भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport and Highways, Government of India)
श्रेत्रीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्,चलसानी नगर,
रानीगारीतोटा, कृष्णालंका, विजयावाडा - 520 013, आन्ध्र प्रदेश
Regional Office: D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,
Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.
फोन / Tel : 0866-2483910, ई-मैल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com
वेब/ web: www.nhai.gov.in

Ref: NHAI/RO-VJA/IOCL/NH-16/682+980/2022-23/1215 March 27, 2023.

INVITATION OF PUBLIC COMMENTS

Sub: RO - Vijayawada - NH Permission for laying of 8.625" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag on NH-16 between Km.682+980 to Km.699+500 LHS and Km 713.530 to Km 713.384 and also crossing at Km 713.384 totalling to a length of 16726 mts. in Visakhapatnam district in the State of Andhra Pradesh - Public comments - Reg.

The Project Director, PIU - Visakhapatnam submitted a proposal of M/s. Indian Oil Corporation Limited along NH-16 **for laying of 8.625" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag on NH-16 between Km.682+980 to Km.699+500 LHS and Km 713.530 to Km 713.384 and also crossing at Km 713.384 totalling to a length of 16726 mts. in Visakhapatnam district in the State of Andhra Pradesh.**

As per MORTH guidelines vide letter No. RW/NH-33044/29/2015/S&R® dated 22nd 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,
Regional Office, Dr. No.41-29-45A, R. S. No.373/2A
Near Kodandaramalayam, Chalasani Nagar,
Ranigarithota, Krishnalanka, Vijayawada - 520 013.
Email: rovijayawada@nhai.org

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

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भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport and Highways, Government of India)
परियोजना कार्यलयन इकाई (जि वयू), भा.रा.रा.पा.एन्कलेव, कि.मी. 2/8 रा.रा.-16
हनुमन्तवाका, विशाखपट्टणम - 530 040, ए.पि., भारत
Project Implementation Unit (GQ), NHAI Enclave, KM 2/8 NH-16
Hanumanthavaka, Visakhapatnam - 530 040, A.P., India
फोन / Tel : 0891-2707600, 2714119
ई-मेइल/ E-mail : vis@nhai.org, nhaipiuvsp@gmail.com, वेब : www.nhai.gov.in

NHAI-PIU-VSP/IOCL-8.625"Gas Pipe line &OFC/2022-23/1353 Date: 27.01.2023

To

The Regional officer,
National Highways Authority of India,
Regional Office, Gurunanak Nagar,
Teachers Colony,

Sub: **NHAI, PIU Visakhapatnam: NH permission for issue of NOC for laying of** 8.625" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 682 and 700 (From 682/980 km to 699/500 Km) and from Km 713.530 to 713.384 & also crossing at Km 713.384.through HDD methodology Visakhapatnam District, Andhra Pradesh State - **Compliance to the observations-Reg.**

Ref: 1) M/S IOCL Letter No. PJ-CGD/VIZAG/008,dated: 22.08.2022. received on 08.09.2022.
2) NHAI/PIU-VSP/IOCL-713.384/2022-23/1007,Dt:26.11.2022.
3)NHAI/RO-VJA/11045/IOCL-8.625"/2022-23/4241,Dt:28.12.2022 received on 02.01.2023.

Sir,

Vide above reference.03 cited above, RO Vijayawada has made certain observations on the subject proposal for the Permission for 8.625" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 from 682.980 km to 699.500 Km and from Km 713.530 to 713.384 & also crossing at Km 713.384 through HDD methodology Visakhapatnam District, Andhra Pradesh State

The observations and compliances are tabulated below:

S.no	RO Observations	PIU Compliance
1.	Annexure-1,3,4,8 & 9 as per clauses 1.11,2.1, 2.2 and 13 of check list is not enclosed.	Noted, The same has enclosed.
2.	Company resolution for power of Attorney is not enclosed.	Along with the proposal it is already enclosed, However, the same is again here with enclosed, for ready reference.

3.	Performance Bank Guarantee should be for Rs.16,72,600/- instead of Rs.16,71,000/-.	Noted, The modified calculation sheet is here with enclosed.
4.	Concessionaire consent for laying of water pipe line is not enclosed.	For BOT/HAM/OMT/TOT consent is required. The proposal is in "CITY LIMITS" of NH-16 which is under routine operation and maintenance contract. So consent for this proposal is not necessary.

In view of the above, the proposal submitted by M/s IOCL for laying pipe line along National Highway-16 from 682.980 km to 699.500 Km and from Km 713.530 to 713.384 & also crossing at Km 713.384 in Visakhapatnam, Visakhapatnam District, in the state of Andhra Pradesh is herewith submitted duly complying the observations made by RO Vijayawada for approval of Competent Authority.

Yours faithfully,

[P. Siva Sankar]
G.M (T) & Project Diretor
27/1/23

Encl: Proposal in two sets
(01 Original + 01 Duplicate)

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वेब/ web: www.nhai.gov.in

Ref: NHAI/RO-VJA/11045/ IOCL-8.625"/2022-23/ 4241

December 28, 2022.

RECEIVED 02 JAN 2023 6514 NHAI PIU, VISAKHAPATNAM

To

The Project Director,
National Highways Authority of India,
Project Implementation Unit,
Visakhapatnam.

Sub: RO - Vijayawada - NH **Permission for laying of 8.625" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag on NH-16 between Km.682+980 to Km.699+500 LHS and Km 713.530 to Km 713.384 and also crossing at Km 713.384 totalling to a length of 16726 mt in Visakhapatnam district in the State of Andhra Pradesh - Issuing NOC** - Reg.

Ref: Your Lr. No.NHAI/PIU-VSP/IOCL-713.384/2022-23/1007 Dated 26.11.2022

Sir,

Please refer to your letter cited under reference above, wherein the proposal of M/s. Indian Oil Corporation Limited (IOCL) for laying of 8.625" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag on NH-16 between Km.682+980 to Km.699+500 LHS and Km 713.530 to Km 713.384 (RHS) and also crossing at Km 713.384 totalling to a length of 16726 mt in Visakhapatnam district in the State of Andhra Pradesh was submitted for approval of the Competent Authority.

2. The proposal has been examined and it is observed that the following documents are not enclosed with the proposal which are required for processing the proposal:

2.1 Annexure-I, Annexure-3, Annexure - 4, Annexure - 8 & 9 as per clauses 1.11, 2.1, 2.2 and 13 of checklist.

2.2 Company resolution for issuing Power of Attorney.

2.3 Performance Bank Guarantee should be for Rs.16,72,600/- instead of Rs.16,71,000/-.

2.4 Concessionaire consent for the proposal.

3. In view of the above, it is requested to submit the above documents for taking further necessary action.

Yours faithfully,

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

NHAI PIU	VSP
DGM (T)	
Dy.M (T)	
S(MLN)	
A(RVG)	
ACCTS	
SE-1	
SE-2	
SE-3	

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CHECK LIST
Guidelines for processing the proposal for laying Natural Gas pipeline in the land across National Highway vested with NHAI
Relevant 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
9. Memorandum of Understanding Between IOCL and NHAI, dated: 08.06.2022

Checklist for getting approval for laying of 8.625" OD Natural Gas pipeline on NH land

S.No.	Item	Information/Status	Remarks
1	General Information		
1.1	Name and address of the Applicant/Agency	Indian Oil Corporation Limited (Pipelines Division) Paradip-Hyderabad Pipeline Project, 4th 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	Anandapuram Jn. To Visakha valley road And NSTL area	
1.5	(Chainage in km)	KM 682/980 to KM 699/500 and KM 713+530 to 713+384 & crossing at 713+384	
1.6	Length in Kilometres	16726 meters	
1.7	Width of available ROW	45 - 60 Mts	
	(a) Left side from centre line towards increasing chainage/km direction	24 - 30 Mts	
	(b) Right side from centre line towards increasing chainage/km direction	21 - 30 Mts	
1.8	Proposal to lay underground petroleum pipeline for supply of petroleum products		
	(a) Left side from centre line towards increasing chainage/km direction	KM 682/980 to KM 699/500	
	(i) Right side from centre line towards increasing chainage/km direction	KM 713+530 to 713+384	

DUSHYANT MANI / Senior Project Manager (CGD)
Indian Oil Corporation Limited
City Gas Distribution Project
Vizag

Project Director
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P.I.U. VISAKHAPATNAM

1.9	Proposal to acquire land		
	(a) Left side from center line	N.A	
	(b) Right side from center line	N.A	
1.10	Whether proposal is in the same side where land is not to be acquired	Yes	
	If not then where to lay the cable.	At the edge of available ROW	
1.11	Details of already laid services, if any along the proposed route	Attached.	Annex-2
1.12	Number of existing lanes (2/4/6/8 lanes).	4 lanes	
1.13	Proposed number of lanes (2 lane with paved shoulders/4/6/8 lanes).	4 lane	
1.14	Service road existing or not	Details attached where service road is available	
	If yes then which side	Both sides	
	(a) Left side from center line	KM 686/012 to KM 686/400, KM 691/304 to KM 694/630,	
	(b) Right side from center line	KM 686/012 to KM 686/400, KM 691/367 to KM 694/630	
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 is after the service road or between the service road and main carriageway	N.A	
1.17	Whether carrying of sewage/gas pipeline has been proposed on highway Bridges. If yes, then mention the methodology proposed for the same.	No pipeline is proposed on bridges.	
1.18	Whether carrying of sewage/gas pipeline has been proposed on the parapet/ any part of the bridges. If Yes, then mention the methodology proposed for the same.	No pipeline is proposed on parapet/any part of bridge.	
1.19	If crossings of the road 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	Yes, HDD Method. HDD is latest trenchless method without casing. It is safest and has no impact on surroundings. This method is being implemented for crossings of NH/NHAI by pipelines all over the country. It has long life compared to cased crossing and is more reliable.	
	(a) Whether existing drainage structures are allowed to carry petroleum pipeline	No	
	(b) It is on a line normal to NH	Yes	
	(c) What is the distance of crossing the petroleum pipelines from the existing structures. Crossings shall not be too near the existing structures on the National Highway, minimum	Complied	

