



बृहन्मुंबई महानगरपालिका
Municipal Corporation of Greater Mumbai



Mithi River Water Quality Improvement Project

Package 3: Dry Weather Flow Interception at Tidal Outfalls (including Gate Pumps), Transfer Sewer, Training of River (Retaining wall and Service Road), Beautification including Promenades and Allied Works from CST Bridge to Prem nagar outfall, Kurla including Vakola River.

Design Build Operate Contract

Volume 3 - Schedule of Payments

Employer:

Municipal Corporation of Greater Mumbai

Municipal Head Office Building, Mahapalika Marg,
Fort, Mumbai - 400 001.

Consultant:

Frischmann Prabhu (India) Pvt. Ltd.

315, Balgovind Wadi, New Prabhadevi Road,
Prabhadevi, Mumbai - 400 025



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TABLE OF CONTENTS

I	SCHEDULE OF PAYMENTS.....	1
1	Schedule of Payments Documents and General Provisions	1
	1.1 Schedule of Payments Documents	1
	1.2 General Provisions	1
II	DESIGN-BUILD.....	4
2	Design-Build Terms of Payment and Pricing.....	4
	2.1 Terms of Payment	4
3	Pricing Schedule A1: Cost Centres (Design-Build)	5
	3.1 Cost Centres General Provisions.....	5
	3.2 Provisional Sums.....	5
	3.3 Revision of Cost Centre Values	5
	3.4 Valuation of Ordered Variations.....	6
4	Pricing Schedule A2: Dayworks	7
	4.1 General Provisions	7
	4.2 Labour	7
	4.3 Design	8
	4.4 Equipment listed Rates.....	8
	4.5 On-Site Overheads, Off-Site Overheads and Profit.....	8
5	Pricing Schedule A3: Contract Price Adjustments (Design-Build).....	9
	5.1 Applicability	9
	5.2 Definitions.....	9
	5.3 Selected Indices	9
	5.4 Price Adjustment Formula.....	10
	5.5 Price Adjustment Proportions	10
6	Not Used.....	11
7	Application for Interim Payment (Design-Build).....	12
	7.1 General	12
III	OPERATION SERVICE.....	16
8	Operation Service Terms of Payment and Pricing	16
	8.1 Terms of Payment	16
9	Pricing Schedule B1: Schedule of Rates and Prices (Operation Services)	18
	9.1 Fixed Time Related Charges	18
	9.2 Flow Dependent Charges	18
	9.3 Load Dependent Charges.....	19
	9.4 Sludge Disposal (Off Site) Charges	19
	9.5 Floor on Operational Costs.....	19
10	Pricing Schedule B2: Asset Replacement Schedule.....	20

	10.1 General	20
11 Pricing Schedule B3: Contract Price Adjustments (Operation Service)		21
11.1 Definitions		21
11.2 Selected Indices		21
11.3 Price Adjustment Formula: Operation Service excluding the Asset Replacement Fund		21
11.4 Price Adjustments Proportions: Operation Service excluding the Asset Replacement Fund		22
11.5 Price Adjustment Formula: Asset Replacement Fund Only		23
12 Failure to Meet Operation Service Performance - Performance Damages		24
12.1 Calculating Performance Damages		24
13 Valuation of Ordered Variations		25
	13.1 General	25
14 Application for Interim Payment (Operation Service)		26
	14.1 General	26
14.2 Monthly Payments to the Contractor		26
14.3 Quarterly Payments to the Asset Replacement Fund		27
14.4 Disbursements from the Asset Replacement Fund		27
15 Innovation and Improved Efficiency		28
	15.1 General	28
16 Operation Service Cost Models		29
	16.1 General	29
16.2 Operation Service Tender Cost Model		29
16.3 Operation Service Actual Cost Model		29
17 Financial Review		30
17.1 General		30

I SCHEDULE OF PAYMENTS

1 SCHEDULE OF PAYMENTS DOCUMENTS AND GENERAL PROVISIONS

1.1 Schedule of Payments Documents

- (1) This Schedule of Payments consists of the following documents:
 - a) Sections 1.0 to 17.0 of this Schedule of Payments;
 - b) Pricing Schedule A1;
 - c) Pricing Schedule A2;
 - d) Pricing Schedule A3;
 - e) Pricing Schedule B1;
 - f) Pricing Schedule B2; and
 - g) Pricing Schedule B3.
 - h) Pricing Schedule C
- (2) Pricing Schedules A1, A2, A3, B1, B2, B3, C and all lists of rates and prices contained therein are collectively referred to as the "Pricing Schedules".

[Note to Tenderers: The Tenderer's completed Pricing Schedules will be taken from the Tenderer's Tender Submission and inserted at the end of this Schedule of Payments, prior to the execution of a final contract.]

1.2 General Provisions

- (1) All references to the Conditions of Contract in this Schedule of Payments are references to the FIDIC General Conditions of Contract for Design, Build and Operate Projects (Gold Book) as modified by the Particular Conditions Part B – Special Provisions in Volume 1.
- (2) All references to "Section" are references to Sections of this Schedule of Payments.
- (3) All rates and prices that appear in the Pricing Schedules shall be in INR as stated in the **Tender Data Sheet**.
- (4) Where the expression "normal working hours" is used in this Schedule of Payments, it means normal working hours as defined in the Contract Data. Where capitalized terms are used in this Schedule of Payments, the definitions of those terms (if not otherwise defined in this Schedule of Payments) shall be as set out in the Contract.
- (5) The rates and prices set out in the Pricing Schedules attached to this Schedule of Payments shall include all taxes, duties, and other charges on the production, manufacture, sale and transport of the Equipment, materials and supplies to be used on or furnished under the Contract, and also on the works and services to be performed under the Contract.

All charges towards Goods and Services (GST) and other duties on material/ Machinery obtained for the work from any source including the tax applicable, as per Maharashtra GST Act, on the transfer of property in good involved in the execution of work contracts, (re-enacted) Act 1991 or as amended shall be borne by the tenderer. The Engineer shall not be responsible for any defaults in paying various taxes / Royalty as mentioned above, by the contractor.. The Prices quoted under column 3 of Price Schedule A1 – Summary shall be inclusive of all taxes and duties and shall be considered for evaluation.

