><th>Modified Scenario</th></tr><tr><td>Present Distance = 75.85 Km Average Fuel Economy = 20 km/litre Total fuel consumption = 75.85/20 = 3.79 litre</td><td>Distance after construction of new national highway = 43.85 Km Average Fuel Economy = 20 km/litre Total fuel consumption = 43.85/20 = 2.19 litre</td></tr><tr><td colspan="2">Fuel saving = 3.79 - 2.19 = 1.60 litre Average fuel cost = 100 Rupee per litre Fuel saving on 13433 PCU = 1.60 x 13433 = 21493 Litre per day approx. Savings (in monetary terms) = 21493 x 100 = 2149300 Rupees per day Total benefits in 5 years (5*365.4 = 1827 days) = 1827 x 2149300 = 3926771100 = Rs 3926.77 Lakh</td></tr></table>	Current Scenario	Modified Scenario	Present Distance = 75.85 Km Average Fuel Economy = 20 km/litre Total fuel consumption = 75.85/20 = 3.79 litre	Distance after construction of new national highway = 43.85 Km Average Fuel Economy = 20 km/litre Total fuel consumption = 43.85/20 = 2.19 litre	Fuel saving = 3.79 - 2.19 = 1.60 litre Average fuel cost = 100 Rupee per litre Fuel saving on 13433 PCU = 1.60 x 13433 = 21493 Litre per day approx. Savings (in monetary terms) = 21493 x 100 = 2149300 Rupees per day Total benefits in 5 years (5*365.4 = 1827 days) = 1827 x 2149300 = 3926771100 = Rs 3926.77 Lakh	
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3	Number of populations benefited due to specific project	As per the detailed project report	The project road passes through Bhojpur District (Bihar), which has 27.28 Lakh Population . The entire population of the district and adjoining districts would be benefitted by the project.						
4	Economic benefits due to of direct and indirect employment due to the project.	As per the detailed project report	A Total of 900000-man days employment will be generated during construction phase for skilled/unskilled labor. Average wages inclusive of all cost of living is Rs 500 per day. Total financial implication will come out to be = 900000 X 500 = Rs 4500 Lakh						

5	Economic benefits due to Compensatory Afforestation	Benefits from such compensatory forestation accruing over next 50 years monetized and discounted to the present value should be included as benefits of compensatory afforestation. *For benefits of CA the guideline of the ministry for NPV estimation may be considered.	In lieu of total trees to be remove from proposed RoW in forest land along the project road it is proposed to undertake at least twice of affected area as Compensatory afforestation (Forest Conservation Act, 1980). So, the net productivity will increase. The Compensatory Afforestation will be done in 45.50 hectare of degraded forest land. Which is down the line would be having a density of minimum 0.4. The ecological value for a 50 years period for the density of 10 is Rs 126.74 Lakh per hectare. By considering minimum 0.4 density the ecological gain for the project would be 126.74 X 0.4 X 45.50 = Rs 2306.67 lakh
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Summary of Cost -Benefit Analysis for the Project

S. No.	Loss (in Lakh)	Benefit (Lakh)
1	Ecosystem services losses Rs 217.57 lakhs	Ecology gains for Compensatory Rs 2306.67 lakh
2	Loss of Animal Husbandry Productivity including loss of Fodder = Rs 21.76 Lakhs	900000-man days will be generated assuming Rs 500 per day as wages total benefit = 500 X 900000 = Rs 4500 Lakh
3	Loss of Public facility Rs 631.65 Lakhs	Benefits of economy due to the specific project = Rs 3926.77 Lakh
4	Possession Value of Forest Land diverted Rs 758.71 lakh	--
5	Habitat Fragmentation Cost Rs 108.79 Lakh	--
6	Compensatory Afforestation and Soil and Moisture Conservation Rs 105.15 lakh	--
	Total Loss = Rs 1843.63 lakh	Total Benefit Rs 10733.44 Lakh

Benefit Cost Ratio = Total Benefit / Total Loss = Rs 10733.44 Lakh/ Rs 1843.63 lakh = 5.82 which is > 1, so project is found viable based on given/above-described criteria.

Note 1: Net Present Value (NPV) of environment and ecosystem services loss:

The concept of Net Present Value of the forest land diverted is a scientific method of calculating the environment cost and other losses caused due to diversion of forest land for non-forestry purposes. The NPV represents the net value of various ecosystem services and other environment services in monetary terms which the forest would have provided if the forest would not have been diverted.

Note 2: Possession Value of forest land diverted:

The forest land diverted for the project such as irrigation, hydropower, railways, roads, wind, and transmission lines and mining etc. are unlikely to be returned and remains in possession of the user agencies. Therefore 30% of the net present value (NPV) of the forest land diverted or market rate of adjoining area in the district should be added as a cost of component as "possession value of forest land" in addition to the environment costs due to loss of forests.

Date:

Place: Patna (Bihar)

Signature of User Agency


Project Director
National Highways Authority of India
Project Implementation Unit
PATNA



Project Name: Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 to Km 84+300 under Bharatmala Pariyojana(Lot-7/Package-2) in the State of Bihar (Package-II).

Forest Proposal No.: FP/BR/ROAD/157384/2022

AREA CALCULATION FOR FOREST LAND

Diversion of **22.716 Ha** forest land under jurisdiction of Forest Division Bhojpur is proposed for the Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II).

Forest Division Bhojpur (Design Km 40+450 to Design Km 84+300)										
S. No.	Arrah-Sasaram-Patna road section of NH-119A - Proposed Design Chainage (Km)	Name of Reach	Left Hand Side*			Right Hand Side*			Total Area (m ²)	Total Area (Hectare)
			Length (m)	Width (m)	Area (m ²)	Length (m)	Width (m)	Area (m ²)	(LHS+RHS)	(LHS+RHS)
1	42+500 - 42+700	Karath Distributary (Chiksil - Karath - Barkagaon Road)	67	10	670	67	10	670	1340	0.134
2	44+100 - 44+300	Gaharuan Distributary	54	10	540	54	10	540	1080	0.108
3	44+700 - 44+800	Piro - Barkagaon - Danwar Road (Ara Canal/Jagdishpur Sone Canal)	56	15	840	56	15	840	1680	0.168
4	53+000 - 53+200	Piro - Bihta Road	370	10	3700	370	10	3700	7400	0.74
5	66+000 - 66+100	Garhani Sikrahta Road	55	10	550	55	10	550	1100	0.11
6	70+700 - 70+900	Garhani Agiaon Road (Jaitpur Distributary)	335	10	3350	335	10	3350	6700	0.67
7	71+600 - 71+800	Jaitpur Distributary	73	10	730	73	10	730	1460	0.146
8	74+400 - 84+300	Ara - Sasaram Road	10320	10	103200	10320	10	103200	206400	20.64
Total Forest Area under Forest Division Bhojpur									227160	22.716

*Left Hand Side and Right Hand Side is according to existing reach (road/canal/drain/river bund etc.)



वनो के क्षेत्र पदाधिकारी
भारत वन पक्षेत्र भार

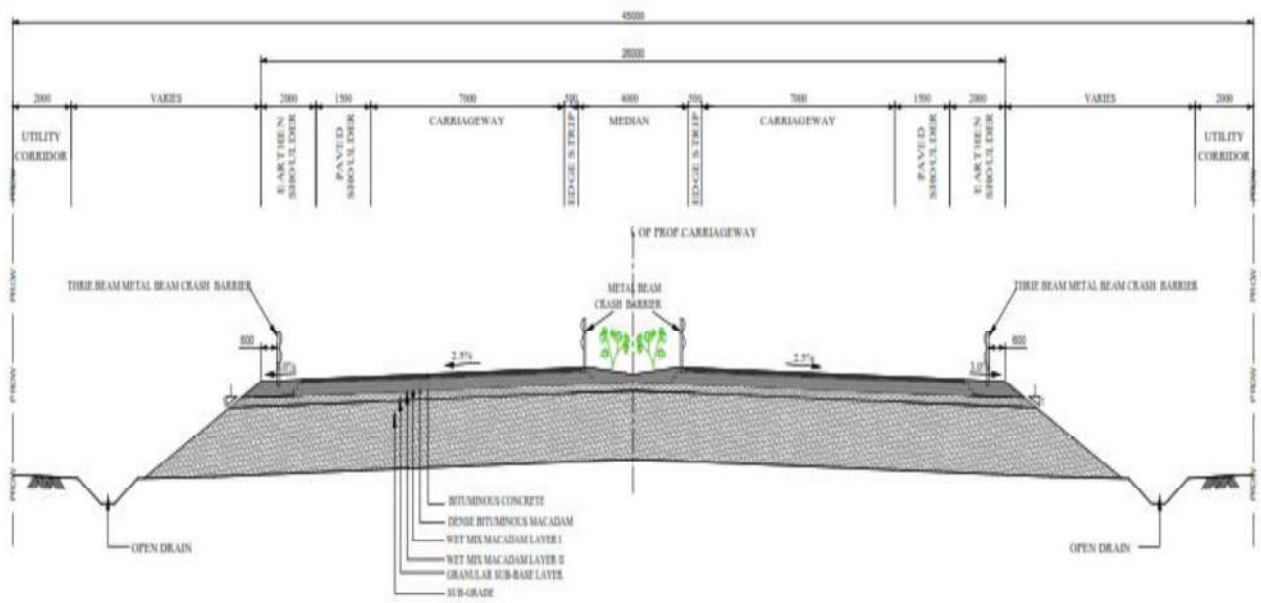
वन प्रमण्डल निदेशिका
भोजपुर वन प्रमण्डल, आर

Signature of User Agency
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

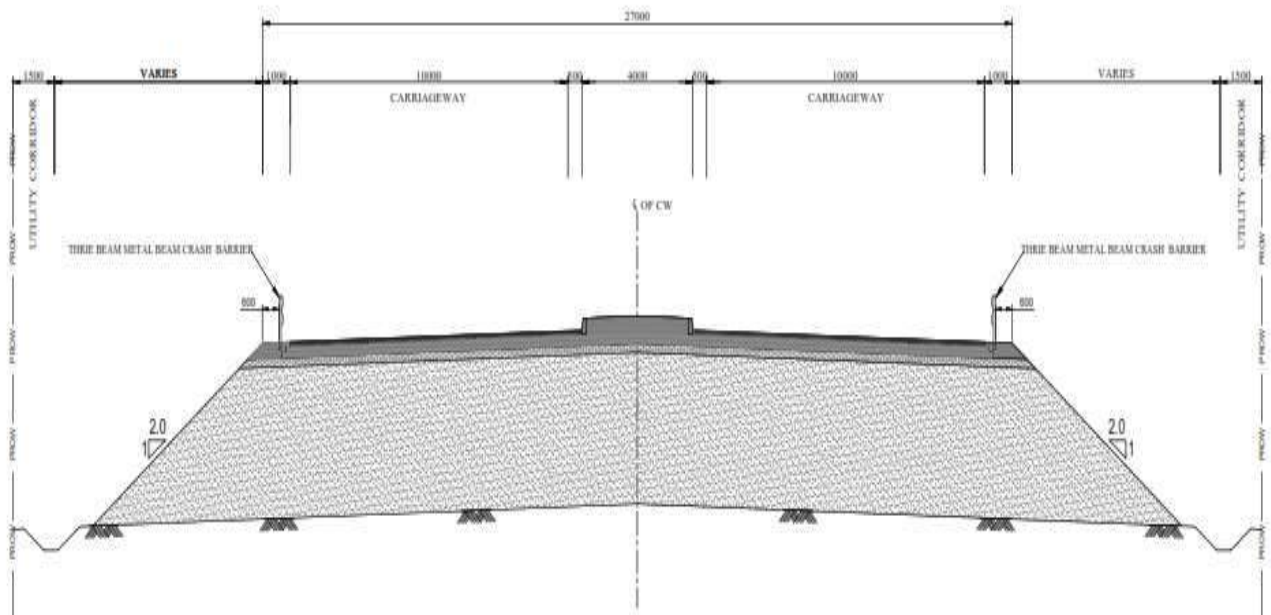
Applicable Stretches of Typical Cross Section (Main Carriageway)

From	To	Length	Applicable TCS
40116	41111	995	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
41111	41535	424	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
41535	42330	795	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
42330	42880	550	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
42880	43925	1045	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
43925	45184	1259	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
45184	45853	669	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
45853	46403	550	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
46403	47447	1044	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
47447	47883	436	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
47883	48342	459	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
48342	48888	546	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
48888	49199	311	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
49199	49635	436	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
49635	52118	2483	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
52118	53625	1507	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
53625	54092	467	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
54092	54516	424	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD

54516	55848	1332	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
55848	56272	424	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
56272	57768	1496	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
57768	58318	550	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
58318	58442	124	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
58442	58878	436	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
58878	60914	2036	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
60914	61338	424	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
61338	61582	244	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
61582	62006	424	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
62006	63897	1891	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
63897	64207	310	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
64207	65828	1621	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
65828	66264	436	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
66264	68897	2633	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
68897	69321	424	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
69321	69672	351	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
69672	70114	442	TCS-2: - TYPICAL CROSS SECTION FOR APPROACHES OF LVUP / SVUP AND ELEVATED SECTION 4-LANE DIVIDED HIGHWAY WITHOUT SLIP ROAD
70114	73977	3863	TCS-1 : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
73977	74977	1000	TCS-3: - TYPICAL CROSSSECTION FOR APPROACHES OF VUP & FLYOVER 4-LANE DIVIDED HIGHWAY WITH SLIP ROAD
74977	84300	9323	TCS- 01(01) : - TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY WITH SERVICE ROAD .



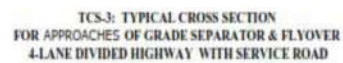
TCS-1: TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY



TCS-2: TYPICAL CROSS SECTION FOR 4-LANE DIVIDED HIGHWAY
HIGH EMBANKMENT

(Signature)
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

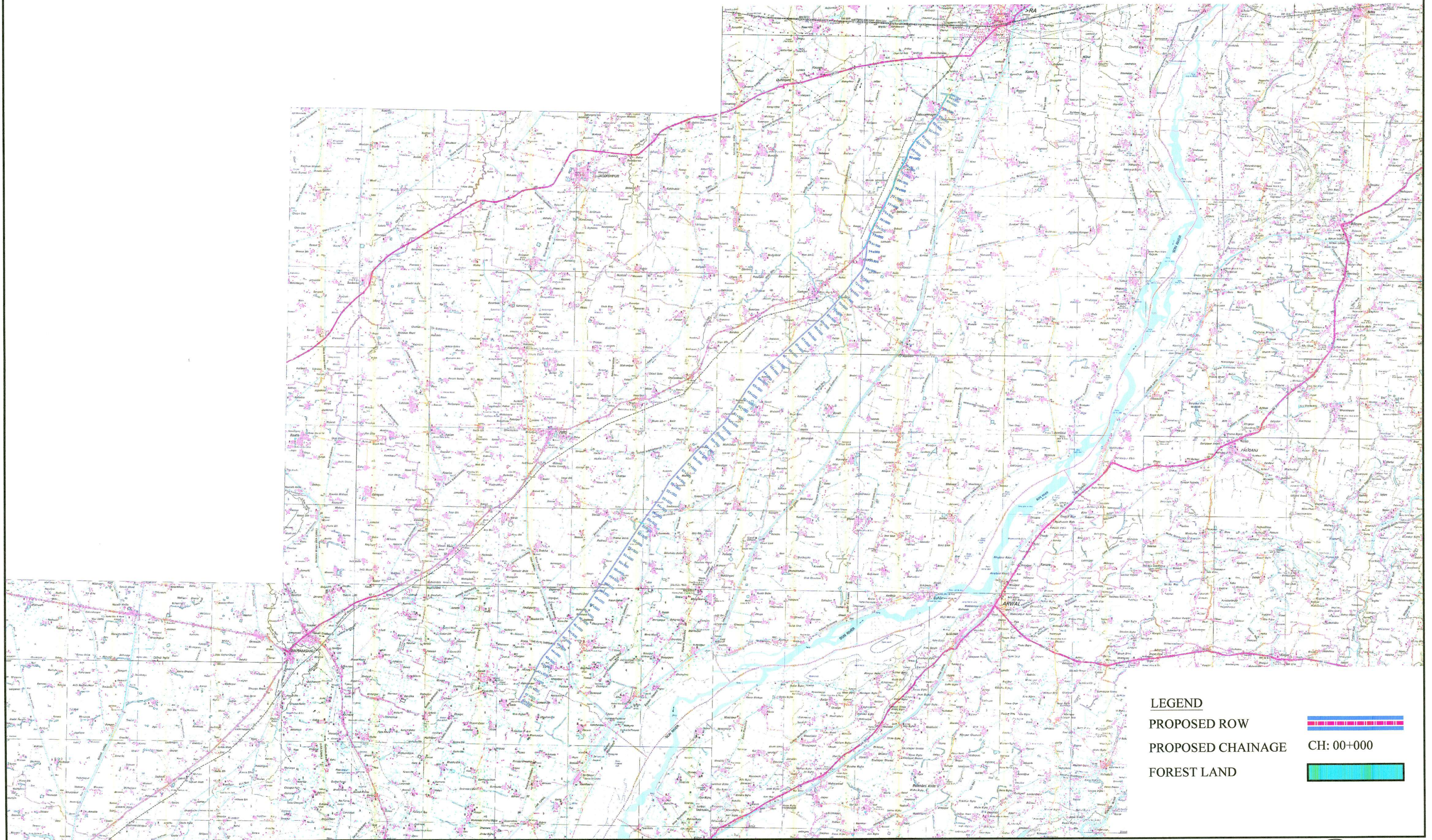




Project Director
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Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



LEGEND

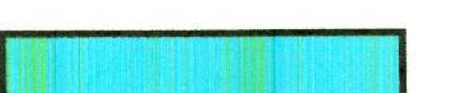
PROPOSED ROW

PROPOSED CHAINAGE

FOREST LAND



CH: 00+000



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Project Implementation Unit
PATNA

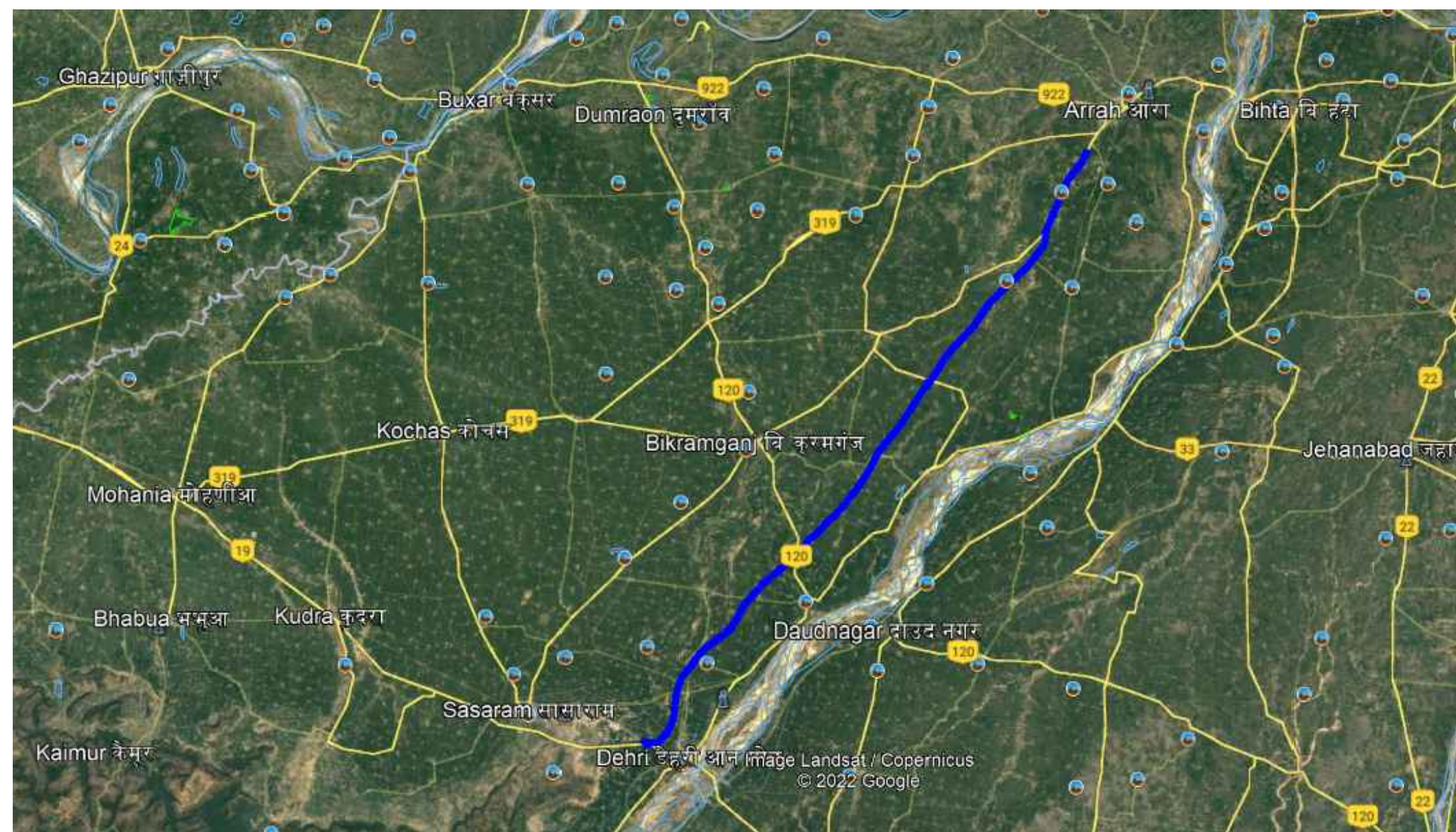
रजिस्ट्रार
महानगरपालिका
पटना

रजिस्ट्रार
महानगरपालिका
पटना

DGPS MAP

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from
Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana
(Lot-7/Package-2) in the State of Bihar (Package-I)

DISTRICT - ROHTAS (00+000 to 40+450)



MAY - 2022



National Highways Authority of India
(Ministry of Road Transport & Highways) Government of India

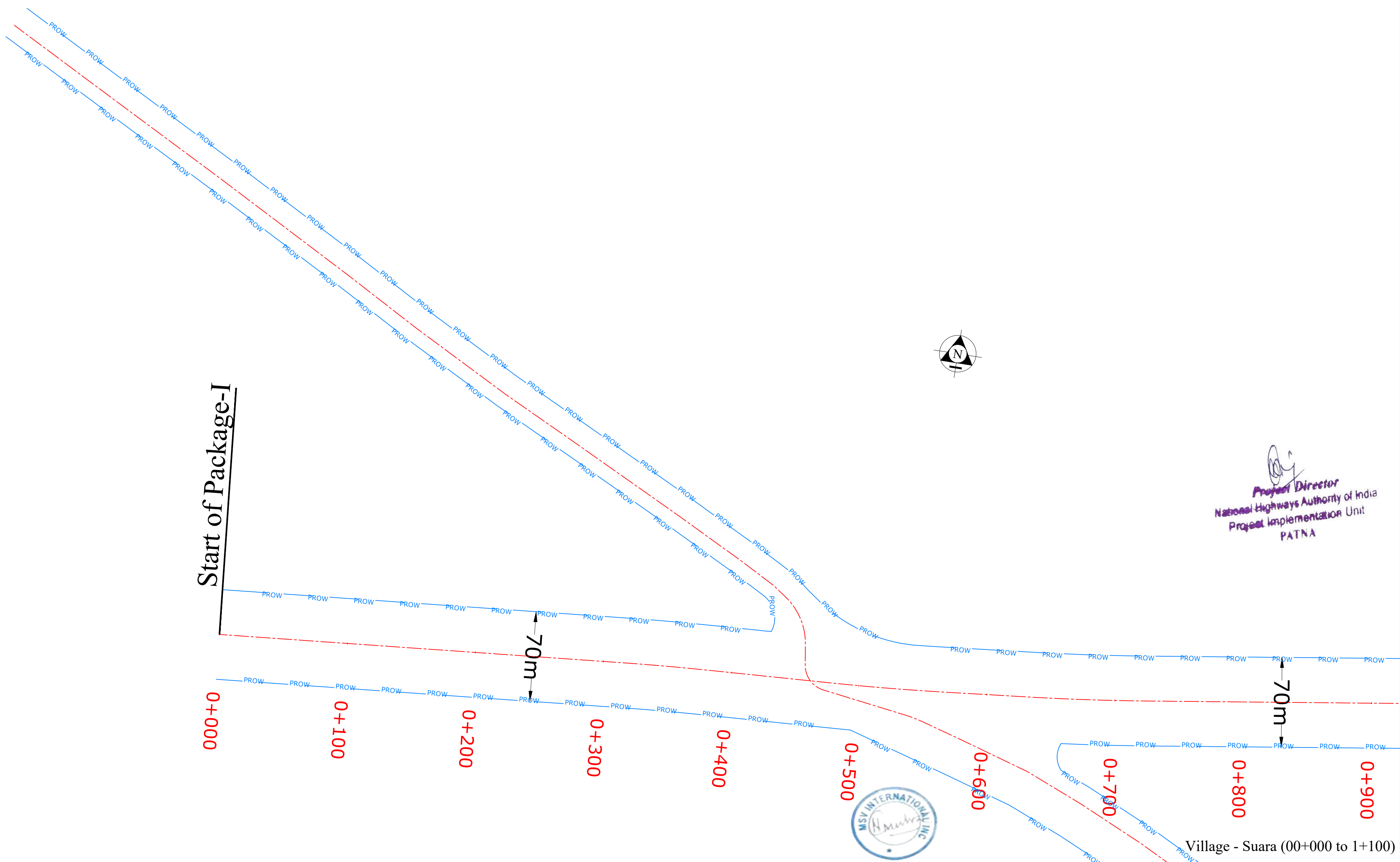


MSV INTERNATIONAL TECH PVT. LTD.

Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf
Course, Extension Road, Sec-65, Gurgaon-122005

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Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	
PROW	
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

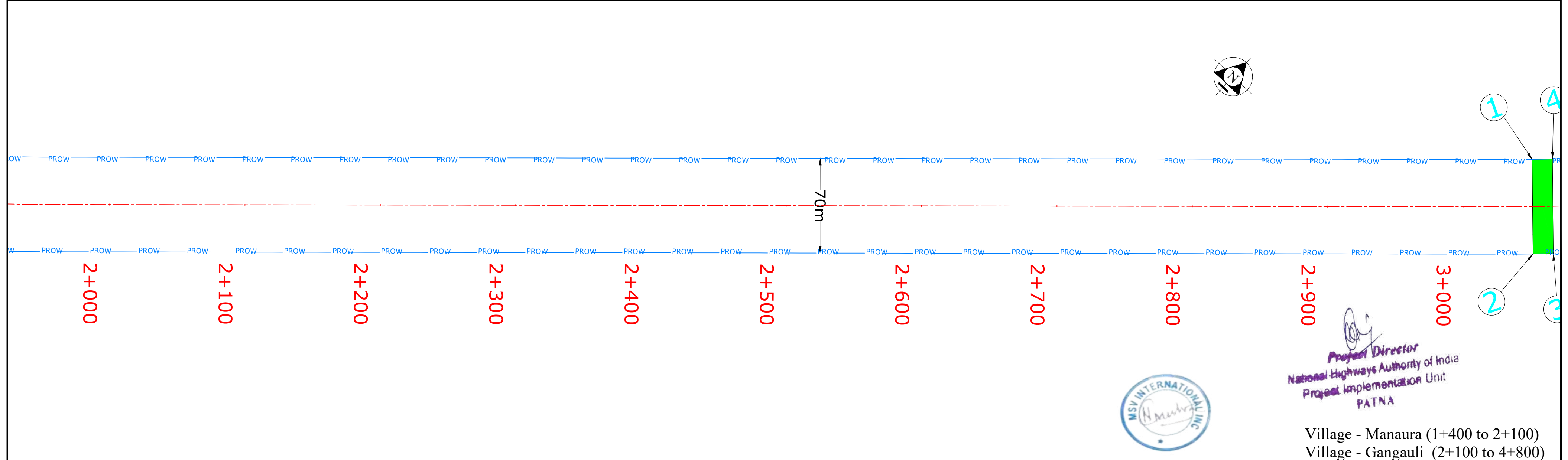
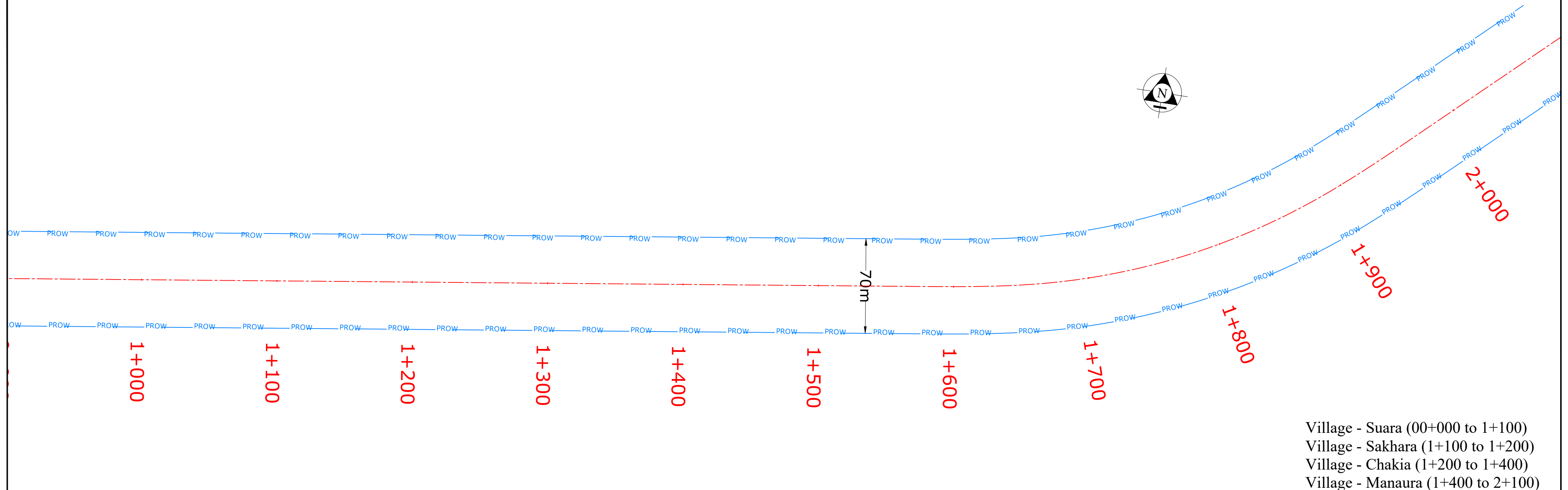
Drawing Title :
DGPS MAP
Km 00+000 to Km 1+000
DISTRICT - ROHTAS

