

# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय)

National Highways Authority of India

(Ministry of Road Transport & Highways) कार्यालय क्षेत्रीय अधिकारी, आंध्रप्रदेश क्षेत्र Office of the Regional Officer, Andhra Pradesh Region

प्लॉट.क.२१, टीचर्स कॉलोनी, गुरुनानक नगर मार्ग, विजयवाड़ा-५२० ००८. आंध्रप्रदेश Plot No. 21, Teachers' Colony, Gurunanak Nagar Road, Vijayawda-520 008. A.P. भारतमाला प्रगति के पथ पर अप्रसर BHARATMAR ROAD TO PROSPERITY

Lr.No NHAI/RO-VJA/11045/NOC/2021-22/ 13/3

Dt.17.06.2021

दूरभाष / Tele : 0866-2483910

ई-मेल / E-mail : rovijayawada@nhai.org

nhairovia@gmail.com

#### **INVITATION OF PUBLIC COMMENTS**

Sub: RO - Vijayawada - Grant of permission for laying of 12.75" dia Natural Gas Pipeline by M/s. IOCL with 89mm dia OFC along NH-16 from Km.733.885 to Km.741.256 for a length of 7371mt - Reg.

The Project Director, PIU - Visakhapatnam submitted a proposal of IOCL for laying of 12.75" dia Natural Gas Pipeline by M/s. IOCL with 89mm dia OFC along NH-16 from Km.733.885 to Km.741.256 for a length of 7371mt.

As per MORTH guidelines vide letter No. RW/NH-33044/29/2015/S&R® dated 22<sup>nd</sup> November 2016, the Highway Administration will put out the application in the Ministry's website for 30 days seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

In view of the above, the comments of public, if any, on the above mentioned proposal is invited on below mentioned address.

Regional Officer - Vijayawada, National Highways Authority of India, Plot No.21, Teachers' Colony, Gurunanak Nagar Road, Vijayawada, Andhra Pradesh. Pin: 520 008. Email: rovijayawada@nhai.org

> (R.K. Singh), Regional Officer RO - Vijayawada

निगमित कार्यालय : जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली- 110 075, वेबसैट : http://www.nhai.gov.in Corporate Office : G-5 & 6, Sector - 10, Dwarka, New Delhi - 110 075, Website : http://www.nhai.gov.in



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण National Highways Authority of India

(सडक परिवहन और राजमार्ग मंत्रालय)

## (MINISTRY OF ROAD TRANSPORT & HIGHWAYS)

परियोजना कार्यान्वयन इकाई (जि क्यू), भा.रा.रा.पा. एन्क्लेव, कि.मी.2/8 रा.रा.5.. Project Implementation Unit (GQ), NHAI Enclave, KM 2/8 NH-16 हनमन्तवाका, विशाखपट्टणम - 530 040, ए.पि., भारत

Hanumanthavaka, Visakhapatnam - 530 040, A.P., India

NHAI/PIU-VSP/Permission-IOCL/2020/ 714

To

The Regional Officer, National Highways Authority of India, Regional Office, Gurunanak Nagar, Teachers Colony, Vijayawada.

दूरभाष / Phone : 0891-2707600

फाक्स / Fax No. : 0891-2714118

ई-मेइल / E-mail : vis@nhai.org

Date: 23.03.2021

NHAI, PIU Visakhapatnam: Permission for layig of 12.75" natural gas Pipelines along Sub: with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and 742 (from 733/885 Km to 741/256Km) - Request for issuing of NOC -Reg.

Ref: (1) Letter No. Nil dated 15.12.2020 PJ-CGD/VIZAG/008, M/s. Indian oil Corporation Limited, Visakhapatnam.

- (2) This office Letter No. NHAI/PIU-VSP/Permission IOCL/20206791 dated 31.12.2020.
- (3) Lr NO. MSV.Armenge/O&M/NHAI-PIU-VSP/IOCL Permission/2020-21/295 dated 08.02.2021.
- (4) This office Lr No. NHAI/PIU-VSP/Permission-IOCL-PHPL/2020/7108 dated 13.02.2021.
- (5) Letter No. Nil dated 08.03.2021 M/s IOCL Letter No., PJ-CGD/VIZAG/008, M/s. Indian Corporation Limited, Visakhapatnam.

Sir.

Vide letter 01st cited, the CCM-PJ (CGD), Indian Oil Corporation Limited Paradip -Hyderabad Pipeline Project has submitted a proposal for seeking Permission for laying of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and 742 (from 733/885 Km to 741/256Km.

The proposal has been inspected and verified by M/s MSV Armenge Consultants and certain observations were communicated vide reference to 2 and 3 cited. The same were informed to the agency and the agency has submitted the revised proposal vide this office letter 4<sup>th</sup> and 5<sup>th</sup> cited.

Keeping in view of the recommendations of the Consultants, the proposal submitted by M/s IOCL, Visakhapatnam, for permission for layig of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and

निगमित कार्यालय : जी-5, एवं.6, सेक्टर-10, द्वारका, नई दिल्ली-110 075. वेब सैट : http://www.nhai.org Corporate Office: G-5 & 6, Sector-10, Dwaraka, NEW DELHI - 110 075, Website: http://www.nhai.org Keeping in view of the recommendations of the Consultants, the proposal submitted by M/s IOCL, Visakhapatnam, for permission for layig of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and 742 (from 733/885 Km to 741/256Km is herewith recommended for communicating the approval of Competent Authority.

Encl: Proposal 02 sets. (01 Original + 01 Duplicate)

[P. SivaSankar]

Copy to:

The Authorized Signatory, M/s Indian Oil Corporation Limited, Paradip - Hyderabd Pipeline Project, 04<sup>th</sup> Floor, LIC Annexe Building, Thikkanna (Diamond Park) Road, Near RTC Complex, Visakhapatnam.

