



**OFFICE OF THE EXECUTIVE ENGINEER
PUBLIC HEALTH ENGINEERING (DEV) DIVISION JAMSHORO**

NO: TC/ 3543 OF 2026,
Jamshoro, dated: - 03 / 08 / 2026.

To,

✓ The Director information (Adv:),
Information Department, Government of Sindh,
Barrack # 96 Sindh Secretariat,
Karachi.

**SUBJECT: - PUBLICATION OF NOTICE INVITING TENDERS IN RESPECT
OF PUBLIC HEALTH ENGINEERING (DEV) DIVISION
JAMSHORO.**

It is to inform you that a copy of Notice Inviting Tender No.
TC/NIT/3542 dated: - 03/08/2026, is submitted herewith (In-Seven Copies)
for publication of leading Newspapers.

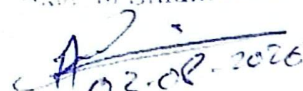
It is further stated that the liabilities of your department have
been paid after receipt of funds.


EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG: (DEV) DIVISION
JAMSHORO

Copy to Mr. Muhammad Soomar Jatoi, Tender Clerk, for information and
compliance.

✓
EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG: (DEV) DIVISION
JAMSHORO

R&I Incharge
Advertisement Section
Information Department
Govt of Sindh, Karachi


03.08.2026.



**OFFICE OF THE EXECUTIVE ENGINEER
PUBLIC HEALTH ENGINEERING (DEV) DIVISION JAMSHORO**

Near Railway Crossing Kotri @ Deputy Commissioner Office Jamshoro @ Kotri

No: TC/NIT/ 3542 /2026, Jamshoro Dated: 03 /08/ 2026

NOTICE INVITING TENDERS (THROUGH EPADS)

"Method of Procurement "Single Stage Two Envelop"

This office invites E-Bid through "E-Pak Acquisition and Disposal System (EPADS)" on website <http://portalsindh.eprocure.gov.pk/> for the following works from the interested Contractors/Firms/Companies, meeting the eligibility criteria/registered with Pakistan Engineering Council (PEC) in relevant category having valid renewal limit of category of following works:-

Sr. No:	Description	Estimated Cost Rs: (M)	Earnest Money 5% Rs: (M)	Tender Fee	Time for Completion	PEC Category
1	Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro.	268.391	13.420	5000	24 Months	C-3 & above
2	Providing / Installing of R.O. Plant at Village Umar Bozdar and Village Sher Rang Scheme namely Installation of R.O. Plants in UC Wahur Taluka Sehwan District Jamshoro.	31.866	1.594	5000	24 Months	C-5 & above

HOW TO APPLY:-

- 1). Bidding documents containing detailed terms and condition can be views and download from <http://portalsindh.eprocure.gov.pk/>.
- 2). Bids shall be submitted electronically through the "EPADS" only. Manual submission will not be entertained.
- 3). Interested bidders must ensure their registration on EPADS at <http://portalsindh.eprocure.gov.pk/>.
- 4). The original instrument of Tender Fee & bid security in the shape of call deposit/ pay order shall be delivered to the Procurement Agency on or before the deadline for submission of E-Bids.

PROGRAMME RECEIPT AND OPENING OF TENDERS

1. Bidding document can be downloaded after hoisted on SPPRA EPADS Website up to date: 24-08-2026 at 10:30 A.M. Physical Bids will not be issued /accepted.
2. Call Deposit Receipt (CDR) will be received physically/through courier up to date: 24-08-2026 at 10:30 A.M.
3. The Bid Shall be open on the dated: 24-08-2026 at 11.00 AM.

MANDATORY CONDITIONS:

- ii) Each page of the Technical Proposal must be attested by the owner of firm/company along with the company stamp.
- iii) Bid Validity period 90 days.
- iv) Conditional tenders will be rejected.

ELIGIBILITY CRITERIA:-

- a) Firm / Contractors must be registered with Pakistan Engineering Council (PEC Valid up to June-2027) in relevant category with specialization Code in CE09, CE10, EE11(i), EE11(ii), EE11(iii), EE11(iv), EE11(vv) & ME07 (Electrical & Mechanical Engineer) must be valid in PEC, supported by PEC valid registration certificate.
- b) Experience in Similar Nature Works Executed During the Last Five (5) Years: (Detailed Working Estimate and BER must be uploaded).
 - (i) At least one similar nature of work having minimum cost 80% of the estimated cost of the work; OR
 - (ii) At least two (02) similar nature works each having minimum cost 50% of the estimated cost.
- c) Bio-data of the Engineering and Technical Staff (Civil) employed by the firm, along with their attested CVs and salary slips, clearly showing their employment with the firm..

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- d) Average annual financial turnover not less than equivalent cost of the Scheme / Project last three (03) years. Verified from the Turnover Bank Certificate of three (03) Years.
- e) The firm/contractor shall be permanently registered with the Income Tax Department (NTN) and the Sindh Revenue Board (SRB). Attested copies of the Permanent NTN Certificate and Permanent SRB Registration Certificate shall be submitted with the bid, along with copies of Income Tax Return receipts for the last three (3) years. The firm/contractor must have Active Taxpayer Status.
- f) The firm/contractor shall furnish its litigation history, indicating all arbitration, litigation, and court cases, if any, along with brief details and the decisions rendered in favour of or against the firm. In case the firm has not been involved in any litigation, arbitration, or court case with any Government Department, it shall submit the latest E-Stamp Paper of Rs. 500/-, duly attested and issued in the name of the firm/proprietor, declaring that all documents, particulars, and information furnished with the bid are true and correct. If any information is found to be false, incorrect, or misleading at any stage, the Procuring Agency reserves the right to reject the bid and take appropriate action in accordance with the applicable rules.
- g) Bank Account Statement in the name of the Bidders Firm for the last three (3) years must be submitted with the Technical Proposal.
- h) Annual audit reports of last three years from (ICAP) registered audit firm. Audit report issued other than (ICAP) registered audit firms will not be accepted.
- i) The firm/contractor shall submit the most recent/latest E-Stamp Paper of Rs. 500/-, issued after the publication of this NIT, duly attested and issued in the name of the firm/proprietor, declaring that all documents, particulars, and information furnished with the bid are true and correct. If any information is found to be false, incorrect, or misleading at any stage, the Procuring Agency reserves the right to reject the bid and take appropriate action in accordance with the applicable rules.
- j) An original and latest undertaking/Affidavit on E-Stamp Paper duly attested Rs.500/- that the Bidder and its firm have never been blacklisted by any Government, Semi Government, Autonomous or State-Owned Organization & their cases regarding blacklisting are not under trial by any Court of Law. De-listed firm will be allowed.
- k) Detail of Machinery & Equipment available for execution of work with documentary evidence of its ownership / rented / lease.
- l) The firm/contractor shall possess a valid License issued by the Electrical Inspector (Government of Sindh/Competent Authority) for the execution of electrical works. An attested and verified copy of the valid license shall be submitted with the bid, failing which the bid shall be liable to rejection.

Evaluation Criteria, sub-criteria, for the evaluation of Full Technical Proposals is based on Yes / No OR Pass / Fail; if a bidder fails to obtain yes or pass in any criteria or sub- criteria then he/ she / it shall not be qualified.

The Competent Authority reserves the right to reject any or all application as per SPPRA Rules 2010 (Amended-up-to-date).

In case, Government announces any public Holiday on Scheduled dates, the tender will be opened on the next working day, as per usual schedule in accordance with Rule -41 (B) of SPPRA 2010 (Amended upto-date).

EXECUTIVE ENGINEER
PUBLIC HEALTH ENGINEERING (DEV) DIVISION
JAMSHORO

Copy F.W.C's for favor of information to:-

1. The Chief Engineer, Public Health Engineering (Dev:) Department Govt. of Sindh, Hyderabad.
 2. The Superintending Engineer, Public Health Engineering (Dev:) Circle Hyderabad.
 3. The Director information, Public Relation Department, Government of Sindh, Barrack # 96 Sindh Secretariat Karachi along with (7) seven Copies for publication in at least three languages leading newspapers.
 4. The Director (A&F) Sindh Public Procurement Regulatory Authority (SPPRA) Government of Sindh Barrack No.08 Secretariat No.04-A, Court Road Karachi.
 5. The Assistant Engineers, Public Health Engineering Sub-Division Jamshoro / Schwan.
 6. The Procurement Committee Members.
 7. The Complaint Redressal Committee Members.
- Copy to Notice Board/Drawing Branch.

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03-08-2026

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آفس آف دی ایگزیکٹو انجنيئر
پبلڪ بيلٽھ انجنيئرنگ (DEV) ڊويزن ڄامشورو
نزد ريلوے ڪراسنگ، ڪوئري، دھڙي ڌرتي ڪمشنر ڄامشورو، ڪوئري۔

نزد ریلوے کراسنگ، کوٹری، دفتر ڈپٹی کمشنر جامشورو، کوٹری۔

No: TC/NIT/ 3542 /2026,

Jamshoro Dated: 03-08-2026

ٹینڈر طلبی نوٹس (بذریعہ ای پیڈس)

»ایک مرحلے پر دو لفافی طریقہ کار کے مطابق«

ہیے دفن و پھینسی رکھے اور اٹلے ٹھیکیداروں / فرموں / کمپنیوں سے، جو متعلقہ زمرے میں پاکستان انجینئرنگ کونسل (PEC) کے ساتھ رجسٹرڈ ہوں اور متعلقہ کاموں کے لیے اپنے زمرے کی موثر تجدید شدہ حد رکھتے ہوں، درج ذیل کاموں کے لیے ویب سائٹ <http://portalsindh.eprocure.gov.pk> پر ای۔ پاک ایکویزیشن اینڈ سپروڈل سسٹم (EPADS) کے ذریعے ایکٹریٹک ایک یو ایس طلب کرتا ہے۔

شمار نمبر	تفصیل	لاگت تخمینہ (ملین روپے)	زیر پراجانہ (%) (ملین روپے)	ٹینڈر فی مسطح	مستطیل	پانی کی سیکوری
1	تعلقہ سینون، شعل جاشورو میں مجوزہ فلٹر پلانٹس کی بنائی / مرمت کام۔	268.391	13.420	5000	24 ماہ	C-3 پائپ سے پانی
2	تعلقہ سینون، شعل جاشورو کی بے ٹین کوئل واپڑ میں واقع گاؤں عمر پو زور اور گاؤں شیر رنگ میں آہر۔ او پلانٹس کی تنصیب کی سٹیم کے تحت آہر۔ او پلانٹس کی فراہمی اور تنصیب کام۔	31.866	1.594	5000	24 ماہ	C-5 پائپ سے پانی

درخواست دینے کا طریقہ:

- 1- یو بی سے متعلق تفصیلی سرانندہ ضوابط پر مشتمل دستاویزات ویب سائٹ <http://portalsindh.eprocure.gov.pk> سے دیکھی اور ڈاؤن لوڈ کی جاسکتی ہیں۔
- 2- یو بی ایس ان فرم کی پاسکیز کو یو بی ایس اینڈروپچرل سسٹم (EPADS) کے ذریعے الیکٹرانک طور پر جمع کرائی جائیں گی۔ دستی طور پر جمع کرائی گئی یو بی ایس قابل قبول نہیں ہوگی۔
- 3- دلچسپی رکھنے والے یو بی ایس ہندوستان کے لیے ضروری ہے کہ وہ EPADS پر <http://portalsindh.eprocure.gov.pk/> کے ذریعے اپنی رجسٹریشن یقینی بنائیں۔
- 4- یو بیس فیڈر اور برقی سپلائر کی اصل دستاویزہ جو کال فنانسز سے اپنے آرڈر کی شکل میں ہو گا۔ یو بی ایس جمع کرانے کی آخری تاریخ اور وقت سے قبل یا اس وقت تک ہے کہ یو بیس رجسٹریشن ایکٹیو کی دفعہ میں جمع کرنا لازمی ہو گا۔

ٹینڈرز وصول کرنے اور کھولنے کا پروگرام

1. بولی سے متعلق نتائج، سٹاپ ریزات SPRA EPADS ویب سائٹ پر اپ لوڈ ہونے کے بعد 24-08-2026 صبح 10:30 بجے تک ڈیٹن لوڈ کی جاسکتی ہیں۔ دستی بولیاں جاری یا قبول نہیں کی جائیں گی۔
2. کال ڈیپانڈر ریسپنڈ (CDR) دستی طور پر یا کوریئر 24-08-2026 صبح 10:30 بجے تک وصول کی جائے گی۔
3. بولیاں 24-08-2026 صبح 11:00 بجے کھولی جائیں گی۔

الزحمی شرائط:

- (ii) تکنیکی، واپزل کے ہر صفحہ پر فرم / کمپنی کے مالک کے دستخط اور کمپنی کی مہر ثبت ہونا لازمی ہے۔
(iii) بولی کی مہر و کارآمد 90 دن ہوگی۔
(iv) مشروط ٹینڈر / بولیاں مسترد کر دی جائیں گی۔

اہلیت کا معیار:

- فرم / ٹھیکیدار کا پاکستان انجینئرنگ کونسل (PEC) میں معلقہ کیٹگری کی تحت (جون 2027 تک مؤثر) رجسٹرڈ ہونا لازمی ہے، نیز شخص کسی کوڈ CE09 ،CE10 ،CE09 اور (S) EE11(ii),EE11(iii),EE11(iv),EE11(vv) اور ME07 (i) میکانیکل اینڈ نیکیکل انجینئرنگ کے ساتھ رجسٹریشن بھی مؤثر ہوگا۔ اس کے تحت کے طور پر PEC کے مطابق رجسٹریشن سرٹیفیکیٹ مشنک کرنا لازمی ہوگا۔
- گزشتہ پانچ (05) سالوں کے دوران اسی نوعیت کے کاموں کا تجربہ: تفصیلی ورکنگ تجویز اور BER اپلوڈ کرنا لازمی ہوگا۔
- i. کم از کم ایک (01) اسی نوعیت کا کام، جس کی ماہیت متعلقہ کام کی تحقیق لاگت کے کم از کم 80 فیصد کے برابر ہو؛ یا
- ii. کم از کم دو (02) اسی نوعیت کے کام، جن میں سے ہر ایک کی ماہیت متعلقہ کام کی تحقیق لاگت کے کم از کم 50 فیصد کے برابر ہو۔
- فرم میں ملازم، انجینئرنگ اور ٹیکنیکی عملہ (سول) کا تیار ذیادتی تصدیق شدہ ویو (CVs) اور تنخواہ کی جڑیں بتانے والے بیان، جن سے واضح ہو کہ وہ معلقہ فرم میں ملازم ہیں۔
- گزشتہ تین (03) برسوں کا واسطہ سالانہ مالیاتی کارڈ یا معلقہ اسکیم / منصوبہ کی تحقیق لاگت سے کم نہ ہو۔ اس کے لیے گزشتہ تین (03) برسوں کا چیک بک تصدیق شدہ ٹرن اوور سرٹیفیکیٹ مشنک کرنا لازمی ہوگا۔
- فرم / ٹھیکیدار کا ٹیکس ڈیپازمنٹ (NTN) اور سندھ ریونیو بورڈ (SRB) کے ساتھ مستقل رجسٹرڈ ہونا لازمی ہے۔ مستقل NTN سرٹیفیکیٹ اور مستقل SRB رجسٹریشن سرٹیفیکیٹ کی تصدیق شدہ نقول، گزشتہ تین (03) برسوں کی انکم ٹیکس ریٹرن بتانے والے بیان ریسروں کے ساتھ ہونی بھی شامل کی جائیں۔ فرم / ٹھیکیدار کا ایکٹیو ٹیکس پیئرز ہونا بھی لازمی ہے۔
- فرم / ٹھیکیدار اپنے مقدمات کی تفصیلات فراہم کرے، جن میں ملوث، عدالتی مقدمات اور دیگر قانونی کارروائیوں کی مکمل معلومات، مختصر تفصیل اور یہ بھی درج ہو کہ فیصلے فرم کے حق میں ہوئے یا غلط۔ اگر فرم کسی بھی سرکاری ادارے کے ساتھ کسی مقدمہ، ملوث یا عدالتی کارروائی میں ملوث نہ رہی ہو تو اس سلسلے میں -/Rs. 500 کے تنازعہ ترین، تصدیق شدہ ای-اسٹامپ پیپر، جو اس NIT کی اشاعت کے بعد جاری ہوا ہو اور فرم / مالک کے نام ہو، حلیفہ بیان بتانے والا ہو گا کہ فرم کسی بھی سرکاری ادارے کے ساتھ کسی مقدمہ، ملوث یا عدالتی کارروائی میں ملوث نہیں رہی۔
- بولی دہندہ فرم کے نام سے گزشتہ تین (03) برسوں کا چیک بک آؤٹ اسٹینڈنٹ ٹھیکیدار کے واپس آن کے ساتھ جمع کرنا لازمی ہوگا۔
- گزشتہ تین (03) برسوں کی چارٹرڈ اکاؤنٹنٹس، جو ICAP سے رجسٹرڈ آؤٹ فرم کی جانب سے جاری کی گئی ہوں، جمع کرانی ICAP غیر رجسٹرڈ آؤٹ فرم کی چارٹرڈ اکاؤنٹنٹس ہوں گی۔
- فرم / ٹھیکیدار -/Rs. 500 کے تنازعہ ترین، تصدیق شدہ ای-اسٹامپ پیپر، جو اس NIT کی اشاعت کے بعد جاری ہوا ہو اور فرم / مالک کے نام ہو، یہ حلیفہ بیان جمع کرانے کے لیے کے ساتھ فراہم کرنا ضروری ہے، معلومات اور تفصیلات درست اور حقیقی ہیں۔ اگر کسی بھی مرحلے پر کوئی معلومات غلط، جعلی یا ناکام بن ثابت ہوگیں تو یہ یکسر کوٹھی کو مسترد کرنے اور فلاحی اطلاع قواعد کے مطابق کارروائی کرنے کا حق حاصل ہوگا۔
- /Rs. 500 کے تصدیق شدہ اصل اور تازہ ترین ای-اسٹامپ پیپر، خلاف نامہ بتانے والا ہو گا کہ بولی دہندہ یا اس کی فرم کو کسی بھی وفاقی، صوبائی، شہر سرکاری، خود مختار یا ریاستی ادارے سے بھی بلایک نہیں کیا گیا اور بلایک سنگٹ کے متعلق اس کے خلاف کوئی مقدمہ کسی عدالت میں زیر سماعت نہیں ہے۔ تاہم ری اسپیش فرمیں شرکت کی اہل ہوں گی۔
- k. کام کی انجام دہی کے لیے دستیاب مشینری اور آلات کی تفصیلات، ان کی ملکیت، کر ایہ پیلز سے متعلق دستاویزی ثبوت کے ساتھ جمع کرانی جائیں۔
- فرم / ٹھیکیدار کے پاس الیکٹریکل کاموں کی انجام دہی کے لیے الیکٹریکل انسپیکٹر (حکومت سندھ / مجاز اختیارات) کی جانب سے جاری کردہ موثر لائسنس ہونا لازمی ہے۔ اس لائسنس کی تصدیق شدہ اور معائنہ شدہ نقش بولی کے ساتھ جمع کرنا لازمی ہوگا، بصورت دیگر بولی مسترد کی جاتی ہے۔
- محل ٹھیکیدار کی حیثیت کے ساتھ بولی دہندگان کے لیے Pass / Fail یا Yes / No کی تالیف ہوں گے۔ اگر کوئی بولی دہندہ کسی بھی معیار یا ذیلی معیار میں Pass یا Yes حاصل کرنے میں ناکام رہتا ہے تو وہ اپنا قرار نہیں دیا جائے گا۔
- مجاز اختیارات (تحال ترسیم شدہ) جول 2010 کے تحت SPRA کے مطابق کسی بھی تمام درجہ استخوان بولیوں کو مسترد کرنے کا حق حاصل ہوگا۔
- مرکز ترسیم شدہ طرح حکومت کی جانب سے عام تخلیق کار اعان کیا جاتا ہے ٹوئیڈر (تحال ترسیم شدہ) جول 2010 کے تحت SPRA کے Rule-41(B) کے مطابق اسکے کام دونوں طرف سے شیڈول کے مطابق کردہ (تحال ترسیم شدہ)۔

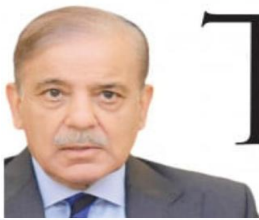
ایگزیکٹو انجنیئر

پبلک ہیلتھ انجینیئرنگ (DEV) ڈویژن
حامشورو



JOB PORTAL BY
INFORMATION DEPARTMENT

INF/KRY/3269/2026



**OFFICE OF THE EXECUTIVE ENGINEER
PUBLIC HEALTH ENGINEERING (DEV) DIVISION JAMSHORO**

Near Railway Crossing Kotri @ Deputy Commissioner Office Jamshoro @ Kotri

No: TC/NIT/ 3542 /2026.

Jamshoro Dated: 03-08-2026

NOTICE INVITING TENDERS (THROUGH EPADS)

“Method of Procurement “Single Stage Two Envelop”

This office invites E-Bid through “E-Pak Acquisition and Disposal System (EPADS)” on website <http://portalsindh.eprocure.gov.pk/> for the following works from the interested Contractors/Firms/Companies, meeting the eligibility criteria/registered with Pakistan Engineering Council (PEC) in relevant category having valid renewal limit of category of following works:-

Sr. No.	Description	Estimated Cost Rs: (M)	Earnest Money 5% Rs: (M)	Tender Fee	Time for Completion	PEC Category
1	Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro.	268.391	13.420	5000	24 Months	C-3 & above
2	Providing / Installing of R.O. Plant at Village Umar Bozdar and Village Sher Rang Scheme namely Installation of R.O. Plants in UC Wahur Taluka Sehwan District Jamshoro.	31.866	1.594	5000	24 Months	C-5 & above

HOW TO APPLY:-

- Bidding documents containing detailed terms and condition can be views and download from <http://portalsindh.eprocure.gov.pk/>.
- Bids shall be submitted electronically through the “EPADS” only. Manual submission will not be entertained.
- Interested bidders must ensure their registration on EPADS at <http://portalsindh.eprocure.gov.pk/>.
- The original instrument of Tender Fee & bid security in the shape of call deposit/ pay order shall be delivered to the Procurement Agency on or before the deadline for submission of E-Bids.

PROGRAMME RECEIPT AND OPENING OF TENDERS

- Bidding document can be downloaded after hoisted on SPPRA EPADS Website up to date: 24-08-2026 at 10:30 A.M. Physical Bids will not be issued /accepted.
- Call Deposit Receipt (CDR) will be received physically/through courier up to date: 24-08-2026 at 10:30 A.M.
- The Bid Shall be open on the dated: 24-08-2026 at 11.00 AM.

MANDATORY CONDITIONS:

- Each page of the Technical Proposal must be attested by the owner of firm/company along with the company stamp.
- Bid Validity period 90 days.
- Conditional tenders will be rejected.

ELIGIBILITY CRITERIA:-

- Firm / Contractors must be registered with Pakistan Engineering Council (PEC Valid up to June-2027) in relevant category with specialization Code in CE09, CE10, EE11(i), EE11(ii), EE11(iii), EE11(iv), EE11(vv) & ME07 (Electrical & Mechanical Engineer) must be valid in PEC, supported by PEC valid registration certificate.
- Experience in Similar Nature Works Executed During the Last Five (5) Years: (Detailed Working Estimate and BER must be uploaded).
 - At least one similar nature of work having minimum cost 80% of the estimated cost of the work; OR
 - At least two (02) similar nature works each having minimum cost 50% of the estimated cost.
- Bio-data of the Engineering and Technical Staff (Civil) employed by the firm, along with their attested CVs and salary slips, clearly showing their employment with the firm.
- Average annual financial turnover not less than equivalent cost of the Scheme / Project last three (03) years. Verified from the Turnover Bank Certificate of three (03) Years.
- The firm/contractor shall be permanently registered with the Income Tax Department (NTN) and the Sindh Revenue Board (SRB). Attested copies of the Permanent NTN Certificate and Permanent SRB Registration Certificate shall be submitted with the bid, along with copies of Income Tax Return receipts for the last three (3) years. The firm/contractor must have Active Taxpayer Status.
- The firm/contractor shall furnish its litigation history, indicating all arbitration, litigation, and court cases, if any, along with brief details and the decisions rendered in favour of or against the firm. In case the firm has not been involved in any litigation, arbitration, or court case with any Government Department, it shall submit the latest E-Stamp Paper of Rs. 500/-, duly attested, issued after the publication of this NIT, and issued in the name of the firm/proprietor, declaring that the firm has not been involved in any litigation, arbitration, or court proceedings with any Government Department.
- Bank Account Statement in the name of the Bidders Firm for the last three (3) years must be submitted with the Technical Proposal.
- Annual audit reports of last three years from (ICAP) registered audit firm. Audit report issued other than (ICAP) registered audit firms will not be accepted.
- The firm/contractor shall submit the most recent/latest E-Stamp Paper of Rs. 500/-, issued after the publication of this NIT, duly attested and issued in the name of the firm/proprietor, declaring that all documents, particulars, and information furnished with the bid are true and correct. If any information is found to be false, incorrect, or misleading at any stage, the Procuring Agency reserves the right to reject the bid and take appropriate action in accordance with the applicable rules.
- An original and latest undertaking/Affidavit on E-Stamp Paper duly attested Rs.500/- that the Bidder and its firm have never been blacklisted by any Government, Semi Government, Autonomous or State-Owned Organization & their cases regarding blacklisting are not under trial by any Court of Law. De-listed firm will be allowed.
- Detail of Machinery & Equipment available for execution of work with documentary evidence of its ownership / rented / lease.
- The firm/contractor shall possess a valid License issued by the Electrical Inspector (Government of Sindh/Competent Authority) for the execution of electrical works. An attested and verified copy of the valid license shall be submitted with the bid, failing which the bid shall be liable to rejection.

Evaluation Criteria, sub-criteria, for the evaluation of Full Technical Proposals is based on Yes / No OR Pass / Fail, if a bidder fails to obtain yes or pass in any criteria or sub- criteria then he/ she / it shall not be qualified.

The Competent Authority reserves the right to reject any or all application as per SPPRA Rules 2010 (Amended-up-to-date).

In case, Government announces any public Holiday on Scheduled dates, the tender will be opened on the next working day, as per usual schedule in accordance with Rule-41 (B) of SPPRA 2010 (Amended upto-date).

ANNUAL PROCUREMENT PLAN 2026-27.
IN RESPECT OF PUBLIC HEALTH ENGG: (DEV) DIVISION JAMSHORO.

Sr. No :	Description of Procurement	Quantity (Where Applicable)	Estimated Unit cost (Where Applicable)	Estimated Total Cost (In Million)	Funds Allocated (In Million)	Source of Funds (ADP/Non ADP)	Proposed procurement Method	Timing of procurement 2026-27				Remarks
								1 st Qtr	2 nd Qtr:	3 rd Qtr:	4 th Qtr:	
01	02	03	04	05	06	07	08	09	10	11	12	13
01	Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro.	N.A	268.391	268.391	70.000	Develop- ment	Single stage Two envelop	Yes				
02	Providing / Installing of R.O. Plant at Village Umar Bozdar and Village Sher Rang Scheme namely Installation of R.O. Plants in UC Wahur Taluka Sehwan District Jamshoro.	N.A	31.866	31.866	18.000	Develop- ment	Single stage Two envelop	Yes				


 EXECUTIVE ENGINEER
 PUBLIC HEALTH ENGG: (DEV) DIVISION
JAMSHORO

PUBLIC HEALTH ENGINEERING DIVISION JAMSHORO

01

NAME OF WORK

Rehabilitation / Repair of Proposed Filter Plants
Taluka Sehwan District Jamshoro

TENDERS DOCUMENTS

Name of Department: Public Health Engineering Department

Name of Procuring Agency: Executive Engineer, Public Health
Engineering (Dev) Division Jamshoro

Reference No.TC/NIT/3542 / 2026 Jamshoro Dated:- 03 / 08 /2026

Date of Opening 24-08-2026 **Time:** 11:00 AM

Documents Issued to: _____

Tender Fee through Pay order No. _____ **Dated:** - _____

Tender Fee Rs:- 5000/-


EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG.(DEV) DIVISION
JAMSHORO

**INSTRUCTIONS
TO
BIDDERS (ITB) AND APPENDICES
TO ITB**

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MANDATORY CONDITIONS:

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- iii) Bid Validity period 90 days.
- iv) Conditional tenders will be rejected.

