सत्यमेव जयते

Government of Jammu & Kashmir

OFFICE OF THE EXECUTIVE ENGINEER FLOOD SPILL CHANNEL DIVISION NARBAL
Fax/Phone: 01951-260223 Email: javidahmakur.80821@jk.gov.in

Notice inviting e-Tender

e- NIT No: 08 of 2026-27 Dated:20/05/2026

For and on behalf of the Lieutenant Governor, Union Territory of Jammu and Kashmir, e-tenders (in double Cover System) on QCBS basis are invited from approved and eligible agencies for the following job to be received by the Executive Engineer Flood Spill Channel Division Narbal.

S.No	Name of Work	Est. Cost (₹. In Lacs)	Earnest Money	Cost of T/Doc. (In ₹.)	Time of completion	M.H Account
01	CORS Enabled DGPS Survey of Flood Spill Channel (FSC) including installation of Benchmarks RD blocks along the alignment of FSC. (QCBS Basis)	26.17	52360/-	2500/-	60 days	FMP Phase-II

Position of AAA =Accorded vide 149-JK (JSD of 2022, dated: 14/07/2022), Position of TS = Sanctioned, Position of funds: (100% Budgetary provision 2026-27)

The Bidding documents consisting of qualifying information, eligibility criteria, bill of quantities (B.O.Q), Set of terms and conditions of contract and other details can be seen/downloaded from the departmental website www.jktenders.gov.in as per schedule of date given below:

1.	Date of Issue of Tender Notice	20 /05/2026
2.	Period of downloading of bidding documents	20/05/2026 **from 1400 Hrs**
3.	Date of pre-bid meeting	25/05/2026 at 11.00 AM in the office of Executive Engineer Flood Spill Channel Division Narbal.
3.	Bid submission Start Date	20 /05/2026 **from 1400 Hrs**
4.	Bid Submission End Date	05/06/2026 **upto 1400 Hrs**
5.	Date & time of opening of Bids (cover-I)	06/06/2026 at 11.00 A.M in the Office of the **Executive Engineer Flood Spill Channel Division Narbal.**
6.	Date of time of bid opening (Cover 2)	Will be intimated online after completion of evaluation of technical cover (cover-I)
7	Submission of Performance Security (PS)	The bidder has to provide 3% of contract Cost as Performance Security & Addl. performance security as per circular issued by the J&K Finance Department vide No. FD-Code/441/2021-02-158 dt:08/08/2025 within 7 days after opening of Financial Bid.

Note:

i. **The Bidders are advised to read all conditions laid down in the NIT carefully before uploaded softcopy any short fall if any found in the soft copy the tender shall be rejected**

ii. **As per Circular issued by the Government of Jammu and Kashmir Civil Sectt. Finance department vide No.OM No.: A/24(2017)-651 dtd. 07-06-2018 which reads as under:**

   a) **The Cost of tenders should be collected by uploading a copy of necessary Treasury Challan/Receipt.**

1. Bids must be accompanied with cost of Tender document in shape of Treasury Challan/Receipt **(Debited to M.H.0701–Rev. Misc)** and Earnest Money in the shape of CDR/FDR in favour of Executive Engineer Flood Spill Channel Division Narbal failing which the tender will be rejected out rightly. The issuing date of CDR/FDR uploaded must be between issuing date to Bid Submission end date of NIT. CDR/FDR (Earnest money/Bid security) and relevant bid documents shall be obtained from the successful bidder before the fixation of contract and relevant documents of Bidder having highest total score (Technical + financial) must be submitted to the Executive Engineer Flood Spill Channel Narbal prior to issuance of allotment.
2. The rates quoted by the bidder shall be deemed to include price escalation and all taxes up to completion of the work. Deduction on account of taxes shall be made from the bills of the contractor on gross amount of the bill as per the rates prevailing at the time of recovery.
3. The Annexure-A and Annexure-B shall form the part and parcel of this e-NIT.
4. Bids shall remain valid for the period **(120 days)** after the bid submission deadline date prescribed by the Employer.
5. Participation in pre-bid meeting is desirable. Bidders shall be deemed to have understood the scope whether or not they attend the pre-bid meeting.
6. Firms registered as Micro, Small or Medium Enterprises (MSME) for providing 'Consultancy Services in Surveying / Engineering / Hydraulic / Flood Management fields' shall be exempted from payment of Tender Document Fee & EMD, subject to submission of a valid and relevant MSME (Udyam) Registration Certificate clearly indicating the applicable service category.
7. Performance security of 3% needs to be deposited by successful bidder.
8. In case the financial bid is found to be unbalanced, the successful bidder (L1) shall have to deposit an Additional Performance Security in the shape of CDR/FDR/BG from any scheduled bank, in accordance with the Govt. of J&K-Finance Department Circular No: FD-Code/441/2021-02-158, Dated: 08/08/2025, as under:
   a. Where the bid price Is below 10% but not below 20% of the project cost put to bid, the additional performance guarantee/security percentage shall be incremented by 0.1% for every percentage of bid price below 10% of the project cost put to bid starting at 11 % with the additional bid performance guarantee being 0.1% and thus additional performance guarantee percentage shall be applied on the bid price.
   b. Where the bid price is 20% or more below of the project cost put to bid, the additional performance guarantee percentage shall be incremented by 0.2% for every percentage of bid price below 20% of the project cost put to bid in addition to 1% of the bid price and this additional performance guarantee percentage shall be applied on the bid price.

c. The additional performance guarantee percentage shall be rounded off to the next lower percentage based on whether the decimal point of the percentage of bid price is below 0.5% or next higher percentage based on whether the decimal point of the percentage of bid price Is 0.5% or more.

Note: The Additional Performance Security shall be treated as a part of Performance Security.

9. The date and time of opening of Bids shall be notified on Web site www.jktenders.gov.in and conveyed to the bidders automatically through an e-mail message on their e-mail address. The bids of responsive bidders shall be opened online on same Web Site in the office of Executive Engineer Flood Spill Channel Division Narbal.
10. The bids for the work shall remain valid for a period of 120 days from the date of opening of bids.
11. The normal deposits to be deducted as per GFR 2017 rules from running bills to be released after DLP of the work is over.
12. The tender opening authority reserves the right to accept or reject any or all tenders or any part of any tender without assigning reason thereof.
13. **Defect liability period of the work shall be commencing six months after completion of civil works. Data correction/defect rectification period is reckoned as six months for survey works after final acceptance.**
14. Bidders are advised to download bid submission manual from the "Downloads" option as well as from "Bidders Manual Kit" on website www.jktenders.gov.into acquaint bid submission process.
15. To participate in bidding process, bidders have to get 'Digital Signature Certificate (DSC)' as per Information Technology Act-2000. Bidders can get digital certificate from any approved vendor.
16. The bidders have to submit their bids online in electronic format with digital Signature. No financial bid will be accepted in physical form. Bids will be opened online as per time schedule mentioned in Para.
17. Bidders must ensure to upload scanned copy of all necessary documents with the bid.

    Note: Scan all the documents on 100 dpi with black and white option.

18. The department will not be responsible for delay in online submission due to any reasons.
19. Scanned copy of cost of tender document in shape of Treasury Challan/Receipt **(Debited to M.H.0701-Rev.Misc) in favour of Executive Engineer Flood Spill Channel Division Narbal and Earnest Money in the shape of CDR/FDR in favour of Executive Engineer Flood Spill Channel Division Narbal failing which the tender will be rejected out rightly.**
20. Bidders are advised not to make any change in BOQ (Bill of Quantities) contents. The BOQ downloaded should be inclusive of all taxes.
21. Bidders should note that if the documents uploaded/submitted on the basis of which the contract has been awarded are found fake/ not genuine at any time, the contract shall be cancelled and the contractor/ bidder shall be blacklisted for participation in this division for a period of One year besides the performance security deposited for the said work shall be forfeited.