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005

SCALE : 1:2000	Sheet : 01 OF 23	Paper Size A3
DATE : MAY 2022		

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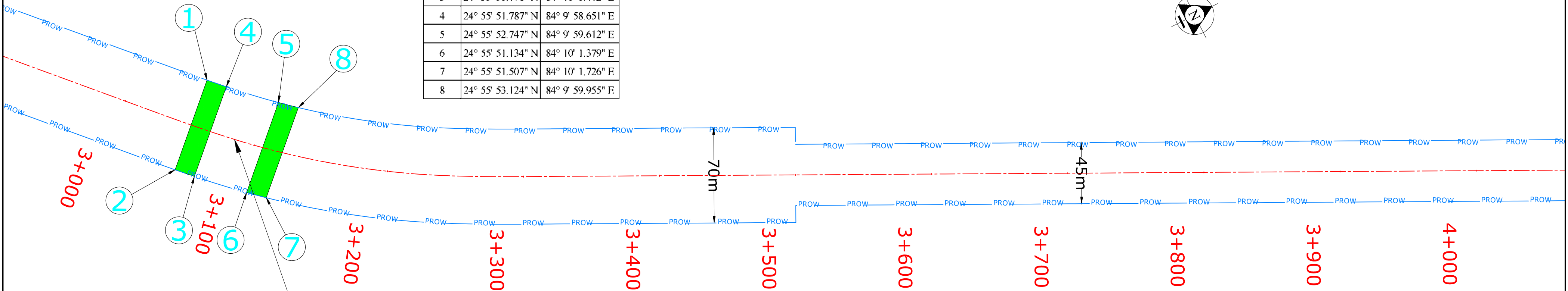
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PROPOSED CENTER LINE	Client :	 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)	Drawing Title :	Consultant:	M/s MSV INTERNATIONAL INC.	SCALE : 1:2000
PROW	Project :		DGMS MAP Km 1+000 to Km 3+000 DISTRICT - ROHTAS	 in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005	Sheet : 02 OF 23	Paper Size A3
FOREST LAND PROPOSED FOR DIVERSION	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)				DATE : MAY 2022	

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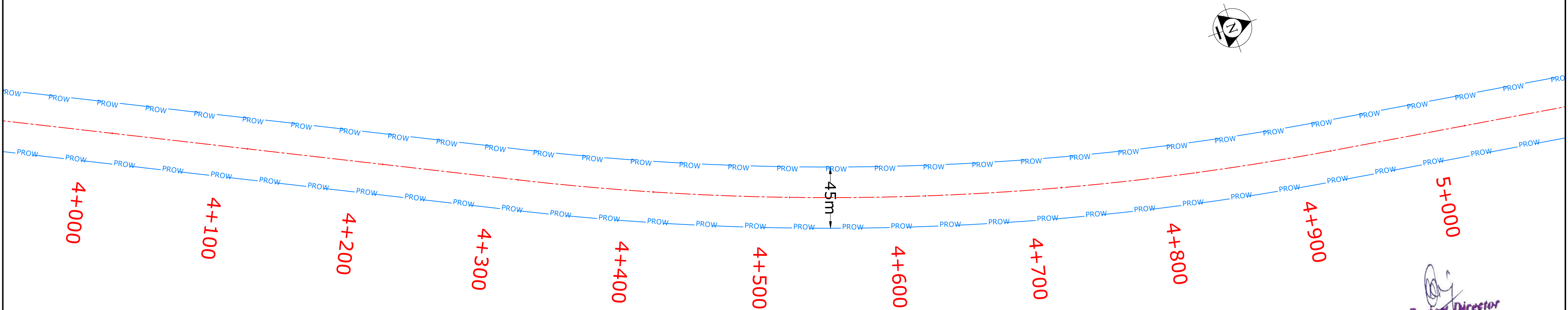
ARRAH>>>

1. Western Son High Level Canal			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	24° 55' 51.439" N	84° 9' 58.276" E	
2	24° 55' 49.830" N	84° 10' 0.038" E	
3	24° 55' 50.178" N	84° 10' 0.412" E	
4	24° 55' 51.787" N	84° 9' 58.651" E	
5	24° 55' 52.747" N	84° 9' 59.612" E	
6	24° 55' 51.134" N	84° 10' 1.379" E	
7	24° 55' 51.507" N	84° 10' 1.726" E	
8	24° 55' 53.124" N	84° 9' 59.955" E	



1. Western Son High Level Canal

Village - Gangauli (2+100 to 4+800)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Gangauli (2+100 to 4+800)
Village - Ugra (4+800 to 5+500)

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

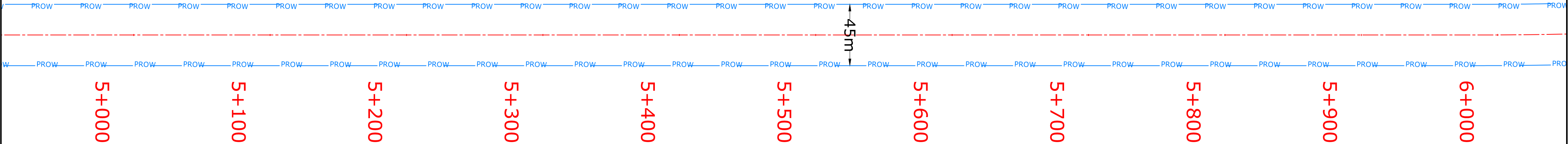
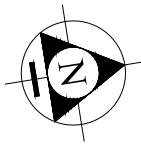
Drawing Title :	DGPS MAP Km 3+000 to Km 5+000 DISTRICT - ROHTAS
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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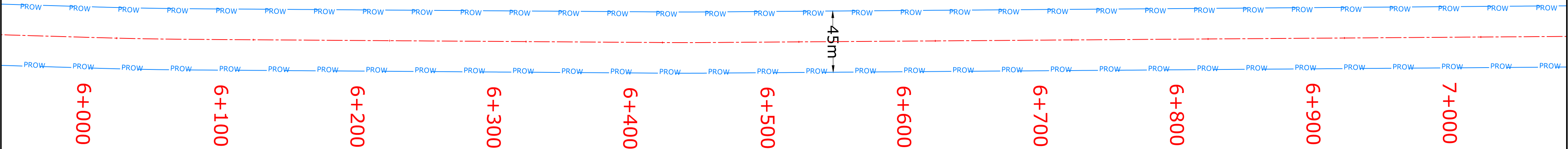
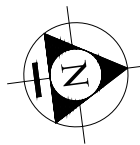
SCALE : 1:2000	Paper Size A3
Sheet : 03 OF 23	
DATE : MAY 2022	

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Village - Ugra (4+800 to 5+500)
Village - Bank (5+500 to 7+600)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

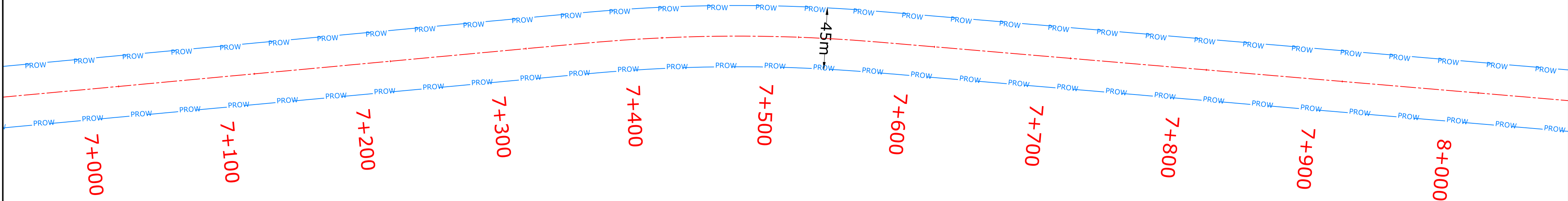


Village - Bank (5+500 to 7+600)

LEGEND		Client :  NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)	Drawing Title : DGPS MAP Km 5+000 to Km 7+000 DISTRICT - ROHTAS	Consultant:  M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005	SCALE : 1:2000	
PROPOSED CENTER LINE					Sheet : 04 OF 23	Paper Size A3
PROW		Project : Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)			DATE : MAY 2022	
FOREST LAND PROPOSED FOR DIVERSION						

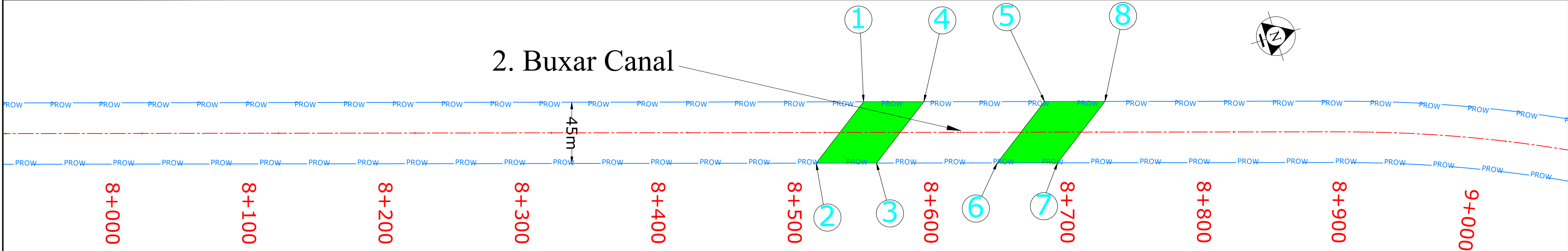
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Village - Bank (5+500 to 7+600)
Village - Baradih (7+600 to 9+000)

2. Buxar Canal



4. Buxar Canal			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	24° 58' 41.399" N	84° 10' 45.997" E	
2	24° 58' 39.910" N	84° 10' 47.197" E	
3	24° 58' 41.291" N	84° 10' 47.631" E	
4	24° 58' 42.780" N	84° 10' 46.431" E	
5	24° 58' 45.542" N	84° 10' 47.299" E	
6	24° 58' 44.054" N	84° 10' 48.499" E	
7	24° 58' 45.435" N	84° 10' 48.934" E	
8	24° 58' 46.924" N	84° 10' 47.733" E	

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	
Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)	

Drawing Title :
DGPS MAP
Km 7+000 to Km 9+000 DISTRICT - ROHTAS

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
	

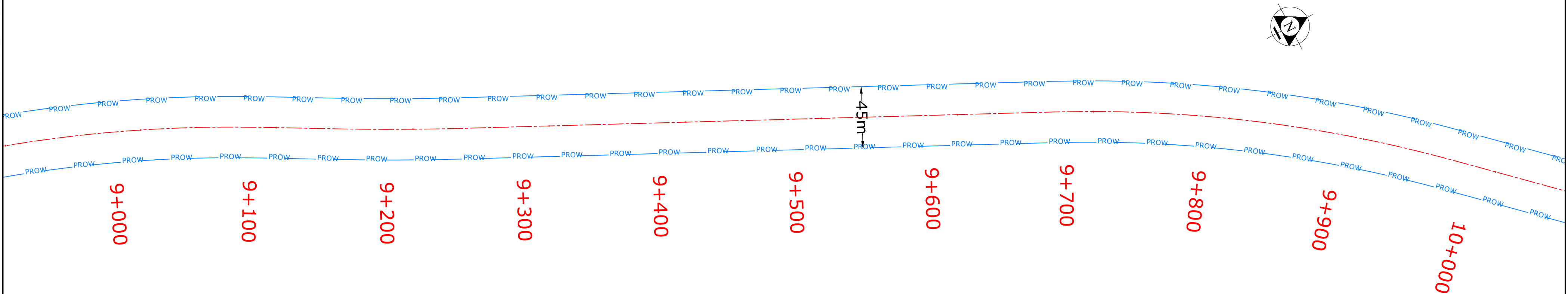
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DATE : MAY 2022		


Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Baradih (7+600 to 9+000)

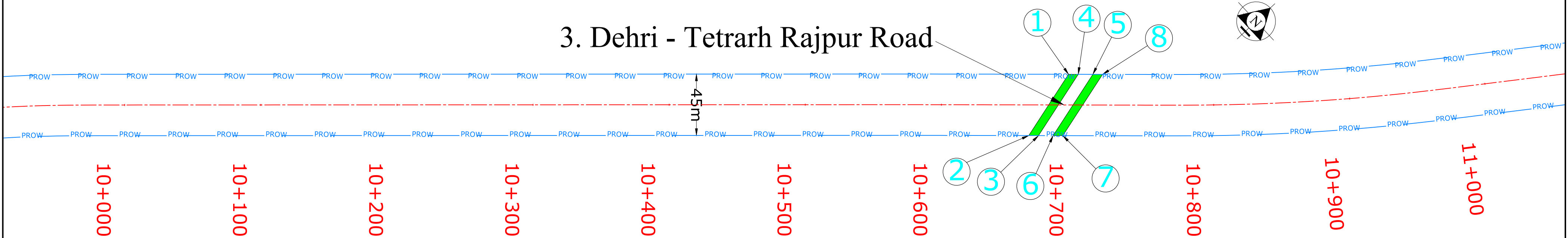
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Village - Karkatpur (9+000 to 10+100)

3. Dehri - Tetrahr Rajpur Road



3. Dehri - Tetrahr Rajpur Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	24° 59' 41.582" N	84° 11' 24.337" E
2	24° 59' 39.901" N	84° 11' 24.836" E
3	24° 59' 40.074" N	84° 11' 25.006" E
4	24° 59' 41.754" N	84° 11' 24.507" E
5	24° 59' 42.013" N	84° 11' 24.763" E
6	24° 59' 40.333" N	84° 11' 25.262" E
7	24° 59' 40.505" N	84° 11' 25.432" E
8	24° 59' 42.186" N	84° 11' 24.933" E



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Karkatpur (9+000 to 10+100)
Village - Chanda (10+100 to 10+600)
Village - Gamhariya (10+600 to 11+700)

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

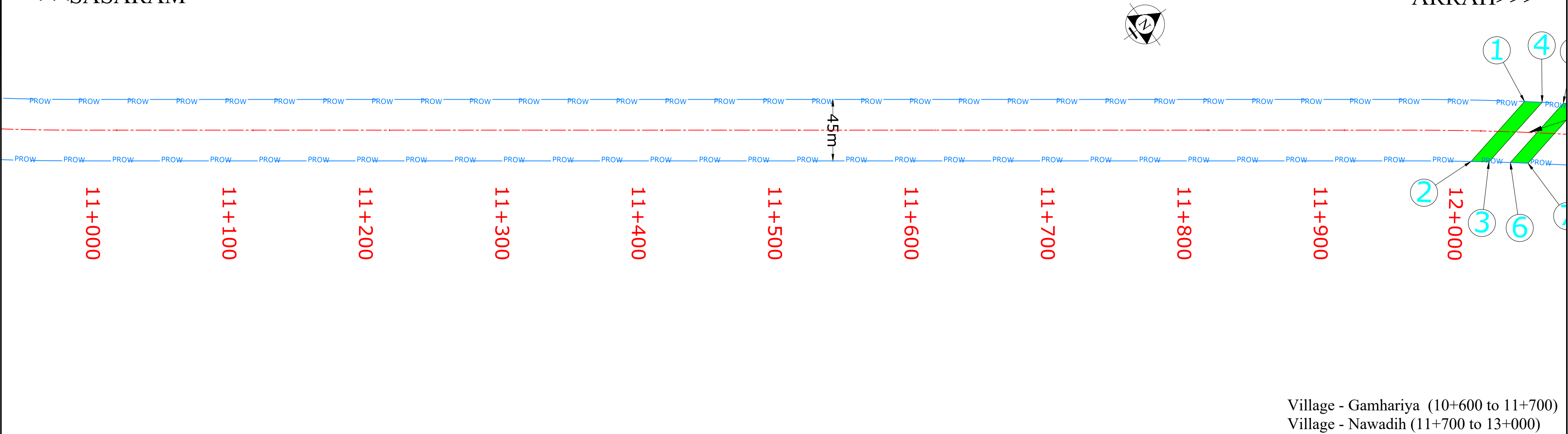
Drawing Title :	DGPS MAP Km 9+000 to Km 11+000 DISTRICT - ROHTAS
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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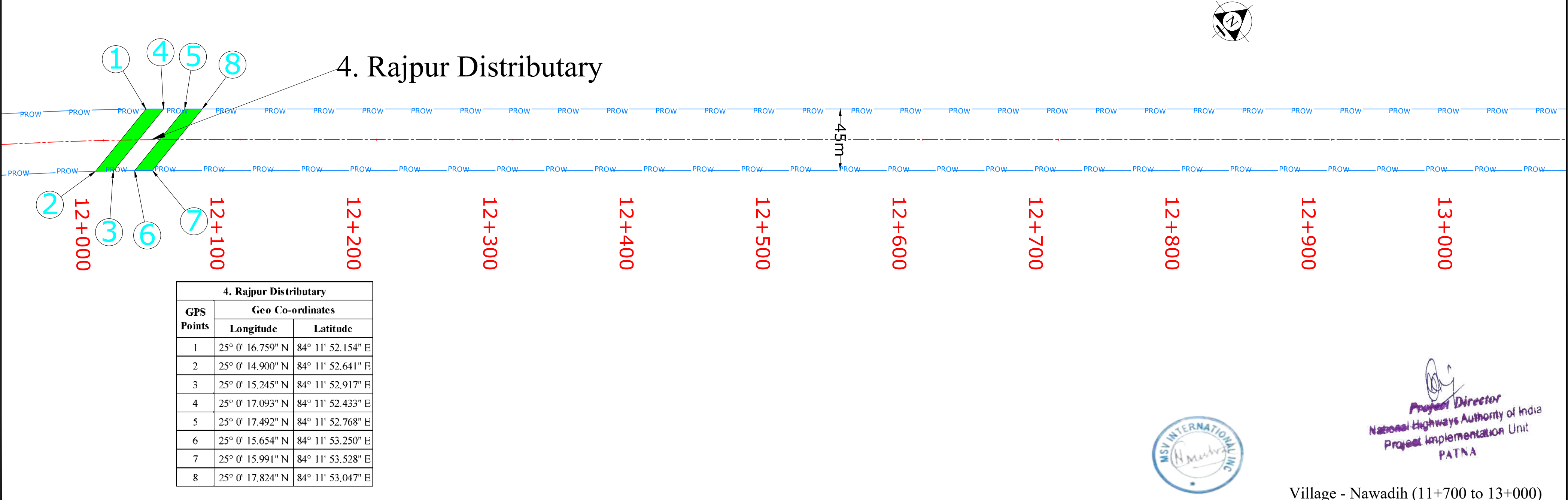
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DATE : MAY 2022		

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Village - Gamhariya (10+600 to 11+700)
Village - Nawadih (11+700 to 13+000)

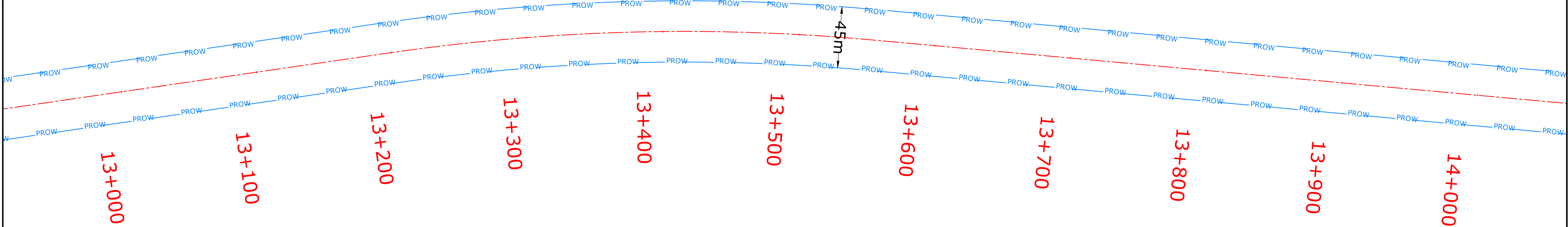


4. Rajpur Distributary

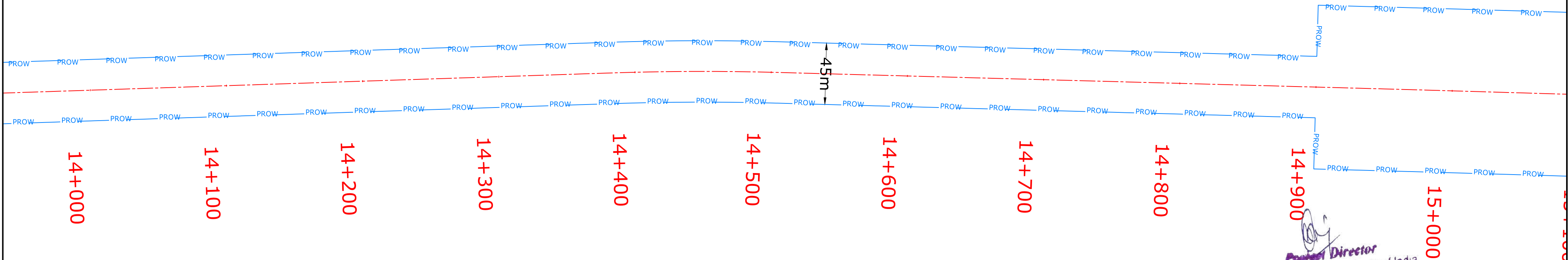
4. Rajpur Distributary		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 0' 16.759" N	84° 11' 52.154" E
2	25° 0' 14.900" N	84° 11' 52.641" E
3	25° 0' 15.245" N	84° 11' 52.917" E
4	25° 0' 17.093" N	84° 11' 52.433" E
5	25° 0' 17.492" N	84° 11' 52.768" E
6	25° 0' 15.654" N	84° 11' 53.250" E
7	25° 0' 15.991" N	84° 11' 53.528" E
8	25° 0' 17.824" N	84° 11' 53.047" E

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Village - Tetrah (13+000 to 14+600)



Village - Tetrah (13+000 to 14+600)
Village - Kaithi (14+600 to 15+500)

LEGEND

PROPOSED CENTER LINE	---
PROW	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

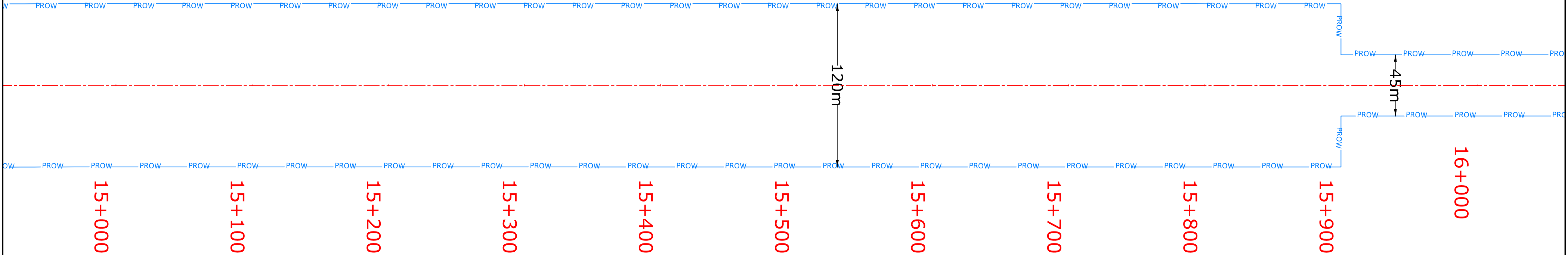
Drawing Title :	DGPS MAP
	Km 13+000 to Km 15+000 DISTRICT - ROHTAS

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
	

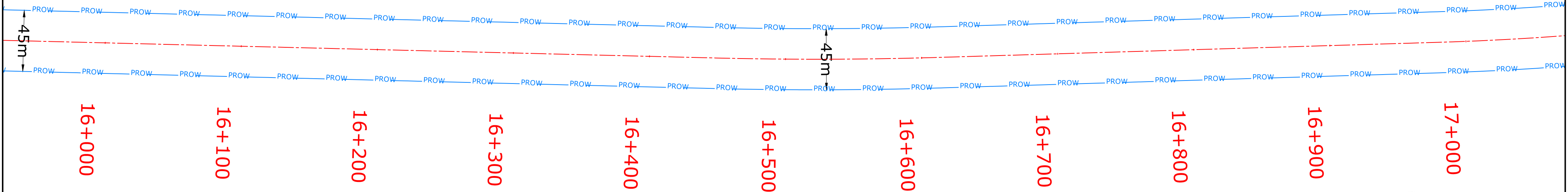
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Village - Kaithi (14+600 to 15+500)
Village - Biseni Kala (15+500 to 17+000)



Village - Biseni Kala (15+500 to 17+000)

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

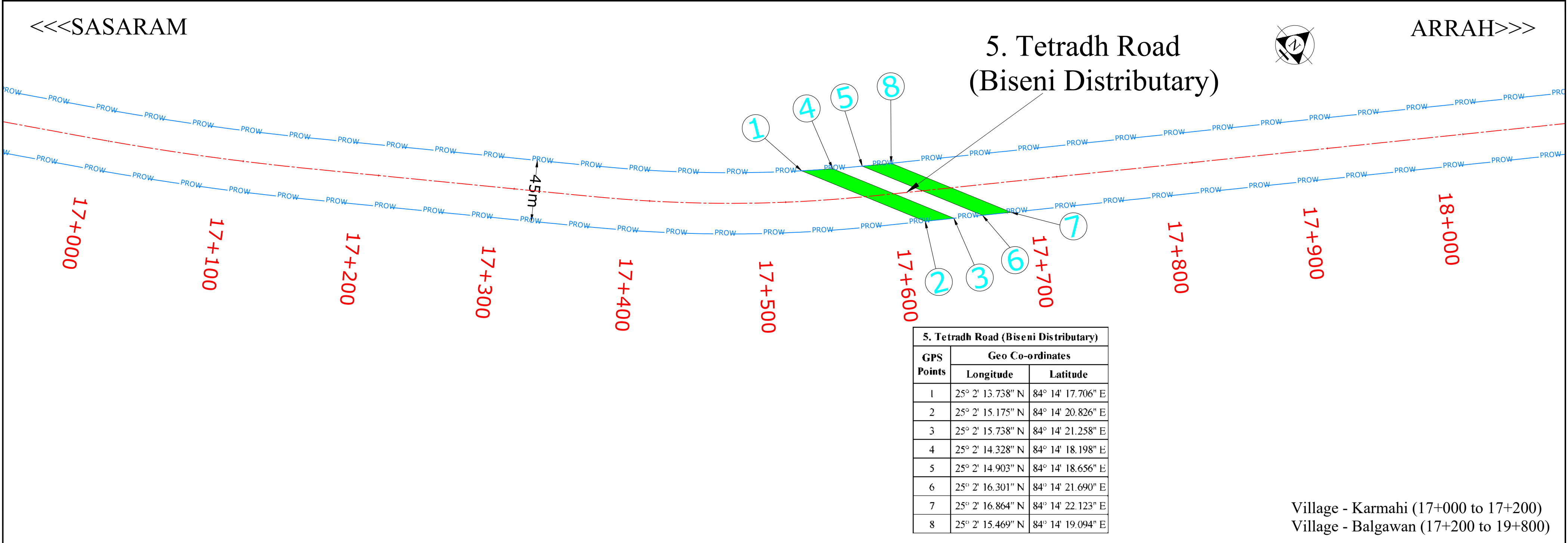
Drawing Title :	DGPS MAP Km 15+000 to Km 17+000 DISTRICT - ROHTAS
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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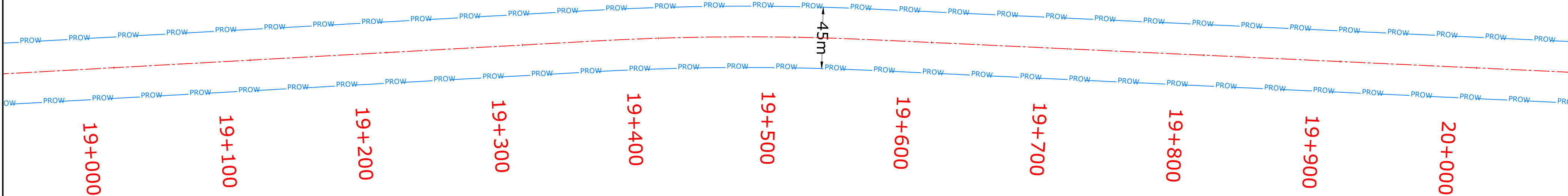



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

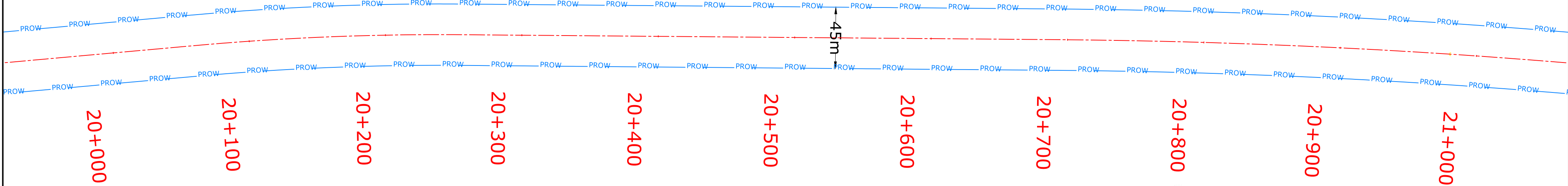


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Village - Balgawan (17+200 to 19+800)
Village - Dhobdiha (19+800 to 20+400)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Dhobdiha (19+800 to 20+400)
Village - Tarawan (20+400 to 20+900)
Village - Mauna (20+900 to 22+600)

LEGEND

PROPOSED CENTER LINE	
PROW	
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