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City Gas Distribution Project
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	distance being 15 meter.		
	(d) The casing pipe(or conduit pipe in the case of electric cable) carrying the petroleum line shall be of steel, cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable. Mention type of casing.	NA	
	(e) Ends of casing /conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.	NA	
	(f) The casing/conduit pipe should, as minimum extend from drain to drain in cuts and toe of slope in the fills.	NA	
	(g) The top of the casing/conduit pipe should be at least 1.2 meters below the surface of the road subject to being at least 0.3 m below the drain inverts. Mention the proposed details.	NA	
	(h) Mention the methodology 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.	Pipeline crossing will be done by HDD Method (which is trenchless method without the need for casing). It is safest and has no impact on surroundings. This method is being implemented for crossings of NH/NHAI by pipelines all over the country. It has long life compared to cased crossing and is more reliable.	Annex-5
	(i) The casing/conduit pipe shall be installed with an even bearing throughout its length and in such a manner as to prevent the formation of a waterway along it.	NA	
2	Document/Drawings to be enclosed with the proposal		
2.1	Cross section showing the size of trench for open trenching method (Is it normal size of 1.65m deep *0.5m wide) i. Should not be greater than 60cm wider than the outer diameter of the pipe ii. Located as close to the extreme	Yes, Upon trenching cross section drawing attached.	Annex-3

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	edge of the right of way as possible but not less than 15m from the centre lines of the nearest carriageway iii. Shall not be permitted to run along the National Highways when the road formation is 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 location of pipeline for HDD method	Yes, Enclosed	Annex-4
2.3	Strip plan/Route plan showing the Gas pipe line, chainage, width of ROW, distance of proposed pipe line from the edge of ROW, important mile stone, intersections, cross drainage works etc.	Strip Plan showing all the details is attached.	Annex-2
2.4	Methodology for lying of the petroleum pipe line.	Yes, Enclosed.	Annex-6
2.4.1	Open trenching method. (May be allowed in the petroleum corridor only where pavement is neither cement concrete nor dense bituminous concrete type. If yes, what is the methodology of refilling of trench?	Yes, Backfilling shall be done with granules material. Compaction shall be done in layers of 15cm each. The trench shall be filled upto the required height of 1.65m (measured from top of ducts as per trench cross section drawing attached in the proposal). A crown of 250mm shall be made at the top of backfilled trench to cater for soil settlement.	
	(a) The trench width should be at least 30cm, but not more than 60 cm wider than the outer diameter of the pipe.	Yes	
	(b) For filling of the trench, bedding 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.	Yes	
	(c) The backfill shall be completed in two stages (i) side fill to level of the top of the pipe and (ii) overfill to the bottom of the road crust.	Yes	

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	(d) The side fill shall consist of granular material laid in15cm layers each consolidated by mechanical tempering and controlled addition of moisture to95% of the proctor's density. Overfill shall be compacted to the same density as the material that has been removed. Consolidation by saturation or ponding will not be permitted	Yes	
	(e) The road crust shall be built to 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.	Yes	
	(f) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours.	Yes	
	(g) If required, a diversion shall be constructed at the expense of agency owing the petroleum line.	Yes	
2.4.2	Horizontal directional drilling (HDD) method.	Yes	
2.4.3	Methodology for laying of pipe line through CD works and method of laying. In cases where the carrying of gas pipe line on the bridge becomes inescapable.	No CD works are involved in laying of pipeline	
3	Draft license Agreement is signed by two witnesses	Yes, Enclosed	
3.1	The license fee estimate as per Ministry's guidelines issued vide circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016	NA (As per MoU between IOCL and NHAI date: 08.06.2022)	
4	Whether performance Bank guarantee as per Ministry's circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016 is obtained	Undertaking for submission of BG has been obtained from M/s. IOCL	
4.1	Confirmation of BG has been obtained or not as per MoRTH/NHAI guidelines	Confirmation of BG shall be obtained 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 utility, if damaged then to pay the losses either to NHAI or to the concerned agency.	Yes, Enclosed	
5.2	Undertaking for Renewal of bank guarantee as and when asked by MoRTH/NHAI.	Yes, Enclosed	
5.3	Undertaking for confirming all standard	Yes, Enclosed	

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	condition of Ministry circulars and NHAI's guidelines.		
5.4	Undertaking for Indemnity against all damages and claims.	Yes, Enclosed	
5.5	Undertaking for management of traffic movement during laying of petroleum line without hampering the traffic	Yes, Enclosed	
5.6	Undertaking that if any claim is raised by the concessionaire/contractor then the same has to be paid by the applicant.	Yes, Enclosed	
5.7	Undertaking that prior approval of the 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.	Yes, Enclosed	
5.8	Undertaking that expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the petroleum line will be borne by the applicant agency owing the line.	Yes, Enclosed	
5.9	Undertaking that text of the license deed 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	Yes, Enclosed	
5.10	Undertaking that the applicant has obtained various safety clearances from the representative authorities such as Directorate of Electricity, Chief controller of Explosives, Petroleum and Explosive safety Organization, Oil Industry safety Directorate, State/Central pollution control board and any other statutory clearances as applicable, before applying to Highway Administration	Petroleum and Explosives Safety Organization (PESO) approval for the Steel network can be applied to Chief Controller of Explosives only after mechanical completion and Hydrostatic testing of the line but before commissioning, as Hydro-testing report will be part of the submittal for obtaining PESO clearance. The approval 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 and as per OISD 226 guidelines.	
5.11	If the MoRTH/NHAI consider it necessary 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 agency owing the petroleum line within a reasonable time (not exceeding 60 days) of the intimation given.	Yes, Enclosed	
5.12	Certificate from the applicant in the	Enclosed	

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	following format (i) Laying of Gas pipe line will not have any deleterious effects on any of the bridge components and roadway safety 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.	SM(CGD), 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 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".	Yes, Enclosed	
8	If NH section proposed to be taken up by	N.A	

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सिटी गैस वितरण परियोजना
City Gas Distribution Project
वेजाग / Vizag

Project Director
National Highways Authority of India
P.I.U. VISAKHAPATNAM

	NHAI on BOT basis – a clause is to be inserted in the agreement. "The permitted Highway on which License has 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 km----------of 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 Gas pipe line		
	(a) On behalf of the Applicant	SM(CGD), Indian Oil Corporation Limited (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 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	SM(CGD), 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 damage done/disruption in working of concessionaire if asked by the concessionaire		
	On behalf of the applicant	Indian Oil Corporation Limited (Pipelines Division) City Gas Distribution Project, Visakhapatnam	
12	A certificate from PD that he will enter the proposed permission in the register of record of the permission in the prescribed proforma (copy enclosed)	Yes, Enclosed	
13	If any various approvals are accorded for laying of underground Gas pipe line then Photocopy of register of records of permission accorded (as maintained by PD) be enclosed.	Yes. PNGRB Authorization and MoU between IOCL & NHAI enclosed.	Annex-8 & 9

Project Director
National Highways Authority of India
P.I.U. VISAKHAPATNAM

दुष्यंत मणि / DUSHYANT MANI
वरिष्ठ परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)
इंडियन ऑयल कॉर्पोरेशन लिमिटेड
Indian Oil Corporation Limited
सिटी गैस वितरण प्रोजेक्ट
City Gas Distribution Project
विशाखापत्तनम / Vizag

Observation – 2.22

ఆంధ్రప్రదేశ్ आन्ध्र प्रदेश ANDHRA PRADESH

Serial No:44130 Denomination: 100 Date28-05-2022

Purchased By :
DUSHYANT MANI
S/O JAGTENDRA SINGH
VSP

For
SELF

Stamp S. no DA 309917

Sub Registrar
Ex. Offico Stamp Vendor
SRO Visakhapatnam(R.O)

Power Of Attorney

Subject: Authorization for signing and execution of documents related to Permanent / Statutory clearances for City Gas Distribution project of Indian Oil Corporation Ltd , Pipelines Division

I do hereby authorize Shri Dushyant Mani, Senior Manager (CGD), Vizag to sign and execute all the documents related to Permissions/Statutory clearances from authorities for City Gas Distribution project in the state of Andhra Pradesh

