



**भारतीय राष्ट्रीय राजमार्ग प्राधिकरण**  
( सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार )  
**NATIONAL HIGHWAYS AUTHORITY OF INDIA**  
(Ministry of Road Transport and Highways, Govt. of India)



भारतमाला  
प्रगति के पथ पर अग्रसर  
**BHARATMALA**  
ROAD TO PROSPERITY

**क्षेत्रीय कार्यालय / REGIONAL OFFICE**

ई-2/167, अरेरा कॉलोनी, हबीबगंज रेलवे स्टेशन के पास, भोपाल ( म.प्र. ) 462016  
E-2/167, Arera Colony, Near Habibganj Railway Station, Bhopal (M.P.) 462016

दूरभाष/Phone : 0755-2426638, फैक्स /Fax : 0755-2426698, ई-मेल/E-mail : robhopal@nhai.org

NHA/RO-MP/CHHP/BSNL/OFC/2021/ **435763**

Date: 13.07.2021

**Invitation of Public Comments**

**Sub:** Proposal for NOC for access permission for NFS involves laying and maintenance of 57015 kms. of OFC across the country for the strategic communication network of Ministry of Defense & co-laying of BSNL OFC in NFS trench on Jhansi- Nowgaon route.

**Ref:** 1. PD, PIU-Chhatarpur letter no. CHHP/26010/12/NFC/Optical Fibre Cable/2021/6809 dt 08.07.2021  
2. Divisional Engineer, BSNL letter no. DETP/JI/G-2/Vol-III/2019-20 dt. 11.06.2021  
3. Maj. Anurag Dhar letter no. 1921 dt. 11.06.2021 for NFS OFC Cable  
4. Maj Anurag Dhar letter no. 08.07.2021

The Project Director, PIU-Chhatarpur NHAI vide their letter dated 08.07.2021 has submitted the Proposal for NOC for OFC cable laying along Jhansi-Khajuraho section of NH-39 with crossing at km 64.5 Jointly laying of OFC cable by 31 Armd Div Sig Regt (A) Jhansi & DETP, BSNL- Jhansi as received from from Maj/Lt. Col. Officer Commanding, 31 Army Div Sig Regt (A) and Divisional Engineer, BSNL Cantt Jhansi.

2. As per Ministry vide OM No. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016, the Highways Administrator will make available the proposal seeking permission for utility laying for public comments for **30 days** on ground of public interest.

3. In view of the above the comments of public are invited on captioned proposal (copy of application is enclosed) and the same should reach to below mentioned address till **12.08.2021** beyond which no comments will be considered.

The Highway Administrator  
O/o Regional Officer,  
National Highways Authority of India  
E-2/167, Arera Colony,  
Near Habibganj Railway Station,  
Bhopal (MP)-462016  
E-mail ID:robhopal@nhai.org

4. This issues with the approval of Highways Administrator Cum Regional Officer, NHAI, Bhopal (MP).

  
(Anand Prasad)  
Manager (T)

**Copy to:**


- Web-Admin, [nhai.org@gmail.com](mailto:nhai.org@gmail.com), NHAI-HQ for uploading on NHAI website.
- The Senior Technical Director, NIC, Transport Bhawan, New Delhi-110001 for uploading on Ministry's Website.
- The Project Director, PIU-Chhatarpur (MP) for information please.
- Divisional Engineer, Telecom Project, BSNL Lalitpur Road Tele. Exch. Cantt. Jhansi (UP) and 31 Armd Div Signal Regiment (AREN) Jhansi for information and necessary action.

CHECK-LIST

Guidelines for processing the proposal for laying of utility line in the land along National Highways vested with NHAI.