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#### **CERTIFICATE**

- Permission for layig of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH 16 between Km Stone 733 and 742 (from 733/885 Km to 741/256Km) in Visakhapatnam district in the state of Andhra Pradesh" is confirming of all the standard conditions / guidelines issued vide Ministry circular No. RW/NH-33044/29/2015/S&R(R) dt. 22.11.2016.
- 2 It is certified that their will be no hindrance to proposed six laning based on feasibility report considering proposed structures at the said location.
- 3 It is certified that sufficient RoW is available at site for accommodating proposed six laning.
- 3. It is certified that the details of the proposed permission shall be entered in the Register of Records of the Permission maintained by PIU.

GM (T) & Project Director

Manager (Tech)



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण National Highways Authority of India

(सड़क परिवहन और राजमार्ग मंत्रालय)

(MINISTRY OF ROAD TRANSPORT & HIGHWAYS)

परियोजना कार्यान्वयन इकाई (जि क्यू), भारा राज्या एन्वलेव, कि.मी.2/8 राज्य.5., Project Implementation Unit (GQ), NHAI Enclave, KM 2/8 NH-16

हनुमन्तवाका, विशाखपट्टणम - 530 040, ए.पि., भारत Hanumanthavaka, Visakhapatnam - 530 040, A.P., India

NHAI/PIU-VSP/Permission-IOCL/2020/ 7427

To

The Regional Officer, National Highways Authority of India, Regional Office, Gurunanak Nagar, Teachers Colony, Vijayawada.

Sub: NHAI, PIU Visakhapatnam: Permission for laying of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and 742 (from 733/885 Km to 741/256Km) - Request for issuing of NOC - Reg.

Ref: (1) Letter No. Nil dated 15.12.2020 PJ-CGD/VIZAG/008, M/s. Indian oil Corporation Limited, Visakhapatnam.

- (2) This office Letter No. NHAI/PIU-VSP/Permission IOCL/20206791 dated 31.12.2020.
- (3) Lr NO. MSV.Armenge/O&M/NHAI-PU-VSP/IOCL Permission/2020-21/295 dated 08.02.2021.
- (4) This office Lr No. NHAI/PIU-VSP/Permission-IOCL-PHPL/2020/7108 dated 13.02,2021.
- (5) Letter No. Nil dated 08.03.2021 M/s IOCL Letter No., PJ-CGD/VIZAG/008, M/s. Indian Corporation Limited, Visakhapatnam.

Sir,

Vide letter 01<sup>st</sup> cited, the CCM-PJ (CGD), Indian Oil Corporation Limited Paradip - Hyderabad Pipeline Project has submitted a proposal for seeking Permission for laying of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and 742 (from 733/885 Km to 741/256Km.

The proposal has been inspected and verified by M/s MSV Armenge Consultants and certain observations were communicated vide reference to 2 and 3 cited. The same were informed to the agency and the agency has submitted the revised proposal vide this office letter  $4^{th}$  and  $5^{th}$  cited.

Keeping in view of the recommendations of the Consultants, the proposal submitted by M/s IOCL, Visakhapatnam, for permission for laying of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and

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हरभाष / Phone : 0891-2707600

प्रावस / Fax No. : 0891-2714118 ई-मेइल / E-mail : vis@nhai.org

Date: 23.03.2021

Keeping in view of the recommendations of the Consultants, the proposal submitted by M/s IOCL, Visakhapatnam, for permission for laying of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH - 16 between Km Stone 733 and 742 (from 733/885 Km to 741/256Km is herewith recommended for communicating the approval of Competent Authority.

Encl: Proposal 02 sets. (01 Original + 01 Duplicate) 1

G.M (T) & Project Diretor

Copy to:

The Authorized Signatory, M/s Indian Oil Corporation Limited, Paradip - Hyderabd Pipeline Project, 04<sup>th</sup> Floor, LIC Annexe Building, Thikkanna (Diamond Park) Road, Near RTC Complex, Visakhapatnam.



# MSV INTERNATIONAL INC.

In Association with

# ARMENGE ENGINEERING AND MANAGEMENT CONSULTANTS PVT. LTD.

ISO 9001: 2015 Certified Company MSV International, Inc.
Project Office
2nd Floor, D. No: 1-55/9, Shipyard Layout
Bindra Nagar, Madhurawada
Visakhapatnam - 530048
Email:
msvarmenge.ranasthalam@gmail.com

CONSULTANCY SERVICES FOR THE IE SERVICES FOR SIX LANING OF RANASTHALAM-ANANDAPURAM OF NH-16 IN THE STATE OF ANDHRA PRADESFI

Lr. No. MSV.Armenge/O&M/NHAI-PIU-VSP/IOCL Permission/2020-21/295

Date: 08.02.2021

To
The Project Director
National Highways Authority of India
PIU, NHAI Enclave
Hanumantawaka Jn.,
Visakhapatnam – 530 040

Sub.: NHAI Works- Consultancy Services for supervision of short Term Improvement and routine Maintenance of a) Anandapuram- Visakhapatnam - Anakapalli section from Km 682.980 to 741.256 (length – 58.276 Kms) of NH-16 (NH-5); b) Visakhapatnam Port connectivity Project corridor in the state of Andhra Pradesh - Report on permission for laying of 12.75" Natural Gas pipe line along with Optical Fibre Cable for city Gas distribution of Vizag along NH-16 between Km 733 and 742 (from Km 733.885 to Km 741.256) - in Visakhapatnam district in the state of Andhra Pradesh - Reg.

Ref: 1) Your office Lr. No. NHAI/PIU – VSP/Permission - IOCL/2020/6791

Dated: 31.12.2020.

