



OPEN SERIES MAP
No. G45T3
Scale 1:50,000

Grid reference table showing sheet numbers G45S14, G45T2, G45T6, G45S15, G45T3, G45T7, G45S16, G45T4, G45T8.

भारतीय सर्वेक्षण विभाग SURVEY OF INDIA

1st Edition 2010. Price: Rs. 50/-

CONVENTIONAL SYMBOLS

Table of conventional symbols for roads, rivers, railways, forests, and other features.

REFERENCE

NH-2 National Highway No. 2

NOTES

Contours are approximate. Heights are in metres and above Indian mean sea level. A relative height 'a' represents the approximate height in metres between the top and bottom of a steep slope.

COMPILED INDEX

A. Surveyed during 1977-78. Updated for major details during 2009-08.



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



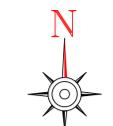
CONTOUR INTERVAL 20 METRES

For further details about this map, please contact Director, Bihar Geo-Spatial Data Centre, Survey of India, 164, Sheikhpura House, Sheikhpura, Patna - 800014. Fax: 0012-2280265

WEBSITE - www.surveyofindia.gov.in

Reproduction in whole or part by any means is prohibited without the written permission of Survey of India, the National Mapping Agency.

GOVERNMENT OF INDIA COPYRIGHT, 2010.



LEGEND

Detailed legend table listing symbols for towns, boundaries, roads, rivers, and other features.

INDEX

Index table with columns for SR. NO., DESCRIPTION, and ROUTE COLOR.

Submitted by: M/s. Prasad Surveyors. Approved by: VCS.

Table for 'ISSUED FOR USE' and 'ISSUED FOR APPROVAL' with columns for NO., DATE, REVISION, BY, CHKD, APPD, PROJ, ENGR.

Client: BHARAT PETROLEUM CORPORATION LIMITED, 1st Floor, B.S.N.L. Exchange Office Campus, Chatra - 825401, Jharkhand.

Project: DEVELOPMENT OF CITY GAS DISTRIBUTION PIPELINE NETWORK AT CHATRA & PALAMU GA.

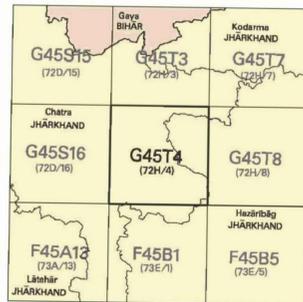
Survey Agency: PRASAD SURVEYORS, Flat no-1, Muddal Nivas, Near Devdhar Hospital, Pimpri, Pune-411017.

Table for 'TITLE', 'SCALE', 'DRAWING NO.', 'SHEET NO.', and 'REV.'.



No. G45T4

Scale 1:50,000



भारतीय सर्वेक्षण विभाग SURVEY OF INDIA

1st Edition 2009. Price : Rs. 50/-

CONVENTIONAL SYMBOLS

- Express highway with toll, with bridge, with distance stone
Roads, metalled according to importance
Unmetalled road, Cart-track, Pack-track with pass, Foot-path
Streams, with track in bed, underflow, Canal
River, dry with water channel, with island & rocks, Tidal river
Wells: lined, unlined, Tube-well, Spring, Tanka, permanent, dry
Embankments: road or rail, bank, broken ground
Railways, broad gauge: double, single with station, under construction
Railways, other gauges: double, single with distance stone, do
Mineral line or tramway, K.M., Cutting with tunnel
Contours with sub-features, Rocky slopes, Cliffs
Sand features: (Wind) (Dune) (Hill) (permanent) (Disappearing)
Towns or Villages: inhabited, deserted, Fort
Huts: permanent, temporary, Tower, Antiquities
Temples, Chhatra, Church, Mosque, Idgah, Tomb, Graves
Lighthouses, Lightships, Buoys, lighted, unlighted, Anchorage
Mines: Vitr. on trails, Grass, Scrub, Bamboo, Other trees
Ponds: saltwater, other, Plemens, Confine, Bamboo, Other trees
Areas: cultivated, wooded, Surveyed tree
Boundary, international
state, demarcated, un-demarcated
district, subdivided, tahsil or taluk, forest
Boundary pillars: surveyed, unlocated, village trijunction
Heights, triangulated: station, point, approximate
Bench-mark: geodetic, tertiary, canal
Post office, Telegraph office, Overhead tank
Rest house or inspection bungalow, Circuit house, Police station
Camping ground, Forest: reserved, protected
Speed name: administrative, locality or tribal
Hospital, Dispensary, Veterinary, Hospital / Dispensary
Aerodrome, Helipad, Tourist site
Power line: with pylons surveyed, with poles unsurveyed

REFERENCE

NY 100 National Highway No. 100.

