SUPPLEMENTARY SPECIFICATIONS / SPECIAL PROVISIONS

SS - 1 Progress Report

The Contractor shall submit to the Employer fortnightly progress reports in two copies detailing the progress in the execution of work during the reporting period. The submission of the progress reports shall be condition precedent to the payment of Contractors Bills by the Employer. One week in advance the Contractor shall submit for the Employer's approval, particulars of the work he proposes to execute within the following two weeks.

SS - 2 Attendance of Meetings

- (a) The Contractor shall attend and shall cause his Sub-Contractors to attend any or all meetings when called by the Employer or the Engineer to discuss progress of the Work and other matters related to the Work and the Contract, without any compensation from the Employer.
- (b) The Contractor shall bear all expenses of the Employer and representatives and the Engineer, and representatives for any meetings requested by the Contractor for instructions and approvals away from the site within or outside Pakistan.

SS - 3 Supply of Bitumen and Cement, etc.

The Contractor shall arrange and ensure timely supply of Bitumen, Cement and other materials required in the Work. The Employer does not assume any responsibility for the supply of materials. Moreover, required Tests of Bitumen quality shall be carried out before applying at site. The tests shall be carried out in approved NHA's Laboratories. JMF for asphalt shall be approved by The Engineer.

SS - 4 Electric Supply

The Contractor shall make arrangement for the electric power supply and distribution of the same at the Site of Works for the completion of the Works at his own expense.

SS - 5 Rate and Prices Inclusive

The rates and prices quoted by the Contractor in the priced Bill of Quantities shall include all freight, customs, import duties, taxes, pilotage, landing Supplementary Conditions of Contract charges, wharfage, octroi, excise duties, royalties and all other costs, charges imposed whatsoever in respect of any or other things provided by him for the Works.

The prices in the Bill of Quantities include also all additional costs and provisions required for the correct execution of work in compliance with the time Schedule and the Specifications.

By way of illustration but not enumeration the Unit Prices shall include besides the costs for supply of material and equipment, cost of their transport, Contractor's profit etc., the cost for provision of the following:-

- (a) Furnishing and maintenance of Contractor's Equipment, fuel for Equipment, temporary works, tests, samples and labour necessary for execution of the works, Equipment for transport, machines, test laboratories, Site Office and sheds including all expenses for the furnishing and maintenance of the Workshops and storage areas used by the Contractor.
 - (b) Required power, water and other services.
 - (c) Illumination and safety at Site.
 - (d) All additional costs due to any kind of difficult working, conditions and interruptions which may possibly be caused by adverse physical conditions.
 - (e) Staff allowances, ambulances, expenses for medical treatment, traveling expenses, holiday wages and salaries and all other costs for all employees, the required means of communications such as telephone and the like, the required means for protection against accidents.
 - (f) All expenses for royalties, licenses, liabilities insurances, rent, hire and the like in connection with the Works.
 - (g) Other special work arrangements and provisions not mentioned here but necessary for the proper and complete execution of the Works such as provision & maintenance of Diversions/Detour etc.
 - (h) All Government and/or Municipal taxes, customs duties, excise duties, stamp duties or any other dues, taxes or charges.
 - (i) Cost of all insurances to be kept in force during the period of construction and the period of maintenance of the works under the Contract.
 - (j) Mobilization, demobilization and clearance of site.
 - (k) Contractor's camp for staff and labour including the services.
- (l) Performance Security and Bank Guarantees as and when required under the Contract.
 - (m) Traffic Diversion / management, work zone safety measures etc. and any other measures required for safe and smooth movement of traffic / road commuters/ workers / pedestrians etc.

The cost of the above shall be deemed to be included in the rates and prices tendered for the works and no separate payment shall be made on this account.

SS - 6 Provision of Plant (Not Applicable)

In respect of any contractor's Equipment in general, except as provided for in these Documents, which the Contractor shall be required to have available at Site for execution of Works in accordance with the Drawings, Specifications or as directed by the Employer, he shall make his own arrangements for foreign exchange, import formalities, customs, transport to the Site of Works and all other formalities whatsoever at his own cost and responsibility.

The Contractor shall be deemed to have taken into consideration all Government or Local Bodies regulations, for the time being in force, regarding the re-export of any plant and equipment which he may have to import in connection with the works. Any amendments to the existing rules and/or further regulations imposed in this respect by the Government of Pakistan shall be strictly followed by the Contractor.