2) M/s IOCL Letter No.P J-CGD/VIZAG/008 Dated.15.12.2020

With reference to the above letter, the proposal has been inspected along with IOCL officials and submitting the report herewith.

- The proposed location for laying of 12.75"diameter, Carbon Steel, API 5L Gr X52, Natural Gas pipe line along with Optical Fibre cable is intended along the National Highway at locations described below in Vizag along NH-16 From 733/885 KM to 741/256 KM (Between KM 733 and 742).
- (ii) The proposal has submitted as per the latest guidelines RW/NH-33044/29/2015/S&R(R) dated 22.11.2016.

## IOCL has submitted the following documents:-

- (i) Proposal letter addressed to PD/NHAI/PIU, Visakhapatnam.
- (ii) Specification Report and License Fee Estimate
- (iii) Checklist
- (iv) Authorization for signing and execution of documents.( General Power of Attorney).
- (v) Grant of authorization issued by Petroleum and Natural gas Regulatory Board to IOCL for development of city gas distribution network in the geographical area of Srikakulam, Vizianagaram and Visakhapatnam Districts.
- (vi) Methodology of laying of pipes for HDD methods.
- (vii) Cross Section for laying of 12.75", Carbon Steel, API 5L Gr X52, Natural Gas pipe line along with Optical Fire.
- (viii) Plan and Profile for laying of 12.75", Carbon Steel, API 5L Gr X52, Natural Gas pipe line along with Optical Fire.
- (ix) Design Calculation of Pipe laying submitted.

Continued on page.....2



- (x) Affidavit.
- (xi) Licensed Lease Agreement (Agreement regarding grant of ROW permission for laying utility services (laying of 12.75", Carbon Steel, API 5L Gr X52, Natural Gas pipe line along with Optical Fire) along and across National Highway land.
- (xii) Undertaking for submission of Performance Bank Guarantee.
- (xiii) Undertaking for not to damage any other Utility, if any and if damaged then to pay the losses either to NHAI or to the concerned agency. (From 5.1 to 5.12 in Check List)
- (xiv) Certification for undertaking for relocates service road/approach road/utilities (laying of 12.75", Carbon Steel, API 5L Gr X52, Natural Gas pipe line along with Optical Fire) at his own cost.
- (xv) Format of maintaining records of Right of way Permission Granting for laying of 12.75", Carbon Steel, API 5L Gr X52, Natural Gas pipe line along with Optical Fiber cable.
- (xvi) Route Map

## The following are should be followed by the Agency:-

- a. The top casing / conduit pipe should be at least 1.2 mtrs below the surface of the road. But it was shown in the drawing as 1 mtr. To be corrected in the drawing and should followed at the site.
- b. The Existing and Proposed features should be indicated in the Plan, but not shown in the submitted plan. Built up area also not shown in the plan.
- c. In addition to the documents submitted above there is a ROW restriction in the locations between Km 733.885 to Km 737.550 wherein the ROW (RCW) width available is between 23 to 24 meters. So, the agency has to submit and provide the action plan how they will be executing the work at these locations wherein the ROW width is not sufficient.
- d. In the above mentioned locations other agencies like Jio, Indian Navy ,BSNL and other OFC cables are already laid, so how will the agency execute the work without given any hindrance to the earlier executed work.
- e. There is a Built-up Area from Lankelaplem Jn. i.e from Km.733.885 to Salpuvanipalem i.e Km.735.200 and Maredupudi village i.e. Km 736.400 to Koppaka Junction i.e. Km 739.500, so the Agency should come with action plan how will the agency execute the work without disturbing the existing road.

Keeping in view of the above we are of the opinion that the agency M/S IOCL should come up with a detailed action plan keeping in mind the above factors mentioned in points (a.to e) along with proposal for laying of 12.75", Carbon Steel, API 5L Gr X52, Natural Gas pipe line along with Optical Fibre cable for the city Gas distribution of Visakhapatnam district is along NH-16 from Km.733.885 to Km.741.256 (7.371 Kms length) in the state of Andhra Pradesh.

Thanking you, Yours faithfully,

K. Kumar

MSV ARMENGE Engineering and Management Consultants Pvt. Ltd.

Kiran kumar

Highway Maintenance Engineer



पाइपलाइन्स प्रभाग

इंडियन ऑयल कॉर्पोरेशन लिमिटेड

सिटी ग्रैस वितरण पृरियोजना

चौथी मंजिल, एल.आई.सी. एनेक्सी भवन, थिक्कना (डायमंड पार्क) रोड, आर.टी.सी. कॉम्पलेक्स के पास, विशाखापट्टणम-530 004

फोन : 0891-2595104

## Indian Oil Corporation Limited

City Gas Distribution Project

4th Floor, LIC Annexe Building, Thikkanna (Diamond Park) Road,

Near RTC Complex, Visakhapatnam-530004

Phone: 0891-2595104

इंडियनअॉयल IndianOil

Company

PIU **Pipelines Division** Mgr (T) Dy.M (T) Date: 08.03.2021 Ref.No: PJ-CGD/VIZAG/008 PS(MLN) To RECEIVED PA(RVG) **Project Director ACCTS** National Highway Authority of India SE-1 Project Implementation unit (GQ), NHAI Enclave, KM 2/8 NH-16, SE-2 Hanumanthawaka, Visakhapatnam - 530040, A.P. SE-3

**Sub**: Permission for laying of 12.75" natural gas Pipelines along with Optical Fibre Cable for City Gas Distribution of Vizag Along NH-16 between KM Stone 733 and 742 (From 733/885 Km to 741/256 Km).

Ref: 1. Letter No. PJ-CGD/VIZAG/008 Dt. 15.12.2020.

2. Letter No: NHAI/PIU-VSP/Permission-IOCL-PHPL/2020/7108 Dt. 13.02.2021.

Vide reference stated above, the detailed action plan for the observations / Queries received from NHAI-PIU, Visakhapatnam have been answered / clarified as per attachment.