The specimen signature of Shri Dushyant Mani is attested below

Your faithfully

(P Srinivasan)
Deputy General Manager
CGD, Vizag

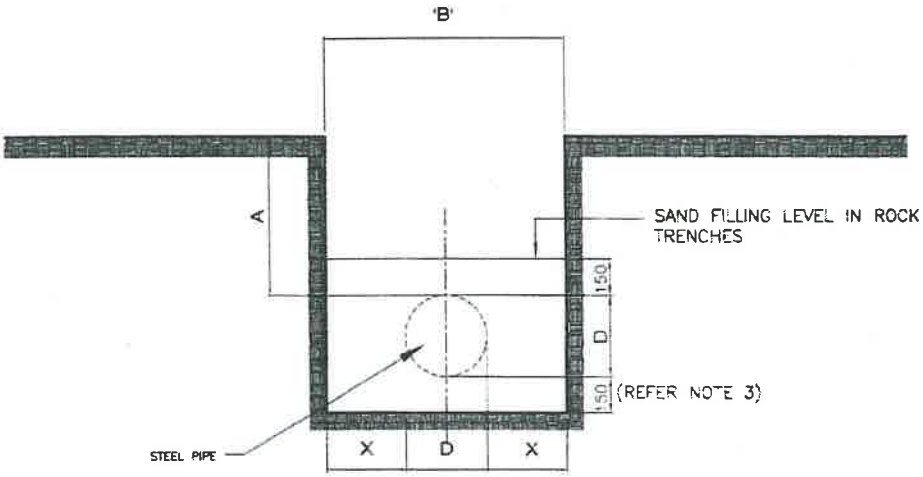
Signature Dushyant Mani
Senior Manager (CGD)

Attested by

DUSHYANT MANI
Senior Project Manager (CGD)
Indian Oil Corporation Limited
सिटी गैस वितरण प्रोजेक्ट
City Gas Distribution Project
विजाग / Vizag

पि. श्रीनिवासन / P SRINIVASAN
उप महाप्रबंधक (CGD)
इंडियन ऑयल कॉर्पोरेशन लिमिटेड
सिटी गैस वितरण प्रोजेक्ट
विजाग / Vizag

Annexure - 3



STANDARD DITCH DIMENSIONS

TABLE

O.D. OF PIPE	DIMENSION 'A' IN ALL TYPE OF SOIL (MM)	DIMENSION 'X'		DIMENSION 'B'	
		IN NORMAL SOIL (MM)	IN ROCK (MM)	IN NORMAL SOIL (MM)	IN ROCK (MM)
D	1000 OR AS PER OISD / T4S / LOCAL AUTHORITY	200	300	D + 400	D + 600

NOTES:-

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. DITCH DIMENSIONS TO CONFORM TO TABLE GIVEN HEREIN.
3. REQUIRED DEPTH OF COMPACTED SOFT SOIL OR SAND PADDING AT THE BOTTOM OF ROCK TRENCH TO BE PROVIDED BY THE CONTRACTOR BEFORE LOWERING THE PIPE.
4. IN CULTIVABLE LAND AND OTHER AREAS SPECIALLY DESIGNATED BY THE OWNER, THE CONTRACTOR SHALL STRIP TOP-SOIL TO A DEPTH OF 300mm TO THE FULL ANTICIPATED WIDTH OF THE DITCH AND STORE THIS MATERIAL SEPARATELY ALONG THE SIDE TO ALLOW RE-FILLING OF THIS MATERIAL ON TOP OF THE BACKFILLED DITCH.
5. IN CASE OF MOORRAM, EXTRA DEPTH OF 150mm EXCAVATION SHALL BE CARRIED OUT TO ACCOMMODATE SAND PADDING AT BOTTOM OF TRENCH AS PER DECISION OF ENGINEER-IN-CHARGE.

S.NO.	OLD REFERENCE DRAWING	DWG. NO.
1.	STANDARD DITCH DIMENSIONS	9200-00000-001-SKB-04

PURPOSE	TENDER / PERMISSION

NO	DATE	REVISION	DRAWN	DESIGNED	CHECKED	APPROVED

SUBJECT OF REVISION

इंडियनऑयल कॉर्पोरेशन लिमिटेड - पाइपलाइन्स
INDIAN OIL CORPORATION LIMITED (PIPELINES)
CNG & CITY GAS DISTRIBUTION PROJECT

STANDARD DITCH DIMENSIONS

CAD FILE NO.	DWG. NO.	SCALE	SIZE	SHEET
CGD-01-00	9200-13700-30109-001-00	NTS	A3	1 OF 1

दुष्यंत मणि / DUSHYANT MANI
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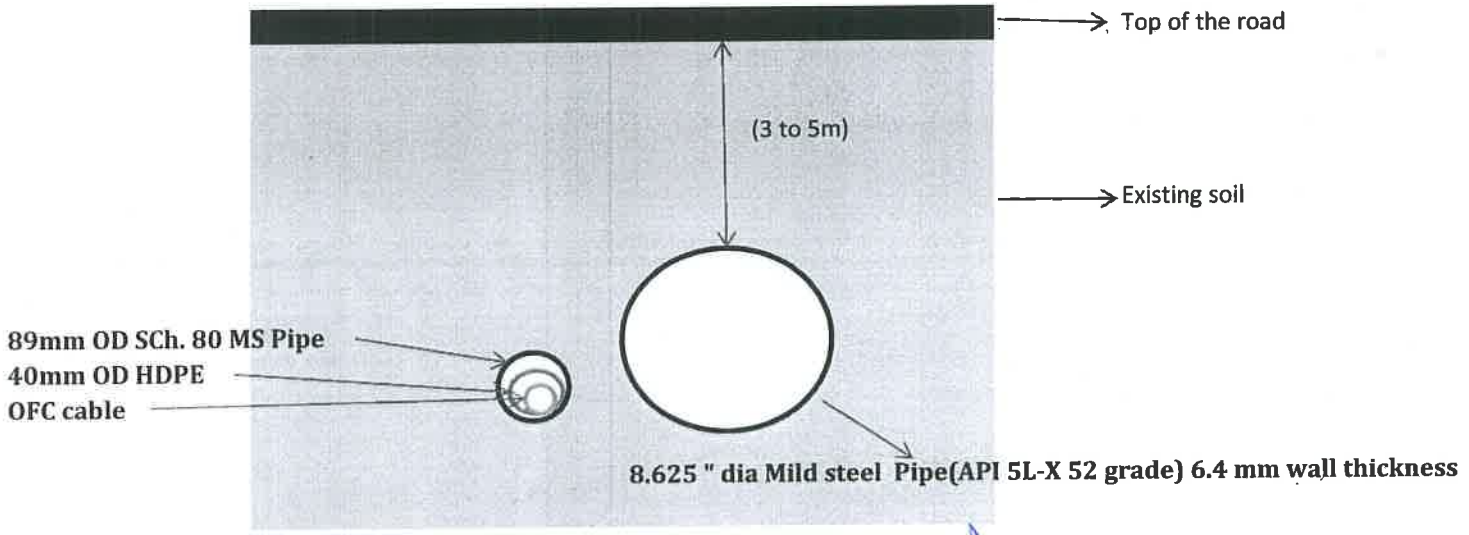
City Gas Distribution Project
वैजाग / Vizag

CROSS SECTION DRAWING OF GAS PIPELINE ALONG WITH OFC (BY HDD METHOD)



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Annexure-4.

Annexure – 5

Methodology of Laying Pipes –Open Trenching &Trenchless (HDD)

1. **Trenching Method:**
   Laying of Pipe along the mentioned route will be done by conventional method/manual and machine Trenching method. The Dimension of the Trench will be 1.5m in depth and 1.0m in width .The pipe laying work will be carried out in phased manner in such a way that after the Pipes are laid, the trench will be restored to its Original surface. Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, from top of pipe including getting out the excavated soil and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 500m.

2. **Trench Filling Method:**
   As a measure of abundant precaution against future settlement and other allied problems, only selected granular material will be used in filling restoration of trenches. The entire depth of cutting will be filled either with coarse sand or the excavated material, compacted in layers not exceeding 20cm when compacted by ordinary power roller/plate compacter. Special compaction equipment like plate compacter, frog hammer will be utilized besides ordinary power roller.

3. **Trenchless Crossing: HDD Method**
   Horizontal Directional Drilling (HDD) is a Technique for installing product pipes, including utility lines, below ground using a surface-mounted drill rig that launches and places and drill string at a shallow angle to the surface and has tracking and steering capabilities. In recent years HDD has been the preferred methodology due to several government policies conducive to infrastructure growth. Major crossings on the Route will be done by Horizontal Directional Drilling method without disturbing the road surface. Slurry liquid used in HDD will be disposed -off at suitable locations.

