

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार) National Highways Authority of India (Ministry of Road Transport & Highways, Govt. of India) परियोजना कार्यान्वयन इकाई, गाजियाबाद Project Implementation Unit, Ghaziabad

टेलीफोन : +91 9560963936 ई-मेल : gha@nhai.org E-mail nh24ghaziabad@gmail.com वेबसाइट Website :www.nhai.gov.in



सी डब्ल्यू जी फ्लाईओवर के नीचे, कि. मी. 2+000 एन एच - 9, (पुराना एन एच-24), अक्षरपाम मंदिर के निकट, दिल्ली-110092 Under CWG Flyover, at Km. 2+000 of NH-9 (Old NH-24), Near Akshardham Temple, Delhi-110092

NHAI/PIU-GZB/DME-IV/12029/NOC/IGL/2023/E- 3770

Dated: 15.12.2023

To,

The Senior Technical Director, National Informatics Centre, Ministry of Road Transport & Highways, Transport Bhavan, 1, Parliament Street, New Delhi- 110001.

Sub.: Design and construction of Delhi-Meerut Expressway from Dasna to Meerut-Km. 27.740 of NH-24 to Km. 51.975 of NH-58 (Design Chainage Km. 28+000 to 59+777) in the State of Uttar Pradesh-Reg.: NOC case for laying of Gas Pipe Line of "M/s. Indraprastha Gas Limited (IGL)" (4"Dia Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi-Meerut Expressway (NE3) (Dasna to Meerut Road), in the state of Uttar Pradesh.

Ref:

- (i) M/s IGL letter no. IGL/PNG/STEEL/Projects/NHAI/NOC/2022-23/01 dated 20.02.2023.
- (ii) Gazette Notification S.O.No. 3292 (E) dated 16.09.2019

Sir,

MoRT&H has transferred the power of NOC for access permission to NHAI, as per Gazette Notification S.O.No. 3292 (E) dated 16.09.2019.

2. Now, this office would like to invite public objections for 30 days from the date of uploading in the portal, as per the MoRT&H Circular no RW/NH-33044/29/2015/S&R (R) dated 22.11.2016 & NH-36094/01/2022-S&R(P&B) dated 17.04.2023. This issue with approval of Competent Authority.

3. It is requested to upload the subject proposal in the MoRT&H website. If any objection received, may be communicated to the below mentioned address.

The Project Director, Project Implementation Unit-Ghaziabad, National Highways Authority of India (NHAI), Under CWG Flyover, at Km. 2+000 of NH-9 (Old NH-24), Near Akshardham Temple, Delhi-110092 Email: - gha@nhai.org, nh24ghaziabad@gmail.com

Yours faithfully,

Encl: As Above

(Arvind Kumar) **Project Director**

Copy for information & necessary action to: (i) Web-admin, NHAI - to upload on NHAI web site. (ii) RO-Delhi, NHAI HQ, New Delhi.





G R INFRAPROJECTS LIMITED

(Formerly known as G.R. Agarwal Builders and Developers Limited)

CIN: L45201GJ1995PLC098652

Ref. No: GRIL/EPC/DA-ME/2023/3879

Date:25.07.2023

To, The Project Director (NHAI), Project Implementation Unit-Ghaziabad, National Highways Authority of India (NHAI) Under CWG Flyover, at KM 2+000 of NH-9 (Old NH-24), Near Akshardham Temple, Delhi-110092

Subject: Design and Construction of Delhi-Meerut Expressway from Dasna to Meerut Km 27.740 of NH-24 to Km 51.975 of NH-58 (Design Chainage 28.000 to 59.777) in the state of Uttar Pradesh on EPC Basis. – Regarding NOC for laying of GAS Pipeline of M/s Indraprastha Gas Limited (IGL) (4 Carbo Steel Pipe) from Km.33+000 RHS to Km 36.235 RHS (Length 3235m) and one Crossing at Km.36.235 (Length 90.0m) (Total Length 3325) along Delhi-Meerut Expressway (NE-3) (Dasna to Meerut Road) in the state of Utter Pradesh.

Ref:

- 1. Authority's letter no. NHAI/PIU-GZB/DME-IV/12029/NOC/IGL/2022/E-578 dated 23.02.2023.
- 2. M/s Indraprastha Gas Limited (IGL)·letter no. 01 dated 20.02.2023.

Dear Sir,

Authority vide letter under reference (1) has forwarded the letter of M/s IGL dated 20.02.2023 and requested the Contractor to examine the site and submit the comments.

In this regard, the Contractor would like to inform that few damages are occurred at Ch. 33+000 to 36+235 RHS during laying of gas pipeline. The Authority may give necessary directions to M/s IGL to rectify the damages. However, Authority may take decision for providing NOC to M/s IGL regarding the subject matter.

Thanking you

Yours faithfully For G R Infra Projects Limited



Copy To: - The Team Leader, M/s. Centra de Estudios de Materiales Y Control de Obra, SA in association with Vaishnavi Infratech Service Pvt. Ltd. Khasra no.93-M, Plot no-24 Sadikpur Urf Kazipura Pargana-Dasna, Ghaziabad, Uttar Pradesh. 201009

CORPORATE OFFICE :

2nd Floor, Novus Tower Plot No. 18, Sector-18 Gurugram, Haryana-122015, India Ph.: +91-124-6435000

HEAD OFFICE :

GR House, Hiran Magri, Sector-11 Udaipur, Rajasthan-313002, India Ph.: +91-294-2487370, 2483033

REGISTERED OFFICE

Revenue Block No. 223 Old Survey No. 384/1, 384/2, Paiki and 384/3, Khata No. 464, Kochariya Ahmedabad, Gujarat-382220, India





In association with

PROJECT OFFICE

H/o, Shri Balbir Singh, Flat No. B-602, Ansal Tanushree Apartment,



daka 12/4/22

CENTRO DE ESTUDIOS DE MATERIALS Y CONTROL DE OBRA, SA (CEMOSA) 502, DDA 5, District Centre, Janakpuri, New Delhi-110058 Tel.: 011-47503189, Fax: 011-45523676 E- mail: arshadali@cemosa.com

Behind Indian Oil Petrol Pump. NH-24, Ghzlabad: 201002

E-mail: cemosa.vispl.dasna@gmail.com

VAISHNAVI INFRATECH SERVICES PVT. LTD. Apex Square, 3rd Floor, Plot No - 11, Pocket-B3, Sector-17, Dwarka, New Delhl: 110 078 (India) Telefax: 011-49038999 E- mail: info@valshnaviinfratech.com

Date 17.03.2023

AE/DME/DASNA/2022/867

To, The Project Director. National Highways Authority of India, PIU-Ghaziabad, Under CWG Flyover, at Km. 2+000 of NH-09, Near Akshardham Temple, Delhi.

Subject: - Design and Construction of Delhi-Meerut Expressway from Dasna to Meerut- Km 27.740 of NH-24 to Km 51.975 of NH-58 (Design Chainage Km 28+000 to Km 59+777) in the State of Uttar Pradesh: Reg; NOC for laying of GAS pipe line of M/s Indraprastha Gas Limited (IGL)(4 carbo steel pipe) from km . 33+000 RHS to km. 36+235 RHS (Length 3235m) and one Crossing at Km. 36+235 (Length 90.0m), (Total ;length 3325) along Delhi-Meerut Expressway (NE3) (Dasna to Meerut Road) in the state of Uttar Pradesh.

Ref 1. NHAI/PIU-GZB/DME-IV/12029/NOC/IGL/2022/E-578 Dated 23.02.2023 2. M/S. IGL Letter no. 01 dated 20.02.2023

Dear Sir,

This is with respect to above cited Ref-1, vide which it was requested to examine the NOC proposal for laying of GAS pipeline of M/s Indraprastha Gas Limited (IGL) (4" carbon steel pipe)) from km . 33+000 RHS to km. 36+235 RHS (Length 3235m) and one Crossing at Km. 36+235 (Length 90.0m), (Total; length 3325) and asked for comments regarding the above subject.

In this regard this office has examined the IGL proposal and comments/observations of the proposal are as under:

- 1. The work methodology (Both Open Trenching & HDD) that has been submitted by M/s Indraprastha Gas Limited as per ministry circular no-RW/NH 330044/29/2015/S&R(R) Dated 22/11/2016 is found ok.
- 2. Further the NOC may be given with the condition that" Agency should strictly follow the guidelines of MORT&H/ NHAI while Executing.
- 3. However during execution of gas pipeline if any damages are found at site then the cost will be recovered from the agency.