General Information:

- |                                                                                      |                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Name and Address of the Applicant/Agency                                          | :Divisional Engineer – Telecom Project<br>BSNL Exchange, Lalitpur road, Jhansi<br>Cantt Jhansi (UP) – 284001                                                                               |
| 2. National Highway No.                                                              | :NH-39                                                                                                                                                                                     |
| 3. State                                                                             | :Uttar Pradesh & Madhya Pradesh.                                                                                                                                                           |
| 4. Location                                                                          | : Jhansi                                                                                                                                                                                   |
| 5. Chainage in Km.                                                                   | :1.From Km. Ch- 5.100 to Ch. 7.200,<br>2. From Km. Ch- 10.400 to 12.00,<br>3. From KM. Ch- 18.000 to 57.00<br>4. From Km. Ch. 64.00 to 69.500<br>5. One No. NH Crossing x60 Mtr. = 60 Mtr. |
| 6. Length in Meter                                                                   | :48.260 KM.                                                                                                                                                                                |
| 7. Width of available ROW in both side                                               | :As per drawing attached                                                                                                                                                                   |
| 8. Side of NH<br>(Left or right side of NH towards increasing chainage/km direction) | :RHS                                                                                                                                                                                       |
| 9. Name of Highway Authority of NHAI                                                 | : NH - 39                                                                                                                                                                                  |
| 10. Highway Administration address                                                   | :Project Director, NHAI,PIU Chhatarpur (MP)                                                                                                                                                |

  
Divisional Engineer  
Telecom Project, BSNL  
Lalitpur Road Tele. Exch.  
Cantt. JHANSI (U.P.)

  
Atul Pundir  
Dy. Manager (Tech.)  
NHAI PIU CHHATARPUR (M.P.)

  
परिचोजना निदेशक  
Project Director  
भारत.रा.प्रा.प.का.ई. छतरपुर ( म.प्र. )  
NHAI, PIU-CHHATARPUR (M.P.)

**Check list for getting approval for laying of optical fiber cables on NH land**

Sr. No.	Item	Measurement Observation as per site conditions	MORTH Norms	Comply MORTH Norms (Y/N)
1	Details of already laid utility service, if any	No	Enclosed	Y
2	Whether up gradation of the stretch in near future is proposed or not	NA		
	If yes, provision of utility adversely affect the plan of up-gradation		Not affect plan of up-gradation	
3	Laying of the utility service along the National Highways.			
3.1	Location of proposed utility service along the stretch	1.From Km. Ch- 5.100 to Ch. 7.200, 2. From Km. Ch- 10.400 to 12.00, 3. From KM. Ch- 18.000 to 57.00 4. From Km. Ch. 64.00 to 69.500 5: 1 Nos. NH crossings 60M on NH-39 at Km.CH. 64.500 (RHS) Total 48.260 mtr. approx	Utility duct beyond the toe line of the embankment and drains and close to the extreme edge of ROW.	
3.2	Depth of top of Utility service from ground level	1.65 Meter	0.6 meter	
3.3	Mechanism for crossing water channel	Under Ground Boring Method (HDD)	Through utility duct (if provision exists) or beneath the bed of water channel	
3.4	Whether ROW is restricted in this stretch.	NA		
3.4.1	If yes, whether provision of land acquisition is required to lay utility.	NA		
	(a)if yes, whether undertaking for land acquisition along with relevant L.A. details has been furnished.	NA		
3.4.2	Width of concrete duct, if utility services are proposed to be laid in	NA	Not less than one lane	