(Dushyant Mani)
SM (CGD), Vizag

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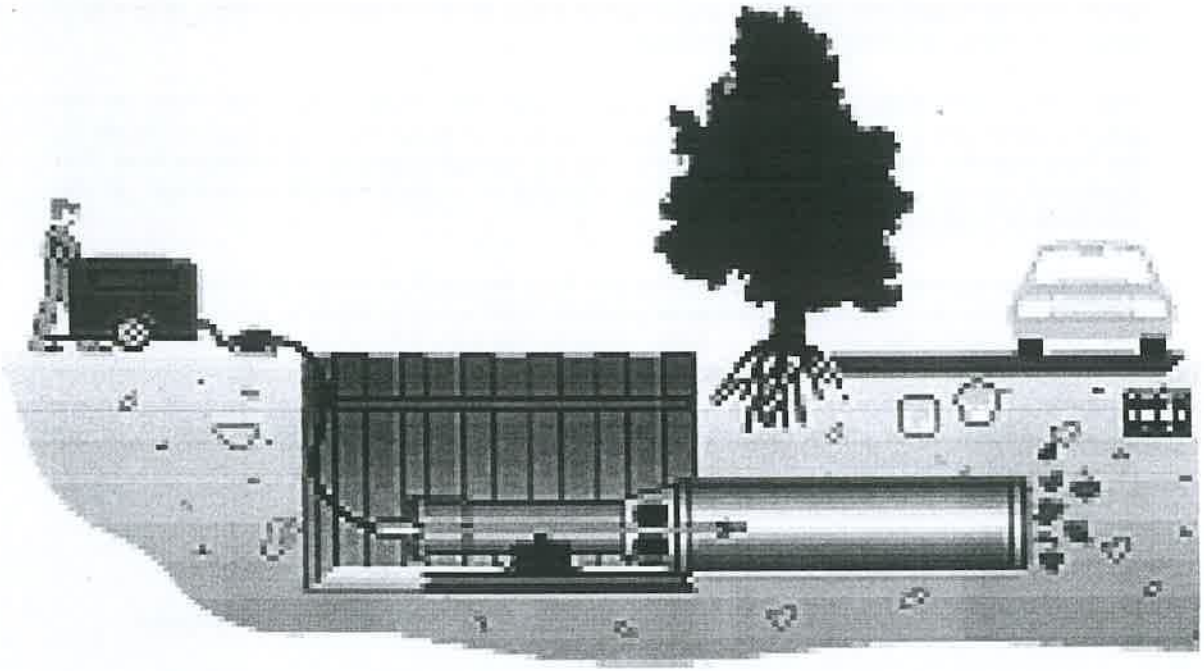
IndianOil

Indian Oil Corporation Limited

CONSTRUCTION METHODOLOGY:

For laying underground pipeline
Crossing National highways by
Horizontal Boring Method



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वैजाग / Vizag

HORIZONTAL DIRECTIONAL DRILLING

GENERAL

Horizontal Directional Drilling or HDD, is a steerable trenchless method of installing underground pipes, conduits and cables in a shallow arc along a prescribed bore path by using a surface launched drilling rig, with minimal impact on the surrounding area. HDD is used when trenching or open excavation is not possible/practical. Directional boring minimizes environmental disruption. It is suitable for a variety of soil conditions and jobs including road, landscape and river crossings. Pipes can be made of materials such as Steel, PVC, etc. if the pipes can be pulled through the drilled hole.

Technique

Directional boring is used for installing infrastructure such as telecommunications and power cable conduits, water lines, sewer lines, gas lines, oil lines, product pipelines and environmental remediation casings. It is used for crossing waterways, roadways, shore approaches, congested areas, environmentally sensitive areas, and areas where other methods are costlier. It is used instead of other techniques to provide less traffic disruption, lower cost, deeper and/or longer installation, no access pit, shorter completion times, directional capabilities, and environmental safety. The technique has extensive use in urban areas for developing subsurface utilities as it helps in avoiding extensive open cut trenches.

The method comprises a three stage process wherein first stage drills a pilot hole on the designed path and the second stage enlarges the hole by passing a larger cutting tool known as the back reamer. The third stage places the product or casing pipe in the enlarged hole. The directional control capabilities assist the rig operator in making necessary changes in the directions of the drilling head.

Horizontal directional drilling is done with the help of a viscous fluid known as drilling fluid. It is a mixture of water and, usually, bentonite or polymer continuously pumped to the cutting head or drill bit to facilitate the removal of cuttings, stabilize the bore hole, cool the cutting head, and lubricate the passage of the product pipe.

Location and guidance of the drilling is a very important part of the drilling operation, as the drilling head is under the ground while drilling and, in most cases, not visible from the ground surface.

Advantages

HDD offers several advantages when compared to other trenchless construction methods:

(a) Complicated crossings can be quickly and economically accomplished with a great degree of accuracy since it is possible to monitor and control the drilling operation.
(b) Sufficient depth can be accomplished to avoid other utilities.
(c) In river crossing applications, danger of river bed erosion and possible damage from river traffic is eliminated.
(d) Requires only a small construction footprint.

The Horizontal Directional Drilling Process

The tools and techniques used in the horizontal directional drilling (HDD) process are an outgrowth of the oil well drilling industry. The components of a horizontal drilling rig used for pipeline construction are similar to those of an oil well drilling rig with the major exception being that a horizontal drilling rig is equipped with an inclined ramp as opposed to a vertical mast. HDD

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pilot hole operations are not unlike those involved in drilling a directional oil well. Drill pipe and downhole tools are generally interchangeable and drilling fluid is used throughout the operation to transport drilled spoil, reduce friction, stabilize the hole, etc. Because of these similarities, the process is generally referred to as drilling as opposed to boring.

Installation of a pipeline by HDD is generally accomplished in three stages as illustrated in Figure 1. The first stage consists of directionally drilling a small diameter pilot hole along a designed directional path. The second stage involves enlarging this pilot hole to a diameter suitable for installation of the pipeline. The third stage consists of pulling the pipeline back into the enlarged hole.

Pilot Hole Directional Drilling

Pilot hole directional control is achieved by using a non-rotating drill string with an asymmetrical leading edge.

It is common in soft soils to achieve drilling progress by hydraulic cutting with a jet nozzle. In this case, the direction of flow from the nozzle can be offset from the central axis of the drill string thereby creating a steering bias. This may be accomplished by blocking selected nozzles on a standard roller cone bit or by custom fabricating a jet deflection bit. If hard spots are encountered, the drill string may be rotated to drill without directional control until the hard spot has been penetrated.

Pre-reaming

For a pre-reaming pass, reamers attached to the drill string at the exit point are rotated and drawn to the drilling rig thus enlarging the pilot hole. Drill pipe is added behind the reamers as they progress toward the drill rig. This insures that a string of pipe is always maintained in the drilled hole..

Pullback

Pipe installation is accomplished by attaching the prefabricated pipeline pull section behind a reaming assembly at the exit point and pulling the reaming assembly and pull section back to the drilling rig. This is undertaken after completion of pre-reaming or, for smaller diameter lines in soft soils, directly after completion of the pilot hole. A swivel is utilized to connect the pull section to the leading reaming assembly to minimize torsion transmitted to the pipe.

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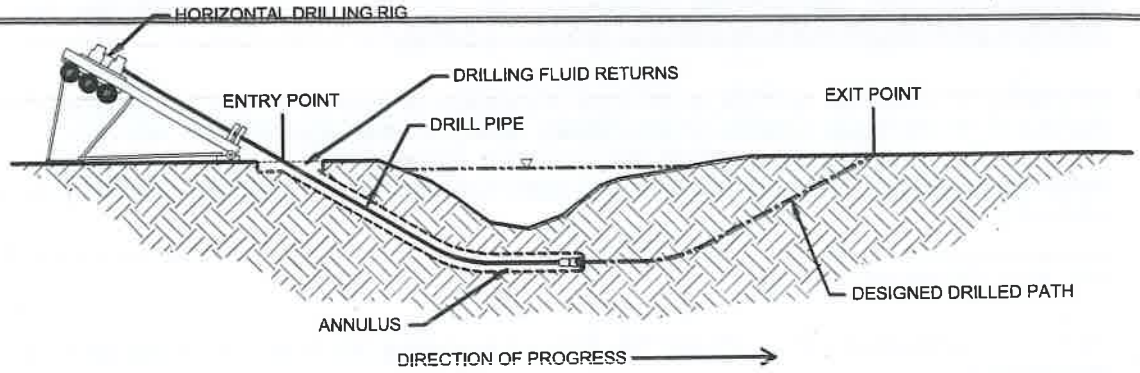
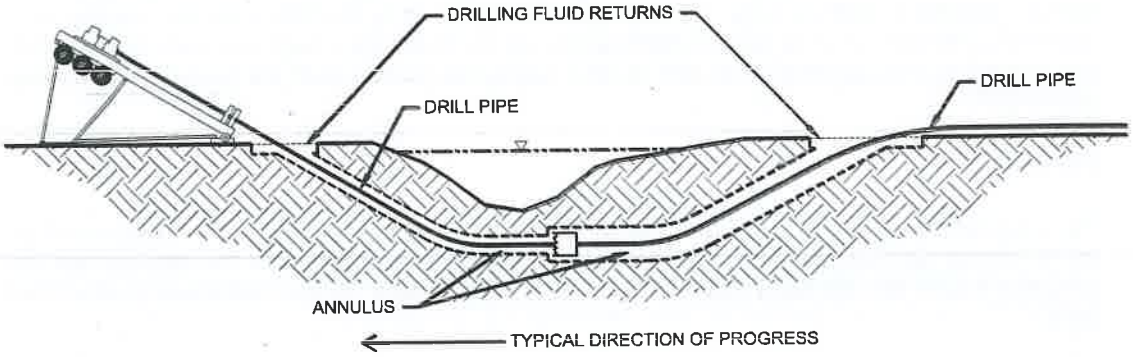
PILOT HOLE