NOTES

- Heights are in metres and above Indian mean sea level.
Contours are approximate.
A relative height, h, represents the approximate height in metres, between the top and bottom of a steep slope.
Tides shown dry, in this area usually contain water from July to February.
Wells are numerous throughout the sheet, only the important ones have been shown.
The exterior boundaries of areas of Reserved or Protected Forests are shown by green borders.
The milestone numbers along roads are shown in black type, e.g., '5' whereas milestone numbers are shown in upright type, e.g., '5'.
The district boundary between Chhatis and Hoshangabad Districts has been surveyed as pointed out by the local officials on the ground but has not been verified by the District authorities.

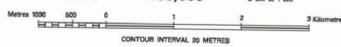
COMPILATION INDEX

A. Surveyed during 1977-78. Updated for major details during 2004-05.

Projection - UTM Datum - WGS 84

Magnetic Variation from True North about 2° West in 2005. (Decreasing by about 1" annually).

1:50,000



CONTOUR INTERVAL 20 METRES

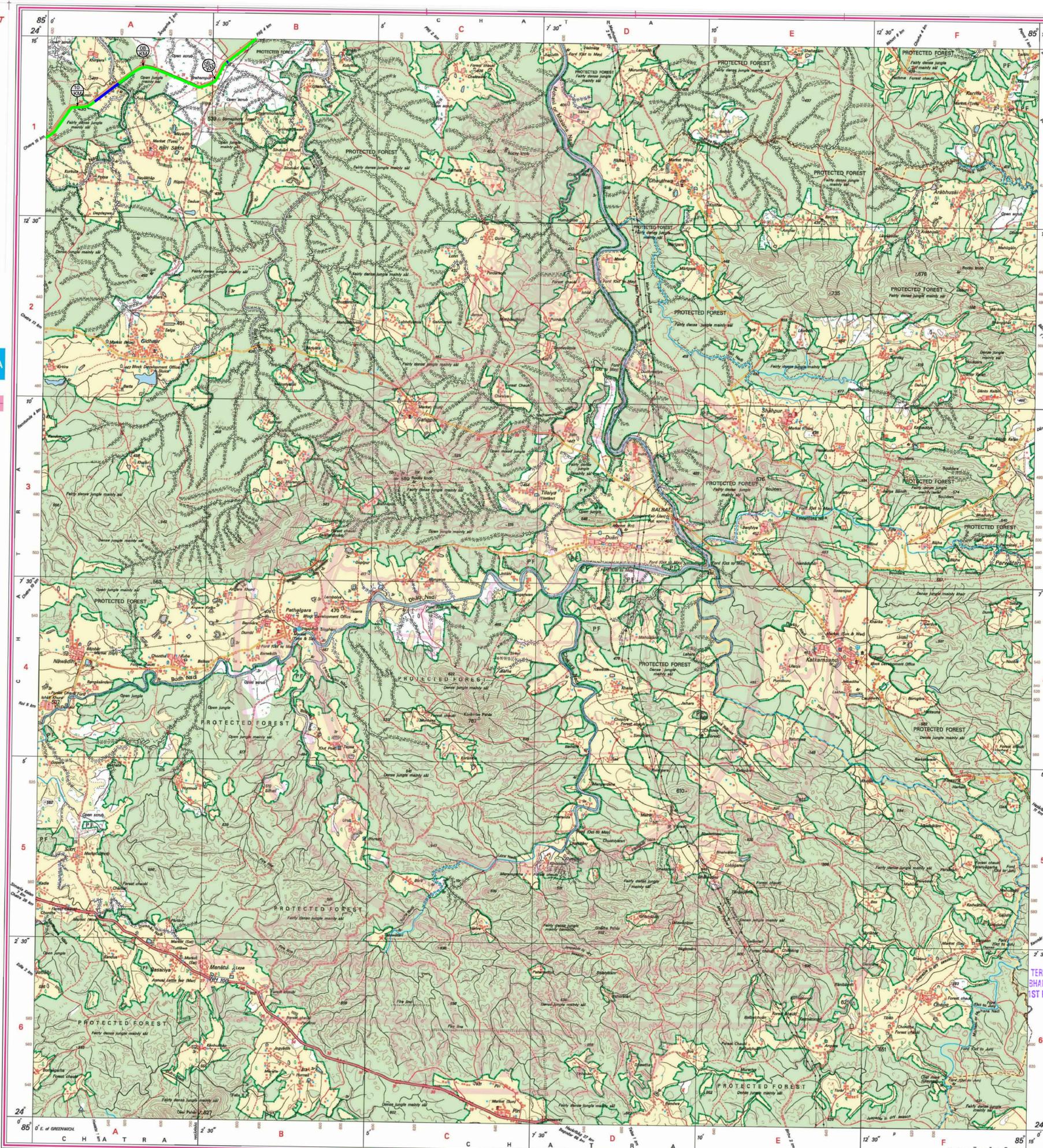
For further details about this map, please contact

