

Special Conditions of contract and specifications for general & civil work natures:

(1) Supply of materials by the contractor/s

1. Material used in the work by the contractor shall conform to the Northern Railway Standard Specifications and the relevant ISI/IRS specifications and should be approved by the Engineer before utilizing them on works.
2. The material should be kept in the safe custody by contractor. Any loss of material by nature or etc. will be the responsibility of contractor.
3. No loading, unloading, lead, lift, stacking, octroi, sale tax, toll tax , royalty or any other charges will be paid for the materials, tools and plant and tools arranged and brought by the contractor to the site of work.

(2) Service Roads: The contractor/s shall make his/their arrangements for service roads, paths etc. for carrying his/their tools and plants, labour and materials etc. at his own cost. The tenderer will be deemed to have included the cost of making any service road, roads or path etc. that may be required by him/them for playing his/their vehicles for the carriage of his /their men and material, tools, plants and machinery for successful completion of the work. Similarly any other feeder road connecting any of the existing roads will be made by the contractor at his/their own cost including any compensation that may be required to be paid for the temporary occupation and or usages of Govt. land or private land and without in any way involving the railway in any dispute for damage and/or compensation. In case Railway has its own paths, service roads, the contractor/s will be allowed to use of such path or service roads free of cost. He/they shall however, in no way involve the railway in any claims or dispute of whatsoever kind due to the inaccessibility of such paths or service roads or due to their poor condition and or maintenance or their being to be blocked and or closed.

(3) Emergency work: In the event of any accident or failure occurring in or about the work of arising out for or in connection with the construction completion or maintenance of the work which in the opinion of the Engineer require immediate attention, the railway may be with its own workmen or other agency execute or partly execute the necessary work or carrying out repairs if the Engineer considers that the contractor is not in a position to do so in time and charge the cost thereof as to be determined by the site Engineer.

(4) Plant & machinery :- The tenderer is required to submit the list of equipment machinery, construction tools and plants available/deployed at site. The successful tenderer on receipt of acceptance letter and conveying their consent shall submit name, addresses, telephone numbers, mail address of the persons to be contacted for requisitioning the above items and notify from time to time if any change in the list of equipments/machinery or the addresses/individuals to the Engineer in charge in writing. The name and address, telephone number and contractor official name shall also be displayed at the site of work. The manpower, consumable items and maintenance of the above tools and plants when requisitioned shall be the responsibility of the tenderer so that the equipments machinery, tools and plants shall be available for effective utilization at the accident sites, natural calamities, breaches sites etc.

(5) Labour & Labour Camps: The contractor man power charge shall be payable

@ minimum wages as notified by the state govt./local bodies/labour department as the case may be for highly skilled, semi skilled personnel drafted for operating the plant and machinery and other work. Land for setting up a workshop by the contractor for his labour camp or for any other purpose, shall have to be arranged by the contractor at his own cost and under his own arrangements. The contractor, however, will be permitted to make use of the railway land to the extent that can be made available to him free of cost by the railway in the vicinity of the site of works. The contractor shall at all times be responsible for any damage or trespass committed by his agent and workmen for carrying out the work. The Railway admin may recommend to the concerned authorities the issue of necessary transport permits for the work. The contractor shall however, furnish full justification for the above facilities, to enable the railway admin to address the state govt. or other authorities in this connection. The contractor shall also maintain regular log book of receipts and issued of the materials to work, if so required by the civil authorities. No claim would however be entertained by the non issue of any priority permits or owing to any interruption in supply.

(6) Night work: If the Engineer is satisfied that the work is not likely to be completed in time except by resorting to night work, he may order without confirming any right on the contractor for claiming any extra payment for the same.

(7) Disposal of surplus excavated materials: The contractor shall at all time keep the site free from all surplus earth, surplus materials, and all rubbish which shall arise from the works and should dispose of the surplus excavated materials as ordered by the Engineer failing which it will be done at the cost of the contractor and cost will be deducted from his dues. Contractor shall remove all unused and surplus materials tools and plants staging and refuge or other materials produced by his operations within 15 days of completion of work.