22. The %age quoted by the bidder shall be deemed to include price escalation and all taxes upto completion of the work. Deduction on account of taxes shall be made from the bills of the contractor on gross amount of the bill as per the rates prevailing at the time of recovery.
23. Bidders are advised to use "My Documents" area in their user on www.jktenders.gov e-Tendering portal to store such documents as are required.
24. **Instruction to Bidder (ITB)**

    The Bidder must have to upload (soft copies) of the following documents (Photostat/Original should be clearly seen in all respect with Ink Signed and Seal):

    i. Valid original Treasury Challan/Receipt (MH.0701-Revenue.Misc).
    ii. Earnest Money in the shape of CDR/FDR in favour of Executive Engineer Flood Spill Channel Division Narbal.
    iii. Registration Card valid & renewed for the year in which bids are invited.
    iv. Valid GSTIN Registration Certificate.
    v. PAN Card with No.
    vi. Bidder shall furnish proof of latest returns (i.e. latest clearance certificate) in form of:
        a) GSTR-I of the latest quarter / latest month whichever is applicable to the bidder.
        b) GSTR-3B of the latest quarter / latest month whichever is applicable to the bidder.
        c) Every participating agency to mandatorily disclose the bank account number which is linked with their GSTIN at the time of bid submission. No payments shall be released to any other bank account except the one linked with the GST registered number of the successful bidder.

    Note: The GSTR-I/GSTR-3B Confirmation status will be checked online. If GSTR-I/GSTR-3B found invalid action as per GFR shall be initiated.

        d) Other Relevant Documents according to NIT.
        e) The successful bidder will have to submit hard copies of all documents uploaded on e-tending portal before issuance of LOI or Allotment.
25. The department will not be responsible for delay in online submission due to any reasons.
26. The contractor shall have to pay necessary royalty charges to Geology & Mining Department for the item of ''Supply of stones/boulders and supply of earth from Karevas' of its own. Nothing shall be paid by the Department**.**
27. The bidder at his own responsibility and risk should visit and examine the site of the work and its surroundings before submission of bid.
28. Labour Cess as applicable shall be deducted at the time of payment.
29. The work should be executed within the time limit as stipulated in the NIT.
30. No variation of quantity or rates is admissible.
31. In case if the contractor fails to execute the work as per condition and time limit prescribed in the NIT. The work shall be put to fresh tenders at his risk and cost, besides debarring from participation in tendering process. In addition to imposition of penalty as warranted under rules.
32. The Service Tax/labour cess/GST/Income tax and other applicable statutory deductions will be made from the gross amount as per the rates in vogue at the time of payment.

General Conditions of Contract:

33. The date of start of the work shall be reckoned within three days from the date of issuance of LOI/Contract allotment as the case may be.
34. Drawl of agreement with this department on PWD form-25 Double within 3 days after fixation of contract.
35. **Penalty for delay in completion:**
    In case of delay in completion of work beyond stipulated period of completion, penalty upto maximum of 10% of the contract shall be imposed.
36. **Advance Payments**: No Mobilization /Equipment Advance shall be paid
37. **Secured Advance**: No Secured Advance is admissible / Payable.
38. **Schedule of payment:**
    The payment schedule shall be fixed after award of contract in favour of successful bidder, on the basis of availability of funds and value of work executed, shall be determined by the Engineer.
39. **Amendment of bidding document**:
    Before the deadline for submission of bids the employer may modify the bidding documents by issuing Addenda.
40. **Restoration of work**:
    On completion of contract the agency shall be responsible to remove all un-used material and restore all work in its original position at his own cost.
41. **Arbitration:**
    The arbitration shall be conducted in accordance with the arbitration procedure stated in the J&K conciliation and Arbitration Act No: XXXV of 1997 issued vide SRO No: 403 vide Notification of J&K Govt., "Law Department" 11th December-1997.
42. **Safety:** The contractor shall be responsible for safety of all activities at site of work.
43. **Discoveries:**
    Anything of historical or other interest or of significant value unexpectedly discovered on the site shall be the property of the Govt.
44. **Tests:**
    The contractor shall be solely responsible for carrying out the mandatory tests required for the quality control at his own cost
45. **Termination:**
    The employer may terminate the contract if the contractor causes a fundamental breach of the contract.
46. The date of start of work shall be reckoned within three days from the date of issuance of allotment/ Letter of intent. In case the agency fails to execute the work, the deposits in the shape of performance Security shall be liable for forfeiture besides the Contractor will be suspended for participation in the tendering process in this department for a period of one year from the bid due date of this work without serving any notice.
47. All key materials shall have to be strictly as per prescribed specifications and approval of the Engineer In-charge.
48. Failure on part of the contractor to fulfill his obligations of maintenance schedules shall result in forfeiture of the Performance Security deposits held for this purpose for this work.
49. **Fundamental breach of contract will include**:
    i. Continuous stoppage of Work for a period of 30 days without authorization of Engineer in- charge.
    ii. Contractor is declared bankrupt.

iii. Any evidence of involvement of contractor in corrupt practices.
iv. If the contractor indulges in willful disregard of the quality control measures put in place by the department.
v. Contractor delays the completion of work beyond stipulated time of completion.
vi. Pursuant to the process of termination of defaulted contract, the employer reserves the right to invite fresh tender for the balance work at the risk and cost of defaulter contractor.
vii. Major Labour Laws applicable to establishment engaged in building and other construction work:
   a) Workmen compensation act 1923.
   b) Payment of Gratuity Act 1972.
   c) Employees P.F. and Miscellaneous Provision Act 1952.
   d) Maternity Benefits Act 1951.
   e) Contract Labour (Regulation & Abolition) Act 1970.
   f) Minimum Wages Act 1948.
   g) Payment of Wages Act 1936.
   h) Equal remuneration Act 1979.
   i) Payment of bonus Act 1965.
   j) Industrial disputes Act 1947.
   k) Industrial employment standing orders Act 1946.
   l) Trade Union Act 1926.
   m) Child Labour (Prohibition & Regulation) Act 1986.
   n) Inter State Migrant workmen's (Regulation of employment & Conditions of service) Act 1979.
   o) The Building and other Construction workers (Regulation of employment and Condition of service) Act 1996 and the Census Act of 1996.
   p) Factories Act 1948.
   q) Compliance with Labour Regulation Laws of J&K State.

50. **Laws Governing the Contract:** The contract shall be governed by Laws of the land.
51. **Insurance:**
    Insurance cover to Labour / Machinery / Work / Plant material / Equipment by the contractor shall be mandatory.
52. **Courts Jurisdiction:**
    In case of any disputes/differences between contractor and Department the jurisdiction shall be J&K State.
53. **Time Extension:**
    a. The work is to be completed within the time limit specified in the NIT and the time of completion will also increase/decrease in proportion with additional/ deleted quantum of work depending upon the actual quantum of work.
    b. Requested for extension of time shall be made by the contractor in writing not later than fifteen days of happening of the event causing delay. The contractor shall also indicate in such a requested the period for which extension is desired.
    c. Abnormal/bad weather of serious loss of damage by fire of civil commotion, strike or lockout (other than among the labour engaged) affecting any or the trades employed on the work, or non-availability of departmental stores. Any other cause which in the absolute

discretion of the accepting authority is beyond the contractor's desire.

d. On contractor's representation based on the grounds as detailed above the time for completion of the work may be extended by a period considered reasonable by the Department.
e. Extension of time shall be also admissible in the event of temporary suspension of work.

54. The tender/bid is liable to rejection if it does not fulfill the requirements as laid down in NIT.
55. All other terms and conditions same as laid down in the PWD Form-25 Double shall also remain in force.
56. Tendering authorities possess the liberty to cancel tenders at any stage before the finalization and issuance of the Letter of Acceptance (LoA).
57. Joint Venture (JV) is not allowed for the bid.
58. **Bidders who have submitted tender fee and EMD for e- NIT No. 03 of 2026-27, Dated:13/04/2026 shall be valid for this Bid also**.

Sd/-

(Er. Javaid Ahmad Kurpal)
Executive Engineer
Flood Spill Channel Division
Narbal.