Drawing Title :
DGPS MAP
Km 19+000 to Km 21+000 DISTRICT - ROHTAS

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005

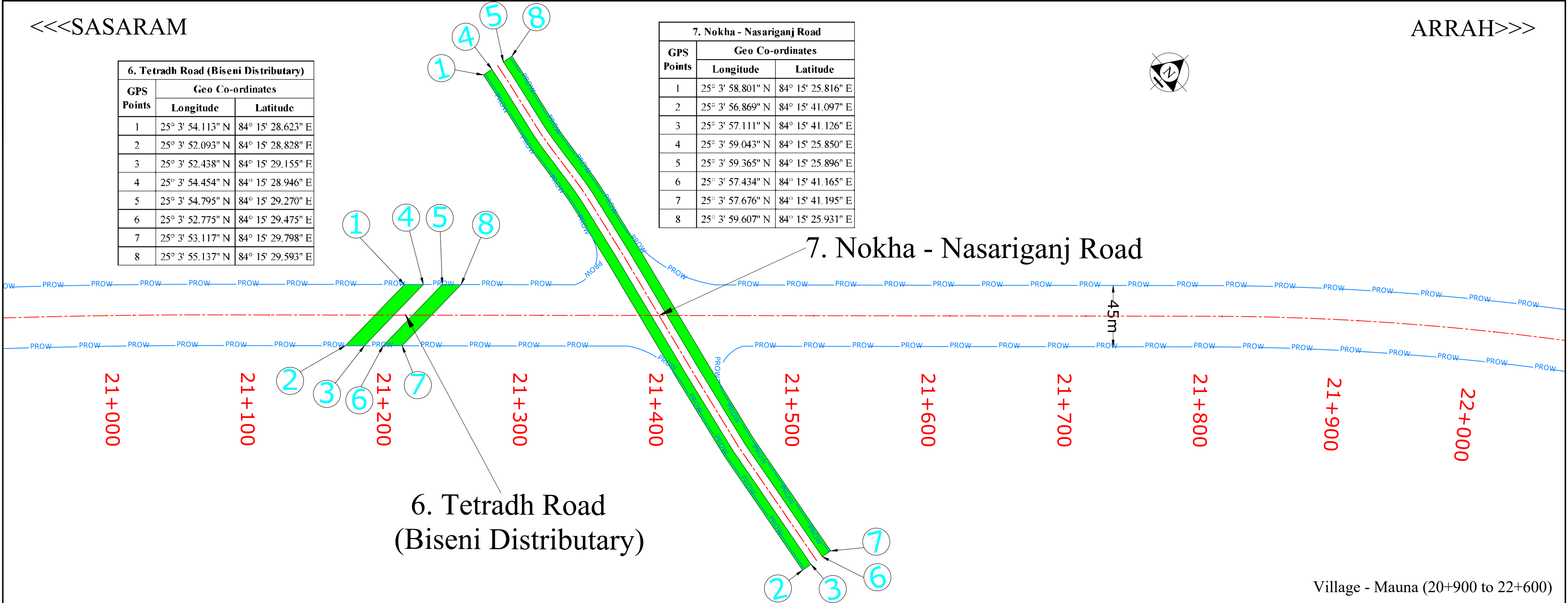
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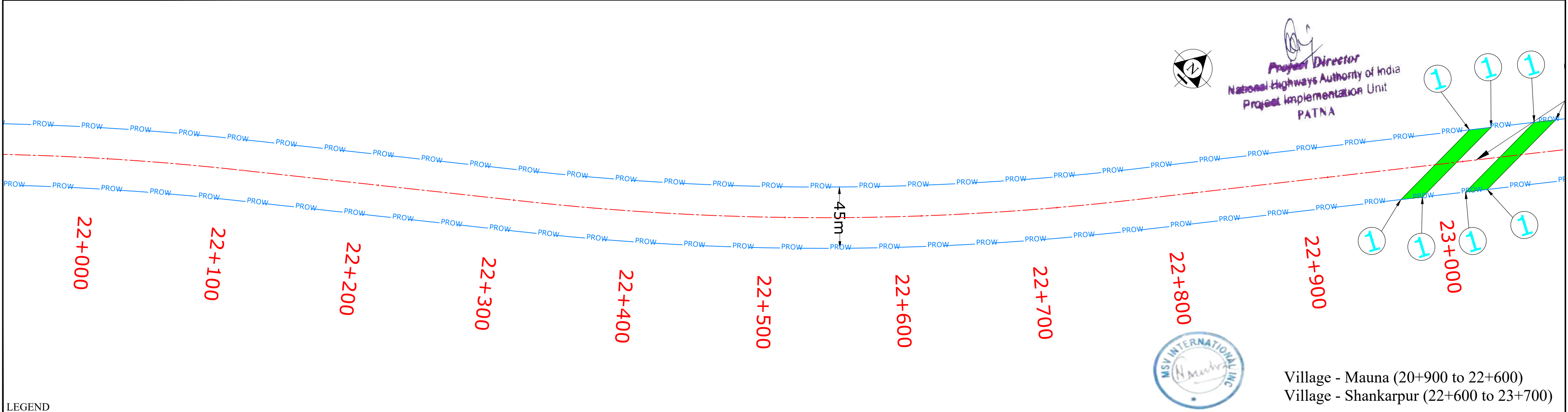
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6. Tetradh Road (Biseni Distributary)			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	25° 3' 54.113" N	84° 15' 28.623" E	
2	25° 3' 52.093" N	84° 15' 28.828" E	
3	25° 3' 52.438" N	84° 15' 29.155" E	
4	25° 3' 54.454" N	84° 15' 28.946" E	
5	25° 3' 54.795" N	84° 15' 29.270" E	
6	25° 3' 52.775" N	84° 15' 29.475" E	
7	25° 3' 53.117" N	84° 15' 29.798" E	
8	25° 3' 55.137" N	84° 15' 29.593" E	

7. Nokha - Nasariganj Road			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	25° 3' 58.801" N	84° 15' 25.816" E	
2	25° 3' 56.869" N	84° 15' 41.097" E	
3	25° 3' 57.111" N	84° 15' 41.126" E	
4	25° 3' 59.043" N	84° 15' 25.850" E	
5	25° 3' 59.365" N	84° 15' 25.896" E	
6	25° 3' 57.434" N	84° 15' 41.165" E	
7	25° 3' 57.676" N	84° 15' 41.195" E	
8	25° 3' 59.607" N	84° 15' 25.931" E	



Village - Mauna (20+900 to 22+600)



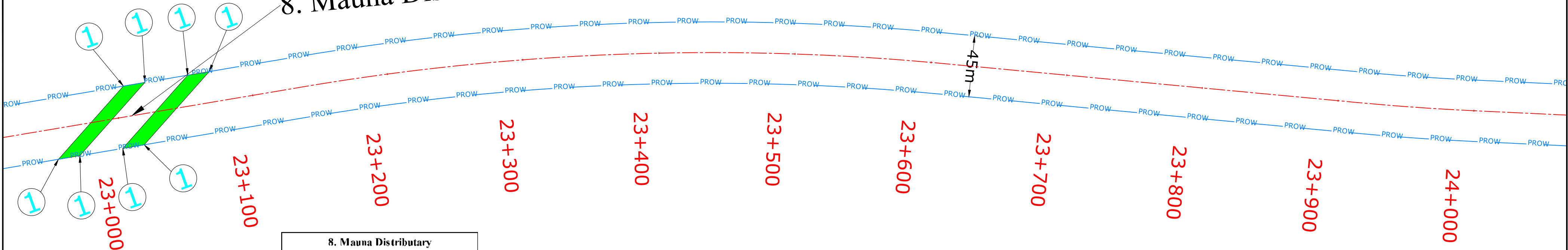
Village - Mauna (20+900 to 22+600)
Village - Shankarpur (22+600 to 23+700)

LEGEND													
PROPOSED CENTER LINE		Client :				Drawing Title :		Consultant:		M/s MSV INTERNATIONAL INC.		SCALE : 1:2000	
PROW		Project : Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)				DGPS MAP Km 21+000 to Km 23+000 DISTRICT - ROHTAS		 M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005		Sheet : 12 OF23		Paper Size A3	
FOREST LAND PROPOSED FOR DIVERSION										DATE : MAY 2022			

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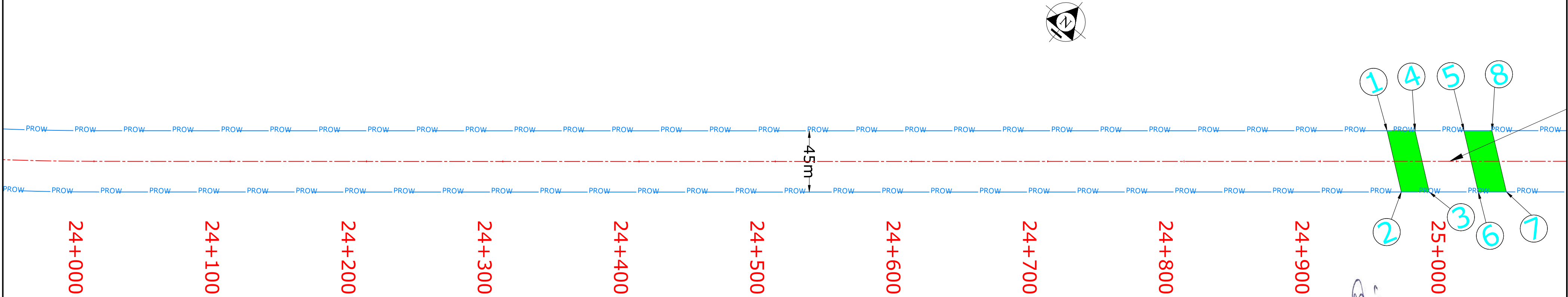
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8. Mauna Distributary



8. Mauna Distributary		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 4' 37.170" N	84° 16' 12.148" E
2	25° 4' 34.838" N	84° 16' 12.240" E
3	25° 4' 35.254" N	84° 16' 12.580" E
4	25° 4' 37.585" N	84° 16' 12.489" E
5	25° 4' 38.416" N	84° 16' 13.170" E
6	25° 4' 36.085" N	84° 16' 13.261" E
7	25° 4' 36.500" N	84° 16' 13.602" E
8	25° 4' 38.832" N	84° 16' 13.510" E

Village - Shankarpur (22+600 to 23+700)
Village - Baradih (23+700 to 23+900)
Village - Panapur (23+900 to 25+000)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Panapur (23+900 to 25+000)

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

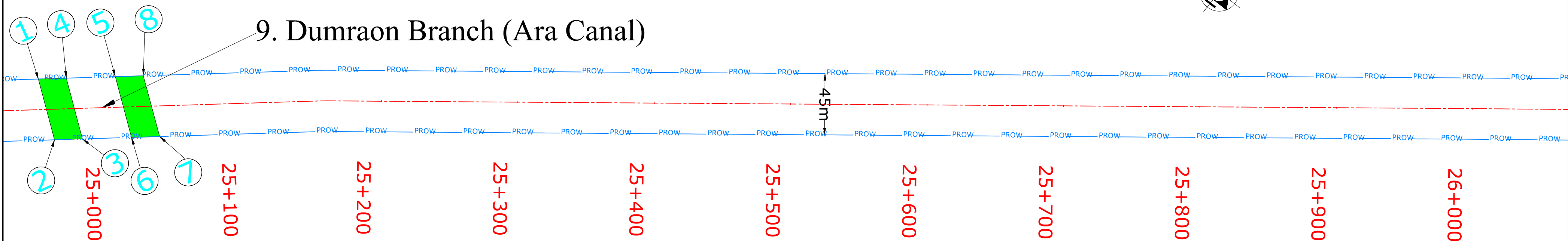
Drawing Title :	DGPS MAP Km 23+000 to Km 25+000 DISTRICT - ROHTAS
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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DATE : MAY 2022	

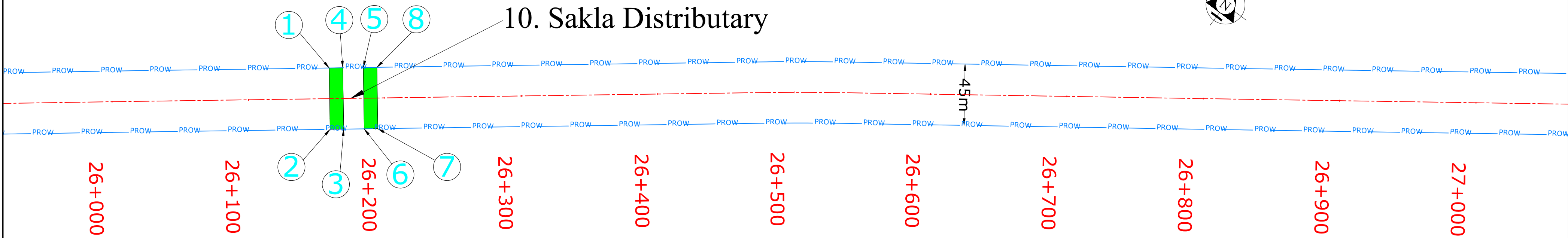
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9. Dumraon Branch (Ara Canal)		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 5' 19.747" N	84° 17' 3.187" E
2	25° 5' 18.867" N	84° 17' 4.522" E
3	25° 5' 19.303" N	84° 17' 5.073" E
4	25° 5' 20.184" N	84° 17' 3.740" E
5	25° 5' 20.950" N	84° 17' 4.707" E
6	25° 5' 20.070" N	84° 17' 6.042" E
7	25° 5' 20.510" N	84° 17' 6.598" E
8	25° 5' 21.388" N	84° 17' 5.260" E

Village - Dehri (25+000 to 25+800)
Village - Sukhara (25+800 to 26+400)



10. Sakla Distributary		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 5' 44.604" N	84° 17' 36.674" E
2	25° 5' 43.464" N	84° 17' 37.678" E
3	25° 5' 43.667" N	84° 17' 37.957" E
4	25° 5' 44.808" N	84° 17' 36.952" E
5	25° 5' 45.112" N	84° 17' 37.370" E
6	25° 5' 43.972" N	84° 17' 38.374" E
7	25° 5' 44.175" N	84° 17' 38.652" E
8	25° 5' 45.316" N	84° 17' 37.648" E

Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Sukhara (25+800 to 26+400)
Village - Bara Dih (26+400 to 26+800)
Village - Kaeth Bahuara (26+800 to 28+300)

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

Drawing Title :	DGPS MAP Km 25+000 to Km 27+000 DISTRICT - ROHTAS
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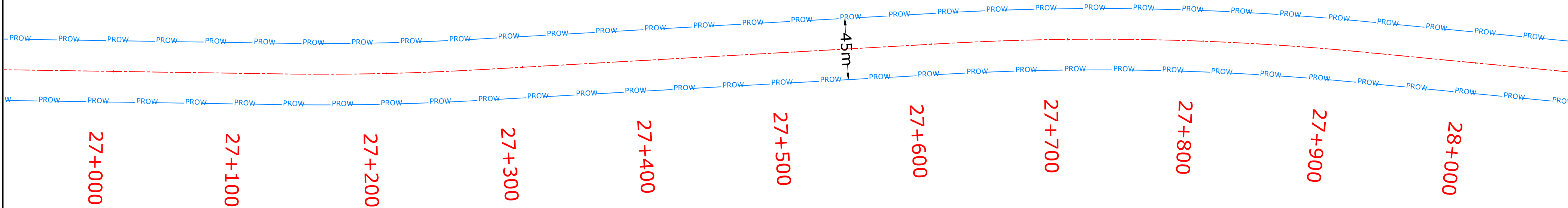
Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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DATE : MAY 2022	

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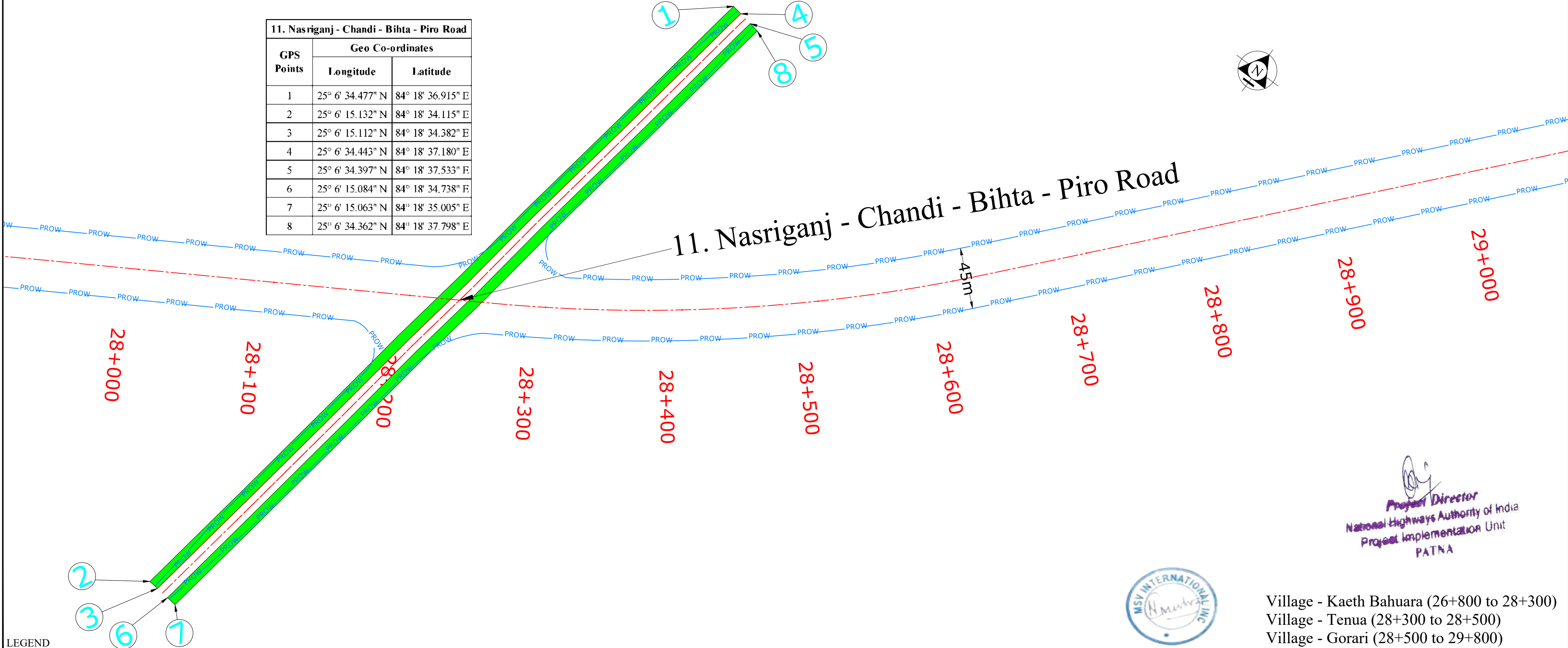
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Village - Kaeth Bahuara (26+800 to 28+300)

11. Nasriganj - Chandi - Bihta - Piro Road			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	25° 6' 34.477" N	84° 18' 36.915" E	
2	25° 6' 15.132" N	84° 18' 34.115" E	
3	25° 6' 15.112" N	84° 18' 34.382" E	
4	25° 6' 34.443" N	84° 18' 37.180" E	
5	25° 6' 34.397" N	84° 18' 37.533" E	
6	25° 6' 15.084" N	84° 18' 34.738" E	
7	25° 6' 15.063" N	84° 18' 35.005" E	
8	25° 6' 34.362" N	84° 18' 37.798" E	

11. Nasriganj - Chandi - Bihta - Piro Road



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA



Village - Kaeth Bahuara (26+800 to 28+300)
Village - Tenua (28+300 to 28+500)
Village - Gorari (28+500 to 29+800)

LEGEND

PROPOSED CENTER LINE	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

Drawing Title :

DGPS MAP
Km 27+000 to Km 29+000
DISTRICT - ROHTAS

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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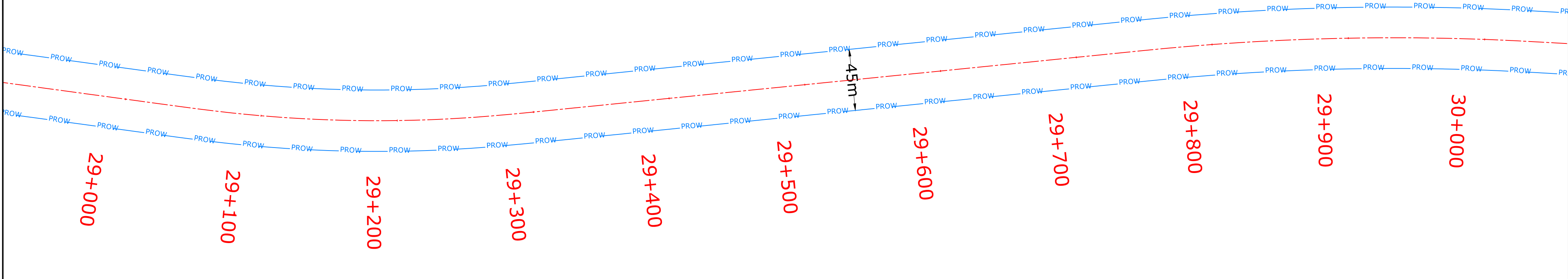
Sheet : 15 OF23

DATE : MAY 2022

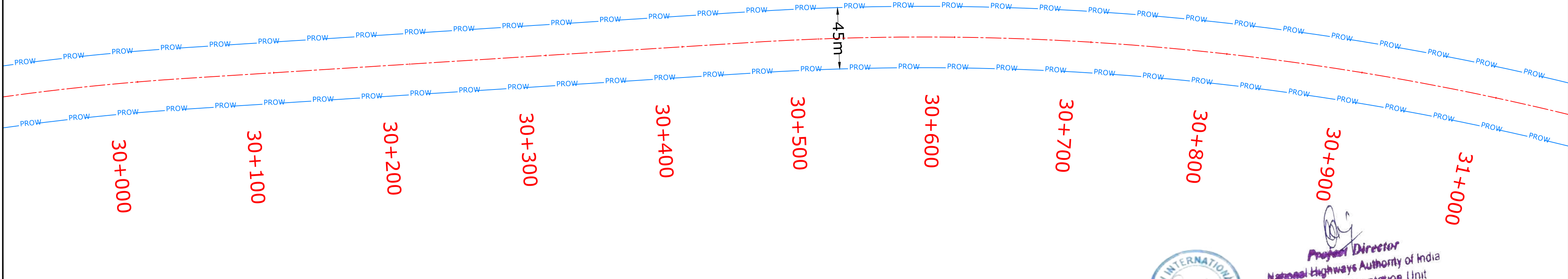
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Village - Gorari (28+500 to 29+800)
Village - Denri (29+800 to 30+000)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Burhawal (30+000 to 31+000)

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

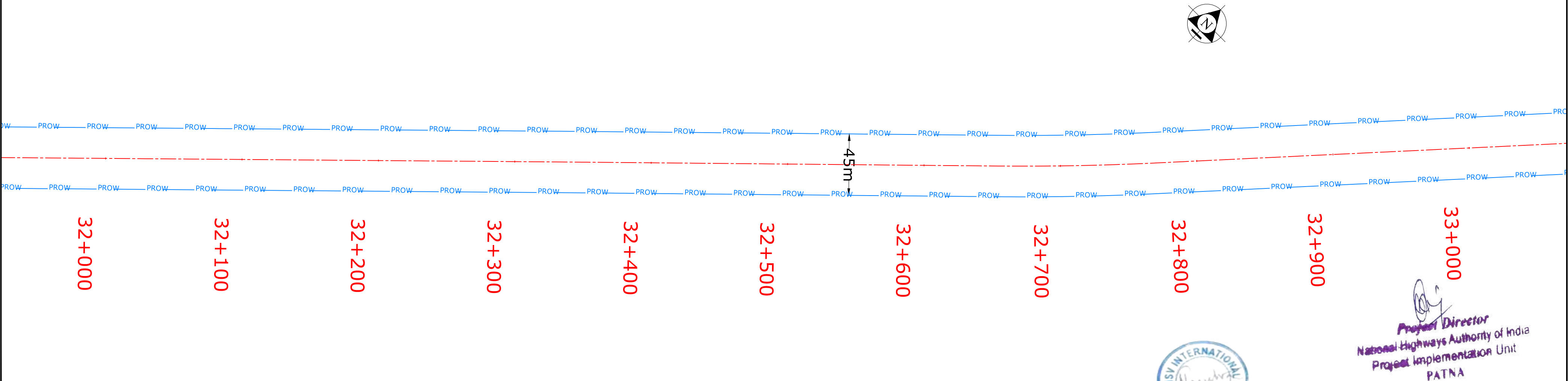
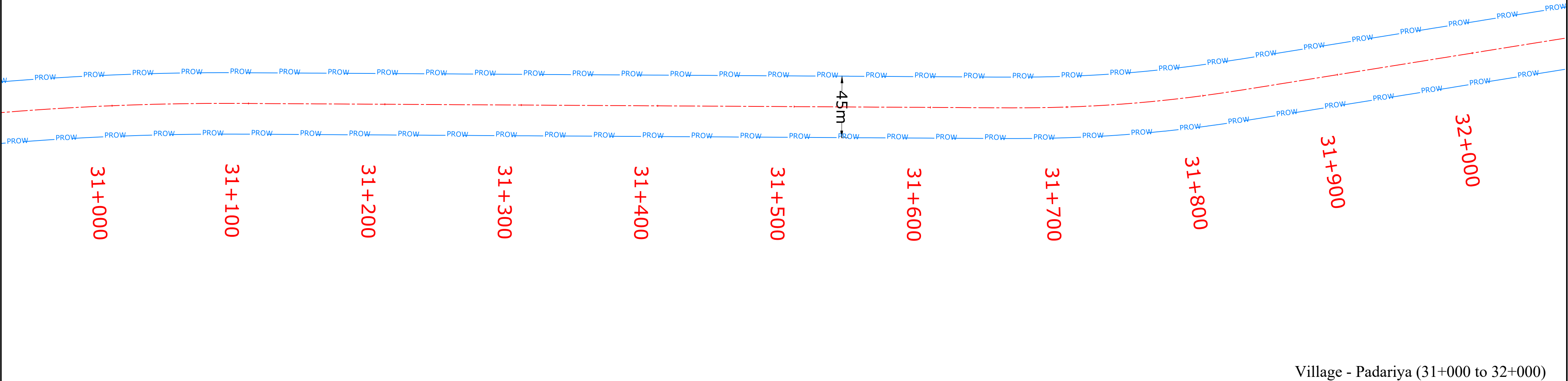
Drawing Title :
DGPS MAP
Km 29+000 to Km 31+000 DISTRICT - ROHTAS

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
	

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Sheet : 16 OF23	
DATE : MAY 2022	

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PROPOSED CENTER LINE	
PROW	
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

Drawing Title :
DGPS MAP
Km 31+000 to Km 33+000 DISTRICT - ROHTAS

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005

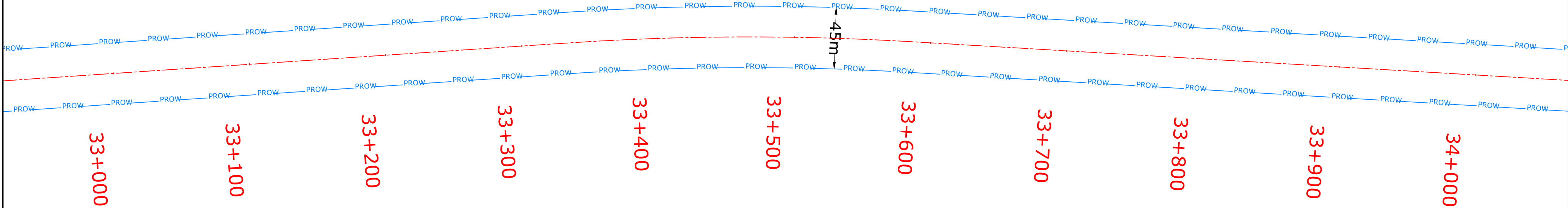
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Sheet : 17 OF23	
DATE : MAY 2022	

Village - Gajpatipur (32+000 to 32+300)
Village - Hatia (32+300 to 33+700)

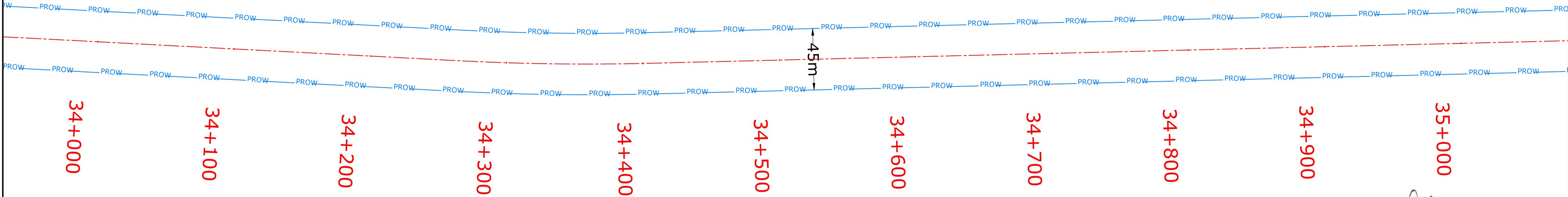
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

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Village - Hatia (32+300 to 33+700)
Village - Parsar (33+700 to 34+200)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA



Village - Parsar (33+700 to 34+200)
Village - Kirhi (34+200 to 34+600)
Village - Bhartha Dih (34+600 to 35+200)

LEGEND

PROPOSED CENTER LINE	
PROW	
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

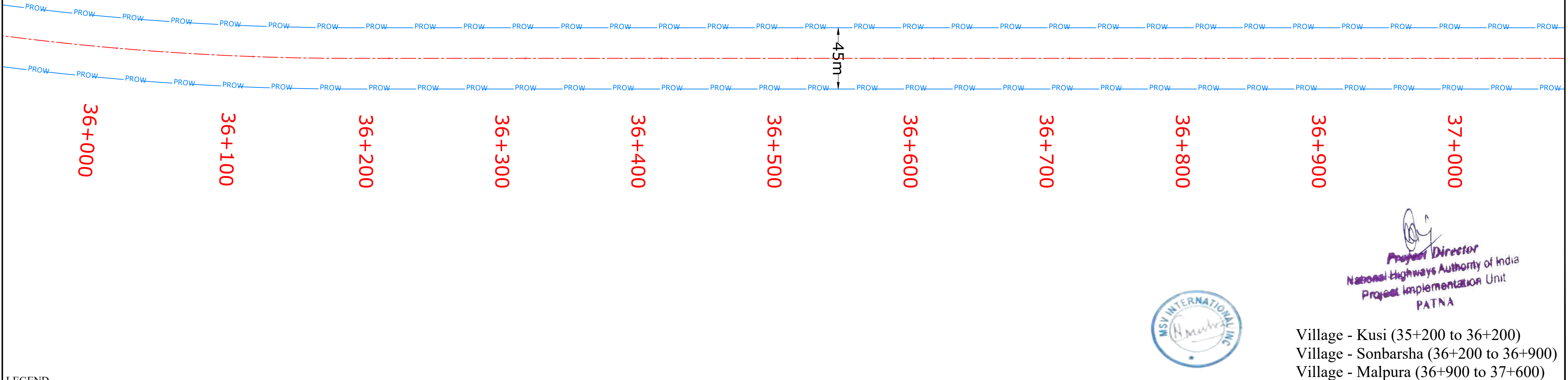
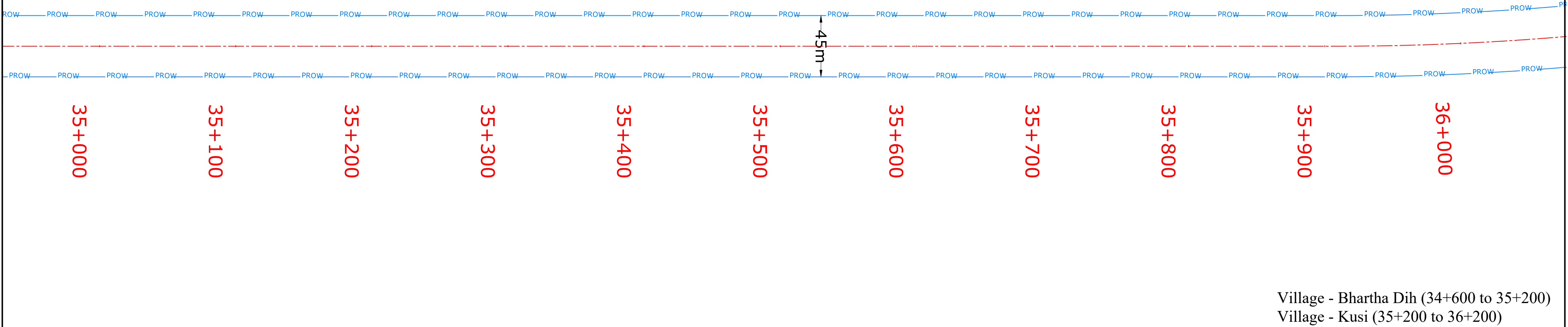
Drawing Title :	DGPS MAP Km 33+000 to Km 35+000 DISTRICT - ROHTAS
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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DATE : MAY 2022	

