

भारतीय सर्वेक्षण विभाग
1st Edition 2009. Price : Rs. 50/-

CONVENTIONAL SYMBOLS

Express highway: with toll, with bridge, with distance stone
Roads metalled: according to importance
Roads double cartageway, according to importance
Unmetalled road: Cart-track, Pack-track with pass, Foot-path
Streams: with track in bed; unmetalled, Canal
Dams: masonry or rock-filled; earthwork, Well
River: dry with water channel; with island & rocks, Tidal river
Summerset rocks, Shoal, Swamp, Flood
Wells: lined, unlined, Tube-well, Spring, Tanks: perennial, dry
Embankments: road or rail; tank, Broken ground
Railways: broad gauge; double, single with distance stone, do
Railways: other gauge: double, single with distance stone, do
Mineral: line or railway, Kila, Cutting with tunnel
Contours with sub-features: Rocky slopes, Cliffs
Sand features: (Mittazsand-hills (german); (Bikneshtingling)
Towns or Villages: inhabited; deserted, Fort
Huts: permanent; temporary, Tower, Antiquities
Temple, Chhatra, Church, Mosque, Sigha, Tomb, Graves
Lighthouse, Lightship, Buoy, Rafted, unlighted, Anchorage
Mine: Vase on trellis, Grass, Scrub
Palms: palmyra; other, Plantain, Conifer, Bamboo, Other trees
Areas: cultivated; wooded, Surveyed line
Boundary, international
state: demarcated; undemarcated
district: subdivision, taluk or thika; forest
Boundary pillars: surveyed; unlocated
Heights, triangulated; station; point: approximate
Bench-mark: geodetic; sanitary; canal
Post office, Telegraph office, Overhead tank
Rest house or inspection hungalow, Circuit house, Police station
Camping ground, Forest: reserved; protected
Spaced names: administrative; locally or tribal
Hospital, Dispensary, Veterinary, Hospital / Dispensary
Aerodrome, Heliport, Tourist site
Power line: with pylons surveyed; with poles unsurveyed

REFERENCES
NH 23 National Highway No. 23, SER South Eastern Railway,
CMBR Chandi Muli Banka Kila.

NOTES :-
Heights are in metres and above Indian map are feet.
Contours are approximate.
A relative height, -B-, represents the approximate height, in metres, between the top and bottom of a steep slope.
Tanks, shown dry, in this area usually contain water from July to December.
The kilometre stone numbers along roads are shown in slant type, e.g., 5' whereas milestone numbers are shown in upright type, e.g., 5.
Unmetalled road along the canal embankment is shown by cart-track symbol.
All unmetalled roads are not suitable in dry season.
A relative height, e.g., -B-, marked along a canal, indicates the height of the top of the canal embankment above the adjacent country.

COMPILED INDEX
A. Surveyed during 1975-76, Updated for major details from 1:25,000 survey 1980-89 and from satellite imagery of 2007 Durio 5000-06.

Projection - UTM Datum - WGS 84
Magnetic Variation from True North about 2° West in 2005.
(Decreasing by about 1' annually)

Scale 1:50,000
600 m to 1 cm
2 cm to 1 km
Metres 3000 0 1 2 3 Kilometres
CONTOUR INTERVAL 10 METRES

For further details about this map, please contact
Director
Jharkhand Geo-Spatial Data Centre
Survey of India, Dhanbad
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WEBSITE - www.surveyofindia.gov.in
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Sudhir Kumar
Project Director
NHAI, PIU
Dhanbad



नियत के लिये नहीं NOT FOR EXPORT
OPEN SERIES
MAP

No. F45B10

Scale 1:50,000

F45B5 (73E/5)	F45B9 (73E/9)	F45B13 (73E/13)
F45B6 (73E/6)	F45B10 (73E/10) Jharkhand	F45B14 (73E/14) Bokaro Jharkhand
F45B7 (73E/7)	F45B11 (73E/11) Ranchi Jharkhand	F45B15 (73E/15) Purniya West Bengal

1 Giridih, Jharkhand.

भारतीय सर्वेक्षण विभाग

SURVEY OF INDIA

1st Edition 2010.