Thanking you and assuring you of our best services; as always.

Yours Sincerely

For, Centro de Estudios De Materials Y Controls De Obra, SA, In with Association with M/S Vaishnavi Infratech Services Pvt. Ltd.

(S. B. Sharma) **Acting Team Leader**

Encl: As Above Copy to: EPC Contractor M/s. GR Infraprojects Ltd (for information).

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भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार) National Highways Authority of India (Ministry of Road Transport & Highways, Govt. of India) परियोजना कार्यान्वयन इकाई, गाज़ियाबाद Project Implementation Unit, Ghaziabad

टेलीफोन +919560963936 ई-मेल ; gha@nhai.org nh24ghaziabad@gmail.com E-mail

वेबसाइट Website : www.nhai.gov.in



सी डब्ल्यू जी फ्लाईओवर के नीचे, कि. मी. 2+000 एन एच–9, (पुराना एन एच–24), अक्षरधाम मंदिर के निकट , दिल्ली–110092 Under CWG Flyover, at Km. 2+000 of NH-9 (Old NH-24), Near Akshardham Temple, Delhi-110092

NHAI/PIU-GZB/DME-IV/12029/NOC/IGL/2022/E-578

Dated: 23.02.2023

To,

M/s Centra de Estudios de Materiales y Control de Obra, SA in association with Vaishnavi infratech Services Pvt. Ltd. B-602, Ansal Tanushri Apartment, Behind	M/s G.R. Infraprojects Ltd. Dasna - Meerut Expressway ProjectKm. 10 of ODR 148 W Modinagar-Hapur Road, Village Bhojpur, Tehsil- Modinagar, Ghaziabad (U.P.).
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Design and Construction of Delhi - Meerut Expressway from Dasna - Meerut km. 27.740 Sub: of NH-24 to Km. 51.975 of NH-58 (Design Chainage 28.000 to 59.777) in the state of Uttar Pradesh - Reg.: NOC for laying of GAS Pipe line of M/s Indraprastha Gas Limited (IGL) (4 Carbo Steel Pipe) from km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total length 3325) along Delhi-Meerut Expressway (NE3) (Dasna to Meerut Road) in the state of Uttar Pradesh.

Ref.: M/s. IGL letter no. 01 dated 20.2.2023

Sir.

This is in reference to M/s. IGL letter no. 01 dated 20.2.2023 (copy enclosed), regarding the above-mentioned subject, which is self explanatory.

It is requested to examine the same as per the MoRT&H /NHAI guidelines and 2. submit your comments at the earliest.

Yours faithfully,

(Arvind Kumar) **Project Director**

Encl: As above.



INDRAPRASTHA GAS LIMITED

(A Joint Venture of GAIL, BPCL & Govt. of NCT Delhi)

IGL/PNG/STEEL/Projects/NHAI/NOC/2022-23/01 To, The Project Director NHAI, PIU Ghaziabad Ghaziabad

Subject: - NOC case for Laying of Gas Pipe Line of M/s Indraprastha Gas Limited (IGL)" (4"ø Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi – Meerut Expressway (NE3), (Dasna to Meerut Road) in the state of Uttar Pradesh.

Respected Sir,

Our Company laying of Gas Pipeline of "M/s Indraprastha Gas Limited (IGL)" (4"ø carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi – Meerut Expressway (NE3), (Dasna to Meerut Road) in the state of Uttar Pradesh.

For the same we are attaching the following documents: -

- 1. Check List
- 2. License agreement as per MORT&H format.
- 3. Necessary Undertakings.
- 4. Route Map.

We are requesting you please provide us the desire NOC from the competent authority as soon as earlier.

Thanking You, Your Faithfully,

Satendra Kumar Pal HOD (Projects) M/s Indraprastha Gas Limited (IGL) New Delhi

> IGL Bhawan, Plot No. 4, Community Centre, Sector-9, R.K. Puram, New Delhi-110 022 Tel. : 46074607 Fax : 26171863 Website : www.iglonline.net CIN : L23201DL1998PLC097614 An ISO 9001 : 2015, ISO 14001: 2015, OHSAS 45001 : 2018 Certified Organisation

CHECK-LIST

Guidelines for processing the proposal for laying of utility line in the land across National Highways vested with NHAI/PWD/BRO.

Ministry circular No-RW/NH 330044/29/2015/S&R(R) Dated 22/11/2016.

Sr. No.	Item	Information/ Status	Remarks
	General Information		
1	Name and Address of the Applicant/Agency	"M/s Indraprastha Gas Limited (IGL)" Regd. Office: - IGL Bhawan, Plot no. 4, Community Center, R K Puram, Sector 9, New Delhi - 110022	
2	National Highway Number	Delhi - Meerut Expressway (NE3)	
3	State	Uttar Pradesh	
4	Location	Dasna to Meerut Road	
5	Chainage in Km.	from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m) (Total Length 3325m)	
6	Length in m	Total Length 3325m	
7	Width of available ROW in both side	45.0m and 45.0m	
3	Side of NH (left or right side of NH towards increasing change/Km direction)	RHS	
	Name of Highways Authority of NHAI/PWD/BRO	ŅHAI	
0	Highway Administration Address	The CGM (Tech.)/Regional Officer, National Highway Authority of India, Regional Office, 3/248, Vishal Khand, Gomti Nagar, Lucknow- 226010	

COMMUNITY CELLIN DELINITIOUZZ

Sr. No.	Item	Measurement observation as per site condition	MORT&H Norms	Whether complying with MORT&H Norms
1	Details of already laid utility service in any	No	Enclosed	Yes
2	Whether up gradation of the stretch in near future is proposed or not	No		Yes
	(a). If yes, provision of utility adversely affects the plan of up - gradation	N/A	affect the plan of up- gradation	Yes
3	Laying of the utility service along the National Details of already laid utility service, if any Highways.	No		Yes
3.1	Location of proposed utility service along the stretch	from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m) (Total Length 3325m) extreme edge Open	Utility duct / beyond the toe line of the embankment and drains, enclose to the extreme edge of the ROW	
	n 2	trench/ HDD method pit will be done outside of ROW of Delhi - Meerut Expressway (NE3)		
3.2	Depth of the utility service from Ground level	1.50m (Min.)	0.6m	Yes
3.3	Mechanism for crossing for water channel	HDD method	Through utility duct (if provision exist) or beneath the bed of water channel	Yes
3.4	Whether ROW is restricted in the stretch?	No		Yes
.4.1	If yes, whether provision of land acquisition is required to lay utility	No	×.	Yes
	(a). If yes, whether undertaking for land acquisition along with relevant L.A detail has been furnished	No		Yes
4.2	With if concrete duct, if utility services are proposed to be laid in concrete ducts	N/A	Not less than one lane	Yes

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4	Laying of utility Services across the NH			
4.1	Whether existing drainage structures is allowed to carry the utility lines.	No	Not to be allowed	Yes
4.2	Proposed crossing of utility services	Yes	Perpendicular to NPH	Yes
4.3	Type of casing pipe/conduit carrying the utility line	4"ø Carbon Steel Pipe	Steel, cast iron, or RCC and have adequate strength	Yes
4.4	Whether ends of the casing /conduit pipe are sealed from the outside	Sealed	Sealed	Yes
4.5	Length of crossing /conduit pipe crossing NH.	Yes (90.0m)	Extend from drain to drain in cuts and toe to toe of slope in the fills	Yes
4.6	Depth of top of the casing /conduit pipe.	1.50m	At least 1.2m below the top of subgrade	Yes
1.7	Crossing method in case of CC pavement	HDD Method	Only open trench method	Yes
.8	Horizontal and vertical clearances in case utilities are allowed overhead	Yes (Carbon Steel Pipe)	In accordance with IRC codes.	Yes
5	Document / drawing enclosed with the proposal	Yes Enclosed		
.1	Cross section showing in the size of trench for open trenching method	N/A	Enclosed, if applicable	Yes
	(a). Trench width	N/A	More than 30 cm and less than 60 cm wider than the outer diameters of the utility pipe	Yes
	(b). Filling of trench	N/A	As per Ministry circular No-RW/NH 30044/29/2015/S&R(R) Dated 22/11/2016.	Yes
	(c). Location of trench	N/A	Extreme edge of the ROW	Yes
	Cross section showing the size of pit and location of conduit for HDD method	Yes	Enclosed, if applicable	Yes

