



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India)

क्षेत्रीय कार्यालय : एफ-120, जनपथ, श्याम नगर, जयपुर-302019

Regional Office : F-120, Janpath, Shyam Nagar, Jaipur-302019

Tel. (O) / फोन : (ऑ.) 0141-2292056, 2292049

E-mail / ई-मेल : rojaipur@nhai.org Web. / वेब : www.nhai.gov.in



क्रमांक:NHAI/18013/1/2021-ROJ/Permission-Crossing Water Pipeline/Irrigation/241/NH-148N km-431.840-442.01/710 दिनांक: 14.06.2023

### INVITATION OF PUBLIC COMMENTS

विषय: Proposal for grant of permission for laying and crossing of Irrigation Water Pipeline of WRD, Kota at Ch. 431+840 to 442+010 of NH-148N (New NH no. NE-4) (Pkg-16) of Delhi-Vadodra greenfield expressway in the state of Rajasthan – reg.

- सन्दर्भ: (i) Ex. En. WRD, Kota Letter no EE/WR/Tech/2022/2509 dated 21.10.2022, letter no 3716-17 dt 16.02.2023, letter no 4110 dt. 20.03.2023, letter no. 63 dt. 10.04.2023, letter no. 198 dt. 26.04.2023 & letter no 304-05 dt 10.05.2023.
- (ii) PD, PIU-Kota letter no. 290120/2022-Kota/Pkg-16/WRD-Kota/147/7781 dated 16.05.2023 (received on 22.05.2023).

Sir,

It is to inform all concern that Ex. En. WRD, Kota vide letter cited under ref. (i) above has submitted a proposal for the subjected work and PD, NHAI, PIU, Kota has submitted the above proposal vide letter under reference (ii) for approval of the Competent Authority, Highway Administration.

2. The proposal is for laying and crossing of Irrigation Water Pipeline of WRD, Kota at Ch. 431+840 to 442+010 of NH-148N (New NH no. NE-4) (Pkg-16) of Delhi-Vadodra greenfield expressway in the state of Rajasthan.

3. As per Para-4 of Ministry's Circular No. RW/NH-33044/29/2015S&R(R) dated 22.11.2016. the Highway Administration shall be put out in the public domain for 30 days for seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

4. In view of the above, before approval of the competent authority, the comments/objections of affected public is hereby invited with reference to the Ministry's circular dated 22.11.2016 due to laying and crossing of Water Pipeline on the subjected stretch. The objections/comments may be addressed to the below mentioned address upto 13.07.2023, beyond due date, no comments/objections will be accepted.

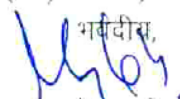
**The Regional Officer, Regional Office - Jaipur**

National Highways Authority of India,

F-120, Janpath, Shyam Nagar, Jaipur (Raj.)-302019,

Tel : 0141-2292049, 2292054 Email : rojaipur@nhai.org

This is issued with the approval of the Regional Officer, NHAI, RO, Jaipur (Rajasthan).

  
 (मनोज खोड़ा)  
 प्रबन्धक (तकनीकी)

- Copy to: (i) Web Admn., NHAI, HQ, New Delhi - for uploading in NHAI's website [web-admin@nhai.org]
- (ii) Director, NIC, New Delhi - for uploading in Ministry's website. [mansoor@nic.in]
- (iii) PD, PIU-Kota: for information and with the request to review the license fee and BG amount as per abended guidelines of MoRTH issued vide no. No. NH-36094/01/2022 S&R (P&B) dated 17.04.2023 and get deposited the same from the applicant within 30 days period for further processing the proposal.
- (iv) Ex. En. WRD, Kota: for information and with the request to deposit revised charges required as per amended guidelines dated 17.04.2023 within 30 days period.





# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय)

## National Highways Authority of India

(Ministry of Road Transport and Highways)

परियोजना कार्यान्वयन इकाई

ए-504, इन्द्रा विहार, कोटा (राजस्थान)-324005

**Project Implementation Unit**

A-504, Indra Vihar, Kota (Rajasthan)-324005

दूरभाष/ Phone : 91-744-2406315

91-744-2980181

ई-मेल/ E-mail : [kota@nhai.org](mailto:kota@nhai.org)

[kotapiu@gmail.com](mailto:kotapiu@gmail.com)

4

No. 290120/2022-Kota/Pkg-16/WRD-Kota/147/ 7781

Date: 16.05 2023

**Regional Officer**

National Highways Authority of India

Regional Office,

F-120, Janpath, Shyam Nagar

Jaipur - 302019



M(T) MIC

23/5

MW  
23/5

**Sub:** Permission for laying and crossing of Irrigation Water Pipeline at chainage 431+840 to 442+010 of NH-148N of Bharatmala Pariyojana (Package-16) in Kota to Ramganjmandi Section- Reg.

- Ref: -**
1. Executive Engineer, WRD, Kota letter no. EE/WR/Tech/2022/2509 dated 21.10.2022 (received on 17.11.2022).
  2. This office letter no. No. 290120/2016-Kota/Pkg-16/WRD-Kota/147/6623 dated 18.11.2022
  3. Authority Engineer letter no. AE/LNMIPPL/DRAIL/16/DVE/NH148N/PKG9/2022/789 dated 11.01.2023 (received on 14.01.2023)
  4. This office letter no. 290120/2016-Kota/Pkg-16/WRD-Kota/147/6942 dated 14.01.2023
  5. Executive Engineer, WRD, Kota letter no. 3716-17 dated 16.02.2023
  6. This office letter no. 290120/2016-Kota/Pkg-16/WRD-Kota/147/7184 dated 17.02.2023
  7. This office letter no. 290120/2016-Kota/Pkg-16/WRD-Kota/147/7291 dated 10.03.2023
  8. Executive Engineer, WRD, Kota letter no. 4110 dated 20.03.2023
  9. Canara Bank, Subjimandi, Kota letter No. CB18410/NHAI-1/2022-23 dated 28.03.2023
  10. This office letter no. 290120/2016-Kota/Pkg-16/WRD-Kota/147/7441 dated 28.03.2023
  11. Executive Engineer, WRD, Kota letter no. 63 dated 10.04.2023
  12. This office letter no. 290120/2016-Kota/Pkg-16/WRD-Kota/147/7542 dated 13.04.2023
  13. Canara Bank, Subjimandi, Kota vide E-mail dated 18.04.2023
  14. This office letter no. 290120/2016-Kota/Pkg-16/WRD-Kota/147/7616 dated 21.04.2023
  15. Executive Engineer, WRD, Kota letter no. 198 dated 26.04.2023
  16. This office letter no. 290120/2016-Kota/Pkg-16/WRD-Kota/147/7656 dated 27.04.2023
  17. Executive Engineer, WRD, Kota letter no. 304-05 dated 10.05.2023

Sir,

In reference to above cited subject matter, Executive Engineer, WRD, Kota letter dated 21.10.2022 (Ref.1) has submitted proposal for laying and crossing of Irrigation Water Pipeline at chainage 431+840 to 442+010 of NH-148N of Bharatmala Pariyojana (Package-16) in Kota to Ramganjmandi Section.

2. PIU vide letter dated 18.11.2022 (Ref.2), requested M/s L N Malviya Infra Projects Pvt. Ltd. to examine the proposal in accordance with Ministry's guidelines and submit comments/ recommendations

3. Further, M/s L N Malviya Infra Projects Pvt Ltd. vide letter dated 11.01.2023 (Ref.3) has recommended the proposal for onward submission to Competent Authority for In-principle approval. The proposal has been examined by this office and seems in order.

4. In the matter, PIU vide letter dated 14.01.2023 (Ref.4) informed, EE, WRD, Kota that Bank Guarantee amounting to Rs. 4,92,500/- is to be submitted to this office before onward submission of the proposal to Competent Authority i.e. NHAI, RO - Jaipur for granting permission. In this regard,

Executive Engineer, WRD, Kota vide letter dated 16.02.2023 (Ref.5) submitted Bank Guarantee no. 1872IGP000461223 Amount 4,92,500/- valid upto 09.02.2024.