- a) The Employer shall deduct 1% Labour Welfare Cess from each Interim and Final Payment Certificate amount as per Government of Maharashtra (GOM) Notification u/no BCA/2009/Case No 108 Labour &-A Mantralaya, Mumbai dated 17.06.2012 under B&OCWWC Act 1996.
 - b) Any tax benefit availed by the bidder by way of statute of the project or by way of project authority certificate shall be to the Employer's account and shall be deducted from the contractor's RA Bills.
- (6) The rates and prices entered into the Pricing Schedules shall be inclusive of all levies, taxes and other duties including but not limited to custom duty and all other import and export duties, **Goods and Service Tax (GST)** and other charges that the Contractor may incur in respect of the performance of the Contract, Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in the Employer's country on profits made by the Contractor in respect of the Contract. Note the following:
- The Employer shall issue Project Authority Certificate (PAC) for Customs/ Excise Duty Exemption. However the contractor shall obtain permission from the Collector of Mumbai and complete all the formalities necessary at their cost. No reimbursement on this account will be made by MCGM.
- (7) Under the provisions of the Indian Income Tax Act, the Employer is required to deduct income-tax and Surcharge from payments due to the Contractor as per rates prevailing at the time of payment. Upon the Contractor's request the Employer will issue a Tax-Deduction at Source (TDS) certificate.
- (8) All the import licenses and permits shall be obtained directly by the Contractor in the name of the Contractor. The Employer will only arrange to issue a project authority certificate based on information furnished in the Tender Submission. Expenses towards import license fees, custom duties, custom clearance, changes in respect of imported plant, materials, consumable spares and services, as necessary for due performance of the Contract shall be borne by the Contractor and are included in the rates and prices set out in Pricing Schedule A1. The Employer shall not be responsible for any costs incurred by the Contractor or due to be paid by the Contractor for the importation of any goods and services necessary for the completion of the Contract. The Employer shall not be liable to the Contractor for any loss resulting from clearance being delayed or refused. Similarly, the Employer shall not be liable for additional costs if the Contractor fails to get any exemptions on custom duties or other fees from State or Central Government. The Contractor is responsible for obtaining all NOCs & compliance thereof from concerned authorities.
- (9) Any equipment subject to exemption from custom duties or similar shall not be utilised on any other project.
- (10) The Contractor shall pay all costs and compensation associated with tonnage, permits, royalties, rent or other payments if any, including any payments due under the Mineral Act, associated with the importation to site of materials such as stone, sand, gravel, clay or any other materials obtained from off-site excavations. The Contractor shall also be responsible for payments or compensations, if any, levied by the Maharashtra State or any Central Government body in relation to any off-site excavation or off-site disposal of any excavated material. All such costs, payments, duties and taxes are payable by the Contractor and shall be included in the rates and prices set out in the Pricing Schedules.

- (11) The Contractor's staff, personnel and labour will be liable to pay personal income taxes in the Employer's country in respect of their salaries and wages as re-chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on the Contractor by such laws and regulations.
- (12) The Contractor shall consider the benefit of any exemption, concessions, remission, rebate, set off, credits or any other benefit pertaining to all taxes in respect of the performance or arising out of the performance of all or any of the obligations of the Contractor under this Agreement or on any materials or other supplies or services bought out or received by Contractor for use in or in relation to the Contract.
- (13) The Contractor shall provide to the Employer all documents which would enable the Employer to take the benefit of any credit / set-off, which may be available under any legislation.
- (14) Chapter XXI-Miscellaneous, section 171(1) of GST Act 2017 governs the "Anti Profiteering Measure" (APM)

As per the provision of this section, "Any Reduction in rate of tax on any supply of goods or services or the benefit of input tax credit shall be passed on to the recipient by way of commensurate reduction in prices"

Accordingly, the contractor shall pass on the complete benefit accruing to him on account of reduced tax rate or additional input tax credit to MCGM.

Further, all the provisions of GST Act shall be applicable to the tender.

Tenderer shall submit Irrevocable Undertaking towards Tax Reduction as per format given in Volume 4 – Contract Forms of Tender Documents.

II DESIGN-BUILD

2 DESIGN-BUILD TERMS OF PAYMENT AND PRICING

2.1 Terms of Payment

- (1) The Terms of Payment in this Section 2.1 are provided pursuant to Sub-Clauses 14.1 and 14.4 of the Conditions of Contract and are particular to the Design-Build Period.
- (2) Payment for the Design-Build will be on a lump sum basis (i.e. non-re-measurable). Changes to the amounts set out in Pricing Schedule A1 will be limited to those arising from instructed Variations, incorporation of Provisional Sums (each in accordance with the Conditions of Contract), and additional payments or deductions as may be required by the Contract.
- (3) The Contractor shall not be entitled to any payment for treatment of wastewater until the Commissioning Certificate has been issued. All costs incurred in the receipt and treatment of wastewater prior to the date stated in the Commissioning Certificate are deemed to be included in the rates and prices set out in Pricing Schedule A1.
- (4) The Contract Price in respect of the Design-Build shall be adjusted for changes to the costs over time, only in accordance with Section 5.0.

3 PRICING SCHEDULE A1: COST CENTRES (DESIGN-BUILD)

3.1 Cost Centres General Provisions

- (1) Pricing Schedule A1 is divided into cost centers (each a “Cost Centre”) and the general scope of work associated with each Cost Centre is set out in the Pricing Schedule A1.
- (2) The sum of the prices in a Cost Centre is the Cost Centre Value, which is carried forward to the Pricing Schedule A1 - Summary.
- (3) The total of Cost Centre Values as shown in the Pricing Schedule Summary or as may be revised in accordance with the Contract shall be the total amount to be paid to the Contractor for executing and completing the Design-Build and performing all other Design-Build obligations under the Contract, as described in or inferred from the Contract as a whole except for changes determined by the Employer’s Representative as being due in accordance with the Conditions of Contract.
- (4) Pricing Schedule A1 provides a breakdown of the costs of the major items included in each Cost Centre. The Cost Centres and the breakdowns contained in them are not intended to be a complete or fully detailed description of the scope and extent of the Design-Build. It is the responsibility of the Contractor to ascertain the full scope of the Design-Build by reference to the Contract as a whole and shall not be limited in any manner whatsoever by the descriptions in the Cost Centres, Pricing Schedule A1, or this Schedule of Payments. The Contractor shall be deemed to have included in Pricing Schedule A1, as a whole, the full cost of the Design-Build.

3.2 Provisional Sums

- (1) Those amounts listed in Appendix F are to be paid only in accordance with Sub-Clause 13.5 of the Conditions of Contract. The amounts listed in Cost Centre A1.11 shall be valued on the basis of the net cost of the services, materials and equipment provided, and the percentage adjustment for Provisional Sums included in the Contract Data in accordance with the following:
 - (a) the term “net cost” is defined as the actual cost incurred by the Contractor after the deduction of all trade, quantity and other discounts where appropriate; and
 - (b) to establish “net cost” the Contractor shall provide all documentation, including receipts, invoices, credit notes, discount vouchers, delivery notes, requisitions and the like which the Employer’s Representative considers necessary to enable him to substantiate the amount due for payment.

3.3 Revision of Cost Centre Values

- (1) The Cost Centre Values shall be revised by the Employer’s Representative:
 - (a) upon a determination pursuant to Sub-Clause 13.3 of the Conditions of Contract, by adding to or deducting from the relevant Cost Centre Value the value as determined; and
 - (b) upon any other determination by the Employer’s Representative of an amount or allowance due to the Contractor under the Contract which can reasonably be included within the scope of a Cost Centre, by adding to the relevant Cost Centre Value the amount or allowance as determined.

- (2) The Employer's Representative may decide which Cost Centre is to be the relevant Cost Centre for the purpose Section 3.3(1) if and insofar as the same is not identified in Pricing Schedule A1, and shall notify the Contractor in writing upon making any such decision.