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5.3	Strip plan / Route plan	Yes Enclosed	Enclosed	Vee
	showing utility line, Chainage, width of ROW, distance of proposed utility from the edge of ROW, important mile stone, intersection, cross drainage works etc.			Yes
5.4	Plan and profile drawing of stretch showing cross section of road at 20m distance along with ROW and proposed utility		Enclosed	Yes
6	Methodology for laying of utility line	Yes enclosed	Enclosed	Yes
7	Draft license agreement is as per Ministry circular No- RW/NH30044/29/2015/S&R(R) Dated 22/11/2016 and signed by two witnesses	Yes enclosed	Enclosed	Yes
8	License fee in favor of NHAI in Bharat Kosh portal on-line.	Yes (to be deproved of the approved	As per Ministry circular No- RW/NH330044/29/201 5/S&R(R) Dated 22/11/2016.	Yes
9	Whether bank guarantee has been obtained	Yes departed		Yes
	a. If yes, whether confirmation of BG has been obtained as per MORT&H / NHAI guidelines	Shall be submit as asked by Competent Authority.		Yes
10	Affidavit / Undertaking from Applicant for			
10.1	Undertaking for not to damage other existing utility, if damaged then to pay the losses to either to MORT&H / NHAI or to the concerned agency.	Enclosed	Enclosed	Yes
10.2	Undertaking for renewal of bank guarantees and when asked by NHAI/MORT&H	Enclosed	Enclosed	Yes
0.3	Undertaking for conforming all standard condition of MORT&H/NHAI guidelines.	Enclosed	Enclosed	Yes
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10.4	Undertaking for shifting of utility as and when asked by MORT&H /NHAI within a month at their own cost	Enclosed	Enclosed	Yes
10.5	Undertaking for indemnity against all damages and claims.	Enclosed	Enclosed	Yes
10.6	Undertaking for management of traffic movement during laying of utility line without hampering the traffic.	Enclosed	Enclosed	Yes
10.7	Undertaking that if any claim is raised by the concessionaire/ contractor then the same has to be paid by the applicant	Enclosed	Enclosed	Yes
	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 state / central pollution control board and any other statutory clearances applicable before applying to	Enclosed	Enclosed	Yes

The ROW of the National Highway available at the proposed location from the centre line of divided carriageways is [45.0m and 45.0m] from centre of ROW towards proposed utility section.

The above particular along with the drawing and documents has been verified and certified as correct as per prevailing site conditions.

National Highways Authority of India Name designation & Signature of the UMAR PANear Akshardham Temple, Delhi-110092

Authorized representative of applicants class climite concerned field authority of NHAI/PWD/BRO INTERNAL Nº, PLOTINO, 4, E SECTOR-9, R.K. PURAM NEW DELHI-110 022

Project Name	Laying of Natural Gas 8" Ø Carbon Steel Pipe line from Km.70+000 to Km. 90+000
	(19000m) by HDD/ Open Trench method along Kuchesar Road chopla, Shikheda,
	Simbhaoli, Buxar, Saroorpur, Badarkha, NH Toll Plaza (Old NH-24), at District- Hapur
	in the State of Uttar Pradesh.
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Job Procedure for <u>BACKFILIING</u>

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Project Name	Laying of Natural Gas 8" Ø Carbon Steel Pipe line from Km.70+000 to Km. 90+000
	(19000m) by HDD/ Open Trench method along Kuchesar Road chopla, Shikheda,
	Simbhaoli, Buxar, Saroorpur, Badarkha, NH Toll Plaza (Old NH-24), at District-Hapur
	in the State of Uttar Pradesh.

1. Purpose & Scope:

- The purpose of this procedure is to prepare the sequential system control on backfilling activity to achieve the desired product. This procedure covers the work method for backfilling with suitable excavated / borrowed earth.

2. Equipment's & Man Power:

- Manual (By Labor) & JCB
- Supervisor As Per Requirement

3. Method:

- Before backfilling the trench, It shall be assured by contractor that all the required work has been completed like Catholics Protection, anchoring, ballast, concrete slab, warning Mat etc.
- Backfilling shall be started after the measurements related to positions of the pipe ,covering of the pipe line ,location of weld joint ,concrete slab , anchoring ,ballast , connections of temporary cables ,cable & connection boxes of the potential measuring points etc.
- Determination of angles and positions of each change of direction have to be completed & the results communicated to IGL.
- In rocky areas, the trench bottom shall have a soft soil/clean graded earth padding of 200 mm. after installation of pipeline, soft soil padding shall be placed around and on top of

The pipe so that thickness compacted padding on top of pipe corrosion coating shall be at least 200 mm. Rock shields are to be used for backfilling in rocky areas.

- The trench in normal soil shall be backfilled to 200 mm above the pipe with soft soil and for trench in rock shall be backfilled to 200 mm above the pipe with sand or soft soil. The soft soil must be free of all hard objects such as stones, gravels, lumps of hard soil & material which damages coating & pipe.
- Different layers (mainly the upper 300 mm and the rest till the trench bottom) shall be backfilled as they were excavated sequentially. The drop height of the filling soil must

Project NameLaying of Natural Gas 8" Ø Carbon Steel Pipe line from Km.70+000 to Km. 90+000
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in the State of Uttar Pradesh.

be limited to the absolute minimum. Filling with soft soil shall be applicable for rocky flat terrain. The upper part of backfilling shall be performed with the help of Dozer or Grader. Each layer must be tamped down to avoid hollow spaces, which might later lay to subsidence. The top arable soil of 300 mm shall be put at the original height and free from all foreign objects, weeds etc.

- Backfilling shall be performed in a manner to provide firm support under the pipe.
- When the Road, Rail, and water crossings are done by open cut trench method, backfill shall be carried out by sand or suitable material and as approved by owner & concerned local authority. In certain cases (such as Road, Rail & water crossings) backfilling shall be carried out in layers by compacting, moistening or ramming the backfilled material and as advised by the owner or concerned local authority.
- In slope areas, breakers shall be installed as per standard drawings in the trench to prevent the erosion of the backfill (slope 10% and more). Breakers shall be constructed of grout bags filled with a mixture of 4:1 sand: Portland cement.
- Backfilling in trenches for pipes / drains shall be commenced after inspection of pipe laying / tie-in welding / drains is completed. Back filling of trenches for pipes / drains
- Shall be carried out up to top level with suitable material not having boulders / stone / hard lump soil.
- The concrete slabs shall be provided during the backfilling at high-tension transmission line crossings (11KV line and above).
- Warning tape shall be laid on the backfill. It will throughout entire pipeline section after completion of post padding
- If any drainage system present in pipe line route, same shall be restored before back filling.

Project Name	Laying of Natural Gas 8" Ø Carbon Steel Pipe line from Km.70+000 to Km. 90+000
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	in the State of Uttar Pradesh.

IGL shall ensure that before back filling, protection shall be provided to pipe line, concrete coating, bank protection etc.

3.0 HEALTH, SAFETY & ENVIRONMENT

- Machine operator involved shall be an experienced person.
- PPE shall be used in this activity.
- Only trained operators to be deployed for this activity.
- Personnel around the machine (if any) should be cautious about overhead falling objects.
- During the movement of earth moving equipment the operator should blow horn to caution the people around.
- All Measuring & Test Equipment used shall be well maintained.
- Excavated Area should be barricaded.
- Provide ladders wherever possible for better approach to the working area if Depth is > 1Mtr.
- Shoring all around the pit shall be checked prior to start of excavation and if required adequate amount of shoring to be done.
- Minimum persons should go in to the pit.
- Only certified and validated tools & tackles to be used.
- Underground pipe to be located by pipe locators prior to start of Trenching.
- First aid box to be maintained at site.
- Emergency contact number to be installed on site.



Project Name	Laying of Natural Gas 8" Ø Carbon Steel Pipe line from Km.70+000 to Km. 90+000
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	the State of Uttar Pradesh.
	the State of Uttar Pradesh.

Job Procedure for HORIZONTAL DRIECTIONAL DRILLING (HDD)

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	the State of Uttar Pradesh.