  
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	concrete ducts.			
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	
4.2	Proposed crossing of utility service	1 Nos. NH crossings on NH-39 at Km. <u>CH.64.500</u>	Perpendicular to NH	
4.3	Type of casing pipe/conduit carrying the utility line.	HDPE Duct	Steel, cast iron, or reinforced cement concrete and have adequate strength	
4.4	Type of casing pipe/conduit pipe are sealed from the outside	Yes	Sealed	
4.5	Length of casing/conduit pipe crossing NH	As per the Width of NH	Extend from drain to drain in cuts and toe to toe of slope in the fills	
4.6	Depth of top of the casing/conduit pipe.	1.65 m below from the top surface	At least 1.2 m below the top of sub grade	
4.7	Crossing method in case of CC pavement. <i>flexible also</i>	HDD Method	Only boring method (HDD)	
4.8	Horizontal and vertical clearances in case utilities are allowed overhead.	NA	In accordance with IRC codes.	
5	Document/Drawings enclosed with the proposal			
5.1	Cross-section showing the size of trench for open trenching method	NA	Enclosed. If applicable	
	(a) Trench width		More than 30 cm and less than 60 cm wider than the outer diameter of the utility pipe	
	(b) Filling of trench		As per Ministry guidelines vide letter No. RW/NH-34044/29/2015/S&R(R) dated 22.11.2018	
	© Location of trench		Extreme edge of ROW	
5.2	Cross section showing the size of pit and location of conduit for HDD method	Enclosed	Enclosed, if applicable	
5.3	Strip plan/Route plan showing utility line, chainage, width of ROW, distance of proposed	Enclosed	Enclosed	

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	utility from the edge of ROW, important mile stone, intersections, cross drainage works etc.			
5.4	Plan and profile drawing of the stretch showing cross section of road at 20m distance along with ROW and proposed utility	Enclosed	Enclosed	
6	Methodology for laying of utility line	Enclosed	Enclosed	
7	Draft License agreement is as per Ministry guidelines vide letter no. RE/NH-34044/29/2015/S& R(R) dated 22.11.2016 and signed by two witnesses	Enclosed	Enclosed	
8	License fees in favor of MORTH RPAO Bhopal	Shall be submitted as soon as permission obtain/Informed by NHAI	As per Ministry vide circular no. RE/NH-34044/29/2015/S& R(R) dated 22.11.2016	
9	Whether Bank Guarantee has been obtained	Shall be submitted as soon as permission obtain/Informed by NHAI	As per Ministry vide circular no. RE/NH-34044/29/2015/S& R(R) dated 22.11.2016	
	(a) If yes, whether confirmation of BG has been obtained as per MORTH/NHAI guidelines			
10	Affidavit/Undertaking from the Applicant for			
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	Enclosed	Enclosed	
10.2	Undertaking for renewal of Bank Guarantees and when asked by NHAI/MORTH	Enclosed	Enclosed	
10.3	Undertaking for confirming all standard condition of MORTH/NHAI guidelines	Enclosed	Enclosed	
10.4	Undertaking for shifting of utility as and when asked by MORTH/NHAI within a month at their own cost.	Enclosed	Enclosed	

  
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10.5	Undertaking for indemnity against all damages and claims	Enclosed	Enclosed	
10.6	Undertaking for management of traffic movement during laying of utility line without hampering the traffic.	Enclosed	Enclosed	
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	
10.8	Undertaking that the applicant has obtained varies safety clearances from the representative authorities such as directorate of Electricity, Chief Controller of Explosives, Petroleum and Explosive Safety Organization, Oil Industry Safety Directorate, State/Central pollution Control Board and any other statutory clearance is applicable, before applying to Highway Administration.	NA	NA	

The Right of the Way (ROW) of the National Highway available at the proposed location from the center line of divided carriageway is 30 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 conditions.

  
**(SUNIL KUMAR KHARE)**  
 [Name Designation and signature  
 Of the authorized representative  
 Of applicant]  
**Divisional Engineer**  
**Telecom Project, BSNL**  
**Lalitpur Road Tele. Exch.**  
**Cantt. JHANSI (U.P.)**

  
 [Name Designation and signature  
 concerned field authority]  
**परिबोजना निदेशक**  
**Project Director**  
**भारत का. ई. छतरपुर ( म.प्र. )**  
**NHAI, PIU-CHHATARPUR (M.P.)**