3.4 Valuation of Ordered Variations

- (1) The valuation of any Variations ordered by the Employer's Representative in accordance with Sub-Clause 13.1 of the Conditions of Contract shall be ascertained by the Employer's Representative in accordance with Sub-Clause 13.3 of the Conditions of Contract and the following principles:
 - (a) Where work in connection with the Variation is of a similar character and executed under similar conditions to work priced in the Pricing Schedules it shall be valued at such rates and prices contained therein as may be applicable.
 - (b) Where work in connection with the Variation is not of similar character or is not executed under similar conditions or is ordered after the issue of the Commissioning Certificate the rates and prices contained in the Pricing Schedules shall be used as the basis for valuation so far as may be reasonable, failing which a fair valuation shall be made by the Employer's Representative. In establishing a fair valuation, the Employer's Representative shall make reference to the breakdown of the Contractor's rates and prices that may have been previously supplied by the Contractor prior to Contract award. In the event that any such breakdown has not been previously provided or if a further breakdown of the price is required, the Contractor shall provide the Employer's Representative with any such breakdown that may be requested.
 - (c) Under certain circumstances during the Design-Build Period, as determined at the sole discretion of the Employer's Representative, the Employer's Representative may order that a Variation ordered under Sub- Clause 13.1 of the Conditions of Contract should be valued in accordance with the rates and prices contained in Pricing Schedule A2. Dayworks.
 - (d) Payments for Variations using the rates and prices contained in Pricing Schedule A2 shall only be made where so specifically instructed by the Employer's Representative.

4 PRICING SCHEDULE A2: DAYWORKS

4.1 General Provisions

- (1) During the Design-Build Period, the Employer's Representative may utilise the rates, charges and percentages adjustments given in Pricing Schedule A2 for the valuation of Variations in accordance with Clause 3.4(1)(c).
- (2) The percentage given in the Contract Data for "Percentage for adjustment of Provisional Sums" shall not apply to any amounts in Pricing Schedule A2.
- (3) The hours and sums included in Pricing Schedule A2 are provisional only and may be used in total, in part or not at all. The Contractor shall not claim loss of profit or overhead claims for lack of use of provisional dayworks.

4.2 Labour

- (1) Labour rates set out in Pricing Schedule A2 shall cover all labour and operatives on site howsoever employed. Rates for labour include as a minimum:
 - (a) wages and salaries;
 - (b) bonuses and incentives;
 - (c) on-site overheads, off-site overheads, and profit;
 - (d) working in special circumstances;
 - (e) special allowances;
 - (f) sick leave and sick pay;
 - (g) severance and/or redundancy payments;
 - (h) travelling to, from and about the Site;
 - (i) time and cost in respect of losses due to inclement weather;
 - (j) subsistence and lodging;
 - (k) protective clothing, boots and safety equipment;
 - (l) meeting any legal requirements with respect to employment;
 - (m) superannuation and life insurance;
 - (n) death benefit;
 - (o) occupational or accident benefits;
 - (p) medical aid or treatment;
 - (q) training, including safety training;
 - (r) small tools such as picks, shovels, barrows, trowels, ladders, hand saws, buckets, trestles, hammers, chisels, and all items of a like nature;
 - (s) all work during normal working hours, excluding general holidays;
 - (t) all subcontract costs;
 - (u) welfare or pension payments and contributions;
 - (v) holidays and holiday pay; meal breaks and rest periods; and
 - (w) supervision.

- (2) Where labour categories are used which are not included in Pricing Schedule A2 then rates shall be agreed on the basis of rates for similar skills included in Pricing Schedule A2.
- (3) Only the net working hours or part hours for labour will be paid for, together with standing time necessitated by the activity or by instruction of the Employer's Representative. Meal breaks and rest periods shall be not be included in the time to be paid.
- (4) Voluntary overtime will be paid as though the work had been carried out during the normal working hours. Voluntary overtime is when the Contractor elects to execute daywork outside of the normal working hours.

4.3 Design

- (1) The rates set out for design in Pricing Schedule A2 shall be fully inclusive of all overtime enhancement, disbursements, computers and travelling time and shall include on-site overheads, off-site overheads and profit. If design staff categories are used which are not listed in Pricing Schedule A2 then rates shall be agreed on the basis of the rates for similar skills included in Pricing Schedule A2.
- (2) Meal breaks and rest periods shall be not be included in the time to be paid.
- (3) Voluntary overtime shall be paid as though the work had been carried out during the normal working hours. Voluntary overtime is when the Contractor elects to execute design work outside of the normal working hours.

4.4 Equipment listed Rates

- (1) In respect of the equipment listed in Pricing Schedule A2 the equipment shall be paid for by the Employer at the rates provided by the Contractor subject to the following:
 - (a) The rates shall include for all travelling time for delivery of the equipment to the location where the work is to be executed and removal of the equipment from that location.
 - (b) Where items of mechanical equipment covered by this section are standing, the rate will be limited to a maximum of 8 hours in any one day. A maximum of 40 hours total will be authorised unless otherwise instructed by the Employer's Representative. Mechanical breakdown will not be paid for.
 - (c) Only the net working hours or part hours for the equipment will be paid for together with standing time necessitated by the activity or by instruction of the Employer's Representative.
 - (d) The rates set out in the Pricing Schedule shall be paid by the Employer and such rates deemed to include on-site overheads, off-site overheads, and profit.

4.5 On-Site Overheads, Off-Site Overheads and Profit

- (1) The rates and percentage adjustments set out in Pricing Schedule A2 with respect to the items set out in Sections 4.2 to 4.4 are deemed to include all on-site overheads, off-site overheads, and all profit.
- (2) Off-Site Overhead includes all off-site overheads and administration including head office and/or registered office staff associated with the contract or general management, administration, finance, estimating, planning, procurement, insurances and all other items not otherwise covered by Pricing Schedule A2.

5 PRICING SCHEDULE A3: CONTRACT PRICE ADJUSTMENTS (DESIGN-BUILD)

5.1 Applicability

- (1) In accordance with Sub-Clause 13.8 of the Conditions of Contract, adjustments changes in cost shall apply during the Design-Build Period on the basis of the provisions of this Section 5.0. Contract Price Adjustments (maximum up to 10% Design Build Cost) for fluctuations in prices after the Base Date shall apply only from 13th(thirteenth) month.
- (2) To the extent that full compensation for any rise or fall in Costs to the Contractor is not covered by the provisions of this or other clauses in the Contract, the Contract Price shall be deemed to include amounts to cover any other rise or fall in the Contractor's Costs.

5.2 Definitions

- (1) For the purpose of this Section 5.0:
 - (a) "Final Index Figure" means any index figure appropriate pursuant to Section 5.3 of this Schedule of Payments not stated in the named publications as provisional;
 - (a) "Base 13 Index Figure" means the Final Index Figure applicable at the date 13th (thirteenth) month after the Base Date. In respect of quarterly published indices, monthly interpolation between indices shall not be permitted.
 - (b) "Current Index Figure" means the appropriate Final Index Figure to be applied in respect of any certificate issued or due to be issued by the Employer's Representative pursuant to Clause 14 of the Conditions of Contract and shall be the appropriate Final Index figure applicable to the date 30 days or, in the case of quarterly indices, the last index issued prior to the earliest of:
 - (i) the due date (or extended date) for completion of the Design-Build; or
 - (ii) the last day of the period to which the certificate relates.
 - (c) The "Effective Value" in respect of the Design-Build shall be the difference between:
 - (i) the amount established in accordance with Sub-Clause 14.3(a) of the Conditions of Contract but excluding any amounts in respect of work instructed under Clause 13 of the Conditions of Contract which is valued using prices or quotations valid at the time of instruction; and
 - (ii) the amount established in the previous Interim Payment Certificate in accordance with Section 5.2(1)(d)(i)

where the value relates only to the Works that have been executed in the qualifying period (from 13 months after the Base Date).