No.: FSCDN/CS/826-50
Dated: 20/05/2026

Copy for information to the:

1. Chief Engineer Irrigation and Flood Control Department, Srinagar. This is with reference to his authorization issued vide No: CE/IFC/DB/434-37 dated : 06/04/2026
2. Director Department of Ecology, Environment & Remote Srinagar for information and with the request to depute expert for bid evaluation of contract
3-6. District Development commissioner Budgam/ Srinagar/ Bandipora/ Baramulla.
7. Superintending Engineer, Hydraulic Circle, Budgam.
8. Joint Director Information Department, Srinagar for publishing the e-NIT in two leading local dailies preferably Greater Kashmir & Urdu daily before its due date.

9-13. Assistant Executive Engineer Flood Spill Channel, Sub-Division Chadoora/ Narbal/Singhpora/ Shariefabad/ Rambagh.
14-21. Contractors Association, Sheikh Bagh/ Court road/Narbal/SadaBahar Sonar Qalipora/ Sumbal /National Contract Association, Chadoora/ Pirpanchal Contractors Association,Zanigam/Beerwah.
22-24. H.D/ H.A /A.A. O/ Divisional office.
25. Notice Board.
26. Office file.

Annexure-A
Eligibility and Qualification Criteria

The following shall be the criteria for qualifying the consultants for the work and therefore relevant documents as sought in the criteria below may be uploaded in technical bid for evaluation purpose:

1. **Office Location**

The firm shall submit details of its working office location strictly in the prescribed format appended at the end of this NIT. The firm must have a fully functional and operational office within the Kashmir Valley, equipped with adequate technical manpower, surveying equipment support and communication facilities, for effective execution, coordination and supervision of the survey work. Firms not having a working office within the Kashmir Valley at the time of submission of bid shall not be considered for this assignment. Documentary proof in support of the working office, such as ownership/lease deed, latest utility bills, or any other relevant evidence, shall be submitted along with the bid.

2. **Financial Criteria (Average annual Turnover)**

The bidder shall have an Average Annual financial turnover during the last three years, ending 31st March of the previous financial year i.e., 31/03/2026, should be at least 30% (thirty percent) of the estimated cost i.e., 26.17lacs.

Note: The turn over should be duly certified by a Chartered Accountant.

3. **Similar Project Experience**

The applicant should have successfully completed or substantially completed similar works during last seven years ending last day of month previous to the one in which applications are invited should be either of the following:

(i) Three similar completed services costing not less than the amount equal to 40% (forty percent) of the estimated cost; or

(ii) Two similar completed services costing not less than the amount equal to 50% (fifty percent) of the estimated cost; or

(iii) One similar completed service costing not less than the amount equal to 80% (eighty percent) of the estimated cost.

Note**:**

“Similar Project Experience” for this NIT shall include:

DGPS/Electronic Total Station–based survey of rivers, flood spill channels, canals, drainage channels or other major hydraulic / flood management infrastructure which shall include preparation of longitudinal sections, cross-sections, bank top surveys and

related drawings. The firm shall have undertaken similar survey of minimum 20kms (Length) or 2.5 sq Kms (area) of canal/river/Nallah.

The Experience Certificate for similar project experience shall be certified by the client to whom the service has been provided not below the rank of Executive Engineer. Private Experience shall not be considered.

4. **Key Personnel**

The firm should have experience and qualified key personnel on board to undertake the task successfully with due diligence:

S.No.	Designation	Qualification	Experience
01.	Project Manager / Team Leader (01 No.)	BE/B.Tech (Civil Engineering)	Minimum **5 years**' experience in survey works, including at least **3 years in river/flood channel surveys**
02.	GIS Expert (01 No.)	Diploma/BE/B.Tech/ (Civil Engineering)/M.Sc/PG diploma in GIS/Geo-informatics/Remote sensing	Minimum **4 years**' experience in DGPS & Total Station–based surveys. Software skills ArcGIS, QGIS etc
03.	DGPS (RTK) Survey Specialist (01 No.)	Diploma / ITI / Certified Surveyor	Minimum **3 years**' experience in CORS enabled RTK-based DGPS surveys, preferably in river or canal projects
04	Survey Specialist (01 No.)	Diploma / ITI / Certified Surveyor	Minimum **3 years**' experience in Total Station/DGPS surveys, especially in constrained areas

Note: *Attach CV's and qualification certificates of the key personnel for evaluation with photograph duly signed by Director/HR head of the firm*

5. **Survey Equipment**

The agency shall have minimum of:

(i) Two (2) numbers of dual frequency/multi-frequency GNSS (DGPS), CORS/RTK compatible with valid calibration certificates,

(ii) one (01) Number electronic Total Station and

(iii)one (01) Number auto level.

Accuracy of the equipment (DGPS)

Horizontal = +/- 15mm$\pm$0.5ppm

Vertical = +/- 15mm$\pm$0.5ppm

6. **Online Submission (uploading) of documents:**

The following documents shall be uploaded online as part of Technical Bid.

1. Treasury Challan /Demand draft due to cost of Bid as per NIT/SBD.
2. Bid Security in the form of CDR/FDR/Bank Guarantee as specified.
3. Financial turnovers of last 3 years certified by a CA with UDIN.
4. Experience in work of Similar nature works executed from last seven years along with copy of allotments/agreement and completion certificates.
5. Evidence of ownership/lease/hiring of the major equipment.
6. Details of the proposed technical persons.
7. Pan Card (Scanned Copy)
8. Registration Certificate G.S.T (Scanned Copy) which shall be checked online.
9. Valid registration (Scanned Copies).
10. In case of MSME firms valid registration which shall be checked online.
11. Latest GST Returns (GSTR-3B) Monthly/Quarterly as applicable (Attested Copy).
12. Any other specific document can be added as per work requirement.
13. Bank account number of the bidder linked with uploaded GSTIN number.
14. ITR of last 3yr financial years ending 31/03/2025.
15. Documentary proof in support of working office in Kashmir valley.
16. Calibration certificates of DGPS.

In case of any deficiency, it will be treated as misrepresentation by such bidder and the bid will be declared non-responsive.

7. **Evaluation of Bids**

The technical bids shall be downloaded for undertaking evaluation. The bidders whose technical bids are found substantially responsive shall be listed online. The financial bids of the technically qualified bidders shall be opened only.

All responsive Bids will be considered for processing as below.

i) Proposal Evaluation Committee will prepare a list of responsive bidders, who comply with all the Terms and Conditions of the tender. All eligible bids will be considered for further evaluation by the Committee according to the Evaluation process defined in this bid document. The decision of the Committee will be final in this regard.

ii) Evaluation committee will examine the bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.

iii) Proposals shall be opened in the presence of bidder's representatives who intend to attend at their cost. The bidder's representatives who are present shall sign a register giving evidence of their attendance. Proposal document shall be evaluated as per the following steps.

A. **Preliminary Examination of Eligibility**

1. Criteria documents:

The Prequalification document will be examined to determine whether the bidder meets the eligibility criteria, whether the proposal is complete in all respects, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non- responsive for any reason or not meeting the minimum levels of the performance or eligibility criteria specified in various sections of this Tender Document will be rejected and will not be considered further.