1.0 SCOPE:

This procedure covers the minimum requirements of various activities to be carried out for the Engineering and construction of pipeline crossing using Horizontal Directional Drilling along the route of 8" & 4"NB Carbon Steel Gas Pipeline along with NH-09.

2.0 EQUIEPMENT & MAN POWER

- HDD Machine & Silicon Roller
- Hydra
- Holiday Crew
- Supervisor
- Holiday Machine
- Welding Machine
- Grinding Machine
- Welding Crew

3.0 METHOD

Pre Construction Survey

IGL will carry out a pre construction survey along the width of the crossing and prepare a construction drawing accordingly. During pre-construction survey existing underground facilities if any will be located and protected.

After completion of Pre-construction survey a detailed drawing & Design calculation will be prepared with all relevant data such as elevation, levels etc. and will submitted to IGL for approval.

Design & Engineering

Based on site conditions, survey drawing, equipment & installation technique the limits of each crossing will be determined. The minimum cover of the pipeline after crossing will be maintained as per approved drawings.

If any underground facilities like pipeline, cable etc. are encountered during survey, the same will be crossed with a minimum clearance of 500 mm from the buried utilities or as required by authorities having jurisdiction. The entry & exit point of the section will be fixed on ground level as per approved drawings. Calculation for determining the maximum permissible overburden on pipe to check that the empty pipeline is safe from collapse at any points in the drilled crossing section will be submitted to IGL for approval. Calculation will be made to determine the stresses & power requirements considering following facts



Project NameLaying of Natural Gas 8" Ø Carbon Steel Pipe line from Km.70+000 to Km. 90+000
(19000m) by HDD/ Open Trench method along Kuchesar Road chopla, Shikheda,
Simbhaoli, Buxar, Saroorpur, Badarkha, NH Toll Plaza (Old NH-24), at District- Hapur in
the State of Uttar Pradesh.

- Back reamed diameter.
- Bentonite density
- Pipeline submerged weight in bentonite

Minimum allowable elastic bend radius will be calculated considering the following conditions.

- The maximum longitudinal stress due to tension & bending in the pipeline section will not exceed 90% of SYMS of the pipe material.
- The combined equivalent stress in the pipeline section due to bending & hydro-test will not exceed 90% of SYMS of the pipe material.
- Maximum permissible equivalent stress during service as per the pipeline operating parameters.

Pipeline configuration

Construction drawing will be prepared with levels, profiles, entry angle, exit angle, radius of bend, total length, and maximum tension required on the pull head of the rig etc. and submitted to IGL for approval. All the works will be carried out in accordance with the approved construction drawings only.

Construction

IGL will comply with all the conditions and requirements issued by authorities having jurisdiction in the area where the work is to be performed.

Installation procedure

IGL will submit a detailed installation procedure for approval before commencing any work at site comprising of project organization chart, details of equipment, hydrostatic test procedure, method of installation, calculations, time schedule etc.

String Preparation

Pipe string will be prepared as a single one for pulling. Welding, Radiographic inspection of joints and field joint coating of the string will be done in accordance with the respective applicable procedures.

Pre-Testing

The complete pipe string will be hydrostatically pre-tested as per the approved procedure. All the welds and pipes will be checked for leakage and the failure if any will be rectified and the hydro test will be repeated after rectification.



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	the State of Uttar Pradesh.

After successful completion of pre-hydro testing, the joint coating of the joints will be carried out as per HDD crossing joint coating procedure.

Site Preparation

The centerline of the crossing will be marked and stacked properly.

The HDD machine centerline will be marked with respect to survey.

A pit will be opened for collecting the used betonies slurry & cuttings which will be further connected to the entry point.

Entry & Exit points will be prepared for easy approach and movement of equipment & manpower.

Pipe section will be placed over rubber lined rollers to avoid any coating damages during pulling operation.

HDD Drilling Operation

The Drill Rig will be anchored in position at entry side.

Drilling operation will start with Pilot drilling. During drilling operation, the high-pressure bentonite slurry will be pumped through the drill bit and the drilling is to be carried out continuously equivalent to one length of drill pipe. A new length of drill pipe will be added at the end of each finished drill pipe.

The line of drilling will be monitored using tracker system, the sensing unit fixed at the rear of the steering tool. The sensing unit transmits the location of the drill bit back to the tracking unit on the surface. The information will be conveyed to the driller for the necessary corrective action if any.

Once the drill bit exits at the exit point of the drill hole, the drill bit, steering tools etc. will be detached and reamer will be attached to the drill steering. During the reaming process betonies slurry will be pumped under high-pressure through the reamer. As the reamer is pulled back by the drill rig, drill pipes will be attached continuously behind the reamer for the subsequent reaming and pipe pulling operations. The reaming operation will be repeated to achieve the required size of the hole.

Exit point offset of the pilot hole from the theoretical exit point will be maintained as less than 0.5% of string length.

Length tolerance will be controlled within 1% of crossing length3.

The size of the back reamed hole will be maintained approximately at 1.5 times the pipeline diameter.



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	the State of Uttar Pradesh.

Pulling

A pull head will be welded with the hydro tested pipe section.

The pull head will be connected to the drill rig.

It will be ensured that the pipe section is longer than the drilled hole.

The pipe string is then pulled from the exit point to entry point by using rig.

During pulling, buoyancy of the pipeline will be controlled by suitable method so as to maintain the buoyancy as close as possible to zero during pull back.

Betonies slurry of specified viscosity will be pumped into the hole to prevent hole from collapsing & protect the coating.

Integrity of the corrosion coating

Before pull back operation, meager test will be done for the entire pipeline string made for the crossing. After pull back operation, again meager test will be done for the installed string before tie-in with the mainline. The observed meager value before and after pulling has to be almost same. However, if the integrity of coating cannot be established by the above method, temporary impressed current system will be set up and current density will be calculated to establish the integrity.

Post Hydro-test

After installation, the complete string will be hydrostatically tested for 24 Hrs. (if needed). **Final Clean up**

After completion of HDD operations, the site will be cleared off all balance materials, debris & betonies slurry.

4.0 Health, Safety & Environment:

- Proper barricading has to be done for this work
- PPE is a must in this activity
- Machine operator involved shall be an experienced person.
- It is to be noted that the special care to be adopted against snake / insects bite.
- Only trained rigging personnel to be deployed for this activity.
- All Measuring & Test Equipment used shall be well maintained.
- All lifting devices & Tolls used shall be well maintained

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Job Procedure for <u>TRENCHING</u>

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ļ		in the State of Uttar Pradesh.

1.0 PURPOSE

The purpose of this work instruction is to establish guidelines and requirements to control the trenching activity to be used for laying of 8" & 4" NB Carbon Steel Gas Pipeline along with NH-09.

2.0 SCOPE

This scope covers the Trenching in all type of soil or in rock for pipeline for Construction. It also covers the blasting of trench and removal of scattered rock and debris from ROW.

3.0 EQUIPMENTS & MAN POWER

JCB : As Per Requirement Civil Labour : As Per Requirement Supervisor : 01 Nos.

4.0 METHODOLOGY

As a sequence operation trenching is to start with a reference line marked as the centerline of the trench. Trail Pits shall be prepared wherever required to locate the OFC, Power Cable, existing pipeline crossing or any other obstacles.

If deemed necessary by IGL or concerned authorities where numerous utilities may be encountered, IGL should carry out the excavation normally. The areas identified for existing utilities shall be marked with temporary painted post and uncovering/exposing of same shall be done manually. Use of excavator bucket is not permitted. In case of damage of any existing utilities IGL and concerned authority should be informed immediately without any delay. Rectification for same shall be done by the contractor at his own cost.

For normal soil trench shall be prepared as per detail (typical trench detail in normal soil) as stipulated in standard drawing,

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	in the State of Uttar Pradesh.
	*

Excavation to additional depth may be done if pipeline approaches or crosses other pipelines, sewer, drain pipes, telephone conduits, permission from concerned authority shall be obtained by the contractor removing, shifting of existing utilities like cables, pipelines, poles or pylons etc during excavation. The pipeline is laid at a minimum clearance unless otherwise stated in particular crossing drawing (This clearance shall be at least 0.3m when the pipeline crosses the existing line and 3.0m when they are parallel). Or as per statutory requirement whichever is more stringent shall be followed.

