



RW/NH-33044/29/2015-S&R(R)pt.  
GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT & HIGHWAYS  
Transport Bhavan, No.1, Parliament Street, New Delhi-110001.

Dated: 11<sup>th</sup> February, 2021

To

1. The Chief Secretaries of all the State Governments/ UTs
2. The Principal Secretaries/ Secretaries of all States/ UTs Public Works Department dealing with National Highways, other centrally sponsored schemes.
3. All Engineers-in-Chief and Chief Engineers of Public Works Department of States/ UTs dealing with National Highways, other centrally sponsored schemes.
4. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110 010.
5. The Chairman, National Highway Authority of India, G-5 &6, Sector-10, Dwarka, New Delhi-110075
6. The Managing Director, NHIDCL, PTI Building, New Delhi-110001
7. All CE-ROs, ROs and ELOs of the Ministry

**Sub: - Utility Shifting Works for development of National Highways - Standard Operating Procedures (SOP).**

Sir,

It has been observed that delays in shifting of utilities is one of the major reasons affecting timely completion of the project. Sometimes, various utilities are not properly accounted/estimated in the DPR which adversely affects execution of the projects.

2. Matter has been considered in detail and following guidelines are issued which shall be strictly followed by the consultants/executing agencies for timely completion of the project: -

2.1 Utilities (both overground and underground) that are required to be shifted for a National Highway project shall be clearly assessed by the DPR consultant during project preparation stage. The scope of work and estimated cost of shifting of utilities (excluding the supervision charges and without credit of dismantled scrape material) shall be included in the bids under civil construction cost as per the detailed estimates duly reviewed/verified by the DPR Consultants and sanctioned by the utility agencies at the appropriate level. Executing Agencies of the Ministry would ensure that the DPR consultants have checked/verified the estimates before sanction by utility owning agencies broadly on following points:

- (i) Utility shifting plans would show the existing utilities to be shifted and proposed utilities with offsets, development plan of project highway duly dimensioned and proposed Right Of Way.
- (ii) There should be no variation in the quantum of existing utilities to be shifted and new facilities to be provided except where the variation is technically explained and



justified and accepted by Executing Agencies. A comparative statement of existing utilities and proposed provision should be prepared and included in the estimates.

(iii) There should not be any upgradation/augmentation of facilities except where the corresponding technologies/codal provisions are obsolete. In case, upgradation/augmentation insisted upon by utility owning agencies, then the difference in the cost of such upgradation/augmentation shall be borne by the utility owning agencies.

(iv) Reference/code no. of SOR items shall invariably be given in the estimates and no centages/contingency and shall be allowed on percentage basis unless the same are provisioned in the applicable SOR having reference/code no.

(v) Market rate of non-scheduled items shall be supported with variable documentary evidence verified by concerned Executing Agency.

(vi) Credit of dismantled material shall be given on realistic basis with detailed calculation/quantities and rates instead of lumpsum/percentage basis.

2.2 In view of the fact that the credit of dismantled material is already accounted for in the cost estimates, the dismantled material/scrap of existing utility to be shifted/dismantled shall belong to the contractor/concessionaire who would be free to dispose of the dismantled material as deemed fit.

2.3 The following provisions of EPC contract agreement shall be amended as under:


S.No.	Mode	Clause No.	Existing Clause	Amended Clause
1.	EPC	9.2	<u>Shifting of Obstructing Utilities</u> The Contractor shall, in accordance with Applicable Laws and with the assistance of the Authority, undertake the work of shifting of any utility (including electric lines, water pipes, gas pipelines and telephone cables) to an appropriate location or alignment, if such utility or obstruction adversely affects the execution of Works or Maintenance of the Project Highway in accordance with this Agreement. <u>The cost of such</u>	<u>Shifting of Obstructing Utilities</u> The contractor shall, subject to Applicable Laws and with assistance of the Authority, undertake shifting of any utility (including electric lines, water pipes and telephone cables), to an appropriate location or alignment, if such utility or obstruction adversely affected the execution of works or maintenance of the project Highway in accordance with this Agreement, as per the scope given in Schedule B and in accordance with applicable standards and specifications of concerned utility owning entity. The cost of shifting of such utilities indicated in Schedule B is payable to the Contractor as per Schedule H. Cost of shifting utilities not included in the Schedule B, if any, shall be treated as Change of Scope. The Authority will provide assistance to the Contractor for obtaining