(8) Site Inspection Register or etc.: A site inspection register will be maintained by the Engineer or his representative, in which the contractor will be bound to sign day to day entries made by the Engineer or his representative. The contractor is required to take note of the instructions given to him through the site inspection register and should comply with the same within a reasonable time. The progress work level will also be maintained in the register. The contractor will also arrange to receive all the letters etc. issued to him at the site of works. The contractor shall also maintain site order register, Cement register, Steel register, labour register; Plant & machinery register and will be signed jointly by Engineer in charge and contractor.

(9) Test check of materials: If the Engineer or any representative considers it necessary for the purpose of enabling inspection of tests analysis to be made to verify or ascertain the quality of any part of the work or of any materials, the contractor shall provide all facilities for inspection of tests analysis of work or material.

(10) Provision of Light signals etc.: The contractor shall make such provision for lighting the works, materials and plant and provide all such marks and lights, signals and other appliances as may be necessary or as may be required by the engineer or other responsible authorities during the execution completion and maintenances of the work and shall provide all labour, stores, etc. required for their efficient working and use at any time of day or night. The contractor will provide upon the works to the satisfaction of the engineer and at such places as he may nominate, proper and sufficient life saving, fire fighting and first aid

appliances which shall at all times be available for use.

(11) Damage to the Railway property or Private Life and Property: The Contractor shall be responsible for all risk to the work and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the Railway, although all reasonable and proper precautions may have

been taken by the Contractor. In case the Railway shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor; the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway may incur in reference thereto, shall be charged to the Contractor. The Railway shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid; any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.

(12) Plain/Reinforced cement concrete works: The IS specification and IRS code of practice for the structural use of reinforced concrete in bridges and buildings shall form part of those additional specifications. Fine Aggregate (Sand) coarse sand of approved quality and conforming to NR standard specifications shall be used as fine aggregate for cement concrete/reinforced cement concrete/controlled concrete and RBC sand shall be clean and absolutely free from dirt and admixture of earth kankar or other deleterious matter. Local pit/river sand shall under no circumstances be permitted for any such works. The contractor to ensure that the coarse sand, stone chips and ballast as may be required for the work are strictly in accordance with the standard specifications. In case these materials cannot be had according to specifications from these sources the same should be procured from other sources by obtaining prior permission of the Engineer in charge, provided the material/s is/are according to standard specifications. In addition to the routine test, special tests on materials will be carried out wherever required by the site engineer. The cost of the specific test will be borne by the railway, if the results are as per standard laid down, failing which the cost of these tests will be borne by the contractor. If at any stage of the work during or after placing the concrete in the structure of the work is found defective, such defective concrete work shall be dismantled by the contractor and the work redone with fresh concrete at the cost of contractor. Wherever chamfer or rounded corners are mentioned in the drawing, form work should be such that chiseling or cutting is required.

(13) Form work and Shuttering: Form work shall be as specified in para 6.2 of NR standard specifications, 2021 and shall be sufficiently rigid to resist forces caused by vibration and incidental loads associated with it. The form work used shall be

invariably oiled but not with staining mineral oil. Only steel/water proof ply wood shuttering shall be used. At any stage if the form work is found defective, such concrete shall be removed and work redone with fresh concrete and with adequate rigid form works at the cost of the contractor. The surface of the form works shall be clean, smooth and free of voids etc.

(14) **Concreting:** The contractor shall design the concrete mix and get the same approved by the Engineer in charge. Necessary corrections as required from time to time during the progress of the work shall be carried out by the contractor and got approved by the Engineer in charge. Mix. Design shall be carried out as per ISI guidelines IS: 10261, 1982 or any other standard approved method. The contractor will provide all facilities to the Engineer and his staff of taking samples of concrete for arranging tests in accordance with the provision of IRS/ISI codes. Testing will be arranged by the Engineer In charge at the cost of contractor.