SS - 7 Rates inclusive for all Lead and Lift

The tendered rates shall include all lead and lift required in earthwork.

SS - 8 Borrow Areas

The Contractor shall make his survey/enquiries regarding the suitable and nearest Borrow Areas for embankment, granular fill, bade and sub-base materials etc., and shall apply to the Engineer for approval for the use of the borrow area. It will be the responsibility of the Contractor to acquire the Borrow Areas approved by the Engineer and pay for all royalties/malkana and all other costs. In case the materials from the approved Borrow Areas do not meet the Specifications, in the opinion of the Engineer, the Contractor shall have to propose new Borrow Areas for approval, and nothing shall be paid to the Contractor for abandonment of the previously approved Borrow Areas.

SS-9 Time for Completion of Works

The Work is required to be completed in the time stated in Appendix to Tender and the Tenderer to whom the Contract is given will be required to complete and deliver the whole of the Permanent Work strictly within the time so stated. If the Tenderer states, in his Tender, a shorter time than shown in the Appendix, then such shorter time governs.

SS-10 Documents Not to be Altered or Mutilated

No alteration or mutilation (other than filling in all the blanks intended to be filled in) shall be made in the form of Tender or in any of the documents attached to it. Any comments which it is desired to make shall not be placed on any of the documents attached hereto, but shall take the form of a separate statement which shall be as brief as possible and referenced to items, clauses and pages of the annexed documents.

Such statements shall not qualify the acceptance of the Tender based upon a proposed change or changes in the annexed documents, nor shall be binding upon the Employer in any way in making the award. Alterations of already written prices must be signed in the place of alteration by the Tenderer or his legally authorized representative.

SS-11 Personal Liability of Public Officials

In carrying out any of the provisions of these Specifications, or in exercising any power of authority granted to them by or within the scope of the Contract, there shall be no liability upon the Chairman (NHA) or his authorized representatives either personally or as officials of the Government, it being understood that in all matters they act solely as agents and representatives of the Government.

No member or officer of the Government or the Employer or the Employer's representative or any one of their respective staffs or their employees shall be in any way personally bound or liable for the acts or obligations of the Employer under the Contract or answerable for any default or omission in the observance or performance of any of the acts, matters or things which are herein, contained.

SS-12 Access and Canal Roads

If the Contractor finds it necessary or elects to use existing canal roads, the Contractor shall make all necessary arrangements and obtain all permits from the provincial Irrigation Department for travel over and use of such canal roads. The Contractor shall observe all rules regulations of the Irrigation Department regarding the use of said canal roads. The cost of maintaining all necessary safety measures and temporary structures and making any necessary repairs, replacements or similar operations and all or any other costs required by reasons of his use of such canal roads shall be borne by the Contractor and the Contractor shall save harmless and indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such operation or interference.

SS-13 Railway Traffic

Where construction work or operations of the Contractor are performed within the limits of the right-of-way of the Pakistan Railways, the Contractor shall cooperate with the railway administration in order to expedite the work and to avoid interference with the operation of the railway. Before performing any

work on his sidings yards or on other transportation facilities adjacent to existing railways, the Contractor shall enter into an agreement with and shall meet all requirements of the railway administration within the area of the Contractor's operation for the protection of its lines against damage, interference with traffic or service thereon by the operations of the Contractor under this Contract. The Contractor shall not store or place

any materials or equipment on the right-of-way of the existing railway in such a manner as to interfere with the operations of trains or the maintenance of the rail bed and track. In advance of any operation which may unavoidably interfere with the operation of the railway, the Contractor shall notify the superintendent of the corresponding Railway division in order that proper flagging or other protection may be provided. The cost of providing and maintaining all necessary safety measures, watchman guards, signals and temporary structures or making any necessary repairs, replacements or similar operations or furnishing indemnity or other required by this article shall be borne by the Contractor and the Contractor shall save harmless and indemnify the Employer in respect of all claims, demands, proceedings, damages costs, charges and expenses whatsoever arising out of or in relation to any such operations or interference.