Price: Rs. 70/-

CONVENTIONAL SYMBOLS

Express Highway: with toll, with bridge, with distance stone	20
Roads, metalled: according to importance	15
Roads, double carriageway: according to importance	10
Unmetalled road, Cart-track, Path-track with pass, Foot-path	5
Streams: with track in bed, underflow, Canal	2
Dam: masonry or rock-filled, earthwork, Water	1
Submerged rocks, Shoal, Swamp, Reeds	0.5
Wells: friction, unlined, Tube-well, Spring, Tanks; perennial; dry	0.2
Embankments: road or rail, bank, Broken ground	0.1
Railways, broad gauge: double, single with station, under construction	0.05
Railways, other gauges: double, single with station, do.	0.02
Mineral line or Railway, Kite, Cutting with tunnel	0.01
Contours with sub-features, Rocky slopes, Cliffs	0.005
Sand features: (Mud) Sand-rills (perennial), (Silt) Sand-rills	0.002
Towns or Villages: inhabited, deserted, Fort	0.001
Huts: Permanent, temporary, Tower, Antiquities	0.0005
Temples: Church, Church, Mosque, Idgah, Tomb, Graves	0.0002
Lighthouses, Lightships, Buoy: lighted, unlighted, Anchorage	0.0001
Mine: View in profile, Grass, Scrub	0.00005
Palms: palm-tree, other, Plantain, Conifer, Bamboo, Other trees	0.00002
Areas: cultivated, wooded, Surveyed tree	0.00001
Boundary: international, state, district, undetermined	0.000005
Boundary pillars: surveyed, unlocated, village, village	0.000002
Height: triangulated, station, point, approximate	0.000001
Benches: met, geodetic, tertiary, canal	0.0000005
Post office: Telegraph office, Overhead tank	0.0000002
Rail house or inspection building, Circuit house, Police station	0.0000001
Camping ground, Forest: reserved, protected	0.00000005
Spaced names: administrative, locality or tribal	0.00000002
Hospital, Dispensary, Veterinary, Hospital/Dispensary	0.00000001
Airports: Helipad, Tourist site	0.000000005
Power line: with pylons, surveyed, with poles unsurveyed	0.000000002

REFERENCES

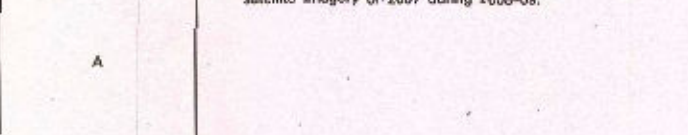
NW 33 National Highway No. 33. PWD Public Works Department.
SEW South Eastern Railway. City, Chennai.

NOTES :-

Heights are in metres and above Indian mean sea level.
Contours are approximate.
A relative height, h_r , represents the approximate height, in metres, between the top and bottom of a steep slope.
The triangulated heights and contours in this sheet have not been adjusted to the heights of the spirit levelled bench - routes and may not be strictly in accordance with them.
The kilometre station numbers along roads are shown in black type, e.g., 5, whereas milestone numbers are shown in red type, e.g., 15.
Forest boundaries north of the Damodar River have not been shown for want of reliable information.
The major boundaries of areas of Reserved or Protected Forests are shown by green ribbons.

COMPILED INDEX

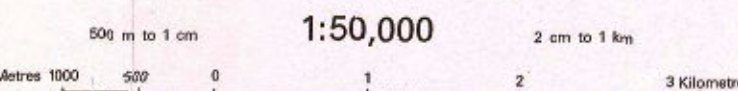
A. Surveyed during 1975-76. Updated for major details from satellite imagery of 2007 during 2008-09.



Projection - UTM Datum - WGS 84

Magnetic Variation from True North about 1° West in 2005.
(Decreasing by about $1'$ annually).