(15) Reinforcement Steel: The reinforcement steel for railway projects, contractors is to be procured from approved primary producers having integrated steel plants namely SAIL, TISCO, RINL, JINDAL, ESSAR Inspat Industries Ltd., Bhushan Steels & MS Shyam Steel Industries Ltd. & other firms as per the approved list of RDSO on the date of supply of steel or their authorized dealers/authorized stock yard which should conform to latest relevant BIS specification. In case of RDSO approved firms, contractor has to submit proof of approved firm. The yields strength of reinforcement steel to be used in RTCC work should be 415N/Sq mm or as per approved plan or as directed by Engineer In charge which should conform to latest relevant BIS specifications. Before use, contractor/s will be required to get the test certificate from the manufacturers pertaining to the various quality tests on steel reinforcement as specified in the relevant BIS code (IS:1786) at his own cost from the laboratories approved by the Engineer In charge. Railway will also take sample during the course of work and get the steel tested to ascertain their conformity to the IS specifications at contractor's cost before a particular lot is put to use. Frequency of testing shall be as prescribed by relevant IS code. Steel having unit weights per meter not falling within the tolerances specified in above IS code shall not be accepted. All bolts and nuts use by contractor will be HSFG/revite as per approved by RDSO and nothing shall be paid extra on this account.

(16) Supply of Cement: Ordinary Portland cement of 43 grade/53 grade conforming to IS: 8112 & IS: 12269 respectively will normally be used. However, whenever permissible & provided in the schedule of items, the PPC conforming to IS: 1489 may also be used. Cement shall be procured by the contractor from the main producers or their authorized dealer of approved make such Ambuja, Grasim, A.C.C., JK Cement & Birla Cement or any other reputed make as approved by Engineer In charge. To improve the workability of concrete and cement grout, admixture conforming to IS-6925 and BIS-9103 (Admixture of make MBT, SIKa, FOSROC, CICO, PROTECT) may be permitted as directed & approved by Engineer In charge subject to satisfactory prove use, manufacture's certificate and laboratory test as applicable.

Cement older than 3 months from the date of manufacture as marked on the bags shall not be accepted. Cement bags preferably in paper bag packing should bear the manufacture's name, registered trade mark of manufacture if any, type of cement, Weight of each bag in kgs or nos. of bags/ton, & date of manufactures generally marked as week of the year/year of manufacture. Quality test certificate

for cements as per IS; 4031 codes shall be furnished by the contractor at his own cost from the manufacturer, before use of cement so supplied. Railway may also take samples during the execution of works and get the cement tested to ascertain its conformity to the relevant IS specifications at contractor's cost before particular lot is put to use. The tests like Fineness, Compressive strength, Initial and final setting time & Soundness should be carried out. In case samples tested do not pass the quality tests conducted, the entire batch of cement supplied shall be rejected and not to be used by the contractors. For storage of cement, the contractor shall have to construct a temporary Godown of adequate capacity at his own cost for which land will be handed over by the Railway on written request of the contractor, free of any rent and bring/store the cement only on written instructions from Gazetted Officer In charge of the work. The Consignment/trucks of cement weighed & quantity should be verified by Inspector In charge while stacked inside Godown under his supervision. Samples for test checks of stored cement should also be made by Engineer In charge. The contractor shall be custodian of cement Godown and shall keep the Godown under his lock and key and ensure safe custody of cement and should not be taken out for any other purpose. The contractor shall ensure that after completion of the work and or determination of the contract for any reason whatsoever, the temporary godown and labour camps should be dismantled & released the dismantled material from the site by contractor at his own cost. All dismantled material/debris shall be removed from the site and cleared site shall be handed over back to railway. All the released material shall be the property of the contractor and no payment shall be made by the railway for dismantling etc. The final bill and Bid security/security deposit shall not be released unless cleared the site in all respect. The consumption of cement on works shall be assessed on the basis of cement constants per unit quantity for various items of works as per DSR-2021 or as per design in case of design mix of cement concrete of specified strength where the cement is to be used by weight where specially ordered in the NS item rate or tender conditions, a variation of +1% (Max) will be allowed in the consumption of cement on works.