SS-14 Irrigation Flow

The Contractor shall conduct his operations so as to offer the least possible obstruction for maintaining flow in irrigation canals, channels and water courses. The Contractor shall observe all rules and regulations of appropriate authorities regarding the interruption and maintenance of flow in irrigation canals, channels and water sources and the Contractor shall save harmless and indemnify the Employer in respect of all claims, demands, proceedings, damages, costs and expenses whatsoever arising out of or in relation to any such construction, operations or interference with irrigation flows.

The Contractor shall maintain alternate channels wherever temporary relocation of irrigation channels is required or where his operations disrupt the irrigation flow, without any compensation from the Employer.

SS-15 Utility Lines

The Contractor shall conduct his operations, make necessary arrangements, take suitable precautions and perform all required work incident to the protection of and avoidance of interference with power transmission, telegraph, telephone and natural gas lines, oil lines water and sewerage mains and other utilities within the areas of his operations in connection with this Contract and the cost thereof shall be borne by the Contractor and the Contractor shall save harmless and indemnify the Employer in respect of all claims, demands, proceedings, costs, charges and expenses whatsoever arising out of or in relation to any such interference.

SS-16 First Aid Facilities

The Contractor shall provide and maintain adequate First Aid Facilities convenient to the Site to the approval of the Employer.

SS-17 Location of Contractor's Camp

The location of houses, barracks, stores and offices, etc., shall be determined in agreement with Employer. Installation for the supply of electricity and water, fuel, lighting, etc., must be present to the necessary extent.

SS-18 Final Hand Over

At the end of the Defects Liability Period stipulated in the Contract, the Employer on application of the Contractor, shall decide the members of the final hand over committee and announce the same to the Contractor. The committee, after investigation of Work, if satisfied that there are no deficiencies or defects due to work of the Contractor, shall certify the final hand-over, and the Engineer will then issue a Defects Liability Certificate as provided under Clause 62.1 of Conditions of Contract.

SS-19 Making Good Damage to Services, Earthwork, etc.

The Contractor shall make good, at his own cost, all damages to telephone, telegraph and electric cables or wires, sewers, water or other pipes except where the Authority, Employer or Private Party owing or responsible for the same elects to make good the damage.

All injury to the surface of the land, to the beds of water courses, protecting banks, riverbeds, etc. Where disturbed by the works (other than where specifically ordered by the Employer), shall be repaired by the Contractor or the Authorities concerned, at the Contractor's expense. All such making good shall be to the approval of the Employer.

SS-20 Returns of Plant, Materials, etc.

The Contractor shall forward to the Employer at the end of each month returns showing the Constructional Plant, materials, etc., on Site, in a form prescribed by the Employer.

SS-21 Method of Measurement (Not Applicable)

The measurement of the Work shall be performed on the basis of

the

Specifications. If these measurements exceed the measurements indicated in the Specifications and Drawings, excepting those directed by the Employer, such excess shall be on the account of the Contractor and he shall not be entitled to any compensation therefor. But if they are less than the measurements indicated in the Specifications and Drawings then the Works actually executed shall be measured, provided they are technically acceptable and there is no provision to the contrary in any other part of the Contract Documents. All work completed under the Contract shall be measured according to the metric system for all items, unless otherwise provided herein or in the special Provisions. All longitudinal

measurements for area or volume will be made horizontally along the road centre line, and no deduction will be made for individual fixtures in the pavement having an area of 1 sq. Meter or less. All transverse measurements for area or volume of pavement courses will be made horizontally in accordance with the dimensions indicated on the plans, or the dimensions ordered by the Employer. In computing volume of excavation, embankment and borrow, the average end-area method will be used.

Quantities of materials wasted or disposed off in a manner not called for under the Contract or rejected loads of materials, including material rejected after it has been placed by reason of the failure of the contractor to conform to the provisions of the Contract, or material not unloaded from the transporting vehicle, or material placed outside of the lines indicated on the drawings or established by the Employer, or material remaining on hand after completion of the work will not be paid for and such material should be disposed off by the Contractor at his own expense. No compensation will be allowed for hauling rejected materials. The Works shall be measured net notwithstanding any general or local custom except where otherwise specifically described or prescribed in the Contract.

SS-22 Record of Measurements (Not Applicable)

The Contractor will supply to the Employer's Representative six (6) copies of the abstract of Contractor's certificate of payment every month along with two copies of detailed measurements, quality control tests and cross sections with calculations, and any other document or information which form the basis of payment.