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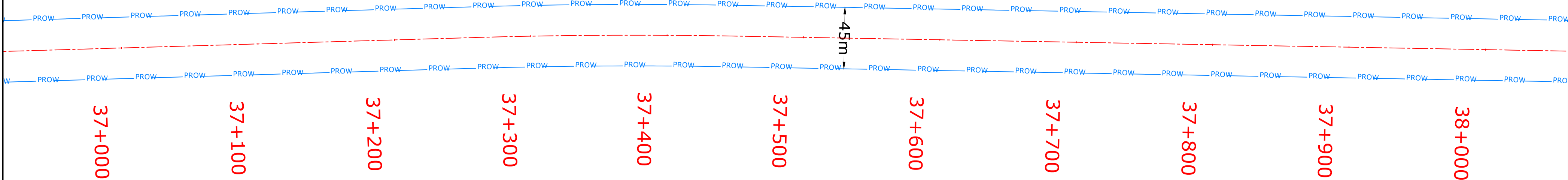
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PROPOSED CENTER LINE		Client :				Drawing Title :		Consultant:		SCALE : 1:2000		
PROW		 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)				DGPS MAP Km 35+000 to Km 37+000 DISTRICT - ROHTAS		 M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005		Sheet : 19 OF23		Paper Size A3
FOREST LAND PROPOSED FOR DIVERSION										DATE : MAY 2022		
		Project : Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)										


Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

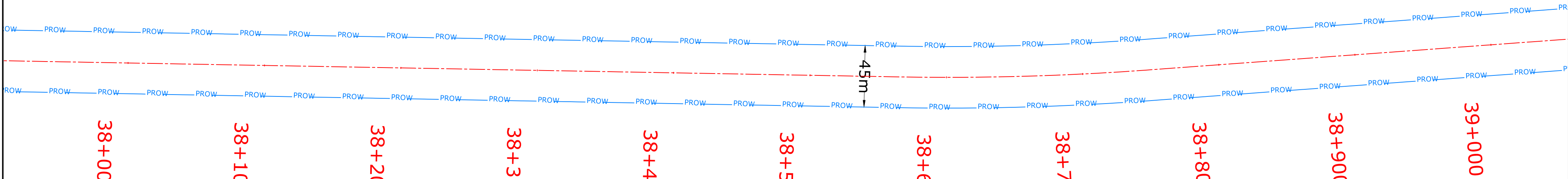


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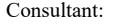
Village - Malpura (36+900 to 37+600)
Village - Kopa (37+600 to 38+800)



Village - Kopa (37+600 to 38+800)
Village - Kechua (38+800 to 38+900)
Village - Kumbia (38+900 to 39+400)

Project Director
National Highways Authority of India
Project Implementation Unit
PATNA



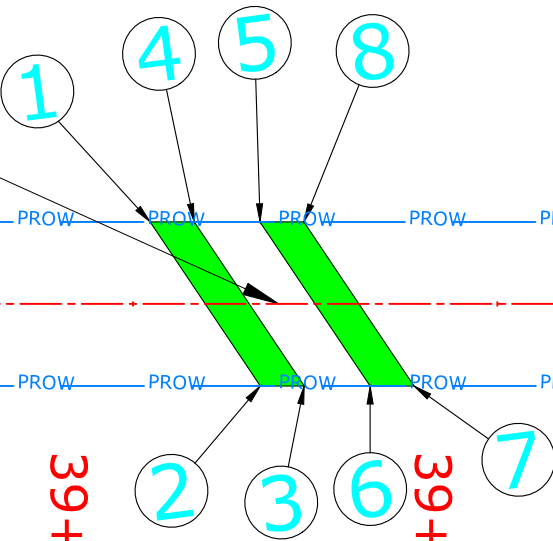
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PROPOSED CENTER LINE		Client :			 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)			Drawing Title :		Consultant:		M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005		SCALE : 1:2000	
PROW		Project :			Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)			DGPS MAP				Sheet : 20 OF23		DATE : MAY 2022	
FOREST LAND PROPOSED FOR DIVERSION								Km 37+000 to Km 39+000 DISTRICT - ROHTAS							

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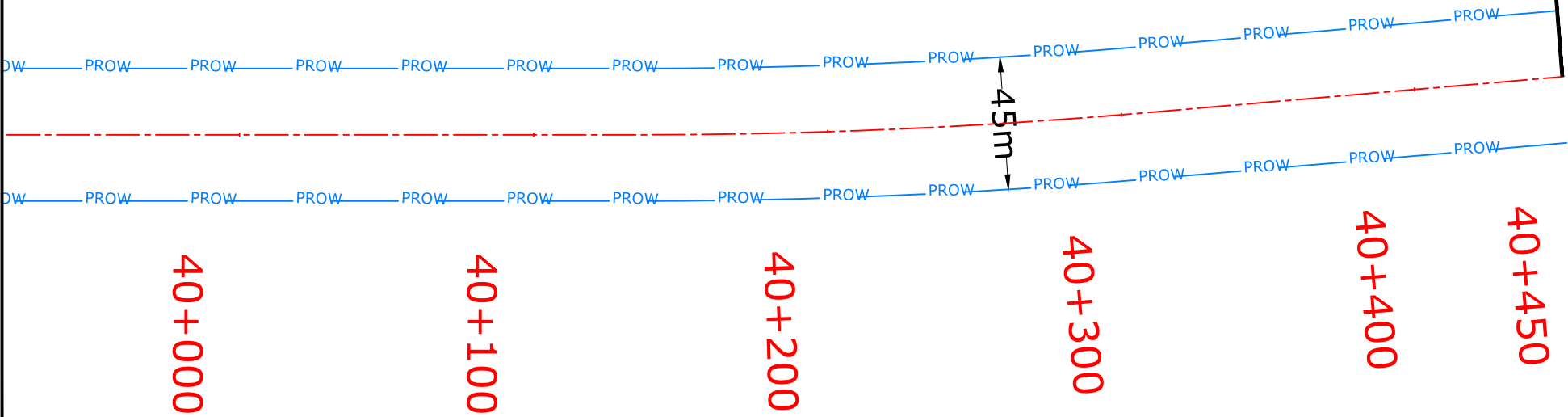
12. Sakla Distributary



12. Sakla Distributary		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 11' 6.729" N	84° 23' 4.942" E
2	25° 11' 6.718" N	84° 23' 6.877" E
3	25° 11' 7.042" N	84° 23' 7.119" E
4	25° 11' 7.053" N	84° 23' 5.184" E
5	25° 11' 7.538" N	84° 23' 5.547" E
6	25° 11' 7.527" N	84° 23' 7.481" E
7	25° 11' 7.850" N	84° 23' 7.723" E
8	25° 11' 7.861" N	84° 23' 5.789" E

Village - Kumbia (38+900 to 39+400)
Village - Sakla (39+400 to 40+453)

End of Package-I



LEGEND

PROPOSED CENTER LINE	---
PROW	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 0+000 (Saura) to Km 40+450 (Sakla) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)

Drawing Title :	DGPS MAP Km 39+000 to Km 40+450 DISTRICT - ROHTAS
-----------------	---

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
	

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Project Director
National Highways Authority of India
Project Implementation Unit
PATNA



Village - Sakla (39+400 to 40+453)

DGPS MAP

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A
from Km 40+450 (Sakla) to 84+300 (Patar) under Bharatmala Pariyojana
(Lot-7/package-2) in the State of Bihar (Package-II)

DISTRICT - BHOJPUR (40+450 to 84+300)



MAY - 2022



National Highways Authority of India
(Ministry of Road Transport & Highways) Government of India

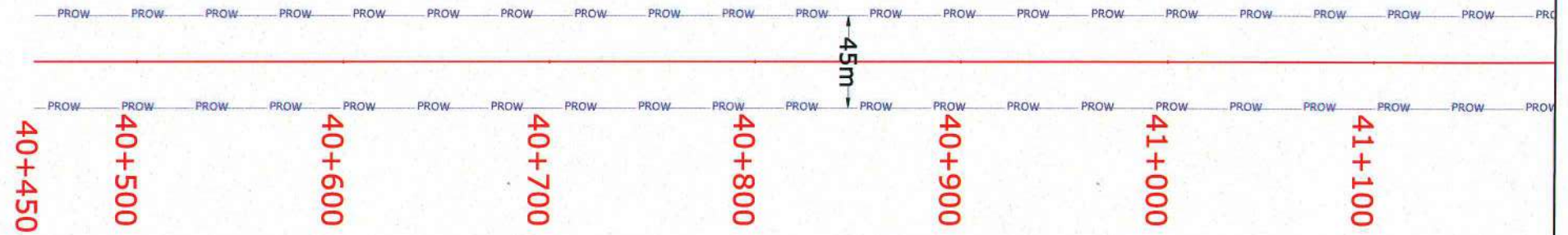


MSV INTERNATIONAL TECH PVT. LTD.

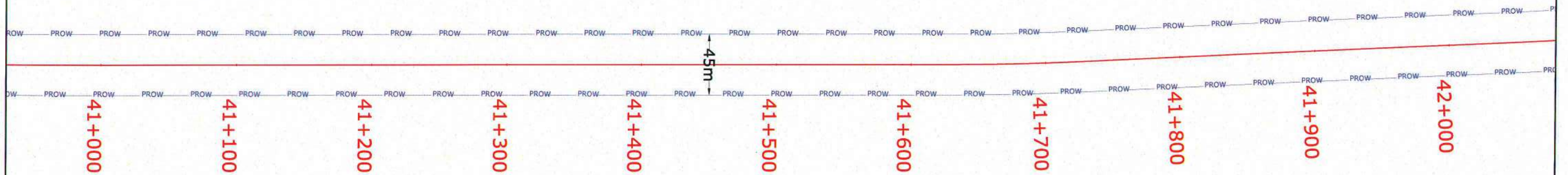
Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf
Course, Extension Road, Sec-65, Gurgaon-122005

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Village - Mahesh Dih (40+453 to 41+000)



Village - Mahadeo Pur (41+453 to 42+000)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

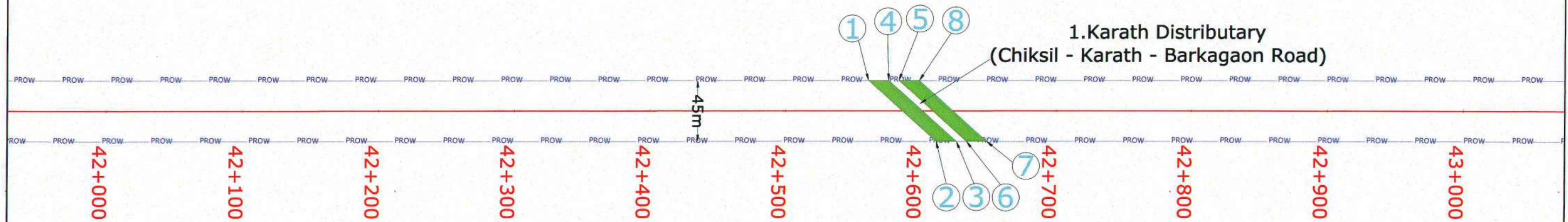
Drawing Title :	DGPS MAP Km 40+450 to Km 42+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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DATE : MAY 2022	

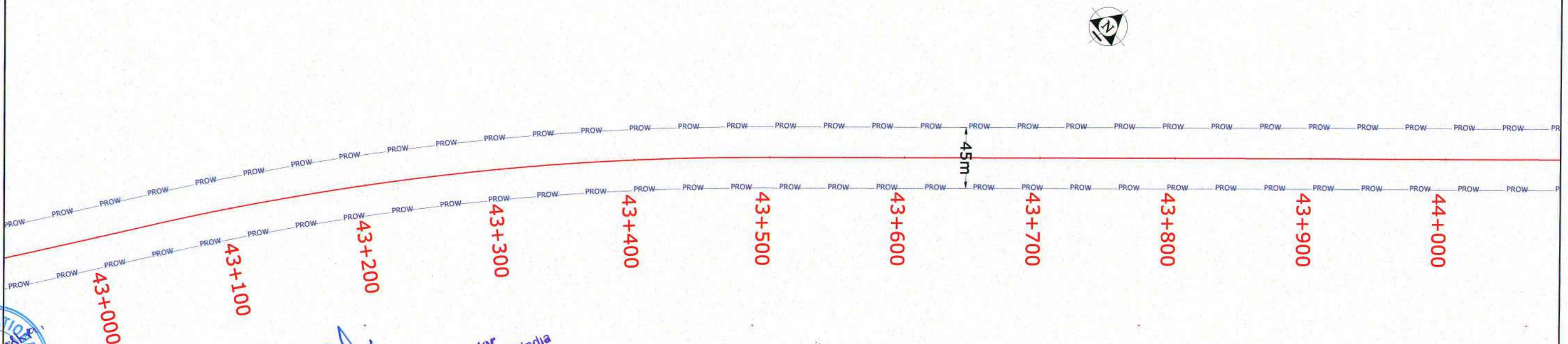
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1. Karath Distributary (Chiksil - Karath - Barkagaon Road)		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 23' 52.846" E	25° 12' 24.750" N
2	84° 23' 55.083" E	25° 12' 25.546" N
3	84° 23' 55.323" E	25° 12' 25.980" N
4	84° 23' 53.086" E	25° 12' 25.184" N
5	84° 23' 53.205" E	25° 12' 25.401" N
6	84° 23' 55.442" E	25° 12' 26.197" N
7	84° 23' 55.682" E	25° 12' 26.630" N
8	84° 23' 53.445" E	25° 12' 25.835" N

Village - Akraunj (42+000 to 43+100)



Village - Akraunj (42+000 to 43+100)
Village - Tarari (43+100 to 44+200)

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP
Km 42+000 to Km 44+000
DISTRICT - BHOJPUR

Consultant :



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec-65, Gurgaon-122005

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DATE : MAY 2022

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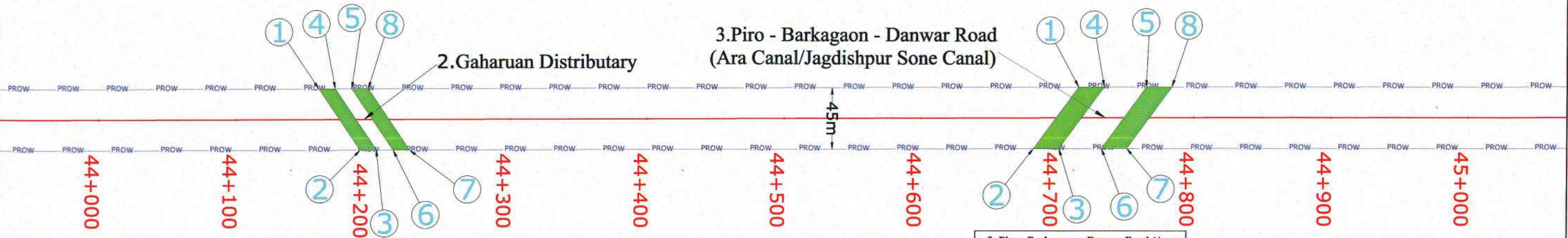
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3. Piro - Barkagaon - Danwar Road (Ara Canal/Jagdishpur Sone Canal)

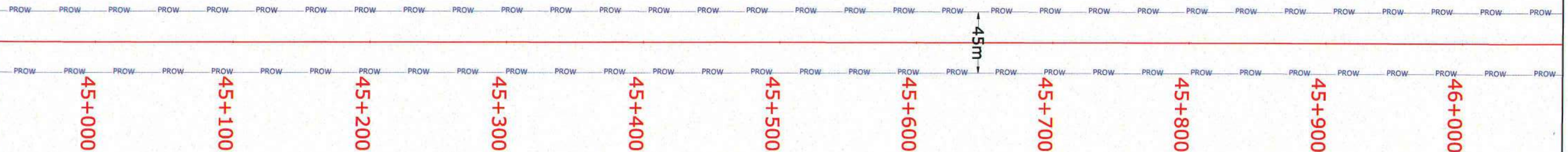
2. Gaharuan Distributary



2. Gaharuan Distributary		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 24' 24.629" E	25° 13' 7.765" N
2	84° 24' 26.557" E	25° 13' 7.591" N
3	84° 24' 26.831" E	25° 13' 7.893" N
4	84° 24' 24.904" E	25° 13' 8.066" N
5	84° 24' 25.178" E	25° 13' 8.368" N
6	84° 24' 27.106" E	25° 13' 8.195" N
7	84° 24' 27.380" E	25° 13' 8.496" N
8	84° 24' 25.452" E	25° 13' 8.670" N

3. Piro - Barkagaon - Danwar Road (Ara Canal/Jagdishpur Sone Canal)		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 24' 37.279" E	25° 13' 21.671" N
2	84° 24' 37.762" E	25° 13' 19.909" N
3	84° 24' 38.186" E	25° 13' 20.376" N
4	84° 24' 37.703" E	25° 13' 22.137" N
5	84° 24' 38.410" E	25° 13' 22.914" N
6	84° 24' 38.893" E	25° 13' 21.153" N
7	84° 24' 39.318" E	25° 13' 21.619" N
8	84° 24' 38.834" E	25° 13' 23.381" N

Village - Tarari (43+100 to 44+200)
Village - Barka Gaon (44+200 to 45+500)



Village - Barka Gaon (44+200 to 45+500)
Village - Bhadsera (45+500 to 46+500)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	—
PROW	—
FOREST LAND PROPOSED FOR DIVERSION	■

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Lining of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

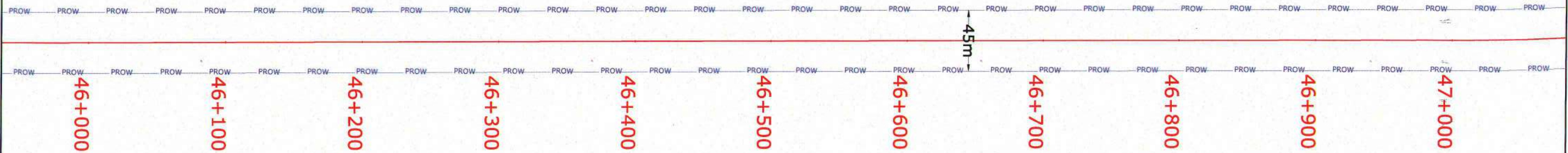
Drawing Title :	DGPS MAP Km 44+000 to Km 46+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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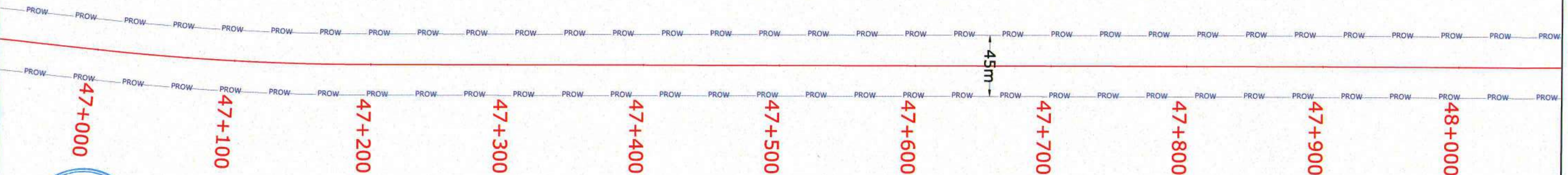
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DATE : MAY 2022	

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Village - Bhadsara (45+500 to 46+500)
Village - Surmana (46+500 to 47+200)



Village - Surmana (46+500 to 47+200)
Village - Dhangawan (47+200 to 47+700)
Village - Dumariya (47+700 to 49+400)



Project Director
National Highways Authority of India
Patna
Bihar

LEGEND

PROPOSED CENTER LINE	—
PROW	—
FOREST LAND PROPOSED FOR DIVERSION	■

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

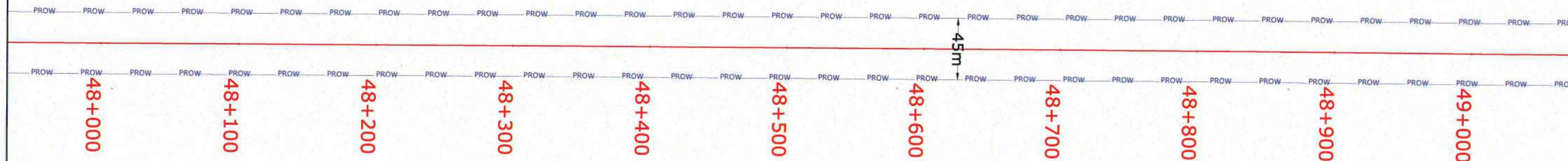
Drawing Title :	DGPS MAP Km 46+000 to Km 48+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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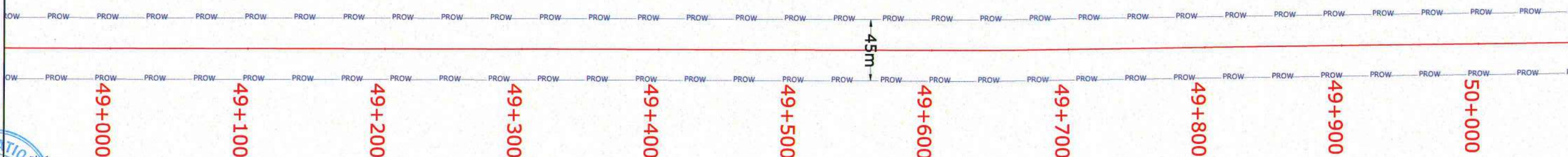
SCALE : 1:2000	Paper Size A3
Sheet : 04 OF 23	
DATE : MAY 2022	

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ARRAH>>>



Village - Dumariya (47+700 to 49+400)



Village - Dumariya (47+700 to 49+400)
Village - Ranni (49+400 to 49+900)
Village - Ithari (49+900 to 50+400)

LEGEND

PROPOSED CENTER LINE	—
PROW	—
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :	DGPS MAP Km 48+000 to Km 50+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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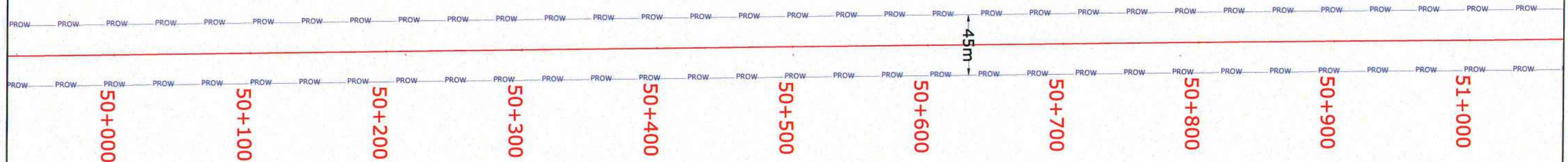
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DATE : MAY 2022	



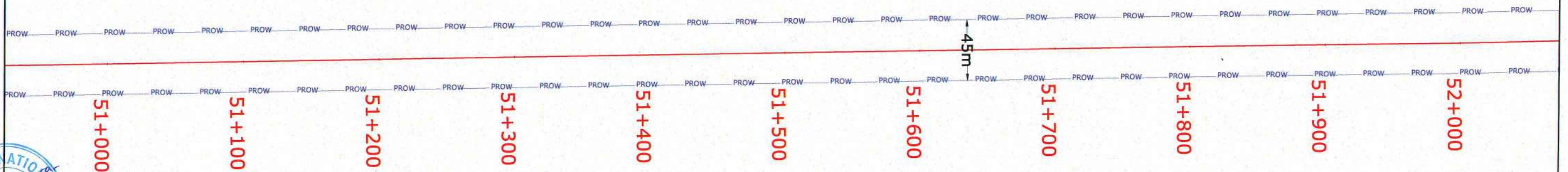
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

<<<SASARAM

ARRAH>>>



Village - Ithari (49+900 to 50+400)
Village - Kiratpur (50+400 to 51+000)



Village - Nirbhai Dehra (51+000 to 51+800)
Village - Gazo Dih (51+800 to 52+300)

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :
DGPS MAP
Km 50+000 to Km 52+000
DISTRICT - BHOJPUR

Consultant:

M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

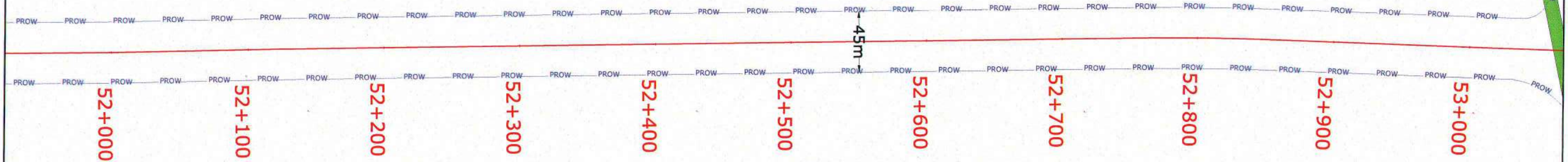
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DATE : MAY 2022
Paper Size A3

Project Director
National Highways Authority of India
Project Implementation Unit
PATNA



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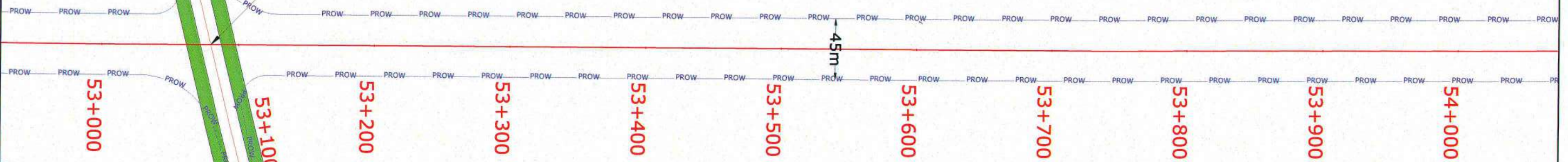
ARRAH>>>



Village - Gazo Dih (51+800 to 52+300)
Village - Kurmorhi (52+300 to 55+000)

4. Piro - Bihta Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 27' 22.284" E	25° 17' 5.398" N
2	84° 27' 34.613" E	25° 17' 1.025" N
3	84° 27' 34.738" E	25° 17' 1.329" N
4	84° 27' 22.417" E	25° 17' 5.699" N
5	84° 27' 22.617" E	25° 17' 6.151" N
6	84° 27' 34.927" E	25° 17' 1.785" N
7	84° 27' 35.053" E	25° 17' 2.089" N
8	84° 27' 22.750" E	25° 17' 6.453" N

4.Piro - Bihta Road



Village - Kurmorhi (52+300 to 55+000)

LEGEND

PROPOSED CENTER LINE	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :
DGPS MAP
Km 52+000 to Km 54+000
DISTRICT - BHOJPUR

Consultant:
M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

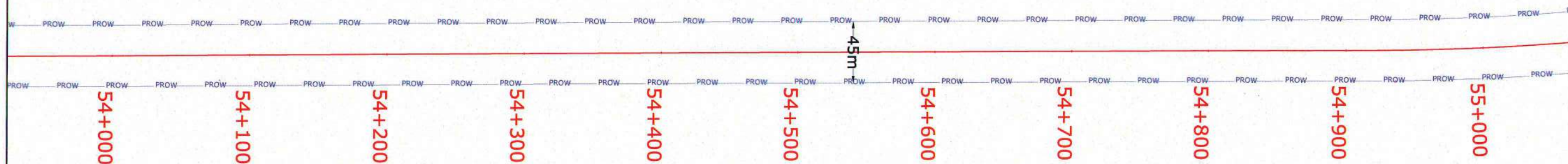
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DATE : MAY 2022
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Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

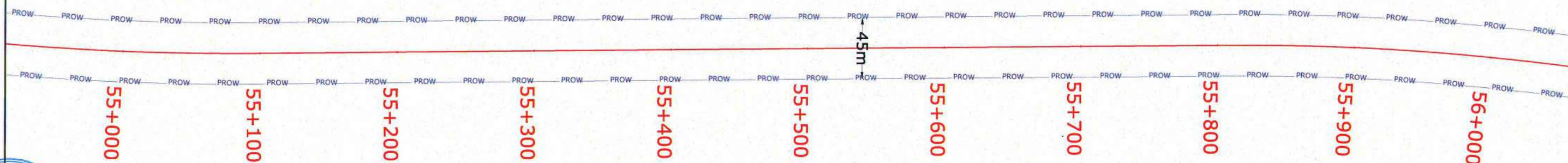


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ARRAH>>>



Village - Kurmorhi (52+300 to 55+000)



Village - Kurmorhi (52+300 to 55+000)
Village - Sonbarsha (55+000 to 55+700)
Village - Kusmahi (55+700 to 56+600)

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED
FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar)
under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 54+000 to Km 56+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

SCALE : 1:2000

Sheet : 08 OF 23

DATE : MAY 2022

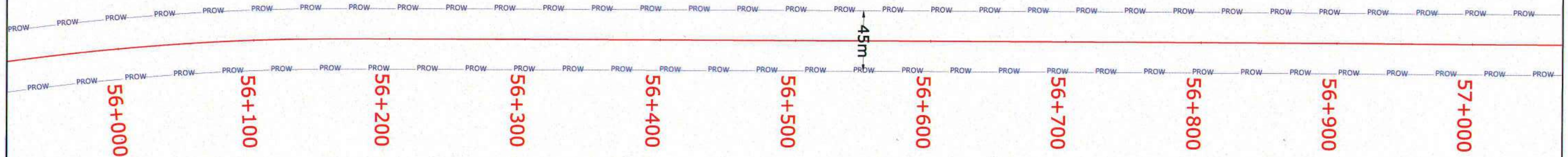
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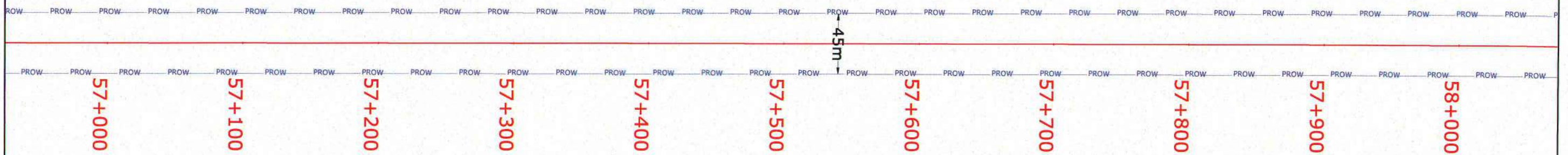
[Signature]
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

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ARRAH>>>



Village - Kusmahi (55+700 to 56+600)
Village - Madhuri (56+500 to 57+500)



Village - Madhuri (56+500 to 57+500)
Village - Kumhaila (57+500 to 58+600)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

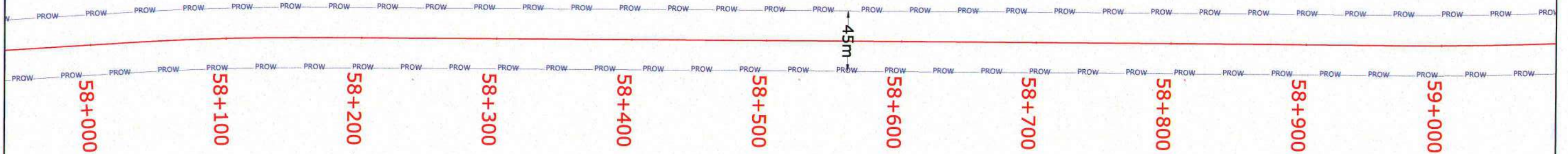
Drawing Title :	DGPS MAP Km 56+000 to Km 58+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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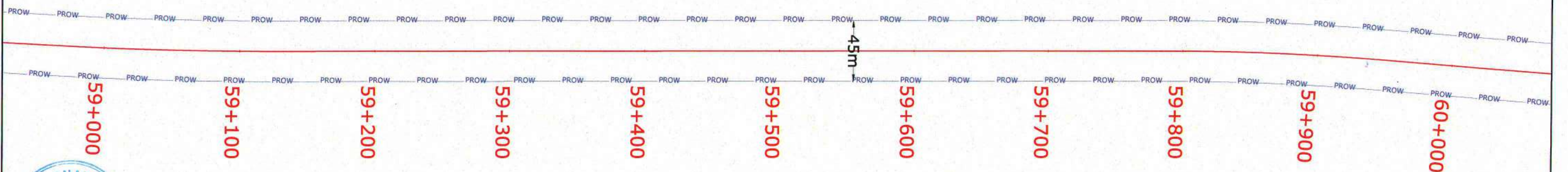
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Sheet : 09 OF 23	
DATE : MAY 2022	