ELIGIBILITY CRITERIA:-

- a) Firm / Contractors must be registered with Pakistan Engineering Council (PEC Valid up to June-2027) in relevant category with specialization Code in CE09, CE10, EE11(i), EE11(ii), EE11(iii), EE11(iv), EE11(vv) & ME07 (Electrical & Mechanical Engineer) must be valid in PEC, supported by PEC valid registration certificate.
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- c)** Bio-data of the Engineering and Technical Staff (Civil) employed by the firm, along with their attested CVs and salary slips, clearly showing their employment with the firm..
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 - j)** An original and latest undertaking/Affidavit on E-Stamp Paper duly attested Rs.500/- that the Bidder and its firm have never been blacklisted by any Government, Semi Government, Autonomous or State-Owned Organization & their cases regarding blacklisting are not under trial by any Court of Law. De-listed firm will be allowed.
 - k)** Detail of Machinery & Equipment available for execution of work with documentary evidence of its ownership / rented / lease.
 - l)** The firm/contractor shall possess a valid License issued by the Electrical Inspector (Government of Sindh/Competent Authority) for the execution of electrical works. An attested and verified copy of the valid license shall be submitted with the bid, failing which the bid shall be liable to rejection.

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INSTRUCTIONS TO BIDDERS

A. GENERAL

IB.1 Scope of Bid and Source of Funds

1.1 Scope of Bid

Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro.

Bidders must quote for the complete scope of works/Services. Any bid covering partial scope of work/services will be rejected as non-responsive, pursuant to Clause IB.24.

1.2 Source of Funds

The Government of Sindh will provide the funds under Annual Development Programme 2026-2027 for the project and proceed of the funds will be applied to eligible payment under the contract for which these bidding documents are issued.

IB.2 Eligible Bidders

2.1 Bidding is open to all firms and persons meeting the following requirements as well as mentioned in the NIT.

- a) Duly licensed by the Pakistan Engineering Council (PEC) in relevant Categories C-3 and above with specialization in CE09, CE10, EE11(i), EE11(ii), EE11(iii), EE11(iv), EE11(vv) & ME07 (Electrical & Mechanical Engineer) valid upto June-2027
- b) Foreign Bidders from eligible countries as per Appendix 'A' to Instruction to Bidders.
- c) Prequalified, if such prequalification exercise has been conducted.

IB.3 Eligible Goods and Services

3.1 All Goods and Services to be supplied under this Contract shall have their origin in eligible countries listed in Appendix 'A' to Instructions to Bidders and all expenditures made under the Contract will be limited to such Goods and Services.

3.2 For purpose of this Clause, "origin" means the place where the Goods are mined, grown or produced or from where the Services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

3.3 The origin of Goods and Services is distinct from the nationality of the Bidder.

IB.4 Cost of Bidding

- 4.1 The Bidder shall bear all costs associated with the preparation and submission of its respective bid and the Owner will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. BIDDING DOCUMENTS

IB.5 Contents of Bidding Documents

- 5.1 In addition to Invitations for Bids, the Bidding Documents are those stated below, and should be read in conjunction with any Addendum issued in accordance with Clause IB.7.

1. Instructions to Bidders with Appendices to ITB
2. Form of Bid & Appendices to Bid

Appendices to Bid are the following:

- (i) Appendix A: Scope of Services
- (ii) Appendix B: Reimbursable Costs
- (iii) Appendix C: Notice and Communication Protocols
- (ii) Appendix D: Work/Services to be performed by Subcontractors
- (vi) Appendix E: Method of Performing Works/Services
- (vii) Appendix F: Proposed Organization
- (viii) Appendix G: Integrity Pact
3. Schedule of Prices
4. General Conditions of Contract, Part-I(GCC)
5. Particular Conditions of Contract, Part-II(PCC)
6. Standard Forms
 - (i) Form of Bid Security
 - (ii) Form of Contract Agreement
 - (iii) Form of Performance Security
 - (iv) Form of Bank Guarantee/Bond for Advance Payment
7. Specifications - Special Provisions
8. Specifications - Technical Provisions
9. Drawings

- 5.2 The Bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the bidders own risk. Pursuant to Clause IB.24, bids which are not substantially responsive to the requirements of the Bidding Documents will be rejected.

IB.6 Clarification of Bidding Documents

- 6.1 A prospective Bidder requiring any clarification(s) in respect of the Bidding Documents may notify the Owner in writing or by telex or fax at the address:

OFFICE OF THE EXECUTIVE ENGINEER, PUBLIC HEALTH ENGG. DIVISION
JAMSHORO NEAR RAILWAY CROSSING KOTRI @ DEPUTY COMMISSIONER
OFFICE KOTRI

Owner will examine the request for clarification of the Bidding Documents which it receives not later than ten days (10) prior to the deadline for the submission of bids and if needed will issue the clarification/amendment of the Bidding Documents at least five (05) days before the date of submission of Bids (without identifying the source of enquiry but including its description) to all prospective Bidders who have purchased the Bidding Documents.

IB.7 Amendment of Bidding Documents

- 7.1 At any time prior to the deadline for submission of bids, the Owner may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by issuing addendum.
- 7.2 Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-Clause 5.1 hereof, and shall be communicated in writing to all purchasers of the Bidding Documents. Prospective Bidders shall acknowledge receipt of each addendum in writing to the Owner. The Bidder shall also confirm in the Form of Bid that the information contained in such addenda have been considered in preparing his bid.
- 7.3 To afford prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Owner may at its discretion extend the deadline for submission of bids in accordance with Clause IB.19.

C. PREPARATION OF BIDS

IB.8 Language of Bid

- 8.1 The Bid prepared by the Bidder and all correspondence and documents related to the Bid, exchanged by the Bidder and the Owner shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in any other language so long as accompanied by an English translation of its pertinent passages in which case, for purposes of interpretation of the Bid, the English translation shall govern.

IB.9 Documents Comprising the Bid

- 9.1 The bid prepared by the Bidder shall comprise the following components:
- (a) Covering Letter
 - (b) Form of Bid duly filled, signed and sealed, in accordance with Clause IB.17.
 - (c) Appendices (A to G) to Bid duly filled and signed, in accordance with the instructions contained therein.
 - (d) Schedule of Prices completed in accordance with Clauses IB.11 and 12.
 - (e) Bid Security furnished in accordance with Clause IB.15.
 - (f) Power of Attorney in accordance with Clause IB 17.5.
 - (g) Joint Venture Agreement (if applicable). A foreign Bidder is entitled to bid only in a joint venture with a Pakistani constructor/operator in accordance with the provisions of relevant PEC bye-laws.
 - (h) Documentary evidence established in accordance with Clause IB.13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
 - (i) Documentary evidence established in accordance with Clause IB.14 that the Goods and Services to be supplied by the Bidder are eligible Goods and Services and conform to the Bidding Documents.
 - (j) Bidders applying for eligibility for domestic preference in bid evaluation shall supply all information & evidence to establish the claim for domestic preference required to satisfy the criteria for eligibility as described in Clause IB.27. The particulars for domestic Goods prescribed in Appendix C to these Instructions shall also be filled in to substantiate claim for domestic preference.
 - (k) Any other documents prescribed in Particular Conditions of Contract or Technical Provisions to be submitted with the bid.

IB.10 Form of Bid and Schedules

- 10.1 The Bidder shall complete, sign and seal the Form of Bid, Appendices (A to G, or as modified) to Bid and Schedule of Prices furnished in the Bidding Documents and shall also enclose other information as detailed in Clause IB.9.
- 10.2 For the purpose of granting a margin of domestic preference; applicable only in case of supply of Goods/Equipments, if any; pursuant to Clause IB.27, the Owner will classify the bids, when submitted in one of three groups as follows subject to change if any, as per policy of the Federal Government as applicable at the date of bid opening;
- (a) **Group ‘A’ Bid.** (i) For Goods for which labour, raw materials and components from within Pakistan account for at least 20% of the ex-factory bid price of the products offered (ii) For Goods for which labour, raw materials and components from within Pakistan account for over 20% and up to 30% of the ex-factory bid price of the products offered (iii) For Goods for which labour, raw materials and components from within Pakistan account for over 30% of the ex-factory bid price of the products offered.
 - (b) **Group ‘B’ Bid.** For Goods manufactured in Pakistan for which the domestic value added in the manufacturing cost is less than 20% of the ex-factory bid price; and
 - (c) **Group ‘C’ Bid.** For Goods of foreign origin.

In preparing their bids, the Bidders, whether local or foreign, shall enter in the Schedule of Prices ex-factory price for indigenously manufactured products and CIF price as well as customs duty and sales tax and other import charges for products to be imported from outside Pakistan.

IB.11 Bid Prices

- 11.1 The Bidder shall fill up the Schedule of Prices attached to these documents indicating the unit rates and prices of the Works/Services to be performed under the Contract. Prices on the Schedule of Prices shall be entered keeping in view the instructions contained in the Preamble to the Schedule of Prices.
- 11.2 The Bidder shall fill in rates and prices for all items of the Works/Services described in the Schedule of Prices. Items against which no rate or price is entered by a Bidder will not be paid for by the Owner when executed and shall be deemed covered by rates and prices for other items in the Schedule of Prices.
- 11.3 The Bidder’s separation of price components in accordance with Sub-Clause 11.1 above, will be solely for the purpose of facilitating the comparison of bids by the Owner and will not in any way limit its right to contract on any of the terms offered.
- 11.4 Unless otherwise stipulated in the Conditions of Contract, prices quoted by the Bidder shall remain fixed during the Bidder’s performance of the Contract and not subject to variation on any account. When the Bidders are required to quote only fixed price(s) a

bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to Clause IB.24.

- 11.5 Any discount offered shall be valid for at least the period of validity of the bid. A discount valid for lesser period shall be considered null and void.

IB.12 Currencies of Bid and Payment

- 12.1 Prices shall be quoted in Pak Rupees:

IB.13 Documents Establishing Bidder's Eligibility and Qualifications

- 13.1 Pursuant to Clause IB.9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the Contract if its bid is accepted.
- 13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Owner's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible source country as defined under Clause IB.2.
- 13.3 The documentary evidence of the Bidder's qualification to perform the Contract if its bid is accepted, shall establish to the Owner's satisfaction:
- (a) that, in the case of a Bidder offering to supply Goods under the Contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the Goods manufacturer or producer to supply the Goods to Pakistan;
 - (b) that the Bidder/Manufacturer has the financial, technical and production capability necessary to perform the Contract; and
 - (c) that, in the case of a Bidder not doing business within Pakistan the Bidder is or will be (if successful) represented by an agent in Pakistan equipped and able to carry out the Supplier's maintenance, repair and spare parts stocking obligations prescribed by the Conditions of Contract and/or Technical Provisions.
- 13.4 Bidder/Manufacturer must possess and provide evidence of the following experience:-

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- c)** Bio data of Engineering and Technical staff (Civil) working with the firm along with Attested CVs, which showing employment with firm.
- d)** Average annual financial turnover not less than equivalent cost of the Scheme / Project last five (05) years.
- e)** Registration with Income Tax Department (NTN Certificate should be attached) and Sindh Revenue Board (SRB Certificate should be attached) supported by copies of Income Tax return receipts of the last three (3) years. Must be active Tax Payer Status.
- f)** Litigation history in which the decision has been given against or in favor of the firm (s). List and give brief details of arbitration / litigation / court cases if any in case of no such cases enclose an affidavit duly attested that the firm has not been involved in any litigation arbitration with any Government Departments.
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- i)** Affidavit duly attested to the effect that the all documents/particulars/information furnished are true and correct, if any information found incorrect/misleading the Procuring Agency reserves the right to reject the bid.
- j)** An original and latest undertaking/Affidavit on **E-Stamp Paper duly attested Rs.500/-** that the Bidder and its firm have never been blacklisted by any Government, Semi Government, Autonomous or State-Owned Organization & their cases regarding blacklisting are not under trial by any Court of Law. De-listed firm will be allowed.

Evaluation Criteria, sub-criteria, for the evaluation of Full Technical Proposals is based on **Yes / No OR Pass / Fail**; if a bidder fails to obtain yes or pass in any criteria or sub- criteria then he/ she / it shall not be qualified.

The Competent Authority reserves the right to reject any or all application as per SPPRA Rules 2010 (Amended-up-to-date).

In case, Government announces any public Holiday on Scheduled dates, the tender will be opened on the next working day, as per usual schedule in accordance with R u l e -41 (B) of SPPRA 2010 (Amended upto-date).

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The Bidder shall certify the capacity and capability for performing the Water Supply & Sewerage Works/Services, qualified man-power and production/delivery of quality materials according to bid specifications and delivery requirements. Besides, such plant should have produced same quality and quantity of water for which it was designed and the Bidder shall submit with the bid all necessary documentation in this regard. The Owner will have the right to verify the particulars regarding the plant and other related information furnished with the bid and the joint venture as well as the partners thereof shall be liable for disqualification in the event of any mis-statement/mis-representation on their part.

The Bidder shall furnish documentary evidence of qualification on the Form "Evidence of Bidder's Capability" (Appendix B to these Instructions)

- (b) The Bidder should have an average annual turnover in the last five years equal to or more than the Total Bid Price. Alternately, the Bidder should have successfully completed in the last five years any specific project having value equal to or higher than the total Bid Price.