SS-23 Dangerous Materials (Not Applicable)

The Contractor and his sub Contractors shall convey, store and make use of all explosives, dangerous petroleum, acetylene, carbide of calcium and other similar material provided by them for use in or on the works in strict accordance with the provision of all laws, orders and regulations that are in force at the Site or may be issued from time to time by the Government.

SS-24 Progress Photographs

The Contractor shall furnish to the Employer every two weeks at least four photographs to clearly show the progress of construction. The photographs shall be submitted in three glossy prints 20 cm x 20 cm, together with the negative. Each print shall be marked on the back with the date and serial number. There shall be no writing, lettering or marking on the face of the photograph.

SS-25 As Built Drawings/Shop Drawings (Not Applicable)

During construction, the Contractor shall keep an accurate record of all deviations of his work as actually installed from that shown or indicated on the Contract Drawings upon completion of the Work, the Contractor shall deliver to the Employer cloth/milar paper tracings, the same size as Contract Drawings and at an approved scale showing the Work as actually installed. All Drawings are to become the property of the Employer.

All the shop drawings/fabrication drawings shall be prepared by the Contractor and submitted to the Engineer at least fifteen days before the start of the work.

The Engineer shall check and approve or return the same to the Contractor for correction/modification within the period of 15 days from the day of receipt of the drawings. All work is to be executed by the Contractor in accordance with the drawings approved before the commencement of the works.

SS-26 Safety Precautions

The Contractor shall adequately provide for the safety, health and welfare of persons and for the prevention of damage to works, material, equipment for the purpose of or in connection with the Contract.

SS-27 Work Zone Safety

The Contractor shall ensure implementation of Work Zone Safety Plan (placement, signage size, dimensions and lettering) according to the standards and Drawings duly approved by the Employer and also provided herein the bidding document. No separate payment shall be made in this regard.

SS-28 Fixed Withholding Tax

A sum in Pakistani Rupees, in accordance with the prevailing income tax laws of Pakistan shall be deducted from all actual payments made to the Contractor and be deposited with the Government of Pakistan towards payment of income tax by the Contractor. When such deduction is made from the payments a certificate to that effect shall be issued by the Employer to the Contractor.

Notwithstanding such deduction of income tax at source, the Contractor shall be liable to pay the balance income tax, super tax and other taxes on income or his profits arising out of the Contract, and his employees on their remunerations etc, in accordance with the prevailing income tax laws of Pakistan.

1. **DETAILED SCOPE OF WORK**

Maintenance of Diversion from stat to completion of work including provision of proper safety and diversion items and machinery, water tank, dozer, static Tendem roller, sign / warning boards, Sand Bags, Lights, Safety jackets, Warning Tapes, Safety Cones etc and flagmen on 24/7 basis lightening & machinery to pull away breakdown loaded vehicles from diversion. Complete in all respect as per the instructions of the Engineer in charge.

2. <u>SUBMISSION OF DOCUMENTS</u>

The following documents will be submitted by the Consultants.

S. No.	Description	Unit of measurement
1.	Maintenance of Diversion from stat to completion	
	of work including provision of proper safety and	
	diversion items and machinery, water tank, dozer, static	
	Tendem roller, sign / warning boards, Sand Bags, Lights,	
	Safety jackets, Warning Tapes, Safety Cones etc and	
	flagmen on 24/7 basis lightening & machinery to pull	
	away breakdown loaded vehicles from diversion.	
	Complete in all respect as per the instructions of the	
	Engineer in charge.	

1. **DESCRIPTION**

The work shall consist of dismantling of structures and obstructions (deck slab, approach slab, RCC railing) using additional machinery / generators / concrete breakers complete in all respects inclusive of everything. Dismantling of existing deck slab is very specialized work. It will be carried out using hand held concrete breakers or chiseling. Use of heavy jack hammers can damages bridge structure and are strictly prohibited.

MEASUREMENT AND PAYMENTS:

a) **Measurement:**

Measurement of acceptable completed works will be made on the basis of BOQ units as shown on the Drawing or as directed by the Engineer in charge. The quantity to be paid shall be at the contract price per cubic meters.

b) **Payments:**

The payment shall constitute full compensation for cost of materials, labour and transportation. Payment will be made for acceptable measured quantity on the basis of unit rate as specified in Bill of Quantities.