Note:- Base Date is on the day of 28 days prior to the date of submission of the e-tender.

5.3 Selected Indices

- (1) The amount payable by the Employer to the Contractor in respect of the Design-Build in an interim payment or in the Final Certificate to be compiled in accordance with the provisions of this Schedule of Payments shall be increased or decreased in accordance with the provisions of this Schedule of Payments using the following indices:

- (a) The All India Consumer Price Index Number for Industrial Workers (CPI-IW); and
- (b) The Indian Wholesale Price Index for Manufactured Products Index Number (Group III).

5.4 Price Adjustment Formula

- (1) The price adjustment formula shall be as follows:

$$PAF_n = \left(F + \left(a \times \frac{A_n}{A_b} \right) + \left(b \times \frac{B_n}{B_b} \right) \right) - 1$$

Where:	PAF_n	=	Price Adjustment Factor to be applied to the Effective Value for current month.
	F	=	Non-adjustable portion as determined by Section 5.5.
	a, b	=	Coefficients determined in Section 5.5.
	A_n, B_n	=	Current Index Figure value for current month for the indices given in Sections 5.3(1)(a) and (b), as applicable
	A_b, B_b	=	Base 13 Index Figure for the indices given in Sections 5.3(1)(a) and (b), as applicable

- (2) For the purposes of this Section 5.0, the term “Price Adjustment Factor” means the amount determined in accordance with Section 5.4(1). The increase or decrease in the amounts otherwise payable to the Contractor pursuant to this Section 5.0 shall be calculated by multiplying the Effective Value by the Price Adjustment Factor.
- (3) If at any time a Current Index Figure (for the ten days prior to the submission of an application) is unavailable, a provisional index equal to the latest available index shall be used, subject to subsequent correction of the amounts certified when the Current Index Figure is available.

5.5 Price Adjustment Proportions

- (1) For the purpose of calculating the Price Adjustment Factor referred to in Section 5.4, the proportions shall, unless otherwise agreed (irrespective of the actual constituents of the work) be as provided in the Table 5.5.1 – Price Adjustment Proportions (Design-Build) that follows.
- (2) The intention of this Section 5.5 is that the proportions shall reflect the actual anticipated cost base spread of the Contractor at the time of Tender submission. If the Contractor included its own proportions in its Tender Submission and such proportions are included as Tender Submission Extracts in the Contract, such proportions shall apply. Where no alternative proportions are stated in the Tender Submission Extracts, then the “Default Value” proportions shall apply.

Table 5.5.1 - Price Adjustment Proportions (Design-Build)

Item	Value	Description of Index
a	0.35	Labour Index defined in Section 5.3(1) of the Schedule of Payments
b	0.55	Materials Index defined in Section 5.3(1) of the Schedule of Payments
F	0.1	In respect of all other costs which shall not be subject to any adjustment
Total	1.00	

Note – The total escalation shall not exceed 10 % of the DB cost

6 NOT USED

7 APPLICATION FOR INTERIM PAYMENT (DESIGN-BUILD)

7.1 General

- (1) Applications for payment during the Design-Build Period shall be made monthly in accordance with the requirements of Sub-Clauses 14.3 and 14.6 of the Conditions of Contract.
- (2) The Contractor shall make an application for an interim payment including the following:
 - (a) For Cost Centres A1.1 to A1.10 the Contract Price shall be established on the basis of the product of each Cost Centre Price and the relevant percentage of the Works completed at the month covered by the application. The contractor shall submit price break-up for Employer's approval. The relevant works completed and percentage thereof shall be checked and confirmed by the Employer's Representative, based on his assessment of the work at the time. Payments shall be made as per approved break-up.

For Cost Centre A1.11 (Provisional Sums) and Cost Centre A1.12 (Provisional Quantities) the Contract Price shall be established in accordance with Sections 3.2.
 - (b) The value of any Variation that has not yet been included in any of the Cost Centres shall be established on the basis of the value of the Works completed by the end of the month, following the procedures given in Section 3.4. If the Employer's Representative has instructed a Variation, but the method of valuation has not yet been established in accordance with the procedures of the Contract, then the Contractor shall base his interim valuation on the rates given in Pricing Schedule A2.
- (3) The Cost Centre Prices shall be revised:
 - (a) upon a determination pursuant to Sub-Clause 13.3 of the Conditions of Contract, by adding to or deducting from the relevant item price the value as determined; and
 - (b) upon any other determination by the Employer's Representative of an amount or allowance due to the Contractor under the Contract which can reasonably be included within the scope of an item, by adding to the relevant item Value the amount or allowance as determined; and
 - (c) adjustments for retention and any other adjustments in the Contract.
- (4) The Contractor shall submit with his applications for payment a completed Schedule of Payments in a form agreed with the Employer's Representative, updated monthly to show payments already made and anticipated payments for the remainder of the Contract. The layout of the application for payment shall be subject to the approval of the Employer's Representative.
- (5) The Cost Centres shall be expanded to show additional items for each claim, if any, until a determination has been made pursuant to Sub-Clause 13.3 of the Conditions of Contract, following which Section 7.1(7) shall apply.
- (6) The Employer's Representative shall determine the amount due to the Contractor following a review of the Contractor's application and supporting documentation which shall set out the extent of Works complete and the value of work carried out against each item in each Cost Centre. The Employer's Representative shall examine the application and the Works completed and shall at its sole discretion make any adjustments considered necessary to reflect his opinion of the extent of

Works properly carried out. Table 7.1 shall be used as a guide by the Employer's Representative in determining the amount due. The designation "P" means progressive monthly payments up to the limits indicated, based on progress made by the Contractor. The designation "LS" means that a lump sum payment will be made upon successful completion of the activity described.

- (7) The Contractor shall make best efforts to assist the Employer's Representative in making any detailed examination of the Works and shall provide all such information as the Employer's Representative may reasonably require in connection with assessing the value of work carried out and agreeing the value of work completed prior to the submission of applications for payment.