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ARRAH>>>



Village - Kumhaila (57+500 to 58+600)
Village - Repura (58+600 to 59+000)



Village - Itaur (59+000 to 59+100)
Village - Kori (59+100 to 59+800)
Village - Jairampur (59+800 to 60+400)



[Signature]
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED
FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar)
under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP
Km 58+000 to Km 60+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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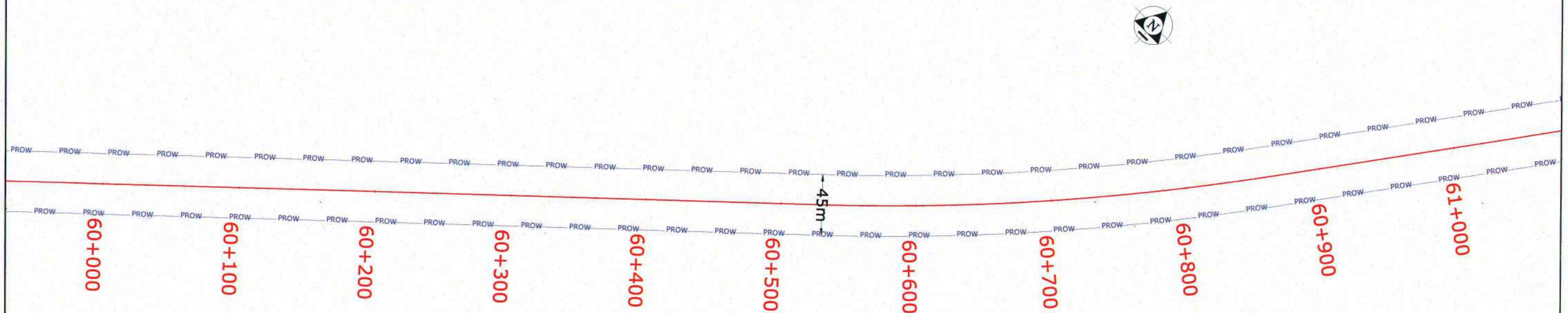
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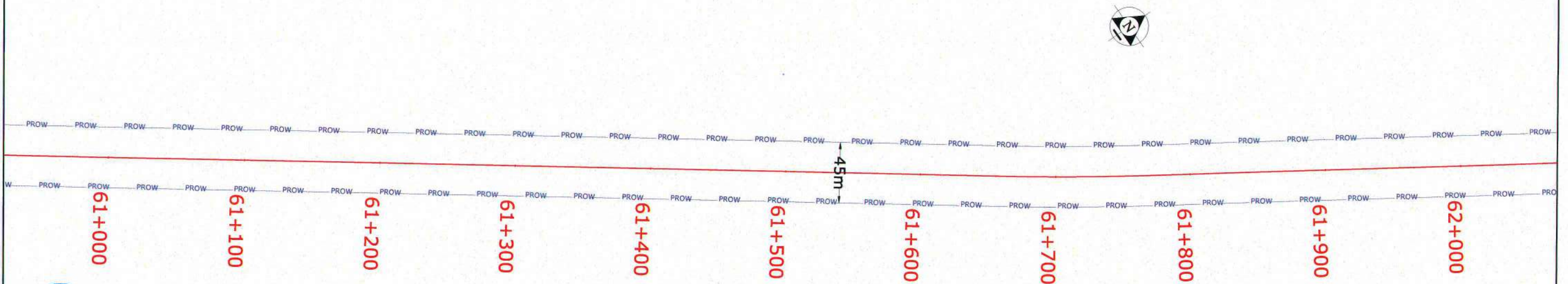
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ARRAH>>>



Village - Jairampur (59+800 to 60+400)
Village - Janca Dih (60+400 to 60+500)
Village - Panre Dih (60+500 to 61+300)



Village - Panre Dih (60+500 to 61+300)
Village - Patkhauli (61+300 to 61+700)
Village - Keshopur (61+700 to 61+800)
Village - Sundarpur (61+800 to 62+500)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	—
PROW	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

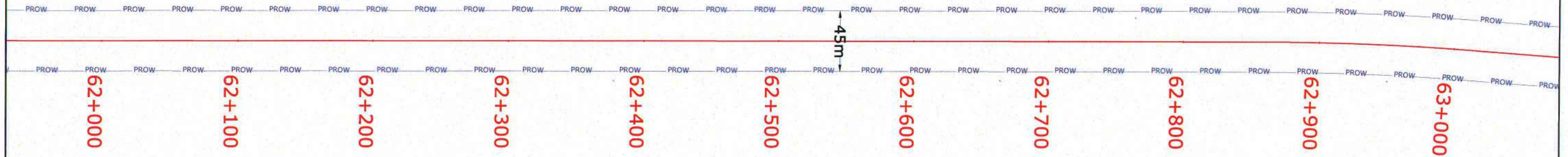
Drawing Title :	DGPS MAP Km 60+000 to Km 62+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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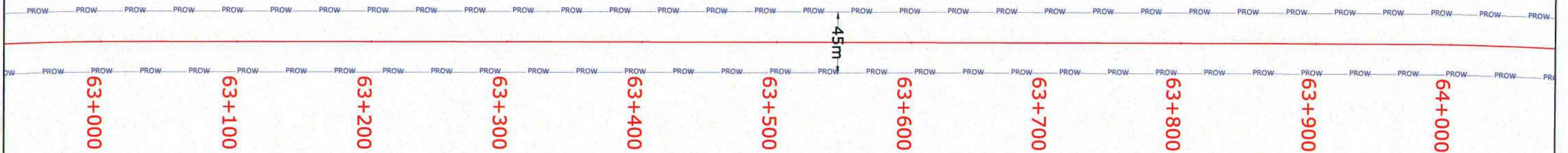
SCALE : 1:2000	Sheet : 11 OF 23	Paper Size A3
DATE : MAY 2022		

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ARRAH>>>



Village - Sundarpur (61+800 to 62+500)
Village - Chandi (62+500 to 63+400)



Village - Chandi (62+500 to 63+400)
Village - Karnaul (63+400 to 64+800)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	---
PROW	---
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

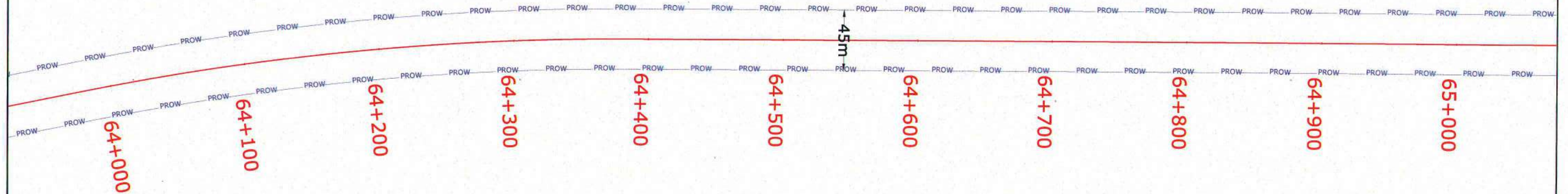
Drawing Title :	DGPS MAP Km 62+000 to Km 74+000 DISTRICT - BHOJPUR
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Consultant :	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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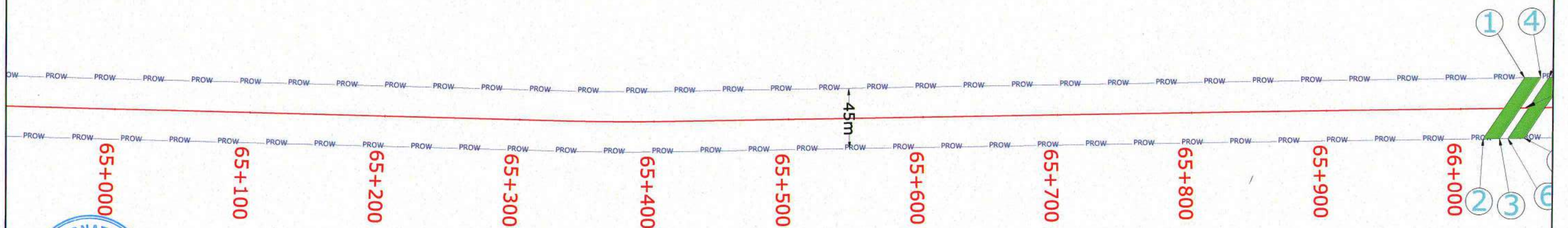
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DATE : MAY 2022	

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Village - Karnaul (63+400 to 64+800)
Village - Bahri (63+400 to 66+000)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	—
PROW	— PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :	DGPS MAP Km 64+000 to Km 66+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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DATE : MAY 2022
Paper Size A3

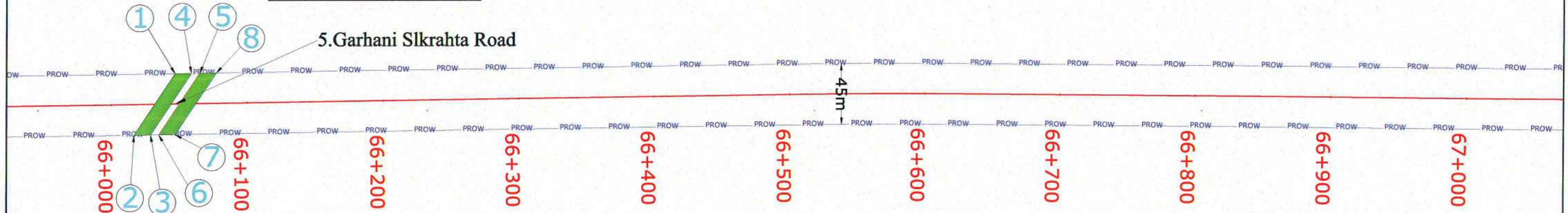
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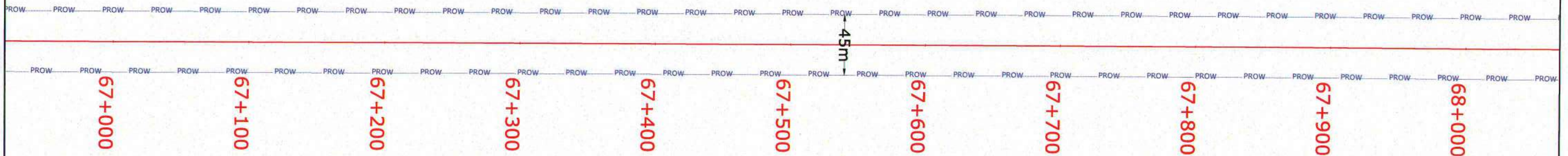
5. Garhani Sikrahta Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 32' 17.749" E	25° 22' 30.542" N
2	84° 32' 18.083" E	25° 22' 28.796" N
3	84° 32' 18.393" E	25° 22' 29.071" N
4	84° 32' 18.060" E	25° 22' 30.817" N
5	84° 32' 18.215" E	25° 22' 30.954" N
6	84° 32' 18.549" E	25° 22' 29.208" N
7	84° 32' 18.859" E	25° 22' 29.483" N
8	84° 32' 18.525" E	25° 22' 31.229" N



5. Garhani Sikrahta Road



Village - Kaup (66+000 to 67+700)

Village - Kaup (66+000 to 67+700)
Village - Dhandhauli (67+700 to 68+700)

Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	
PROW	
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

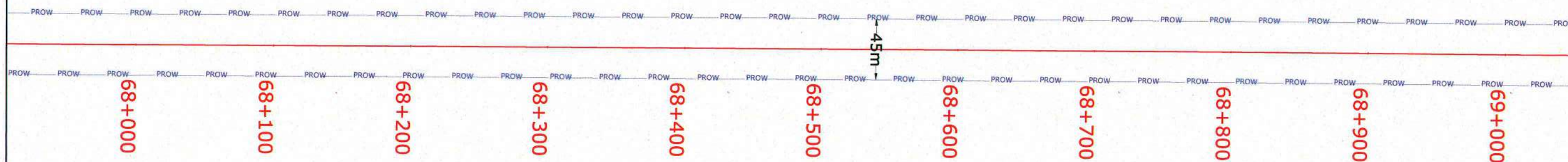
Drawing Title :	DGPS MAP Km 66+000 to Km 68+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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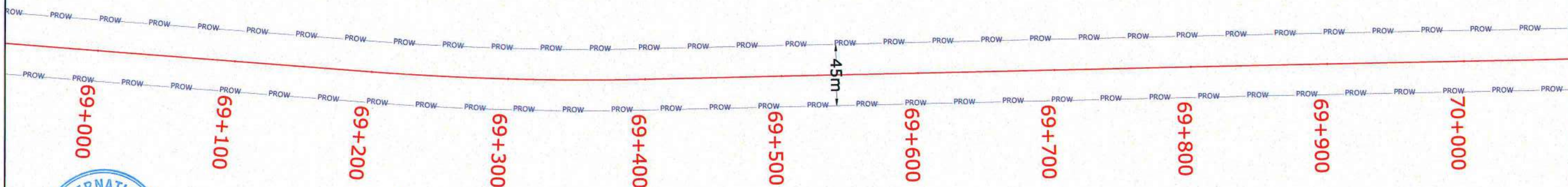
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Sheet : 14 OF 23	
DATE : MAY 2022	

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Village - Dhandhuli (67+700 to 68+700)
Village - Garahni (68+700 to 69+100)



Village - Garahni (68+700 to 69+100)
Village - Pararia (69+100 to 70+200)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	— PROW — PROW —
PROW	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :	DGPS MAP Km 68+000 to Km 70+000 DISTRICT - BHOJPUR
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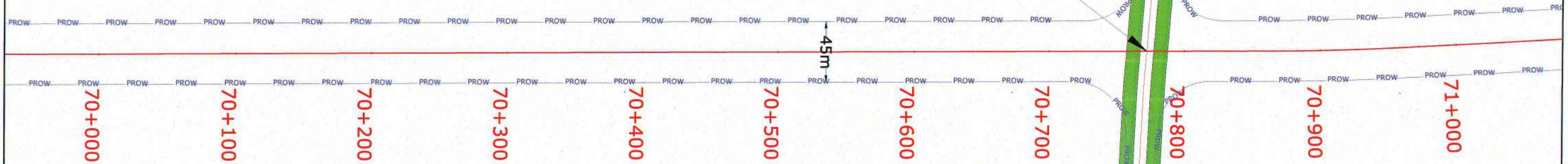
Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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DATE : MAY 2022	

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ARRAH>>>

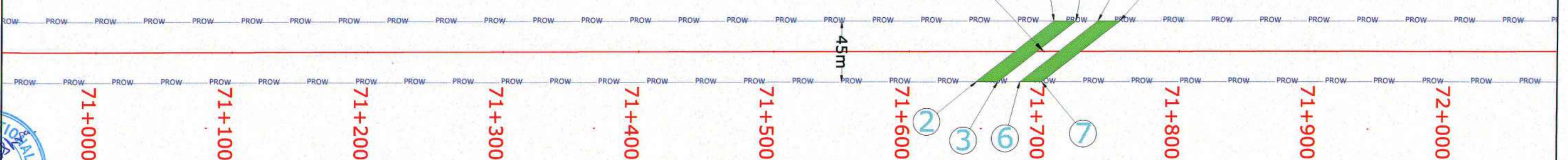
6. Garhani Agiaon Road (Jaitpur Distributary)



6. Garhani Agiaon Road (Jaitpur Distributary)		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 34' 13.407" E	25° 24' 21.645" N
2	84° 34' 21.906" E	25° 24' 14.003" N
3	84° 34' 22.158" E	25° 24' 14.234" N
4	84° 34' 13.642" E	25° 24' 21.890" N
5	84° 34' 13.878" E	25° 24' 22.135" N
6	84° 34' 22.395" E	25° 24' 14.479" N
7	84° 34' 22.644" E	25° 24' 14.712" N
8	84° 24' 38.834" E	25° 13' 23.381" N

Village - Pararia (69+100 to 70+200)
Village - Dhamania (70+200 to 71+400)

7. Jaitpur Distributary



7. Jaitpur Distributary		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 34' 38.021" E	25° 24' 42.529" N
2	84° 34' 38.010" E	25° 24' 40.150" N
3	84° 34' 38.370" E	25° 24' 40.566" N
4	84° 34' 38.380" E	25° 24' 42.944" N
5	84° 34' 38.740" E	25° 24' 43.360" N
6	84° 34' 38.729" E	25° 24' 40.981" N
7	84° 34' 39.089" E	25° 24' 41.397" N
8	84° 34' 39.100" E	25° 24' 43.776" N

Village - Dhamania (70+200 to 71+400)
Village - Baraura (71+400 to 72+500)

LEGEND

PROPOSED CENTER LINE	—
PROW	—
FOREST LAND PROPOSED FOR DIVERSION	■

Client :	
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :
DGPS MAP
Km 70+000 to Km 72+000
DISTRICT - BHOJPUR

Consultant:
M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

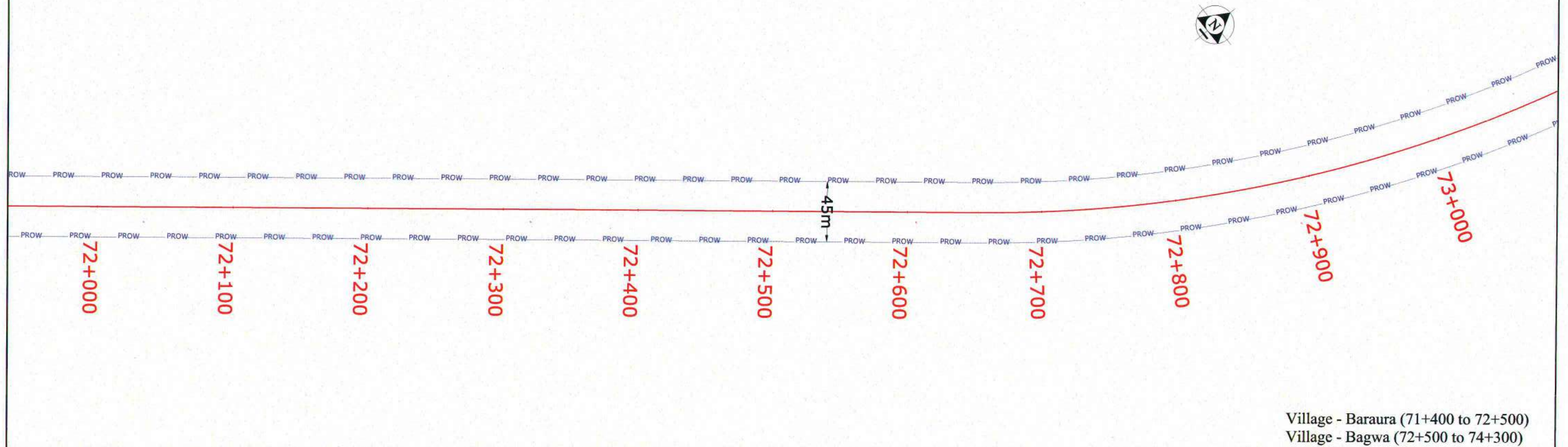
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DATE : MAY 2022
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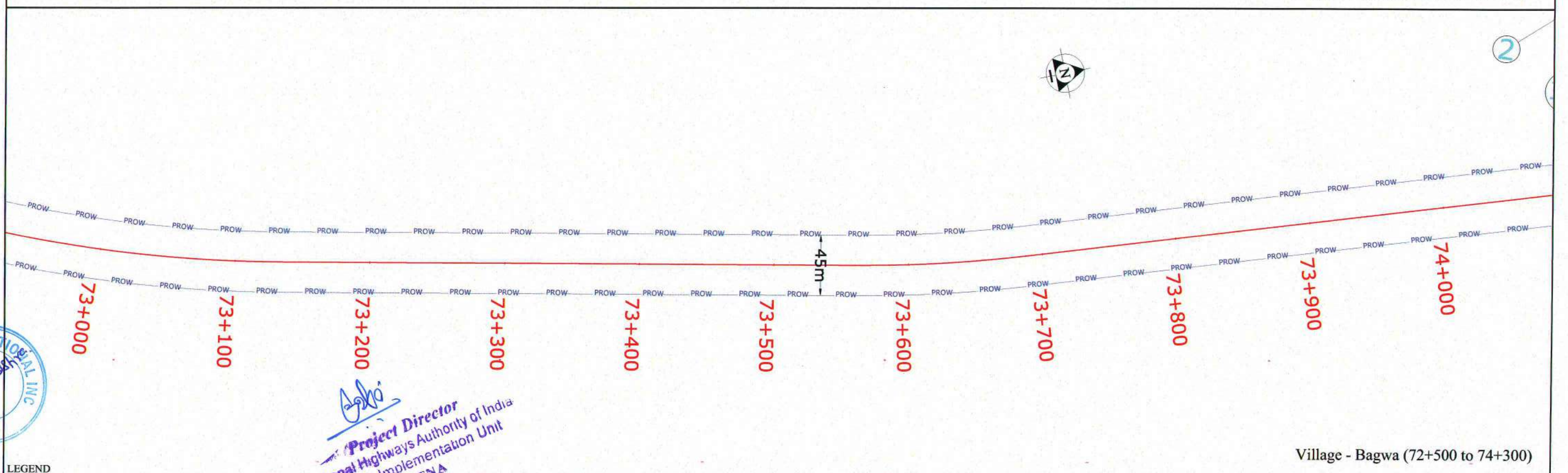
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

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ARRAH>>>



Village - Baraura (71+400 to 72+500)
Village - Bagwa (72+500 to 74+300)



Village - Bagwa (72+500 to 74+300)

LEGEND

PROPOSED CENTER LINE	—
PROW	— PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :	DGPS MAP Km 72+000 to Km 74+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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DATE : MAY 2022	

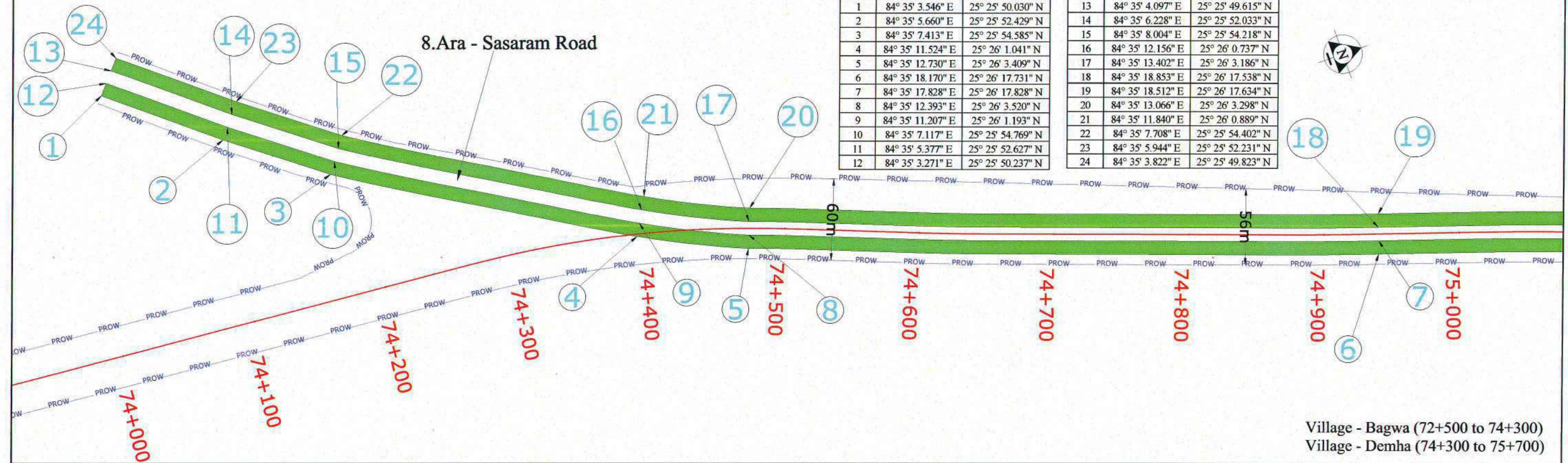
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ARRAH>>>

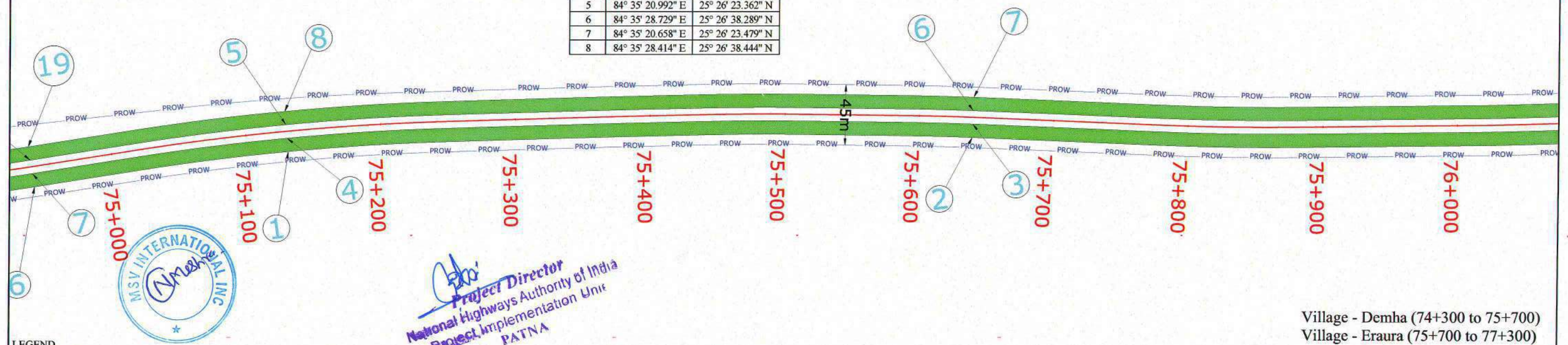
8.Ara - Sasaram Road

8. Ara - Sasaram Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 35' 3.546" E	25° 25' 50.030" N
2	84° 35' 5.660" E	25° 25' 52.429" N
3	84° 35' 7.413" E	25° 25' 54.585" N
4	84° 35' 11.524" E	25° 26' 1.041" N
5	84° 35' 12.730" E	25° 26' 3.409" N
6	84° 35' 18.170" E	25° 26' 17.731" N
7	84° 35' 17.828" E	25° 26' 17.828" N
8	84° 35' 12.393" E	25° 26' 3.520" N
9	84° 35' 11.207" E	25° 26' 1.193" N
10	84° 35' 7.117" E	25° 25' 54.769" N
11	84° 35' 5.377" E	25° 25' 52.627" N
12	84° 35' 3.271" E	25° 25' 50.237" N

13	84° 35' 4.097" E	25° 25' 49.615" N
14	84° 35' 6.228" E	25° 25' 52.033" N
15	84° 35' 8.004" E	25° 25' 54.218" N
16	84° 35' 12.156" E	25° 26' 0.737" N
17	84° 35' 13.402" E	25° 26' 3.186" N
18	84° 35' 18.853" E	25° 26' 17.538" N
19	84° 35' 18.512" E	25° 26' 17.634" N
20	84° 35' 13.066" E	25° 26' 3.298" N
21	84° 35' 11.840" E	25° 26' 0.889" N
22	84° 35' 7.708" E	25° 25' 54.402" N
23	84° 35' 5.944" E	25° 25' 52.231" N
24	84° 35' 3.822" E	25° 25' 49.823" N



8. Ara - Sasaram Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 35' 3.546" E	25° 25' 50.030" N
2	84° 35' 5.660" E	25° 25' 52.429" N
3	84° 35' 19.990" E	25° 26' 23.711" N
4	84° 35' 27.785" E	25° 26' 38.754" N
5	84° 35' 20.992" E	25° 26' 23.362" N
6	84° 35' 28.729" E	25° 26' 38.289" N
7	84° 35' 20.658" E	25° 26' 23.479" N
8	84° 35' 28.414" E	25° 26' 38.444" N



LEGEND

PROPOSED CENTER LINE	—
PROW	—
FOREST LAND PROPOSED FOR DIVERSION	■

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :	DGPS MAP Km 74+000 to Km 76+000 DISTRICT - BHOJPUR
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Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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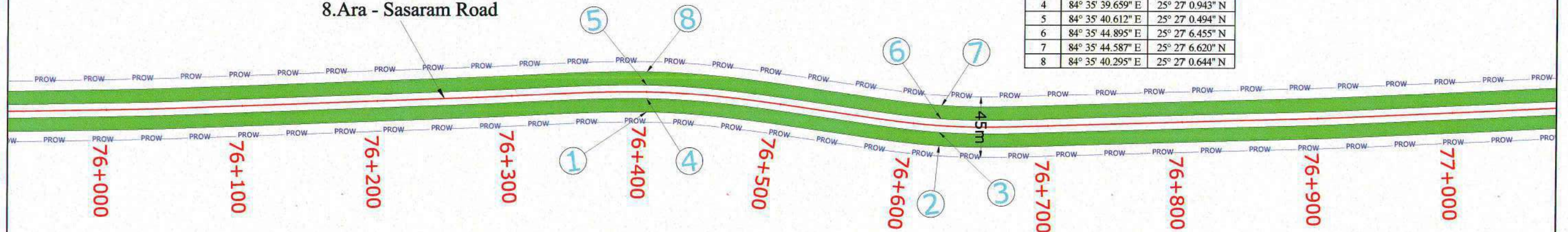
SCALE : 1:2000	Sheet : 18 OF 23
DATE : MAY 2022	Paper Size A3

<<<SASARAM

ARRAH>>>

8.Ara - Sasaram Road

8. Ara - Sasaram Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 35' 7.413" E	25° 25' 54.585" N
2	84° 35' 11.524" E	25° 26' 1.041" N
3	84° 35' 43.970" E	25° 27' 6.949" N
4	84° 35' 39.659" E	25° 27' 0.943" N
5	84° 35' 40.612" E	25° 27' 0.494" N
6	84° 35' 44.895" E	25° 27' 6.455" N
7	84° 35' 44.587" E	25° 27' 6.620" N
8	84° 35' 40.295" E	25° 27' 0.644" N



Village - Eraura (75+700 to 77+300)

8.Ara - Sasaram Road

8. Ara - Sasaram Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 35' 12.730" E	25° 26' 3.409" N
2	84° 35' 18.170" E	25° 26' 17.731" N
3	84° 36' 3.288" E	25° 27' 44.936" N
4	84° 35' 57.541" E	25° 27' 34.123" N
5	84° 35' 58.514" E	25° 27' 33.711" N
6	84° 36' 4.273" E	25° 27' 44.550" N
7	84° 36' 3.945" E	25° 27' 44.678" N
8	84° 35' 58.189" E	25° 27' 33.848" N
9	84° 35' 20.324" E	25° 26' 23.595" N
10	84° 36' 4.299" E	25° 27' 47.324" N
11	84° 36' 5.316" E	25° 27' 47.011" N
12	84° 36' 4.977" E	25° 27' 47.115" N

