CONSTRUCTION & DESIGN SERVICES



UTTAR PRADESH JAL NIGAM

(A Govt. of U.P.Undertaking)





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2821 7-15- (DINI 1931) CATT-165

Date. 19. 17. 116

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Construction of a Dedicated corridor (4 Lane including Extradosed Bridge across river Ganga) for old, differently abled persons during Kumbh and Magh Mela at Sangam, Allahabad (U.P.) India

Replies/Clarifications to the Queries raised on RFQ cum RFP & Bid Documents by various firms in Pre-Bid Meeting (II) on dated 25.06.2016

Regarding NIT No. 496/CGM-I/ Dedi.Corri.All./16 dated 06.04.2016 and subsequent corrigendum issued vide letter no. 556/CGM-I/Dedi.Corri.All./16 dated 05.05.2016, a Pre-Bid Meeting (II) was held at Head Quarter of C&DS, UP Jal Nigam, Lucknow on dated 25.06.2016. Some of the firms participating in meeting raised some queries in person as well as through correspondence (electronic or otherwise) regarding the pre-qualification criteria mentioned in RFQ cum RFQ document and draft EPC Agreement.

The Bid clarifications and amendments in RFQ cum RFP document and draft EPC agreement are attached herewith.

Enclosure: As above.

(A K Rai) Chief General Manager (I)

Copy to the following for information and necessary action please:-

- 1. Managing Director, U.P. Jal Nigam, Lucknow with enclosures.
- 2. Director, C&DS, U.P. Jal Nigam, Lucknow.
- 3. General Manager (Ganga Bridge), C&DS, U.P. Jal Nigam, Lucknow.
- 4. SAO, C&DS, U.P. Jal Nigam, Lucknow.
- 5. Project Manager, Unit-10, C&DS, U.P. Jal Nigam, Allahabad.
- 6. M/s.....(Participating Firms).

Chief General Manager (I)

AN ISO 9001: 2008 CERTIFIED ORGANISATION

Construction of Dedicated corridor (4 lane including extradosed bridge across river Ganga) for old, differently abled persons during Kumbh and Magh Mela at Sangam, Allahabad (U.P.) India

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1	2	3	4	5	6	
1	RFQ cum RFP/Corrigen dum NIT		Bid Due Date - 05.07.2016 up to 15:00 Hours IST	Request to Extend the Bid Due Date from 05.07.2016 to 31.08.2016. The issuance of the bid documents comprising of draft EPC documents and Feasibility report has been delayed. Therefore we request you to please extend the bid submission due date by 4 weeks time from the present bid due date to submit a comprehensive bid. Since the tender is based on "Design & Construction lump Sum Contract" and the tender estimate is to be based on pretender design, we request Department to extend the tender submission date by 04 weeks from the current date. We request to extend the date of submission by 2 months i.e. 5th September 2016.	no. 238/CGM-I/045/02 dated 08.07.2016 which may be downloaded from our website "www.cdsupjn.org".	
2	RFQ cum RFP		and on-going works as well as the stipulated period			
3	RFQ cum RFP	2.2.1(e) (ii)/15	The Bidder shall have <u>completed</u> at least one project in the last <u>five</u> years preceding the Bid Due Date involving construction of works having:	The Bidder shall have <u>FULLY or SUBSTANTIALLY*</u> completed at least one project in the last <u>TEN</u> years preceding the Bid Due Date involving construction of works having:	As per Amendment -I	

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				With reference to the eligibility criterion setforth for the above mentioned project, we would like to bring to your kind notice that, the construction Industry in India has witnessed very few of such projects of construction of Extradosed / Cable stayed bridges in the last five years. It will be difficult for construction companies in india to meet the requirement through one/single project involving the construction of works/activities mentioned at s.no. i, ii, iii & iv. Therefore we request you to consider at least Two projects and complated in the last seven years preceding the bid due date to meet the eligiblity of the bidder and modify the criterion stuitably as proposed below. Generally for such special projects, experience of projects completed in the last 7-10 years has been considered by the authorities. Copies of Qualification Criteria for recently invited tenders Zuari bridge of MoRTH, ADB funded Six Lane Cable Stayed Bridge in the state of Bihar tendered by BSRDC and Narmada Bridge Project of NHAI enclosed for your reference at Annexure - I The bidder should have experience during the last Seven Financial years preceding the bid due date, of following activities from a single project/multiple projects		
4	RFQ cum RFP	2.2.1(e) (ii)/15	[i]. 4 lane wide PSC Segmental Superstructure bridge least 1500m length on well foundation (excl approaches & viaduct) over a perennial stream/river	e of at [i]. 4 lane wide PSC Segmental Superstructure bridge of at least 864m length on well foundation (excluding approaches & viaduct) over a perennial stream/river (i). 4 lane wide PSC Segmental Superstructure bridge of at least 1500 m length on well / pile foundation (excluding approaches) over a perennial stream/river / sea; (i) 2 lane wide PSC Segmental Superstructure bridge of at least 1500m length on well/Pile foundation(excluding approaches & viaduct) over a perennial stream/river/backwaters. In addition, Bidder should also have construction experience of Segmental superstructure of minm.1500m in a bridge/Viaduct Projects.	As per Amendment -I	

15:07.2016

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5	RFQ cum RFP	2.2.1(e) (ii)/15	at least one extradosed/cable stayed span of minimum 120m length over a perennial stream/river	[ii]. minimum 864 m length (2 lanes or more) bridge with at least seven extradosed/cable stayed span of minimum 96m length over a perennial stream/river [ii]. minimum 500 m length (2 lanes or more) bridge with at least one extradosed/cable stayed span of minimum 120m length over a perennial stream/river ii. minimum 500 m length (2 lanes or more) bridge with at least one extradosed / cable stayed / Steel Super Structure span of minimum 120m length over a perennial stream/river; ii. Minimum 2 lanes bridge with at least one extradosed / cable stayed span over a perennial stream/river; iii. Minimum 400m length (2 lanes or more) bridge/ROB/Viaduct with at least one extradosed/cable stayed span of minimum 100m length.	
6	RFQ cum RFP	2.2.1(e) (ii)/15	viaduct over well/pile foundation	[iii]. at least 2250m length of 4 lane wide road/ railway viaduct over well/pile foundation iii. at least 1750 m length of 4 lane wide road/ railway viaduct over well/pile foundation; iii. at least 1750 m length of 4 lane wide road/ railway viaduct / Elevated structures over well/pile foundation;	
				New Clause Added: For evaluation purpose, construction experience/completed portion from an ongoing project which is open to traffic will also be considered.	As per Amendment- I



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	RFP cum RFP		[iv]. at least 2800m length of 4 lane wide Road or embankment	iv. at least 2800 m length of 4 lane wide Road on embankment iv. at least 2800 m length of 4 lane wide Road on embankment. * In case of a Joint Venture all the members should collectively fulfill all the above criteria, in addition each member of the Joint Venture should individually fulfill at least one of the above criteria. Note:- (i) A single railway line shall be considered as a two-lane road. (ii) The bidder shall furnish the experience certificate issued by the client not below the rank of an Executive Engineer or equivalent.	As per Amendment -I	
8	RFP cum RFP	2.2.1(e) (ii)/15	(Rupees Three Hundred Eighty Two Crores only) shal have been completed from the Eligible Projects in Category 1 and/or Category 3 specified in clause 3.2.1. Fo this purpose, a project shall be considered to completed, i	Therefore we request you to consider at least one similar work complated in the last seven years preceeding the biddue date and modify the criterion as proposed below. at least at least one similar work of Rs. 382.00 Crores (Rupees Three Hundred Eighty Two Crores only) shall have been completed from the Eligible Projects in Category 1 and/or Category 3 specified in clause 3.2.1. For this purpose, a project shall be considered to completed, if more than 90% of the value of work has been completed and such completed value of work is equal to or more than 50% of the estimated project cost during the last 7 years preceding the Bid Due		
				Date.		
9	RFQ cum RFP	2.2.2 (B) (iii)/16	. ~ \	"The Bidder / Firms who have applied for / availed Corporate Debt Restructuring (CDR)/ Strategic Debt Restructuring (SDR) during last five (5) financial years and continuing to be under the same as on the date of tendering are not eligible to participate in the Bid"		