13.5 Joint Venture

In order for a Joint Venture to qualify:

- (a) At least one of the partners of joint venture shall satisfy the relevant experience criteria specified in Sub-Clause 13.4(a) hereinabove.
- (b) All firms comprising the joint venture shall be legally constituted and shall meet the eligibility requirement of Sub-Clause 2.1 hereof.
- (c) All partners of the joint venture shall at all times and under all circumstances be liable jointly and severally to Owner for the execution of the entire Contract in accordance with the Contract terms and conditions and a statement to this effect shall be included in the authorization mentioned under para (f) below as well as in the Form of Bid and Form of Contract Agreement (in case of a successful bidder).
- (d) The Form of Bid, and in the case of successful bidder, the Form of Contract Agreement, shall be signed so as to be legally binding on all partners.
- (e) One of the joint venture partners shall be nominated as being in-charge and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners.
- (f) The partner-in-charge shall be authorized to incur liabilities, receive payments and receive instructions for and on behalf of any or all partners of the joint venture.
- (g) A copy of the agreement entered into by the joint venture partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which

persons will be directly responsible for due performance of the Contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partner without prior written consent of the Owner.

- 13.6 The Bidder shall propose, in order of his priority; plant, equipment or goods of not more than three Manufacturers. Owner at his own jurisdiction will evaluate the plant, equipment or goods of only one of such Manufacturers.

IB.14 Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

- 14.1 Pursuant to Clause IB.9, the Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the Bidding Documents of all Goods and Services which the Bidder proposes to perform under the Contract.
- 14.2 The documentary evidence of the Goods and Services eligibility shall establish to the Owner's satisfaction that they will have their origin in an eligible source country as defined under Clause IB.3. A certificate of origin issued at the time of shipment will satisfy the requirements of the said Clause.
- 14.3 The documentary evidence of the Goods and Services' conformity to the Bidding Documents may be in the form of literature, drawings and data and shall furnish:
- (a) A detailed description of the Goods, essential technical and performance characteristics.
 - (b) Complete set of technical information, description data, literature and drawings as required in accordance with Appendix A to Bid, Scope of Services. This will include but not to be limited to the following:
 - (i) A sufficient number of drawings, photographs, catalogues, illustrations and such other information as is necessary to illustrate clearly the significant characteristics such as general construction dimensions and other relevant information about the Goods to be furnished.
 - (ii) Details of equipment and machinery with capacity.
 - (iii) Any other information which is required for evaluation purposes.
 - (c) A clause-by-clause commentary on Technical Provisions, provided with the Bidding Documents, demonstrating the Goods' and Services' substantial responsiveness to those Specifications or a statement of deviations and exceptions to the provisions of the Technical Provisions.
- 14.4 For purpose of the commentary to be furnished pursuant to Sub-Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers, designated by the Owner in the Technical Provisions are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid,

provided that it demonstrates to the Owner's satisfaction that the substitutions are substantially equivalent or superior to those designated in the Technical Provisions. Copies of the standards proposed by the Bidder other than those specified in the Bidding Documents shall be furnished.

IB.15 Bid Security

- 15.1 Each Bidder shall furnish, as part of his Bid, a Bid Security in an amount equal to **5%** of the total project cost in Pak Rupees or an equivalent amount in any freely convertible currency.
- 15.2 The Bid Security shall be, at the option of the Bidder, in the form of Deposit at Call / Pay Order issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan in favour of the Employer valid for a period twenty eight (28) days beyond the bid validity date.
- 15.3 The Bid Security is required to protect the Employer against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to Sub-Clause 15.7 hereof.
- 15.4 Any Bid not accompanied by an acceptable Bid Security shall be considered by the Employer as non-responsive, pursuant to Clause IB.24.
- 15.5 The Bid securities of unsuccessful Bidders will be returned upon award of contract to the successful Bidder or on the expiry of validity of Bid Security whichever is earlier.
- 15.6 The Bid Security of the successful Bidder will be returned when the bidder has furnished the required Performance Security pursuant to Clause IB.34 and signed the Contract Agreement, pursuant to Clause IB.35.
- 15.7 The Bid Security may be forfeited:
 - (a) if a Bidder withdraws his Bid during the period of Bid validity;
 - (b) If a Bidder does not accept the correction of his Lump-Sum Fixed Price Bid, pursuant to Sub-Clause 24.2 hereof; or
 - (c) In the case of a successful Bidder, if he fails to:
 - (i) Furnish the required Performance Security in accordance with Clause IB.34, or
 - (ii) Sign the Contract Agreement, in accordance with Clause IB.35.

IB.16 Validity of Bids

- 16.1 Bids shall remain valid for 90 days after the date of bid opening as prescribed in Clause IB.19.
- 16.2 In exceptional circumstances prior to expiry of original bid validity period, the Owner may request the Bidders to extend the period of validity for a specified additional period which shall in no case be more than the original bid validity period. The request and the responses thereto shall be made in writing. A Bidder may refuse the request without forfeiture of his Bid Security. A Bidder agreeing to the request will be required to extend the validity of his Bid Security for the period of the extension, and in compliance with Clause IB.15 in all respects in which case, the Owner will be obligated to compensate the Bidders, upon substantiation for their increase in costs (if it is a fixed price bid).

IB.17 Format and Signing of Bid

- 17.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the Contract strictly in accordance with the Bidding Documents.
- 17.2 All Appendices to Bid are to be properly completed and signed.
- 17.3 No alteration is to be not made in the Form of Bid nor in the Appendices thereto except in filling up the blanks as directed. If any alteration be made or if these instructions be not fully complied with, the bid may be rejected.
- 17.4 Each Bidder shall prepare one (1) Original, of the documents comprising the bid as described in Clause IB.9 and clearly mark them "ORIGINAL" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 17.5 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign (in the case of copies, Photostats are also acceptable). This shall be indicated by submitting a written Power of Attorney authorizing the signatory of the Bidder to act for and on behalf of the Bidder. All pages of the bid shall be initialed and stamped by the person or persons signing the bid.
- 17.6 The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the Owner, or as are necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 17.7 Bidders shall indicate in the space provided in the Form of Bid their full and proper addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the Contract is to be sent.
- 17.8 Bidders should retain a copy of the Bidding Documents as their file copy.

D. SUBMISSION OF BIDS

IB.18 Sealing and Marking of Bids

18.1 Each bidder shall submit his bid as under:

- (a) ORIGINAL of the Bid shall be separately sealed and put in separate envelopes and marked as such.
- (b) The envelopes containing the ORIGINAL will be put in one sealed envelope and addressed / identified as given in Sub- Clause 18.2 hereof.

18.2 The inner and outer envelopes shall;

- (a) Be addressed to the Owner at the address given in Sub-Clause 6.1 heretofore.
- (b) Bear the Project name, Bid No. and Date of opening of Bid.
- (c) Provide a warning not to open before the time and date for bid opening.

18.3 The Bid shall be delivered in person or sent by registered mail at the address to Owner as given in Sub-Clause 6.1 heretofore.

18.4 In addition to the identification required in Sub-Clause 18.2 hereof, the inner envelope shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause IB.20.

18.5 If the outer envelope is not sealed and marked as above, the Owner will assume no responsibility for the misplacement or premature opening of the bid.

IB.19 Deadline for Submission of Bids

19.1 (a) Bids must be received by the Owner at the address specified in Sub-Clause 6.1 hereof not later than the time and date stipulated in the Invitation for Bids.

- (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of bids. No claims for refund of each expenses will be entertained.

- (c) Where delivery of a bid is by mail and the Bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed bid package.

- (d) Upon request, acknowledgment of receipt of bids will be provided to those making delivery in person or by messenger.

19.2 Bids submitted through telegraph, telex, fax or e-mail shall not be considered.

- 19.3 The Owner may, at his discretion, extend the deadline for submission of bids by issuing an addendum in accordance with Clause IB.7, in which case all rights and obligations of the Owner and the Bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

IB.20 Late Bids

- 20.1 (a) Any bid received by the Owner after the deadline for submission of bids prescribed in Clause IB.19 will be returned unopened to such Bidder.
- (b) Delays in the mail, delays of person in transit, or delivery of a bid to the wrong office shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the Bidder's responsibility to determine the manner in which timely delivery of his bid will be accomplished either in person, by messenger or by mail.

IB.21 Modification, Substitution and Withdrawal of Bids

- 21.1 Any Bidder may modify, substitute or withdraw his bid after bid submission provided that modification, substitution or written notice of the withdrawal is received by the Owner prior to the deadline for submission of bids.
- 21.2 The modification, substitution or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.18 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL", as appropriate.
- 21.3 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in forfeiture of the Bid Security pursuant to Clause IB.15.

E. BID OPENING AND EVALUATION

IB.22 Bid Opening

- 22.1 A committee consisting of nominated members by the Owner will open the bids, including withdrawals, substitution and modifications made pursuant to Clause IB.21, in the presence of Bidders' representatives who choose to attend, at the time, date and location stipulated in the Invitation for Bids.

The Bidders' representatives who are present shall sign in a register evidencing their attendance.

- 22.2 Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first and the name of the Bidder shall be read out. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause IB.21 shall not be opened.

- 22.3 The Bidder's name, Bid Prices, unit rates, any discount and price of any Alternate Proposal(s), bid modifications, substitutions and withdrawals, the presence or absence of Bid Security, and such other details as the Owner at its discretion may consider appropriate, will be announced by the Owner at the bid opening. The Owner will record minutes of bid opening.

Any Bid Price or discount which is not read out and recorded at bid opening will not be taken into account in the evaluation of bid.

- 22.4 Discounts offered for lesser period than the bid validity shall not be considered in evaluation.

IB.23 Clarification of Bids

- 23.1 To assist in the examination, evaluation and comparison of Bids the Owner may, at his discretion, ask the Bidder for a clarification of his Bid. The request for clarification and the response shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

IB.24 Preliminary Examination & Determination of Responsiveness of Bids

- 24.1 Prior to the detailed evaluation of bids, pursuant to Clause IB.26:

(a) the Owner will examine the Bids to determine whether;

- (i) The Bid is complete and does not deviate from the scope,
- (ii) Any computational errors have been made,
- (iii) Required sureties have been furnished,
- (iv) The documents have been properly signed,
- (v) The Bid is valid till required period,
- (vi) The Bid prices are firm during currency of contract if it is a fixed price bid,

- (vii) Completion period offered is within specified limits,
- (viii) The Bidder/Manufacturer is eligible to Bid and possesses the requisite experience,
- (ix) The Bid does not deviate from basic technical requirements, and
- (x) The Bids are generally in order.

(b) A bid is likely not to be considered, if;

- (i) it is unsigned,
- (ii) its validity is less than specified,
- (iii) it is submitted for incomplete scope of work,
- (iv) it indicates completion period later than specified,
- (v) it indicates that Works/Services and materials to be supplied do not meet eligibility requirements,
- (vi) It indicates that Bid prices do not include the amount of income tax.

(c) A bid will not be considered, if;

- (i) It is not accompanied with bid security,
- (ii) It is submitted by a Bidder who has participated in more than one bid,
- (iii) It is received after the deadline for submission of bids,
- (iv) It is submitted through fax, telex, telegram or email,
- (v) It indicates that prices quoted are not firm during currency of the contract whereas the Bidders are required to quote fixed price(s),
- (vi) The Bidder refuses to accept arithmetic correction,
- (vii) It is materially and substantially different from the Conditions/ Specifications of the Bidding Documents.

24.2 Arithmetical errors will be rectified on the following basis:

If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between the words and figures the amount in words shall prevail. If there is a discrepancy between the total Bid price entered in Form of Bid and the total shown in Schedule of Prices Summary, the amount stated in the Form of Bid will be corrected by the Owner in accordance with the Corrected Schedule of Prices.

If the Bidder does not accept the corrected amount of Bid, his Bid will be rejected and his Bid Security forfeited.

24.3 Prior to the detailed evaluation pursuant to Clause IB.26, the Owner will determine the substantial responsiveness of each Bid to the Bidding Documents. For purpose of these Clauses, a substantially responsive Bid is one which conforms to all the terms and conditions of the Bidding Documents without material deviations.

A material deviation or reservation is one

- (i) which affects in any substantial way the scope, quality or performance of the Works/Services.
- (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Owner's rights or the Bidder's obligations under the Contract; or
- (iii) whose rectification/adoption would affect unfairly the competitive position of other Bidders presenting substantially responsive bids.

The Owner's determination of a Bid's responsiveness will be based on the contents of the Bid itself without recourse to extrinsic evidence.

- 24.4 A Bid determined as substantially non-responsive will be rejected and will not subsequently be made responsive by the Bidder by correction of the non-conformity.
- 24.5 Any minor informality or non-conformity or irregularity in a Bid which does not constitute a material deviation may be waived by Owner, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

IB.25 Conversion to Single Currency

- 25.1 To facilitate evaluation and comparison, the Owner will convert, all Bid Prices expressed in the amount in various currencies in which Bid Price is payable, to Pak. Rupees at the Telegraphic Transfer and Over Draft (TT&OD) composite (selling) exchange rates published/authorized by State Bank of Pakistan and applicable to similar transactions, on the date of the opening of Bids.

IB.26 Detailed Evaluation of Bids

- 26.1 The Owner will evaluate and compare only the bids previously determined to be substantially responsive pursuant to Clause IB.24 as per requirements given hereunder.
- 26.2 Evaluation and Comparison of Bids
 - (a) Bids will be evaluated for each item and/or complete scope of work/Services.
 - (b) Basis of Price Comparison
The prices will be compared on the basis of the Evaluated Bid Price pursuant to Para (e) herein below.
 - (c) Technical Evaluation
It will be examined in detail whether the Goods offered by the Bidder comply with the Technical Provisions of the Bidding Documents. For this purpose, the Bidder's data submitted with the bid will be compared with the specific scope of Services prescribed by the Owner and technical features/criteria of the Goods detailed in the Technical Provisions. Other technical information submitted with the bid regarding the Scope of Work/Services will also be reviewed.
 - (d) Commercial Evaluation
It will be examined in detail whether the bids comply with the commercial/contractual conditions of the Bidding Documents. It is expected that

no major deviation/stipulation shall be taken by the Bidders.

(e) Evaluated Bid Price

In evaluating the bids, the Owner will determine for each bid in addition to the Bid Price, the following factors (adjustments) in the manner and to the extent indicated below to determine the Evaluated Bid Price:

- (i) making any correction for errors pursuant to Sub-Clause 24.2 hereof.
- (ii) excluding Provisional Sums, if any, but including priced Day work.
- (iii) making an appropriate adjustment for any other acceptable variation or deviation.