2. **Evaluation of document:**

Detailed evaluation of the bids shall be carried out in order to determine whether the bidders are competent enough and whether the technical aspects are substantially responsive to the requirements set forth in the Tender Document. Bids received would be assigned scores based on the parameters defined in the table below. All supporting document submitted in support of Eligibility and Technical Evaluation matrix should comply the following:

a. Supporting document is to be submitted in Technical Cover.

b. Supporting document should clearly indicate value of the completed/on-going project and scope of work/ services should be clearly highlighted.

c. Bidders failing to comply with any of the above then the Bid will be summarily rejected

The Criteria for Technical Evaluation are as follows:

S.No.	Technical Qualification Requirement	Technical Qualification Framework	Max. Marks
1.	**Similar Project Experience**	**Distribution of Marks** **a)** ETS/DGPS survey projects of canal / river / nallah / drainage channel / flood channel including cross-sections, longitudinal sections and site plan = **5 Marks per project (**Maximum = **10 Marks)** **b)** CORS-enabled DGPS / RTK survey projects of canal / river / nallah / drainage channel / flood channel including cross-sections, longitudinal sections and site	**33**

		plan = **6 Marks per project** **(**Maximum = **18 Marks)** **c)** Similar CORS-enabled DGPS / RTK survey projects for hydraulic, irrigation, drainage, flood management, road/linear infrastructure or large-area topographic survey = 2.**5 Marks per project** (Maximum = **5 Marks)** **Note:** Only completed or substantially completed works supported by work order/allotment, completion certificate and scope of work shall be considered. The certificate should clearly indicate the nature of work, length/area surveyed, value of work and date of completion.	
2.	**Project Understanding and Survey Methodology**	**Distribution of Marks** **a)** Understanding of FSC alignment, cross-sections, L-sections, bank tops, bed levels, HFL, utilities, confluences and benchmarks = **3 Marks** **b)** Reach-wise survey methodology with chainage-based execution plan = **3 Marks** **c)** Methodology for CORS-enabled DGPS/RTK, Total Station and Auto/Digital Level integration = **3 Marks** **d)** Strategy for obstructed areas such as bridges, dense vegetation, narrow reaches, built-up stretches and utility crossings = **2 Marks** **e)** Methodology for identification, marking and referencing of HFL with respect to established benchmarks = **2 Marks**	**13**
3.	**Accuracy Assurance and Quality Control Plan**	**Distribution of Marks** **a)** Detailed plan to achieve required accuracy of **±25 mm** for exposed ground/control survey = **3 Marks** **b)** Independent check survey plan using Total Station / Auto Level / Digital Level = **3 Marks** **c)** Benchmark establishment, levelling, closure checks and error adjustment method = **3 Marks** **d)** RTK quality parameters including fixed solution, PDOP, satellite count, correction age, occupation time and repeat observations = **3 Marks** **e)** Accuracy validation report format including horizontal	**15**

		and vertical error statement = **3 Marks**	
4.	**Submerged Bed-Level Methodology**	**Distribution of Marks** **a)** Method for capturing bed levels in submerged or water-covered portions of FSC = **3 Marks** **b)** Use of suitable method such as GNSS-integrated echo sounder / calibrated sounding rod / other approved bathymetric method depending upon depth and flow condition = **2 Marks** **c)** Method for deriving bed RL from Water Surface Level and measured depth with proper correction for offsets = **2 Marks** **d)** Calibration and validation procedure for sounding / bathymetry equipment = **1 Mark** **e)** Field safety and operational procedure for survey in flowing water / high water condition = **2 Marks**	**10**
5.	**Work Plan, Deployment and Completion Strategy**	**Distribution of Marks** **a)** Reach-wise deployment schedule for completing the full FSC survey within the stipulated time period = **2 Marks** **b)** Daily productivity plan indicating number of cross-sections per day, survey teams and equipment deployment = **1 Marks** **c)** Manpower deployment chart including Team Leader, Surveyors, GIS/CAD staff and QA/QC personnel = **1 Mark** **d)** Risk management plan for vegetation, access constraints, water level, weather conditions and utility obstructions = **1 Mark**	**5**
6.	**Data Processing, GIS/CAD Deliverables and Data Management**	**Distribution of Marks** **a)** Processing workflow from raw DGPS / Total Station / Level data to final X, Y, Z dataset = **2 Marks** **b)** Preparation methodology for DTM/DEM, site plan, contours, cross-sections and longitudinal sections = **3 Marks** **c)** Proposed digital deliverables including Shapefile, DWG, PDF, Excel, raw data and processed data = **2 Marks** **d)** Feature coding strategy for bank top, toe, bed, structures, utilities, HFL, benchmarks and other survey features = **1 Mark**	**10**

		e) Data backup, naming convention, metadata and version control procedure = **2 Marks**	
7.	**Project Approach and Proof of Concept**	**Presentation shall include step-by-step methodology, field procedure, survey equipment, software workflow, data processing, accuracy control, bathymetry approach and sample outputs.** **Proof of Concept shall include a CORS-enabled DGPS/RTK survey of 100 m section of FSC as per scope of work in the bidding document.** **Distribution of Marks** **a)** Field survey of 100 m section of FSC in presence of Departmental officials = **2 Marks** **b)** Cross-sections at 25 m interval with adequate points across channel width = **2 Marks** **c)** Submission of sample raw data, processed coordinates and geo-tagged field photographs = **1 Mark** **d)** Sample cross-section, longitudinal section and site/topographic plan drawing = **2 Marks** **e)** Accuracy check statement and comparison with independent check observations = **2 Marks** **f)** Submission of sample survey report/drawings within prescribed time = **1 Mark**	**10**
8.	**Presentation and Technical Interaction**	**Distribution of Marks** **a)** Clarity of presentation on overall methodology and deliverables = **1 Mark** **b)** Explanation of CORS-enabled RTK DGPS, Total Station and Auto/Digital Level integration = **1 Mark** **c)** Explanation of bathymetry / submerged bed-level procedure = **1 Mark** **d)** Explanation of QA/QC, validation, closure checks and error reporting = **1 Mark**	**4**
		Technical Score (Te) =	**100**

Note: For assessment of technical score, committee shall include external member from Department of Ecology, Environment & Remote sensing, J&K & atleast one member from technical cell from the office of Chief Engineer, Kmr, I&FC Department Kashmir.

B Financial Evaluation

The Bidder shall be selected on the basis of Quality cum Cost Based System (QCBS), whereby technical proposal will be allotted weightage of **70%** and financial proposal will be allotted weightage of **30%**. The proposal with the lowest bid shall be given a financial score of 100 and the other proposals shall be given financial scores that are inversely proportionate to lowest financial proposal as stated below. The total score, both technical and financial, shall be obtained by weighing the quality and cost score and adding them up.

Financial Proposals of only those Applicants who scores at least 70% marks in Technical Proposal evaluation shall be opened and evaluated as per financial evaluation criteria.

The Financial Proposals shall be given scores as follows:

S_f= 100 x Fm/ F

F: Financial Proposal of Applicant under consideration (applicants quoted price)

F_m: Lowest financial proposal (lowest quoted price)

S_f: Financial Score

For selection of bidder, final ranking will be determined based on the combined total score for each consultant separately. This will be done by applying a weight of 0.70(or 70% and 0.30 (or 30%) respectively to the technical and financial scores of each qualifying proposal.

The Total Score of Technical Proposal and Financial Proposal shall be computed as follows:

Total Score = (T_e x 0.70) + (S_f x 0.30)

T_e: Technical score.

S_f: Financial Score

C Selection

The Applicant scoring the highest Total Score shall be declared as the Selected Consultant/Bidder.

D Bid opening Committee

Bids will be opened by the committee framed by Executive Engineer FSC Narbal. For evaluation of Bids (technical/financial) Chief Engineer Jal Shakti (I&FC) shall nominate additional members in addition to the committee already framed by Executive Engineer FSCD Narbal. The committee beside existing divisional committee shall include following members:

1. Atleast one member from Department of Ecology, Environment & Remote sensing, J&K.
2. Atleast one member from technical cell in the office of Chief Engineer, Kmr, I&FC Department Kashmir.
3. Atleast one member of the rank of Executive Engineer from other division of, I&FC Department Kashmir.

Firms/Consultant Contact Details		
1.	Name of Firms/Consultant	
2.	Main areas of Expertise in Consultancy	
3.	Type of Organization Firm/Company/ partnership firm registered under the Indian Companies Act,*1956 /* the partnership Act,1932/MSME registration	
4.	Whether the Firms/Consultant has been blacklisted by any Central Govt. / State Govt./PSU/ Govt. Bodies /Autonomous? If yes, details there of.	
5.	Address of registered office with telephone no.	
6.	Contact Person with telephone no, Whatsapp No. &e-mail ID	

Enclose:-Copy of Certificate of Incorporation.