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10	RFQ cum RFP		"Profit before Tax" [as per its audited books of accounts] during the last 2(two) financial years immediately	Profitability: The Bidder shall be required to have positive "Profit before Tax" [as per its audited books of accounts] during the last 5(FIVE) financial years immediately preceding the Bid Due Date.	As per RFQ cum RFP	
11	RFQ cum RFP	2.2.8/18	Member should, in the last 3 (three) years, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder including individual or any of its Joint Venture Member, as the case may be, nor has been expelled from any project or contract by any public entity nor have had any contract terminated by any public entity for breach by	The Bidder including individual or any of its Joint Venture Member should, in the last 2 (two) years, have neither failed to perform for the works of Expressways, National Highways, ISC, & EI works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder including individual or any of its Joint Venture Member, as the case may be, nor has been expelled or terminated by Ministry of Road Transport & Highways or its implementing agencies for breach by such Bidder including individual or any of its Joint Venture Member.		
12	RFQ cum RFP	Appendix-I/44	judicial authority or a judicial pronouncement or arbitration award, nor been expelled from any project or contract by any public authority nor have had any contract			
13	Draft EPC Agreement	4.1.3(b)/17	Approval of general arrangement drawings (the "GAD") from railway authorities to enable the contractor to construct road over-bridges/under-bridges at level crossings on the project road in accordance with specifications and standards, and subject to the terms and conditions specified in such approval, within a period of 150 (one hundred fifty) days from the appointed date, and reimbursement of all the costs and expenses paid by the contractor to the railway authorities for and in respect of the road over-bridges/under bridges;		As per Amendment-II	

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14	Draft EPC Agreement	4.1.3(c)/17		This clause to be deleted or to be replaced with "there is no necessity of Environment Clearance for this particular project as per Governement Gazette"		
15	Draft EPC Agreement	4.1.5/18		"the aggregate damages payable under clauses 4.1.4, 8.3 and 9.2 shall not exceed 10% (ten percent) of the contract price."	As per EPC Agreement.	
16	Draft EPC Agreement	6.1.1/23	this Agreement, the Contractor has, after a complete and careful examination, made an independent evaluation of the Request for Qualification cum Request for Proposal, Scope of the Project, Specifications and Standards of design, construction and maintenance, Site, local conditions, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Site and all information provided by the Authority or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. The Contractor further agrees, acknowledges and affirms	Deviation in this Clause is unsual and we are suggesting below standard Clause being used by NHAI/MoRTH: The Contractor acknowledges that prior to the execution of this Agreement, the Contractor has, after a complete and careful examination, made an independent evaluation of the Request for Qualification cum Request for Proposal, Scope of the Project, Specifications and Standards of design, construction and maintenance, Site, local conditions, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Site and all information provided by the Authority or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Save as provided in Clause 4.1.2 and Clause 5.2,		

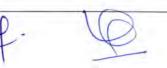






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			conducted its own investigations and analysis and checked the accuracy, adequacy, correctness, reliability and completeness thereof; and the Contractor shall have no claim against the Authority and/or its consultant, to indemnify the selected bidder/Contractor in respect of any loss/damage/costs whatsoever arising out of or in connection with such reliance placed by the Contractor on the aforesaid assumptions, assessments, statements, data and information furnished in the bidding document including this Agreement by the Authority and/or by any consultant appointed by Authority, as the case may be. Save as provided in Clause 4.1.2 and Clause 5.2, the Authority makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Contractor confirms that it shall have no claim whatsoever against the Authority in this regard. The contractor shall, for the performance of its obligations The Authority is requested to release the 50% of the					
17	Draft EPC Agreement	7.1.1/26	hereunder during the construction period, provide to the	Performance Security shall be released upon issuance of Completion Certificate and the balance within 7 days of expiry of the Defects Liability Period.	As per EPC Agreement.			





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18	Draft EPC Agreement	7.4/27	contractor within 60 (sixty) days of the later of the expir	0		
19	Draft EPC Agreement	7.5.1/27	accordance with the provisions of clause 19.5, the authority shall deduct 6% (six percent) thereof as guarantee money for performance of the obligations of the contractor	It is requested that "the authority shall deduct 5% (five percent) thereof as guarantee money for performance of the obligations of the contractor during the construction period (the "Retention Money") subject to the condition that the maximum amount of Retention Money shall not exceed 5% (five percent) of the contract price."		
20	Draft EPC Agreement	7.5.3/28	The Contractor may, upon furnishing an irrevocable and unconditional bank guarantee substantially in the form provided at Annex-II of Schedule-G, require the Authority to refund the Retention Money deducted by the Authority under the provisions of Clause 7.5.1. Provided that the refund hereunder shall be made in tranches of not less than 1% (one per cent) of the Contract Price.		As per EPC Agreement.	
	Draft EPC (Agreement		specified in Clause 8.2 for any reason other than Force Majeure or breach of this Agreement by the Contractor, the Authority shall pay Damages to the Contractor in a sum calculated in accordance with the following formula for and in respect of those parts of the Site to which the Right of Way has not been provided:	 N=Completion period for that particular section of work shall be from agreed construction program. Actual expenses incurred by the contractor shall be reimbursed since the stipulated formula doesn't cover the same. Request you to change 0.05 to 0.5, as idling cost per day per meter will be much more than the cost arriving as per the existing formula. 	As per EPC Agreement.	

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22	Draft EPC Agreement	10.3.2/41	The Contractor shall construct the Project Road in accordance with the Project Completion Schedule set forth in Schedule-J. In the event that the Contractor fails to achieve any Project Milestone or the Scheduled Completion Date within a period of 30 (thirty) days from the date set forth in Schedule-J, unless such failure has occurred due to Force Majeure or for reasons solely attributable to the Authority, it shall pay Damages to the Authority of a sum calculated at the rate of 0.05% (zero point zero five percent) of the Contract Price for delay of each day reckoned from the date specified in Schedule—J and until such Project Milestone is achieved or the Works are completed;	tor shall pay Damages to the Authority of a sum ed at the rate of 0.01% (zero point zero one percent) Contract Price for delay of each day reckoned from the pecified in Schedule —J and until such Project	As per EPC Agreement.	
23	Draft EPC Agreement	14.1.1/60	Project Road: The Contractor shall maintain the Project Road for a period of 4 (four) years commencing from the date of the Provisional Certificate (the "Maintenance Period"). In case of standalone Bridge I structure work, the contractor will get 0.25%, 0.5%, 0.5% and 0.5% of the Contract Price for the first, second, third and fourth year respectively. Amount shall be, inclusive of all taxes. The amount payable for maintenance shall be adjusted to reflect any increase or decrease arising out of variation in WPI to be determined in accordance with the provisions of Clause 19.12. For the avoidance of doubt, it is agreed that in the event no Provisional Certificate is issued, the Maintenance Period shall commence from the date of the Completion Certificate. It is further agreed that the Contract Price hereunder shall be reckoned with reference to the amount specified in Clause 19.1.1, which shall be adjusted to the extent of Change of Scope and the works withdrawn under the provisions of Clause 8.3.3, but shall	eriod of 4 (four) years commencing from the date of visional Certificate (the "Maintenance Period"). In standalone Bridge I structure work, the contractor 0.5%, 1%, 1.5% and 2% of the Contract Price for	As per EPC Agreement.	