(17) Curing: All concrete work/RCC work/Brick work in cement mortar, plaster/pointing etc. shall be continuously cured for the prescribed period as per direction of the engineer. Curing shall be done by covering the newly laid concrete with gunny bags and keeping them wet constantly. If it is found that contractor is not properly observing these instructions, the Engineer In charge may undertake the curing through another agency/labour without any notice to the contractor at the cost of the contractor. The cost incurred along with supervision charges @ 12.5% of the cost with incidental will be debited to the contractor. Intimation of the employment of another agency for curing, will be given in writing to the contractor as soon as possible.

(18) Timely notice for inspection of foundations or works to be covered up: The contractor shall give notice to the Engineer in charge when and as soon as the excavation of any portion of the site for maintaining a foundation bottom, whether above or below water, has reached the depth and width shown on the drawings. The contractor shall also give further notice to the Engineer in charge where ever any foundation or bottom is ready for inspection and wherever it is necessary to cover up any work in respect of which previous inspection is desired by the Engineer so that the engineer may inspect the same before it is covered up. No foundation or bottom of work shall be covered up or filled or built upon

without the previous consent in writing of the Engineer. In default of such notice and consent in writing aforesaid the foundation or bottom of the work shall on the order in writing of the engineer, be uncovered and any filling put in or work built thereon be removed or pulled down by the contractor at his own cost.

(19) Drawing: The design of foundations, depth of foundation below the bed level may be varied and will be decided by the design Engineer/Architect during the progress of the work according to the actual site conditions. The drawings already prepared and which may be prepared hereinafter are not to be taken as final nor are these bindings on the railways in any respect. The contractor shall have no claim on the railway if any change is made in the approved drawings. Also his inability to take timely arrangements for the necessary plants and machinery due to any such changes which the Engineer may make will not be taken as an excuse for slow performance or non performance of the work.

(20) Open Foundation: The bed of open foundation should be made horizontal and sides neatly dressed and in all cases got approved by the Engineer before concrete is laid. If foundations are laid in sandy or clayey soil, the variation in levels should not be more than 15mm. But in case, it is laid on soft rock, boulder studded soil layer variation may be permitted by the Engineer In charge at his discretion, according to the conditions of site in no case, concrete be laid on a sloping bed. In case of loose pockets, the same will have to be filled with lean concrete, as directed by the Engineer In charge for which no extra payment will be made.

(21) Brick work: All brick work shall be done in well burnt bricks as per chapter 6 of NR specifications in cement mortar in proportions as may be specified in the drawings or as instructed by the Engineer in charge.

Bricks shall be made from the good brick earth available in the locality from which supply is to be made in accordance with the contract. The earth shall be free from slakes deposits, pebbles, kankar, moulds and other deleterious matter and the brick shall be well moulded. The brick shall be strictly in accordance with Railway specifications and sample must be tested & got approved/passed by the Engineer in charge before use in the work.

(22) Disposal of Surplus excavated materials: All the surplus earth excavated from foundation of building shall be utilized by the contractor for filling in acquired area irrespective of lead or/and lift involved and dressed to the exact profile in layers duly watered and rammed as directed by the Engineer for which no extra payment shall be made except for lead and lift involved as per DSR-2021

(23) Marble stone flooring: (Marble slabs): The slabs shall be of the kind of marble specified in the item. The marble from which the slabs are made shall be of selected quality, hard, sound, dense, and homogenous in texture, free from cracks, decay, weathering and flaws. Before starting the work, the contractor shall get the sample of marble slab approved from the Engineer in charge. The slabs shall be machine cut, to the required dimensions.