26.3 Evaluation Methods

Pursuant to Sub-Clause 26.2, Para (e)(iii), following evaluation methods for price adjustments will be followed:

- (a) Price Adjustment for Completeness in Scope of Works/Services
- (b) Price Adjustment for Technical Compliance
- (c) Price Adjustment for Commercial Compliance
- (d) Price Adjustment for Deviations in Terms of Payment
- (e) Price Adjustment for Completion Schedule

(i) Price Adjustment for Completion in Scope of Works/Services

In case of omission in the scope of work/Services of a quoted item no price adjustment for the omitted item(s) shall be applied provided that the Bidder has mentioned in his bid that the same is covered in any other item.

The price adjustment shall not justify any additional payment by the Owner. The price(s) of omitted item(s) shall be deemed covered by other prices of the Schedule of Prices.

(ii) Price Adjustment for Technical Compliance

The cost of making good any deficiency resulting from technical non compliance will be added to the Corrected Total Bid Price for comparison purposes only. The adjustments will be applied taking the highest price quoted by other Bidders being evaluated in detail in their original Bids for corresponding item. In case of non availability of price from other Bidders, the price will be estimated by the Owner.

(iii) Price Adjustment for Commercial Compliance

The cost of making good any deficiency resulting from any quantifiable variations and deviations from the Bid Schedules and Conditions of Contract, as determined by the Owner will be added to the Corrected Total Bid Price for comparison purpose only. Adjustment for commercial compliance will be based on Corrected Total Bid Prices.

(iv) Price Adjustment for Deviation in Terms of Payment

If a bid deviates from the terms of payment/payment conditions as specified in the Conditions of Contract and if such deviation is considered acceptable to the Owner, mark-up earned for any earlier payments involved in the terms outlined in the Bid as compared to those stipulated in the Conditions of Contract shall be calculated at the following mark-up rates:

and shall be added to the Corrected Total Bid Price for comparison purposes only.

- 26.4 If the bid of the successful Bidder is seriously unbalanced in relation to the Owner's estimate of the cost of work to be performed under the Contract, the Owner may require the Bidder to produce detailed price analyses for any or all items of the Schedule of Prices to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Owner may require that the amount of the Performance Security set forth in Clause IB.34 be increased at the expense of the successful Bidder to a level sufficient to protect the Owner against financial loss in the event of default of the successful Bidder under the Contract.

IB.27. Domestic Preference

- 27.1 In the comparison of evaluated Bids, the Goods manufactured in Pakistan, will be granted a margin of preference in accordance with the following procedures, provided the Bidder shall have established to the satisfaction of Owner that the manufacturing cost of such Goods includes a domestic value addition equal to at least 20% of the ex-factory Bid price of such Goods. Bidders applying for domestic preference shall fill in Appendix C to these Instructions to substantiate their claim.
- 27.2 The Owner will first review the Bids to determine, the Bid group classification in accordance with Sub-Clause 10.2 hereof.
- 27.3 The comparison shall be Ex-factory price of the Goods to be offered from within Pakistan (such prices to include all costs as well as custom duties and taxes paid or payable on raw materials and components incorporated or to be incorporated in the Goods) and the DDP (CIF + Customs duty, sales tax and other import charges) Pakistan seaport price of the Goods to be offered from outside Pakistan.
- 27.4 The lowest evaluated bid of each Group shall first be determined by comparing all evaluated bids in each Group among themselves taking into account:
- (a) In the case of Goods manufactured in Pakistan, sales tax, local body charges and other similar taxes which will be payable on the furnished Goods in Pakistan.

- (b) In the case of Goods of foreign origin offered from abroad, customs duties, sales tax and other import charges which will be payable on furnished Goods in Pakistan.
- (c) In the case of Goods of foreign origin already located in Pakistan, customs duty, sales tax and import charges on CIF price as applicable for Sub-Clause 27.4(b) here above.

27.5 The price preference to Group A bids will be:

- (i) 15% of the ex-factory bid price, if the value addition through indigenous manufacturing is at least 20%;
- (ii) 20% of the ex-factory bid price, if the value addition through indigenous manufacturing is over 20% and up to 30%; and
- (iii) 25% of the ex-factory bid price, if the value addition through indigenous manufacturing is over 30%.

27.6 The applicable price preference i.e., as per Sub-Clause 27.5 herein above will be applied to Group A Bid by reducing the ex-factory bid price.

27.7 The computation for the purpose of domestic preference under sub-clause 10.2 and clause 27, and award of contract shall be subject to change as per policy of the Federal Government as applicable on the date of bid opening.

IB.28 Process to be Confidential

28.1 Subject to Clause 23 heretofore, no Bidder shall contact Owner on any matter relating to his Bid from the time of the Bid opening to the time the bid evaluation result is announced by the Owner. The evaluation result shall be announced at least ten (10) days prior to award of Contract. The announcement to all Bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated.

28.2 Any effort by a Bidder to influence Owner in the Bid evaluation, Bid comparison or Contract Award decisions may result in the rejection of his Bid. Whereas any Bidder feeling aggrieved may lodge a written complaint not later than fifteen (15) days after the announcement of the bid evaluation result; however, mere fact of lodging a complaint shall not warrant suspension of the procurement process.

F. AWARD OF CONTRACT

IB.29. Post-Qualification

- 29.1 The Owner, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in supplier's or contractor's capacities, may require the suppliers or contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons therefore in writing. They shall form part of the records of that bid evaluation report.

- 29.2 The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualification submitted under Appendix B to Instructions to Bidders "Evidence of Bidder's Capability" by the Bidder pursuant to Clause IB.13, as well as such other information as required under the Bidding Documents.
- 29.3 An affirmative determination will be a pre-requisite for award of the Contract to the lowest evaluated Bidder. A negative determination will result in rejection of that Bidder's bid in which event, Owner will proceed to undertake a similar determination of the next lowest evaluated Bidder's capabilities to perform the Contract satisfactorily.

IB.30 Award Criteria

- 30.1 Subject to Clause IB.32, the Owner will award the Contract to the Bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be eligible in accordance with the provisions of clause IB.2 qualified to satisfactorily perform the Contract in accordance with the provisions of Clause IB.29.

IB.31 Owner's Right to Vary Quantities

- 31.1 Owner reserves the right at the time of award of Contract to increase or decrease by upto 15% the quantity of Goods and Services specified in the Schedule of Prices without any change in the unit price or other terms and conditions.

IB.32 Owner's Right to accept any Bid and to reject any or all Bids

- 32.1 Notwithstanding Clause IB.30, the Owner reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected Bidders or any obligation to inform the affected Bidders of the grounds for the Owner's action except that the grounds for its rejection shall upon request be communicated, to any Bidder who submitted a bid, without justification of grounds. Rejection of all bids shall be notified to all Bidders promptly.

- 32.2 No negotiations with the Bidder having been evaluated as lowest responsive or any other Bidder shall be permitted. However, the Owner may have clarification meeting(s) to get clarify any item(s) in the bid evaluation report.

IB.33 Notification of Award

- 33.1 Prior to expiration of the period of bid validity prescribed by the Owner, the Owner will notify the successful Bidder in writing ("Letter of Acceptance") that his bid has been accepted. This letter shall name the sum which the Owner will pay the Contractor in consideration of the execution and completion of the Works/Services by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called the "Contract Price").
- 33.2 The Letter of Acceptance and its acceptance by the Bidder will constitute the formation of the Contract, binding the Owner and the Bidder till signing of the formal Contract Agreement.
- 33.3 Upon furnishing by the successful Bidder of a Performance Security, the Owner will promptly notify the other Bidders that their bids have been unsuccessful and return their bid securities.

IB.34 Performance Security

- 34.1 The successful Bidder shall furnish to the owner a Performance Security in the prescribed form. The said Security shall be furnished by the Contractor within 07 days after the receipt of the Letter of Acceptance. The Performance Security shall be of an amount equal to 5% of the Contract Price stated in the Letter of Acceptance. Such Security shall, at the option of the bidder, be in the form of either (a) bank guarantee from any Scheduled Bank in Pakistan or (b) bank guarantee from a bank located outside Pakistan duly counter-guaranteed by a Scheduled Bank in Pakistan. The cost of complying with requirements of this Sub-Clause shall be borne by the operator / Contractor.
- 34.2 Failure of the successful Bidder to comply with the requirements of Sub-Clause IB.34.1 or Clause IB.35 or Clause IB.43 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

IB.35 Signing of Contract Agreement

- 35.1 Within fourteen (14) days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Owner will send to the successful Bidder the Form of Contract Agreement provided in the Bidding Documents, duly filled in and incorporating all agreements between the parties for signing and returning it to the Owner.
- 35.2 The formal Agreement between the Owner and the successful Bidder shall be executed within fourteen (14) days of the receipt of such Form of Contract Agreement by the successful Bidder from the Owner.

G. ADDITIONAL INSTRUCTIONS

IB.36 Instructions not Part of Contract

- 36.1 Bids shall be prepared and submitted in accordance with these Instructions which are provided to assist Bidders in preparing their bids, and do not constitute part of the Bid or the Contract Documents.

IB.37 Contract Documents

- 37.1 The Documents which will be included in the Contract are listed in the Form of Contract Agreement set out in these Bidding Documents.

IB.38 Sufficiency of Bid

- 38.1 Each Bidder shall satisfy himself before Bidding as to the correctness and sufficiency of his Bid and of the rates and prices entered in the Schedule of Prices. Except insofar as it is otherwise expressly provided in the Contract, the rates and prices entered in the Schedule of Prices shall cover all his obligations under the Contract and all matters and things necessary for the proper completion of the Works/Services.

IB.39 One Bid per Bidder

- 39.1 Each Bidder shall submit only one bid either by himself, or as a partner in a joint venture. A Bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.41) will be disqualified and bids submitted by him shall not be considered for evaluation and award.

IB.40 Bidder to Inform Himself

- 40.1 The Bidder is advised to obtain for himself at his own cost and responsibility all information that may be necessary for preparing the bid and entering into a Contract for execution of the Works/Services. This shall include but not to be limited to the following:
- (a) inquiries on Pakistani Income Tax/Sales Tax to the Commissioner of the Income Tax and Sales Tax, Karachi Sindh Pakistan.
 - (b) Inquiries on customs duties and other import taxes, to the concerned authorities of Customs and Excise Department.
 - (c) Information regarding port clearance facilities, loading and unloading facilities, storage facilities, transportation facilities and congestion at Pakistan seaports.
 - (d) Investigations regarding transport conditions and the probable conditions which

will exist at the time the Goods will be actually transported.

IB.41 Alternate Proposals by Bidder

- 41.1 Any Bidder should consider that he can offer any advantage to the Owner / Employer by a modification to the designs, specifications or other conditions. He may, in addition to his bid to be submitted in strict compliance with the Bidding Documents, submit any Alternate Proposal(s) containing (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details / conditions, provided that the total sum entered in the Form of Bid shall be that which represents complete compliance with the Bidding Documents.
- 41.2 Alternate Proposal(s), if any, of the lowest evaluated responsive Bidder only may be considered by the Owner as the basis for the award of Contract to such Bidder.

IB.42 Local Conditions

- 42.1 Bidder must verify and supplement by his own investigations the information about site and local conditions. However, Owner will assist the Bidder wherever practicable and possible.

IB.42 Pre-Bid Meeting

The Employer may, at his own or at the request of any prospective Bidder(s), hold a Pre-Bid meeting to clarify issues and to answer any questions on matters related to the Bidding Documents. The date, time and venue of Pre-Bid meeting, if convened, shall be intimated through letter for invitation.

All prospective Bidders or their authorized representatives shall be invited to attend such a Pre-Bid meeting.

IB.43 Integrity Pact

The Bidder shall sign and stamp the Integrity Pact provided at Appendix-G to Bid in the Bidding Document for all Federal Government procurement contracts exceeding Rupees ten (10) million. Failure to provide such Integrity Pact shall make the bid non-responsive.

NAME OF ELIGIBLE COUNTRIES

All the successful Water Supply & Sewerage shall be carried out as per International practices and the replaced parts & goods shall be from the renowned manufactures of North American and western European origin or equivalent and the contractor shall have to submit the detail of source of manufacturer location and their commitment / supply certificate in this regard to establish the same

EVIDENCE OF BIDDER'S CAPABILITY

[Note: Bidders to provide the following information with the bid separately and indicate herein its references where this information is available.]

Sr.No.	Information to be Supplied	Bid References
1.	Name of bidder, business address and country of incorporation.	
2.	Type of firm whether individually owned, partnership, corporation or joint venture and the names of its owners or partners.	
3.	The annual reports or qualification statements giving general description of the firm, sort of business carried out, balance sheets, profit and loss statements, turn over and business done by the firm, duly authenticated, for the last three (3) years. Audited Balance Sheets for the preceding 3 years and projected assets and liabilities for the next 2 years shall be provided.	

Sr.No.	Information to be Supplied	Bid References
8.	Reference lists of similar works done/services performed by the bidder in its country and abroad indicating the name of customer, description and quantity of product, year of supply and the approximate value.	
9.	Details of projects under execution and future contractual commitments (for each partner, in case of a joint venture).	
10.	Banking reference, names of banks and addresses may be given to whom reference regarding financial capability of the bidder may be made, with authority to make inquiries from the bidder's bankers and clients regarding any financial and technical aspects (for each partner, in case of a joint venture).	
11.	Information on any litigation or arbitration resulting from contracts completed or under execution by the bidder over the last ten (10) years. The information shall indicate the parties concerned, the matter of dispute, the disputed amounts and the result thereof (for each partner, in case of a joint venture).	

