

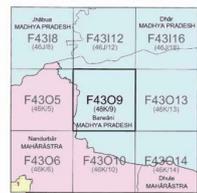


निर्दिष्ट के बिना नहीं NOT FOR EXPORT

OPEN SERIES MAP

No. F4309

Scale 1:50,000



भारतीय सर्वेक्षण विभाग SURVEY OF INDIA

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CONVENTIONAL SYMBOLS

Table of conventional symbols for various features like roads, railways, rivers, and buildings.

NOTES

Map showing the location of the sheet in the region of Madhya Pradesh and Chhattisgarh.

COMPIRATION INDEX



Projection - UTM Datum - WGS 84

Magnetic Variation from True North about 5° West in 2005 (Decreases by about 1' annually)

1:50,000



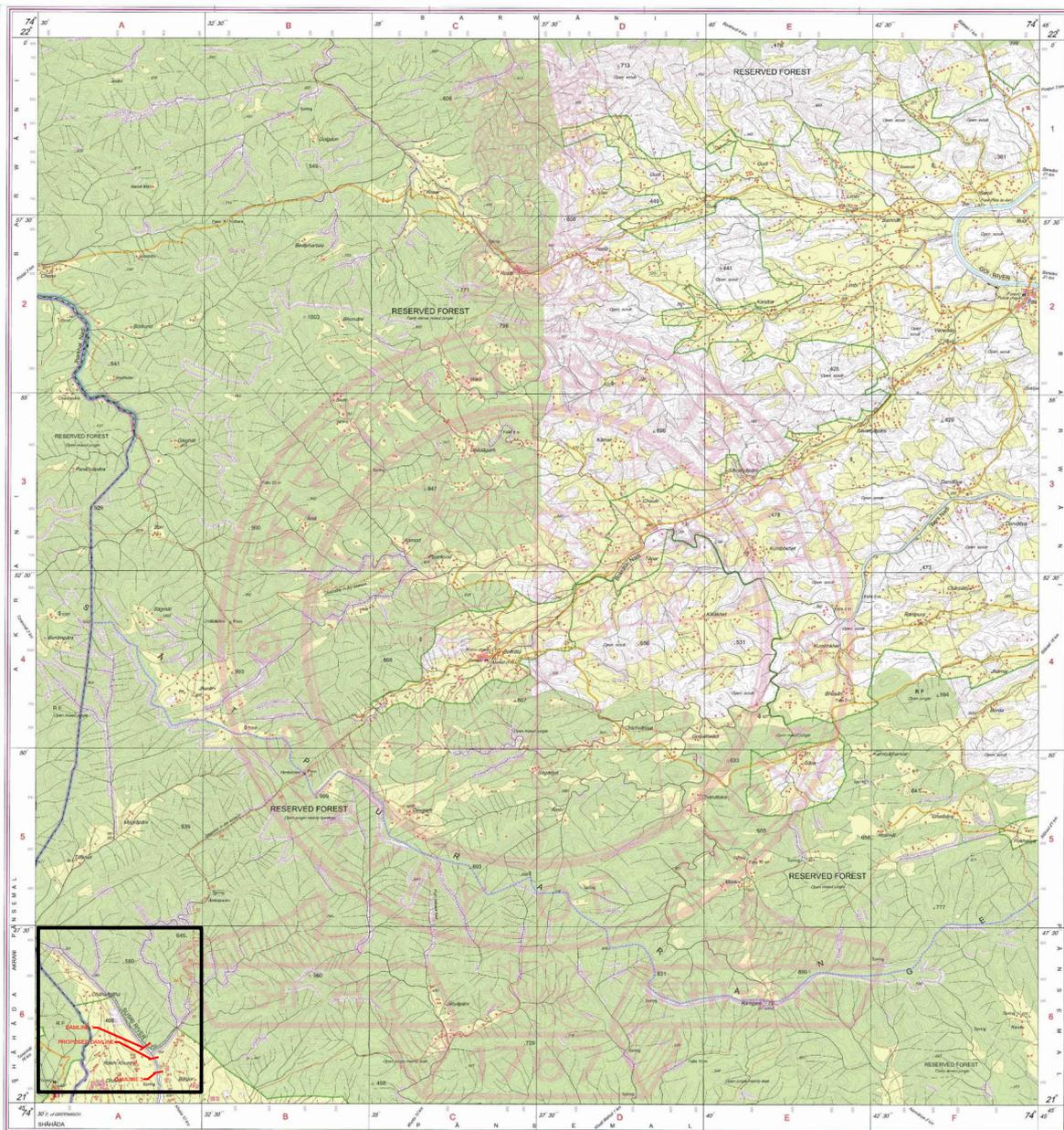
CONTOUR INTERVAL IN METRES

For further details about the map please contact Director, Madhya Pradesh Geo-Spatial Data Centre, Survey of India, Jabalpur.