Table 7.1 - Interim Payment Application Certification for Design Build part of the Contract
All Interim Payment Applications shall be Certified as per following Table for Design and Build Part of the Contract

Major Work Category	Type of Payment	Payment %	Description
Preconstruction and Contractual Costs			
Insurances, General Items etc.	P	100%	Progressive payments up to completion of the Design-Build period
Designs and documentation	LS	80%	On approval and acceptance of working drawings, designs and documentation of each process unit and other buildings by the Employer's Representative
	LS	10%	On approval and acceptance of the final designs and documentation by the Employer's Representative
	LS	10%	After commissioning
Civil Works			
Water Retaining structures (e.g. aeration tank, settlement tanks, digesters, grit separators, etc.)	P	80%	Progressive certification up to completion of the civil works, but prior to hydraulic testing
	LS	10%	after hydraulic testing
	LS	10%	after commissioning
Other civil works such as connecting channels, buildings, excavation, roadwork, drainage etc.	P	80%	Progressive certification up to completion of the civil works
	LS	10%	10% after testing
	LS	10%	10% after Commissioning
Plant and Equipment for Incorporation in the Permanent Works			
Mechanical and Electrical Equipment, instrumentation, etc.	LS	70%	Progressive certification in accordance with Clause 14.6 of Conditions of Contract
	LS	20%	Progressive certification on completion of installation
	LS	10%	Progressive certification on completion of testing and commissioning
Pre-commissioning and commissioning tests for the Works	LS	100%	Progressive certification on successful completion
Plant Proving Period	LS	100%	LS on successful completion
Provisional Sum Items			
Any requirement	LS	100%	Progressive certification upon production of receipts for any approved expenditure

Note: P = Progressive, LS = Lump Sum.

Table 7.2 - Interim Payment terms for Design and Build part of the Contract

Payments without interest against All Certified Interim Payment Applications for Design and Build Part of the Contract shall be made/released as follows

7.2 A – Advance Payment:

Payment	Description
10% of	DB contract value as an Advance as per clause 14.2 of volume 1

7.2 B – Retention & Interim Payment

Payment	Description
5% of	the amount shall be retained and released as per Table 7.3 C
95% of	the amount certified in each interim payment application as per table 7.1

7.3 C – Retention Amount shall be released as follows:

Payment	Description
50% of	Retention Amount after date of issue of commissioning certificate. ^{1,2}
50% of	Retention Amount after 60 months from date of issue of commissioning certificate. ^{1,2}

DB: Design and Build**Note:**

- 1) All payments subject to operation and maintenance performance satisfying & complying with performance requirement as stipulated under clause no. 18 and Appendix B of volume 2.
- 2) All payments shall be made as per clause nos. 14.1 of FIDIC General Conditions and within period as specified in 14.8 of Volume 1(as amended in this addendum).

III OPERATION SERVICE

8 OPERATION SERVICE TERMS OF PAYMENT AND PRICING

8.1 Terms of Payment

- (1) The Terms of Payment in this Section 8.0 to 17.0 are provided pursuant to Sub-Clauses 14.1 and 14.4 of the Conditions of Contract and are particular to the Operation Service Period.
- (2) The portion of the Contract Price associated with the Operation Service Period will be established on the basis of a combination of fixed time related charges and operation charges based on measured inputs and outputs. Additional payments or deductions may become due as a result of instructed variations.
- (3) Interim applications for payment during the Operation Service Period shall be made on a Monthly basis.
- (4) Measurements for payment purposes shall be undertaken by the Contractor in accordance with the procedures set out in the Employer's Requirements, Volume 2.
- (5) In Sections 9.2 and 9.3, measurements are expressed as being taken at certain measurement points. These refer to the generic layout in Figure B3.1 in Appendix B3 of Volume 2, Employer's Requirements.
- (6) When a measurement for payment is missing, incomplete, or in doubt (in the opinion of the Employer's Representative) payment shall be ascertained on the basis of the lowest equivalent measurement in the previous 20 measurements.
- (7) Notwithstanding Section 8.1(6), the Contractor shall not be entitled to any payment which relies on a measurement where the measurement is missing, incomplete, or in doubt (in the opinion of the Employer's Representative) for a continuous period of 4 weeks or more.
- (8) In respect of the Operation Services, payments will be adjusted for changes to the cost of labour, material or other matters, in accordance with Section 11.0.
- (9) Performance damages shall be applied in accordance with Section 12.0 where the Contractor fails to meet the performance requirements of the Contract.
- (10) Payments for the Operation Services will be certified on the basis of the following components:
 - (a) Fixed Time Related Costs;
 - (b) Flow Dependent Charges;
 - (c) Load Dependent Charges; and
 - (d) Sludge disposal charges
- (11) Pricing Schedule B1 provides the mechanism for payments for the Operation Service with special provision made for the payments in the first year of operation. The first year of operation is deemed to cover the one year commencing on the date stated in the Commissioning Certificate in accordance with Clause 11.7 of the Conditions of Contract, excluding the date of the first anniversary of the date stated on the Commissioning Certificate.
- (12) The scope and extent of the Operation Service is to be ascertained by reference to the Contract as a whole and shall not be limited in any manner whatsoever by the descriptions in the Pricing Schedules B1 and B2. The Contractor shall be deemed

to have acknowledged that the prices contained in the Pricing Schedules B1 and B2 fully reflect for carrying out the full scope and extent of the Operation Services.

9 PRICING SCHEDULE B1: SCHEDULE OF RATES AND PRICES (OPERATION SERVICES)

9.1 Fixed Time Related Charges

- (1) The rates included in Pricing Schedule B1 in the chart entitled “Fixed Time Related Charges” (the “Fixed Time Related Charges Chart”) are fully inclusive of those costs that will be incurred, but not be limited to:
 - (a) fixed costs associated with the provision of Plant and Materials;
 - (b) costs associated with the provision of office accommodation, health and welfare facilities, testing, laboratories and workshops;
 - (c) costs associated with supervisory management, financial performance and analytical services;
 - (d) costs associated with insurances;
 - (e) fixed costs associated with the transport and disposal of screenings, grit and other waste products;
 - (f) routine, preventive and corrective maintenance;
 - (g) maintenance of required stock of spare parts;
 - (h) regular testing and calibration of instrumentation and control equipment;
 - (i) measurement, sampling, analysis and data collection and storage;
 - (j) maintenance and updating of Operation and Maintenance Documentation and general reporting requirements; and
 - (k) costs associated with maintenance of all landscaping on and off site (beautification) and all other exterior maintenance.
- (2) The Fixed Time Related Charge component of each Interim Payment Certificate shall be valued on the basis of the product of,
 - (a) the daily charge rate as set out in the Fixed Time Related Charges Chart; and
 - (b) the number of days in the Month.

9.2 Flow Dependent Charges

- (1) Charges to cover the costs related to the flow volumes in the various components of the dry weather flow interception, transfer, pumping and treatment facility shall be paid by the Employer in accordance with the rates set out in Pricing Schedule B1 in the chart entitled “Flow Dependent Charges” (the “Flow Dependent Charges Chart”).
- (2) The rates set out in the Flow Dependent Charges Chart are deemed to include all costs that are directly related to the flow stream (exclusive of any fixed time related charges and load dependent charges and shall include but not be limited to:
 - (a) cost of power;
 - (b) cost of consumable materials;
 - (c) costs associated with plant and equipment operations;
 - (d) marginal cost of maintenance (if any);

- (e) marginal cost of labour (if any);
- (f) processing of return liquors and washwater; and
- (g) variable costs of transport and disposal of grit, screenings & other waste products