S. No.	Description	Unit of measurement
SP-1	Dismantling of Structures and Obstructions using additional / generators concrete breaker inclusive of everything (Jack hammers are not allowed)	

1. <u>DETAILED SCOPE OF WORK</u>

a. Topographic Surveys

Digital topographic survey of existing bridge / site minimum 600m along the road (300m along the road on either side of bridge) and along Nullah upto 100 meter on Upstream & 100 meter on downstream showing all aspects including Detailed survey / dimensions of bridge showing dimensions of all element of the Superstructure. The extent of the survey will be adjusted to the local site condition. Location of the Cross Section shall be marked on the Site Plan.

1) Detail of Services

- a) At the dimensions of existing bridge including measurement of all spans, deck slabs, girders spacing/depth, piers, approaches, abutments and existing old diversion.
- b) FRL and NSL levels shall be marked on cross section at 30 meter intervals upto 50 meter length on approaches for the design of diversion.
- c) Topographic survey should also include the locations and dimensions of Electric pylons / poles / lines, gas lines, water lines, existing barriers, sign boards, boundary walls, retaining walls etc complete in all respect.

DETAILED SURVEY OF EXISTING BRIDGES

Through certain essential measurements of existing bridges were taken, but their exact details / measurements will be carried out by the contractor before the star of the work. Any discrepancy or mistakes noted in the drawings will be submitted to the engineer for finalization of the design if so required.

All the dimensions of all the elements with sketches existing bridges are required to be measured to maximum accuracy. The data includes centre to centre spacing of girder, distance between transoms of two bridges, width of overhang, levels, dimensions and thickness of pile caps, height of piers, height and width of existing abutments, NSL, FRL complete in all respect of existing bridges etc.

2. SUBMITALS.

a) The survey team shall submit complete set of documents and drawings listed above on three (03) digital CD-ROMs. Files (Word, Excel,

AutoCAD, Graphical Images and Photographs etc) shall be properly indexed / catalogued for record purposes and use / reproductions at a later stage by NHA .

b) Two print copies on minimum 4x5 ft. sheets.

3. **SUBMISSION OF DOCUMENTS**

The following documents will be submitted by the Consultants:

S. No.	Description	Submissions
1.	Topographic Survey (Digitalized) and dimensions of existing bridge as specified.	2 prints on 4x5 sheets and 2xCDs

SP-3 – PROVIDE EQUIP & FURNISH RESIDENTIAL ACCOMMODATION (RENTAL BASIS) FOR THE EMPLOYER'S & ENGINEER'S REPRESENTATIVE AND STAFF

GENERAL:

The Contractor shall provide, properly maintained and serviced facilities for the Engineer (the "Engineer's Facilities") comprising of HOUSING (The "Engineer's Housing) as specified hereinafter for the exclusive use of the Engineer during the whole Contract period.

The Contractor shall provide and pay for all residential consumables, the consumption of electricity, gas and water, the installation and the use of telephones, and provide and pay for all other incidental and costs related to the Engineer's facilities.

The Engineer's Facilities, including all vehicles, equipment, furniture, fixtures shall become the property of the Employer on the date of issue of the Taking-Over Certificate

These services and maintenance shall be provided by the Contractor for entire Contract period.

MEASUREMENT AND PAYMENT:

The payment shall be made as under

Pay Item	Description	Unit of No Measurement
SP-3	Provide Equip and furnish Residentia Accommodation (Rental basis) for th Employer's & Engineer's representat And staff	e

SP-4 MAINTAIN EMPLOYER AND ENGINEER'S REPRESENTATIVES RESIDENTIAL ACCOMMODATIONS

GENERAL:

The Contractor shall provide, properly maintained and serviced facilities for the Engineer (the "Engineer's Facilities") comprising of housing (The "Engineer's Housing") as specified hereinafter for the exclusive use of the Engineer during the whole Contract period.

The Contractor shall provide and pay for all residential consumables, the consumption of electricity, gas and water, the installation and the use of telephones, and provide and pay for all other incidental and costs related to the Engineer's facilities.

The Engineer's Facilities, including all vehicles, equipment, furniture, fixtures shall become the property of the Employer on the date of issue of the Taking-Over Certificate

These services and maintenance shall be provided by the Contractor for entire Contract period.