1:50,000



CONTOUR INTERVAL 10 METRES

For further details about this map, please contact

Director

Jharkhand Geo-Spatial Data Centre

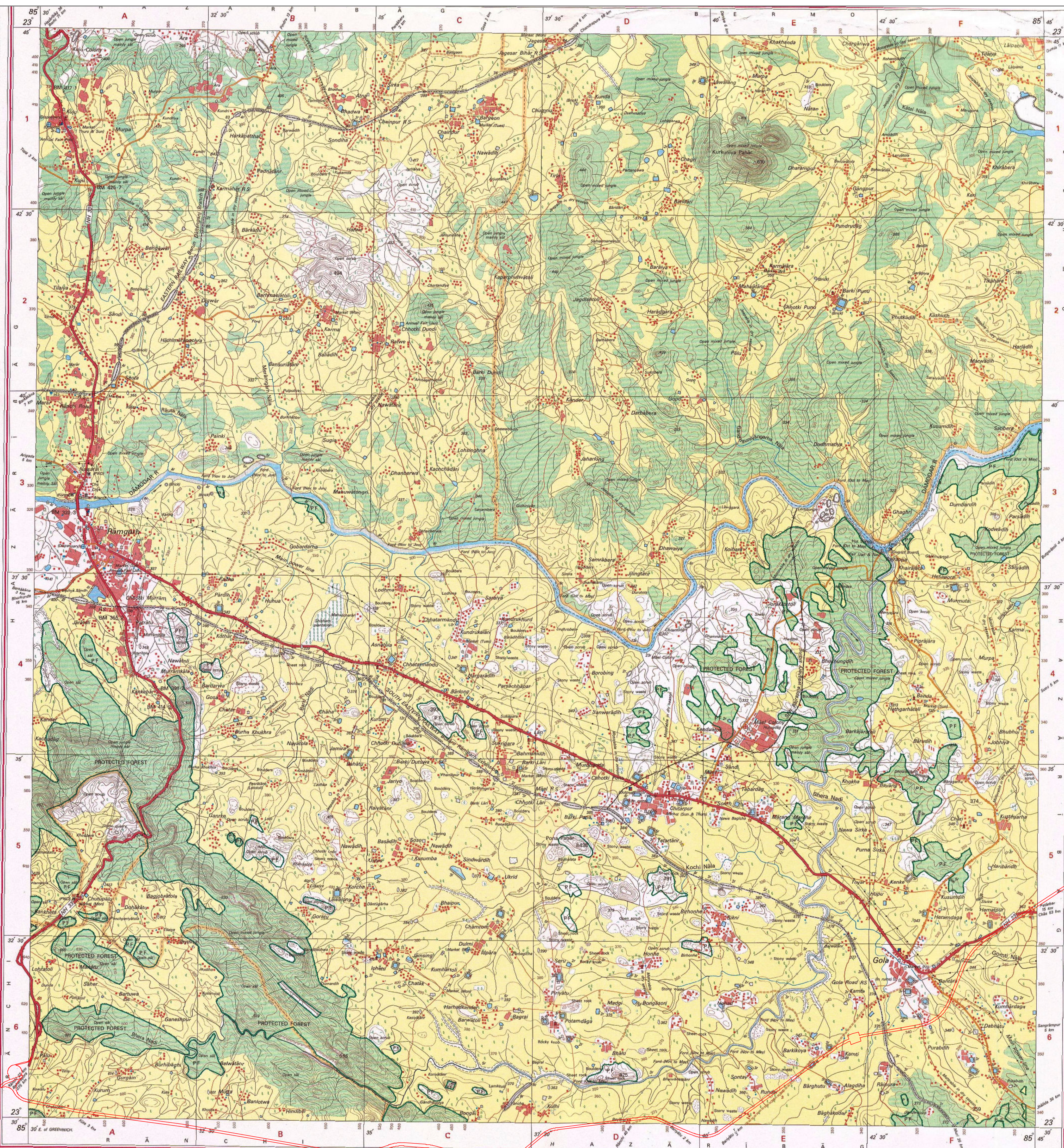
Survey of India, Doranda

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OPEN SERIES
MAP

No. F45B11

Scale 1:50,000

Hazaribag JHARKHAND F45B6 (73E/6)	F45B10 (73E/10)	Bokaro JHARKHAND F45B14 (73E/14)
F45B7 (73E/7)	F45B11 (73E/11) Ranchi JHARKHAND	F45B15 (73E/15) Purnulia WEST BENGAL
F45B8 (73E/8)	F45B12 (73E/12)	F45B16 (73E/16) Sarakela Kharsawan JHARKHAND

भारतीय सर्वेक्षण विभाग

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CONVENTIONAL SYMBOLS

Express highway with toll with bridge with distance stone	
Roads, metalled according to importance	
Roads, double cartway according to importance	
Unmetalled road, cart-track, pack-track with pass, foot-path	
Streams with track in bed, underflow, canal	
Stream, masonry or rock-lined, partition, weir	
River, dry with water channel, with island & rocks, tidal river	
Submerged river, shoal, swampy, reeds	
Water, tract, unlined, tubewell, spring, tank, perennial, dry	
Settlements: road or rail, tank, broken ground	
Railways, broad gauge, double, single with station, under construction	
Railways, other gauges, double, single with station, under construction	
Mineral line or railway, line, cutting with tunnel	
Contours with sub-features, rocky slopes, cliffs	
Sand features: (Mud) Sand-hill (Spur), (Dune), (Shifting)	
Towns or Villages: inhabited, unincorporated, (Settlement)	
Huts, permanent, temporary, tower, Antiquities	
Temples, Chattri, Church, Mosque, Ghat, Tomb, Graves	
Lighthouses, Lightships, Buoys, lighted, unlighted, Anchorage	
Mine, Vind on, wells, Grass, Scrub	
Palms, palmry, other, Plants, Cactus, Bamboo, Other trees	
Areas: cultivated, wooded, Surveyed tree	
Boundary, international	
State, demarcated, unincorporated	