Ditches, sewers, drains and other natural waterways shall be maintained open & functional. Where ever in the execution, work shall be maintained if not possible facility would be provided using temporary pipeline crossings. The trench excavated should have a minimum width as indicated in the job drawing / specifications. The depth of the cover should be measured from the top of the pipe. Corrosion coating to the top of undisturbed surface of the soil or top of rail or top of road whichever is lower. The depth should be sufficient provided maximum coverage is mentioned below.

The trench shall be dug in such a way that is symmetrical in relation to the axis of the channel actually marked out.

Directional changes on the trench floor should tally with the draft longitudinal profile perfectly –both horizontally and vertically – and with changes in pipe direction so that welded pipe sections lie in a continuous and uniform manner along the trench floor.

The depth of the trench will be such as to provide minimum cover from the generetrix of pipe and top of the surface as stipulated below for reference:

i)	Normal surface i.e. Road & Residential Area	-	1.20 meter
ii)	Minor Water Crossings/Canal (Open cut / boring)	-	1.50 meter
iii)	Drainage ditches at Road	-	1.50 meter

Project Name	(19000m) by HDD/ Open Trench	method along Ku	e from Km.70+000 to Km. 90+000 chesar Road Chopla, Shikheda, Plaza (Old NH-24) , at District- Hapur
iv) Rock	y Areas	-	1.00 meter

W/ Rooky Areas	
v) Cased/ Uncased road crossing	- 1.50 meter
vi) Railway Crossing	- 3.5 meter
vii) Other areas	- 1.20 meter
Viii) Major Water crossing/ Canals	- 5 meter (below scour depth)
ix) HDD/ Micro -tunneling	- 2.5 meter (below scour depth)

Prior approval shall be taken for trench profile at special crossings stated above.

In rocky soil, the trench must be excavated with a mechanical trencher fitted with suitable teeth which assured maximum fragmentation of the excavated material. Any Explosive material should not be used. If blasting is required at some hard rocky area, the work will be done as per approved procedure & with prior permission of concerned authority.

If the use of mechanical trencher is unfeasible for technical reasons, excavation is to be carried out with excavator equipped with a bucket/breaker.

Wherever required Dewatering from trench should be carried out with dewatering pumps and drain water should be discharge to nearest Nala /river /canal or in proper location so it should avoid difficulties in local area.

The Trench walls/bottom must be free of hard and protruding points to avoid damaging of the pipeline coating when it is being lowered in.

Pipeline must be laid in the trench without any interruption i.e. the completed section at the time and the activity may be carried out to avoid any accidents.

5.0 HEALTH, SAFETY & ENVIRONMENT

Project Name	Laying of Natural Gas 8" Ø Carbon Steel Pipe line from Km.70+000 to Km. 90+000
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	in the State of Uttar Pradesh.

- Machine operator involved shall be an experienced person.
- PPE shall be used in this activity.
- Only trained operators to be deployed for this activity.
- Personnel around the machine (if any) should be cautious about overhead falling objects.
- During the movement of earth moving equipment the operator should blow horn to caution the people around.
- All Measuring & Test Equipment used shall be well maintained.
- Excavated Area should be barricaded.
- Provide ladders wherever possible for better approach to the working area if Depth is > 1Mtr.
- Shoring all around the pit shall be checked prior to start of excavation and if required adequate amount of shoring to be done.
- Minimum persons should go in to the pit.
- Only certified and validated tools & tackles to be used.
- Underground pipe to be located by pipe locators prior to start of Trenching.
- First aid box to be maintained at site.
- Emergency contact number to be installed on site.

Affidavit	Ó		udicial Stamp overnment	Ó	Date : 13/02/2023
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GRN No	99219467	Depo	onent	Penalty : (Rs. Zero Only)	₹0
Name: Ms i	ndraprastha gas limite	d			
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City/Village Delł	ni Distric	t : Delhi	State Dehli		
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LICENSE FOR THE USE OF NATIONAL HIGHWAY LAND

Enclosure to Ministry of Transport & Highway Letter No.- RW/NH-33044 /29/2005/ S&R (R) Dated- 22.11.2016.

AGREEMENT to lay Gas Pipe Line (**4"Ø Carbon Steel Pipe**) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi - Meerut Expressway (NE3), (Dasna to Meerut Road) in the State of Uttar Pradesh.

This agreement made this ______ day of ______ Month of ______ Year between NHAI acting in his executive capacity through______ ("hereinafter referred to as NHAI which expression shall unless excluded / included his successors in office and assigns) on the one part and "*M/s Indraprastha Gas Limited (IGL)*" having it's office address at: IGL Bhawan, Plot no. 4, Community Center, R K Puram, Sector 9, New Delhi - 110022, India Which expression shall, unless excluded by repugnant to the context include his heirs its successors their successors their and assigns of the second part.

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Whereas National Highway Authority of India/NHAI is responsible, Inter-alia, for development and maintenance of lands in Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m).

Whereas the licensee proposes to lay gas pipe line etc. referred to as utility services in subsequent paras.

Whereas the license has applied to the authority for permission to lay Gas pipe line $(4"\phi)$ Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi - Meerut Expressway (NE3), (Dasna to Meerut Road) in the State of Uttar Pradesh.

And whereas the Authority has agreed to grant such permission for way leave on the NH ROW as per terms and conditions hereinafter mentioned.

Now this agreement witnessed that in consideration of the condition hereinafter contained and on the part of the license to be observed and performed "The NHAI hereby grants to the license permission to lay utility services as per the approved drawing attached hereto subject to the following conditions, namely: -

- 1. ROW permissions are only enabling in nature. The purpose of extending the way leave facility on the National Highway ROW is not for enhancing the scope of activity of a utility service provider, either by content or by intent. Further enforceability of the permission so granted shall be restricted only to the extent of provisions / scope of activities defined in the license agreement & for the purpose for which it is granted.
- 2. No license shall claim exclusive right on the ROW and any subsequent user will be permitted to use the ROW, either above or below, or by the side of the utilities laid by the first user, subject to technical requirements being fulfilled. Decision of the Authority in relation to fulfilment of technical requirements shall be final and binding on all concerned parties, in case any disruption/damage is caused to any existing user by the subsequent user, the Authority shall not be held accountable or liable in any manner.
- 3. The licensee shall be responsible for undertaking all the activities including, but not limited to site identification, survey, design, engineering, arranging finance, project management, obtaining regulatory approvals & necessary clearances, supply of equipment, material, construction, erection, testing and commissioning, maintenance and operation and all other activities essential or required for efficient functioning of their own utility / industrial infrastructure facilities.
- 4. The licensee shall pay license fee @ Rs ------ / sq. m. /month to the Authority. The license fee shall become payable from the date of handling over of ROW land to the licensee, for laying of utilities / cables /conduits /pipelines for infrastructure / service provider. As regards Tariff and terms and conditions for providing common utility ducts along National Highways, there shall be a separate agreement regime.
- 5. Fee shall have to be paid in advance for the period for which permission is granted for entering in to a license agreement. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

SATENDER FUMATION

- 6. Present policy of the MORT&H is to provide a 2.0m wide utility corridor on either side of the extreme edge of ROW. In case where utility ducts with sufficient space are already available along NH, the utility service shall be laid in such ducts subject to technical requirements being fulfilled.
- 7. The utility service shall be laid at the edge of ROW. In case of restricted width of ROW, which may be adequate only to accommodate the carriageway, central verge, shoulders, slopes of embankment, drains, other road side furniture etc., the utility service shall be laid beyond the toe line of the embankments and clear of the drain.
- 8. The licensee shall make his own arrangement for crossing of cross drainage structure, rivers etc. below the bed. In case, this is not feasible, the utility services may be carried outside the railings/parapets and the bridge superstructure. The fixing and supporting arrangement with all details shall be required to be approved in advance from the concerned Highway Administration. Additional cost on account of fixing and supporting arrangement as assessed by the Authority shall be payable by the Licensee.
- 9. In exceptional cases, where ROW is restricted the utility service can be allowed beneath the carriageway of service road, if available, subject to the condition that the utility services be laid in concrete ducts, which will be designed to carry traffic on top. The width of the duct shall not be less than one lane. In such cases, it also needs to ensure that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic. The cost of operation and maintenance will have to be borne by the licensee.
- 10. It is to be ensured that at no time there is interference with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the utility services shall be at least 0.6 metre below the ground level. However, any structure above ground shall be aesthetically provided for/landscaped with required safety measures as directed by the concerned authority;
- 11. The utility service shall be permitted to cross the National Highway either through structure or conduits specially bullt for that purpose. The casing/conduit pipe should, as minimum, extend from drain to drain in cuts and toe of slope to toe of slope in the fills and shall be designed in accordance with the provision of IRC and executed following the specifications of the Ministry.
- 12. Existing drainage structures shall not be allowed to carry the lines across.
- 13. The top of the casing/conduit pipe containing the utility services to cross the road shall be at least 1.2m below the top of the sub grade or the existing ground level whichever is lower, subject to being at lease 0.3m below the drain inverts. A typical sketch showing the clearances is given in Attachment-I.
- 14. The utility services shall cross the National Highway preferable on a line normal to it or as nearly so as practicable.
- 15. The casing/conduit pipe for crossing the road may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall be preferred.
- 16. In case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30 cm but not more than 60 cms wider than the outer diameter of the pipe. Filling of the trench shall conform to the specifications contained here-in-below or as supplied by the Highway Authority.