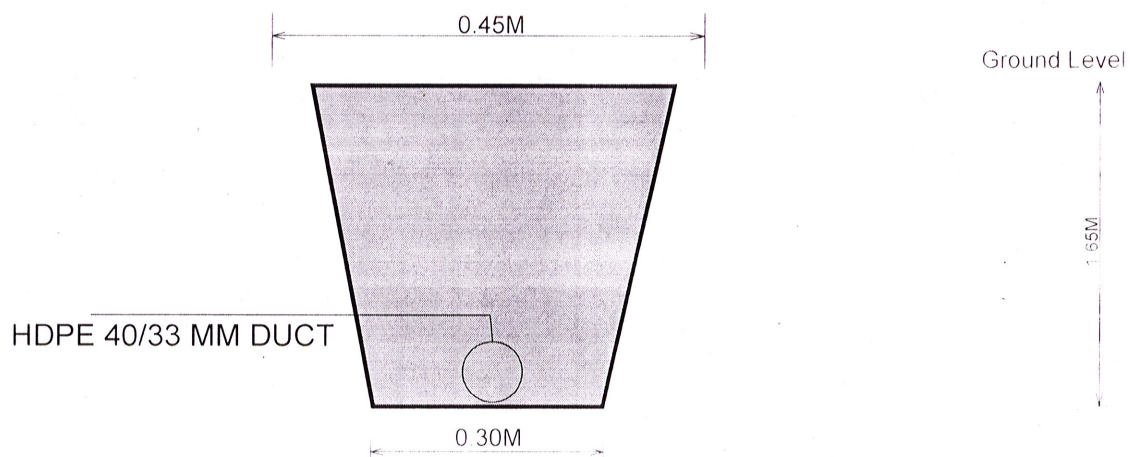
  
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ANNEXURE NO-7

TYPICAL CROSS SECTION OF TRENCHING FOR OFC LAYING



  
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## Annexure 8

### Methodology of Laying of OFC - Open Trenching & Trenchless (HDD)

#### **Trenching Method:**

Laying of Optical Fiber Cable along NH-58 along the mentioned route will be done by conventional method/manual and Machine Trenching method. The dimension of the trench will be 165 cms in depth and 45 cms in width. The Cable laying work will be carried out in phased manner in such a way that after the HDPE / Protection ducts are laid for Optical Fiber Cable, the trench will be reinstated to its original surface.

#### **Trench Filling Method:**

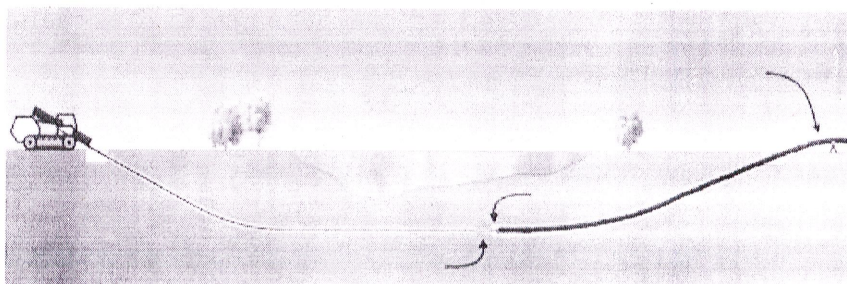
As a measure of abundant precaution against future settlement and other allied problems, only selected granular material will be used in filling reinstatement of trenches. The entire depth of cutting will be filled either with coarse sand or the excavated material, compacted in layers not exceeding 75 mm when compacted by ordinary power roller /plate compacter. Special Compaction equipment like plate compacter, frog hammer will be utilized besides ordinary power roller.

#### **Trenchless Crossing: HDD Method**

Horizontal Directional Drilling (HDD) is a technique for installing product pipes, including utility lines, below ground using a surface-mounted drill rig that launches and places a drill string at a shallow angle to the surface and has tracking and steering capabilities. In recent years HDD has been the preferred methodology due to several government policies conducive to infrastructure growth.

All crossing on the Route will be done by Horizontal Directional Drilling method without disturbing the road surface.

***A Typical HDD Methodology is shown below:***



*[Handwritten Signature]*  
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