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24		19.2.1/74	"Advance Payment") equal in amount to 10 (ten) percent of the contract price, for mobilization expenses and for acquisition of equipment. The Advance payment shall be made in two installments each equal to 5% (five percent) of the Contract Price. The advance payment would be deemed as interest bearing advance at an interest rate of	Request you to make available interest free Mobilisation	
25	Draft EPC Agreement	19.2.7(b)/75	percent) of each Stage Payment Statement with interest until such time as the advance payment has been repaid: provided that the advance payment shall be completely	Deductions shall be made at the rate of 11% (eleven percent) of each Stage Payment Statement until such time as the advance payment has been repaid: provided that the advance payment shall be completely repaid along with interest prior to the time when 80% (80 percent) of the Contract Price has been certified for payment.	
26	Draft EPC Agreement	19.20/86	to the Scheduled Completion Date. the Contractor shall be entitled to receive a payment of bonus equivalent to 0.015% (zero point zero one five per cent) of the Contract Price for each day by which the Project Completion Date		

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27	Draft EPC	19.10.4/82	1			Item				1	Pand	Item Works		,	As per Amendment-II	
	Agreement		Component	Earth Work, granular work, and other	Bituminous	Cement concrete pavement	Culverts, minor bridges and other structures	Major bridges and structures	Component	Earth Work, granular work, and other works	Bituminous work	Cement concrete pavement	Culverts, minor bridges and other structures	Major bridges and structures		
			Labour (PL)	works 20%	20%	20%	15%	15%	Labour (PL)	20%	20%	20%	15%	15%		
			Cement (PC)	5%	Nil	20%	15%	15%	Cement (PC)	5%	Nil	20%	15%	15%		
			Steel (PS)	Nil	Nil	Nil	15%	20%	Steel (PS) Bitumen	Nii	Nil 15%	Nii	15% Nii	20% Nii		
			Bitumen (PB)	Nil	15%	Nil	Nii	MI	(PB) Fuel and	-				1		
			Fuel and Lubricants (PF)	10%	10%	10%	10%	10%	(PF) Other	10%	10%	10%	10%	10%		
			Other Materials (PM)	50%	40%	35%	30%	25%	(PM) Plant	50%	40%	35%	30%	25%		
			Plant Machinery and Spares	15%	15%	15%	15%	15%	Machinery and Spares (PA)	15%	15%	15%	15%	15%		
			(PA)	100%	100%	1000	1000	4000	Total	100%	100%	100%	100%	100%		
			Total	100%	100%	100%	100%	100%	Structural S kindly incre					involved,		
28	Draft EPC Agreement	Schedule- A/1.4/131	The angum	e alignment plans of the project is specified in Annex-III Annex-III only gives the schematic plan of the project. Request kindly share the exact plan depicting Northing Easting of the project.												
29	Draft EPC Agreement	Annex-I (Schedule- A)/1/132		Chain	age Km 7	7.28 towa	ards Anda		ri request kind k including th				ction of th	e widening	Refer clause 2.5.1 of RF6 cum RFP & 6.1.1 of Dra EPC Aggrement	
30	Draft EPC Agreement	Annex-I (Schedule- A)/2/132	The Major passes is pr			through	which the	alignmer	these private			itus of "L	and Acqu	isition" for	Land Acquisition is unde process	
31	Draft EPC Agreement	Annex-I (Schedule- A)/3/133	presently to	here is comNew and 0.78 ceting p	3.4 Km Naini Br 80 from St oint), rest	existing idge to C hastri bri	pavement Chainage dge towar	t/alignmer 3.4 Km o ds Andav	nt carriageway n Bridge towa a Acquisition	, ROW ards And	and overla ava Chow	pping ch k. What	aingaes fr	om Shastri	Refer Detailed drawing folder of feasibility report Land acquisition is unde process.	
32	Draft EPC Agreement	Annex-I (Schedule- A)/6/133	these are in	dicated .	as "Nil"				Please conf	irm the sa	ime.				As per draft EPC Aggrement	
			-		s are giver				Kindly prov	ide the C	AD's of ex	cisting cul	verts		Refer clause 2.5.1 of RFC	

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34	Draft EPC Agreement	Annex-II (Schedule- A)/138	Stretch-1: ROW-60m: Within 150 days after the appointed date Stretch-4: ROW-30m: Within 150 days after the appointed date	 Actual ROW requirement will be more than 60m at sections having "Rotary" Kindly confirm the date for ROW availability of this stretch. 	Date for ROW availabilty of this stretch shall be within 150 days of appointed date	
		Ш		Embankement near Ulta Quila. • Kindly confirm the date for ROW availability of this stretch		
35	Draft EPC Agreement	Annex-III (Schedule- A)/139	details provided in Google Map photo without Northing Easting	Request kindly share the exact location plan depicting Northing, Easting of the alignment. Kindly also provide the soft copy of road alignment in Google Maps along with the Auto Cad drawings.	bid clarification.	
36	Draft EPC Agreement	Annex-IV (Schedule- A)/140-143	The environment clearances activity for the above project is not required as per MoEF notification of 22 August, 2013.		As per EIA 2016 notification enviroment clearence is not required	
37		Schedule- B/1/144	On North Side the NH-2 from Km. 6.620 to Km. 7.280 towards Andava Chowk to be widened from 4-lane to 6-lane.	Kindly provide the cross section for road widening and ROW requirement for this stretch.	Refer clause 2.5.1 of RFQ cum RFP & 6.1.1 of Draft EPC Aggrement	
38	Agreement	Annex-I (Schedule- B)/2.3/146		Please provide the widening scheme and relevant drawings along with ROW availablity on either side of Shastri bridge.	It shall be prepared and got approved by the authority engineer before taking up the construction.	
39	Agreement	Annex-I (Schedule- B)/3/149	Existing intersections which are deficient shall be improved to the prescribed standards.	The number of existing intersections that are to be improved are not mentioned either in Schedule A or Schedule B.	Refer clause 2.5.1 of RFQ cum RFP & 6.1.1 of Draft EPC Agreement	
		Schedule- C/2/160	2-Lane Jhunsi end Ramps (up and down) from Km 5.200 to Km 5.670 to be provided as Viaduct with Well foundation		Refer revised GAD provided in soft copy. Printed version may be obtained from this office.	
- 1	Company of the compan	Schedule- C/2/160		Available ROW at this location is 60m as per Clause 2.4 of Annex I of Schedule B. With this provision of rotary the proposed width will be 63m (2*7.5+1.5+2.5+40) which is more than 60 m available. Please confirm.		