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- a. Bedding shall be to a depth not less than 30 cm. It shall be consisting of granular material, free of lumps, clods and cobbles, and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edges should be excavated and replaced by selected material.
- b. The backfill shall be completed in two stages (i) side-fill to the level of the top of the pipe (ii) overfill to the bottom of the road crust.
- c. The side fill shall consist of granular material laid in 15cm. Layers each consolidated by mechanical tamping and controlled addition of moisture to 95% of the proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.
- d. The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highway Authority.
- 17. The licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction, so as to restore the land in to the same condition as it was before digging the trench, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way;
- 18. All required restoration works subsequent to laying of the cable shall be required to be undertaken by the licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards.
- 19. Prior to commencement of any work on the ground, a performance bank guarantee @ Rs. Per route metre / Rs. Per sqm. with a validity of one year initially (extendable if required till satisfactory completion of work) shall have to be furnished by the licensee to the Authority/its designated agency as a security against improper restoration of ground in terms of filling/unsatisfactory compaction damaged caused to other underground installations/utility services & interference, interruption, disruption or failure caused thereof to any services etc. In case of the licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the licensee and recover the amount by forfeiture of the Bank Guarantee.
- 20. In case, the performance bank guarantee is invoked as mentioned above, the license shall be required to replenish and reinstate the required performance Bank Guarantee within one month of such invoking. In case the work contemplated herein is not completed to the satisfaction of the Authority, which has granted the permission, within a period of 11 months from the date of issue of the Bank Guarantee, the licensee shall either furnish a fresh guarantee or extend the guarantee for a further period of one year. Notwithstanding this, the licensee shall be liable to pay full compensation to the aggrieved Authority/Its designed agency for any damage sustained by them by reason of the exercise of the ROW facility;
- 21. The licensee shall shift the utility services within 90 days (or as specified by the respective Authority) from the date of issue of the notice by the concerned Authority to shift/relocate the utility services, in case it is so required for the purpose of improvement/widening of the road/route/highway or construction of flyover/bridge and restore the road/land to its original condition at his own cost and risk.

SECTOR 9, R.K. PURAM OMMUNITY CENTRE. NEW DELHI-110 022

- 22. The licensee shall be responsible to ascertain from the respective agency in coordination with Authority, regarding the location of other utilities/underground installations/facilities etc. The licensee shall ensure the safety and security of already existing underground installation utilities/facilities etc. Before commencement of the excavation/using the existing cable ducts. The licensee shall procure insurance from a reputed insurance company against damages to already existing underground installation utilities/facilities etc.
- 23. The licensee shall be solely responsible/for full compensation/indemnification of concerned agency/aggrieved Authority for any direct, indirect or consequential damage caused to them/claims or replacements sought for, at the cost and risk of the licensee. The concerned agency in co-ordination with Authority shall also have a right make good such damages/recover the claims by forfeiture of Bank Guarantee.
- 24. If the licensee fails to comply with any condition to the satisfaction of the Authority, the same shall be executed by the Authority at the cost and risk of the licensee.
- 25. Grant of licensee is subject to the licensee satisfying (a) minimum disruption of traffic and (b) no damage to the highways. As far as possible, the licensee should avoid cutting of the road for crossing highway, and other roads and try to carry out the work by trenchless technology. In case any damage is caused to the road pavement in this process, the licensee will be required to restore the road to the original condition at its cost. If due to unavoidable reasons the road needs to be cut for crossing or laying utility services, the licensee has to execute the restoration work in a time bound manner at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards. In case of the licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the licensee and recover the amount by forfeiture of the Bank Guarantee.
- 26. The licensee shall inform/give a notice to the concerned agency designated by the Authority at least 15 days in advance with route details prior to digging trenches, for fresh or maintenance/repair works. A separate performance Bank Guarantee for maintenance/repair works shall have to be furnished by the licensee.
- 27. Each day, the extent of digging the trenches should be strictly regulated so that utility service is laid and trenches filled up before the close of the work that day. Filling should be completed to the satisfaction of the concerned agency designated by the Authority.
- 28. The licensee shall indemnify the concerned agency in co-ordination with Authority, against all damages and claims, if any due to the digging of trenches for laying cables/ducts.
- 29. The permission for laying utility services is granted maximum for 5 years at a time, which can thereafter be considered for renewal. On payment of additional fee at the time of renewal, the permission shall automatically be renewed, unless defaults exist. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract @ 15% per annum compounded annually.
- 30. The permission shall be valid only for the period it is issued and fee deposited. However, the Authority also has a right to terminate the permission or to extend the period of Agreement.

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- 31. That the licensee shall not undertake any work of shifting, repairs or alterations to the utility services without prior written permission of the concerned agency in coordination with the Authority.
- 32. The permission granted shall not in any way be deemed to convey to the license any ownership right or any interest in route/road/highway land/property, other than what is herein expressly granted. No use of NH ROW will be permitted for any purpose other than that specified in the Agreement.
- 33. During the subsistence of this Agreement, the utility services located in highway land/property shall be deemed to have been constructed and continued only by the consent and permission of the Authority so that the right of the licensee to the use thereof shall not become absolute and indefeasible by lapse of time.
- 34. The license shall bear the stamp Duty charged on this Agreement.
- 35. Three copies of 'as laid drawings' of utilities (hard and soft copies) with geo-tagged photographs and geo-tagged video recordings of laying of cables in the trench (with respect to the NH) and after complete restoration shall be submitted to Authority for verification and record within a month of completion of works.
- 36. The licensee shall allow free access to the site at all times to the authorised representatives of Authority to inspect the Project Facilities and to investigate any matter within their Authority, and upon reasonable notice, shall provide reasonable assistance necessary to carry out their respective duties and functions.
- 37. The utility service shall not be made operational by the licensee unless a completion certificate to the effect that the utility services has been laid in accordance with the approved specification of the concerned agency in co-ordination with the Authority has been obtained. Notwithstanding anything contained herein, this Agreement may be cancelled at any time by Authority for breach of any condition of the same and the licensee shall neither be entitled to any compensation for any loss caused to it by such cancellation not shall it be absolved from any liability already incurred.
- 38. The licensee shall ensure adherence to relevant Indian standards and follow best industry practices, methods and standards for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation, repair and maintenance of any part of the utility lines/industrial infrastructure facilities and which practices, methods and standards shall be adjusted as necessary, to take account of;
 - a. Operation, repair and maintenance guidelines given by the manufacturers,
 - b. The requirements of Law,
 - c. The physical conditions at the site, and
 - d. The safety of operating personnel and human beings
- 39. The licensee shall have to provide safety measures like barricading, danger lighting and other necessary caution boards while executing the work.
- 40. While laying utility services, at least one lane of road shall be kept open to traffic at all times. In case of single lane road, a diversion shall be constructed. If any traffic diversion works are found necessary during the working period such diversion shall be provided at the cost of licensee.
- 41. After the termination/expiry of the agreement, the license shall remove the utility services within 90 days and the site shall be brought back to the original condition failing

NEVA DISLIMITED 0.2

which the license will lose the right to remove the utility services. However before taking up the work of removal of utility services the licensee shall furnish a Bank Guarantee to the Authority for a period of one year for an amount assessed by the Authority as a security for making good the excavated trench by proper filling and compaction, clearing debris, loose earth produced due to excavation of trenching at least 50m away from the edge of the ROW.