PREREAMING



PULLBACK

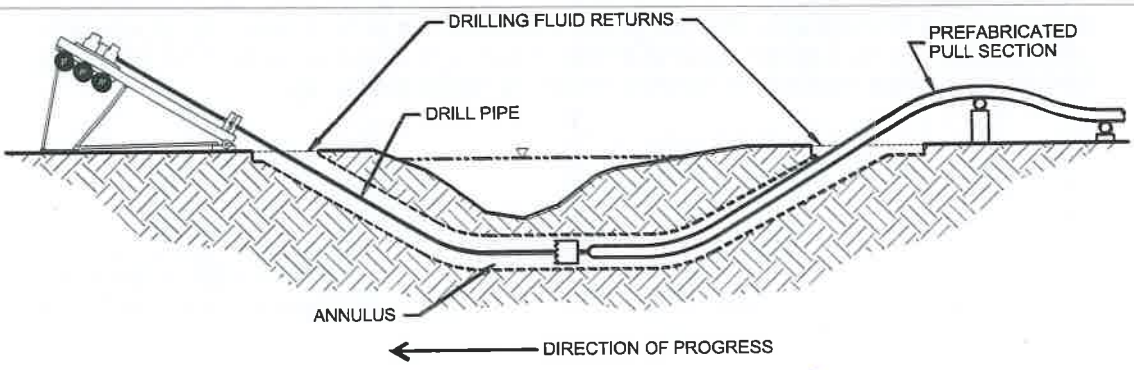


Figure 1
The HDD Process

दुष्यंत मणि / DUSHYANT MANI
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Disadvantages of Cased Crossing:

Cased Crossings are being worldwide discouraged due to technical & operational issues/problems being faced by people involved in installing & maintaining pipelines. Some of the points going against cased crossings are as follows:

- For installing a pipeline by cased crossing method, large launching & receiving pits are required to be excavated on both sides of the crossing (highway/ railway etc.). In case of high water table conditions, it is very difficult to keep these pits in stable/ dry condition. De-watering and sheet piling / shoring methods may be required especially for higher depth crossings.

- Collapse of the pits may lead to severe accidents. Several such accidents, fatal in some cases, have been reported in the past due to collapse of deep pits excavated at cased crossing locations.

- Due to requirement of deep pits and water table, depths more than of 3-4m are practically difficult to be achieved by this technique and may be risky.

- The installation is done by horizontal auger boring machine placed in the launching pit. The boring process is un-guided and at times may deviate considerably from the intended straight path due to soft soil conditions and/or presence of rock/ hard strata beneath the road/ rail surface. Under such conditions the hole may have to be abandoned and a new boring at a separate location may be required. Filling the abandoned hole is very difficult and settlement of road/ ground surface may occur in future.

- Maximum length of boring which can be practically achieved depends on the soil conditions and size of boring. However any length beyond 50-60m is difficult, risky & time consuming. As highway crossings, especially NH & SH are of longer lengths, this method has got limitations of installation.

- Problems of short-circuiting between casing & carrier pipes is another problem prevalent in cased crossings. This leads to loss of cathodic protection current thereby reducing the secondary protection to the carrier pipe. Any damage to pipe coating at such locations may lead to development of corrosion spots and potential areas for leakage of petroleum products in future.

- In case widening of the highway is undertaken in future, the low depth of the pipe may become a hindrance. Extension of the casing to cover the new width of crossing is very cumbersome and time consuming.

Advantages of HDD Technique:

- Horizontal Directional Drilling (HDD) technique is a trenchless technique used worldwide for crossing of obstacles like rivers, canals, drains, highways etc. by petroleum pipelines (liquid / gas), sewer lines etc.

- It is a environment friendly technique for pipeline crossings

- It is a much safer technique as compared to other techniques of pipeline crossings.

- Small excavation is required at both ends

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- By the use of this technique the pipeline can be installed at a much greater depth from the obstacle as per requirement of client. In PRRPL project, the depth below highway has been kept more than 5m. Such depths may not be possible by cased crossing technique.

- In this technique, use of casing pipe is not required as the hole drilled for installation of the carrier pipe is kept stable due to presence of drilling fluid (bentonite) under pressure and the drill pipe / product pipe being always present in the hole.

- Much longer crossing lengths can be achieved by HDD technique. Thus highway widening activities can be carried out without any hindrance as the pipeline is laid at much higher depth and for longer length as compared to cased crossing. In PRRPL project HDD crossing length of more than 100m have been envisaged. Such lengths cannot be obtained by cased crossing method.

- Success rate of HDD technique is much higher than auger boring. Problems of abandonment of hole which have been mentioned above in cased crossings are almost nil in case of HDD crossings of small lengths for highways, small canals etc.

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City Gas Distribution Project
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Annexure – 8 & 9.

PNGRB/CGD/BID/9/2018/01/Andhra Pradesh –Bid Evaluation

पेट्रोलियम एवं प्राकृतिक गैस विनियामक बोर्ड

Petroleum and Natural Gas Regulatory Board

प्रथम-तल, वर्ल्ड ट्रेड सेंटर, बाबर रोड, नयी दिल्ली - 110001

1st Floor, World Trade Centre, Babar Road, New Delhi – 110001

01st March, 2019

To
Indian Oil Corporation Limited
7th Floor, Core-2, Scope Complex,
7 Institutional Area, Lodhi Road,
New Delhi- 110003

Subject: Grant of Authorization to Indian Oil Corporation Limited for development of City Gas Distribution Network in the Geographical Area of Srikakulam, Vishakhapatnam and Vizianagaram Districts.

Sir,

With reference to submission of Performance Bank Guarantee for Rs. 50 crore vide your letter dated 28.02.2019, as per the requirement under Regulation 10(1) of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008, please find enclosed authorization in Schedule D for the GA of Srikakulam, Vishakhapatnam and Vizianagaram Districts in duplicate.

2. The tariff applicability is as per the Judgment of Hon'ble Supreme Court of India in the SLP No. 22273 of 2012.

3. You are requested to put your stamp & signature on each page of the document and return one copy, within 7 days of receipt of this communication, to the PNGRB for records.

4. The enclosed authorization issues with the approval of the Board.

Yours faithfully,

1/3/2019

(Arvind Kumar)
Additional Advisor

Encl: **As above**

Schedule D

[see regulations 10 *(1)* and 18 *(7)*]

Grant of authorization for laying, building, operating or expanding CGD network

To
Indian Oil Corporation Limited
7th Floor, Core-2, Scope Complex,
7 Institutional Area, Lodhi Road,
New Delhi- 110003

Subject: Grant of Authorization to Indian Oil Corporation Limited for development of City Gas Distribution Network in the Geographical Area of Srikakulam, Vishakhapatnam and Vizianagaram Districts.

Sir,

With reference to your application-cum-bid for grant of authorization for laying, building, operating or expanding the CGD network in **Srikakulam, Vishakhapatnam and Vizianagaram Districts** in the state of **Andhra Pradesh**, it has been decided to grant you the authorization subject to the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008 and the following terms and conditions:

1. The Authorised Area for laying, building, operating or expanding the proposed CGD Network shall cover an area of **<23650.30>** square kilometre and as depicted in the enclosed drawing or map,
2. The activities of laying, building, operating or expansion of the CGD Network shall commence immediately after the issuance of this authorisation.
3. **The activities permitted above shall have to be completed as per the work programme mentioned below, namely: -**

Serial Number	Description of work	Numbers
1	Number of CNG Stations (Online and Daughter Booster stations) to be installed within 8 contract years from the date of authorisation	**211**
2	Number of domestic Piped Natural Gas connections to be achieved within 8 contract years from the date of authorisation	**929842**
3	Inch-km of steel pipeline to be laid within 8 contract years from the date of authorisation	**2300**

The entity shall be required to achieve the year-wise work programme within 8 contract years as per details given below:

PNG Connections (cumulative)		CNG Stations (cumulative)		Inch-km of steel pipeline (cumulative)	
By the end of contract year	% of work program	By the end of contract year	% of work program	By the end of contract year	% of work program
1st	Nil	1st	Nil	1st	5
2nd	10	2nd	15	2nd	20
3rd	20	3rd	30	3rd	40
4th	30	4th	45	4th	60
5th	40	5th	60	5th	70
6th	60	6th	75	6th	80
7th	80	7th	90	7th	90
8th	100	8th	100	8th	100
Note - In case derived numbers are in fraction, the same shall be rounded off to the nearest whole number and 0.5 shall be rounded off to next higher whole number.					

4. Any failure on the part of the entity in complying with the milestones prescribed in the work programme shall lead to consequences as specified under regulation 16.

5. The entity shall design and install an optimal size of the infrastructure in terms of pipelines of various types including steel belting of the authorised area, online compressors of adequate capacity for compressing of natural gas into CNG, allied equipment and facilities in the CGD network depending upon the potential demand for natural gas. The infrastructure in the CGD network should be adequate to maintain uninterrupted flow of natural gas in the pipelines and be also able to maintain supplies at adequate pressure to online CNG stations.

6. The entity shall maintain an uninterrupted supply of natural gas to all categories of customers in the CGD network. In the event of any disruption in the supply of natural gas in the CGD Network, first priority shall be accorded to restoration of supplies to domestic PNG customers. In case of disruption of supply to domestic PNG customers for more than twelve hours, the entity shall compensate the domestic customer on the following manner, namely: -

(a) the normative volume of natural gas consumption for the first domestic PNG connection for cooking requirements based on last three months

weighted average consumption per day to be applied for each day's disruption and multiplied by ten;

(b) normative value of natural gas consumption shall be based on last three months' weighted average billing price of natural gas for supplies to the first domestic PNG connection for cooking requirements; and

(c) the value of compensation shall be equal to normative volume of natural gas consumption as per clause (a) above multiplied by normative value as per clause (b) and shall be adjusted by allowing a credit to the domestic PNG Customer in the next billing cycle or in the next pre-paid smart card in case of smart card metering.