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42	Draft EPC	Schedule- F/169		The authority shall extend all assistance for obtaining permit licenses for smooth operation of construction at site.	Authority agrees with the suggestion.
43	Development of the second of t	Schedule-H/1.3.2/182	foundations for wing and return walls: (weightage: 52.59%) Sub-structure: On completion of abutments, piers up to the abutment/pier cap for a minimum 300 m length of Bridge (Stage) (weightage: 6.59%) Super-structure: On completion of the super structure of minimum 300 m length of Bridge (Stage) in all respects including hand rails/crash barriers, wing walls, return walls, guide bunds, if any, tests on completion etc., bridge complete in all respects and fit for use (weightage: 40.82%) Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridge. Payment shall be made on completion of	Since the bridge is over river Ganga and considering nature and magnitude of work, we may have to put our maximum resources to start the work of well foundation of different wells at a time. Therefore, the payment should be modified as under: • Payment shall be eligible for completion of each linear depth of 10m (in unit of 10m length) of foundation. Payment shall be made on pro rata basis with respect to total linear depth of foundation for 90% of total foundation cost. Balance 10% shall be released on completion of foundation in all respect including bottom plug and well cap. Payment of foundation of abutments shall be made on completion in all respect including foundation for wing wall and return wall. b) Superstructure Since Ganga is perennial river, the superstructure shall be of • spans of non navigable portion • Span of navigable portion	

and

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44	Draft EPC		Project Milestones - I = 9 Months Project Milestones - II = 15 Months	Initial activity like mobilisation, soil investigation, design etc. will consume considerable time. Request you to change, Project Milestones - I = 9 Months / 12 Months Project Milestones - II = 15 Months / 18 Months. Balance shall be kept same.	
45	Plant & Machinery Advances			Kindly provide extra interest free 5% advance against acquisition of equipment.	as per EPC Agreement
46	Structural/ Tender Drawing	Tender Drawings			
47	Structural/Ten der Drawing	Tender Drawings		Kindly confirm, can we modify the span arrangements keeping min. obligatory requirements.	Refer to Sl. No. 46.
48	Structural/ Tender Drawing	Tender Drawings	Span Arrangement and Type of Foundation, Sub-Structurand Super-Structure	Whether the span arrangement and the details (other than Navigational span) i.e type of Superstructure, Substructure and foundation shown in GAD are mandatory. Being an EPC project the bidder can propose any other type of proposal Please clarify	

S. No.	Reference/ Volume Name	Clause/Page No	Existing Clause/Available Terms	Issues raised/Query	Clarifications/Replies by C&DS UP Jal Nigam
1	2	3	-4	5	6
49	Land for temporary use	General		We request authority to provide 50000 Sqm. land near by the site for temporary use of office, Batching plant, Labour camp & casting / FabricationYard at free of cost. We request the authority to provide sufficient land nearby the site free from obstructions for installation of batching plant, casting yards, office and labour camp.	arrange required land or its own.
	Bridge Bearings			In the long extradosed bridge, we intend to provide steel box bearing type sliding mechanism after every 2 to 3 spans of 120m at the centre of spans. Please confirm the acceptability.	shall be taken from
	IRC:112				Approval of authority Engineer shall be taken before execution of work
	RFQ cum RFP and Draft EPC Agreement		MS-1= 9 Months MS-2= 15 Months MS-3= 25 Months The Scheduled Completion Date shall occur on the 30(Thirty) months from the Appointed Date.	Since construction of bridge is of complex nature, the completion period should be considered 36 month instead of 30 months. Again as the project envisage many preparatory and investigative works, the following milestone of progress are suggested:- MS-1= 9 Months =10% MS-2= 15 Months =40% MS-3= 18 Months =50% MS-4= 24Months =70% MS-5= 36 Months =100%	
53	General			Since it is an EPC Contract, the contractor should be free to adapt any type of foundation, substructure and superstructure including span arrangement, keeping basic parameters and mandatory conditions of clearance unaltered. Please confirm.	Refer to SI. No. 46.
54	General			Considering the magnitude of work and completion schedule, the construction activities may have to be continued in shifts. Hence, there should be no restriction on working hours.	
55	General			Site of work should be handed over in one go free from all encumbrances / obstruction and the date of start shall be considered when such free site is made available. Please confirm the status of availability of land.	
-/ 12	Draft EPC Agreement			Secured Advance equivalent to 90% of cost of material brought for the project may please be provided.	Refer to Amendment -II

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S. No.	Reference/ Volume Name	Clause/Page No	Existing Clause/Available Terms	Issues raised/Query	Clarifications/Replies by C&DS UP Jal Nigam
1	2	3	4	5	6
57	Structural/Ten der Drawing			L-section of ramps to the Arail Ghat with existing level of ground and proposed FRL of the ramps may be provided. L-Section and Length of viaduct and length of embankment fill portion of the ramps on Jhunsi side may also be provided, please	drawing folder of feasibility report.
58	Structural/Ten der Drawing			Seismic zone is IV as mentioned in GAD, whereas as per IS:1893 Allahabad falls in zone II. Please clarify	The project site falls in Zone -III as per Map
59	Structural/Ten der Drawing			Sa/g is mentioned as 2.5 in GAD, do we have to consider it as 2.5 or depending upon time period of the structure? Please confirm	
60	Structural/Ten der Drawing				Size of platform is proposed as 80m x 20m resting over well foundation. Approval of authority Engineer shall be taken before execution of work.
61	Structural/Ten der Drawing				As per revised GAD. Soft copy has been made available with this calrification. Prinouts may be obtained from Authority's office.
62	Structural/Ten der Drawing				Passenger lift shall be in operation only during Kumbh and Magh Mela. Approval of authority Engineer shall be taken before execution of work.
63	Structural/Ten der Drawing			VUP at Ch 6+500	It is a part of Viaduct.

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S. No.	Reference/ Volume Name	Clause/Page No	Existing Clause/Available Terms	Issues raised/Query	Clarifications/Replies by C&DS UP Jal Nigam
1	2	3	4	5	6
64	Structural/Ten der Drawing			Up & Dn Ramps near Ulta Quila	As per Draft EPC Agreement and Feasibility report. Approval of authority Engineer shall be taken before execution of work. (RL of top of plateform is proposed at Normal Flood level of 84.0m)
Addi	tional Clarificta	ions:			
65	General				In case of Joint Venture, the Bid documents need to be purchased in the name of JV.
66	General				Revised GAD providing for Viaduct near Ulta Quila, as per revised layout has been uploaded on our website "www.cdsupjn.org". This replaces the embankment near Ulta Quila.

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Draft EPC Agreement for Construction of Dedicated corridor (4 lane including extradosed bridge across river Ganga) for old, differently abled persons during Kumbh and Magh Mela at Sangam, Allahabad (U.P.) India

Amendment-I (RFQ cum RFP)