(24) Dressing of Slabs: Every stone shall be machine cut to the required size and shape on all sides to the full depth so that straight edge laid along with side of the stone shall be fully in contact with it. The sides and top surface of slabs shall be machined rubbed or table rubbed with coarse sand before paying. All edges and angles of the marble slabs shall be true, square and free from chipping and the surface shall be level and smooth. The thickness of the slabs shall be as specified in the description of the item.

(25) Laying: The sub grade concrete or the RCC slab on which the slabs are to be laid shall be cleared, wetted and mopped. The bedding for the slab shall be with cement mortar 1:4 (1 cement: 4 coarse sand). The average thickness of bedding mortar under the slab shall be 20mm and the thickness at any place under the slab shall not be less than 12 mm. The Slabs which are fixed in the floor adjoining the wall shall not enter less than 12 mm under the plaster, skirting or dado. The junction between the wall plaster and floor shall be finished neatly and without waviness. The flooring shall be cured for a minimum period of 7 days.

(26) Polishing and finishing: Slight unevenness at the meeting edges of slabs shall then be removed by fine chiseling in a slant. The surface shall then be ground and finished in the same manner as specified in NR specification.

(27) Measurement: All works will be paid for at the tendered rate on the basis of the actual measurement taken at site by Engineer Incharge No cognizance will be taken for heights and thickness of the masonry over those shown in the approved drawings.

(28) Procurement of Raw Materials: Contractor shall make his own arrangement for procurement of material intimate for expeditious completion of work covered in the contract. The railway shall not be responsible for any loss or any damage incurred by the contractor in c/with such procurement of material for expeditious completion of the work. Safe custody of the material at site is contractor's responsibility until completion of work done by contractor.

The steel and cement required for execution of the work shall be as per std. specification, 1987. Cement: Gr.43IS8112/1989/Gr.53.

Steel: (i) Mild steel & medium tensile steel bar IS; 432-1982 IS 226-1975, refined by IS; 2062. (ii) Hot rolled deformed bars IS;1139-1966 (iii) Cold twisted bars IS;1786-1979.

Railway reserve the right to reject the whole or part of the supply which in the judgment of the railway does not comply with the requirements of the above mentioned IRS code of the practice and drawings. The decision of the railway in this regard shall be final and conclusive for all purposes in case of such rejection the contractor is bound to replace the material at his own cost.

(29) Water & Electricity: The contractor shall be responsible for the arrangement to obtain supply of water & electricity if required necessary for the works & his workers at his own cost.

(30) Notices to public bodies: Contractor shall give to the Municipality, police and other authorities all notices that may be required by law and certain all requisite licenses for temporary obstructions, enclosures and pay all fees, taxes and charges which may be livable on account of his operations in executing the contract. He should make good any damage to adjoining premises whether public or private and supply and maintain any lights etc. required at night. The contractors are required to complete the works within the specified period as provided in agreement. If the contractor fails to complete the work within specified period, necessary action will be taken as per GCC 2022. No claim for extra payment shall be entertained on account of the interruption to work due to rain, floods or due to delay in acquisition of land in same portion or any other cause nor will any extra payment be made for the excavation on this account. No claim for earthwork done in low laying water logged area, local pits and depressions containing water will be entertained by the railway. Sales tax or any other tax levied or livable by the centre or sales tax of any other taxes of state govt. or local bodies shall be borne by the contractor or will be deducted from the

contractor's bill as per GCC 2022. No such taxes on contractors labour and materials will be paid by the railway.

(31) Penalties due to unsafe work:-

- (a) In the event of accident at the work site, a departmental enquiry shall be held and in case it is established that the accident has occurred on account of contractor's negligence or the negligence of his men, penalties up to an upper limit of 10% of the total cost of the work shall be imposed on the contractor.
 - (i) In the event of contractor not completing the work or leaving it unsafe at the end of days work so they may serve speed restrictions if required to be imposed, track shall be attended to by the railway immediately at the contractor's cost without any further notice. In addition the labour cost recoverable from the contractor, supervision charges @ 12.5% and train detention charges @ Rs. 2000/- every half hour or part thereof shall also be recovered.