Since this is a time bound project of National importance, contributing to national prosperity, we solicit your most expeditious action to grant NOC for laying the pipeline along with optical fibre cable under National Highway-16.

Thanking you,

Yours sincerely,

V.Sudhakar, CM-PJ(CGD), Vizag

ONO		3. 10
S.INO.	Query	Clarification
	The top casing / conduit pipe should be at least 1.2 m below the surface of the road.	In the drawing, it was shown as either 1 mtr or As per OISD / T4S / Local
	the drawing as 1 mtr. To be corrected in the drawing and should	Authority. As per OISD STD 226, the minimum clearance from the top of
1	followed at the site.	pipeline to the surface of road is 1.2Mtr. We will be maintaining atleast
		1.2Mts below the surface of the road.
,	The Existing and Proposed features should be indicated in the plan, but not shown in	New plan showing existing features and proposed features along with built
7	the submitted plan. Built up area also not shown in the plan.	up area attached.
	In addition to the documents submitted above there is a ROW restriction in the	Plan attached. We propose HDD at locations where open cut is not feasible.
	locations between km 733.885 to km 737.550 wherein the ROW (RCW) width available	
æ	3 is between 23 to 24 meters. So, the agency has to submit and provide the action plan	
	how they will be executing the work at these locations wherein the ROW width is not	
	sufficient.	
	In the above mentioned locations other agencies like Jio, Indian Navy, BSNL and other We will be laying after informing other agencies and ensuring that their	We will be laying after informing other agencies and ensuring that their
4	4 OFC cables are already laid, so how will the agency execute the work without given any	the work without given any existing features are not disturbed.
	hindrance to the earlier executed work.	
,	There is a Built-up Area from Lankelapalem Jn. i.e from from Km.733.885 to	Drawing and detailed Plan are attached showing proposed HDD in the built
	Salpuvanipalem i.e Km.735.200 and Maredupudi village i.e Km 736.400 to Koppaka	up area locations.
,	Junction i.e Km 739.500, so the Agency should come with action plan how will the	
	agency execute the work without disturbing the existing road.	





#### **OISD - STD - 226**

#### NATURAL GAS TRANSMISSION PIPELINES AND CITY GAS DISTRIBUTION NETWORKS

Page No. 27

#### 10.2 Pipeline Cover

- 10.2.1 Gas pipelines shall be buried with a minimum cover as specified in Table 5 unless above ground construction is desirable due to technical, economic or topographical reasons.
- 10.2.2 In rocky areas and areas with hard soils / gravels, minimum 150 mm thick padding of soft soil / sand shall be provided all around the pipe. If required protective layer of rockshield / rock guard or concrete coating may be provided to prevent damage to coating / steel pipe during installation and testing in place of soft padding.
- 10.2.3 No dwellings shall be permitted within ROU.

Table 5
Minimum Cover Requirements for Pipelines

Sl No.	Locations	Minimum Cover In Mtr
i)	Areas of agricultural, horticultural activity, limited or no human activity, Industrial, commercial and residential area	1.0
ii)	Rocky terrain	1.0
iii)	Drainage, ditches at roads/railway crossing	1.0
iv)	Minor river crossings/canal /drain/nala/ditches	1.5
v)	Major river crossings (below scour level)	2.5
vi)	River with rocky bed (below scour level)	1.5
vii)	Area under influence of tides	1.5
viii)	Cased/Uncased road crossing	1.2
ix)	Cased railway crossing	1.7

#### NOTES:

- (i) The depth of cover shall be measured from the top of the pipe coating to the top of the undisturbed surface of soil or the top of graded working strip, whichever is lower. The fill material in the working strip shall not be considered in the depth of cover;
- (ii) The cover shall be measured from the top of road or top of rail, as the case may be;
- (iii) For river/watercourses that are prone to scour and erosion, adequate safe cover shall be provided below the predicted scour profile expected during the life time of the pipeline;
- (iv) When scour level is not known, an additional cover of at least 1 m shall be provided from the existing bed of the river/water course except in case of rocky river bed;

"OISD hereby expressly disclaims any liability or responsibility for loss or damage resulting from the use of OISD Standards/Guidelines."