In case the disruption of supplies is attributed to any fault of the domestic PNG customer, no compensation shall be payable by the entity.

7. The entity is allowed an exclusivity period under the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008, in respect of the following, namely: -

(a) **300** months from the date of issue of this communication for laying, building and expansion of the CGD network; and

(b) **96** months from the date of issue of this communication in terms of an exemption from the purview of common carrier or contract carrier for the CGD network:

Provided that the entity meets the obligations in line with the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008:

Provided further that the period of exclusivity allowed under sub-clause (a) or sub-clause (b) may be terminated before the expiry of the period mentioned above in line with the provisions under Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008.

8. The authorised entity shall be required to take prior approval from the Board for creation of any lien, charge or hypothecation of the CGD network to secure finances for the project and furnish details of utilisation of funds. And, in case of raising funds from any financial institution or bank, the entity will be required to only inform the Board of the sanction of the funds within a period of seven days.

9. The entity shall submit a detailed and clear financial closure report to the Board within a period of two hundred and seventy days from the date of authorisation issued by the Board under regulation 10.

10. The entity shall publish on its website the transportation rate for CGD and transportation rate for CNG in the authorised area as per the following table namely: -

Serial Number	Description	Rate
1	Transportation rate for CGD - in rupees per million British Thermal Unit (Rs./MMBTU) for the first contract year	30
2	Transportation rate for CNG - in rupees per kilogram (Rs. /kg) for the first contract year	2
Note - Annual escalation shall be considered from the second contract year and onwards based on the "Wholesale Price Index (WPI) Data (2011-12 = 100)" for "All Group / Commodity", as normally available on the website of the Office of the Economic Adviser, Government of India, Ministry of Commerce and Industry, Department of Industrial Policy and Promotion (DIPP) on the link "http://eaindustry.nic.in/home.asp."		

11. The entity shall publish the applicable retail selling price of PNG for all categories of customers and also for the purpose of invoicing in Rs. / MMBTU.

12. The entity shall publish and display the retail selling price of natural gas for the purpose of invoicing to CNG customers in Rs. / Kg at all natural gas dispensing stations.

13. The furnishing of performance bond of **Rs. 500** Million is a guarantee for timely commissioning of the project as per the prescribed work programme in the bid and for meeting the service obligations during the operating phase of the project.

14. The entity shall comply with the applicable provisions under the Petroleum and Natural Gas Regulatory Board (Authorising Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008, the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008, relevant regulations for technical standards and specifications, including safety standards, any other regulations as may be applicable and the provisions of the Act.

15. In case the authorisation of the entity is terminated, the Board may assign the rights and obligations of the entity to any agency or another entity on such terms and conditions, as it may deem fit. Further, the entity may be required, as per the directions of the Board, to continue the operations of the CGD network at the same level till another agency or entity appointed by the Board takes over the full control of the CGD network.

16. The entity shall comply with any other term or condition which may be notified by the Board in public interest from time to time.

You are requested to confirm your acceptance by filling-in the acceptance of the grant of authorisation provided below and return the same in original.

Yours faithfully,

Dated: 1/8/2019

Name and Designation of Officer
On behalf of the PNGRB

Official Seal

Acceptance of the Grant of Authorisation

I / We hereby accept the grant of authorisation issued by the PNGRB vide letter ref.
<____> dated <____> and agree to comply with all the terms and conditions subject to which I/ We have been granted the authorisation for laying, building, operating or expanding city or local natural gas distribution network in the authorised area of _____in the State or the Union Territory of ____.

Date:

Place:

Signature of the Entity or Authorised Signatory
Name and Official Seal

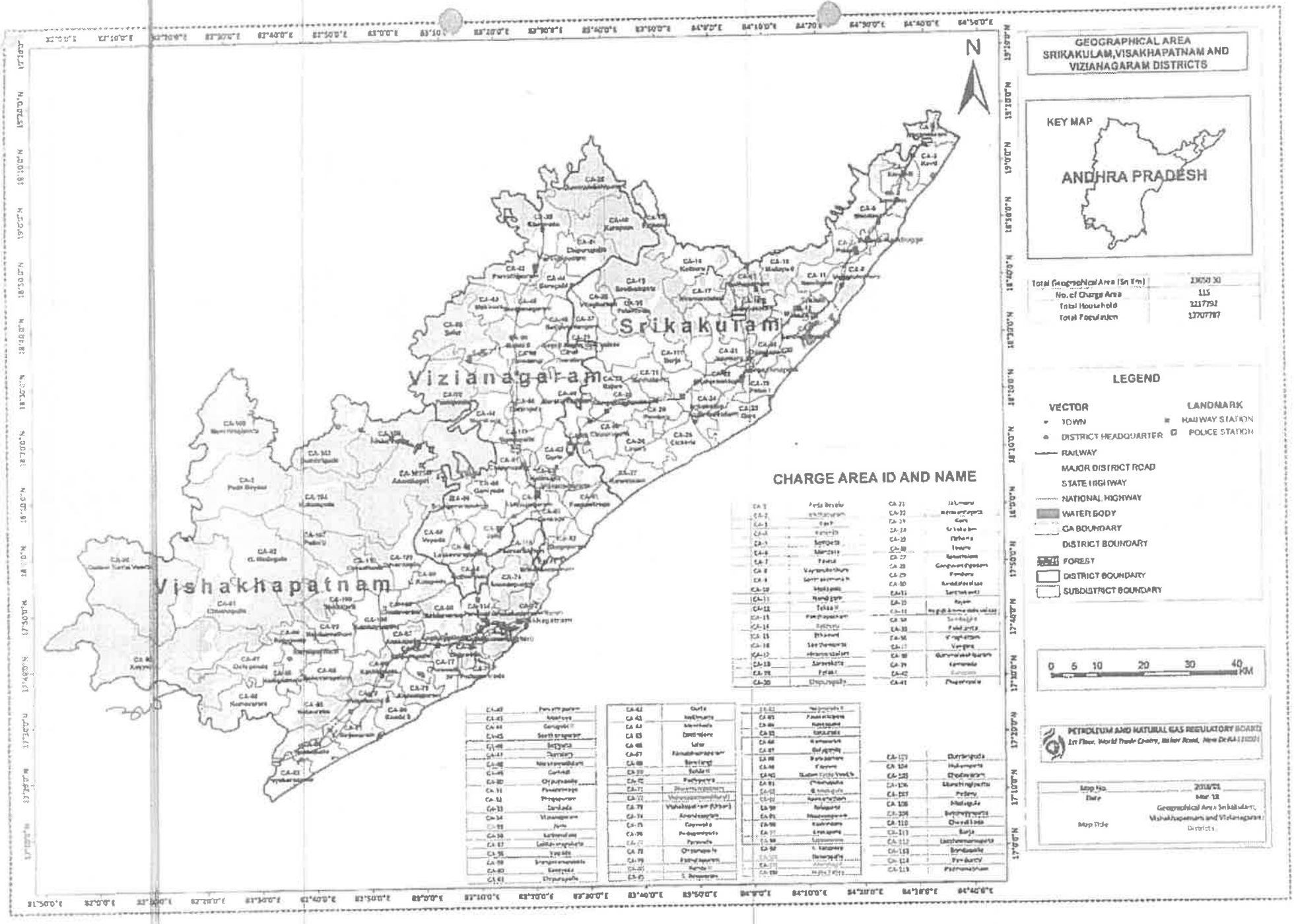
ACBD for GRANT OF AUTHORIZATION FOR LAYING, BUILDING, OPERATING OR EXPANDING CITY OR LOCAL NATURAL GAS DISTRIBUTION NETWORK IN THE GEOGRAPHICAL AREA OF SRIKAKULAM, VISAKHAPATNAM & VIZIANAGARAM DISTRICTS

CORRIGENDUM – 3
TENDER No. – PNGRB/CGD/BID/9/2018/GA/1/ANDHRA PRADESH

GA ID-1

DATE: 21.06.2018

Sr. No.	Section / Clause No.	Application-cum-Bid Document Page No.	Clause Description	Addition / Deletion / Modification
1.	Annexure-1	33	Map	Population data is corrected as 93,38,177 Household data is corrected as 23,65,521
2.		2 & 57	Bid Bond	Bid Bond value modified to 9,33,81,770


GEOGRAPHICAL AREA
SRIKAKULAM,VISAKHAPATNAM AND
VIZIANAGARAM DISTRICTS
KEY MAP
ANDHRA PRADESH
N
Srikakulam
Vizianagaram
Vishakhapatnam
Total Geographical Area (Sq Km) 23650.30
No. of Charge Area 115
Total Household 3217793
Total Population 12707787
LEGEND
VECTOR
TOWN
DISTRICT HEADQUARTER
RAILWAY
MAJOR DISTRICT ROAD
STATE HIGHWAY
NATIONAL HIGHWAY
WATER BODY
CA BOUNDARY
DISTRICT BOUNDARY
FOREST
DISTRICT BOUNDARY
SUBDISTRICT BOUNDARY
LANDMARK
RAILWAY STATION
POLICE STATION
CHARGE AREA ID AND NAME
0 5 10 20 30 40 KM
PETROLEUM AND NATURAL GAS REGULATORY BOARD
1st Floor, World Trade Centre, Babar Road, New Delhi-110001
Map No. 2018/01
Date Mar 18
Map Title Geographical Area Srikakulam, Vishakhapatnam and Vizianagaram Districts

Annexure – 8 & 9.