			<p>shifting, as per estimate prepared by the entity owning the utility and approved by the authority shall be reimbursed by the authority to the contractor. The scope of work such shifting of utility shall be indicated in Schedule B-1. In the event of any delay in such shifting on the part of the contractor, no extension of time for completion of the project and no claims in any manner shall be admissible on this account against the authority.</p> <p>The work of shifting of utilities can be taken up by the contractor any time after signing of the agreement.</p>	<p>the estimates for shifting of such utilities from the entity owning such electric lines, water pipes or telephone cables, as the case may be. The Contractor shall execute such utility shifting works under the supervision of utility owning agency and Authority Engineer (AE) in accordance with the provision of agreement. The supervision charges only shall be paid by the Authority to the Utility Owning Entity. In the event of any delay in shifting thereof, the Contractor shall be responsible for failure to perform any of its obligations here under if such failure is not as a direct consequence of delay on the part of the entity owning such electric lines, water pipes or telephone cables, as the case may be.</p> <p>The dismantled material/scrap of existing Utility to be shifted dismantled shall belong to the Contractor who would be free to dispose-off the dismantled materials as deemed fit by them.</p> <p>The work of shifting of utilities can be taken up by the Contractor any time after signing of the Agreement.</p>
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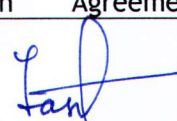
2.4 The following provision of HAM concession agreement shall be amended as under:

S.No.	Mode	Clause No.	Existing Clause	Amended Clause
1	HAM	11.2	11.2.1 The Concessionaire shall subject to applicable laws and with assistance of the authority, undertake shifting of any utility including electric lines, water pipe and telephone	11.2.1 The Concessionaire shall, subject to Applicable Laws and with assistance of the Authority, undertake shifting of any utility (including electric lines, water pipes and telephone cables), to an appropriate location or alignment, if such utility or obstruction adversely affects the execution of works or maintenance of the Projects





			<p>cables to an appropriate location or alignment within or outside the Site if and only if such utility causes or shall cause a material adverse effect on the construction, operation or maintenance of the project. The cost of such shifting shall be borne by the Authority or by the entity owning such utility, if the Authority so directs, and in the event of any delay in shifting thereof, the Concessionaire shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay on the part of the entity owning such electric lines, water pipes or telephone cables, as the case may be</p>	<p>Highway in accordance with this Agreement, as per the scope given in Schedule B and in accordance with applicable standards and specifications of concerned utility owing entity. The cost of shifting of such utilities indicated in Schedule B is payable to the Concessionaire as part of Bid Project Cost. Cost of shifting utilities not included in the Schedule B, if any, shall be treated as Change of Scope. The Authority will provide assistance to the Concessionaire for obtaining the estimates for shifting of such utilities from the entity owning such electric lines, water pipes or telephone cables, as the case may be. The Concessionaire shall execute such utility shifting works under the supervision of utility owning agency and Independent Engineer (IE) in accordance with the provision of Agreement. The supervision charges only shall be paid by the Authority to the Utility Owning Entity. In the event of any delay in shifting thereof, the Concessionaire shall be responsible for failure to perform any of its obligations hereunder if such failure is not as a direct consequence of delay on the part of the entity owning such electric lines, water pipes or telephone cables, as the case may be.</p> <p>The dismantled materials/scrap of existing Utility to be shifted/ dismantled shall belong to the Concessionaire who would be free to dispose-off the dismantled materials as deemed fit by them.</p> <p>The work of shifting of utilities can be taken up by the Concessionaire any time after signing of the Agreement.</p> <p>11.2.2 In case Appointed Date is not achieved and the Concession Agreement is</p>
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				<p>terminated prior to achievement of Appointed Date, the Concessionaire shall be reimbursed the cost of utility shifting carried out during Development Period by the Authority after due certification by the Authorized Representative of the Authority. For the purpose of such reimbursement, the rates in the approved estimates by the concerned utility department shall be paid as per actual work carried out at site. For the avoidance of doubt, the Concessionaire would be reimbursed the cost of utility shifting only in case of termination prior to Appointed Date and only if it carries out the utility shifting as envisaged in Clause 11.2.1</p>
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2.5 The details of existing utilities shall be added in Annexure-I of the Schedule A as given in Sheet-I for both EPC contract agreement & HAM concession agreement.