9.3 Load Dependent Charges

Deleted

9.4 Waste/silt Disposal (Off Site) Charges

- (1) Payments for waste/silt Disposal (Off Site) will be determined each month. Payments will be based on the average daily weight (tonnes of dry solids per day) in the month. Average daily weight is calculated by dividing the total waste/silt disposed (Off Site) in the month, by the number of days in the month.
- (2) Payment will be made on a slab-wise basis. Therefore that portion of the average daily waste/silt Disposal Off-Site within the ranges defined in the Pricing Schedule B1 will be multiplied by the rate associated with that range in the waste/silt Disposal Off- Site Charges Chart and by the total number of days in the month for which payment is to be calculated. If weights are in excess of the first range, then that excess amounts(s) will be multiplied by the rate(s) appropriate for that portion of the waste/silt Disposal load and by the total number of days in the Monthly for which payment is to be calculated.
- (3) The rates set out in Pricing Schedule B1 in the chart entitled “waste/silt Disposal Off-Site include all marginal costs that are directly related to the disposal of sludge. Rates are exclusive of any fixed time related charges and flow dependent charges set out in Pricing Schedule B1 and shall include, but not be limited to:
 - (a) Cost of power;
 - (b) Cost of consumable materials;
 - (c) Costs associated with plant and equipment operations;
 - (d) Marginal cost of maintenance (if any);
 - (e) Marginal cost of labour (if any);
 - (f) Costs of handling and loading
 - (g) Cost of transport
 - (h) Fees and taxes (e.g. for landfilling)
 - (i) Costs of any monitoring measures.

9.5 Floor on Operational Costs

- (1) Annual operational cost (from Pricing Schedule B1) shall not be less than 3% of the D&B cost (from Pricing Schedule A1).

10 PRICING SCHEDULE B2: ASSET REPLACEMENT SCHEDULE

10.1 General

- 1) Payments towards Asset Replacement for each Quarter shall cover the mechanical and electrical portion of the major Plant.
- 2) The administration and management of the Asset Replacement Schedule shall be carried out in accordance with Sub-Clause 14.18 of the Conditions of Contract and Sub-Clause 22.4 of the Employer's Requirements (Volume 2).
- 3) No payments shall be made to the Contractor in the first 7 years of the Operation Service Period. Thereafter payments to the Contractor shall be the lesser of:
 - a) the total of the amounts legitimately included in the Asset Replacement Schedule up to the payment date; and
 - b) the total of the value of items legitimately included in the Asset Replacement Schedule that have actually been replaced up to the payment date
- 4) For the purpose of this Section 10.0 the value of each item under Section 10.1(4)(b) shall be derived from the amounts included in the Asset Replacement Schedule. An item of Plant will not be considered to have been replaced until the item has been installed and tested, and has been demonstrated to be in accordance with the Contract to the satisfaction of the Employer's Representative.

11 PRICING SCHEDULE B3: CONTRACT PRICE ADJUSTMENTS (OPERATION SERVICE)

11.1 Definitions

- (1) For the purpose of this Clause 11.0:
- (a) "Final Index Figure" shall mean any index figure appropriate to Section 11.2 not stated in the noted publications as provisional;
 - (b) "Base Index Figure" shall mean the appropriate Final Index Figure applicable at the Base Date. In respect of quarterly published indices, monthly interpolation between indices shall not be permitted;
 - (c) "Current Index Figure" shall mean the appropriate Final Index Figure to be applied in respect of any certificate issued or due to be issued by the Employer's Representative pursuant to Clause 14 of the Conditions of Contract and shall be the appropriate Final Index Figure applicable to the date 30 days or, in the case of quarterly indices, the last index issued prior to the earlier of:
 - (i) the date stated by the Employer's Representative as being the date on which the Contractor shall cease the operation of the Works; or
 - (ii) the last day of the period to which the certificate relates.
 - (d) The "Effective Value" in respect of the Operation Service shall be the payment for the Operation Service established in accordance with Sub-Clause 14.3(g) of the Conditions of Contract and this Schedule of Payments, but excluding any amounts in respect of work instructed which is valued using prices or quotations valid at the time of instruction.

11.2 Selected Indices

- (1) The amount payable by the Employer to the Contractor in respect of the Operation Service in an interim payment or in the Final Certificate shall be increased or decreased if there are any changes in the following published Indian indices:
- (a) **the All India Consumer Price Index Number for Industrial Workers (CPI-IW);**
 - (b) **the Wholesale Price Index for Chemicals and Chemical Products Index Number (Group III, Sub-Group H); - (Not Applicable)**
 - (c) **the Wholesale Price Index for Electricity Index Number (Group II, Sub-Group C); and**
 - (d) **the Wholesale Price Index for High Speed Diesel Oil Index Number (Group II, Sub-Group B, Commodity High Speed Diesel Oil).**

11.3 Price Adjustment Formula: Operation Service excluding the Asset Replacement Fund

- (1) The price adjustment formula shall be as follows:

$$PAF_n = \left(F + \left(a \times \frac{A_n}{A_b} \right) + \left(b \times \frac{B_n}{B_b} \right) + \left(c \times \frac{C_n}{C_b} \right) + \left(d \times \frac{D_n}{D_b} \right) \right) - 1$$

Where:	PAF_n	=	Price Adjustment Factor to be applied to the Effective Value (excluding any payments to or from the Asset Replacement Fund) for current quarter.
	F	=	Non-adjustable portion as determined by Section 11.4.
	a, b, c, d	=	Coefficients determined in Section 11.4.
	A_n, B_n, C_n, D_n	=	Current Index Figure value for current month for the indices given in Sections 11.2(1)(a), 11.2(1)(b), 11.2(1)(c), and 11.2(1)(d), as applicable.
	A_b, B_b, C_b, D_b	=	Base Index Figure value for the indices given in Sections 11.2(1)(a), 11.2(1)(b), 11.2(1)(c), and 11.2(1)(d), as applicable.

- (2) For the purposes of this Section 11.3, the “Price Adjustment Factor” shall mean the amount determined in accordance with Section 11.3(1). The increase or decrease in the amounts otherwise payable to the Contractor pursuant to this Section 11.3 shall be calculated by multiplying the Effective Value by the Price Adjustment Factor.
- (3) If at any time a Current Index Figure (for the ten days prior to the submission of an application) is unavailable, a provisional index equal to the latest available index shall be used, subject to subsequent correction of the amounts certified when the Current Index Figure is available.

11.4 Price Adjustments Proportions: Operation Service excluding the Asset Replacement Fund

- (1) For the purpose of calculating the Price Adjustment Factor referred to in Section 11.3, the proportions shall unless otherwise agreed (irrespective of the actual constituents of the work) be as provided in the Table 11.4.1 – Price Adjustment Proportions (Operation Service).
- (2) The intention is that the proportions shall reflect the actual anticipated cost base spread of the Contractor at the time of Tender Submission. If the Contractor included its own proportions in Pricing Schedule B1 and such proportions are included in the Tender Submission Extracts such proportions shall apply. Where no alternative proportions are stated in the Tender Submission Extracts, then the “Default Value” proportions set out shall apply.
- (3) The Employer and the Contractor will review the proportions in use during the Contract at annual intervals to determine if they remain an appropriate representation of the Contractor’s cost spread across the indices. If they are found by the Employer to be inappropriate, the Employer shall not be bound to, but may, in its sole discretion, make an adjustment to these proportions, provided that the Employer shall do so in order to better reflect the variations in the Contractor’s overall costs with the indices listed in Table 11.4.1.