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

e-Stamp

Certificate No.	:	IN-DL43131039471235U
Certificate Issued Date	:	07-Jun-2022 11:13 AM
Account Reference	:	IMPACC (SH)/ dlshimp17/ SUPREME COURT/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDLSHIMP17709177172027 87U
Purchased by	:	INDIAN OIL CORPORATION LIMITED
Description of Document	:	Article 5 General Agreement
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	INDIAN OIL CORPORATION LIMITED
Second Party	:	Not Applicable
Stamp Duty Paid By	:	INDIAN OIL CORPORATION LIMITED
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

Please write or type below this line

MEMORANDUM OF UNDERSTANDING

BETWEEN

INDIAN OIL CORPORATION LIMITED

AND

NATIONAL HIGHWAY AUTHORITY OF INDIA (NHAI)

This Memorandum of Understanding (hereinafter referred to as "MoU") made at **NHAI, G-3, Sector-10, Dwarka, New Delhi** on this **8th of June 2022** ("Effective Date"),

by and between:

INDIAN OIL CORPORATION LIMITED, a company duly incorporated under the Companies Act, 1956 and having its registered office at G-9, Ali Yavar Jung Marg, Bandra (East), Mumbai – 400 051 (hereinafter referred to as "IOCL" which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) of the First Part.

And

NATIONAL HIGHWAY AUTHORITY OF INDIA (hereinafter called NHAI) an autonomous Authority constituted by Act of Parliament, having its registered office at Sector 10, Dwarka, New Delhi - 110075, India, which expression shall, unless the context required otherwise, include its legal successors and permitted assigns (hereinafter referred to as "NHAI") of the Second Part.

IOCL and **NHAI** are individually referred to as "Party" and collectively as "Parties".

RECITALS:

WHEREAS; IOCL, a Maharatna Central Public Sector Undertaking under the administrative control of Ministry of Petroleum and Natural Gas (MoPNG), Government of India and is India's flagship national oil company with business interests straddling the entire hydrocarbon value chain – from refining, pipeline transportation and marketing of petroleum products to natural gas and petrochemicals.

WHEREAS; NHAI, is an autonomous agency of the Government of India under the Ministry of Road Transport and Highways (MoRTH) for development, maintenance, and management of National Highways across the country.

WHEREAS; In ever expanding networks of cross-country pipelines of IOCL and National Highways of NHAI, interfacing of these two structures and many locations is unavoidable.

WHEREAS: Parties are desirous of simplification of the process of obtaining crossing permissions, optimization of the expenditure on the crossings and bringing about uniformity of such proceedings across the country.

WHEREAS; in furtherance of the same, NOW THEREFORE, it is understood between the parties as under:

I. **SCOPE AND APPLICABILTY**: The terms and conditions mentioned in this MoU will be applicable for complete network of NHAI's National Highways in National Highways Right of Way and IOCL's gas/ petroleum pipeline(s) across the country.

II. **DESCRIPTION OF PURPOSE**: This MOU is an understanding between the parties to express the mutual interest of the parties, within the framework of this MoU for amicable mutual interface for laying of gas/ petroleum pipeline(s) along and across National Highways Corridors and vice versa.

III. **OBLIGATIONS, DUTIES AND UNDERTAKINGS OF NHAI**

1. **In respect of already laid gas/ petroleum pipeline(s):**
   a. Wherever, the alignment of a National Highway ("NH") crosses an already laid gas/ petroleum pipeline(s) (i.e., pipeline(s) existing prior to declaration of said National Highway vide relevant Notification), NHAI shall either construct portal structure(s) over the existing pipeline (as per **Annexure-A**) or cause shifting of such operating pipeline(s) at NHAI's cost under supervision of IOCL.
   b. NHAI will inform IOCL regarding upcoming alignment of National Highways over IOCL's existing gas/ petroleum pipeline(s) as soon as NHAI becomes aware of such operating pipeline(s) to expedite the interface related formalities. However, NHAI may explore possibilities of expediting the information to IOCL regarding crossing of National Highways to IOCL's existing gas/ petroleum pipeline(s) during the land acquisition stage to expedite the crossing related formalities.

c. NHAI will try to maximize the crossing angle i.e., near to 90 Deg to IOCL's gas/ petroleum pipeline(s).

d. For crossing length exceeding 30m, NHAI to provide rectangular vent of minimum size, 3ft x 3ft in the RCC portal structure.

e. NHAI will extend all possible support to IOCL during any exigency in IOCL's gas/ petroleum pipeline(s).

f. Wherever, the alignment of an existing National Highway ("NH") crosses an already laid gas/ petroleum pipeline(s) (i.e., pipeline(s) laid after declaration of said National Highway vide relevant Notification), NHAI will allow IOCL to either shift or take suitable measures to protect its pipeline(s) at IOCL's cost within mutually agreed period of time upon receipt of notice from NHAI, if such pipeline obstructs the upgradation of the National Highway(s).

2. In respect of laying of new gas/ petroleum pipeline(s):

a. NHAI will issue NOC to IOCL for laying gas/ petroleum pipeline(s) along and across National Highways in National Highways land (Right of Way) in 60 days period from the date of formal application by IOCL. Beyond this period of 60 days, it is understood by both the parties that the NOC stands issued.

b. NHAI shall not levy any charges from IOCL and its agencies for laying new gas/ petroleum pipeline(s) along or across National Highways in National Highways Right of Way.

c. NHAI will obtain Performance Security from IOCL before issuance of permission for laying gas/ petroleum pipeline(s) along and across National Highways in National Highways land (Right of Way).

d. NHAI will extend all possible support during any exigency in IOCL's gas/ petroleum pipeline(s) at crossing location of NHAI to IOCL.

IV. OBLIGATIONS, DUTIES AND UNDERTAKINGS OF IOCL

1. In respect of already laid gas/ petroleum pipeline(s):

a. Wherever, the alignment of a National Highway ("NH") crosses an already laid gas/

petroleum pipeline(s) (i.e., pipeline(s) existing prior to declaration of said National Highway vide relevant Notification), IOCL will allow NHAI to either construct portal structures over the existing pipeline (as per **Annexure-A**) or cause shifting of such operating pipeline(s) at NHAI's cost under supervision of IOCL.

b. Wherever, the alignment of an existing National Highway ("NH") crosses an already laid gas/ petroleum pipeline(s) (i.e., pipeline(s) laid after declaration of said National Highway vide relevant Notification), IOCL to either shift or take suitable measures to protect its pipeline(s) at IOCL's cost within mutually agreed time period upon receipt of notice by NHAI, if such pipeline obstructs the upgradation of the National Highway(s).

c. IOCL will not levy any charges on NHAI for constructing National Highways over their already laid gas/ petroleum pipeline(s).

d. IOCL will obtain Insurance Cover from NHAI before allowing construction of National Highways over their already laid gas/ petroleum pipeline(s).

e. IOCL will issue NOC to NHAI whenever under construction National Highway crosses over an already laid gas/ petroleum pipeline(s) (i.e. pipeline(s) existing prior to declaration of said National Highway vide Notification) in 60 days period from the date of formal application by NHAI. Beyond this period of 60 days, it is understood by both the parties that the NOC stands issued.

f. IOCL will extend all possible support during any exigency in NHAI's National Highways in National Highways Right of Way at crossing location of IOCL to NHAI.

2. In respect of laying of new gas/ petroleum pipeline(s):

a. IOCL, while laying gas / petroleum pipeline(s) across already constructed National Highways, will adopt Trenchless method throughout National Highways land (Right of Way) with the depth of topmost point of pipeline being at-least 1.5m below ground level/ bottom of any National Highway structure/ facility.

b. IOCL shall bear all cost for laying of new pipeline along or across existing NH land (Right of Way).

c. IOCL will try to maximize the crossing angle i.e., near to 90 Deg to NHAI's National Highways in National Highways Right of Way.

d. IOCL will inform NHAI regarding crossing of IOCL's pipeline to National Highways during the land acquisition stage to expedite the crossing related formalities.

e. IOCL will extend all possible support during any exigency in NHAI's National Highways in National Highways Right of Way at crossing location of IOCL to NHAI.

V. DEFINITIVE AGREEMENT:

1. The Parties may enter into separate agreement(s) in terms of this MoU on specific work association of the parties for crossing permissions and shall identify inter alia the methodology of crossing, division of their individual scope of work, division of responsibilities and respective liabilities, expenses etc.

2. Such definitive agreements would be binding on the parties and would be entered into generally as per the understanding contained in this MoU, upon approval by competent authorities of the parties.

3. In case of any contradiction/ discrepancy in any of the clauses of MoU and the definitive agreement(s), the definitive agreement shall prevail. However, clauses of the definitive crossing agreement (s) to be made in line with this MoU conditions for both the parties.

VI. NON-EXCLUSIVITY:

The understanding between the Parties under this MoU shall be initially on non-exclusive basis. However, the understanding shall be on exclusive basis contingent upon parties entering into definitive agreement as stipulated above.