1. Copy of Article of Association in respect of 3above.
2. MSME Registration
3. Undertaking in respect of 4 above.

Signature of the Bidder
Full name of authorized person
Stamp and Date

Format for CV of Key personnel

The Bidder shall provide all the information requested below. Fields with asterisk(*) shall be used for evaluation.

Position*		
Personnel information	**Name**	**Date of birth**
	Professional qualifications	
Present employment	**Name of employer**	
	Address of employer	
	Telephone	**Contact(manager/personnel officer)**
	Fax	**E-mail**
	Job title	**Years with present employer**

Summarize professional experience in reverse chronological order. Indicate experience relevant to the consultancy project.

From*	**To***	**Company**	**Position**	**Relevant Technical Experience***

Note: Paste Latest Photograph on CV

Annexure-B

Terms of Reference

1. Background

The Flood Spill Channel (FSC) is a critical flood mitigation infrastructure intended to divert excess flood discharge of River Jhelum and reduce flooding in Srinagar city and adjoining areas. The Flood Spill Channel has an overall length of approximately 48kms, extending from Padshahibagh, Srinagar to its outfall near Wullar Lake, Sopore. The width of the channel varies from 80 to 220m (excluding embankments). In order to enhance its carrying capacity and improve hydraulic efficiency, re-sectioning of the Flood Spill Channel has been proposed. Accurate and up-to-date survey data is essential for planning, design and execution of these works. Accordingly, this survey assignment is intended to generate reliable field data related exclusively to the Flood Spill Channel.

2. Objective of the survey

The primary objectives of the survey are:

(i) To carry out detailed topographic survey for re-sectioning of the Flood Spill Channel.

(ii) To capture existing channel geometry including bed levels, side slopes and bank tops, HFL.

(iii)To prepare longitudinal and cross-sectional profiles required for design and execution of re-sectioning works.

(iv) To establish/construct reference benchmarks (After every 1Km on both embankments of FSC) and ensure uniform vertical and horizontal control.

3. Scope of Work

The scope of survey work shall be confined strictly to the Flood Spill Channel (FSC) and shall include the following components:

(i) Reconnaissance and Preparatory Works:

a. Preliminary reconnaissance of the Flood Spill Channel to understand site conditions, accessibility and constraints.

b. Identification of survey limits, control points and suitable locations for benchmarks.

(ii) Cross-Sectional Survey

a. Detailed cross-sectional survey of the Flood Spill Channel at regular intervals of every 25 meters (Minimum 18 field points per x-section or more , as required to

capture full channel geometry) along the entire length or as directed by the Engineer-in-Charge.

b. In reaches where the channel profile, bed configuration, width, side slopes or hydraulic characteristics vary significantly, or near structures, bends, confluences, constricted sections and disturbed reaches, additional cross-sections shall be taken at intervals of less than 25 meters as directed by the Engineer-in-Charge.
c. Each cross-section shall capture complete channel geometry including bed level, side slopes, berms and bank tops on both sides.
d. Identification, observation and marking of High Flood Level (HFL) at different locations along the Flood Spill Channel, based on available physical indicators, historical evidence, local enquiries and field observations, as directed by the Engineer-in-Charge.
e. The HFL marks shall be clearly referenced to established benchmarks and incorporated in the longitudinal sections, cross-sections and drawings.
f. Cross-section recording of FSC is mandatory at each bridge sites and PHE/irrigation infrastructure sites.
g. Location & levels of embankments of Hokersar /Higam/Nowgham wetland.

(iii) Longitudinal and Centre Line Survey

a. Longitudinal survey along the center line of the Flood Spill Channel to record bed profile and level variations.
b. Chainage-based survey to ensure continuity and accuracy of longitudinal data.

(iv) Survey of existing Infrastructure

a. Locations, alignments and levels of existing **PHE schemes and Irrigation schemes**, including intake points, pump houses, pipelines, canals and related appurtenances falling within or near the Flood Spill Channel shall be surveyed.
b. Accurate location and levels of existing infrastructure viz. Bridges, gates, sluice gates, regulators, electric poles, transmission towers, PHE pipelines, irrigation pipelines, embankments and other utilities shall be captured and mapped with reference to the channel centerline.

(v) Survey of Nallah / Drain Confluence

At each nallah or drain confluence point with the Flood Spill Channel, detailed survey shall be carried out including:

i. Cross-sections of the Flood Spill Channel and the nallah 500m upstream and downstream of confluence point.
ii. Longitudinal sections up to 500 m upstream/downstream of the confluence point
iii. Recording of bed levels, bank levels and water surface levels, as applicable

(vi) Integration with Channel Survey

All structural, utility and confluence data shall be integrated with the main Flood Spill Channel survey and referenced to the approved benchmarks and coordinate system.

(vii) Site Plan of FSC

Site plan plan shall include alignment of FSC along with location of Infrastructure, benchmarks and major landmarks with proper labeling.

(viii) Establishment of Benchmarks

Location of all the existing and new benchmarks shall be well established.

(ix) Construction of Benchmarks

New benchmarks shall be constructed along the alignment of FSC as per the specifications provided in the document.

(x) Development of Model

The survey shall include development of digital models (DTM/DEM) of the channel and recording of **survey points at the interval of 10m for topographic survey** along entire stretch of FSC.

(xi) Calculation of earthwork quantities

Survey shall include calculation of quantities of earthwork required for two (02) number of proposals for re-sectioning of FSC.

(xii) Manpower, equipment & machinery

The firm/contractor has to all the necessary arrangements viz. equipments, machinery, manpower, approvals and certifications and the cost shall be borne by the firm. The consultant/firm shall execute survey irrespective of hindrances at site viz. existing infrastructure, vegetation, considerably high water levels in channel etc.

4. Survey Methodology and Instruments

a. The primary survey instrument shall be DGPS (RTK-based) for establishing horizontal and vertical control and for carrying out channel surveys.
b. CORS (Continuously Operating Reference system)-based DGPS (Real-Time Kinematic) survey methodology shall be adopted to maintain continuity and consistency of data along the Flood Spill Channel.
c. In areas where DGPS observations are affected due to dense vegetation, proximity to bridges, overhead structures, narrow sections or signal obstruction, Total Station survey shall mandatorily be used.
d. Auto Level may be used wherever required for cross-verification of levels.

Methodology Details shall clearly describe:

- DGPS (RTK) survey methodology including base–rover configuration
- Use of Total Station in obstructed areas such as bridges, dense vegetation and narrow sections
- Procedure for taking cross-sections at 25 m intervals and at closer intervals wherever channel profile varies
- Method of capturing bed levels in flowing water (WSL and depth-based derivation)
- Procedure for marking High Flood Levels (HFLs)
- The bidder shall demonstrate how the specified accuracy of ±25mm shall be achieved and validated.
    a) Fixed RTK solution is obtained.
    b) CORS correction is stable.
    c) PDOP is within acceptable limits.
    d) Sufficient occupation time is maintained.
    e) Benchmarks are tied to a reliable vertical datum.
- Independent check observations are carried out by Total Station/Auto Level.
- The Bidder shall utilize best possible technique for recording measurements in areas which are continuously submerged.

5. Accuracy Standards of Survey

The permissible error in vertical and horizontal measurements shall be within ±25 mm.

Necessary checks and closures shall be carried out to ensure accuracy and reliability of survey data. Datum and coordinate system must be defined.

Real-time Kinematic Position (RTK)/Network RTK

- Horizontal: 25mm ± 0.5ppm
- Vertical: 25mm ± 0.5ppm

a) Horizontal datum: WGS 84 / UTM Zone 43N or department-approved coordinate system.
b) Vertical datum: Mean Sea Level / nearest approved GTS/departmental benchmark.
c) If CORS gives ellipsoidal height, conversion to orthometric height must be clearly documented.

6. Benchmarks and Control

a. Temporary and/or permanent benchmarks shall be established at suitable locations as directed by the department.
b. All survey data shall be referenced to approved benchmarks to ensure uniformity across the surveyed reaches.
c. Permanent benchmarks should be connected by closed levelling using Auto Level/Digital Level.
d. Benchmark after every 500 m on both banks be established or as decided by engineer-incharge.
e. Closure error should be specified.