Village - Eraura (75+700 to 77+300)
Village - Kasap (77+300 to 81+000)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)

Drawing Title :	DGPS MAP Km 76+000 to Km 78+000 DISTRICT - BHOJPUR
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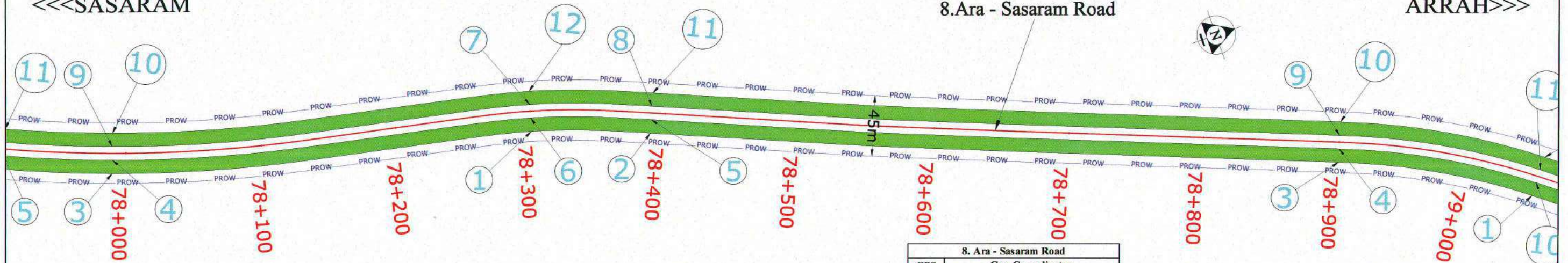
Consultant :	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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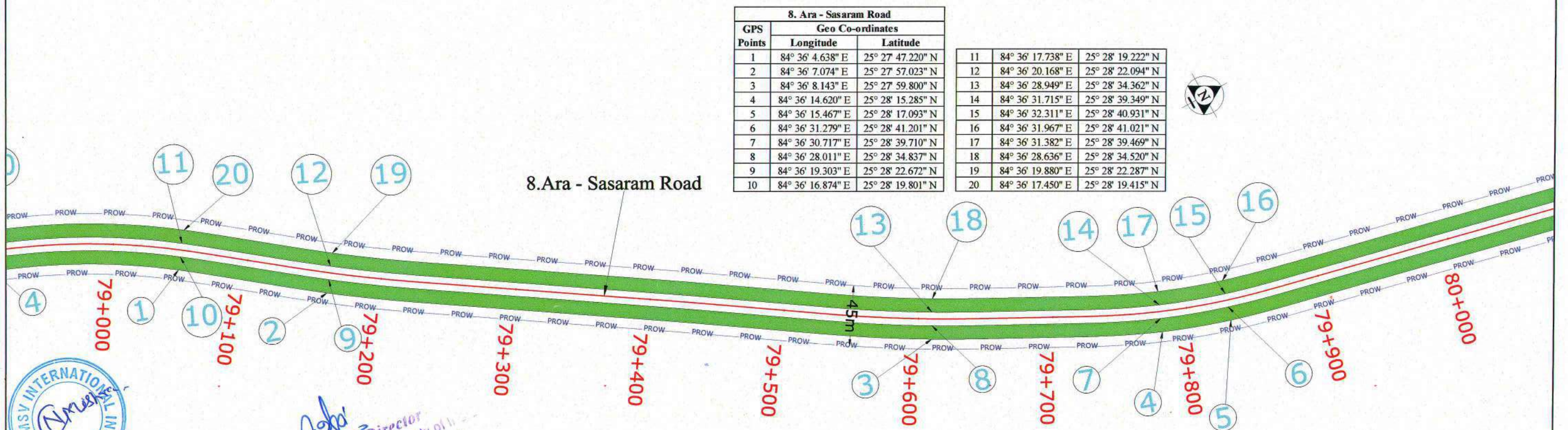
ARRAH>>>

8.Ara - Sasaram Road



8. Ara - Sasaram Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 35' 28.100" E	25° 26' 38.599" N
2	84° 35' 39.977" E	25° 27' 0.794" N
3	84° 35' 44.278" E	25° 27' 6.784" N
4	84° 36' 14.285" E	25° 28' 15.399" N
5	84° 36' 7.811" E	25° 27' 59.920" N
6	84° 36' 6.728" E	25° 27' 57.106" N
7	84° 36' 7.766" E	25° 27' 56.858" N
8	84° 36' 8.808" E	25° 27' 59.559" N
9	84° 36' 15.290" E	25° 28' 15.057" N
10	84° 36' 14.955" E	25° 28' 15.171" N
11	84° 36' 8.475" E	25° 27' 59.680" N
12	84° 36' 7.420" E	25° 27' 56.941" N

Village - Kasap (77+300 to 81+000)



8. Ara - Sasaram Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	84° 36' 4.638" E	25° 27' 47.220" N
2	84° 36' 7.074" E	25° 27' 57.023" N
3	84° 36' 8.143" E	25° 27' 59.800" N
4	84° 36' 14.620" E	25° 28' 15.285" N
5	84° 36' 15.467" E	25° 28' 17.093" N
6	84° 36' 31.279" E	25° 28' 41.201" N
7	84° 36' 30.717" E	25° 28' 39.710" N
8	84° 36' 28.011" E	25° 28' 34.837" N
9	84° 36' 19.303" E	25° 28' 22.672" N
10	84° 36' 16.874" E	25° 28' 19.801" N

11	84° 36' 17.738" E	25° 28' 19.222" N
12	84° 36' 20.168" E	25° 28' 22.094" N
13	84° 36' 28.949" E	25° 28' 34.362" N
14	84° 36' 31.715" E	25° 28' 39.349" N
15	84° 36' 32.311" E	25° 28' 40.931" N
16	84° 36' 31.967" E	25° 28' 41.021" N
17	84° 36' 31.382" E	25° 28' 39.469" N
18	84° 36' 28.636" E	25° 28' 34.520" N
19	84° 36' 19.880" E	25° 28' 22.287" N
20	84° 36' 17.450" E	25° 28' 19.415" N

Village - Kasap (77+300 to 81+000)



Gohi
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 78+000 to Km 80+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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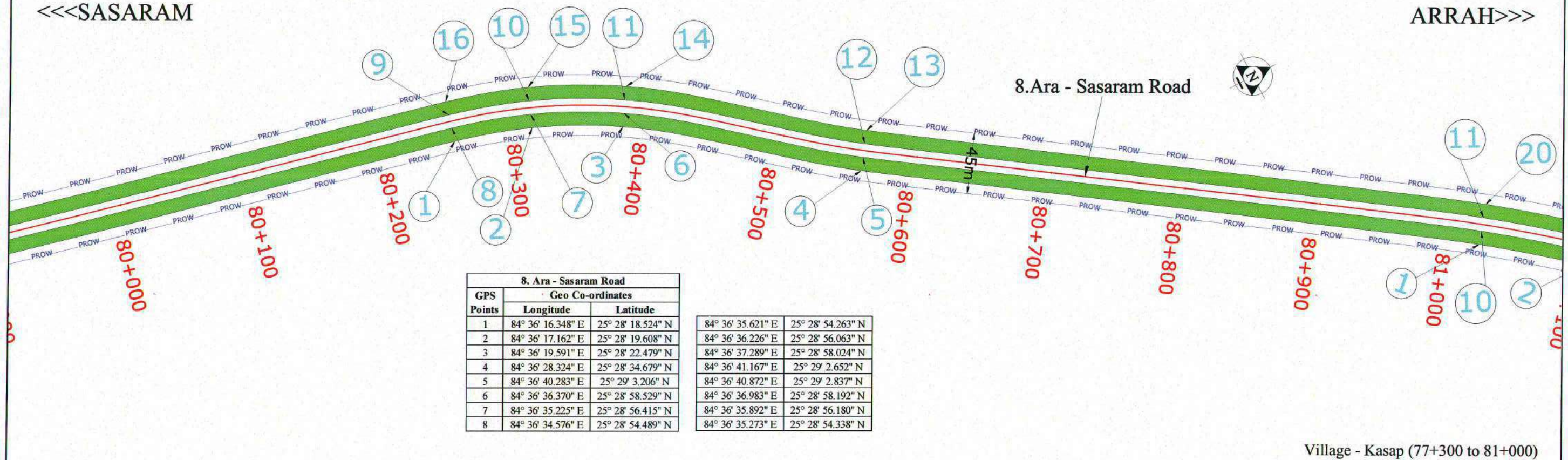
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DATE : MAY 2022

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Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE
PROW
FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Lining of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP
Km 80+000 to Km 82+000
DISTRICT - BHOJPUR

Consultant :



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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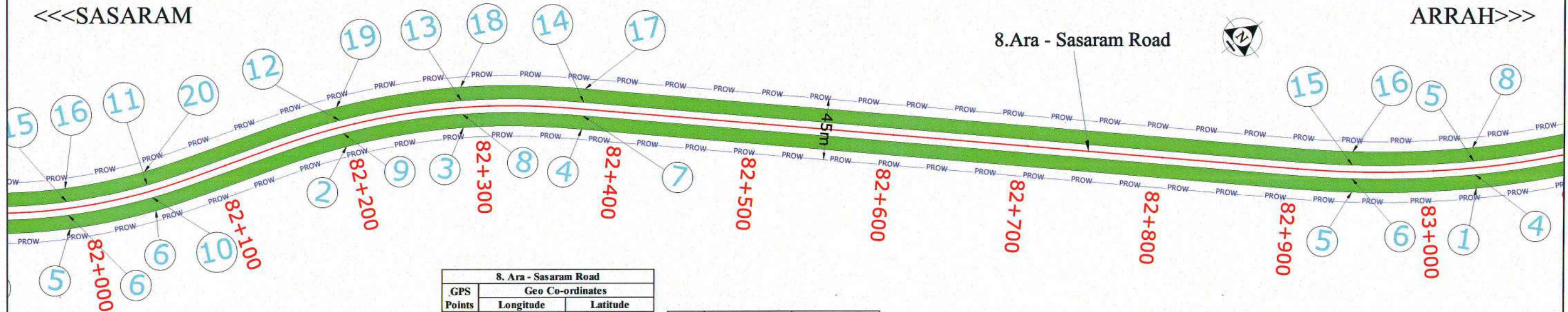
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8.Ara - Sasaram Road

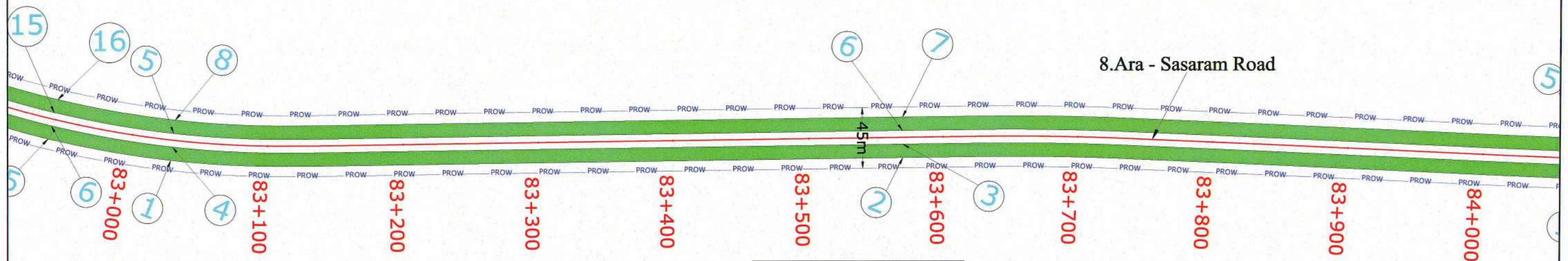


8. Ara - Sasaram Road			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	84° 36' 40.578" E	25° 29' 3.021" N	
2	84° 36' 49.682" E	25° 29' 15.476" N	
3	84° 36' 51.448" E	25° 29' 17.537" N	
4	84° 36' 57.057" E	25° 29' 22.573" N	
5	84° 37' 12.030" E	25° 29' 35.131" N	
6	84° 37' 33.428" E	25° 30' 2.697" N	
7	84° 37' 19.818" E	25° 29' 48.939" N	
8	84° 37' 17.780" E	25° 29' 46.583" N	
9	84° 37' 16.222" E	25° 29' 43.929" N	
10	84° 37' 14.517" E	25° 29' 39.351" N	

11	84° 37' 15.520" E	25° 29' 39.004" N
12	84° 37' 17.211" E	25° 29' 43.550" N
13	84° 37' 18.679" E	25° 29' 46.050" N
14	84° 37' 20.617" E	25° 29' 48.288" N
15	84° 37' 34.266" E	25° 30' 2.088" N
16	84° 37' 33.986" E	25° 30' 2.291" N
17	84° 37' 20.351" E	25° 29' 48.505" N
18	84° 37' 18.379" E	25° 29' 46.228" N
19	84° 37' 16.882" E	25° 29' 43.676" N
20	84° 37' 15.186" E	25° 29' 39.120" N

Village - Udwanthnagar (81+000 to 83+300)

8.Ara - Sasaram Road



8. Ara - Sasaram Road			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	84° 37' 55.463" E	25° 30' 41.923" N	
2	84° 37' 55.146" E	25° 30' 42.072" N	
3	84° 37' 18.080" E	25° 29' 46.406" N	
4	84° 37' 20.084" E	25° 29' 48.722" N	
5	84° 37' 36.159" E	25° 30' 4.526" N	
6	84° 37' 44.295" E	25° 30' 20.501" N	
7	84° 37' 43.969" E	25° 30' 20.634" N	
8	84° 37' 35.854" E	25° 30' 4.696" N	

Village - Udwanthnagar (81+000 to 83+300)
Village - Deoria (83+300 to 84+311)

Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED
FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar)
under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 82+000 to Km 84+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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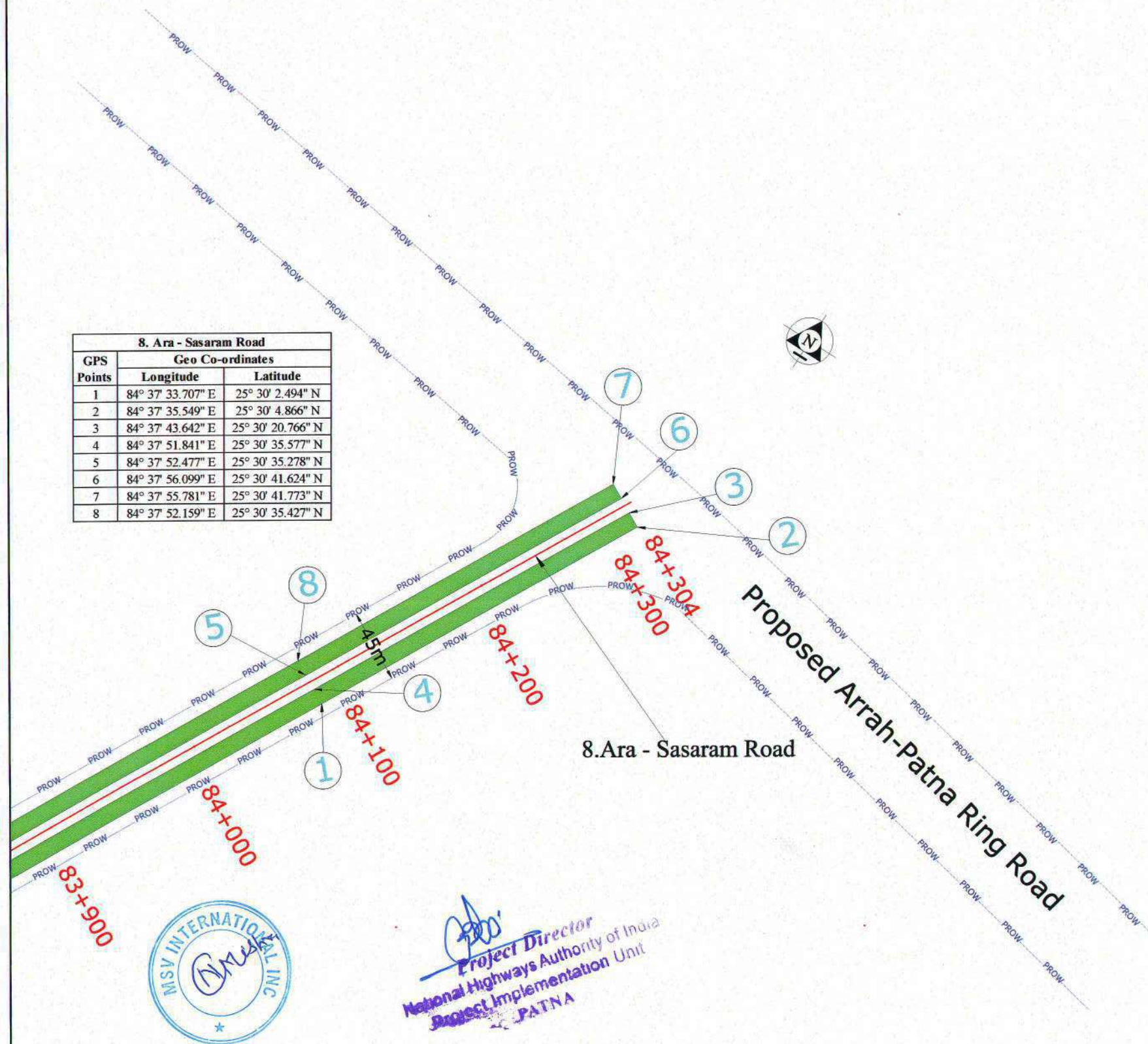
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DATE : MAY 2022

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Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED
FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 40+450 (Sakla) to Km 84+300 (Patar)
under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 84+000 to Km 84+304
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with

MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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Sheet : 23 OF 23

DATE : MAY 2022

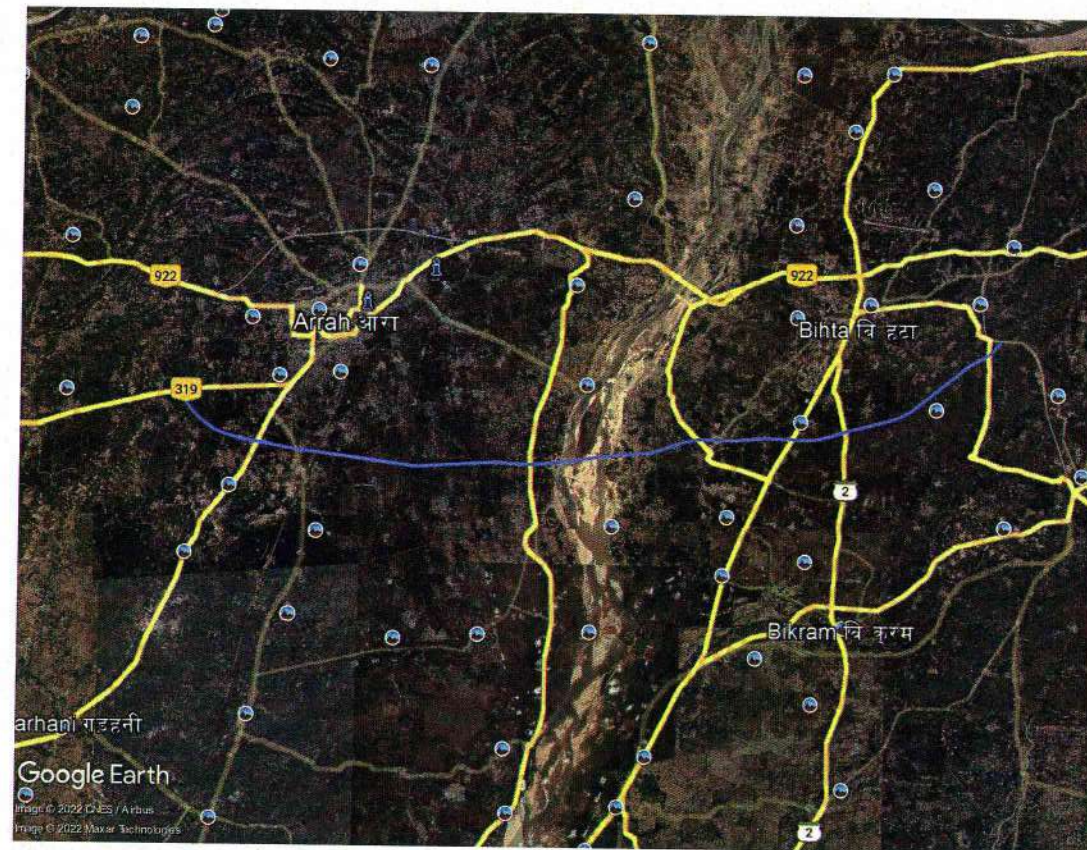
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Village - Udwantnagar (81+000 to 83+300)
Village - Deoria (83+300 to 84+311)

DGPS MAP

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

DISTRICT - PATNA (00+000 to 18+000)



MAY - 2022

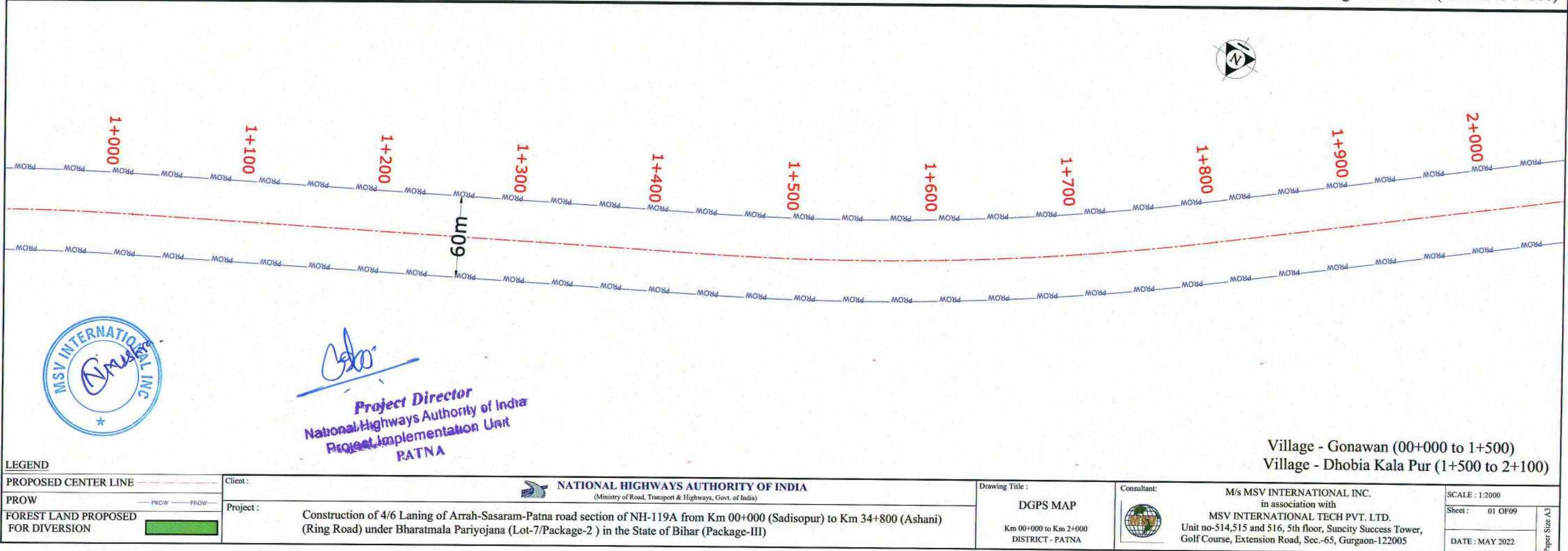
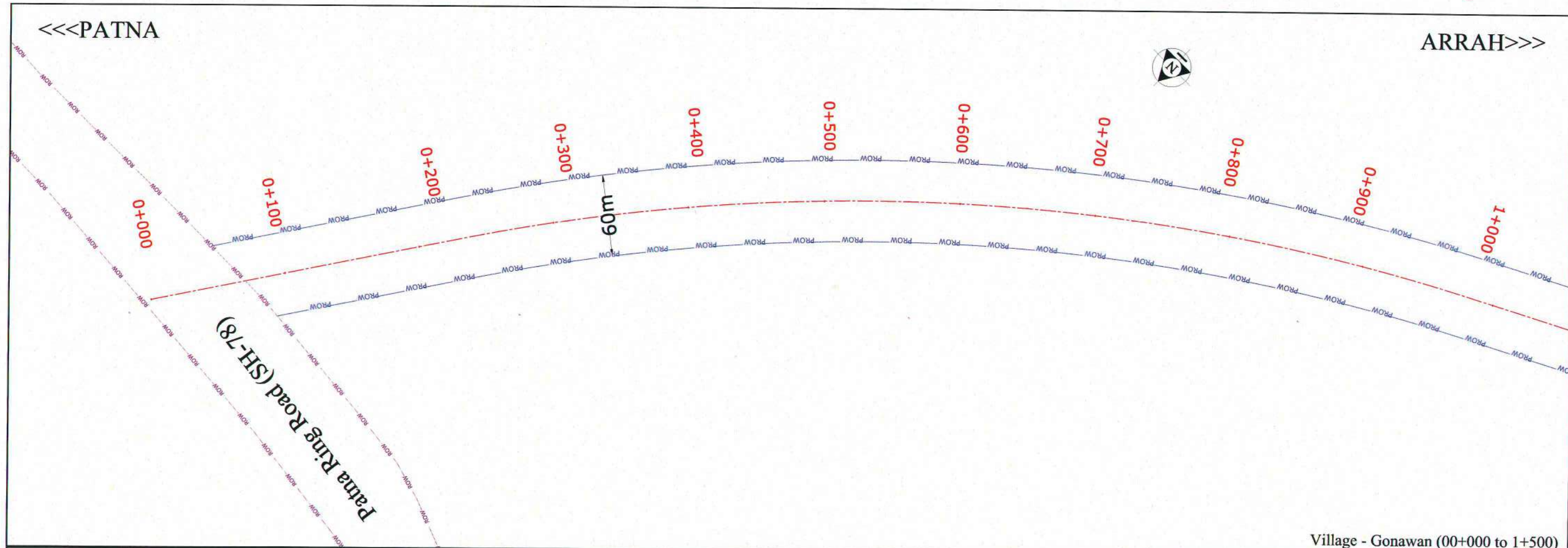


National Highways Authority of India
(Ministry of Road Transport & Highways) Government of India)



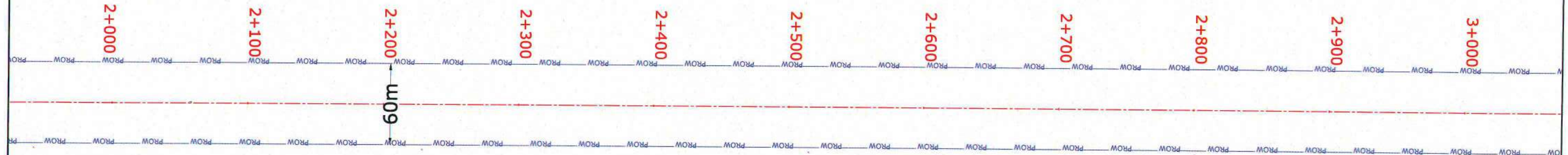
MSV INTERNATIONAL TECH PVT. LTD.

Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec-65, Gurgaon-122005

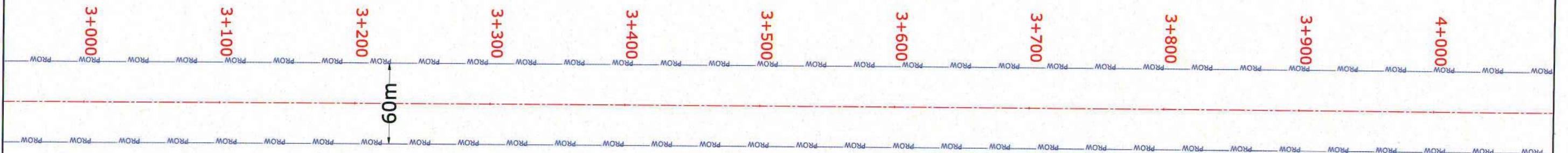


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ARRAH>>>



Village - Dhobia Kala Pur (1+500 to 2+100)
Village - Udaipur (2+100 to 2+200)
Village - Nondiha (2+200 to 3+800)



Village - Nondiha (2+200 to 3+800)
Village - Tiskhora (3+800 to 3+900)
Village - Paltu Chhitni (3+900 to 4+700)



[Signature]
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

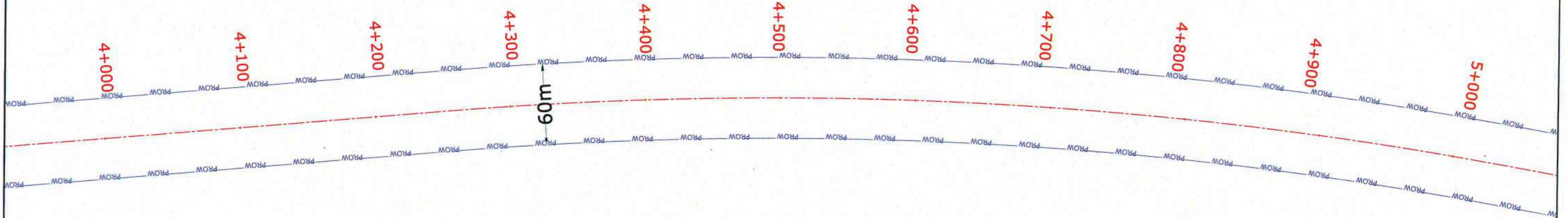
Drawing Title :
DGPS MAP
Km 2+000 to Km 4+000
DISTRICT - PATNA

Consultant:
M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

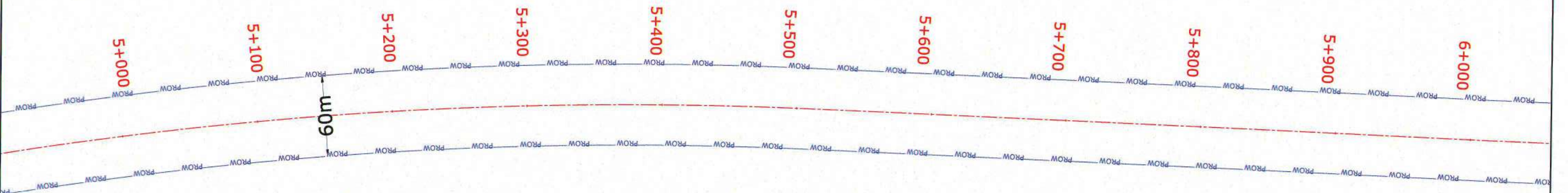
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DATE : MAY 2022
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Village - Paltu Chhitni (3+900 to 4+700)
Village - Sihora (4+700 to 5+500)



Village - Sihora (4+700 to 5+500)
Village - Kharagpur (5+500 to 7+200)



[Signature]
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	—
PROW	— PROW — PROW
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

Drawing Title :

DGPS MAP
Km 4+000 to Km 6+000
DISTRICT - PATNA

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

SCALE : 1:2000

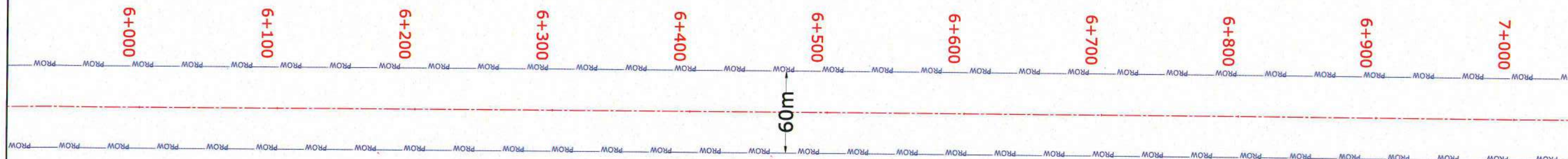
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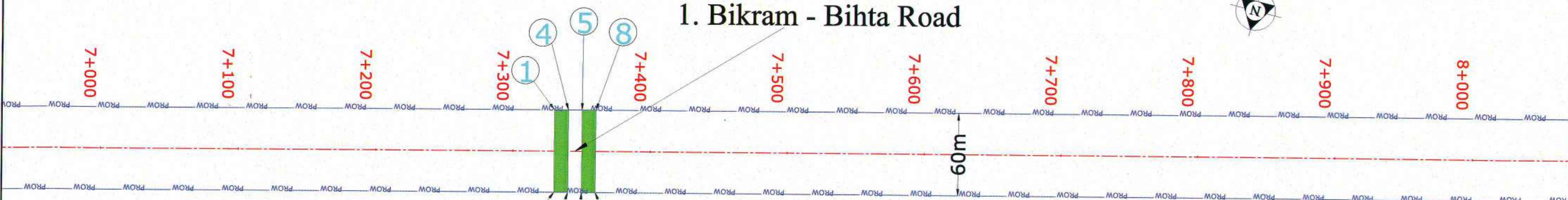
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ARRAH>>>



Village - Kharagpur (5+500 to 7+200)

1. Bikram - Bihta Road



1. Bikram - Bihta Road

GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 31' 1.536" N	84° 51' 54.241" E
2	25° 31' 3.419" N	84° 51' 53.688" E
3	25° 31' 3.336" N	84° 51' 53.342" E
4	25° 31' 1.452" N	84° 51' 53.895" E
5	25° 31' 1.368" N	84° 51' 53.549" E
6	25° 31' 3.252" N	84° 51' 52.996" E
7	25° 31' 3.168" N	84° 51' 52.650" E
8	25° 31' 1.285" N	84° 51' 53.203" E



Project Director
National Highways Authority of India
Bihar Implementation Unit
PATNA

Village - Kharagpur (5+500 to 7+200)
Village - Jamnapur (7+200 to 8+000)

LEGEND

PROPOSED CENTER LINE	— PROW — PROW —
PROW	— PROW — PROW —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

Drawing Title :

DGPS MAP
Km 6+000 to Km 8+000
DISTRICT - PATNA

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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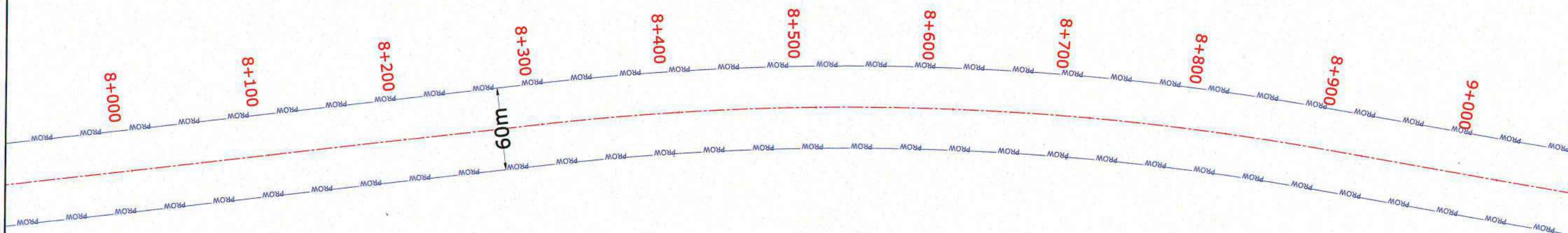
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DATE : MAY 2022

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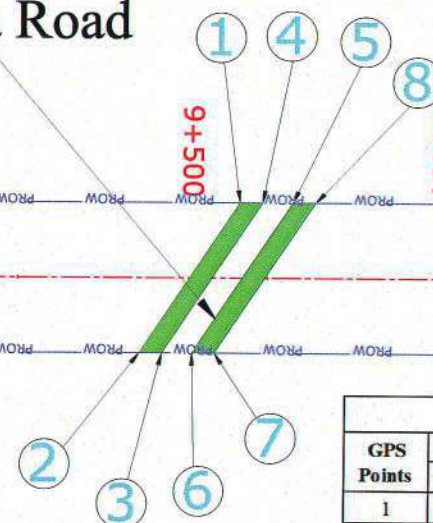
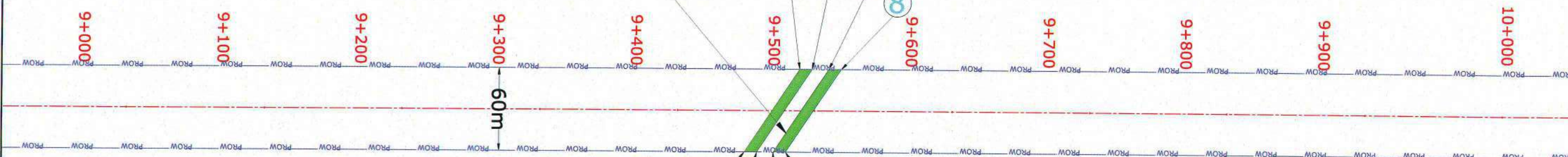
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ARRAH>>>



Village - Parri (8+000 to 10+100)

2. Bihta Kanpa Road



2. Bihta Kanpa Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 30' 51.688" N	84° 50' 38.036" E
2	25° 30' 53.606" N	84° 50' 39.514" E
3	25° 30' 53.613" N	84° 50' 39.191" E
4	25° 30' 51.695" N	84° 50' 37.713" E
5	25° 30' 51.704" N	84° 50' 37.284" E
6	25° 30' 53.623" N	84° 50' 38.762" E
7	25° 30' 53.629" N	84° 50' 38.439" E
8	25° 30' 51.711" N	84° 50' 36.961" E

Village - Parri (8+000 to 10+100)



Project Director
National Highways Authority of India
Request Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 8+000 to Km 10+000
DISTRICT - PATNA

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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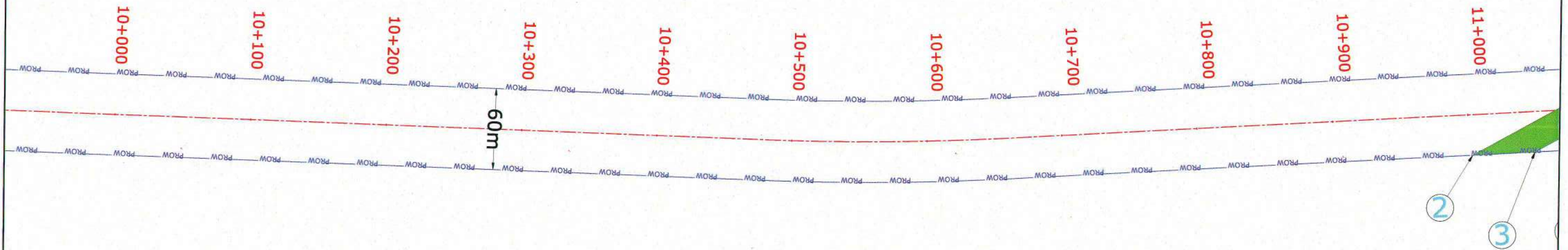
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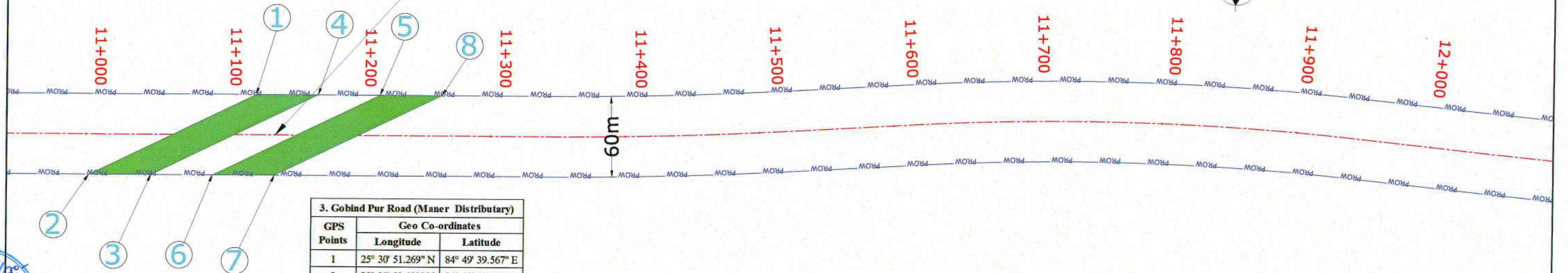
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Village - Parri (8+000 to 10+100)
 Village - Chauki (10+100 to 10+400)
 Village - Ramtari (10+400 to 11+800)

3. Gobind Pur Road (Maner Distributary)



3. Gobind Pur Road (Maner Distributary)			
GPS Points	Geo Co-ordinates		
	Longitude	Latitude	
1	25° 30' 51.269" N	84° 49' 39.567" E	
2	25° 30' 53.492" N	84° 49' 43.838" E	
3	25° 30' 53.389" N	84° 49' 42.201" E	
4	25° 30' 51.166" N	84° 49' 37.930" E	
5	25° 30' 51.062" N	84° 49' 36.293" E	
6	25° 30' 53.286" N	84° 49' 40.564" E	
7	25° 30' 53.183" N	84° 49' 38.926" E	
8	25° 30' 50.959" N	84° 49' 34.656" E	

Village - Ramtari (10+400 to 11+800)
 Village - Mithapur (11+800 to 12+100)

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED FOR DIVERSION

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 (Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 10+000 to Km 12+000
 DISTRICT - PATNA

Consultant:



M/s MSV INTERNATIONAL INC.
 in association with
 MSV INTERNATIONAL TECH PVT. LTD.
 Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
 Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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Sheet : 06 OF 09

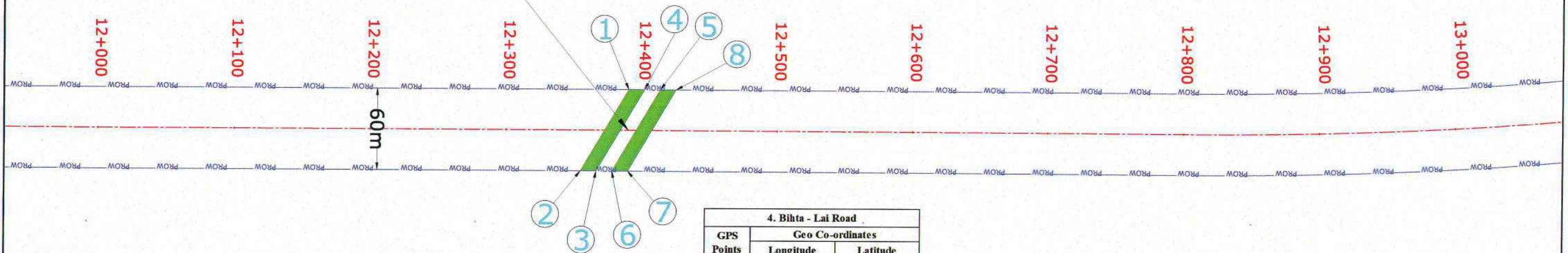
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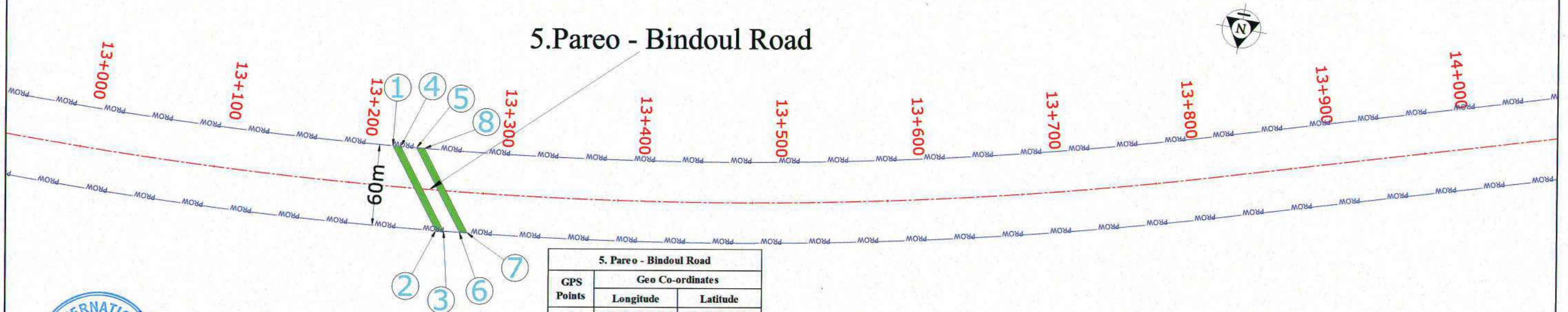
4.Bihta - Lai Road



4. Bihta - Lai Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 30' 49.787" N	84° 48' 54.301" E
2	25° 30' 51.698" N	84° 48' 55.635" E
3	25° 30' 51.710" N	84° 48' 55.220" E
4	25° 30' 49.799" N	84° 48' 53.886" E
5	25° 30' 49.812" N	84° 48' 53.471" E
6	25° 30' 51.722" N	84° 48' 54.805" E
7	25° 30' 51.735" N	84° 48' 54.390" E
8	25° 30' 49.824" N	84° 48' 53.056" E

Village - Mithapur (11+800 to 12+100)
Village - Nagarbihta (12+100 to 13+000)

5.Pareo - Bindoul Road



5. Pareo - Bindoul Road		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 30' 49.730" N	84° 48' 24.418" E
2	25° 30' 51.530" N	84° 48' 22.850" E
3	25° 30' 51.507" N	84° 48' 22.642" E
4	25° 30' 49.709" N	84° 48' 24.208" E
5	25° 30' 49.667" N	84° 48' 23.789" E
6	25° 30' 51.460" N	84° 48' 22.226" E
7	25° 30' 51.436" N	84° 48' 22.019" E
8	25° 30' 49.645" N	84° 48' 23.580" E

Village - Etwa (13+000 to 13+300)
Village - Rampur Hasan Lai (13+300 to 14+300)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 12+000 to Km 14+000
DISTRICT - PATNA

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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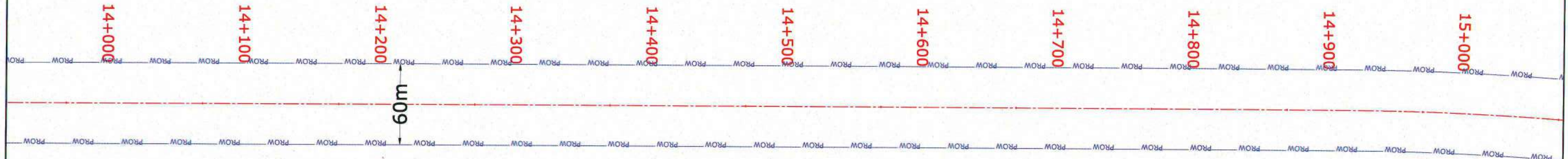
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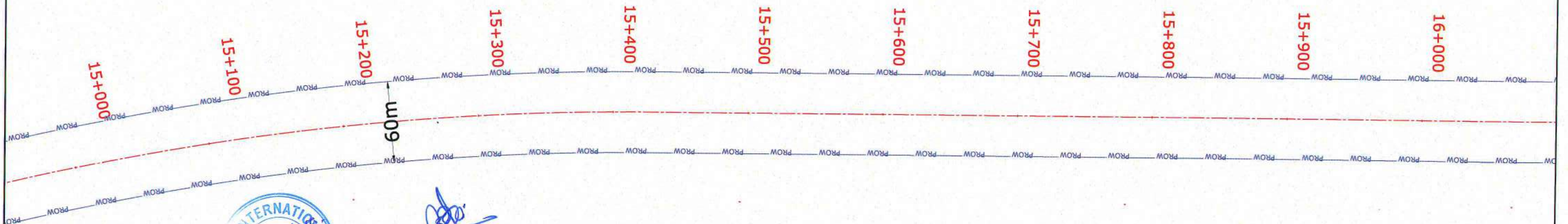
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Village - Rampur Hasan Lai (13+300 to 14+300)
Village - Kelhanpur (14+300 to 15+600)



Village - Kelhanpur (14+300 to 15+600)
Village - Ghoratap (15+600 to 16+000)

LEGEND

PROPOSED CENTER LINE	— PROW — PROW —
PROW	
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

Drawing Title :

DGPS MAP

Km 14+000 to Km 16+000
DISTRICT - PATNA

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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Sheet : 08 OF 09

DATE : MAY 2022

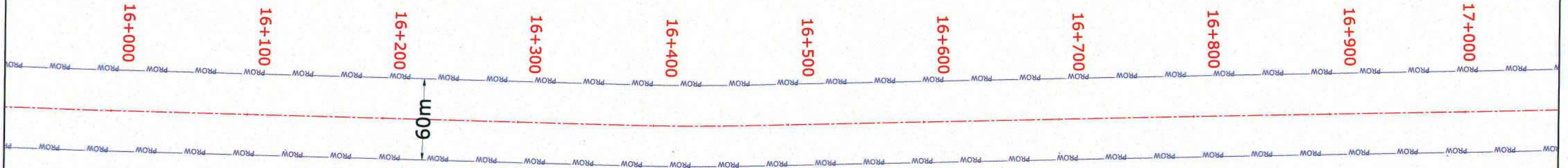
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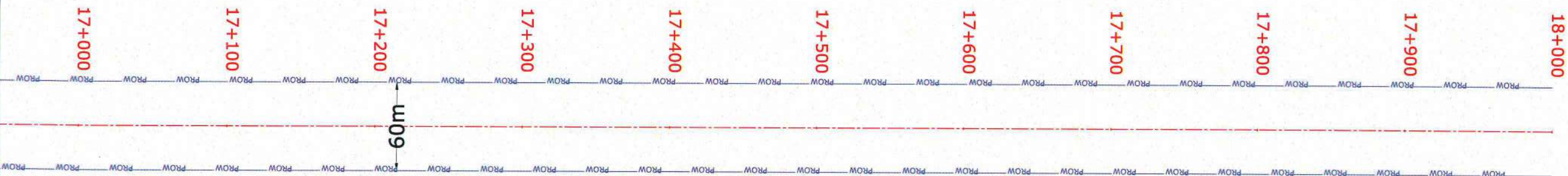
[Signature]
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

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Village - Mahura (16+000 to 18+000)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Mahura (16+000 to 18+000)

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

Drawing Title :	DGPS MAP
	Km 16+000 to Km 18+000 DISTRICT - PATNA

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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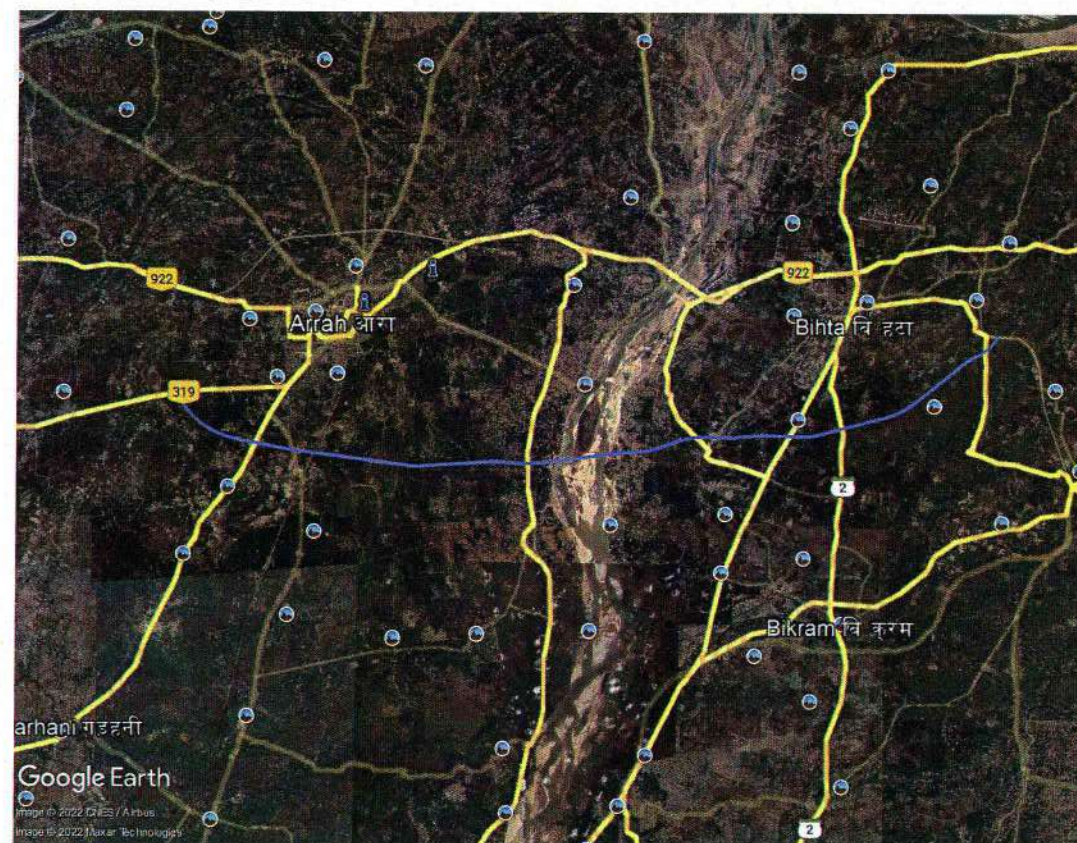
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DGPS MAP

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

DISTRICT - BHOJPUR (18+000 to 34+800)



MAY - 2022



National Highways Authority of India
(Ministry of Road Transport & Highways) Government of India)

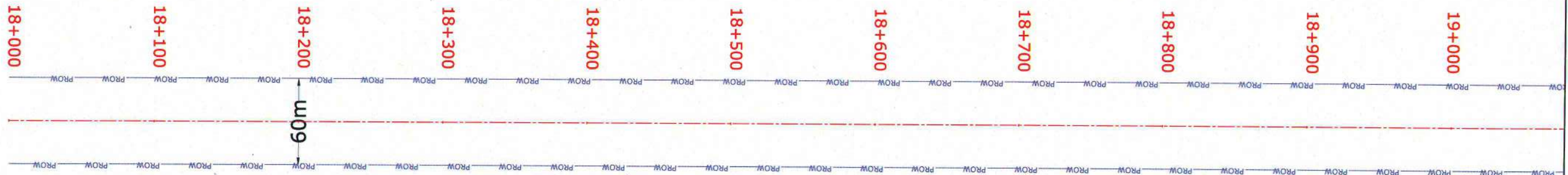


MSV INTERNATIONAL TECH PVT. LTD.

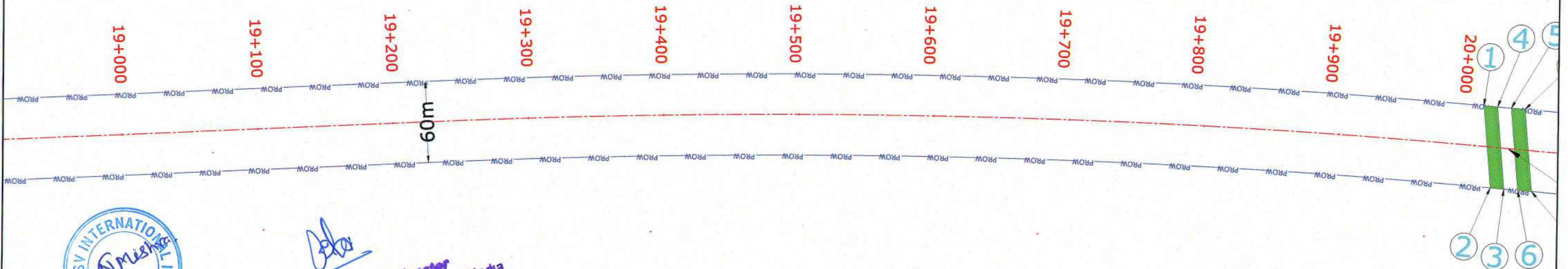
Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec-65, Gurgaon-122005

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Village - Khangawn (18+000 to 19+500)



Village - Khangawn (18+000 to 19+500)
Village - Kusihan (19+500 to 20+700)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	— — — — —
PROW	— — — — —
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

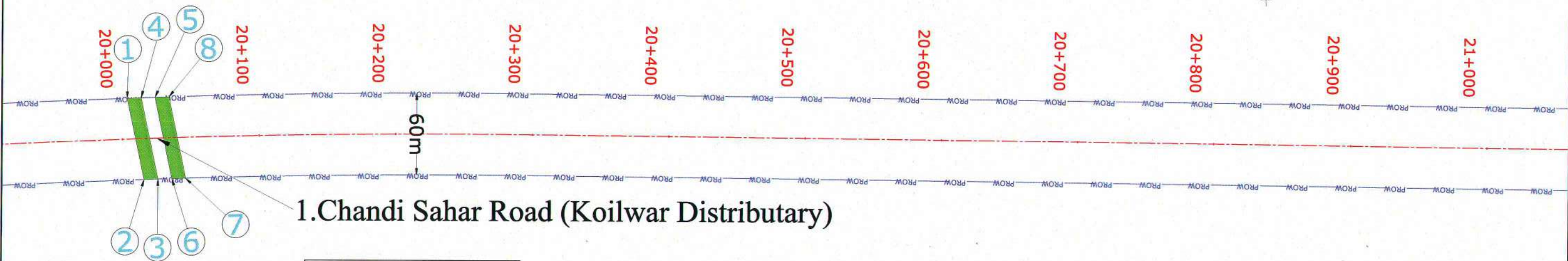
Drawing Title :	DGPS MAP
	Km 18+000 to Km 20+000 DISTRICT - BHOJPUR

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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1. Chandi Sahar Road (Koilar Distributary)

1. Chandi Sahar Road (Koilar Distributary)		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 30' 15.714" N	84° 44' 25.595" E
2	25° 30' 17.664" N	84° 44' 25.225" E
3	25° 30' 17.665" N	84° 44' 24.861" E
4	25° 30' 15.715" N	84° 44' 25.231" E
5	25° 30' 15.715" N	84° 44' 24.868" E
6	25° 30' 17.666" N	84° 44' 24.498" E
7	25° 30' 17.668" N	84° 44' 24.134" E
8	25° 30' 15.716" N	84° 44' 24.504" E

Village - Kusihan (19+500 to 20+700)
Village - Manpur (20+500 to 21+800)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Manpur (20+500 to 21+800)
Village - Guri (21+800 to 22+700)

LEGEND

PROPOSED CENTER LINE

PROW
FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 20+000 to Km 22+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with

MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
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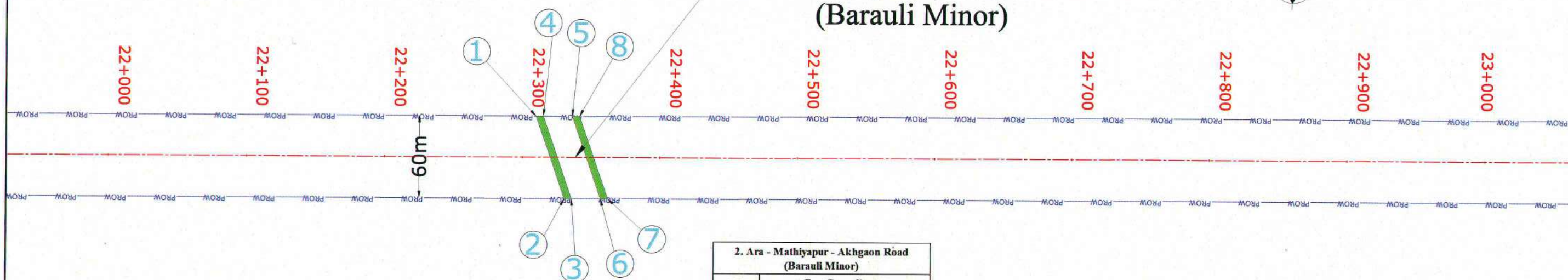
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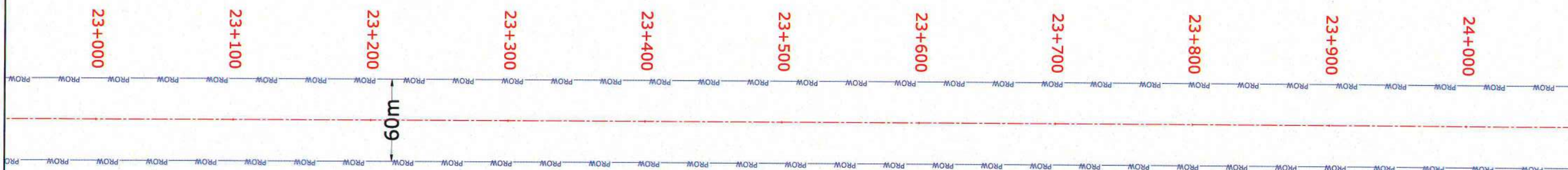
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2.Ara - Mathiyapur - Akhgaon Road (Barauli Minor)



2. Ara - Mathiyapur - Akhgaon Road (Barauli Minor)		
GPS Points	Geo Co-ordinates	
	Longitude	Latitude
1	25° 30' 16.276" N	84° 43' 3.228" E
2	25° 30' 18.179" N	84° 43' 2.346" E
3	25° 30' 18.169" N	84° 43' 2.157" E
4	25° 30' 16.265" N	84° 43' 3.039" E
5	25° 30' 16.223" N	84° 43' 2.282" E
6	25° 30' 18.125" N	84° 43' 1.401" E
7	25° 30' 18.114" N	84° 43' 1.212" E
8	25° 30' 16.212" N	84° 43' 2.093" E

Village - Guri (21+800 to 22+700)
Village - Jalpura (22+700 to 25+100)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

Village - Jalpura (22+700 to 25+100)

LEGEND

PROPOSED CENTER LINE
PROW
FOREST LAND PROPOSED
FOR DIVERSION

Client : NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Project : Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

Drawing Title :