**Appendix C to
Instructions to Bidders**

Domestic Goods (Value added in Pakistan)

[Bidders claiming eligibility for domestic preference should fill in for supply items only, all columns hereunder and provide documentation to substantiate their claim]necessary

Sr. No.	Description of Indigenous Goods	Unit	Qty	Total Price of Goods Ex-Factory (Pak Rs.)	Domestic value added in the manufacturing cost as percentage of Ex-Factory Price	Amount of value addition (Pak Rs.)
1	2	3	4	5	6	7
	N I L					
				Total in columns 5 & 7		

Computations:

- | | |
|--|--------------|
| A. Total amount of Value Addition (from Col.7) | Rs _____ |
| B. Total Ex-Factory Price of Indigenous Goods (from Col.5) | Rs _____ |
| C. Total DDP Price of imported supply items | Eqv.Rs _____ |
| D. Total Price of supply items [B+C] | Eqv.Rs _____ |
| E. % of value addition = [(A/D)x100] | _____ % |
| F. Domestic Preference =(15,20 or 25)% of B | Rs _____ |

FORM OF BID AND APPENDICES TO BID

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FORM OF BID
(LETTER OF OFFER)

Bid Reference No. _____

Name of Work:- **Rehabilitation / Repair of Proposed Filter Plants Taluka**
Sehwan District Jamshoro

To:

The Executive Engineer
Public Health Engineering (Dev)
Division Jamshoro.

1. Having examined the Bidding Documents including Instructions to Bidders, Conditions of Contract, Specifications, Drawings, Schedule of Prices and Addenda Nos. _____ for the execution of the above-named Works/Services, we, the undersigned, being a company doing business under the name of and address _____
_____ and being duly incorporated under the laws of _____ hereby offer to execute and complete such Works/Services and remedy any defects therein in conformity with the said Documents including Addenda thereto for the Total Bid Price comprising Foreign Currency Component of _____ (_____) and Local Currency Component of Rs. _____ (Rupees _____) or such other sum as may be ascertained in accordance with the said Documents.
2. We understand that all the Schedules attached hereto form part of this Bid.
3. As security for due performance of the undertakings and obligations of this Bid, we submit herewith a Bid Security in the amount of _____ (Rs.) _____ drawn in your favour or made payable to you and valid for a period of twenty eight (28) days beyond the period of validity of Bid.
4. We undertake, if our Bid is accepted, to commence the Works/Services and to deliver and complete the whole of the Works/Services comprised in the Contract within the time stated in the Conditions of Contract (PCC 1.2).
5. We agree to abide by this Bid for the period of _____ days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
7. We undertake, if our Bid is accepted, to execute the Performance Security referred to in Sub-Clause 15.15 of Conditions of Contract for the due performance of the Contract.

8. We understand that you are not bound to accept the lowest or any Bid you may receive.
9. We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other Bidder making a Bid for the Works/Services.
10. We confirm, if our Bid is accepted, that all partners of the joint venture shall be liable jointly and severally for the execution of the Contract and the composition or the constitution of the joint venture shall not be altered without the prior consent of the Owner. (Please delete in case of Bid from a single firm).

Dated this _____ day of _____ 20_____

Signature _____ in the capacity of _____ duly

authorized to sign bids for and on behalf of _____
(Name of Bidder in Block Capitals)
(Seal)

Address

Witness:

(Signature) _____

(Name) _____

Address: _____

Occupation _____

BILL OF QUANTITY
Schedule of Price Capacity and Category Wise

Separate Sheet Attached.

Total Quoted Amount for Rs:-_____

In Words_____

Note:

Details showing locations, type, capacity and status of plants are attached with the bidding documents. Bidder has to fill schedule of price for each plant capacity wise and category wise in separate form

Contractor / Firm

Executive Engineer
Public Health Engg: Division
Jamshoro

APPENDIX–C TO BID

NOTICES AND COMMUNICATION PROTOCOLS

The contractor should adopted the standard and latest notices and communication protocols used for the successful implementation of the project.

PRIMARY CONTACT INFORMATION

Address,
Phone No.
Fax No.
email
& whatsapp etc.

SECONDARY CONTACT INFORMATION

(Alternate)

APPENDIX-D TO BID

WORKS/SERVICES TO BE PERFORMED BY SUB CONTRACTORS

The Bidder will do the work with his own forces except the work listed below which he intends to sub-contract.

<u>Items of Work</u> <u>/Services to be</u> <u>Sub-Contracted</u>	<u>Name and address of</u> <u>Sub-Contractor</u>	<u>Statement of similar</u> <u>works/services previously</u> <u>executed(attach evidence)</u>
---	---	---

Note:

1. No change of Sub-Contractor shall be made by the Bidder without prior approval of the Owner.
2. The truthfulness and accuracy of the statement as to the experience of Sub-Contractors is guaranteed by the Bidder. The Owner's judgment shall be final as to the evaluation of the experience of Sub-Contractors submitted by the bidder.
3. Statement of similar works/Services shall include description, location & value of work/services, year completed and name & address of the clients.

METHOD OF PERFORMING THE WORKS/SERVICES

The Bidder is required to submit a narrative outlining the method of performing the Works/Services. The narrative should indicate in detail and include but not be limited to:

- The sequence and methods in which he proposes to carry out the Works/Services, including the number of shifts per day and hours per shift, he expects to work.
- A list of all major items of constructional and erection plant, tools and vehicles proposed to be used in carrying out the Works/Services at Site, including number of each kind, make, type, capacity of all equipment, working condition, which shall be deployed by him for Civil Work and Erection, Testing and Commissioning of the Works, in sufficient detail to demonstrate fully that the equipment will meet all the requirements of the Technical Provisions.
- The procedure for installation of equipment and machinery and transportation of equipment and materials to the site.
- Details regarding mobilization in Pakistan, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.
- Organization chart indicating head office & field office personnel involved in management, supervision and engineering of the Works to be done and Services to be performed under the Contract.

PROPOSED ORGANISATION

The Bidder shall list in this Schedule the key personnel he will employ from Head office and for Site office to direct and execute the Works and perform the Services, together with their names, qualifications, experience, positions held and their nationalities.

Designation	Name of Person	Summary of Qualifications, Experience, Present Position and Nationality
--------------------	-----------------------	--

- Head Office:

- Site Office:
Contractor's Representative
Site Superintendent
Supervising Engineer
Plant Erectors
Construction Supervisors
Other Key Staff

(INTEGRITY PACT)

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN
CONTRACTS WORTH RS. 10.00 MILLION OR MORE**

Contract No. _____ Dated _____
 Contract Value: _____
 Contract Title: _____

..... [name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Name of Buyer:

Name of Seller/Supplier:

Signature:

Signature:

[Seal]

[Seal]

GENERAL CONDITIONS OF CONTRACT

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GENERAL CONDITIONS OF CONTRACT

1 AGREEMENT

1.1 AGREEMENT

This Agreement consists of the terms and conditions set forth in the sections captioned by numbered clause designations ("Clauses") and the following appendices, which are incorporated and made part of this Agreement by this reference and are included in any reference to this Agreement:

Appendix A - Scope of Services

Appendix B – Reimbursable Costs

Appendix C – Notices and Communication Protocols

Appendix D – Works to be Performed by Subcontractors/Operator

Appendix E_ Method of Performing The Works

Appendix F_ Proposed Organization

Appendix G_ Integrity Pact

If the terms and conditions of the Clauses of this Agreement vary or are inconsistent with any portion of the Appendices, the terms of the Clauses this Agreement shall control and be given priority, and the provisions of the Appendices shall be subject to the terms of the Clauses. This Agreement contains the entire agreement between the parties and supersedes all prior agreements, whether oral or written, between the parties with respect to the subject matter of this Agreement. Neither party will be bound by or be deemed to have made any representations, warranties, commitments or other undertakings with respect to the subject matter of this Agreement that are not contained in this Agreement.

1.2 EFFECTIVE DATE AND TERM

This Agreement shall be effective and shall govern the rights and obligations of the parties from and after the date of this Agreement for a period *as mentioned in PCC* .

1.3 RELATIONSHIP OF THE PARTIES

Operator has been retained by Owner as an independent contractor to operate, maintain and manage the Project on behalf of Owner, in accordance with Prudent Utility Practice and the requirements of the Project Agreements. Owner has delegated to Operator overall responsibility for operating, maintaining and managing the Project to ensure that the Project is available for its function namely *as provided in PCC* for Owner and meets all requirements under the Project Agreements. Neither Operator nor any of its employees, subcontractors or agents shall be deemed to have any other status, except that Operator is the agent of Owner to the limited extent that this Agreement expressly grants Operator the authority to act on behalf of Owner.

1.4 REPRESENTATIVES

Owner and Operator shall each designate a representative ("Designated Representative") to act on its behalf in overseeing the performance of this Agreement. Owner and Operator may change their respective Designated Representatives upon written notice to the other party given as provided in this Agreement. Designated Representatives shall be the primary means for communication and all other interactions between Owner and Operator that are required under this Agreement. Designated Representatives shall have the power and authority to bind their respective principals under the terms of this Agreement, with any required internal corporate approvals with respect to such authority being the responsibility of each representative to obtain from his or her principal.

1.5 INTEGRITY PACT.

For Contracts of worth Rupee ten million or more, which relate to federal finance, the Integrity Pact duly signed between the Operator(Contractor/supplier) shall be binding till completion of the contract. In other cases, this Sub-Clause 1.5 of the Agreement is not applicable.

2 DEFINITIONS

Unless otherwise required by the context in which a defined term appears, the following terms shall have the meanings specified in this Clause 2. Terms that are defined in other Clauses shall have the meanings given to them in those Clauses.

"Annual Project Operating Plan" has the meaning set forth in Sub-Clause 6.2.

"Annual Operating Fee" means an annual operating fee paid to Operator during each Contract Year as set forth in Sub-Clause 5.2.

"Annual Budget" has the meaning set forth in Sub-Clause 6.2

"Bankruptcy" means a situation in which (i) a party's actions under applicable debtor relief laws demonstrate an inability to pay its debts as they mature or a need for protection from its creditors; (ii) a court of competent jurisdiction approves a petition filed against a party, which petition sought relief for the party's creditors, and the action of the court remains in effect for an aggregated period of 60 days (whether or not consecutive); (iii) a party admits in writing its inability to pay its debts as they mature; (iv) a party gives notice to any person or entity of its current (or pending) insolvency or suspension of operations; or (v) a party makes an assignment for the benefit of creditors or takes other similar action for the protection or benefit of its creditors.

"Business Day" means any day other than a Sunday or any other day on which commercial banks are authorized or required to close the business *as mentioned in PCC*.

"Contract Year" means: (i) for the first Contract Year, that period from the date of this Agreement to and including June 30 of such year; and (ii) for each Contract Year thereafter, the fiscal year.

"Five-Year Budget" has the meaning set forth in Sub-Clause 6.2(e).

"Force Majeure Event" means an event, condition or circumstance beyond the reasonable control of, and not due to the fault or negligence of, the party affected, and which could not have been avoided by due diligence and use of reasonable efforts, which prevents the performance by such affected party of its obligations hereunder; provided, that a "Force Majeure Event" shall not be deemed to have occurred or to be continuing unless the party claiming Force Majeure complies with the requirements of Sub-Clause 15.3 (*Force Majeure*). Subject to the foregoing, "Force Majeure Event" shall include, as to either party, explosion and fire (in either case to the extent not attributable to the negligence of the affected party), flood, earthquake, storm or other natural calamity or act of God, strike or other labor dispute, war, insurrection or riot, actions or failures to act by governmental entities or officials, failure to obtain governmental permits or approvals (despite timely application thereof and due diligence) and changes in laws, rules, regulations, orders or ordinances affecting of the Project, which events were not pending on the date of this Agreement.

"Operating Manuals" means the operating data, design as-built drawings, specifications, vendors' manuals, warranty requirements, procedures (including those for maintenance of the Project and environmental and safety compliance), and similar materials with respect to the Project.

"Procedures Manual" has the meaning set forth in Clause 6.1.

"Project" means the project *as mentioned in PCC* and related assets, together with other facilities and related assets, to be constructed on certain real property, *as mentioned in PCC*.

"Project Agreements" means the agreements relating to the Project, *as mentioned in PCC*, Interconnection Agreement, this Agreement and all other agreements applicable to the Project, permits, and licenses required for the Water Supply & Sewerage and management of the Project, as identified in writing by Owner.

"Prudent Utility Practice" means (i) any of the practices, methods, and acts engaged in or approved by a significant portion of the project related industry in the country and geographic region where the Project is located during the relevant time period, or (ii) practices, methods and acts that, in the exercise of reasonable judgment on the facts known (or that reasonably should have been known) at the time a decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition.

"Reference Rate" means the discount rate published by the State Bank of Pakistan from time to time.

"Reimbursable Costs" has the meaning set forth in Sub-Clause 5.3.

"Services" has the meaning set forth in Sub-Clause 3.1.

3 SERVICES

3.1 SCOPE OF SERVICES

Operator shall (i) operate, maintain and manage the Project on behalf of Owner ("Services") and (ii) also perform the specific duties set forth in this Agreement if they are not otherwise required by the standards defined in Sub-Clause 3.2.

3.2 STANDARDS FOR PERFORMANCE OF THE SERVICES.

Operator shall perform the Services required under this Agreement, including those set forth in Appendix A, in a prudent, reasonable, and efficient manner and in accordance with (i) Operating Manuals, the Administrative Procedures Manual and applicable vendor warranties, (ii) the applicable Annual Project Operating Plan and Annual Budget, (iii) all applicable Laws, (iv) Prudent Utility Practices, (v) the Project Agreements, (vi) the requirements of any System Operator. Operator shall use all reasonable efforts to optimize the useful life of the Project and to minimize Reimbursable Costs and Project outages or other unavailability.

3.3 OPERATOR'S PERSONNEL STANDARDS

Operator shall provide as reasonably necessary all labor and professional, supervisory and managerial personnel as are required to perform the Services. Such personnel shall be qualified to perform the duties to which they are assigned and shall meet any requirements for Project personnel under the Project Agreements. All individuals employed by Operator to perform the Services shall be employees of Operator, and their working hours, rates of compensation and all other matters relating to their employment shall be determined solely by Operator (subject to Owner's approval rights with respect to the Annual Budget). With respect to labor matters, hiring personnel, and employment policies, Operator shall comply with all applicable Laws. Operator also shall act in a reasonable manner that is consistent with the intent and purpose of this Agreement and with Operator's acknowledgment (hereby given) that Operator has no authority to enter into any contracts with respect to labor matters that purport to bind or otherwise obligate Owner.