HOD	ОТ					
OT         OT<		5	TO	DOH	TO	TO
OT         OT         OT         HDD           735.683-736.000         736.000-736.200         736.200-736.362         736.362-736.500           347MTRS         200MTRS         162MTRS         138MTRS           400MTRS         137.500-737.635         737.635-737.900         737.900-737.950           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950	734.700-734.780	734.780-734.900	734.900-735-100	735,100-735,200	735.200-735.630	735,630-735,683
OT         OT         OT         HDD           735.683-736.000         736.000-736.200         736.200-736.362         736.362-736.500           317MTRS         200MTRS         162MTRS         138MTRS           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950           737.400-737.500         737.500-737.635         737.635-737.900         737.900-737.950           A00MTRS         135MTRS         50MTRS						
OT         OT         OT         HDD           735.683-736.000         736.000-736.200         736.200-736.362         736.362-736.500           317MTRS         200MTRS         162MTRS         138MTRS           HDD         HDD         OT           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950           400MTRS         135MTRS         50MTRS         50MTRS		120MTRS	200MTRS		430MTRS	53MTRS
OT         OT         OT         HDD           735.683-736.000         736.000-736.200         736.200-736.362         736.362-736.500           317MTRS         200MTRS         162MTRS         138MTRS           HDD         HDD         OT           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950           400MTRS         135MTRS         265MTRS         50MTRS				100MTRS		
OT         OT         HDD           735.683-736.000         736.000-736.200         736.200-736.362         736.362-736.500           317MTRS         200MTRS         162MTRS         138MTRS           HDD         HDD         OT           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950           400MTRS         135MTRS         50MTRS         50MTRS						
735.683-736.000         736.000-736.200         736.200-736.362         736.362-736.500           317MTRS         200MTRS         162MTRS         138MTRS           HDD         HDD         OT           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950           400MTRS         135MTRS         50MTRS		НОО	TO	HDD	HDD	TO
317MTRS   200MTRS   162MTRS   138MTRS   138MTRS   1400MTRS   138MTRS   1400MTRS   137.500-737.635   737.635-737.900   737.900-737.950   50MTRS   50MTRS	736.362-736.500	736.500-736.580	736.580-736.640	736.640-736.740	736.740-736.950	736.950-737.100
### ### ### ### ### #### #### ##### ####	-					
HDD         HDD         OT           737.100-737.500         737.500-737.635         737.900-737.950         737.900-737.950           400MTRS         135MTRS         265MTRS         50MTRS			60MTRS			150MTRS
HDD         HDD         OT           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950           400MTRS         36MTRS         50MTRS		BOMTRS		100MTRS	210MTRS	
HDD         HDD         OT           737.100-737.500         737.500-737.635         737.635-737.900         737.900-737.950           400MTRS         SOMTRS         SOMTRS						
737.100-737.500	TO	ПОД	TO	MDD	DOH	QQH
400MTRS 265MTRS 265MTRS	737.900-737.950	737.950-738.125	738.125-738.240	738.240-738.500	738.500-738.700	738.700-738.800
400MTRS 265MTRS 265MTRS						
400MTRS 265MTRS 265MTRS	SOMTRS		115MTRS			
	11.	175MTRS		ZEOMTRS	200MTRS	100MTRS
OT HDD HDD	ДДН	TO	TO	HDD	TO	TO
NHAI-REF 738.800-739.200 739.200-739.500 739.500-739.686 739.686-739.750 739.	739.686-739.750	739.750-740	740-740.300	740.300-740.650	740.650-740.850	740.850-741.256
Chainage						
OT 400MTRS 256	22	250MTRS	300MTRS		ZOOMTRS	406MTRS
HDD 300MTRS 64MTRS 64MTRS	64MTRS			350MTRS		





पाइपलाइन्स प्रभाग **Pipelines Division**  इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पारादीप-हैदराबाद पाइपलाइन परियोजना

चौथी मंजिल, एल.आई.सी. एनेक्सी भवन, थिक्कना (डायमंड पार्क) रोड, आर.दी.सी. कॉम्पलेक्स के पास, विशाखापट्टणम-530 004

फोन: 0891-2595104

Indian Oil Corporation Limited

Paradip-Hyderabad Pipeline Project

4th Floor, LIC Annexe Building, Thikkanna (Diamond Park) Road,

Near RTC Complex, Visakhapatnam-530004

Phone: 0891-2595104

IndianOi A Maharatna Company

**इंडियन**ऑयट

Date: 15.12.2020

RECEIVED

Ref.No: PJ-CGD/VIZAG/008

To The Project Director, National Highway Authority of India, Project Implementation Unit, Visakhapatnam (Andhra Pradesh).

Permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Sub: Gas Distribution of Vizag at following locations:

1. Along NH-16 between KM Stone 733 and 742 (From 733/885 KM to 741/256 KM)

Dear Sir,

Indian Oil Corporation Limited, a Govt. of India Enterprise, leading company in Oil and Gas sector is operating and maintaining more than 13000 Km of underground crude, product, LPG and Natural Gas pipelines across India. IOCL got authorization to implement City Gas Distribution of Vizag, Srikakulam and Vizianagaram from Petroleum and Natural Gas Regulatory Board (PNGRB) vide PNGRB/CGD/BID/9/2018/01/Andhra Pradesh DT 01.03.2019.

The proposed 12.75" diameter, Carbon steel, API 5L Gr X52, pipeline along with optical fibre cable is intended along the National Highway at locations described below in Vizag:

1) Along NH-16 From 733/885 KM to 741/256 KM (Between Km 733 and 742)

We are hereby submitting the proposal in compliance with the guidelines (F.No. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016).

Since this is a time bound project of National importance, contributing to national prosperity, we solicit your most expeditious action to grant NOC for laying the pipeline along with optical fibre cable under National Highway-16.

Thanking you,

Yours sincerely,

V.Sudhakar, CCM-PJ(CGD), Vizag

Encl:

- 1. License Agreement on Non-Judicial stamp paper, Power of attorney of authorized Signature
- 2. Checklist, Affidavit as per NHAI, Methodology of laying, undertaking, certificate
- 3. PNGRB Authorization
- 4. Strip-Sheet, Open-cut and HDD drawings
- 5. Stress / Design calculations

मुख्यालय : ए-1, उद्योग मार्ग, सेक्टर-1, नोएडा-201 301 Head Office: A-1, Udyog Marg, Sector-1, Noida-201 301 पंजीकृत कार्यालय : जी-9, अलि यावर जंग मार्ग, बांदा (पूर्व) मुम्बई-400 051 (भारत) ● Regd. Office : G-9, Ali Yavar Jung Marg, Bandra (East) Mumbai-400 051. (India) सी.आई.एन. नं / CIN No.: L23201MH1959GOI011388

CHECK LIST			
Guideli	nes for processing the proposal for laying Natural Gas pipeline in the land across National		
Highwa	y vested with NHAI		
Releva	nt circulars		
1.	Ministry circular No. NH-41(58)/68 dated 31-01-1969		
2.	Ministry circular No. NH-III/P/66/76 dated 18-11-1976		
3.	Ministry circular No. RW-NJ-III/P/66/76 dated 01-05-1982		
4.	Ministry circular No. RW/NH-11037/1/86-DOI(II) dated 28-07-1993		
5.	Ministry circular No. RW/NH-11037/1/86-DOI dated 19-01-1995		
6.	Ministry Circular No.RW/NH-34066/2/95/S&R dated 25-10-1999		
7.	Ministry Circular No.RW/NH-34066/7/2003 S&R (B) dated 17-09-2003		
8.	Ministry Circular No.RW/NH-33044/29/2015/S&R(R) dated 22.11.2016		