7. Data Recording and Documentation

a. All observations shall be recorded systematically with proper coding and referencing.
b. Field sketches and notes shall be maintained to supplement digital data.

8. Time Schedule

The entire assignment as per the scope of work has to be completed within 60 days.

9. Report and Documents to be submitted by Consultant

A. Pre-Execution Submissions (Within 3 Days of work order)

These are mandatory before field work starts:

1. Survey Work Plan & Methodology Report
    a. Reach-wise survey plan with chainage limits
    b. Proposed sequence of work to complete survey within 60 days
    c. Instrument inventory to be used (DGPS RTK, Total Station, Auto Level)
    d. Details of CORS (Continuously Operating Reference system) based RTK (Real-Time Kinematic) methodology
    e. Proposed mitigation for DGPS limitations (bridges, vegetation, narrow reaches)
2. Deployment Schedule

a. Manpower details (survey teams, supervisors)
b. Instrument allocation reach-wise
c. Daily production targets (cross-sections/day)

3. Instrument Calibration Certificates
    a. Valid calibration certificates of DGPS, Total Station and Auto Level
    b. Certificates shall not be older than 6 months
4. RTK observation quality
    a. Only fixed RTK observations should be accepted.
    b. Float RTK points should be rejected or re-observed.
    c. PDOP limit should preferably be ≤ 3.
    d. Minimum satellite count and correction age should be recorded.
    e. Raw observation logs should be submitted.

B. Daily & Weekly Execution Reports (Core Control Mechanism)

1. Daily Survey Progress Report (To be submitted electronically)

   It shall include:
    a. Date and location (chainage from – to –)
    b. Number of cross-sections completed (25 m interval)
    c. Instruments used
    d. Weather/site constraints (if any)
    e. Geo-tagged photographs of survey activity
2. Weekly Progress Report
    a. Reach-wise progress summary
    b. Cumulative chainage covered
    c. List of completed cross-sections
    d. Pending stretches with reasons
    e. Planned targets for next week

Weekly reports will be reviewed to ensure adherence to the 60-day completion period.

C. Technical Data Submissions (For verification)

1. Raw Survey Data
    a. DGPS observation files
    b. Total Station raw files (where used)
    c. Field level books (scanned copies)
2. Processed Survey Data
    a. Coordinate files (X, Y, Z)
    b. Cross-section data in tabular format

c. Longitudinal profile data

3. Control & Benchmark Report
    a. List of benchmarks used/established
    b. Coordinates and levels
    c. Closure calculations and error statements

The contractor has to assist third-party for verification

D. Drawings & Interim Submissions

1. Interim Drawing Submissions
    a. Reach-wise submission of drawings (every 10–15 km or as directed)
    b. Cross-sections at 25 m intervals
    c. Longitudinal section plots
    d. Site Plans
2. Correction & Compliance Notes
    a. Compliance report on observations raised by Engineer-in-Charge
    b. Revised drawings/data after corrections

E. Final Submission Documents

1. Final Survey Report
    a. Methodology adopted
    b. Instruments used
    c. Accuracy achieved (±25 mm)
    d. Difficult stretches & mitigation adopted
2. Final Drawings
    a. Approved longitudinal sections
    b. Approved cross-sections
    c. Index plans
    d. Site Plans
    e. Validation report
3. Digital Data
    a. Shape file/ DWG/ PDF drawings
    b. Raw & processed data
    c. Excel cross-section tables
    d. Excel Longitudinal-section tables
4. Completion Certificate
    a. Certification that survey is complete and correct
    b. Signed by authorized representative of contractor

Soft copy of Data shall be provided in separate DVDs and Solid State Hard disk of requisite capacity

Hard Copy Submission of Drawings and Documents

- The contractor shall submit hard copies (3 sets) of all drawings, plans, longitudinal sections, cross-sections and related documents, printed on standard A1/A2/A3/A0 size sheets as applicable, using high-resolution, clear and legible prints.
- All hard copies shall be produced from original digital files with appropriate scale, proper line weights, clear annotations, chainages, levels and legends, ensuring excellent print clarity and readability.
- Scanned, blurred or low-resolution prints shall not be accepted.
- Each hard copy shall be duly signed and stamped by the authorized representative of the contractor prior to submission.

Hard copies shall strictly match the approved digital drawings and any discrepancy between hard and soft copies shall render the submission liable for rejection.

10. Verification of Data and Drawings

a. The final submission in the form soft and hard copy shall be examined and evaluated by a Committee constituted by the Chief Engineer, I&FC Kashmir.
b. Verification shall include, but not be limited to:
    i. Verification of DGPS (RTK) and Total Station observations
    ii. Cross-checking of longitudinal sections, cross-sections and level data
    iii. Validation of coordinates, reduced levels and benchmark references
    iv. Scrutiny of accuracy, closures and compliance with specified tolerances
    v. Verification of surveyed locations of bridges, utilities, PHE and irrigation infrastructure.
    vi. Contractor shall make all necessary arrangements viz. survey equipments, manpower, etc for third party verification.
    vii. Minimum 2% of points/cross-sections should be independently checked by department/third party.
    viii. Check shots should be taken using Total Station/Auto Level.
    ix. A separate accuracy validation report should be submitted.

11. Rectification of Deficiencies

Any errors, omissions or discrepancies observed during verification shall be communicated to the firm/consultant, who shall rectify the same at his own cost within the stipulated time frame.

12. Final Acceptance of Deliverables and closure of survey

Final acceptance of the survey work and release of payments shall be subject to satisfactory completion, verification by committee and approval by the Engineer-in-Charge.

13. Payment Schedule

Payment to the contractor shall be made in stages, linked strictly with physical progress, submission of required reports/documents and satisfactory proof checking of survey data. No advance payment shall be admissible. Payments shall not made without third party verification.

Stage-I

On Completion of 30% Survey Work – 25% Payment shall be released

1. Completion of survey of 30% of length of total i.e., 14.5Kms
2. Submission of:
    (i) Daily & Weekly Progress Reports.
    (ii) Raw & processed DGPS / Total Station data for completed reaches.
    (iii) Interim drawings (cross-sections & L-sections) certified by Engineer-in-Charge.
    (iv) Verification by committee.
    (v) Construction of Benchmarks in the stretch of 14.5Kms.

Stage-II

On Completion of 60% Survey Work – 50% Total Payment shall be released

1. Completion of survey of 60% of length of total i.e., 29.0Kms
2. Submission of:
    (i) Daily & Weekly Progress Reports.
    (ii) Raw & processes DGPS / Total Station data for completed reaches.
    (iii) Drawings (site plan, cross-sections & L-sections) certified by Engineer-in-Charge.
    (iv) Verification by committee.
    (v) Rectified drawings.
    (vi) Construction of Benchmarks in the stretch of 29.0Kms.

Stage-III

On Completion of 90% Survey Work – 75% Total Payment shall be released

1. Completion of survey of 90% of length of total i.e., 43.0Kms
2. Submission of:
    (i) Daily & Weekly Progress Reports.
    (ii) Raw & processes DGPS / Total Station data for completed reaches.

(iii) Drawings (site plan, cross-sections & L-sections) certified by Engineer-in-Charge.

(iv) Verification by committee.

(v) Rectified drawings.

(vi) Construction of Benchmarks in the stretch of 48.0Kms.

Stage-IV

On Completion of 100% Survey Work – 100% Total Payment shall be released

Final payment shall be released only after submission of:

(i) Final Survey Report

(ii) Approved drawings (hard & soft copies)

(iii) Complete digital data package

(iv) Verification and clearance by the Third-Party Proof Checking Committee constituted by the Chief Engineer, I&FC Kashmir

(v) Final acceptance by the Competent Authority

Note: No payment shall be released on completion of civil works only.