3.4 COMPLIANCE

Operator shall comply with all Laws applicable to the Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro of the Project and the performance of the Services. Operator shall apply for and obtain, and Owner shall assist Operator in applying for and obtaining, all necessary permits, licenses and approvals (and renewals of the same) required to allow Operator to do business or perform the Services in the jurisdictions where the Services are to be performed. Operator shall provide reasonably necessary assistance to Owner, to secure permits, licenses, and

approvals (and renewals of the same) that Owner is required to obtain from or file with any governmental agency regarding the Project. Operator also shall file such reports, notices, and other communications as may be required by any governmental agency regarding the Project.

3.5 OPERATING RECORDS AND REPORTS

Operator shall maintain, at a location acceptable to Owner, the Project operating logs, records, and reports that document the Water Supply and Sanitation of the Project, all in form and substance sufficient to meet Owner's reporting requirements under the Project Agreements. Operator shall maintain current revisions of drawings, specifications, lists, clarifications and other materials related to Water Supply & Sanitation of the Project provided to Operator by Owner and vendors. Operator shall provide Owner reasonably necessary assistance in connection with Owner's compliance with reporting requirements under the Project Agreements, applicable Laws or any other agreement to which Owner is a party relating to the Project. Such assistance shall include providing reports, records, logs and other information that Owner may reasonably request as to the Project or its operation.

3.6 NO LIENS OR ENCUMBRANCES

Operator shall maintain the Project free and clear of all liens and encumbrances resulting from any action of Operator or work done at the request of Operator, except for such liens or encumbrances that result directly from nonpayment by Owner of amounts due and owing to Operator under this Agreement.

3.7 NO ACTION

Except where such action is expressly permitted by this Agreement, Operator shall not take any action that would cause a default under any Project Agreement.

3.8 EMERGENCY ACTION

If an emergency endangering the safety or protection of persons, the Project, or property located near the Project occurs, Operator shall promptly notify Owner and take all necessary action to attempt to prevent or mitigate any such threatened damage, injury or loss. Operator shall make reasonable efforts to minimize any cost associated with remedial action in case of such an emergency.

3.9 ACTION IN EXTRAORDINARY CIRCUMSTANCES

In the event that:

- (A) The Project or major Project equipment suffers an unplanned outage (or Operator reasonably believes that such an occurrence is imminent), and

- (B) Operator has made reasonable, but unsuccessful, efforts to notify and communicate with Owner regarding such occurrence or imminent occurrence in accordance with the terms of this Agreement, then Operator shall:
 - (i) take all necessary action to prevent or to mitigate such unplanned outage,
 - (ii) make reasonable efforts to minimize any cost associated with such remedial action,
 - (iii) continue to attempt to notify and communicate with Owner regarding the occurrence and the remedial action, and

4 OWNER RESPONSIBILITIES

4.1 INFORMATION

Owner shall provide Operator with all vendor manuals, spare parts lists, Project data books and drawings which are provided to Owner pursuant to any Project Agreement or by any contractor responsible for construction, installation, repair or maintenance of the Project or a part thereof. Subject to the standards of performance set forth in Sub-Clause 3.2, Operator shall be entitled to rely upon such information in performance of the Services. Owner shall also provide Operator with copies of all Project Agreements and any amendments thereto and any other documents that define the Project's operating requirements.

4.2 OVERHAUL OF MAJOR EQUIPMENT AND CAPITAL *IMPROVEMENT*

The cost of all major equipment teardowns and overhauls and all capital improvements shall be the responsibility of Owner. Operator shall promptly notify Owner in writing of any such teardowns and overhauls of major equipment or capital improvements that Operator believes are necessary or advisable together with a proposed schedule for completing such repairs or improvements. To the extent reasonably possible, the costs of all major equipment teardowns and overhauls and all capital improvements shall be incorporated into the applicable Annual Budget. If such costs have been incorporated into the applicable approved Annual Budget, or if Owner has otherwise consented in writing to reimburse Operator for such costs, Operator shall schedule, coordinate, contract and oversee the performance of such activities. Operator also shall be responsible for monitoring and enforcing contract compliance by the contractor performing such work, including taking such steps, short of litigation, to enforce any warranties granted to Owner by such contractor.

4.3 ANNUAL BUDGET AND PROJECT OPERATING PLAN

In accordance with Clause 6, Owner shall be responsible for approval of the Annual Budget, the Annual Project Operating Plan and the Five-Year Budget.

5 COMPENSATION AND PAYMENT

5.1 PAYMENTS

As compensation to Operator for performance of the Services hereunder, Owner shall pay Operator the Annual Operating Fee included in the (or a pro rata portion thereof in the case of a Contract Year of less than 12 months). In addition, Owner shall (at Owner's Option) either (i) reimburse Operator, in the manner and at the times specified in this Clause 5 and Appendix B, as modified from time to time, for all Reimbursable Costs included in the O&M Cost or (ii) pay such Reimbursable Costs directly to the applicable third parties.

5.2 ANNUAL OPERATING FEE

For the first Contract Year and each subsequent Contract Year, Owner shall pay to Operator the sum *as mentioned in PCC* per month of the Contract Year, for an annual fee *as mentioned in PCC* (the "Annual Operating Fee"). Beginning on the first day of the second Contract Year and on the first day of each Contract Year thereafter, the Annual Operating Fee (and the corresponding monthly operating fee) shall be adjusted to reflect changes *as mentioned in PCC*

5.3 REIMBURSABLE COSTS

Owner shall reimburse Operator for all costs incurred by Operator in performing the Services, including the costs set forth in Appendix B (collectively, the "Reimbursable Costs"). Owner's obligation under this provision is subject to (i) Owner's express approval of the costs as part of an Annual Budget or separately in writing, or (ii) Operator incurring costs in accordance with Sub-Clauses 3.8 (*Emergency*), 3.9 (*Extraordinary Circumstances*). Expenditures made by Operator in excess of the Annual Budget that are required to comply with any Law applicable to the Services or to the Project, shall be approved and reimbursed by Owner. Subject to Owner's right to modify the provisions of this Sub-Clause 5.3 from time to time. Owner shall pay Reimbursable Costs as follows:

- (a) Owner will advance to Operator on a mutually agreed basis, funds required for given Operator to make payments as they become due in accordance with the Annual Budget. Not less than fifteen (15) days before the first day of each calendar month during the term of this Agreement, Operator shall submit to Owner an estimate of funds required for such month, which estimate shall be in accordance with the Annual Budget. Owner shall pay to Operator the amount of such estimate prior to the time such funds are required by Operator. Such advances shall be deposited in a separate account in Operator's name, as agent for Owner, in a scheduled Bank of Pakistan, subject to withdrawal by Operator solely for the purpose of making required payments. Within fifteen (15) days of the end of each month, Operator shall submit to Owner a statement of receipts and disbursements, in detail satisfactory to Owner, together with supporting documentation.
- (b) Operator shall not incur Reimbursable Costs unless they are incurred in accordance with the applicable Annual Budget, or are permitted by Sub-Clauses 3.8 (*Emergency*), 3.9 (*Extraordinary Circumstances*). If Operator becomes aware that Reimbursable Costs exceed or will exceed the amount provided in the applicable Annual Budget by 10% or more, Operator shall use all reasonable

efforts to notify Owner within ten (10) days and shall not, without Owner's approval to amend the applicable Annual Budget or Owner's authorization for Operator to make such expenditure, perform any further Services that will cause or increase a budget overrun, except as provided in Sub-Clauses 3.8 (*Emergency*), 3.9 (*Extraordinary Circumstances*). If Owner refuses to authorize expenditures in excess of the Annual Budget, Operator shall be relieved of those duties or obligations of this Agreement that cannot be performed without the expenditures Owner refuses to approve.

- (c) In all cases, Operator shall use reasonable commercial efforts to mitigate any adverse effect from Owner's refusal to authorize expenditures in excess of the Annual Budget. Owner's reimbursement of any cost related to the Services shall not be construed as Owner's approval or acceptance of the Services.

5.4 ADJUSTMENT AND CONDITIONS

Notwithstanding the payment of any amount pursuant to the foregoing provisions, Owner shall remain entitled to conduct a subsequent audit and review of all Reimbursable Costs incurred and paid by Owner and of any supporting documentation for a period of two 2 years after the applicable Contract Year. If such audit and review shows that any amount previously paid by Owner to Operator did not constitute a Reimbursable Cost, Owner may (a) recover such amount from Operator, plus interest at the Reference Rate, calculated from the date the audit commenced, or (b) deduct such amount from any payment that thereafter may become due to Operator.

5.5 BILLING AND PAYMENT

Within 15 days following the end of each month, Operator shall submit the receipts and disbursements showing Reimbursable Costs for such month in accordance with Sub-Clause 5.3(a). Within 15 days after receipt of any such invoice, Owner shall:

- (a) pay Operator the sum specified in such invoice, less (i) any amounts previously deposited with Operator relating to such invoice as well as net interest (if any) earned on the bank deposit, and (ii) any portion of such invoice amount that Owner disputes in good faith or is permitted to offset under this Agreement; and
- (b) with respect to any disputed portion of such invoice, provide Operator with a written statement explaining, in reasonable detail, the basis for such dispute. The parties shall attempt to resolve any such disputed portion in accordance with Clause 14.

CLAUSE 6 PROCEDURES, PLANS AND REPORTING

6.1 PROCEDURES MANUAL

The parties have approved a procedures manual that includes procedures for (i) reporting and correspondence pursuant to this Agreement, (ii) procurement and contracting, and (iii) accounting, bookkeeping and record-keeping ("Procedures Manual"). The Procedures Manual shall govern the covered activities of Operator for the term of this Agreement, subject to such revision and amendment as agreed in writing by Owner and Operator.

6.2 ANNUAL PROJECT OPERATING BUDGET AND PLAN

- (a) **Proposal:** At least ninety (90) days before the beginning of each Contract Year, Operator shall prepare and submit to Owner a proposed annual budget for the Contract Year, established on a monthly basis. The proposed annual budget shall include separate operating and capital budgets. The proposed annual budget shall also set forth, in detail acceptable to Owner, (i) anticipated
- (b) s, repairs and capital improvements, (ii) maintenance and overhaul schedules, (iii) planned procurement (including equipment, spare parts, and consumable inventories), (iv) labor activities (including staffing, labor rates, and holidays), (v) administrative activities, and (vi) other work proposed to be undertaken by Operator, together with an itemized estimate of all Reimbursable Costs to be incurred. Each proposed annual budget shall be acc
- (c) ompanied by a proposed annual operating plan setting forth the assumptions and implementation plans underlying the proposed annual budget. Any actions to be performed by Operator under the proposed annual operating plan shall be consistent with Operator's obligations set forth in this Agreement.
- (b) **Adoption:** Owner shall review Operator's proposed annual budget and annual operating plan within thirty (30) days following receipt of the proposals. Owner may, by written request, propose changes, additions, deletions and modifications

to the proposals. If requested by Operator, Owner shall provide Operator any cost information in Owner's possession from previous Contract Years applicable to items in the proposed annual budget. Owner and Operator will then meet and use their reasonable commercial efforts to agree upon a final budget and plan (the "Annual Budget" and "Annual Project Operating Plan", respectively), which shall be approved in writing by both parties. Except to the extent that the terms of Sub-Clause 3.8 and 3.9 permit Operator to take actions which are outside the final Annual Budget without the consent of Owner, the final Annual Budget and Annual Project Operating Plan shall remain in effect throughout the applicable Contract Year, subject to revisions and amendments proposed by either party and consented to in writing by the other party.

- (c) **Changes:** Operator shall notify Owner as soon as reasonably possible of any significant deviations or discrepancies from the projections contained in the Annual Budget or Annual Project Operating Plan.
- (d) **Failure to Adopt:** If, by the first day of any Contract Year after the first Contract Year, the parties are unable to reach agreement concerning any item or portion of the Annual Budget for such Contract Year, then the amount(s) of such item or portion of the Annual Budget for such Contract Year shall be equal to 105% of the amount for the corresponding item or portion of the Annual Budget for the preceding Contract Year.
- (e) **Five-Year Budget.** At least ninety (90) days before the first day of each Contract Year, Operator shall prepare and submit to Owner a proposed budget for the next 5 Contract Years or the remaining term of the Agreement, whichever period is shorter. The proposed five-year budget shall be established on an annual basis and shall include separate operating and capital budgets. The proposed five-year budget shall also set forth, in detail acceptable to Owner,
 - (i) anticipated work and overhaul schedules;
 - (iii) planned procurement (including equipment, spare parts, and consumable inventories);
 - (iv) labor activities (including staffing, labor rates, and holidays);
 - (v) administrative activities; and
 - (vi) other work proposed to be undertaken by Operator, together with an itemized estimate of all Reimbursable Costs to be incurred, accompanied by the underlying assumptions and implementation plans of the proposed five-year budget. Owner shall review Operator's proposed five-year budget within 30 days following receipt of the proposal. Owner may, by written request, propose changes, additions, deletions and modifications to the proposals. Owner and Operator will then meet and use their reasonable commercial efforts to agree upon a final five-year budget (the "Five-Year Budget"), which shall be approved in writing by both Parties. If a final Five-Year Budget is not approved in its entirety by both parties, the proposed five-year budget submitted by Operator, together with Owner's final suggested changes, additions, deletions and modifications shall serve as the Five Year Budget. The Five-Year Budget shall be used only for planning and comparison purposes, and shall not constrain Operator in its actions or expenditures, provided, however, that Operator

shall be required to conform in its operations to the Annual Budget and Annual Project Operating Plan as provided in this Agreement.

6.3 OPERATING DATA AND RECORDS

Operator shall monitor and record all operating data and information that (i) Owner must report to any person or entity under any Project Agreement, (ii) Owner must report to any government agency or other person or entity under applicable Laws and (iii) Owner reasonably requests. Operator shall report required or requested operating data and information to Owner as specified by Owner to support monthly invoicing under the Project Agreements, and within fifteen (15) Calendar Days following a request by Owner. Operating data to be reported include information from operating (logs, meter and gauge readings) and maintenance records.