### Checklist for getting approval for laying of Natural Gas pipeline on NH land

S.No.	Item	Information/Status	Remarks
1	General Information		
1.1	Name and address of the	Indian Oil Corporation Limited	
	Applicant/Agency	(Pipelines Division)	
		Paradip-Hyderabad Pipeline Project,	
		4 <sup>th</sup> Floor, LIC Annexe Building,	
		Thikkanna (Diamond Park) Road, Near	
		RTC Complex, Visakhapatnam-530004	
1.2	National Highway Number	NH-16	
1.3	State	Andhra Pradesh	
1.4	Location	KM 733/885 to KM 741/256	
1.5	(Chainage in km)	KM 733/885 to KM 741/256	
1.6	Length in Kilometres	7371 meters	
1.7	Width of available ROW	59 to 66 Mts.	
	(a) Left side from centre line	30-36Mts	
	towards increasing chainage/km		
	direction		
	(b) Right side from centre line	23-30Mts	
	towards increasing chainage/km		
	direction		
1.8	Proposal to lay underground petroleum		
	pipeline for supply of petroleum	<b>N</b>	
	products		
	(a) Left side from centre line	N/A Procedur	Cins
	towards increasing chainage/km	National Highways Au	
	direction	P.I.U. VISAKHA	DATMAN
		THIS VICANIA	r a i no w
	(i) Right side from centre line	KM 733/885 to KM 741/256	
	towards increasing chainage/km	,	
	direction		
1.9	Proposal to acquire land		
- VIII	(a) Left side from center line	N.A	
	(b) Right side from center line	N.A	
	1		

Along NH-16 application of IOCL –City Gas Distribution Project Location: Along NH-16 Between Km 733.885 – 741.256 (7.371 Km), Visakhapatnam District

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1.10	Whether proposal is in the same side	Yes
1.10	where land is not to be acquired	163
	If not then where to lay the cable.	At the edge of available ROW
1.11	Details of already laid services, if any	Attached.
1.11	along the proposed route	Attached.
1.12	Number of existing lanes (2/4/6/8 lanes).	4 lanes
1.13	Proposed number of lanes (2 lane with	4 lane
1 1 1	paved shoulders/4/6/8 lanes).	N <sub>2</sub>
1.14	Service road existing or not	No
	If yes then which side	
	(a) Left side from center line	N.A
	(b) Right side from center line	N.A
1.15	Proposed service road	
	(a) Left side from center line	N.A
	(c) Right side from center line	N.A
1.16	Whether proposal to lay the petroleum	Pipeline shall be laid after the truck lay
	pipeline is after the service road or	byes/ Bus bays as the case may be
	between the service road and main	
	carriageway	
1.17	Whether carrying of sewage/gas pipeline	No pipeline is proposed on bridges.
	has been proposed on highway Bridges.	
	If yes, then mention the methodology	
	proposed for the same.	
1.18	Whether carrying of sewage/gas pipeline	No pipeline is proposed on parapet/any
	has been proposed on the parapet/ any	part of bridge.
	part of the bridges.	3
	If Yes, then mention the methodology	
	proposed for the same.	
1.19	If crossings of the road involved	No Crossings are involved
	If yes, it shall be either encased in pipes	
	or through structure or conduits specially	
	built for the purpose at the expenses of	
	the agency owing the line	
	(a) Whether existing drainage	NA
	structures are allowed to carry	
	petroleum pipeline	
21 5	(b) It is on a line normal to NH	NA
	(c) What is the distance of crossing	NA
	the petroleum pipelines from the	
	existing structures.	
	Crossings shall not be too near	
	the existing structures on the	
	National Highway, minimum	,
	distance being 15 meter.	(\)
	(d) The casing pipe(or conduit pipe	NA - VOD
	in the case of electric cable)	Projector
	carrying the petroleum line shall	National Highways Authority of In
		P.I.U. WSAKHAPATNAM
	be of steel, cast iron, or reinforced cement concrete and	
	CTALEST CONTROL CONTRO	
	have adequate strength and be	0.000
	large enough to permit ready	Colholato

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	withdrawal of the carrier		
	pipe/cable.		
	Mention type of casing.		
	(e) Ends of casing /conduit pipe shall	NA	
	be sealed from the outside, so		
	that it does not act as a drainage		
	path.		
	, , , , , , , , , , , , , , , , , , , ,		
			- 1
-	(f) The casing/conduit pipe should,	NA	_
	as minimum extend from drain		
	to drain in cuts and toe of slope		
	in the fills.		
	(g) The top of the casing/conduit	NA	_
	pipe should be at least 1.2	INA	
	meters below the surface of the		
	road subject to being at least 0.3		
	m below the drain inverts.		
	Mention the proposed details.		-
	(h) Mention the methodology	NA	
	proposed for crossings of road		
	for the proposed Sewage/gas		
	pipe line.		
	Crossings shall be by boring		
	method (HDD) (Trenchless		
	Technology), specially, where the		
	existing road pavement is of		
	cement concrete or dense		
	bituminous concrete type.		
	(i) The casing/conduit pipe shall be	NA	
	installed with an even bearing		
	throughout its length and in such		
	a manner as to prevent the		
	formation of a waterway along it.		
2	Document/Drawings to be enclosed with		
	the proposal		
2.1	Cross section showing the size of trench	Yes, Upon trenching cross section Annex-1	
	for open trenching method	attached.	
	(Is it normal size of 1.65m deep *0.5m		-1
	wide)		
	i. Should not be greater than 60cm		
	wider than the outer diameter of		
	the pipe		
	ii. Located as close to the extreme	lack	
	edge of the right of way as		
	possible but not less than 15m	Projector	
	from the centre lines of the	National Highways Authority of Ir	
	nearest carriageway	P.I.U. VISAKHAPATNAM	
	iii. Shall not be permitted to run	T III O TIONNIA TATIVAM	
	along the National Highways		
	when the road formation is		
	when the road formation is	19210	