14. Taxes

The financial offer of the consultant is deemed to include all taxes, GST, Income tax as applicable to the consultancy service payments and same shall be deducted as per rules in vogue from the running payments of the consultant

15. Data and Services by Client

The client shall provide necessary cooperation to the consultant in undertaking the assignment. The following data and services shall be provided by the Department to facilitate smooth and timely execution of the survey work. However, provision of these inputs shall not absolve the contractor of its responsibility for accuracy, completeness and timely completion of the survey. Existing drawings, layouts and records of the Flood Spill Channel available in the Division office, if any

(i) Facilitation of site access to the Flood Spill Channel within departmental jurisdiction

(ii) Coordination with concerned field offices for smooth movement of survey teams

(iii) Details of available permanent or temporary benchmarks.

(iv) Technical guidance from the Engineer-in-Charge regarding survey limits, critical locations and priorities

(v) Review and approval of survey methodology, interim submissions and drawings within reasonable time.

(vi) Constitution of Third-Party Committee by the Chief Engineer, I&FC Kashmir

(vii) Coordination for scheduling and conduct of proof-checking activities

Non-availability or insufficiency of any data provided by the Department shall not be cited as a reason for delay or inaccuracy in survey work. The contractor shall independently verify all data and shall be solely responsible for correctness of the survey.

16. Release of EMD/Bid Security

Bid security of unsuccessful bidders shall be released after finalization of tender. Bid security of the successful bidder shall be released after submission of Performance Security.

The performance security shall be released in favour of the consultant after successful completion of services including DLP/ defect correction period. In case the consultant does not complete the assignment as per the agreed terms and conditions, his/her performance security is liable to be forfeited. In case any deficiency arises in the services offered under this contract, the client shall take appropriate action including the forfeiture of the performance security deposit. **The consultant should exercise due diligence and standard professional ethics while delivering the services. Any misleading, inaccurate and deficient document/detail/advice shall attract action including forfeiture of the EMD.**

17. Penalty for Delay

The assignment under this contract is time bound and to be completed without delay and spilling over. In case consultant does not take steps to complete the task within the stipulated time, he will be penalized for such delays beyond the completion time. The amount will be recovered from his due payments as per discretion of client. The delay shall vary upto 10% of allotted amount.

18. Termination of Contract

The contract is liable to be terminated by the Client in case:

i) Consultant fails to discharge its obligations under the contract.
ii) Consultant fails to comply with the notices and instructions of client

19. Termination of Contract

The contract is liable to be terminated by the Client in case:

i) Consultant fails to discharge its obligations under the contract.
ii) Consultant fails to comply with the notices and instructions of client.

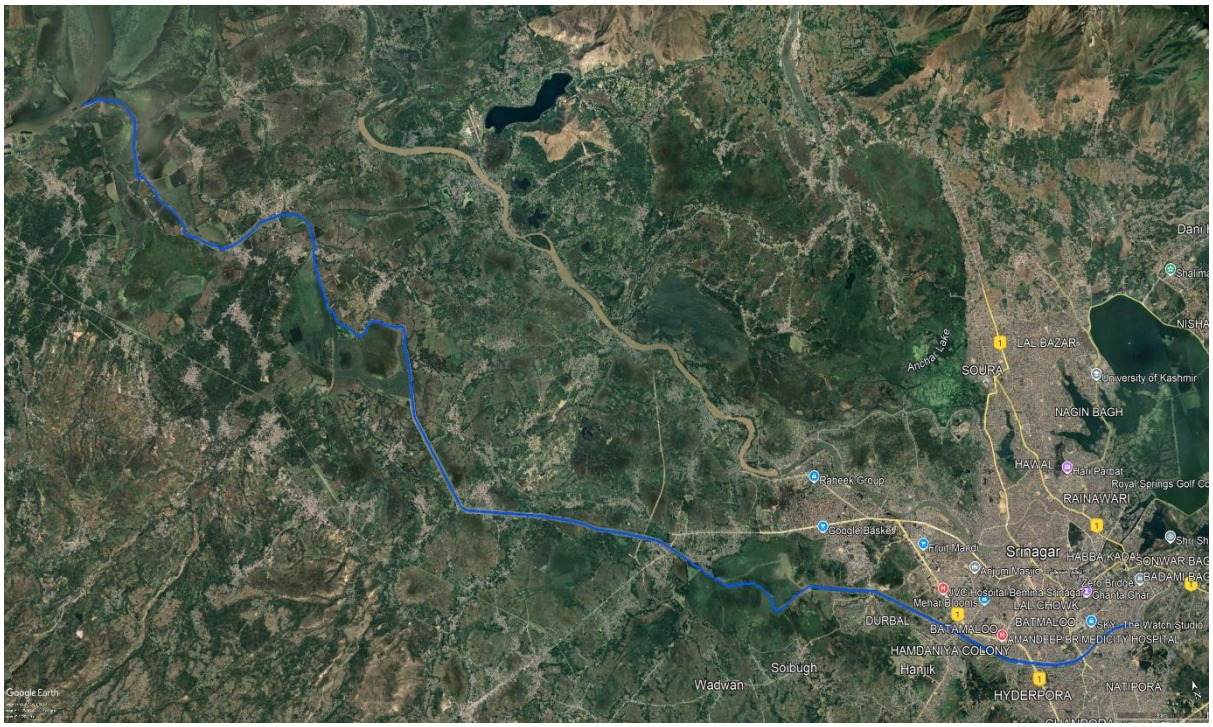
20. Jurisdiction

The Contract has been entered into at Narbal- Budgam and its validity, construction,

interpretation & legal effects shall be subject to the exclusive jurisdiction of the court of Budgam. No other jurisdiction shall be applicable.

21. Data Privacy

All data generated, processed, or handled under the agreement belongs exclusively to the department, and unauthorized copying/usage is prohibited



Current alignment of Flood Spill Channel from Padshahibagh Srinagar to Wullar.

Details of existing Benchmarks on FSC			
S.No	Location	Northing (m)	Easting (m)
1.	Padshahibagh	3768737.388	483457.57
2.	Barzulla	3768160.916	480839.804
3.	Bemina	3770715.936	477435.473
4.	Sozeth	3774514.883	470873.872
5.	Baliharan	3777698.793	465987.451
6.	Trikolbal	3780528.409	463265.782
7.	Gamud chayre	3783065.834	463453.432
8.	Naidkhai	3789037.066	459780.625
9.	Umar colony	3774634.915	473132.57
10.	Narbal play ground	3773698.192	470004.241
11.	Soibugh	3771379.749	472996.799
12.	Hajibagh	3771649.15	474621.57

General Abstract of Cost for Survey of Flood Spill Channel from RD 0.00kms to 48kms

Sr. No.	Particulars	Unit	Qty.	Rate	Amount
1	Construction of Bench Marks on Flood Spill Channel Narbal from RD 0kms to RD 48kms (Type-1).	No	102	3482	355164
2	Construction of Bench Marks on Flood Spill Channel Narbal from RD 0kms to RD 48kms (Type-2).	No	10	36732	367320
3	CORS Enabled DGPS Survey of FSC from 0-48kms which include cross section, L-Sections, site plan submission of soft and hard copies of output including cost of manpower, machinery, labour, surveying instruments, camp equipage, transportation etc. as per directions Engineer In-charge. (complete Job).	KM	48	39468	1894464