S. No.	Refere	Reference		se age	Existing Clause	Modified Clause					
1	RFQ RFP	cum	2.2.1 (ii)/15	(e)	The Bidder* shall have completed at least one project in the last FIVE years preceding the Bid Due Date involving construction of works having: (i) 4 lane wide PSC Segmental Superstructure bridge of at least 1500 m length on well foundation (excluding approaches & viaduct) over a perennial stream/river; (ii) minimum 500 m length (2 lanes or more) bridge with at least one extradosed/cable stayed span of minimum 120m length over a perennial stream/river; (iii) at least 1750 m length of 4 lane wide road/ railway viaduct over well/pile foundation; (iv) at least 2800 m length of 4 lane wide Road on embankment. *In case of a Joint Venture all the members should collectively fulfil all the above criteria, in addition each member of the Joint Venture should individually fulfil at least one of the above criteria. Note:- (i) A single railway line shall be considered as a two-lane road. (ii) The bidder shall furnish the experience certificate issued by the client not below the rank of an Executive Engineer or equivalent.	2.2.1 (e) (ii) The Bidder* shall have completed at least one project in the last FIVE years preceding the Bid Due Date involving construction of works having: (i) 4 lane wide PSC Segmental Superstructure bridge of at least 1500 m length on well foundation (excluding approaches & viaduct) over a perennial stream/river; (ii) at least 1750 m length of 4 lane wide road/ railway viaduct over well/pile foundation; and (iii) at least 2800 m length of 4 lane wide Road on embankment. 2.2.1 (e) (iii) In addition to the above, the Bidder shall have completed at least one work involving construction of works of (2 Lane or more) Road/Railway Bridge having at least one Extradosed/Cable stayed span Bridge/ROB/Viaduct. *In case of a Joint Venture all the members should collectively fulfil all the above criteria, in addition each member of the Join Venture should individually fulfil at least one of the above criteria. Note:- (i) A single railway line shall be considered as a two-lane road. (ii) The bidder shall furnish the experience certificate issued by the client not below the rank of an Executive Engineer of equivalent.					







2	RFQ RFP	cum	2.2.8/18	The Bidder including individual or any of its Joint Venture Member should, in the last 3 (three) years, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder including individual or any of its Joint Venture Member, as the case may be, nor has been expelled from any project or contract by any public entity nor have had any contract terminated by any public entity for breach by such Bidder including individual or any of its Joint Venture Member.	The Bidder including individual or any of its Joint Venture Member should, in the last 2 (two) years, have neither failed to perform for the works of Express Ways, National Highways, ISC and EI works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder including individual or any of its Joint Venture Member, as the case may be, nor has been expelled or terminated by Ministry of Road Transport & Highways or its implementing agencies for breach by such Bidder including individual or any of its Joint Venture Member.
3	RFQ RFP	cum	2.26.7 (a)/33	If a Bidder submits a non-responsive Bid;	Deleted.
4	RFQ RFP	cum	Appendix-I Letter Comprising the Application for Bid/44	6. I/ We certify that in the last three years, we/ any of the JV partners have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.	6. I/ We certify that in the last two years, we/ any of the JV partners have neither failed to perform for the works of Express Ways, National Highways, ISC and EI works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award, nor has been expelled or terminated by Ministry of Road Transport & Highways or its implementing agencies for breach by such Bidder including individual or any of its Joint Venture Member.
5	RFQ RFP	cum	ANNEX-I to Appendix-I/5 (e)/49	The updated following information w.r.t para 2.2.8 for the Bidder and each Member of the Joint Venture:	Deleted.

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6	RFQ cum RFP	ANNEX-I to Appendix- I/6/49	Nam	e of Applicant/member of Joint Venture			its non- proje last w.r.t	tatement by the Bidder and each of the Joint Venture (where applicable) disconnects, contractual disputes and litigation/2 years is given below (Attach extra sheet para 2.2.8	losing npliance arbitration	material in past on in the
			No.	Criteria	1st Last Year	2nd Last Year	No.	Criteria	1st Last Year	2nd Last Year
			1	If bidder have either failed to perform for works of Expressways, National Highways, ISC & EI works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder or any of its Joint Venture Member, as the case may be, or has been expelled / terminated by Ministry of Road Transport & Highways or its implementing agencies, for breach by such Bidder or any of its Joint Venture Member, along-with updated details of ongoing process of litigation / blacklisting.			1	If bidder have either failed to perform for works of Expressways, National Highways, ISC & EI works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder or any of its Joint Venture Member, as the case may be, or has been expelled / terminated by Ministry of Road Transport & Highways or its implementing agencies, for breach by such Bidder or any of its Joint Venture Member, along-with updated details of ongoing process of litigation / blacklisting.		
			non- proje	atement by the Bidder and each of the Joint Venture (where applicable) disconserved and contractual non-contents, contractual disputes and litigation/software years is given below (Attach extra sheet para 2.1.19:	losing npliance arbitratio	in past on in the				
7	RFQ cum RFP	Appendix- IV/1/66	and h Goma as the	asideration of you, Chief General Manage aving its principal offices at T.C-38V ti Nagar, Lucknow- 226010, (U.P) (here e "Authority",all or any of ions contained in the said Bidding Docur	, Vibhu inafter r	ti Khand, eferred to	havin Naga "Auth	nsideration of you, Director, C&DS, U. g its principal offices at T.C-38V, Vibhur, Lucknow- 226010, (U.P) (hereinafter nority",all or any of the ter ined in the said Bidding Documents.	iti Khan referred	d, Gomati to as the







8	RFQ RFP	cum	Appendix- VI/70	Director, U.P. Jal Nigam and having its principal offices at T.C-38V, Vibhuti Khand, Gomati Nagar, Lucknow-226010, (U.P., (hereinafter referred to as the "Authority" during Kumbh and Magh Mela at Sangam, Allahabad (U.P.) India (the "Project") through EPC Contract.	at T.C-38V, Vibhuti Khand, Gomati Nagar, Lucknow- 226010, (U.P, (hereinafter referred to as the "Authority" during
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Draft EPC Agreement for Construction of Dedicated corridor (4 lane including extradosed bridge across river Ganga) for old, differently abled persons during Kumbh and Magh Mela at Sangam, Allahabad (U.P.) India

Amendment-II (Draft EPC Agreement)

S. No.	Reference	Clause No./Page No.	Existing Clause	Modified Clause				
1	Draft EPC Agreement	4.1.3(b)/17	Approval of general arrangement drawings (the "GAD") from railway authorities to enable the contractor to construct road over-bridges/under-bridges at level crossings on the project road in accordance with specifications and standards, and subject to the terms and conditions specified in such approval, within a period of 150 (one hundred fifty) days from the appointed date, and reimbursement of all the costs and expenses paid by the contractor to the railway authorities for and in respect of the road over-bridges/under bridges;					
2	Draft EPC Agreement	6.1.1/23	The Contractor acknowledges that prior to the execution of this Agreement, the Contractor has, after a complete and careful examination, made an independent evaluation of the Request for Qualification cum Request for Proposal, Scope of the Project, Specifications and Standards of design, construction and maintenance, Site, local conditions, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Site and all information provided	The Contractor acknowledges that prior to the execution of this Agreement, the Contractor has, after a complete and careful examination, made an independent evaluation of the Request for Qualification cum Request for Proposal, Scope of the Project, Specifications and Standards of design, construction and maintenance, Site, local conditions, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Site and all information provided by the Authority or				







S. No.	Reference	Clause No./Page No.	Existing Clause	Modified Clause				
			by the Authority or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. The Contractor further agrees, acknowledges and affirms that, it has, before placing reliance on the aforesaid, conducted its own investigations and analysis and checked the accuracy, adequacy, correctness, reliability and completeness thereof; and the Contractor shall have no claim against the Authority and/or its consultant, to indemnify the selected bidder/Contractor in respect of any loss/damage/costs whatsoever arising out of or in connection with such reliance placed by the Contractor on the aforesaid assumptions, assessments, statements, data and information furnished in the bidding document including this Agreement by the Authority and/or by any consultant appointed by Authority, as the case may be. Save as provided in Clause 4.1.2 and Clause 5.2, the Authority makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Contractor confirms that it shall have no claim whatsoever against the Authority in this regard.	obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Save as provided in Clause 4.1.2 and Clause 5.2, the Authority makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Contractor confirms that it shall have no claim whatsoever against the Authority in this regard.				