DGPS MAP

Km 22+000 to Km 24+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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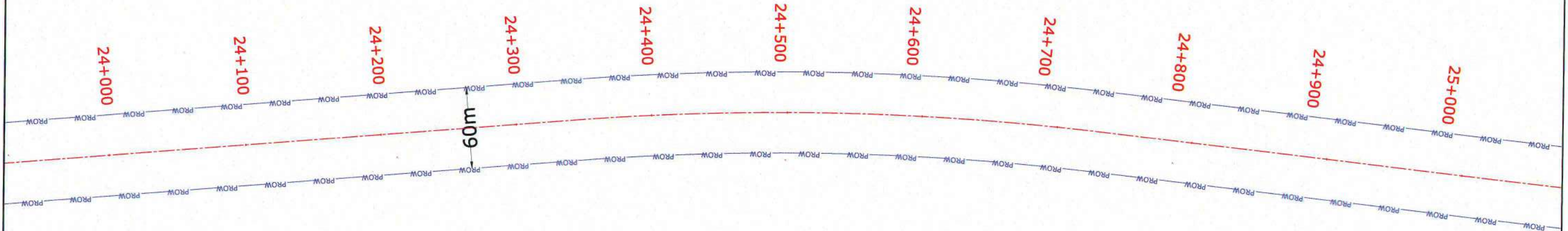
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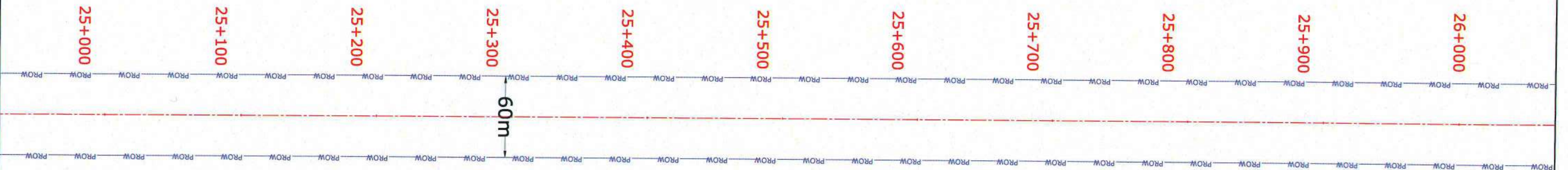
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Village - Jalpura (22+700 to 25+100)



Village - Jalpura (22+700 to 25+100)
Village - Bakri (25+100 to 27+300)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE
PROW
FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 24+000 to Km 26+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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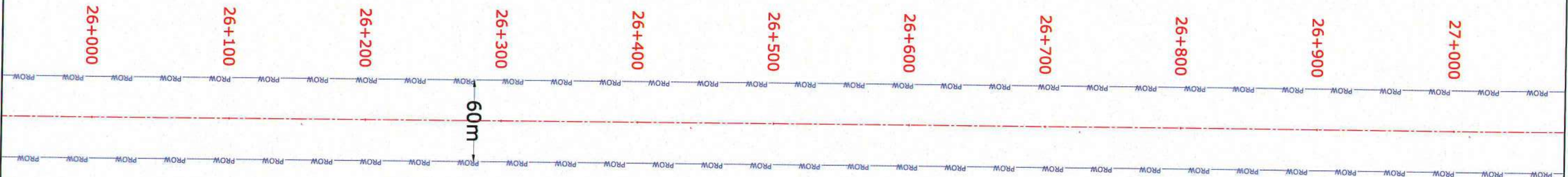
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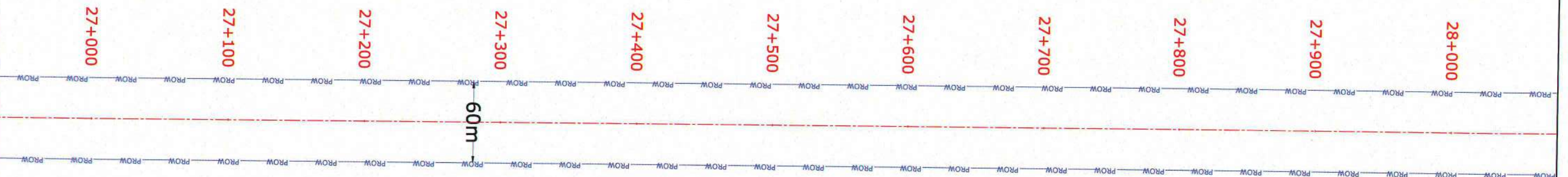
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ARRAH>>>



Village - Bakri (25+100 to 27+300)



Village - Bakri (25+100 to 27+300)
Village - Piania (27+300 to 29+200)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	---
PROW	---
FOREST LAND PROPOSED FOR DIVERSION	■

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

Drawing Title :
DGPS MAP
Km 26+000 to Km 28+000
DISTRICT - BHOJPUR

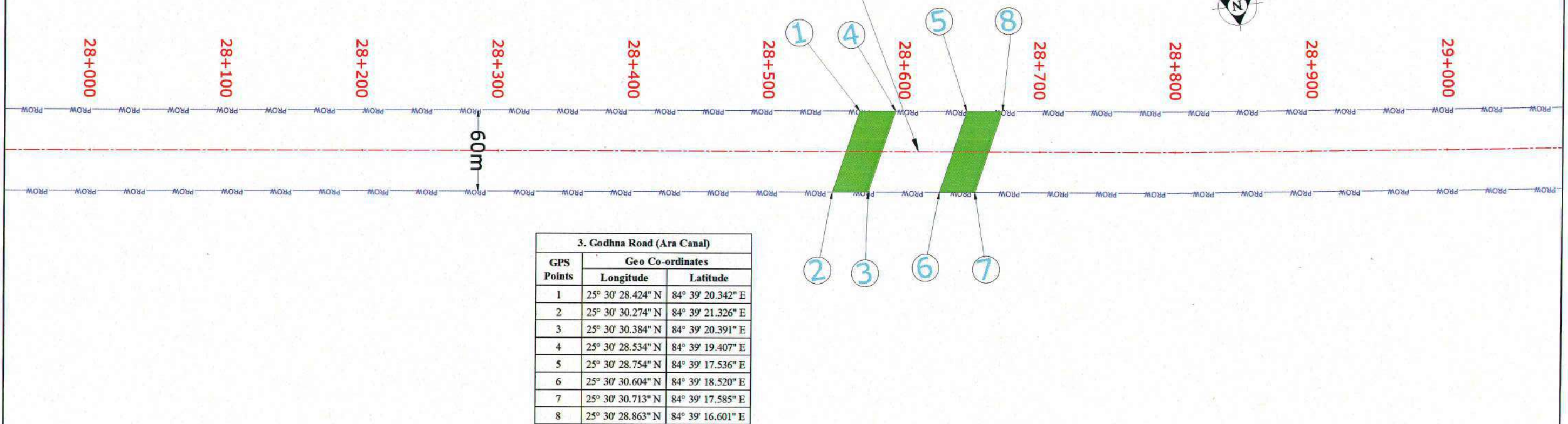
Consultant:
M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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Sheet : 05 OF 09
DATE : MAY 2022
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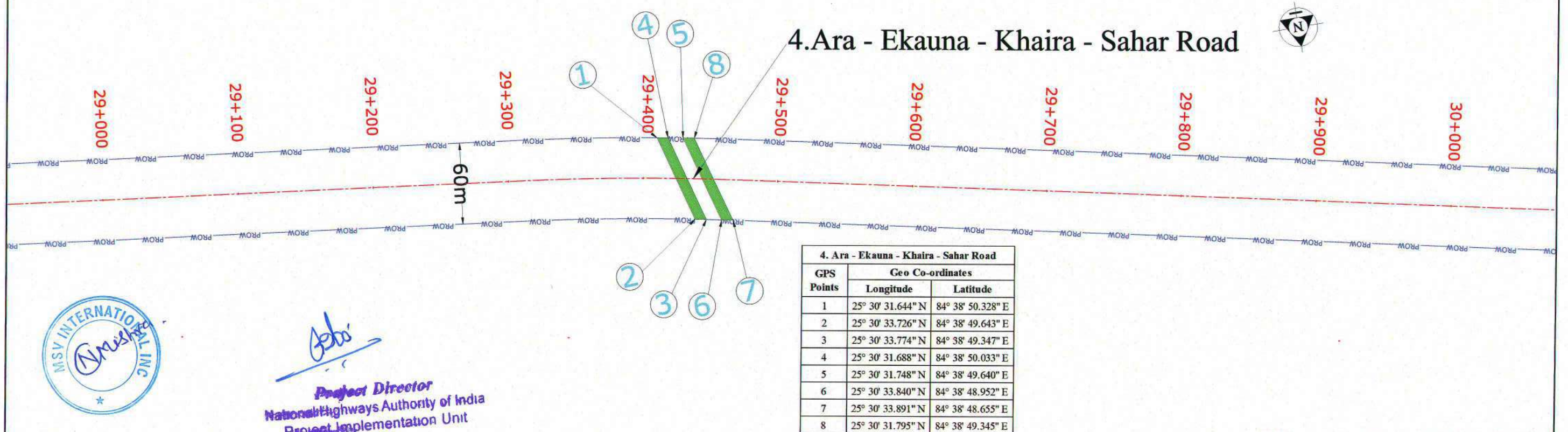
3. Godhna Road (Ara Canal)

ARRAH>>>



Village - Udwantnagar (29+900 to 32+600)

4. Ara - Ekauna - Khaira - Sahar Road



Village - Udwantnagar (29+900 to 32+600)



Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE
PROW
FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 28+000 to Km 30+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

SCALE : 1:2000

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DATE : MAY 2022

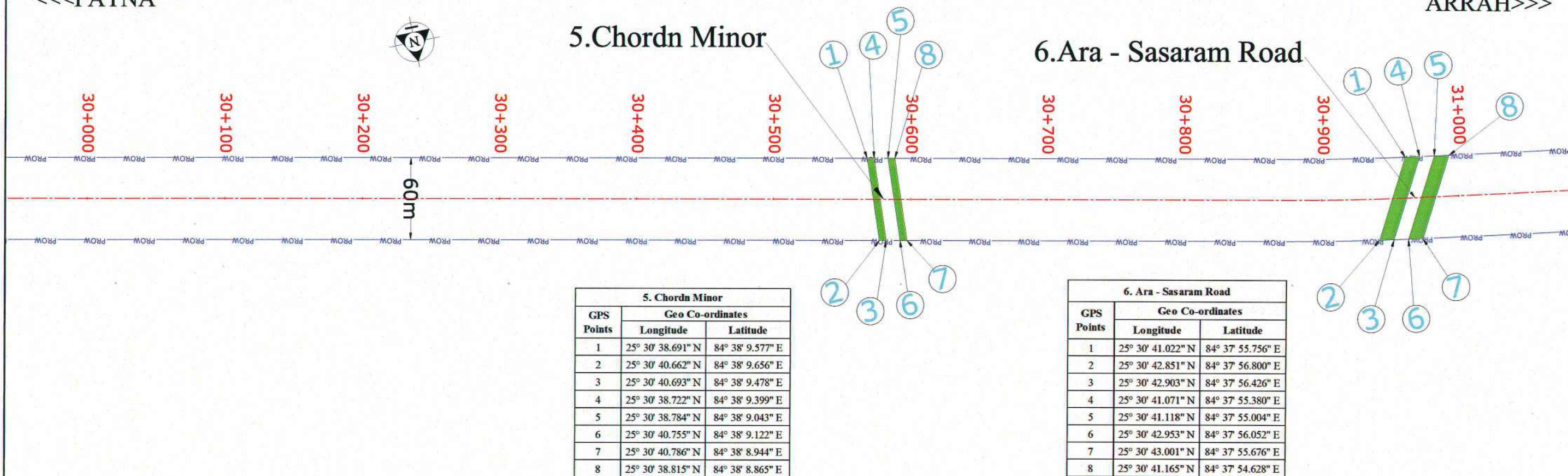
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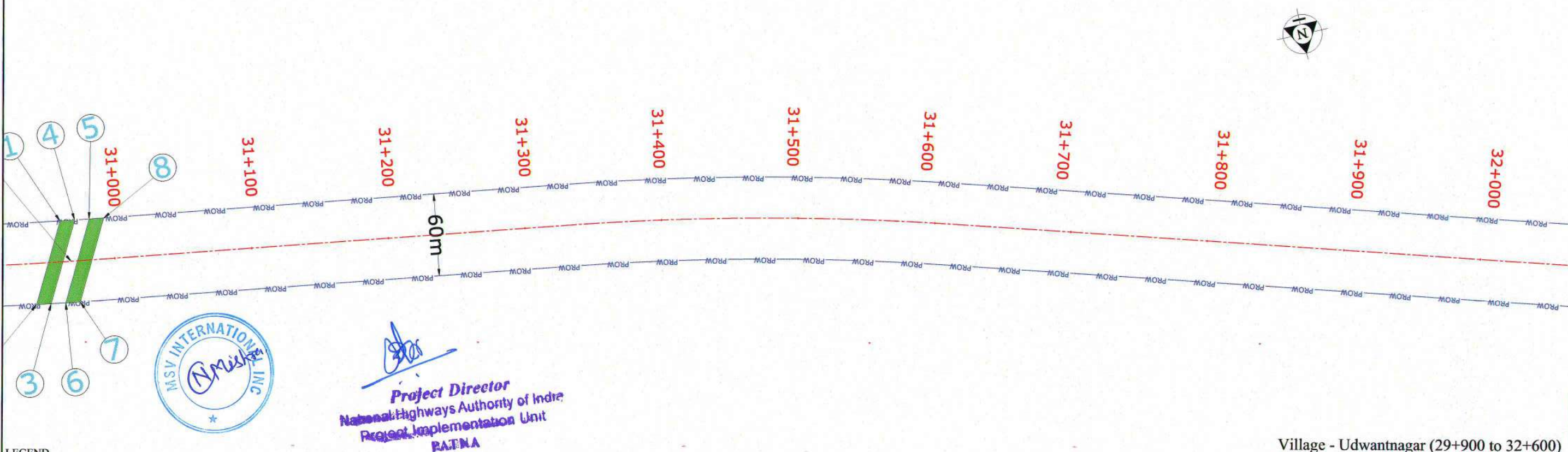
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5.Chordn Minor

6.Ara - Sasaram Road



Village - Udwanatnagar (29+900 to 32+600)



Village - Udwanatnagar (29+900 to 32+600)

LEGEND

PROPOSED CENTER LINE

PROW

FOREST LAND PROPOSED FOR DIVERSION

Client :

Project :

Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Drawing Title :

DGPS MAP

Km 30+000 to Km 32+000
DISTRICT - BHOJPUR

Consultant:



M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

SCALE : 1:2000

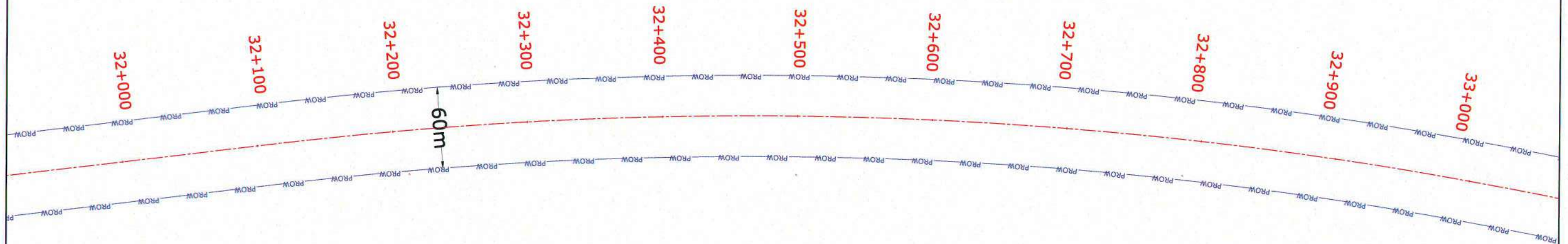
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DATE : MAY 2022

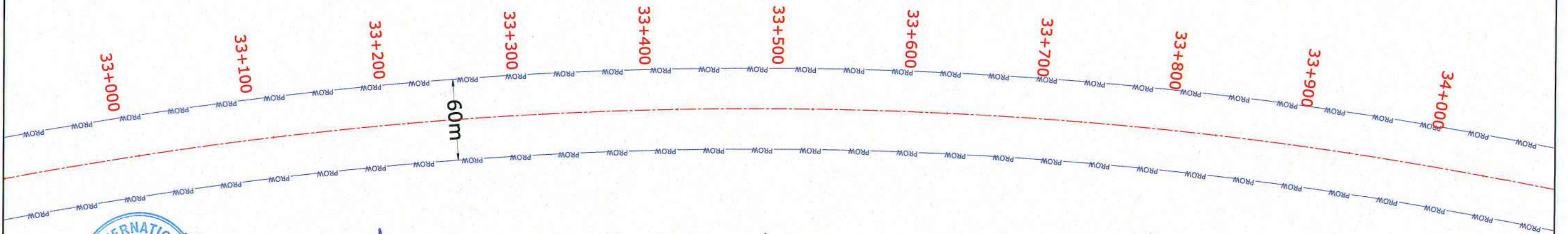
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Village - Udwananagar (29+900 to 32+600)
Village - Garha (32+600 to 34+300)



Village - Garha (32+600 to 34+300)



[Signature]
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE	
PROW	
FOREST LAND PROPOSED FOR DIVERSION	

Client :	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road, Transport & Highways, Govt. of India)
Project :	Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

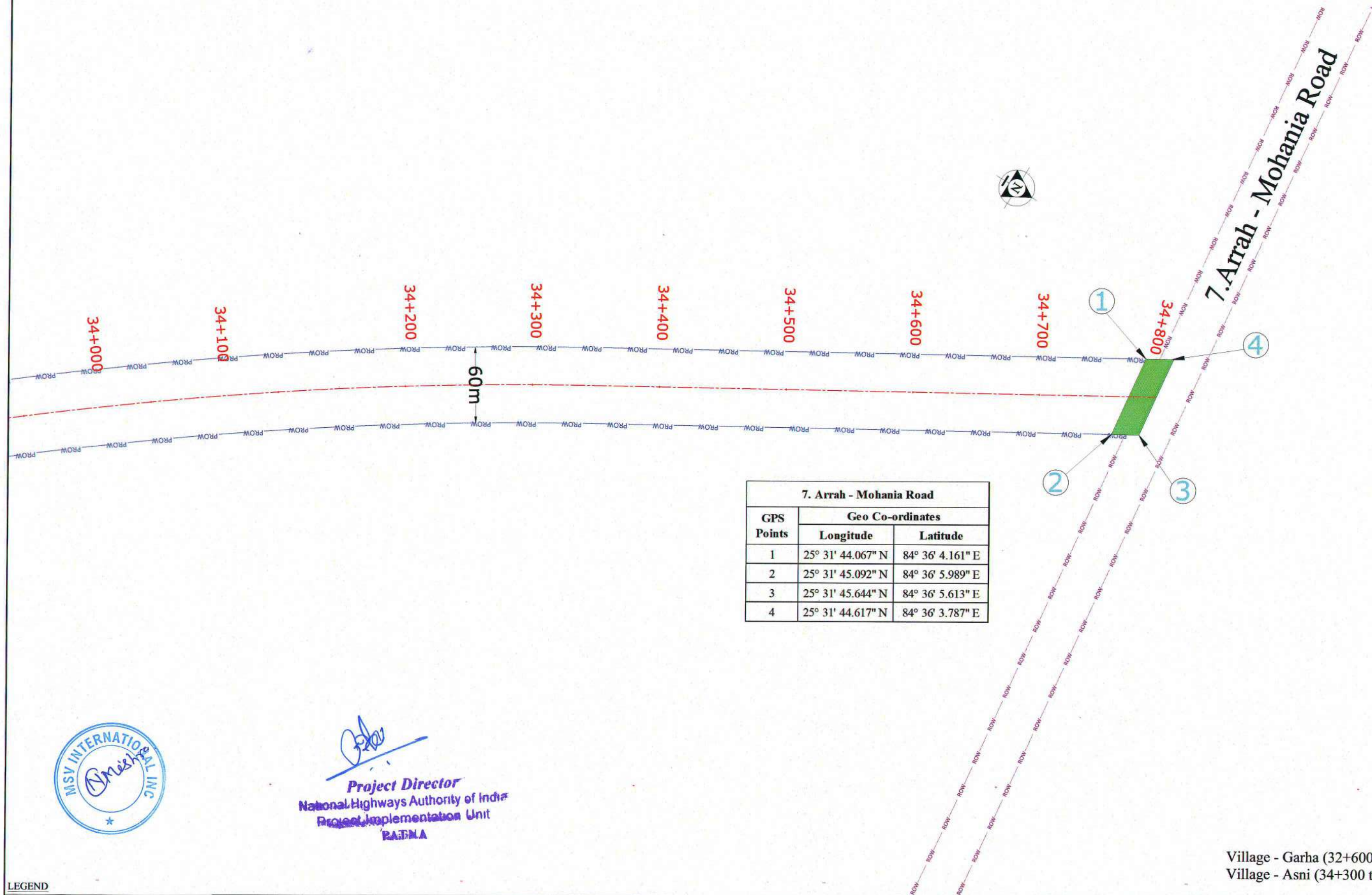
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	Km 32+000 to Km 34+000 DISTRICT - BHOJPUR

Consultant:	M/s MSV INTERNATIONAL INC. in association with MSV INTERNATIONAL TECH PVT. LTD. Unit no-514,515 and 516, 5th floor, Suncity Success Tower, Golf Course, Extension Road, Sec.-65, Gurgaon-122005
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SCALE : 1:2000	Sheet : 08 OF 09
DATE : MAY 2022	Paper Size A3

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ARRAH>>>



[Signature]
Project Director
National Highways Authority of India
Project Implementation Unit
PATNA

LEGEND

PROPOSED CENTER LINE
PROW
FOREST LAND PROPOSED FOR DIVERSION

Client : NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road, Transport & Highways, Govt. of India)

Project : Construction of 4/6 Laning of Arrah-Sasaram-Patna road section of NH-119A from Km 00+000 (Sadisopur) to Km 34+800 (Ashani) (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)

Drawing Title :
DGPS MAP
Km 34+000 to Km 34+803
DISTRICT - BHOJPUR

Consultant:
M/s MSV INTERNATIONAL INC.
in association with
MSV INTERNATIONAL TECH PVT. LTD.
Unit no-514,515 and 516, 5th floor, Suncity Success Tower,
Golf Course, Extension Road, Sec.-65, Gurgaon-122005

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DATE : MAY 2022
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Project Details			
Project Name	Construction of 4 laning from saura (sasaram) at Ch. 0+000 to Pattar (at Arraha bypass) at Ch 84+400 of Patna-arraha-sasaram corridor of NH-119A with a SPUR connectivity of 4.3 km with Arraha Mohania (new NH-319) at Asni under Bharatmala Pariyojna in the State of Bihar on HAM Mode		
UPC	BR/12345678		
1. Project Outline			
1.1 Project Title	Construction of 4 laning from saura (sasaram) at Ch. 40+000 to Pattar (at Arraha bypass) at Ch 84+300 of Patna-arraha-sasaram corridor of NH-119A (Package-02)		
i. Salient Features of the project			
Sr. no	Description	Details	
1	Length	43.850 km (Design Length)	
2	Type of pavement (Flexible /Rigid))	Flexible Pavement	
3	Major Bridges cum LVUP	2 nos.	
4	Minor Bridges cum SVUP	6 nos.	
5	Culverts	62 (Box Culverts)	
6	Flyover/Grade Separator	4 nos.	
7	Viaduct	Nil	
8	ROB/RUB	Nil	
9	VUP/LVUP/SVUP	05 Nos./6 Nos./7 Nos.	
10	Major Junctions	2Nos.	
11	Length of Service Road/Slip road	4000 (BHS Length)	
12	Toll Plaza	1 No. on MCW +1 no on exit entry	
15	Bus shelter	02 No	
16	Truck lay Bys	01 Nos.	
17	Rest Area	01 Nos.	
ii. Total traffic (No. of PCUs) and the Month & year in which traffic survey conducted.	Traffic surveys were conducted in FY 2021-22 13433 PCU		
iii. Main Carriageway	1	No. of lane/Width	Four-lane (Greenfield Alignment) Width of one side: 0.5 m K.S. + 7.00 m MCW + 1.5 m P.S. + 2.0 m E.S.
	2	MSA and CBR of soil for calculating pavement thickness	Main Road-80MSA with 8% effective CBR Slip/Service Road-10 MSA with 8% effective CBR
	3	Pavement Composition Flexible and Reason for not adopting Rigid pavement	Main Road:- BC-40mm, DBM=85mm, WMM=150 & CTSB=215 mm, Subgrade=500mm Rigid Pavement not adopted to restrict the Project cost
	4	Pavement composition for Rigid Pavement (proposed for Toll Plaza including taper portion on both sides)	PQC = 290 mm DLC = 150 mm GSB = 150 mm




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iv. Slip Road and Service Road	Slip Road provided at approaches of VUP, ROB/Flyover and Interchange
a) Width of Slip/ Service Road (As per NHAI Circular dated 10.01.2016 / 2017, it should be 9.0 m wide)	Slip Road=0m Service Road = 7.5 & 5.5 m.
b) Million Standard Axles (msa) for which designed	Main Road-80MSA with 8% effective CBR Slip/Service Road-10 MSA with 8% effective CBR
c) Slip/Service Road Pavement (Flexible / Rigid) - Composition and Reason for not adopting rigid pavement.	Slip/Service Road - BC-30mm, DBM=50 mm, WMM=150 & CTSB=200 mm, Subgrade=500mm Rigid Pavement not adopted to restrict the Project cost

2. Outcome & Deliverables

1.1 Stated aims and objectives of the Project	It is observed that SH-12 (Arrah-Sasaram-Section) is heavily congested at locations Grahni, Piro, Bikramganj, Mokal and also at connecting point at Sasaram. The existing road (SH) was mostly having 2-lane carriageway and would not be able to cater to the present and anticipated future traffic which will play on Arrah-Sasaram Section. The existing alignment was needed for rehabilitation and capacity augmentation to Four Laning. Since the proposal of bypasses on the existing stretch was not economically viable that's why separate Four lane green field alignment was necessitated.																									
2.2 Indicate year wise outputs/ deliverables for the project in a tabular form.		<table> <tr> <th rowspan="2">Components</th><th colspan="2">Year 1</th><th colspan="2">Year 2</th><th colspan="2">Total</th></tr> <tr> <th>Physical</th><th>Financial</th><th>Physical</th><th>Financial</th><th>Physical</th><th>Financial</th></tr> <tr> <td>The entire project</td><td>60%</td><td>60%</td><td>40%</td><td>40%</td><td>100%</td><td>100%</td></tr> </table>	Components	Year 1		Year 2		Total		Physical	Financial	Physical	Financial	Physical	Financial	The entire project	60%	60%	40%	40%	100%	100%				
Components	Year 1			Year 2		Total																				
	Physical	Financial	Physical	Financial	Physical	Financial																				
The entire project	60%	60%	40%	40%	100%	100%																				
2.3 Indicate final outcomes for the project in the form of measurable indicators which can be used for impact assessment / evaluation after the project is complete. Baseline data or survey against which such outcomes would be benchmarked should also be mentioned.	Direct benefit accruable from the project cannot be translated into monetary terms. This is a scheme for improvement of infrastructure facility, which will automatically bring socio- economic growth in the region.																									


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Details of approvals already obtained and/or sought under the Act for other sections of the Project.

S. No.	Name of Project	Forest Proposal No.	Status
1.	Construction of 4/6 Laning of Arrah-Sasaram-Patna Road section of NH-119A from Km 0+000 to Km 40+450 under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-I)	FP/BR/ROAD/157376/2022	Proposal is pending at User Agency due to EDS raised by Regional Office.
2.	Construction of 4/6 Laning of Arrah-Sasaram-Patna Road section of NH-119A from Km 40+450 to Km 74+432 under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-II)	FP/BR/ROAD/157384/2022	Proposal is pending at User Agency due to EDS raised by Regional Office.
3.	Construction of 4/6 Laning of Arrah-Sasaram-Patna Road section of NH-119A from Km 00+000 to Km 34+800 (Ring Road) under Bharatmala Pariyojana (Lot-7/Package-2) in the State of Bihar (Package-III)	FP/BR/ROAD/157408/2022	Stage-I Approval accorded by: Regional Office.

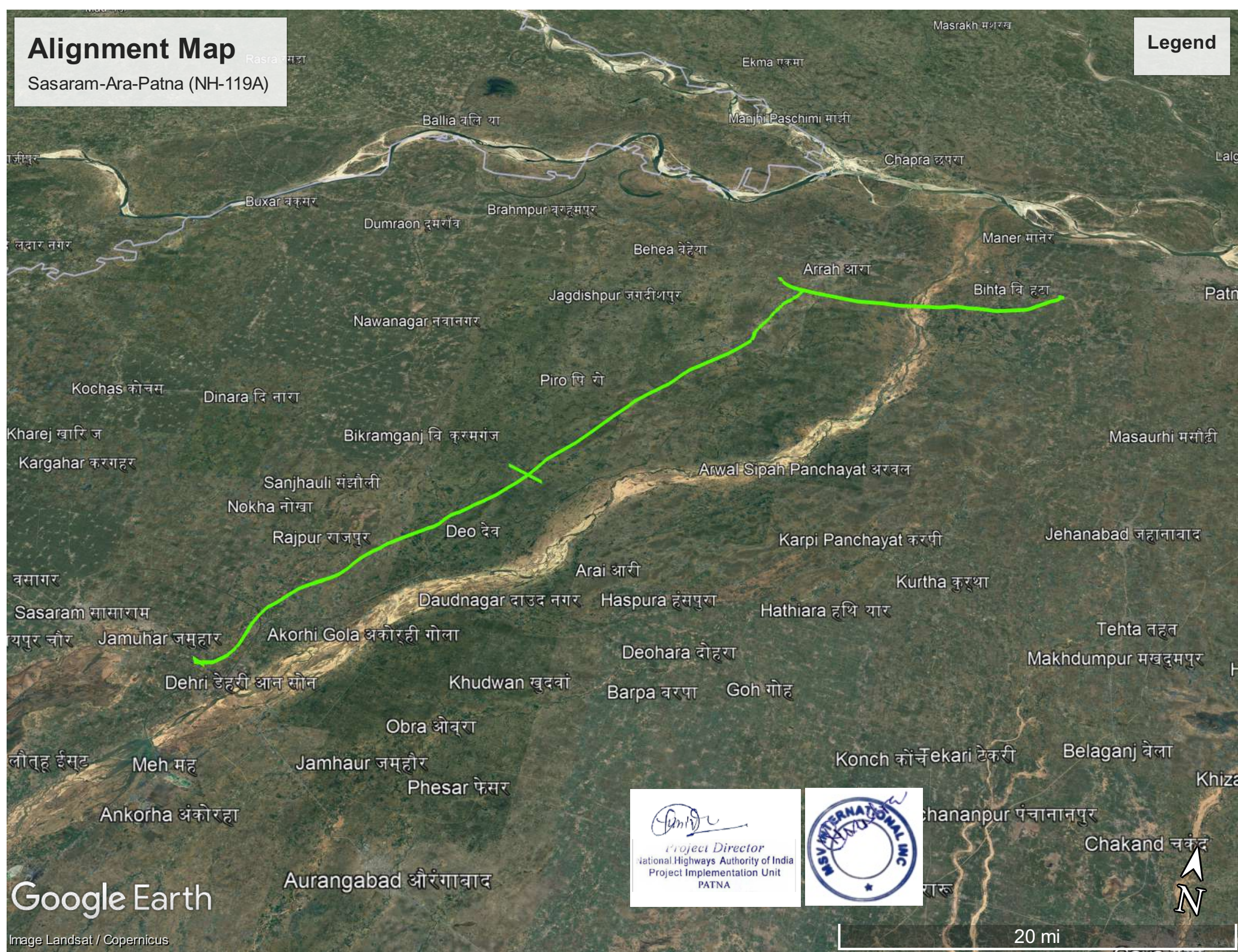

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Alignment Map

Sasaram-Ara-Patna (NH-119A)

Legend



Google Earth

Image Landsat / Copernicus

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