Total = **2616948**

or **26.17 lacs**

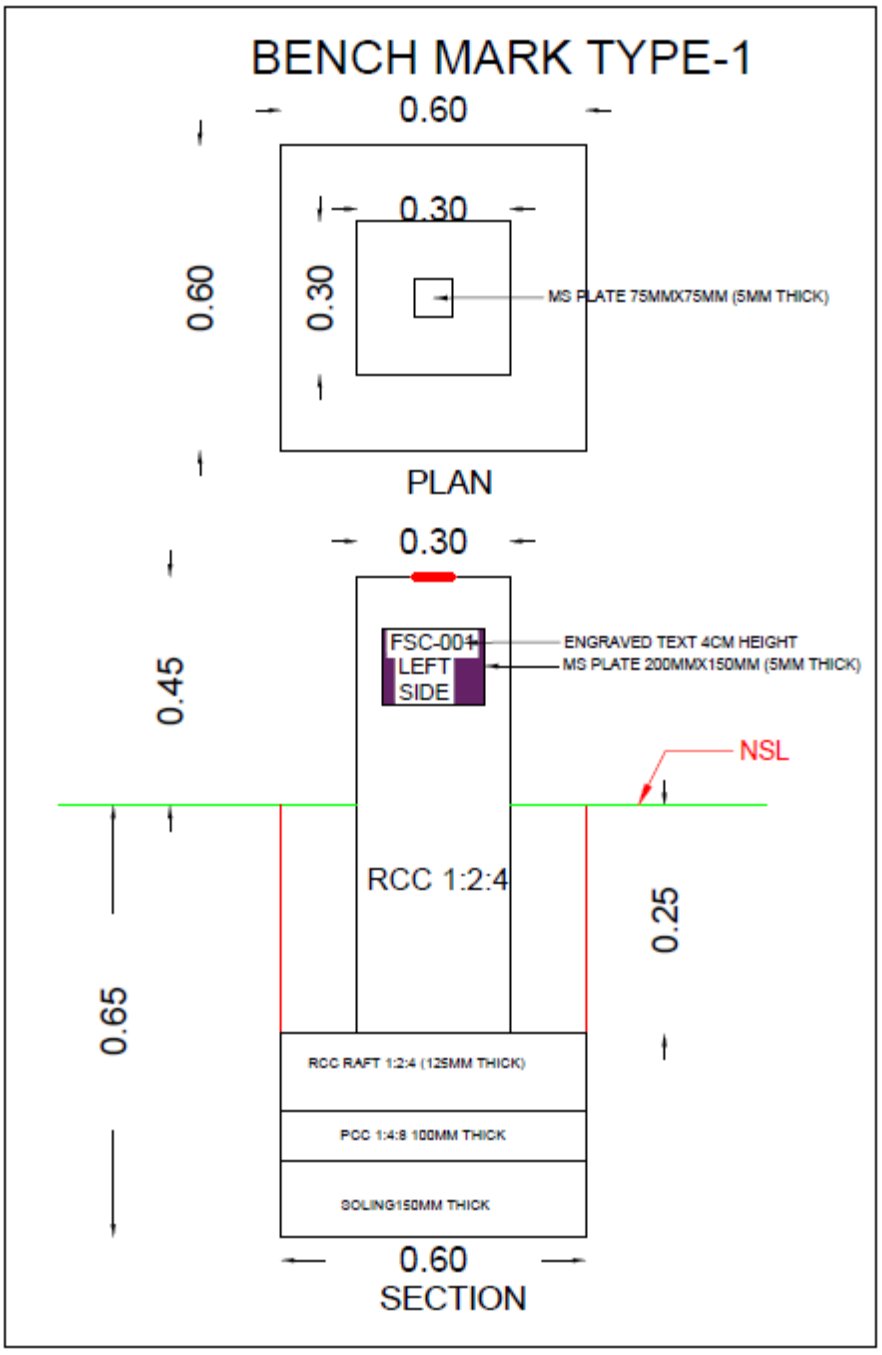
Abstract of Cost for Construction of Bench Marks On Flood Spill channel Narbal from Rd 0 kms to Rd 48 kms (TYPE-1)

S.No	Item Description	Quantity	Unit	Rate	Amount
1	Earth work in excavation by manual means in trenches for foundations, drains, pipes, cables etc. (not exceeding 1.5 m in width) and for shafts, wells, cesspits and the like not exceeding 10 sqm on plan, including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out excavated earth and disposal of surplus excavated earth as	23.87	Cum	479.30	11441
2	Providing and laying Stone soling Hand Packed including cost of stones	5.51	Cum	1252.9	6903
3	Providing and laying in position cement concrete of grade 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 40 mm nominal size) for compound wall foundation up to plinth level, including curing but excluding the cost of centring and shuttering, as directed by the Engineer-in-Charge.	3.67	Cum	5202.9	19095
4	Providing and laying in position specified grade of reinforced cement concrete including curing but excluding the cost of centering, shuttering, finishing and reinforcement. All works upto plinth level 5.1.3) 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	11.02	Cum	7104.35	78290
5	Centering and shuttering including strutting, propping etc. and removal of form for: 5.9.1) Foundations, footings, bases of columns etc. for mass concrete.	128.52	Sqm	286.35	36802
6	Providing and fixing MS plate (5mm thick) of required size (75mmx75mm) and (200mmx150mm) including engraving of 4cm height letters as per directions of EIC. For RD Blocks/TBM	110	Each	705	77550
7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level Thermo-Mechanically Treated bars of grade Fe-500D or more.	771.4	Kg	123.2	95036
8	12mm Cement plaster of mix: 13.1.1 1 : 4 (1 cement : 4 fine sand)	55.08	Sqm	283.80	15632
9	Carriage of materials by MT including and unloading				
	a) Stones 20 kms average lead	5.51	cum	482.31	2658
	b) 40mm Aggregates 20 kms average lead	3.303	cum	445.64	1472

	c) 20mm Aggregates 20kms average lead	9.918	cum	409.94	4066
	d)Sand/fine Aggregates 1 kms average lead	6.6105	cum	128.75	851
10	Carriage of materials by manual means 50 mtrs average lead				
	a) Stones	5.508	cum	236.08	1300
	b) 40mm Aggregates	3.303	cum	216.94	717
	c) 20mm Aggregates	9.918	cum	200.67	1990
	d)Sand/fine Aggregates	6.6105	cum	200.67	1327
				G Total =	**355129**

TOTAL NO OF BENCH MARKS = 102

COST PER NUMBER = 3482


BENCH MARK TYPE-1
0.60
0.30
0.60
0.30
MS PLATE 75MMX75MM (5MM THICK)
PLAN
0.30
FSC-001
LEFT
SIDE
ENGRAVED TEXT 4CM HEIGHT
MS PLATE 200MMX150MM (5MM THICK)
0.45
NSL
RCC 1:2:4
0.25
0.65
RCC RAFT 1:2:4 (125MM THICK)
PCC 1:4:8 100MM THICK
SOLING150MM THICK
0.60
SECTION

Abstract of Cost for Construction of Bench Marks On Flood Spill channel Narbal from Rd 0 kms to Rd 48 kms (TYPE-2)

S.No	Item Description	Quantity	Unit	Rate	Amount
1	Earth work in excavation by manual means in trenches for foundations, drains, pipes, cables etc. (not exceeding 1.5 m in width) and for shafts, wells, cesspits and the like not exceeding 10 sqm on plan, including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out excavated earth and disposal of surplus excavated earth as	45.74	Cum	479.30	21923
2	Providing and laying in position specified grade of reinforced cement concrete including curing but excluding the cost of centering, shuttering, finishing and reinforcement. All works upto plinth level (5.1.3) 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	1.80	Cum	7104.35	12788
3	Centering and shuttering including strutting, propping etc. and removal of form for: (5.9.1) Foundations, footings, bases of columns etc. for mass concrete.	12.00	sqm	286.35	3436
4	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone- III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone- III) : 8 graded stone aggregate 40 mm nominal size),inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	10	each	30404.5	304045

5	Providing and fixing MS plate (5mm thick) of required size (300mmx250mm) including engraving of 6cm height letters as per directions of EIC. For Bench marks	10	Each	835	8350
6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level Thermo-Mechanically Treated bars of grade Fe-500D or more.	126	Kg	123.2	15523
7	Carriage of materials by MT including and unloading				
	a) 20mm Aggregates 20kms average lead	1.62	cum	409.94	664
	b)Sand/fine Aggregates 1 kms average lead	0.81	cum	128.75	104
8	Carriage of materials by manual means 50 mtrs average lead				
	a) 20mm Aggregates	1.62	cum	200.67	325
	b)Sand/fine Aggregates	0.81	cum	200.67	163
				Total =	**367320**

TOTAL NO OF BENCH MARKS = 10

COST PER No. = 36732

BENCH MARK TYPE-2