5. In response to above, this office vide letter dated 17.02.2023 (Ref.6), requested to Canara Bank Subzi Mandi to confirm issuance of the aforesaid Bank Guarantee & its genuineness and provide the system generated report duly signed by Branch Manager regarding linking our account with BG under SFMS Platform. In this regard, this office vide letter dated 10.03.2023 (Ref.7) informed to Executive Engineer, WRD, Kota that Canara Bank Subzi Mandi, Kota has mentioned that they have not received any confirmation of the BG till date (i.e. 10.03.2023) on SFMS platform.

6. Further, Executive Engineer, WRD, Kota vide letter dated 10.05.2023 (Ref.17) submitted fixed deposit (FD) no. 072504094 Amount 4,92,500/- valid upto 05.05.2024 to this office.

7. It is mentioned that, Authority Engineer M/s L N Malviya Infra Projects Pvt Ltd. vide letter dated 11.01.2023 (Ref.3) has recommended the proposal for onward submission to Competent Authority for In-principle approval. The proposal has been examined by this office and seems in order.

In view of above and based on the recommendation of AE, the subject proposal is recommended for approval of Competent Authority for granting In-principle approval.

Yours faithfully,



(J P Gupta)

GM (T) cum Project Director

Encl: Four sets of Proposals in including 2 Set of License Deed in original.

Copy to: Executive Engineer WR Parwan Project Div.-I, Jhalawar – ***It is pertinent to mention here that Rs. 14,956.80/- towards License Fee is to be submitted (as mentioned in checklist submitted) before approval of Competent Authority. Hence, it is advised for perusal of the proposal for deposition of License fee and signing of the License Deed at NHAI, RO-Jaipur.***



## CHECK LIST

**Refer Circular No. Ministry's circular No. RW/NH-33044/29/2015/S& R (R) Dated 22.11.2016  
(Guidelines for processing the proposal for laying of utility line in the land crossing National  
Highways vested with NHAI/ PWD/ BRO.**

### General Information:

- 1 Name and Address of the Applicant /Agency : Executive Engineer Water Resource Division,  
Kota (Raj)
- 2 National Highway Number : NH-148  
  
State : Rajasthan
- 4 Location : Kota to Ramganj Mandi section of NH-148
- 5 (Chainage in km) : Chaianage 431.840, 431.855, 432.285, 432.900,  
433.600, 434.530, RD/550, 435.975, 436.525,  
437.115, 437.400, 438.745, 439.295, 439.295,  
440.110, 440.800, 441.600 & 442.010  
(Crossings to NH-148)
- 6 No.of Crossing : 18 No
- 7 Width of available ROW in Both Side : 50 m Each side from C/L  
  
Side of NH : NH Crossing  
(left or right side of  
NH towards increasing  
Chainage /km/ direction)
- 9 Name of Highway Authority : NHAI PIU, Kota (Raj.)  
(NHAI/PWD/BRO)
- 10 Highway Administration : NHAI PIU, Kota  
address

*Tyrote*  
Bridge/Structural Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (NH-148-N) PKG-16

*V*  
Resident Comm Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (NH-148-N) PKG-16

*6/*  
Team Leader cum Senior Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (NH-148-N) PKG-9

**Propose Water Resource Division Water supply pipe line crossings 18 Nos. between  
Chainage 431.840 to 442.010 Kota to Ramganj Mandi Section of NH-148 Bharat Mala  
Pariyojna Tehsil Ramganj Mandi Distt. Kota in State Rajasthan.**