2.6 Scope of work of proposed utilities shall be added in Annexure-I to Schedule B1 as per utility shifting plans and drawing incorporating the details, such as the length and category of the lines, types of circuits, type and number of poles, size and type of the conductor/cable, the number and type of crossings and the capacity and the number of transformer etc. Annexure-I to Schedule-B1 shall be as given in Sheet-II for both EPC contract agreement & HAM concession agreement.

2.7 For EPC contracts, proportion of contract price corresponding to the utility shifting work (excluding the supervision charges) shall be added under clause 1.2 of Schedule-H as given in Sheet-III. For EPC contracts, the procedure of estimating the value of utility shifting work to be done shall be added under Clause 1.3 of Schedule-H as given in Sheet-IV.

2.8 For Hybrid Annuity Projects, proportion of contract price (excluding the supervision charges) for different stages of utility shifting works shall be added under Clause 1.2 of Annexure-I of Schedule-G enclosed as given in Sheet-V.

2.9 Following shall be added in Schedule D of for both EPC contract agreement & HAM concession agreement: -

“As regards, the work of utility shifting, the relevant specification, relevant rules, regulations and acts of Utility Owning Department/Agencies shall be applicable.”

2.10 The clauses 19.1 (ii) of EPC contract agreement shall be added as under:



“The Contract Price also includes the cost of shifting of obstructing Utilities (including all centages as applicable by the utility owning department except supervision charges) as given in clause 9.2 and Schedule B.”

3. This issue with the approval of competent Authority.

Encl: as above

Yours faithfully,



Jagat Narayan

Superintending Engineer (S&R) (R)  
For Director General (Road Development) & SS

**Copy to:**

1. All CEs in the Ministry of Road Transport & Highways
2. The Secretary General, Indian Roads Congress
3. Technical circular file of S&R (R) Section
4. NIC-for uploading on Ministry's website under "What's new"

**Copy for kind information to:**

1. Sr. PPS to Secretary (RT&H)
2. PPS to DG (RD) & SS
3. PS to all ADGs
4. PS to all JSs

## Sheet-I (Annexure-I to Schedule-A)

### (i) Electrical utilities

The site includes the following electrical utilities: -

#### (a) Extra High-Tension Lines (EHT Lines) \*

S. No	Chainage		Length(in Km)				Crossings			
	From	To	400KV	220KV	110KV	66KV	400KV	220KV	110KV	66KV

#### (b) High Tension/Low Tension Lines (HT/LT Lines) \*

S. No	Chainage		Length(in Km)			Crossings			Transformers	
	From	To	33KV	11KV	LT	33KV	11KV	LT	No	Capacity

### (ii) Public Health utilities (Water/Sewage Pipe Lines) \*

The site includes the following Public Health utilities: -

S. No	Chainage		Length(in Km)				Crossings			
	From	To	Water Supply line		Sewage line		Water Supply line		Sewage line	
			With Pumping	With Gravity flow	With Pumping	With Gravity flow	With Pumping	With Gravity flow	With Pumping	With Gravity flow

### (iii) Any Other Line

(\* This is illustrative and may change as per features of existing utilities.)



**Utility Shifting.**

Shifting of obstructing existing utilities indicated in Schedule A to an appropriate location in accordance with the standards and specifications of concerned Utility Owning Department is part of the scope of work of the Contractor/Concessionaire\*. The bidders may visit the site and assess the quantum of shifting of utilities for the projects before submission of their bid. Copy of utility relocation plan is enclosed. The specifications of concerned Utility Owning Department shall be applicable and followed.