Director, Jharkhand Geo-Spatial Data Centre, Survey of India, Dorsande, Ranchi-834002, Fax: 0661-2482789

WEBSITE - www.surveyofindia.gov.in

Reproduction in whole or part by any means is prohibited without the written permission of Survey of India, the National Mapping Agency.

GOVERNMENT OF INDIA COPYRIGHT, 2008.



LEGEND

- Towns or Villages: inhabited, deserted, Fort
Huts: permanent, temporary, Tower, Antiquities
Temple, Chhatra, Church, Mosque, Idgah, Tomb, Graves
Lighthouse, Lightship, Buoys, lighted, unlighted, Anchorage
Mines: Vitr. on trails, Grass, Scrub, Bamboo, Other trees
Palms: palm, other, Plantain, Conifer, Bamboo, Other trees
Boundary, international
state, demarcated, un-demarcated
district, subdivided, tahsil or taluk, forest
Boundary pillars: surveyed, unlocated, village trijunction
Heights, triangulated: station, point, approximate
Bench-mark: geodetic, tertiary, canal
Post office, Telegraph office, Overhead tank
Rest house or inspection bungalow, Circuit house, Police station
Camping ground, Forest: reserved, protected
Speed name: administrative, locality or tribal
Roads, metalled: according to importance, distance stone
unmetalled: do
Cart-track, Pack-track and pass, Foot-path with bridge
Bridges: with piers, without, Causeway, Ford or Ferry
Streams: with track in bed, underflow, Canal
Dams: masonry or rock-filled, earthenwork, Weir
River banks: shaling, steep, 3 to 6 metres, over 6 metres
dry with water channel, with island & rocks, Tidal river
Submerged rocks, Shoal, Swamp, Reeds
Wells: lined, unlined, Tube-well, Spring, Tanks: permanent, dry
Embankments: road or rail, tank, Broken ground
Railways, broad gauge: double, single with station, under construction
other gauges: do
do, with distance stone, do
Mineral line or tramway, Telegraph line, Cutting, with tunnel
Contours with sub-features, Rocky slopes, Cliffs
Sand features: (Hill) (Dune) (Hill) (permanent) (Disappearing)

INDEX

Table with 3 columns: SR. NO., DESCRIPTION, ROUTE COLOR. Row 1: PROPOSED GAIL SV 19A HARHAD TO ARIHAT FEULS GAS PIPELINE. Row 2: FOREST ROUTE GAIL SV 19A HARHAD TO ARIHAT FEULS GAS PIPELINE.

Submitted by: M/s. Prasad Surveyors

Approved by: VCS

Table with 6 columns: NO., DATE, REVISION, BY, CHKD, APPD, PROJ ENGR. Row 1: ISSUED FOR USE. Row 2: ISSUED FOR APPROVAL.