Website: www.surveyofindia.gov.in

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Sub Divisional Officer Water Resources Sub Divisor Pansemal

Executive Engineer Water Resources Division Barwani

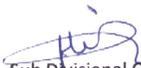
Three Alternate Dam site

Dam line 1 :- If we consider dam line 1 as a proposed site the catchment area will reduce to 30% results the storage will be reduced upto 30% hence the irrigation of 1325 ha will not be achieved. The whole body of dam structure and whole submergence are in forest land hence the forest land area of submergence will increase.

Dam line 2 :- As we proposed dam line 2 in this project. The catchment area will be sufficient to have that capacity which serves the potential of 1325 ha of irrigation. The whole body of dam structure or component are in revenue land. Hence the optimum storage gain with minimum forest land area. Hence this dam line is suitable for constructing a Dam

Dam line 3:- If we consider the dam line 3 as a proposed site the catchment area will be the same as dam line 2. But in this Dam line both the flanks of river are so low or are not available for the sufficient height to collect the storage. The site of spill channel are also not available. In submergence one village that is Rakhikhurd will also be submerged.

Hence the best suitable site is dam line 2.


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Sailent Features of Alternate Dam Sites of Susari Project

S. No.	Particulars	Alternate - 1	Alternate - 2 (Proposed)	Alternate - 3
I	General			
	Name of Project	Susari Tank	Susari Tank	Susari Tank
	Type Of Project	Irrigation	Irrigation	Irrigation
	Location	Near Rakhikhurd village	Near Rakhikhurd village	Near Rakhikhurd village
	Latitude	21:45:58	21:45:35	
	Longitude	74:31:30	74:31:49	
	River Basin	Tapti	Tapti	Tapti
	Located on River	Susari River	Susari River	Susari River
	Tehsil	Pansemal	Pansemal	Pansemal
	District	Barwani	Barwani	Barwani
	State	M.P	M.P	M.P
II	Hydrology			
	Catchment Area	40sqkm	58.02Sqkm	58.02Sqkm
	Available Annual Yield at Dam site 75% Dependable(mcum/year)	0.1392	0.1392	0.1392
III	Principal Levels			
	Lowest Sill Level(m)	302	297.7	294.7
	Full Reservoir Level(m)	337.5	341.5	340
	Maximum Water Level(m)	339.5	343.5	342
	Top Bund Level(m)	341.5	345.5	344
	Live Storage Capacity(mcum)	3.4	6.62	6.62
	Submergence at F.R.L.(ha)	40	59.8	80
IV	Desing Iggigation	680	1325	1325
V	Submergence Details			
	Total Submergence(ha)	40	59.8	80
	Private Land(ha)	Nil	9	60
	Govt. Land(ha)	Nil	5.75	8
	Forest Area(ha)	40	28.08	20
	Habitation	Nil	Nil	Rakhikhurd village
	Properties	Nil	Nil	Road 600m
	Total Cost(Lakh)	2878.3	3128.8	4132
	Construction Cost(Lakh)	18.38	2332.00	2650.00
	Cost per Ha. (Rs. In Lakhs)	4.23	2.36	3.11
	Techno Economic feasibility	Not feasible due to high cost per ha.	Feasible	Not feasible, flanks are not available,suitable site of waste weir also not available

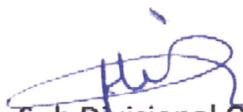

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OFFICE OF EXECUTIVE ENGINEER WATER RESOURCE
DEPARTMENT BARWANI (M.P)

Justification Note

A note containing justification for location the project named Susari Tank Project .It consist of earthen dam near village Rakhikhurd on susri river which has catchment area of 56 sqkm and irrigation served as 1325ha .A etaied survey has been carried out to achieve min submergence area and optimum project cost . For this purpose a detailed study of dam alternate dam line with different principle level and last we decided this site. If we shift dam line that either decrease in capacity or unvaibility of banks or higher the submergence area will occur. Therefore present proposal is well suitable site with minimum submergence area and maximum capacity.


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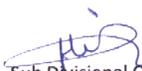
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