district, subdivision, taluk or block, forest	
Boundary pillars: surveyed, unincorporated, village, information	
Heights, triangulated, station, point, approximate	
Bench-mark, geodetic, survey, aneroid	
Post office, Telegraph office, Coded, tele. post	
Rail, house or inspection building, Circuit, house, Police station	
Camping ground, Forest, reserved, protected	
Spaced names: administrative, locality or rural	
Hospital, Dispensary, Veterinary, Hospital/Dispensary	
Airplane, Helipad, Tourist, ship	
Power line: with pylons surveyed, with poles unsurveyed	

REFERENCES

3 E R South Eastern Railway, PWD Public Works Department,
800 Block Development Office.

NOTES :-

Heights are in metres and above Indian mean sea level.
Contours are in metres.
The triangulated heights and contours in this sheet have not been adjusted to the heights of the spirit levelled bench-marks and may not be exactly in accordance with them.
A relative height is represented by the approximate height, in metres, between the top and bottom of a step slope.
The kilometre stone numbers along roads and railways are shown in slant type, e.g. 'S' whereas milestone numbers are shown in upright type, e.g. '1'.
Forest boundaries have not been shown for want of reliable information.

COMPILATION INDEX

A. Surveyed during 1978-79. Updated for major details from satellite imagery of 2007 during 2008-09.



Projection - UTM Datum - WGS 84

Magnetic Variation from True North about 1/2° West in 2005.

1:50,000
2 cm to 1 km
Kilometres
Metres 1000 500 0 500 1000

CONTOUR INTERVAL 20 METRES

For further details about this map, please contact
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Name of Project : Diversion of fresh Forest Land for development of Economic Corridors, Inter Corridors, Feeder Routes
etc., under Bharatmala Pariyojana of Jaina More -Gola -Ormanji section in the state of Jharkhand.