VII. BINDING UNDERSTANDING:

1. The Parties undertake to act in good faith with respect to each other's rights and obligations under the objectives of this MoU,

2. The Parties recognize the impracticality of providing for every contingency, which may arise during or after the expiry of the MoU and hereby agree to operate fairly and without detriment to the interests of either of them,
3. Subject to any definitive agreements entered into, this MoU is binding in nature, and is a definite expression and record of the purpose and intention of the Parties concerned.

VIII. TRANSFER AND ASSIGNMENT

1. None of the Parties shall assign or transfer this MoU or any of its respective rights or obligations hereunder, to any other third party without the prior written consent of the other.
2. This consent requirement shall not apply in the event that a Party shall change its corporate name.

IX. DISPUTE RESOLUTION AND GOVERNING LAW:

1. This MoU will be construed and governed by the laws of India.
2. Any dispute arising out of this MoU shall be amicably resolved in first instance, through discussions in good faith with a view to expeditiously resolve such differences or disputes in a spirit of mutual understanding and cooperation.
3. In the event of any dispute or difference relating to the interpretation and application of the provisions of this agreement, such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE (GM)/FTS-1835 dated 22.05.2018 issued by Ministry of Heavy Industries and Public Enterprises.

X. DURATION AND TERMINATION OF THIS MOU:

1. This MoU shall enter into force on the Effective Date.
2. This MoU shall remain in force for a period of three (3) years from the Effective Date (i.e. the date on which this MoU is signed).
3. The Parties may elect to extend the period of this MoU for an additional period of time or multiple periods of time as may be mutually agreed upon by the Parties in writing.
4. Each party has a right to terminate the MoU at any time during the validity of this MoU,

in writing, with at least one (1) month notice of such intention to the other party. However, the termination of this MoU shall not affect the actions that may have been formalized during its operation.

XI. CONFIDENTIALITY

1. The Parties hereto agree that they will not at any time during the Term of this MoU, without the prior written consent of the other Party, disclose the existence of, or the terms and conditions set forth in this MoU unless otherwise required by law or regulation.
2. Only those individuals and representatives of the Parties, and their respective legal and financial advisors, with a need to know and for the sole basis of advising the respective Parties concerning the transactions contemplated hereby, shall be permitted to receive knowledge of the information contained herein.

XII. AMENDMENT

1. This MoU may be amended in writing by mutual agreement between the Parties.
2. Any such amendment shall enter into force from the date agreed to by the Parties.

XIII. NOTICES

1. Notices in connection with this MOU must:
   a) Be in writing, in the English language.
   b) All notices or other information required or deemed necessary to be given to:
      i. **For NHAI:**

      Name: Chairperson, NHAI

      Address: NHAI 2nd Office Building, G-3, Sector-10, Dwarka, New Delhi-110075

      Email Id: chairman@nhai.org, chairperson@nhai.org

ii. For IOCL

Name: Executive Director (Operations), PLHO

Address: Indian Oil Bhavan, A-1, Udyog Marg, Sector 1, Noida (UP)-201301

Email Id: edoplho@indianoil.in

c) Notices shall be delivered by courier or hand or sent by email to the respective addresses and email which are specified above or if the addressee specifies another address or email, in writing, then to that address or email.

XIV. COUNTER PARTS

This MoU shall be executed in two counterparts. Both Parties shall each have one counterpart of this MoU. Both counterparts shall constitute one and the same MoU.

In witness whereof, the undersigned being duly authorized thereto, by their respective parties, have signed this MoU.

Signed at **NHAI, G-3, Sector 10, Dwarka, New Delhi** on **8th June 2022** in two originals text in English language.

Signature.....

Signed by: **Udeep K Singhal**
General Manager (Tech.) &
Regional Officer, Delhi

For and on behalf of;
National Highway Authority of India

Signature.....

Signed by: **Rajesh Gupta**
Executive Director (Const.)
PLHO, Noida

For and on behalf of;
Indian Oil Corporation Limited

Witnesses:

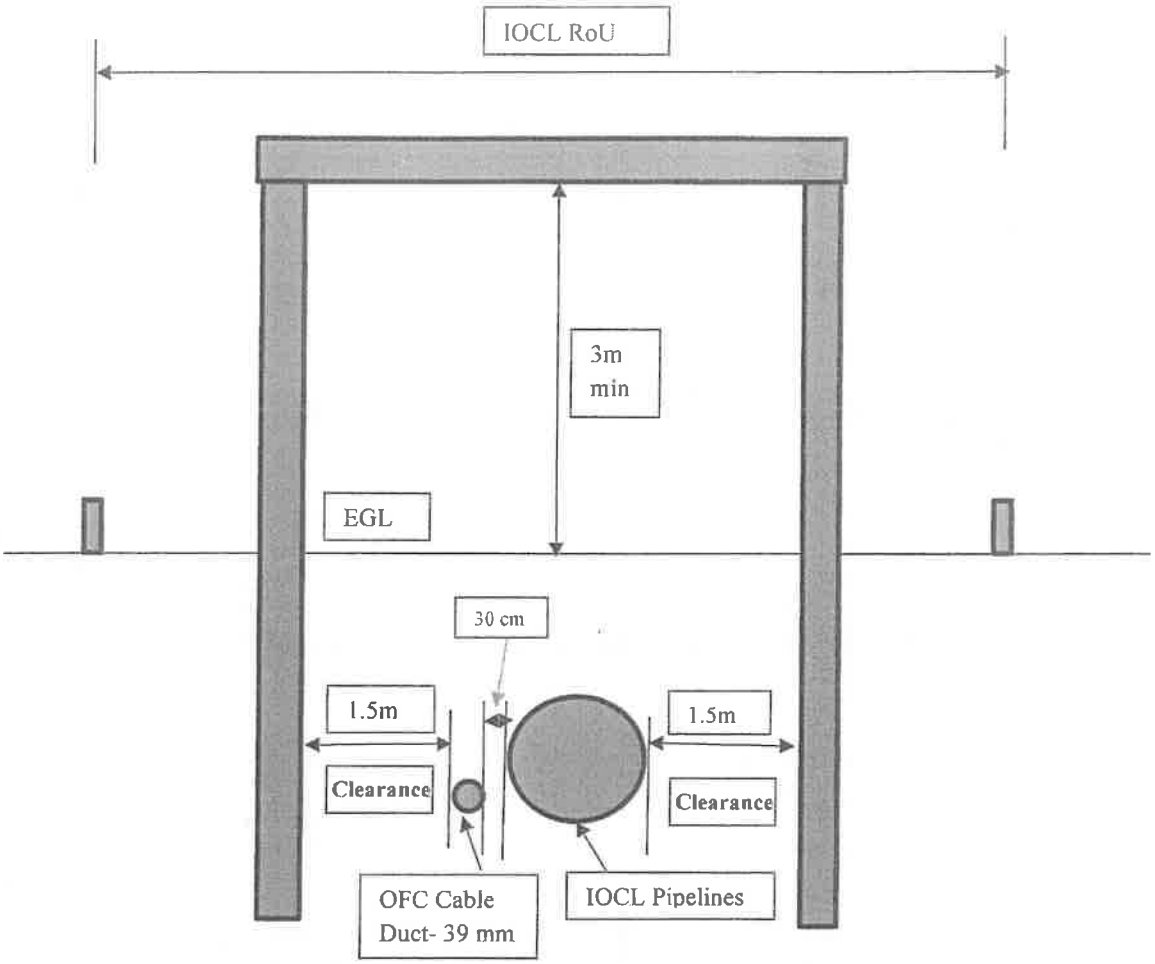
Signature.....

Signed by ...Manoj Kumar
Member (P)
NHAI

Signature.....

Signed by ...S. S. Sawant
ED (operations)
PLHO, Noida

Annexure A



PROPOSED RCC PORTAL STRUCTURE ACROSS IOCL'S ROU

Note:

i. EGL- Existing Ground Level

ii. Clearance of minimum 1.5 meter to be kept from outside edges of Pipeline and OFC as shown above

iii. In case of multiple pipelines in the same ROU, single portal or more than one portal as per site condition can be built with minimum distance of 1.5-meter from outside edges of Pipeline and OFC as shown above

LICENCE FEE & BG ESTIMATE		
Name of the Work: Estimate towards License Fee for laying of 8.625" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 682 and 700 (From 682/980 km to 699/500 Km) and from Km 713.530 to 713.384 & also crossing at Km 713.384.through HDD methodology in visakhapatnam,Visakhapatnam District, Andhra Pradesh State.		
Estimate -A		
Performace Bank Guarantee Amount Calculation		
Amount of performance Guarantee to be submitted : Length in Mtr Rs. 100/ met as per point No. 6 MORTH guide line vide letter No. RS/ NH/ 33044/29/2015/S&R(R), Dated. 22.11.2016.	16726 mt x Rs.100/met = 16,72,600/-	16,72,600/-
Sixteen Lakh Seventy Two Thousand Six Hundred only/-		
For licence fee as per MoU between NHAI & IOCL dt:07.06.2022 11:13 AM point no 02.b.NHAI shall not levy any charges from IOCL and its agencies for laying new gas petroleum pipeline(s) along or across National Highways in National Highways Right of Way.		

DGM (T)

[P. Siva Sankar]
G.M (T) & Project Diretor