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			T
	situated in double cutting. Nor		
	shall be laid over the existing		
	culverts and bridges.		
	iv. These should be so laid that their		
	top is least 0.6m below the		
	ground level so as not to obstruct		
	drainage of the road land.		
2.2	Cross section showing the size of pit and	Yes, Enclosed	Annex-2
	location of pipeline for HDD method		
2.3	Strip plan/Route plan showing the Gas	Strip Plan showing all the details is	Annex-3
	pipe line, chainage, width of ROW,	attached.	
	distance of proposed pipe line from the		
	edge of ROW, important mile stone,		
2.4	intersections, cross drainage works etc.	V Fld	A 4
2.4	Methodology for lying of the petroleum	Yes, Enclosed.	Annex-4
2.4.1	pipe line.	Vos Backfilling shall be done with	
2.4.1	Open trenching method. (May be allowed in the petroleum corridor only	Yes, Backfilling shall be done with	
	where pavement is neither cement	granules material. Compaction shall be done in layers of 15cm each. The trench	
	concrete nor dense bituminous concrete	shall be filled upto the required height	
	type.	of 1.65m (measured from top of ducts	
	If yes, what is the methodology of	as per trench cross section drawing	
	refilling of trench?	attached in the proposal). A crown of	
	remining of tremen:	250mm shall be made at the top of	
		backfilled trench to cater for soil	1 '
		settlement.	
	(a) The trench width should be at	Yes	
	least 30cm, but not more than 60		
	cm wider than the outer		
	diameter of the pipe.		
	(b) For filling of the trench, bedding	Yes	
	shall be at a depth of not less		
	than 30cm. it shall consist of		
	granular material, free of lumps,		
	clods and cobbles and graded to		
	yield a firm surface without a		
	sudden change in the bearing		
	value. Unsuitable soil and rock		
	edged should be excavated and		
	replaced by selected material.		
	(c) The backfill shall be completed in	Yes	(1978)
	two stages (i) side fill to level of		
	the top of the pipe and (ii)		
	overfill to the bottom of the road	N	
	crust.		1
	(d) The side fill shall consist of	Yes Project Dire	ctor
	granular material laid in15cm	National Highways Au	
	layers each consolidated by	P.I.U. VISAKHA	
	mechanical tempering and		
	controlled addition of moisture		
	to95% of the proctor's density.	Sansana Sansana	

	Overfill shall be serverested to	T	1
	Overfill shall be compacted to		
	the same density as the material		
	that has been removed.		
	Consolidation by saturation or		
	ponding will not be permitted		
	(e) The road crust shall be built to	Yes	
	the same strength as the existing		
	crust on either side of the trench.		
	Care shall be taken to avoid the		
	formation of a dip at the trench.		
	(f) The excavation shall be	Yes	
	protected by flagman, signs and		
	barricades, and red lights during		
	night hours.		
	(g) If required, a diversion shall be	Yes	
	constructed at the expense of		
	agency owing the petroleum line.		
2.4.2	Horizontal directional drilling (HDD)	Yes	
2.4.2	method.	163	
2.4.3	Methodology for laying of pipe line	No CD works are involved in laying of	
2.4.5	through CD works and method of laying.	pipeline	
	In cases where the carrying of gas pipe	pipelille	
3	line on the bridge becomes inescapable.	Vac England	
3	Draft license Agreement is signed by two witnesses	Yes, Enclosed	
3.1		Enclosed	Δ = = = = = =
3.1	The license fee estimate as per	Enclosed	Annex-5
	Ministry's guidelines issued vide circular		
	no. RW/NH-33044/29/2015/S&R(R)		
	dated 22.11.2016		
4	Whether performance Bank guarantee as	Undertaking for submission of BG has	
	per Ministry's circular no. RW/NH-	been obtained from M/s. IOCL	
	33044/29/2015/S&R(R) dated		
	22.11.2016 is obtained		
4.1	Confirmation of BG has been obtained or	Confirmation of BG shall be obtained	
	not as per MoRTH/NHAI guidelines	after BG Submission by M/s. IOCL	
5	Affidavit/ Undertaking from the		
	Applicant for the following is to be		
	furnished		
5.1	Undertaking for not to damage any other	Yes, Enclosed	
	utility, if damaged then to pay the losses		
	either to NHAI or to the concerned		
	agency.		
5.2	Undertaking for Renewal of bank	Yes, Enclosed	
	guarantee as and when asked by	,	
	Morth/NHAI.		
5.3	Undertaking for confirming all standard	Yes, Enclosed	
	condition of Ministry circulars and NHAI's	Projective	
	guidelines.	National Highways	Authority of
5.4	Undertaking for Indemnity against all	Yes, Enclosed	HAPATNAM
1.4		res, Lilciuseu	
	damages and claims.	Vac Englaced	
5.5	Undertaking for management of traffic	Yes, Enclosed	