Signature of Chetan Kumar Mishra, Territory Manager (Gas), Jharkhand 1, Bharat Petroleum Corporation Limited, 1st Floor, BSNL Exchange Office Campus, Chatra, Jharkhand-825401.

CLIENT: BHARAT PETROLEUM CORPORATION LIMITED, 1st Floor, B.S.N.L. Exchange Office Campus, Chatra - 825401, Jharkhand

M/s. VCS QUALITY SERVICES PVT. LTD., B-10, 11th FLOOR, BAJAJ BHAWAN, SECTOR-03, NOIDA-201301

PROJECT: DEVELOPMENT OF CITY GAS DISTRIBUTION PIPELINE NETWORK AT CHATRA & PALAMU GA.

SURVEY AGENCY: PRASAD SURVEYORS, Flat no.-1, Mudgal Nivas, Near Devdhar Hospital, Pimpri, Pune-411017, Ph: 020-27416969 Email - prasadsurveyors@gmail.com

TITLE: GAIL SV 19A STATION, HARHAD VILLAGE CHATRA TO ARIHAT FUELS BABHANE, CHATRA TOWN GAS PIPE LINE

Table with 4 columns: SCALE, DRAWING NO., SHEET NO., REV. Row 1: 1:50,000, PS/BJPL/CGD/CHATRA GA/GRF-02, 02 OF 03, FINAL

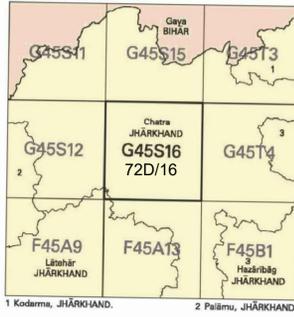


निर्गत के लिए नहीं NOT FOR EXPORT

OPEN SERIES MAP

No. G45S16

Scale 1:50,000



भारतीय सर्वेक्षण विभाग SURVEY OF INDIA

1st Edition 2008. Price : Rs. 50/-

CONVENTIONAL SYMBOLS

- List of conventional symbols for roads, railways, water features, and other landmarks.

REFERENCE

NH 89 National Highway No. 89

NOTES

- Notes regarding map accuracy, scale, and projection.

COMPILED INDEX

Map compilation details and index information.