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S. No.	Reference	Clause No./Page No.		Existing Clause						Modified Clause				
3	Draft EPC Agreement	19.10.4 (e)/82		7		Item				Item				
	rigicoment	(0)/02			Road	Works				Road Works				
			Compo nent	Earth Work, granul ar work, and other works	Bitum inous work	Ceme nt concr ete pave ment	Culvert s, minor bridges and other structu res	Major bridge s and structu res	Compo nent	Earth Work , granu lar work, and other works	Bitu mino us work	Ceme nt concr ete pave ment	Culver ts, minor bridges and other structu res	Major bridges and structures 5% 15% 15% 15% Nil Nil
			Labour (PL)	20%	20%	20%	15%	15%	Labour (PL)	20%	20%	20%	15%	
			Cement (PC)	5%	Nil	20%	15%	15%	Cement (PC)	5%	Nil	20%	15%	
			Steel (PS)	Nil	Nil	Nil	15%	20%	Steel (PS)	Nil	Nil	Nil	15%	30%
			Bitume n (PB)	Nil	15%	Nil	Nil	Nil	Bitume n (PB)	Nil	15%	Nil	Nil	Nil
			Fuel and Lubrica nts (PF)	10%	10%	10%	10%	10%	Fuel and Lubrica nts (PF)	10%	10%	10%	10%	10%
	ŝ		Other Materia Is (PM)	50%	40%	35%	30%	25%	Other Materia Is (PM)	50%	40%	35%	30%	15%
			Plant	15%	15%	15%	15%	15%	Plant	15%	15%	15%	15%	15%



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S. No.	Reference	Clause No./Page No.	Existing Clause					Modified Clause							
			Machin ery and Spares (PA)						1 - 3 - 3 - 3	95,000					
			Total	100%	100%	100%	6 100%	100%	То	otal	100%	100%	100%	100%	100%
	Draft EPC Agreement	Schedule-H, Table	Stage of	Payment		ght-	Payment Procedure		Sta	age of	Payme	nt V	Weight- age	Payme Proced	
4		Table 1.3.2/182 A -New Major Bridges (1) Foundation: On completion of the foundation work for minimum 300 m length(stage) of the Bridge including foundations for wing and return walls (2) Foundation: On completion of the foundation work for minimum 300 m length(stage) of the Bridge including foundations for wing and return walls (3) Foundation: (5) Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridge. Payment shall be made on completion of each stage of a Major Bridge as per the		ge be on sis to ear of	(1) Foundation: On completion of the foundation work including foundations for wing and return walls		the work	52.59%	Payment s be made of rata basis on number of foundation executed monthly we respect to total number foundation	n pro- on the ons with the oer of					
							be made completion each stage of Major Brid	on of a ge	a	On co lbutme ip	tructure impletion ents, p to ent/pier c	of of oiers the		Payment sibe made or rata basis on number of abutments/ wing wall/	n pro- on the



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S. No.	Reference	Clause No./Page No.	Existing Clause				Modified Clause		
			(2) Sub-structure: On completion of abutments, piers up to the abutment/pier cap for a minimum 300 m length of Bridge (Stage) (3) Super-structure: On completion of the super structure of minimum 300 m length of Bridge (Stage) in all respects including hand rails/crash barriers, wing walls, return walls, guide bunds, if any,	[6.59%]	given in table	this	(3) Super-structure: On completion of the super structure upto and including Deck Slab.	35.90%	wall, etc, executed monthly with respect to the total number of abutments/piers/ wing wall/return wall, etc. Payment shall be eligible on completion of an individual span. Payment shall be made on pro rata basis completed span with respect to the total linear length (m) of the bridge. This stage payment shall be as



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S. Reference No.	Clause No./Page No.	Existing Clause	Modified Clause
		tests on completion etc., bridge complete in all respects and fit for use .	i. 50% Upon Casting/Fabri cation of each individual span. ii. Balance 50% on Erection and casting of Deck Slab and completion of each individual span.

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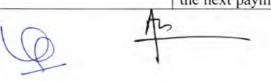
S. No.	Reference	Clause No./Page No.	Existing Clause	Modified Clause			
				(4) Wearing Coat: Expansion Joints, Footpaths, Railings, Crash Barrier, lighting, utility ducts etc. complete in all respect for use.	B.08% Payment shall be eligible on completion of an individual span. Payment shall be made on pro rata basis completed span with respect to the total linear length (m) of the bridge.		
				(5) Other 1 Miscellaneous Items	be made on completion of works in all respects.		
	Secured Advance		NA	specified by the Authority Er paid during the progress of the 75% of the assessed value	n indenture in the form to be ngineer, shall be entitled to be ne execution of the work up to of the Reinforcement Steel, nent works) and Extra-Dose		

and

S. Referen	ce Clause No./Page No.	Existing Clause	Modified Clause
			Cables Stay & Accessories, (which is to be consumed within 90 days of advance), which are in the opinion of the Authority Engineer, nonperishable, non-fragile and are in accordance with the contract and which comply to the following- (i) Brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. (ii) These materials shall be stored in measurable stacks. (iii) The contractor's records of the requirements, orders, receipts and use of materials are kept in a form approved by the Authority Engineer and such records are available for inspection by the Authority/Authority Engineer. (iv) The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Authority Engineer for the purpose of valuation of the materials and providing evidence of ownership and payment thereof. When above specified material, on account of which an advance has been made, are incorporated in the work, the amount of such advance shall be recovered/ deducted from the next payment made under any of the clause or clauses of







S. No.	Reference	Clause No./Page No.	Existing Clause	Modified Clause
				this contract. For avoidance of doubt it is made clear that this advance paid shall be recovered within 90 days of providing the
				advance. If under any circumstances no bills are due within the said period of 90 days, the advance shall be recovered from the first bill put up after the said period even if they are not incorporated in works. The decision of the Authority Engineer shall be final & binding on the Contractor.

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		Allahabad Ro	ad Bridge					
	Centreline Coordinates							
Chainage	Easting	Northing	Remarks					
0.000	586680.101	2811960.730	Start of Alignment					
20.000	586700.080	2811961.627	02					
40.000	586720.060	2811962.524						
60.000	586740.040	2811963.421						
80.000	586760.020	2811964.318						
100.000	586780.000	2811965.214						
120.000	586799.980	2811966.111						
140.000	586819.960	2811967.008						
160.000	586839.940	2811967.905						
180.000	586859.919	2811968.802						
200.000	586879.899	2811969.699						
220.000	586899.879	2811970.596						
240.000	586919.862	2811971.423						
260.000	586939.857	2811971.885						
280.000	586959.857	2811971.946						
300.000	586979.855	2811971.672						
320.000	586999.852	2811971.360						
340.000	587019.850	2811971.048						
360.000	587039.847	2811970.736						
380.000	587059.845	2811970.424						
400.000	587079.843	2811970.112						
420.000	587099.840	2811969.800						
440.000	587119.838	2811969.488	TOTAL STREET,					
460.000	587139.835	2811969.176						
480.000	587159.833	2811968.864						
500.000	587179.830	2811968.552						
520.000	587199.828	2811968.240						
540.000	587219.825	2811967.928						
560.000	587239.823	2811967.616						
580.000	587259.821	2811967.304						
600.000	587279.818	2811966.992						
620.000	587299.816	2811966.680						
640.000	587319.813	2811966.368	AVI a sale a					
660.000	587339.811	2811966.056						
680.000	587359.808	2811965.744						
700.000	587379.806	2811965.430						
720.000	587399.798	2811964.881	A					
740.000	587419.776	2811963.932						
760.000	587439.730	2811963.532						
780.000	587459.654	2811962.383						