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	movement during laying of petroleum	
	line withouthampering the traffic	
5.6	Undertaking that if any claim is raised by	Yes, Enclosed
	the concessionaire/contractor then the	
	same has to be paid by the applicant.	
5.7	Undertaking that prior approval of the	Yes, Enclosed
	NHAI shall be obtained before	
	undertaking any work for installation,	
	shifting or repairs, or alterations to the	
	petroleum located in the National	
	Highway right-of-ways.	
5.8	Undertaking that expenditure, if any,	Yes, Enclosed
	incurred by NHAI for repairing any	
	damage caused to the National Highway	
	by the laying, maintenance or shifting of	5
	the petroleum line will be borne by the	
	applicant agency owing the line.	
5.9	Undertaking that text of the license deed	Yes, Enclosed
	is as per verbatim of MoRTH format	
	(issued vide Ministry's circular no.	
	RW/NH-33044/29/2015/S&R(R) dated	
	22.11.2016	
5.10	Undertaking that the applicant has	Petroleum and Explosives Safety
	obtained various safety clearances from	Organization (PESO) approval for the
	the representative authorities such as	Steel network can be applied to Chief
	Directorate of Electricity, Chief controller	Controller of Explosives only after
	of Explosives, Petroleum and Explosive	mechanical completion and Hydrostatic
	safety Organization, Oil Industry safety	testing of the line but before
	Directorate, State/Central pollution	commissioning, as Hydro-testing report
	control board and any other statutory	will be part of the submittal for
	clearances as applicable, before applying	obtaining PESO clearance. The approval
	to Highway Administration	will be submitted to NHAI after
	·	obtaining it. Electricity, OISD and PCB
		clearances are not applicable.
		Undertaking is being submitted. The
		construction of the Steel Network is
		done as per the T4S guideline of PNGRB
=	15.1	and as per OISD 226 guidelines.
5.11	If the MoRTH/NHAI consider it necessary	Yes, Enclosed
	in future to move the petroleum line for	
	any work of improvement or repairs to	
	the road, it will be carried out as desired	
	by the MoRTH/NHAI at the cost of the	N
	agency owing the petroleum line within a	
	reasonable time (not exceeding 60 days)	
F 40	of the intimation given.	FIGURE Authority of the standard
5.12	Certificate from the applicant in the	Enclosed National Highways Authority of India
	following format	F.I.U. VISAKHAPATNAM
	(i) Laying of Gas pipe line will not have	
	any deleterious effects on any of the	
	bridge components and roadway safety	wuistice .

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7. 201400		
	for traffic.  (ii) "We do undertake that I/we will relocate service road/approach road/utilities at my/our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future six-lanning or any other development."	
6	Who will sign the agreement on behalf of Gas pipe line agency.	Indian Oil Corporation Limited (pipelines division) City Gas Distribution project, Visakhapatnam.
	Power of Attorney to sign the agreement is available or not	Yes, Enclosed
7	The project Director will submit the following Certificates	
7.1	Certificate that the proposal is confirming to all standard conditions issued vide Ministry's circular No: RW/NH-33044/29/2015/S&(R) dated 22.11.2016	Yes, Enclosed.
7.2	Certificate from PD in the following format  (i)" It is certified that any other location of the Gas pipe line would be extremely difficult and unreasonable costly and the installation of Gas pipe line within ROW will not adversely affect the design, stability & traffic safety of the Highway nor the likely future improvement such as widening of the carriageway, easing of curve etc.".  (ii) for 6-lanning  (a) Where feasibility is available "I do certify that there will be no	Yes, Enclosed
	hindrance to proposed six-laning based on the feasibility report considering proposed structures at the said location".  (b) In case feasibility report is not available "I do certify that sufficient ROW is available at site for accommodating proposed six-lining".	Project Director  National Highways Authority of India P.I.U. VISAKHAPATNAM
8	If NH section proposed to be taken up by NHAI on BOT basis – a clause is to be inserted in the agreement. "The permitted Highway on which License has	N.A

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	been granted the right to lay Gas		
	Pipeline/duct has also been granted as a		
	right of way to the concessionaire under		
	the concession agreement for up-		
	gradation of [section from Km		
	to kmof NH no		
	on Build: operate and transfer		
	basis] and therefore, the license shall		-
	honour the same."		
9	Who will supervise the work of laying of		
550	Gas pipe line	*	
	(a) On behalf of the Applicant	CM(PJ-CGD),	
		Indian Oil Corporation Limited	1
		(pipelines division)	
		City Gas Distribution Project,	
		Visakhapatnam.	
	(b) On behalf of the MoRTH/NHAI	Project Director, NHAI, Visakhapatnam	
10	Who will ensure that the defects in road	Troject Bricetor, William, Visakriapatriam	
	portion after laying of Gas pipe line are		
	corrected and if not corrected then what		
	action will be taken.		
	(a) On behalf of the applicant	CM(PJ-CGD),	
	(a) on serial of the applicant	Indian Oil Corporation Limited	
		(pipelines division)	
		City Gas Distribution Project,	
		Visakhapatnam.	
	(b) On behalf of NHAI	Project Director, NHAI, Visakhapatnam	
11	Who will pay the claims for	, and a particular to the control of	
	damage done/disruption in		
	working of concessionaire if		
	asked by the concessionaire		
	On behalf of the applicant	Indian Oil Corporation Limited	<del>                                     </del>
	The second second	(Pipelines Division)	
		City Gas Distribution Project,	
		Visakhapatnam	
12	A certificate from PD that he will enter	Yes, Enclosed	<del>                                     </del>
e <del>n la ma</del> ri	the proposed permission in the register	. 55, 211010504	
	of record of the permission in the		
	prescribed proforma (copy enclosed)		
13	If any various approvals are accorded for	Yes, PNGRB Authorization enclosed.	Annex-6
	laying of underground Gas pipe line then	res. I None Additionzation enclosed.	Alliex-0
	Photocopy of register of records of		
	permission accorded (as maintained by		
	PD) be enclosed.		
	T D/ DE ETICIOSEU.		



Projector
National Highways Authority of India
P.I.U. VISAKHAPATNAM