- 42. Any disputes in interpretation of the terms and conditions of this agreement or their implementation shall be referred to the redress mechanism prevailing in the Ministry and the decision of the redress mechanism shall be final and binding on all.
- 43. For PPP Projects, in case of any financial loss incurred by the respective project concessionaires due to such laying/shifting of utility services by the licensee, compensation for the same shall be required to be borne by the licensee in mutual agreement with the respective project concessionaires. MORT&H/NHAI/ implementing authorities for the project shall not be liable to the concessionaire in any way in this regard.

This agreement has been made in duplicate, each on a Stamp paper, each party to this Agreement has retained one stamped copy each.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED THROUGH THEIR RESPECTIVE AUTHORISED REPRESENTATIVES THE DAY AND THE YEAR FIRST ABOVE WRITTEN.

SIGNED SEALED AND DELIVERED FOR AND ON BEHALF OF AUTHORITY.

BY SHRI

(Signature, name & address with stamp)

	WASTENDRA KUMAR PAL	
SIGNED ON BEHALF OF M/S		E) M
BY SHRI	COMMUNITY CENTRE, SECTOR 9, RK, PUR NEW DELHI-110 022	

(Signature, name & address with stamp)

HOLDER OF GENERAL POWER OF ATTORNEY DATED_____EXECUTED IN ACCORDANCE EITH THE RESOLUTION NO.DATEDPASSED BY THE BOARD OF DIRECTORS IN THEMEETING HELD ON

IN THE PRESENCE OF (WITNESSES)

1.

2.



UNDERTAKING

 Application for Granting Permission to Gas Pipe Line of "M/s Indraprastha Gas Limited (IGL)" (4"Ø Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi -Meerut Expressway (NE3), (Dasna to Meerut Road) in the State of Uttar Pradesh.

It is hereby undertake that: -

 i) The proposal for confirming all standard enclosed condition issued vide Ministry of Road Transport and Not enclosed Highways Circular No. NH-IIIIP/66/76 dated 18/19.11.1976, RW/NH-III/P/66/76 dated 11.05.1982, RW/NH-11037/1/86-001 (ii) dated 28.7.1993, RW/NH-11037/1/86/DOI dated 19.1.1995, RW/NH-34066/2/95 S&R dated 25.10.1999 and Ministry Circular No. RW/NH-34066/7/2003 S&R (B) dated 17.9.2003 and Circular No. RW/NH-33044/29/2015 S & R (R) dated 22.11.2016.

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UNS LIMPLED SECTOR-0, RK PURAM PLOTIN 4, Satendra Kumar Pal IG CLAR QELHI-110 022 HOD (Projects) M/s Indraprastha Gas Limited (IGL) New Delhi

RUNDAR PAL

Affidavit			ian-Non Judicia Iaryana Govern	ment	пр	Ó	Date :13/02/2023
Certificate No.	R0M2023B54					Stamp Duty	Paid : ₹ 101
GRN No.	99219467				ŝ	(Rs. Only) Penalty :₹ 0 (Rs. Zero Only)	
Deponent							
Name: Ms indra	iprastha gas lim	ited					
H.No/Floor: 0		Sector/Ward :	0 La	andmark :	: 0		
City/Village : De	lhi	District : Delhi		State :	Dehl	i	
Phone: 98*	*****01						
					(1) 400 400 (1)		
Purpose : STAMP PAPER to be submitted at Any office							

UNDERTAKING

- Application for Granting Permission to Gas Pipe Line of "M/s Indraprastha Gas Limited (IGL)" (4"Ø Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi Meerut Expressway (NE3), (Dasna to Meerut Road) in the State of Uttar Pradesh.
 It is hereby undertake that:
 - i. Any other location of the Gas pipe line (Carbon Steel Pipe) would be extremely difficult and unreasonable costly and the installation of Gas 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 4/6/8- laning

(a) Where feasibility is available

"I do undertake that there will be no hindrance to proposed 4/6/8-laning based on the feasibility report considering Enclosed/proposed structure at the said location". Not Enclosed.

(b) In case feasibility report is not available

"I do certify that sufficient ROW is available at site for Enclosed/accommodating proposed 6/8 laning". Not Enclosed.

Satendra Kumar Pal HOD (Projects) M/s Indraprastha Gas Lingited (IGL)⁰²² New Delhi Affidavit



Certificate No. R0M2023B55

GRN No. 99219467

Indian-Non Judicial Stamp Haryana Government

Deponent



Date :13/02/2023

Stamp Duty Paid : ₹ 101 (Rs. Only) Penalty :₹ 0 (Rs. Zero Only)

Name: Ms indraprastha gas limitedH.No/Floor : 0SCity/Village : DelhiDPhone :98******01

Sector/Ward : 0 District : Delhi

Landmark : 0 State : Dehli



Purpose : STAMP PAPER to be submitted at Any office

UNDERTAKING

3. Application for Granting Permission to Gas Pipe Line of "M/s Indraprastha Gas Limited (IGL)" (4"Ø Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi - Meerut Expressway (NE3), (Dasna to Meerut Road) in the State of Uttar Pradesh.

It is hereby undertake that: -

i. Proposed permission will be entering in the register of records for the permissions in the prescribed proforma (Copy enclosed).

Satendra Kumar Pal HOD (Projects) M/s Indraprastha Gas Limited (IGL) PURAM New Delhi

Affidavit	Indian-Non Judicial Stamp Haryana Government	Date :13/02/2023
Certificate No. R0M2023B56		Stamp Duty Paid : ₹ 101
GRN No. 99219467		(Rs. Only) Penalty :₹ 0 (Rs. zero Only)
	Deponent	
Name: Ms indraprastha gas lin	nited	
H.No/Floor: 0	Sector/Ward : 0 Landmark : 0	
City/Village : Delhi	District : Delhi State : De	ehli
Phone : 98*****01	r ž	
Purpose : STAMP PAPER to b	e submitted at Any office	LELWEINTURISCHEM

UNDERTAKING

It is hereby undertake that: -

- 1) All the standard conditions issued vide the following Ministry Circular have been confirmed:
- i) Ministry Circular No. NH-41 (58)/68 dated 31.1.1969
- ii) Ministry Circular No. NH-III/P/66/76 dated 18/19.11.1976
- iii) Ministry Circular No. RW/NH-III/66/76 dated 11.5.1982
- iv) Ministry Circular No. RW/NH-11037/1/86-DOI (ii) dated28.7.1993
- v) Ministry Circular No. RW/NH-11037/1/86/DOI dated 19.1.1995
- vi) Ministry Circular No. RW/NH-34066/2/95/S&R dated 25.10.1999
- vii) Ministry Circular No. RW/NH-34066/7/2003 S&R (B) dated 17.9.2003

viii) Ministry Circular No. RW/NH-33044/29/2015 S&R (R) dated 22.11.2016

- 2) Any other location of the Gas pipe line (Carbon Steel Pipe) would be extremely difficult unreasonable and costly and the installation of Gas pipe line (Carbon Steel Pipe) within ROW will not adversely affect the design, stability & traffic safety of the highway not the likely future improvement such as widening of the carriageway, easing of curve etc. ii) For 4/6/8-Laning
 - a) N/A
 - b) That sufficient ROW is available at site for accommodating proposed 4/6/8- laning.
- 3) That the proposed permission will be entered in the register of records for the permission in the prescribed Performa.

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Satendra Kumar Pal HOD (Projects) Composition New DeLHI-110 022 M/s Indraprastha Gas Limited (IGL) New Delhi



UNDERTAKING

4. Application for Granting Permission to Gas Pipe Line of "M/s Indraprastha Gas Limited (IGL)" (4"Ø Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi - Meerut Expressway (NE3), (Dasna to Meerut Road) in the State of Uttar Pradesh.

I Satendra Kumar Pal - HOD (Projects) M/s Indraprastha Gas Limited (IGL) New Delhi hereby undertake that: -

- I. Laying of Gas pipe line (Carbon Steel Pipe) will not have any deleterious effects on any of the bridge components and roadway safety for traffic.
- II. we do undertake that 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 4/6/8 laning or any other development.