Table 11.4.1 - Price Adjustment Proportions (Operation Service)

Coefficient	Proportions	Description of Index
	Default Values	
a	0.30	Labour Index defined in Section 11.2(1)(a)
b	0	Chemicals Index defined in Section 11.2(1)(b)
c	0.30	Electricity Index defined in Section 11.2(1)(c)
d	0.30	Auto diesel Index defined in Section 11.2(1)(d)
F	0.10	In respect of all other costs which shall not be subject to any adjustment
Total	1.00	

+

11.5 Price Adjustment Formula: Asset Replacement Fund Only

- (1) The price adjustment formula for payments to or from the Asset Replacement Fund shall be as follows:-

$$PAF_{ARFn} = \frac{B_n}{B_b} - 1$$

Where:	PAF_{ARFn}	=	Price Adjustment Factor to be applied to the Asset Replacement Fund payments for current quarter.
	B_n	=	Current Index Figure value for current month for the index in 11.5(2).
	B_b	=	Index figure at the Base Date for the index in 11.5(2).

- (2) The Indian Wholesale Price Index for Manufactured Products Index Number (Group III) shall be used as the index applicable to this Section 11.5.
- (3) The increase or decrease in the amounts otherwise payable to the Contractor pursuant to this Section 11.5 shall be calculated by multiplying the payment due under the Asset Replacement Fund payment by the Price Adjustment Factor as derived from the price adjustment formula given above.
- (4) If at any time a Current Index Figure (for the ten days prior to the submission of an application) is unavailable, a provisional index equal to the latest available index shall be used, subject to subsequent correction of the amounts certified when the Current Index Figure is available.

12 FAILURE TO MEET OPERATION SERVICE PERFORMANCE - PERFORMANCE DAMAGES

12.1 Calculating Performance Damages

- (1) Amounts to be paid by the Employer to the Contractor in respect of Operation Services shall be subject to adjustment in accordance with this Section 12.0. Adjustments to be made in accordance with this Section 12.0 are based on the Contractor's failure to meet the performance requirements set out in the Employer's Requirements.
- (2) Details of Failure Events are set out in the Employer's Requirements. Details of the Price Adjustment consequent upon the occurrence of any failures as defined in the Failure Events are set out in Table 12.1.1 below. For clarity, "for each day of failure" refers to those days of failure within the payment month in excess of the permitted number of failures based on the number of samples taken in that month.
- (3) Performance damages shall be additive such that where more than one Failure Mode is applicable then the performance damages for each shall be applied subject to the limit that the performance damages shall reduce the payment due under each cost component to a minimum of zero. Also, the total cumulative performance damages for any payment certificate shall be limited to 20% of the value of the Interim or Final Payment Certificate prior to the application of performance damages.

Table 12.1.1 - Performance damages

Failure Mode	Brief Description	Performance Damages
(1)	The Major Dry weather flow interception facilities or pumping stations fails to intercept ADWF as per requirements in Appendix B1 of Employer's Requirements and discharge DWF to Mithi River	For each day on which a failed event occurs after taking account of the permitted exceedances allowed in Appendix B1, Table B1.4 and B1.5 and the allowable exceptions in Table 17.3 of the Employer's Requirements deduct: <ul style="list-style-type: none"> • 50% of 24 hour payment for Fixed Time Related Charges (Section 9.1); plus • 24 hour payment for flow dependent charge (Section 9.2); plus •

13 VALUATION OF ORDERED VARIATIONS

13.1 General

- (1) The valuation of any Variation ordered or approved by the Employer's Representative in accordance with Sub-Clause 13.1 of the Conditions of Contract shall be ascertained by the Employer's Representative in accordance with Sub-Clause 13.3 of the Conditions of Contract and the following principles:
 - (a) Where work is of a similar character and executed under similar conditions to work priced in Pricing Schedule B1, for which further details are provided in the Operation Service Tender Cost Model, it shall be valued at such rates and prices contained therein as may be applicable.
 - (b) Where the work is not of a similar character or is not executed under similar conditions to work priced in Pricing Schedule B1 rates, the further details provided in the Operation Service Tender Cost Model may be used as the basis for a fair valuation so far as may be reasonable, failing which the Employer's Representative may request the Contractor to submit a breakdown of the rates and prices of the work to be undertaken in accordance with Clause 13 of the Conditions of Contract, or the Employer's Representative may order the work to be valued using the rates and principles set out in Pricing Schedule B1.
 - (c) Where a Variation is ordered by the Employer's Representative in accordance with the requirements of Sub-Clauses 13.6 or 13.7 of the Conditions of Contract and such Variation does not require any modification to the Permanent Works or the operation and maintenance activities then additional or reduced amounts will be established on the basis of changes in costs for the Operation Service. No allowance will be made for profit. The Contractor shall submit such evidence of additional or reduced costs as the Employer's Representative may reasonably require. Notwithstanding the forgoing, such additional or reduced cost shall not be separately paid or credited if the same shall be taken into account by the indexing of any of the inputs to the Price Adjustment Formulae in Section 11.0, as applicable. The amount established in accordance with this Section 13.1(1)(c) shall be included under the amount to be certified under Sub-Clause 14.3 (j) of the Conditions of Contract.

14 APPLICATION FOR INTERIM PAYMENT (OPERATION SERVICE)

14.1 General

- (1) Applications for payments during the Operation Service Period shall be made monthly and otherwise in accordance with the Sub-Clause 14.3 of the Conditions of Contract. Applications shall be submitted within 28 days of the end of each calendar quarter. The first application may be submitted for that portion of the calendar quarter remaining after the date of the Commissioning Certificate.
- (2) Applications for payments shall be calculated in accordance with the requirements of this Schedule of Payments.
- (3) Further to the requirements of Sub-Clause 14.3 of the Conditions of Contract the Contractor shall submit an application for an interim payment on the basis of three categories as follows:
 - (a) Monthly Payments to the Contractor (excluding the Asset Replacement Fund);
 - (b) Quarterly Payments to the Asset Replacement Fund; and
 - (c) Quarterly Disbursements from the Asset Replacement Fund.