*abhimanyu*  
Site Engineer  
NHAI PIU-Kota

*Project Director*  
Project Director  
NHAI PIU KOTA

*Manager (Tech.)*  
Manager (Tech.)  
NHAI PIU-Kota

*(सत्यमेव जयते)*  
अधिसाधी अभियन्ता  
जल संसाधन खण्ड कोटा



SL. No	Item	Measurement observations as per site conditions	MORTH Norms	Whether complying with Morth Norms
1	Detail of already laid utility service if any	NIL	Not applicable	Not applicable
2	Whether up -gradation of the stretch in near future is proposed or not	Not proposed	Not applicable	Not applicable
	(a) if yes, provision of utility adversely affect the plan of the up- gradation	Not applicable	Not applicable	Not applicable
3	<b>Laying of The utility service along the National Highways.</b>			
3.1	Location of proposed utility service along the stretch	Through Ex. Structure & Utility ducts		NO
3.2	Depth of top of utility service from ground level	Not Applicable	0.6 meter	Not Applicable
3.3	Mechanism for crossing water channel	Not Applicable	Through utility duct (if provision exists) or beneath the bed of water channel	Not Applicable
3.4	Whether Row is restricted in this stretch	Not Applicable		Not Applicable
3.4.1	If yes, whether provision of land acquisition is required to lay utility	Not Applicable		
	(a) If yes, whether Under taking for land acquisition along with relevant L.A. details has been furnished	Not Applicable		
3.4.2	Width of concrete duct, if utility services are proposed to be laid in concrete ducts	Not Applicable	Not less than one land	Not Applicable
4	<b>Laying of utility Service across the NH</b>			
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 service	Crossing to NH 431.840,431.855, 432.285,432.900, 433.600,434.530, RD/550,435.975, 436.525, 437.115,437.400, 438.745,439.295, 439.295, 440.110,440.800, 441.600 & 442.010	Perpendicular to NH	YES

Team Leader Cum Senior Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi- Vadodara (NH-148-N) PKG-9

**Propose Water Resource Division Water supply pipe line crossings 18 Nos. between Chainage 431.840 to 442.010 Kota to Ramganj Mandi Section of NH-148 Bharat Mala Pariyojna Tehsil Ramganj Mandi Distt. Kota in State Rajasthan.**

Bridge/Structural Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi - Vadodara (NH-148-N) PKG-9

Resident Civil Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi - Vadodara (NH-148-N) PKG-9

Manager (Tech)  
NHAI, Pili Kota

Project Director  
NHAI, Pili Kota

4.3	Type of casing pipe/conduit carrying the utility line	MS Pipe	Steel, cast iron, or reinforced cement concrete and have adequate strength.	YES
4.4	Whether ends of the casing/conduit pipe are sealed from the outside	YES	Sealed	YES
4.5	Length of casing/conduit pipe crossing NH	18 X100=1800 M	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.	1.60M	At least 1.2 m below the top of subgrade	YES
4.7	Crossing method in case of CC pavement	HDD	Only boring method (HDD)	YES
4.8	Horizontal and vertical clearances in case utilities are allowed overhead,	Not Applicable	In accordance with IRC codes	Not Applicable
5	<b>Document/Drawing Enclosed with the proposal .</b>			
5.1	Cross section showing the size of trench for open trenching method.	Not Applicable		YES
	(a) Trench width	No Trenching	More than 30 cm and less than 60cm wider than the outer diameter of the utility pipe.	YES
	(b) Filling of trench	No trenching hence not applicable	As per Ministry guidelines vide letter No. RW/NH-34044/29/2015 /S&R(R)dated 22.11.2016	YES
	(c) Location of trench	Not Applicable	Extreme edge of the ROW	YES
5.2	Cross section showing the size of pit and location of conduit for HDD method.	Yes Attached	Enclosed, if applicable	YES
5.3	Strip, plan, /route plan showing utility line, chainage, width of ROW, distance	Yes Attached	Enclosed	YES

abhimanyu  
 Site Engineer  
 NHAI, PUNE  
 Propose Water Resource Division Water supply pipe line crossings 18 Nos. between Chainage 431.840 to 442.010 Kota to Ramganj Mandi Section of NH-148 Bharat Mala Pariyojna, Tehsil Ramganj Mandi Distt./Kota in State Rajasthan.