Satendra Kumar Pal HOD (Projects) NDRAPRASTILA GAS LIMITED M/s Indraprastha Gas Limited (IGL) 022 New Delhi



Purpose : STAMP PAPER to be submitted at Any office

UNDERTAKING

5. Application for Granting Permission to Gas Pipe Line of "M/s Indraprastha Gas Limited (IGL)" (4"Ø Carbon Steel Pipe) from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m) along Delhi - Meerut Expressway (NE3), (Dasna to Meerut Road) in the State of Uttar Pradesh.

I Satendra Kumar Pal - HOD (Projects) M/s Indraprastha Gas Limited (IGL) New Delhi hereby undertake that: -

- 1) To take care of existing services/utilities that have been laid previously. And not to damage other utility, if damaged then to pay the losses either to the NHAI or to the concerned agency.
- 2) To submit the requisite Bank Guarantee and to renew it, as directed by the NHAI.
- 3) That the laying of Gas Pipe line (Carbon Steel Pipe) will conform to all standard conditions of NHAI guidelines and Ministry Circulars / Letters and its amendments from time to time shall be strictly followed.
- 4) To shift the Gas Pipe line (Carbon Steel Pipe) as and when required by NHAI at our own cost.
- 5) To shift the Gas Pipe line (Carbon Steel Pipe) due to 4/6/8 laning/widening of NH as and when required by NHAI at our own cost.
- 6) To indemnify NHAI against all damages and claims.
- 7) To manage the traffic movement during laying of Gas Pipe line (Carbon Steel Pipe).
- 8) That if any claim is raised by the Concessionaire, then the same has to be paid by the applicant.
- 9) To take prior approval of NHAI before undertaking any work of installations, shifting or repairs or alterations to the Gas Pipe line (Carbon Steel Pipe) / any other utility located in National Highway Right-of-Ways.

NDRA RUMAR PAL INDRAFRASTILA GAS LEMITE D COMMUNITY CENTRE, SECTOR 9, R.K. PURAM NEW DELHI-110 022

- 10) That the expenditure, if any incurred by NHAI for repairing any damages caused to the National Highway by the laying, maintenance or shifting of the Gas Pipe line (Carbon Steel Pipe) will be borne by the applicant agency owning the line.
- 11) That if the NHAI considers it necessary in future to move the utility line for any work of improvement or repairs to the road, it will be carried out as desired by the NHAI at the cost of agency owning the utility line with a reasonable time (not exceeding 60 days) of intimation given.
- 12)
- a. That I undertake that laying of Gas Pipe line (Carbon Steel Pipe) within the ROW will not adversely affected the design, stability and traffic safety of the highway not the likely future improvements such as widening of the carriage way, easing of curves and construction of any structure like flyover/VUP etc.
- b. That I do undertake that I will relocate service road/approach road/utilities at my/our own cost notwithstanding the permissions granted within such time as will be stipulated by NHAI, for future 4/6/8 laning or any other development.

Satendra Kumar Pal HOD (Projects) M/s Indeprestha Gas Limited (IGL) New Delhi INDRACHINA GAS LIMITED INDRACHINA GAS LIMITED INDRACHINA GAS LIMITED INDRACHINA GAS LIMITED INDRACHINA GAS LIMITED

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Format for Maintaining Records of Right-of- Way permission granted for laying of Gas Pipe line (4" & Carben Steel Pipe)

(To be maintained separately for every NH)

1. Name of State

Uttar Pradesh

Name of Highway Authority (NHAI/PWD/BRO)
 NH Number

: Delhi - Meerut Expressway (NE3)

Remarks		
Any deviation from MORT&H standard norms	8	
Date of last inspection of site		
Date of Validity of agreement		
ensee and Date of Baddress signing of agreement	201	
Name of licensee and contact address	"M/s Indraprastha Gas Limited (IGL)" Regd. Office: - IGL Bhawan, Plot no. 4, Community Center, R K Puram, Sector 9, New Delhi - 110022	Sur senoundary
Kind of Service	Gas Pipe Line (4"Ø Carben Steel Pipe)	
Section and Reach	Delhi - Meerut Expressway (NE3), (Dasna to Meerut Road)	
Right or Left side of NH (towards increasing chainage /Km direction)	RHS	
Location (Chainage in Km.)	from Km. 33+000 RHS to Km. 36+235 RHS (Length 3235m) and One Crossing at Km. 36+235 (Length 90.0m), (Total Length 3325m)	
Sr, No.	÷.	



श्वयमेव जयते

INDIA NON JUDICIAL

Government of Uttar Pradesh

e-Stamp

IN-UP56072649934231U

(One Hundred only)



Certificate No. Certificate Issued Date Account Reference Unique Doc. Reference Purchased by Description of Document Property Description Consideration Price (Rs.) First Party Second Party Stamp Duty Paid By Stamp Duty Amount(Rs.)



01-Apr-2022 12:29 PM
NEWIMPACC (SV)/ up14411804/ MUZAFFARNAGAR SADAR/ UP-MJF
SUBIN-UPUP1441180403197464567986U
IGL RK PURAM DELHI
Article 12 (A) Bank Guarantee
Not Applicable
IGL RK PURAM DELHI
Not Applicable
IGL RK PURAM DELHI
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Please write or type below this line.

GENERAL POWER OF ATTORNEY KNOW ALL MEN BY THIS GENERAL POWER ATTORNEY

This Power of Attorney is executed at New Delhi by Mr. Sanjay Kumar working as Managing Director in Indraprastha Gas Limited.

WHEREAS Indraprastha Gas Limited is a company incorporated under the companies Act, 1956, having its Registered Office at IGL Bhawan, Plot No-4, Community Centre, R.K. Puram, Sector-9, New Delhi - 110022 (hereinafter referred to as the 'Company').

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Statutory Ainrt.

Annotation of this Stamp certificate should be verified at twee sholestamp com or using e-Stamp Mobile App of Stock Holding replace, in the datalis on this Certificate and as available on the website / Mobile App renders it invalid s of chricking the leademacy is to the users of the certificate of any characterize base of certificate of the Certificate of any characterize base of certificate of the Certificate of any characterize base of certificate of the Certificate of any characterize base of certificate of the Certificate of any characterize base of certificate of the Certificate of any characterize base of certificate of the Certificate of any characterize base of certificate state of the Certificate of any characterize base of of any char AND WHEREAS pursuant to the Resolution passed by the Board of Directors on 14.01.1999, the Managing Director and/or Director (Commercial) of the Company have been authorized to do various acts and perform various duties as mentioned therein. The Resolution dated 14.01.1999, is attached herewith as Annexure-A.

AND WHEREAS it is considered necessary and expedient to appoint Mr. Satendra Kumar Pal - HOD (Projects), to be the true and Lawful Attorney of the Company (hereinafter referred to as the 'Attorney').

AND NOW THEREFORE I. Sanjay Kumar Managing Director IGL, in the capacity of above vested powers here by authorize and delegate the following powers to Mr. Satendra Kumar Pal - HOD (Projects), to carry out the following acts in matters only connected with Delhi, Ajmer, Gautam Buddha Nagar, Rewari, Gurugram, Karnal, Kaithal, Muzaffarnagar, Kanpur, Ghazlabad and Hapur on behalf of Indraprastha Gas Ltd: -

- To appear and represent the Company before the Central Government, the State Governments, Local Authorities, Local Self Government Bodies, Income Tax Authorities, Public Bodies Officers and similar other Authorities;
- To sign and execute all Agreement, Undertakings, Applications, Returns, Papers, Receipts, all other documents and to do all or any of the acts, Deeds, Matters and Things as may be considered expedient and necessary on behalf of the Company, in the matters connected herewith; and,
- 3. To sign and execute Agreements relating to purchase of properties, or to sign and execute lease deed and where necessary to register and any and all Documents including Deeds, leases, etc. before any Authority.

IN WITNESS WHEREOF this General Power of Attorney is signed and sealed on this <u>stan</u> day of July, 2022.

Says

(Sanjay Kumar) Managing Director Indraprastha Gas Limited Executant

Specimen Signature of Mr. Satendra Kumar Pal

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BANJAY KUMAR Managing Director INDRAPRASTHA GAS LIMITED IGL BHAWAN, PLOT NO. 4 COMMUNITY CENTRE, SECTOR-9, R.K. PURAM NEW DELNI-110 022

WITNESSES:

Vail Taxim Maffo Pris TANUS GARG