14.2 Monthly Payments to the Contractor

- (1) Applications of payment in accordance with Sub-Clause 14.3 of the Conditions of Contract shall be submitted by the Contractor, indicating the amount due in the monthly categorized as follows:
 - (a) Normal Payments:
 - (i) Fixed Time Related Charges;
 - (ii) Flow Dependent Charges ;
 - (iii) Performance damages;
 - (b) Variations:
 - (i) amount due for Design-Build Variation orders valued in accordance with this Schedule of Payments, the Conditions of Contract and and/or other rates and prices from the Operation Service Tender Cost Model; and
 - (ii) amount due for Operation Services Variation orders valued in accordance with this Schedule of Payments and the Conditions of Contract;
 - (c) Savings:
 - (i) 25% of net savings in operation and maintenance charges as a result of Contractor requested Variation pursuant to Section 13.2 once savings have been incorporated into revised rates for amounts due under Section 14.2(1);
 - (d) Other Changes:
 - (i) amount due for changes in legislation in accordance with Sub- Clause 13.6 of the Conditions of Contract which have not been taken into account by Section 14.2(1)(a);
 - (i) amount due for changes in technology in accordance with Sub- Clause 13.7 of the Conditions of Contract which have not been taken into account by Section 14.2(1)(a);

- (e) Price Adjustments:
 - (i) amount due as a result of applying the Price Adjustment Factor determined in accordance with Section 11.0 which have not been taken into account by Sections 14.2(1)(a), 14.2(1)(b), 14.2(1)(c), or 14.2(1)(d);
- (f) Other Price Adjustments:
 - (i) any other amounts due for Contract Price Adjustments in accordance with the Contract but not included under any other category pursuant to this Section 14.2;
- (g) Maintenance Retention Fund:
 - (i) any amount to be deducted for the Maintenance Retention Fund in accordance with Sub-Clause 14.19 of the Conditions of Contract; and
- (h) Asset Replacement Fund:
 - (i) any amount to be released from the Asset Replacement Fund in accordance with Sub-Clause 14.18 of the Conditions of Contract.

14.3 Quarterly Payments to the Asset Replacement Fund

- (1) Applications of payment to the Asset Replacement Fund, in accordance with Sub-Clause 14.3 of the Conditions of Contract shall be submitted as:
 - (a) amount due in accordance with Section 10.0; and
 - (b) amount due as a result of applying the price adjustment formula in accordance with Section 11.5.

14.4 Disbursements from the Asset Replacement Fund

- (1) Applications for disbursement from the Asset Replacement Fund, in accordance with Sub-Clause 14.18 of the Conditions of Contract, shall be submitted as:
 - (a) amount due for disbursement in accordance with Section 10.0; and
 - (b) amount due as a result of applying the price adjustment formula in accordance with Section 11.5.

15 INNOVATION AND IMPROVED EFFICIENCY

15.1 General

- (1) The Contractor is encouraged to introduce innovation and improved efficiency into the operation of the Asset Replacement Fund, where it can be demonstrated to be economically advantageous to the Employer in terms of improved efficiency, reduced environmental impact or cost reduction.
- (2) When the Contractor wishes to introduce an innovation, the Contractor shall put forward a proposal in writing to the Employer's Representative. The proposal shall include the following:
 - (a) a detailed description of the innovation being proposed including a work method statement and a programme for its implementation;
 - (b) physical changes to the Works (if any);
 - (c) environmental impacts and abatement of any adverse impacts;
 - (d) environmental benefits;
 - (e) cost/benefit analysis; and
 - (f) financial plan for proportioning of costs and savings between the Employer and the Contractor.
- (3) The Employer's Representative will review the proposal submitted in accordance with Section 15.1(2) and discuss the merits with the Employer and the Contractor to reach a decision collectively. The sharing of any capital cost and operational cost savings against annual budgets shall be divided equally between the Employer and the Contractor. The Employer shall be under no obligation to accept any such proposal.
- (4) The Employer and/or the Employer's Representative may also introduce a proposal for innovation and improved efficiency similarly to the Contractor. If the Employer wishes to present an innovation, it shall put the innovation forward in the same manner as described in Section 15.1(2). If the Employer innovation is implemented the sharing of any capital cost and operational cost savings against annual budgets shall be divided 75% to the Employer and 25% to the Contractor. The Contractor shall be under no obligation to implement any such proposal.

16 OPERATION SERVICE COST MODELS

16.1 General

- (1) The Contractor shall submit an Operation Service Tender Cost Model for each year of the Operation Service Period which demonstrates:
 - (a) how each of the rates and prices stated in the Pricing Schedule B1 have been calculated; and
 - (b) a typical payment schedule over a 15 year operational period, (the "Operation Service Tender Cost Model"). The Operation Service Tender Cost Model has been included in this Contract as a Tender Submission Extract.

16.2 Operation Service Tender Cost Model

- (1) The Contractor's Operation Service Tender Cost Model, as substantiated adequately during the Contract if deemed applicable by the Employer's Representative, shall be used to form the basis of the valuation of certain Variations in accordance with Section 13.0. At the request of the Employer's Representative the Contractor shall provide additional details of any component of the Operation Service Tender Cost Model, although this shall not alter any of the amounts included for any other component.
- (2) The Operation Service Tender Cost Model shall not be updated or modified without the prior consent of the Employer's Representative, which shall only be granted in the following circumstances:
 - (a) incorporation of additional details;
 - (b) Variation ordered or agreed in accordance with Clause 13 of the Conditions of Contract, although modifications shall be limited to the components affected by the Variation; and
 - (c) agreement between the Contractor and the Employer.
- (3) If in the Employer's Representative's opinion, the Operation Service Tender Cost Model is inadequate to be used as a basis for valuation then the Contractor shall be obliged to provide full justification of his tendered rates and prices that clearly shows how the rates have been built up. If this is not appropriate or the Employer's Representative is not satisfied with the information provided he shall be entitled to ignore references in the Contract to the Operation Service Tender Cost Model in the context of valuation and make his own assessment on matters of valuation.

16.3 Operation Service Actual Cost Model

- (1) The Contractor shall develop a detailed operational cost model ("Operation Service Actual Cost Model"), which will model the actual costs that are incurred during the Operation Service Period. This Operation Service Actual Cost Model shall be structured similar to the Operation Service Tender Cost Model but shall be maintained and updated completely separately from the Operation Service Tender Cost Model.
- (2) The Operation Service Actual Cost Model shall be updated quarterly in the first year of the Operation Service Period and yearly for subsequent years.

17 FINANCIAL REVIEW

17.1 General

- (1) The cost of and price for the Operation Services will be subject to a periodic financial review which will be undertaken quarterly during the first year of the Operation Service Period and yearly for subsequent years. The basis of the financial review will be the comparison between the Operation Service Tender Cost Model and the Operation Service Actual Cost Model.
- (2) The financial review will be undertaken by the Employer's Representative, or, if agreed between the parties, by the Operation Service Monitoring Group, and will take account of, but not be limited to, the Contract Price Adjustments mechanism, the operation of the Asset Replacement Fund, future upgrades and improvements, the continual development of sludge strategy and any other financial issues.
- (3) The financial review undertaken in the fifth year after the commencement of the Operation Service Period, and in each five years thereafter, will take account of the insurance provisions submitted in accordance with Clause 19 of the Conditions of Contract.
- (4) The financial review itself will not result in any adjustment to the Contract Price in respect of the Operation Service or to the rates and prices and rates set out in Pricing Schedules B1 and B2.
- (5) If the Operation Service Monitoring Group or the Employer's Representative, as a result of a financial review in accordance with this Section 17.1, considers that a change in circumstances has occurred to the extent that a review of any rate is justified, they shall advise the Employer of the circumstances and recommend a revised rate or rates. If accepted by the Employer the Contractor shall implement the recommended change in rates by order of a Variation in accordance with Clause 13 of the Conditions of Contract. The Employer is not bound, in any way whatsoever, to accept any recommended revisions to the rates recommended to the Employer.
- (6) Notwithstanding the financial review and notwithstanding any recommendation made in accordance with Section 17.1(5), no change in any rate will be considered during the first five years of the Operation Service Period.