Projection - UTM Datum - WGS 84

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

Scale 1:50,000

Contour Interval 30 METRES

For further details about this map, please contact

Director, Jharkhand Geo-Spatial Data Centre

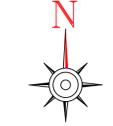
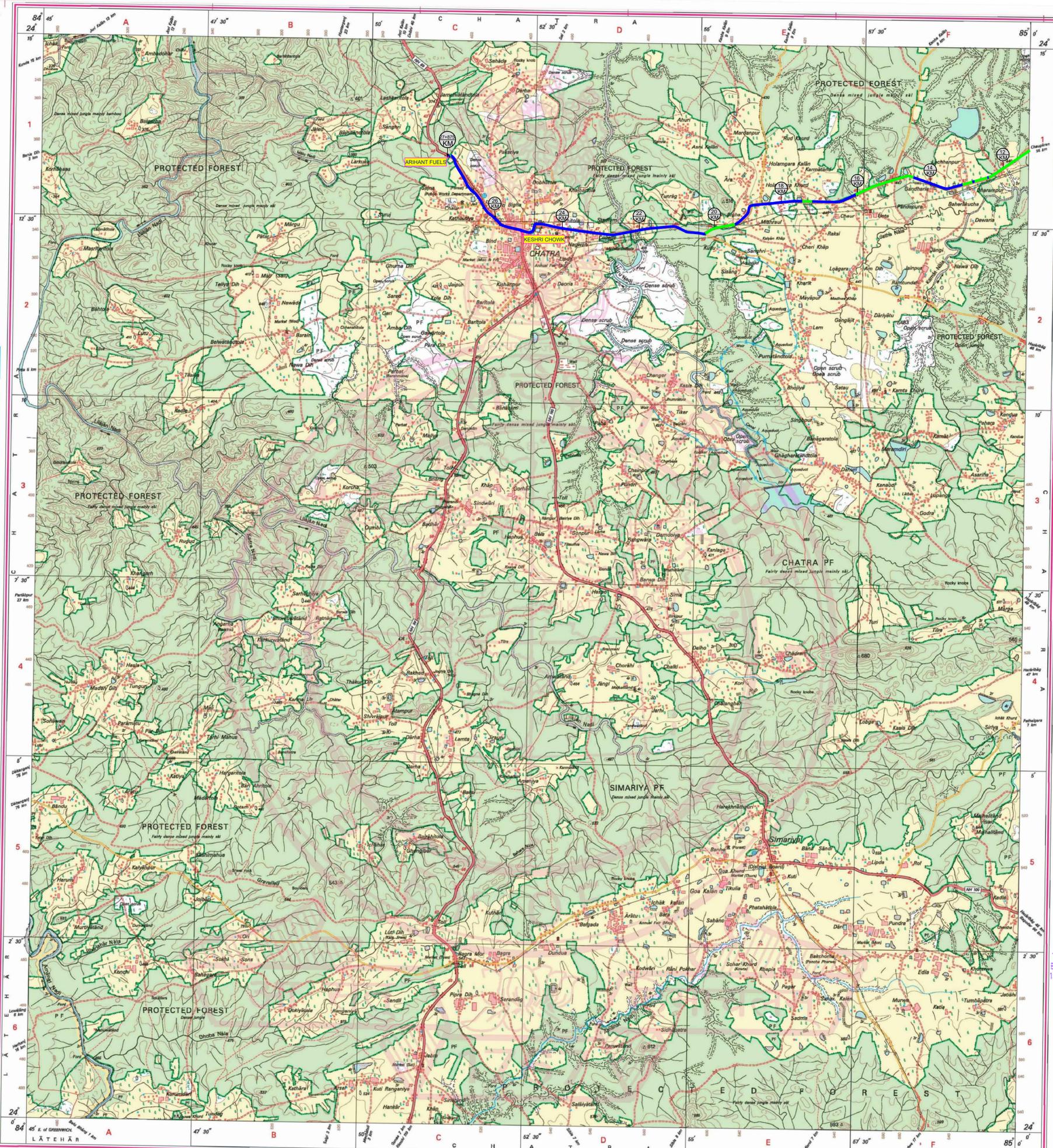
Survey of India, Dorenda, Ranchi-834002.

Fax : 0661 - 2482930

WEBSITE - www.surveyofindia.gov.in

Reproduction in whole or part by any means is prohibited without the written permission of Survey of India, the National Mapping Agency.

GOVERNMENT OF INDIA COPYRIGHT, 2008.



LEGEND

- Detailed legend for symbols used in the map, including terrain, infrastructure, and natural features.

INDEX

Table with 3 columns: SR. NO., DESCRIPTION, ROUTE COLOR. Lists proposed gas pipeline routes.

Submitted by / DATE: M/s. Prasad Surveyors. Approved by / DATE: VCS.

Table with 5 columns: NO., DATE, REVISION, BY, CHKD, APPD, PROJ, ENGR.

Signature and stamp of Chetan Kumar Mishra, Territory Manager (GAS), Jharkhand 1, Bharat Petroleum Corporation Limited.

Client: BHARAT PETROLEUM CORPORATION LIMITED, 1st Floor, B.S.N.L. Exchange Office Campus, Chatra - 825401, Jharkhand.

PMC: M/s. VCS QUALITY SERVICES PVT. LTD., B-10, 1st FLOOR, BAJAJ BHAWAN, SECTOR-03, NOIDA-201301.

Project: DEVELOPMENT OF CITY GAS DISTRIBUTION PIPELINE NETWORK AT CHATRA & PALAMU GA.

Survey Agency: PRASAD SURVEYORS, Flat no.-1, Mugal Nivas, Near Devdhar Hospital, Pimpri, Pune-411017.

Title: GAIL SV 19A STATION, HARHAD VILLAGE CHATRA TO ARIHANT FUELS BAHANE, CHATRA TOWN GAS PIPE LINE.

Table with 3 columns: SCALE, DRAWING NO., SHEET NO., REV. Shows scale 1:50,000 and drawing details.