800.000	587479.538	2811958.690	
820.000	587499.376	2811956.148	
840.000	587519.159	2811953.209	
860.000	587538.882	2811949.891	
880.000	587558.588	2811946.473	
900.000	587578.293	2811943.054	
920.000	587597.999	2811939.636	
940.000	587617.705	2811936.217	
960.000	587637.410	2811932.799	
980.000	587657.116	2811929.380	
1000.000	587676.822	2811925.962	N. C.
1020.000	587696.527	2811922.543	
1040.000	587716.233	2811919.125	
1060.000	587735.939	2811915.706	
1080.000	587755.644	2811912.288	
1100.000	587775.350	2811908.869	
1120.000	587795.056	2811905.451	
1140.000	587814.761	2811902.032	
1160.000	587834.467	2811898.614	
1180.000	587854.173	2811895.195	
1200.000	587873.879	2811891.777	Start of Arail Ghat Loop
1220.000	587893.584	2811888.358	
1240.000	587913.290	2811884.940	
1260.000	587932.996	2811881.521	
1280.000	587952.701	2811878.103	
1300.000	587972.407	2811874.684	
1320.000	587992.113	2811871.266	
1340.000	588011.818	2811867.848	
1360.000	588031.524	2811864.429	
1380.000	588051.230	2811861.011	
1400.000	588070.960	2811857.736	
1420.000	588090.732	2811854.725	
1440.000	588110.542	2811851.977	
1460.000	588130.387	2811849.494	
1480.000	588150.263	2811847.264	
1500.000	588170.145	2811845.102	
1520.000	588190.028	2811842.940	
1540.000	588209.911	2811840.778	
1560.000	588229.794	2811838.616	
1580.000	588249.677	2811836.454	
1600.000	588269.559	2811834.292	
1620.000	588289.442	2811832.130	
1640.000	588309.325	2811829.968	
1660.000	588329.208	2811827.806	

1680.000	588349.091	2811825.644	
1700.000	588368.973	2811823.482	
1720.000	588388.856	2811821.319	
1740.000	588408.739	2811819.157	
1760.000	588428.622	2811816.995	
1780.000	588448.505	2811814.833	
1800.000	588468.387	2811812.671	
1820.000	588488.270	2811810.509	
1840.000	588508.152	2811808.337	
1860.000	588527.998	2811805.863	
1880.000	588547.737	2811802.652	
1900.000	588567.332	2811798.653	
1920.000	588586.752	2811793.875	
1940.000	588605.965	2811788.323	
1960.000	588624.941	2811782.007	
1980.000	588643.649	2811774.938	
2000.000	588662.059	2811767.127	
2020.000	588680.142	2811758.585	
2040.000	588697.869	2811749.327	
2060.000	588715.212	2811739.367	
2080.000	588732.142	2811728.722	
2100.000	588748.634	2811717.409	
2120.000	588764.659	2811705.444	
2140.000	588780.194	2811692.849	
2160.000	588795.325	2811679.770	
2180.000	588810.368	2811666.590	
2200.000	588825.410	2811653.410	
2220.000	588840.453	2811640.230	
2240.000	588855.495	2811627.049	End of Arail Ghat Loop
2260.000	588870.538	2811613.869	
2280.000	588885.581	2811600.689	
2300.000	588900.623	2811587.508	
2320.000	588915.666	2811574.328	
2340.000	588930.708	2811561.148	
2360.000	588945.751	2811547.967	
2380.000	588960.794	2811534.787	
2400.000	588975.836	2811521.607	
2420.000	588990.879	2811508.426	
2440.000	589005.921	2811495.246	
2450.000	589013.442	2811488.656	Rotary
2460.000	589020.964	2811482.066	
2480.000	589036.006	2811468.885	
2500.000	589051.049	2811455.705	
2520.000	589066.092	2811442.525	

2540.000	589081.134	2811429.344	
2560.000	589096.177	2811416.164	
2580.000	589111.219	2811402.984	
2600.000	589126.262	2811389.803	
2620.000	589141.287	2811376.603	
2640.000	589156.150	2811363.222	
2660.000	589170.492	2811349.284	
2680.000	589184.281	2811334.799	
2700.000	589197.480	2811319.774	
2720.000	589210.067	2811304.233	
2740.000	589222.023	2811288.202	
2760.000	589233.298	2811271.686	
2780.000	589243.980	2811254.778	
2800.000	589254.028	2811237.485	
2820.000	589263.915	2811220.100	
2840.000	589273.788	2811202.707	
2860.000	589283.662	2811185.314	
2880.000	589293.535	2811167.921	
2900.000	589303.408	2811150.527	
2920.000	589313.164	2811133.068	
2940.000	589322.394	2811115.328	
2960.000	589330.506	2811097.051	
2980.000	589336.856	2811078.094	
3000.000	589341.827	2811058.724	
3018.854	589345.841	2811040.303	Abutment A1 of South Viaduct
3020.000	589346.079	2811039.182	
3040.000	589350.112	2811019.593	
3060.000	589354.132	2811000.001	
3080.000	589358.151	2810980.409	
3100.000	589362.242	2810960.832	
3120.000	589366.787	2810941.356	
3140.000	589372.468	2810922.183	
3160.000	589379.323	2810903.399	
3180.000	589387.427	2810885.118	
3200.000	589396.343	2810867.216	
3220.000	589405.567	2810849.470	
3240.000	589414.801	2810831.729	
3260.000	589424.034	2810813.988	
3280.000	589433.272	2810796.249	
3300.000	589442.701	2810778.612	
3320.000	589452.817	2810761.362	
3340.000	589464.145	2810744.888	
3360.000	589477.064	2810729.629	
3380.000	589491.408	2810715.704	

3386.854	589496.635	2810711.271	Start of Main Bridge (Curve Portion)/A2 S. Viaduct
3400.000	589507.072	2810703.281	
3420.000	589523.897	2810692.485	
3440.000	589541.717	2810683.423	
3460.000	589560.353	2810676.187	
3480.000	589579.619	2810670.848	
3500.000	589599.321	2810667.459	
3520.000	589619.264	2810666.056	
3540.000	589639.250	2810666.587	
3560.000	589659.066	2810669.238	
3580.000	589678.532	2810673.793	
3600.000	589697.446	2810680.269	
3620.000	589715.618	2810688.601	
3640.000	589732.867	2810698.707	
3660.000	589749.033	2810710.470	
3680.000	589763.936	2810723.797	
3700.000	589777.789	2810738.218	
3708.854	589783.673	2810744.834	Start of Extradosed Bridge
3720.000	589790.956	2810753.272	
3740.000	589803.896	2810768.521	
3760.000	589816.825	2810783.780	
3780.000	589829.754	2810799.039	
3800.000	589842.683	2810814.299	
3820.000	589855.612	2810829.558	
3840.000	589868.541	2810844.817	
3860.000	589881.470	2810860.076	
3880.000	589894.398	2810875.335	
3900.000	589907.327	2810890.595	
3920.000	589920.256	2810905.854	
3940.000	589933.185	2810921.113	
3960.000	589946.114	2810936.372	
3980.000	589959.043	2810951.631	
4000.000	589971.972	2810966.890	
4020.000	589984.901	2810982.150	
4040.000	589997.830	2810997.409	
4060.000	590010.759	2811012.668	
4080.000	590023.688	2811027.927	
4100.000	590036.617	2811043.186	
4120.000	590049.546	2811058.446	
4140.000	590062.475	2811073.705	
4160.000	590075.404	2811088.964	
4180.000	590088.332	2811104.223	
4200.000	590101.261	2811119.482	
4220.000	590114.190	2811134.741	