MEASUREMENT AND PAYMENT:

The payment shall be made as under

Pay Iten	n Description	Unit of No Measurement
SP-4	Maintain employer and Engineer's representative and staff residential accommodation	Months

SP 5 – PROVIDE VEHICLES FOR THE EMPLOYER & ENGINEER'S REPRESENTATIVE 1 X DOUBLE CABIN (WITH AC) (RENTAL BASIS)

GENERAL:

The Contractor shall procure, furnish and maintain vehicles for the use of the Engineer's and Employer's Representatives until the end of the maintenance period at which time they shall become the property of the Employer. The Contractor's Insurance, shall also cover the vehicles provided for the Engineer's and Employer's Representatives. The Insurance policy shall be comprehensive.

If the contractor fails to provide the vehicles within the time allowed, the cost of hiring alternative vehicles, used for the work shall be deducted from the Contractor's Bill.

The Contractor shall provide and furnish to the Engineer's and Employer's Representatives, not later than thirty (30) days after the receipt of Notice to Proceed.

The vehicles shall be tax-paid, comprehensively insured, fueled, repaired, serviced and maintained by the Contractor for the duration of the contract and temporarily replaced if any vehicles is not in a roadworthy condition and until such vehicle is repaired and retained for use. The Contractor shall provide competent drivers who shall be responsible for the vehicle allocated to them for the duration of the Contract.

If the Contractor fails to maintain the vehicles to the satisfaction of the Engineer's and Employer's Representatives or otherwise fails to comply fully with these provisions, the Engineer's Representative may get the vehicles maintained through some alternated arrangement. The Contractor to comply with these provisions.

PAYMENT FOR VEHICLES:

Payment for the provision and maintenance of the transport for the Engineer's Representative shall be made for the respective pay items listed below which price and payment shall be the full compensation for the provision of the vehicles and their maintenance, including drivers fuel, lubricants, repairs, all insurance, taxes and everything necessary to satisfy the requirements of these provision:

Pay It	em Description	Unit of Measurement
SP-5	Provide Vehicles for the Employer & Engineer Representative 1 Double Cabin (with AC) (Rental Basis).	Vehicle Month

SP 6 - MAINTAIN VEHICLES OF EMPLOYER & ENGINEER'S INCLUDING DRIVER, FUEL, LUBRICANTS, TYRES, TUNING, REPAIRS, INSURANCE ETC. COMPLETE IN ALL RESPECT

GENERAL:

The Contractor shall procure, furnish and maintain new vehicles for the use of the Engineer's and Employer's Representatives until the end of the maintenance period at which time they shall become the property of the Employer. The Contractor's Insurance, shall also cover the vehicles provided for the Engineer's and Employer's Representatives. The Insurance policy shall be comprehensive.

If the contractor fails to provide the vehicles within the time allowed, the cost of hiring alternative vehicles, used for the work shall be deducted from the Contractor's Bill.

The Contractor shall provide and furnish to the Engineer's and Employer's Representatives, not later than thirty (30) days after the receipt of Notice to Proceed.

The vehicles shall be tax-paid, comprehensively insured, fueled, repaired, serviced and maintained by the Contractor for the duration of the contract and temporarily replaced if any vehicles is not in a roadworthy condition and until such vehicle is repaired and retained for use. The Contractor shall provide competent drivers who shall be responsible for the vehicle allocated to them for the duration of the Contract.

If the Contractor fails to maintain the vehicles to the satisfaction of the Engineer's and Employer's Representatives or otherwise fails to comply fully with these provisions, the Engineer's Representative may get the vehicles maintained through some alternated arrangement. The Contractor to comply with these provisions.

PAYMENT FOR VEHICLES:

Payment for the provision and maintenance of the transport for the Engineer's Representative shall be made for the respective pay items listed below which price and payment shall be the full compensation for the provision of the vehicles and their maintenance, including drivers fuel, lubricants, repairs, all insurance, taxes and everything necessary to satisfy the requirements of these provision:

Pay Item	Description	Unit of Measurement
Er Lı	aintain vehicles of the employer & ngineer' including Drivers, Fuel, abricants, tyres, tuning, repairs, insumplete in all respect	Vehicle Month rance etc.