L.N. Malviya Intra Projects Pvt. Ltd. Resident Cum Highway Engineer  
 Delhi-Vadodara (NH-148-N) PKG-9  
 L.N. Malviya Intra Projects Pvt. Ltd. Manager (Tech.)  
 Delhi-Vadodara (NH-148-N) PKG-10  
 Team Leader Cum Senior Highway Engineer  
 L.N. Malviya Intra Projects Pvt. Ltd.  
 Delhi-Vadodara (NH-148-N) PKG-9  
 (सत्यमेव जयते)  
 अधिशासी अभियन्ता  
 जल संसाधन खण्ड  
 Project Director  
 NHAI, PUNE



	of proposed utility from the edge of ROW, important mile stone, intersection, cross drainage works etc.			
5.4	Plan and profile drawing of stretch showing cross section of road at 20m distance along with ROW and proposed utility	Yes Attached	Enclosed	YES
6	Methodology for laying of pipe line .	1 HDD crossing (Ch-431+840)	Enclosed	YES
7	Draft License agreement is as per Ministry guidelines vide letter No. RW/NH-34044/29/2015/S&R(R) dated 22.11.2016 and signed by two witnesses	Yes, attached	Enclosed	YES
8	License fees in Favor of Morth RPAO jaipur	T BE PROVIDED ON	As per Ministry guidelines vide letter No. RW/NH-34044/29/2015 /S&R(R)dated 22.11.2016	YES
9	Whether Bank Guarantee Has been Obtained	To be provided on demand	As per Ministry guidelines vide letter No. RW/NH-34044/29/2015 /S&R(R)dated 22.11.2016	YES
	(a)If yes, whether Confirmation of BG has been obtained as per Morth, NHAI guidelines	—	—	—
10	Affidavit / undertakings from the applicants for :	Yes	Revised	Yes
10.1	Undertaking for not to damage other existing utility, if damaged then to pay the losses to either to MORTH/NHAI or to the concerned agency .	Yes, attached	Enclosed	YES
10.2	Undertaking for renewal Bank Guarantees and when asked by NHAI/MORTH.	Yes, attached	Enclosed	YES
10.3	Undertaking for confirming all standard condition of MORTH/NHAI guideines.	Yes, attached	Enclosed	YES
10.4	Undertaking for shifting of utility as and when required by MORTH/NHAI within a month at their own cost.	Yes, attached	Enclosed	YES
10.5	Undertaking for indemnity against all damages and claims.	Yes, attached	Enclosed	YES

**Propose Water Resource Division Water supply pipe line crossings 18 Nos. between Chainage 431.840 to 442.010 Kota to Ramganj Mandi Section of NH-148 Bharat Mala Pariyojna Tehsil Ramganj Mandi Distt. Kota in State Rajasthan.**

Bridge/Structural Engineer  
L.N. Mahviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (NH-148-N) PKG-16

Resident Civil Highway Engineer  
L.N. Mahviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (NH-148-N) PKG-16

Manager (Tech)

Team Leader Cum Senior Highway Engineer  
L.N. Mahviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (NH-148-N) PKG-16  
अधिसाधन खण्ड प्रमुख  
Director  
NHAI PUNE KOTA

10.6	Undertaking for management of traffic movement during laying of utility line without hanpering the traffic.	Yes, attached	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.	Yes, attached	Enclosed	YES
10.8	Undertaking that the applicant has obtained various safety clearances from the represantive 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 applicable, before applying to Highway Administration	Yes, attached	Enclosed	YES

.he Right of the Way (ROW) of the National Highway available at the proposed location from the center line of divided carriageway is (100) m (from center of ROW to edge of ROW towards proposed utility)

The above particulars along with the drawing and documents have been verified and certified as correct as per prevailing site condition.