4240.000	590127.119	2811150.001	
4260.000	590140.048	2811165.260	
4280.000	590152.977	2811180.519	
4300.000	590165.906	2811195.778	
4320.000	590178.835	2811211.037	
4340.000	590191.764	2811226.297	
4360.000	590204.693	2811241.556	
4380.000	590217.622	2811256.815	
4400.000	590230.551	2811272.074	
4420.000	590243.480	2811287.333	
4440.000	590256.409	2811302.592	
4460.000	590269.338	2811317.852	
4480.000	590282.266	2811333.111	
4500.000	590295.195	2811348.370	
4520.000	590308.124	2811363.629	
4540.000	590321.053	2811378.888	
4560.000	590333.982	2811394.148	
4580.000	590346.911	2811409.407	
4600.000	590359.840	2811424.666	4
4620.000	590372.769	2811439.925	T
4640.000	590385.698	2811455.184	
4660.000	590398.627	2811470.443	
4680.000	590411.556	2811485.703	
4700.000	590424.485	2811500.962	
4720.000	590437.414	2811516.221	
4740.000	590450.343	2811531.480	
4760.000	590463.272	2811546.739	
4780.000	590476.199	2811561.999	
4788.854	590481.922	2811568.756	End of Extradosed Bridge
4800.000	590489.123	2811577.263	
4820.000	590501.999	2811592.567	
4840.000	590514.442	2811608.222	
4860.000	590525.951	2811624.575	
4880.000	590536.371	2811641.642	
4900.000	590545.631	2811659.365	
4920.000	590553.690	2811677.665	
4940.000	590560.510	2811696.462	
4960.000	590566.064	2811715.672	
4980.000	590570.324	2811735.209	
5000.000	590573.267	2811754.988	
5018.854	590574.880	2811773.767	End of Main Bridge (Curve Portion) / A1 N. Viaduct
5020.000	590574.924	2811774.913	and of main bridge (earlier of tion) / At 14. Viaudet
5040.000	590575.191	2811794.908	
5060.000	590574.217	2811814.879	

5080.000	590571.766	2811834.726	
5100.000	590568.078	2811854.379	4.
5120.000	590563.091	2811873.744	
5140.000	590556.821	2811892.732	
5160.000	590549.303	2811911.261	
5180.000	590540.584	2811929.256	
5200.000	590530.796	2811946.695	Start of Jhunsi Side Ramps
5220.000	590520.384	2811963.770	
5240.000	590509.874	2811980.786	
5260.000	590499.359	2811997.799	
5280.000	590488.844	2812014.812	
5300.000	590478.328	2812031.824	
5320.000	590467.813	2812048.836	
5340.000	590457.297	2812065.849	
5360.000	590446.781	2812082.861	11
5380.000	590436.265	2812099.873	
5400.000	590425.749	2812116.885	
5420.000	590415.233	2812133.898	
5440.000	590404.717	2812150.910	
5460.000	590394.202	2812167.922	
5480.000	590383.686	2812184.934	
5500.000	590373.170	2812201.947	
5520.000	590362.656	2812218.960	
5540.000	590352.180	2812235.997	
5560.000	590342.088	2812253.263	
5580.000	590332.611	2812270.874	
5600.000	590323.833	2812288.843	
5620.000	590315.780	2812307.148	
5640.000	590308.466	2812325.762	
5660.000	590301.901	2812344.652	
5680.000	590296.100	2812363.791	End of ramps / Platform
5700.000	590291.067	2812383.146	
5720.000	590286.813	2812402.687	
5740.000	590283.344	2812422.382	
5760.000	590280.664	2812442.200	
5780.000	590278.781	2812462.110	
5800.000	590277.694	2812482.079	
5820.000	590277.408	2812502.076	
5840.000	590277.922	2812522.068	
5860.000	590279.175	2812542.028	
5880.000	590281.079	2812561.936	
5900.000	590283.185	2812581.825	
5920.000	590285.297	2812601.713	
5940.000	590287.452	2812621.597	

5960.000	590289.849	2812641.452	
5980.000	590292.611	2812661.261	
6000.000	590295.788	2812681.006	
6020.000	590299.363	2812700.684	
6040.000	590303.308	2812720.291	
6060.000	590307.643	2812739.815	
6080.000	590312.368	2812759.248	
6100.000	590317.481	2812778.583	
6120.000	590322.979	2812797.812	
6140.000	590328.861	2812816.927	
6160.000	590335.125	2812835.921	
6180.000	590341.766	2812854.786	
6200.000	590348.768	2812873.520	
6220.000	590356.038	2812892.151	
6240.000	590363.473	2812910.718	
6260.000	590370.909	2812929.284	
6280.000	590378.347	2812947.850	
6300.000	590385.852	2812966.388	
6320.000	590393.830	2812984.726	
6340.000	590402.861	2813002.566	
6360.000	590413.420	2813019.542	
6380.000	590425.614	2813035.384	
6400.000	590439.328	2813049.930	
6420.000	590454.429	2813063.032	
6440.000	590470.761	2813074.561	
6460.000	590488.164	2813084.399	
6480.000	590506.462	2813092.452	
6500.000	590525.475	2813098.630	
6520.000	590545.010	2813102.878	
6540.000	590564.871	2813105.160	
6560.000	590584.861	2813105.446	
6580.000	590604.787	2813103.827	
6600.000	590624.420	2813100.051	
6620.000	590643.669	2813094.640	
6640.000	590662.492	2813087.883	
6660.000	590681.113	2813080.587	
6680.000	590699.695	2813073.190	Meeting Point with existing NH-2
6700.000	590718.275	2813065.789	The state of the s
6720.000	590736.855	2813058.387	
6740.000	590755.436	2813050.986	
6760.000	590774.016	2813043.586	
6780.000	590792.597	2813036.187	
6800.000	590811.180	2813028.791	
6820.000	590829.763	2813021.398	

6840.000	590848.349	2813014.011	
6860.000	590866.939	2813006.636	
6880.000	590885.543	2812999.294	
6900.000	590904.207	2812992.108	
6920.000	590923.022	2812985.328	
6940.000	590941.970	2812978.927	
6960.000	590961.042	2812972.905	
6980.000	590980.230	2812967.268	
7000.000	590999.531	2812962.028	
7020.000	591018.934	2812957.177	
7040.000	591038.426	2812952.701	
7060.000	591058.004	2812948.614	
7080.000	591077.659	2812944.919	
7100.000	591097.385	2812941.619	
7120.000	591117.172	2812938.713	
7140.000	591137.014	2812936.204	
7160.000	591156.902	2812934.093	
7180.000	591176.828	2812932.379	
7200.000	591196.784	2812931.064	
7220.000	591216.762	2812930.123	
7226.854	591223.611	2812929.882	Abutment A2 of North Viaduct
7240.000	591236.753	2812929.547	
7260.000	591256,752	2812929.484	
7280.000	591276.749	2812929.824	
7281.054	591277.802	2812929.846	End of Alignment