**Notes:**

- (a) The type/ spacing/ size/ specifications of poles/ towers/ lines/ cables to be used in shifting work shall be as per the guidelines of utility owning department and it is to be agreed solely between the Contractor/Concessionaire\* and the utility owning department. No change of scope shall be admissible and no cost shall be paid for using different type/ spacing/ size/ specifications in shifted work in comparison to those in the existing work or for making any overhead crossings to underground as per requirement of utility owning department and/or construction of project highway. The Contractor/Concessionaire\* shall carry out joint inspection with utility owning department and get the estimates from the utility owning department. The assistance of the Authority is limited to giving forwarding letter on the proposal of Contractor/Concessionaire\* to utility owning department whenever asked by the Contractor/Concessionaire\*. The decision/ approval of utility owning department shall be binding on the Contractor/Concessionaire\*.
- (b) The supervision charges at the rates/ charges applicable of the utility owning department shall be paid directly by the Authority to the Utility Owning department as and when Contractor/Concessionaire\* furnishes demand of Utility Owning Department along with a copy of estimated cost given by the later.
- (c) The dismantled material/scrap of existing Utility to be shifted/ dismantled shall belong to the Contractor/ Concessionaire\* who would be free to dispose-off the dismantled material as deemed fit by them unless the Contractor/Concessionaire\* is required to deposit the dismantled material to utility owning department as per the norm and practice and in that case the amount of credit for dismantled material may be availed by the Contractor/Concessionaire\* as per estimate agreed between them.
- (d) The utilities shall be handed over after shifting work is completed to Utility Owning Department to their entire satisfaction. The maintenance liability shall rest with the Utility Owning Department after handing over process is complete as far as utility shifting works are concerned.

**Note -II Copy of utility shifting plans enclosed as Annexure-II to Schedule B1.**

**\*Strike out which is not applicable**



**Sheet-III (In EPC, to be added in Clause 1.2 of Schedule H)**

Item	Weightage in percentage to the Utility Shifting Price	Stage for payment	Percentage weightage
Electrical utilities and public Health Utilities (Water pipe lines and sewage lines)	[****]	(i) EHT line (ii) EHT crossings (iii) HT/ LT line (iv) HT/ LT crossings (v) Water pipeline (vi) Water pipeline crossings (vii) Sewage lines (viii) Sewage line crossings	[***] [***] [***] [***] [***] [***] [***] [***]

\* This is illustrative and may require modification as per scope of work.

**Sheet-IV (In EPC, to be added in clause 1.3 of Schedule 'H')**

Stage of Payment	Weightage	Payment procedure
(i) EHT line	[**]	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rate basis as per its weightage with reference to total cost of EHT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable-30%, (iii) DTR erection (if involved)-15% and (iv) Charging of line including dismantling and site clearance-35% (with DTR) and 50% without DTR)
(ii) EHT crossings	[**]	Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the

		crossings subject to a minimum of 4 crossings.
(iii) HT/ LT line (including transformers if any)	[**]	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of LT/ HT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20% (ii) Conductor stringing including laying of cable-30%, (iii) DTR erection (if involved)-10% and (iv) Charging of line including dismantling and site clearance-40% (with DTR) and 50% without DTR)
(iv) HT/ LT crossings	[**]	Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 10 crossings.
(v) Water pipeline	[**]	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance-50%)
(vi) water pipeline crossings	[**]	Cost of each crossing shall be determined on pro-rata



		basis with reference to total no. of crossings. Payment shall be made for not less than 25% of the crossings subject to a minimum of 8 crossings.
(vii) Sewage lines	[**]	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipe line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is laying of pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance-50%)
(viii) Sewage line crossings	[**]	Cost of each crossing shall be determined on pro-rata basis with reference to total no. of crossings. Payment shall be made for completed activity. (The average weightage of major activities in shifting work is laying pipe-50%, Charging of line including all miscellaneous works and dismantling and site clearance-50%)

\* This is illustrative and may require modification as per scope of work.

Sheet-V (in HAM, to be added under clause 1.2 of Annexure1 to Schedule-G)

Item	Stage for measurement of physical progress	Unit	Quantity	Weightage in percentage to the Contract Price
Electrical and public health utilities	EHT Line	Km		
	EHT crossing*	Number		
	HT/LT lines (including Transformers if	Km		

	any)			
	HT/LT crossings	Number		
	Water Pipelines	Km		
	Water Pipelines crossing	Number		
	Sewage line	Km		
	Sewage line crossing	Number		

**\*This is illustrative and may require modification as per scope of work**