[Name, Designation and Signature of the authorized representative of applicant]

अधिकाारी अभियन्ता  
जल संसाधन खण्ड कोटा

[Name, Designation and Signature of concerned field authority of NHAI/PWD/BRO]

Manager (Tech.)  
NHAI, PIU-Kota

Abhimanyu  
Site Engineer  
NHAI, PIU-Kota

Team Leader Cum Senior Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi- Vadodara (NH-148-N) PKG-9

Bridge/Structural Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi- Vadodara (NH-148-N) PKG-16

Resident Cum Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi- Vadodara (NH-148-N) PKG-16

**Propose Water Resource Division Water supply pipe line crossings 18 Nos. between Chainage 431.840 to 442.010 Kota to Ramganj Mandi Section of NH-148 Bharat Mala Pariyojna Tehsil Ramganj Mandi Distt. Kota in State Rajasthan.**



## HORIZONTAL DIRECTIONAL DRILLING METHOD (HDD) (Trenchless Digging Technology)

### Development of HDD Technology

With the growing environmental concerns and stringent regulations, use of the age old methods like Auger Boring, Drill Bit and Jars are getting restricted. Besides these methods offer result in damaging existing utility and public inconvenience, delay in completion and cost-time over run.

Trench less technology takes all these into consideration and include state-of-art operator stations, automatic hydraulic drill rod loaders on board fluid and mixing stations high torque and horse power for exceptional performance, heavy duty frame to suite any environmental conditions and integrated Tracking System. Tracking system provides not only the whereabouts of the existing utility but also a live real time progression of tools and boring path.

### Objective of HDD

The trench less technology otherwise known as Horizontal Directional Drilling (HDD)/Boring is a process by which Pipeline, Telecom Cables, Power cables, Railway signaling cables, sewerage pipes, Gas and water pipes are installed efficiently under the ground with out disturbing the high value surface and existing utilities as well.

No open cut trench work, no damage to tree roots or flora, no job-site waste to dispose off. Eco friendly on the whole.

No mess, No disruption to public, No Traffic congestion

### Actual Drilling Process

#### Bore path Lanning

The theoretical bore path along which the drill is supposed to move is drawn on a graph sheet. This becomes the reference sheet against which the actual Drill is compared. Any deviation observed is taken care of immediately by suitably adjusting the drill angle or pitch.

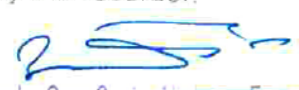
### Pilot Drilling

The start and target pits are made. High pressure fluid consisting of Bentonite and water mixed in proportion (depending upon soil condition) is emitted from the drill head which rotates through the ground forming a pilot hole or tunnel. The position and depth at which the drill head is located can be determined with the help of Tracker. This works on principle of sending electromagnetic waves into the ground and is transferred back by drill tool and measured above ground by the recorder.

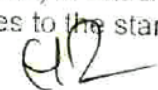
### Back Reaming

The controlled drill tool reached the target pit and is then replaced with a relevant reamer for the job. The product (pipe/cable) is attached directly behind the reamer then moves back along the pit and comes to the start pit.

  
Resident Cum Highway Engineer  
L.M. Malviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (PH-148-N) PKG-9

  
Team Leader Cum Senior Engineer  
L.M. Malviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (PH-148-N) PKG-9

  
T-path  
Bridge/Structural Engineer  
L.M. Malviya Infra Projects Pvt. Ltd.  
Delhi-Vadodara (PH-148-N) PKG-9

  
अधिशासी अभियन्ता  
जल संसाधन खण्ड, कोट.

### Advantages

- Minimum surface disturbance, local landscaping, streets are left undisturbed.
- No traffic disruption.
- Eco friendly-no noise, no waste disposal
- Zero damage to existing underground utilities.

### Safety Precautions during execution

- Informing area - specific local bodies like BSNL, Municipal, Electrical, Water and Sewerage etc. for carrying out HDD job.
- Underground utility scanning is done through GPR.
- Working area is cordoned off with barricading and display boards.
- Sufficient lighting is done for night working.



अविशाधी अरविन्दन  
जल संसाधन बण्ड, कोट



Resident Cum Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi - Vadodara (NH-148-N) PKG-16



Team Leader / Senior Highway Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi - Vadodara (NH-148-N) PKG-9



Sub Engineer  
L.N. Malviya Infra Projects Pvt. Ltd.  
Delhi - Vadodara (NH-148-N) PKG-15