6.4 ACCOUNTS AND REPORTS

Operator shall cooperate with Owner in complying with reporting requirements set forth in the Project Agreements and shall, during the term of this Agreement, furnish or cause to be furnished to Owner the following reports concerning the Project and the Services:

- (a) Monthly Reports: Within ten (10) calendar days following the last day of each calendar month, Operator shall submit: (i) a progress report, in detail acceptable to Owner, covering all activities during such month with respect Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro (including information regarding the inputs and outputs of the project / facility.

(Specify) capital improvements, labor relations, other significant matters, and Services. The monthly report shall include a comparison of such items to the corresponding values for the preceding month and for the corresponding portion of the previous Contract Year, a listing of any significant operating problems along with immediately planned remedial actions, and a brief summary of major activities planned for the next reporting period, and (ii) a statement setting forth all Reimbursable Costs paid or incurred in such month, which statement shall itemize, in detail acceptable to Owner, the computation of such Reimbursable Costs including documentary evidence and shall state whether or not the Project operations have conformed to the applicable Annual Project Operating Plan and Annual Budget during such reporting period and if not, the extent and reasons for any deviation and the planned remedial action.

- (b) Annual Reports: As soon as available, and in any event within sixty (60) days after the end of each Contract Year, Operator shall submit an annual report describing, in detail substantially similar to that contained in the monthly reports referred to in Sub-Clause 6.4(a), the Project activities and operating data for such Contract Year. The annual report shall present a comparison of such Project activities and operating data with the goals set forth in the Annual Project Operating Plan and Annual Budget for such Contract Year, and with those achieved during the preceding Contract Year (if applicable) and an explanation of any substantial deviations. Within thirty (30) days after submission of each annual

report, Operator shall meet with Owner to review and discuss the report and any other aspects of Project operations that Owner may wish to discuss.

- (c) **Litigation, Permit Lapses:** Upon obtaining knowledge thereof, Operator shall promptly notify Owner in writing of: (i) any event of default under any of the Project Agreements; (ii) any litigation, claims, disputes or actions, threatened or filed, concerning the Project or the Services; (iii) any refusal or threatened refusal to grant, renew or extend (or any action pending or threatened that might affect the granting, renewal or extension of) any license, permit, warranty, approval, authorization or consent relating to the Project or the Services; and (iv) any dispute with any governmental authority relating to the Project or the Services.
- (d) **Other Information:** Operator shall promptly submit to Owner any material information concerning new or significant aspects of the Project's activities and, upon Owner's request, shall promptly submit any other information concerning the Project or the Services.

6.5 ADDITIONAL COMMUNICATIONS

Operator shall communicate certain additional events specified in Appendix C to Owner and third parties in accordance with the communication protocols set forth in Appendix C to this Agreement.

7 LIMITATIONS ON AUTHORITY

7.1 GENERAL LIMITATIONS

Notwithstanding any provision in this Agreement to the contrary, unless previously approved by Owner in writing or through Owner's approval of the Annual Budget, Operator and any employee, representative, contractor or other agent of Operator are prohibited from taking the specified actions with respect to the matters indicated below.

- (a) **Disposition of Assets:** Sell, lease, pledge, mortgage, convey, or make any license, exchange or other transfer or disposition of any property or assets of Owner, including any property or assets purchased by Operator where the purchase cost is a Reimbursable Cost;
- (b) **Contract:** Make, enter into, execute, amend, modify or supplement any contract or agreement (i) on behalf of, in the name of, or purporting to bind Owner or (ii) that prohibits or otherwise restricts Operator's right to assign such contract or agreement to Owner at any time;
- (c) **Expenditures:** Make or consent or agree to make any expenditure for equipment, materials, assets or other items which would be a Reimbursable Cost, except in conformity with the Annual Budget; provided, however, that solely in connection with actions taken by Operator pursuant to Sub-Clauses 3.8 (*Emergency*), 3.9 (*Extraordinary Circumstances*), Operator may, without prior approval from Owner, make limited expenditures outside the Annual Budget in accordance with those provisions;

- (d) **Other Actions:** Take or agree to take any other action that materially varies from the applicable Annual Project Operating Plan, Annual Budget or the requirements of any Project Agreement;
- (e) **Lawsuits and Settlements:** Settle, compromise, assign, pledge, transfer, release or consent to the compromise, assignment, pledge, transfer or release of, any claim, suit, debt, demand or judgment against or due by, Owner or Operator, the cost of which, in the case of Operator, would be a Reimbursable Cost hereunder, or submit any such claim, dispute or controversy to arbitration or judicial process, or stipulate in respect thereof to a judgment, or consent to do the same;
- (f) **Liens:** Create, incur or assume any lien upon the Project;
- (g) **Transactions on Behalf of Others:** Engage in any other transaction on behalf of Owner or any other person or entity not expressly authorized by this Agreement or that violates applicable Laws, this Agreement or any Project Agreement; or
- (h) **Agreements:** Enter into any agreement to do any of the foregoing.

7.2 EXECUTION OF DOCUMENTS

Any agreement, contract, notice or other document that is expressly permitted hereunder (or under written approval of Owner) to be executed by Operator shall be executed by the authorized representative of Operator or, subject to prior written notice to Owner, by such other representative of Operator who is authorized and empowered by Operator to execute such documents.

8 TERM AND TERMINATION

8.1 TERM

The term of this Agreement shall be from and including the date of this Agreement to and including *as mentioned in PCC*. Upon agreement of Owner and Operator, this Agreement may be extended for certain periods of agreed duration. This Agreement is subject to earlier termination pursuant to Sub-Clauses 8.2, 8.3, 8.4, 8.5 or 8.6.

8.2 IMMEDIATE TERMINATION BY OWNER

Subject to the terms of any Project Agreements, Owner may terminate this Agreement immediately:

- (i) upon the Bankruptcy of Operator; or
- (ii) upon the occurrence of a Force Majeure Event that is not remedied within one hundred and twenty (120) days of its initial occurrence. If the Agreement is terminated by Owner pursuant to Sub-Clause 8.2(i) or 8.2(ii), Operator shall be compensated for all Reimbursable Costs incurred by Operator to and including the date of termination. In addition, if the Agreement is terminated by Owner pursuant to Sub-Clause 8.2(ii), Operator shall be paid all unpaid Annual Operating Fees to and including the date of termination.

8.3 TERMINATION UPON NOTICE BY OWNER

- Subject to the terms of any Project Agreements, Owner may terminate this Agreement upon ten (10) days prior written notice to Operator in the event
- (i) that Operator violates, or consents to a violation of, any Laws applicable to the Services or the Project, where the violation has or may have a material adverse effect of the Project or Owner's interest, and Operator does not cure such violation within thirty (30) days (or, if not curable within thirty (30) days, within such period of time as is reasonably necessary, but in no event more than ninety (90) days, provided Operator diligently commences and pursues such cure and indemnifies Owner for all related costs, of whatever kind), or
 - (ii) of a material breach by Operator in the performance of the Services, if Operator does not cure such breach within thirty (30) days from the date of Operator's receipt of notice from Owner demanding cure (or, if not curable within thirty (30) days, within such period of time as is reasonably necessary, but in no event more than 90 days, provided Operator diligently commences and pursues such cure and indemnifies Owner for all related costs, of whatever kind). If the Agreement is terminated by Owner pursuant to this Sub-Clause 8.3, Operator shall be compensated for all Reimbursable Costs incurred by Operator and all unpaid Annual Operating Fees to and including the date of termination.

8.4 OTHER TERMINATION UPON NOTICE BY OWNER

Subject to the terms of any Project Agreements, Owner may terminate this Agreement with sixty (60) days prior written notice to Operator, upon the occurrence of :

- (a) a sale or transfer by Owner of its rights in the Project or a sale or transfer of all or substantially all of the assets of or interests in Owner, (b) Operator's Reimbursable Costs for Services exceeding the approved Annual Budget with respect to Reimbursable Costs, for any 2 consecutive Contract Years, where such overruns are the fault of, or due to the negligent operation of the Project by, Operator, (c) a determination by Owner that, for any reason, it no longer intends to continue operation of the Project or (d) a determination by Owner that it does not wish to extend this agreement pursuant to Sub-Clause 8.1. If the Agreement is terminated by Owner pursuant to this Section 8.4, Operator shall be compensated for all Reimbursable Costs incurred by Operator and all unpaid Annual Operating Fees to and including the date of such termination under this Sub-Clause 8.4.

8.5 TERMINATION BY OWNER WITHOUT CAUSE

In addition to its rights set forth in this Clause 8, subject to the terms of any Project Agreements, Owner reserves the right to terminate this Agreement without cause upon ninety (90) days written notice to Operator. If the Agreement is terminated by Owner pursuant to this Sub-Clause 8.5, Operator shall be compensated for all Reimbursable Costs incurred by Operator and all unpaid Annual Operating Fees to and including the date of such termination under this Sub-Clause 8.5. Such payments, together with the termination payment set forth in Sub-Clause 8.8, shall be Operator's sole remedy in respect of such termination and shall be made by Owner within 30 days of receipt of a final invoice from Operator.

8.6 TERMINATION BY OPERATOR

Subject to the terms of any Project Agreements, Operator may terminate this Agreement for cause upon fifteen (15) days prior written notice to Owner in the event of: (i) Owner's Bankruptcy; or (ii) Owner's failure to perform in a timely manner any of its material obligations under this Agreement and such failure is not cured within thirty (30) days of Owner's receipt of a notice from Operator demanding cure (or, if not curable within thirty (30) days, within such period of time as is reasonably necessary, but in no event more than 90 days, provided that Owner diligently commences and continues to pursue such cure).

8.7 PROJECT CONDITION AT END OF TERM

Upon expiration or termination of this Agreement, Operator shall remove its personnel from the Project. Operator shall leave the Project in as good condition as it was on the Effective Date, normal wear and tear and casualty excepted. Operator shall be paid all unpaid Reimbursable Costs. All special tools, improvements, inventory of supplies, spare parts, safety equipment, Operating Manuals and Procedures Manuals, operating logs, records and documents maintained by Operator pursuant to Sub-Clause 3.5 and any other items furnished on a Reimbursable Cost basis under this Agreement will be left at the Project and will become or remain the property of Owner without additional charge. Owner shall also have the right, in its sole discretion, to assume and become liable for

any contracts or obligations that Operator may have undertaken with third parties in connection with the Services. Operator shall cooperate in taking all reasonable steps requested by Owner required to effect the assumption of the contracts, provided that Owner agrees to indemnify and hold harmless Operator for all liabilities arising out of events and obligations arising from the assumption of contract rights and obligations after the date of any such assumption. Operator shall use commercially reasonable efforts to cooperate with Owner or a succeeding operator to assure that the Water Supply and Sanitation of the Project are not disrupted.

8.8 *TERMINATION PAYMENT*

- (a) In the event of a termination of this Agreement pursuant to the above Sub-Clauses 8.2 (ii), 8.4 (a), 8.4 (c), 8.4 (d) or 8.5, Operator shall be entitled, in addition to all other amounts due under this Agreement as of the date of termination, to a demobilization and cancellation payment equal to the total of all relocation and severance costs incurred with respect to Operator's employees and all costs Operator is at such time contractually or legally obligated to pay to its employees, or which are incurred with the prior written approval of Owner. Severance costs for each of Operator's employees shall be *as mentioned in PCC* for each year such employee has worked for Operator at the Project. Subject to Owner's right to conduct a subsequent audit and review pursuant to Sub-Clause 8.8(b), such amounts shall be due and payable by Owner within 30 days of Operator's submission of an invoice, which invoice shall include a statement of all such costs and expenses in the form and with the substantiation required by Sub-Clause 6.2(a). Owner shall pay any and all legal costs incurred by Operator to collect payments under this Sub-Clause 8.8.
- (b) **Audit.** Notwithstanding payment of any amount pursuant to this Section 8.8, Owner shall remain entitled to conduct a subsequent audit and review of all costs incurred and paid by Owner pursuant to this Section 8.8, together with any supporting documentation requested by Owner, for a period of 2 years from and after the date of such payment. If, pursuant to such audit and review, it is determined that any amount previously paid to Operator did not constitute, in whole or in part, a reimbursable item pursuant to this Sub-Clause 8.8, Owner may recover such amount from Operator plus interest at the Reference Rate calculated from the date such audit commences, or Owner may deduct or cause to be deducted such amount from any payment that may be due to Operator.

9 *WARRANTY*

9.1 *VENDOR'S WARRANTIES*

For Owner's benefit, Operator shall obtain from sellers of equipment, material, or services (other than the Services), warranties against defects in materials and workmanship to the extent such warranties are reasonably obtainable, and, to the extent of any such warranties actually obtained, Owner releases Operator from any further liability arising in respect of such equipment, material or services (other than the Services) to the extent such liability is covered by any such warranty. Operator itself

shall not be liable for any such warranties, or for any defects or damage caused by such equipment, material or services (other than the Services). Upon Owner's request, Operator agrees to take such steps as are necessary, short of litigation, to enforce said warranties. Each such warranty shall be enforceable by Owner for Owner's benefit or assignable by Operator to Owner without any further action or consent by or on the part of any third party. Unless otherwise requested, Operator shall administer such warranties and immediately notify Owner of any defects discovered or suspected that may be covered by such warranties. When requested, Operator shall assign any such warranty to Owner and assist Owner with the administration and enforcement of such warranty, or, if such warranty is not assignable to Owner, assist Owner with the administration and enforcement of such warranty.

10 INDEMNIFICATION AND LIABILITIES

10.1 INDEMNIFICATION

- (a) Indemnification by Operator: Operator shall indemnify, defend and hold harmless Owner, the members thereof, and their respective officers, directors, employees, agents, Affiliates and representatives (the "Owner Indemnified Parties"), from and against any and all claims (in whatever form and to the fullest extent permitted by law) arising out of or in any way connected with, but only to the extent of, any gross negligence, fraud or willful misconduct of Operator or anyone acting on Operator's behalf or under its instructions, in connection with this Agreement and Operator's obligations thereunder. Any costs or expenses incurred by Operator pursuant to its indemnity obligations under this Sub-Clause 10.1(a) shall be the sole responsibility of the Operator.
- (b) Indemnification by Owner: Owner shall indemnify, defend and hold harmless Operator, its officers, directors, employees, agents, Affiliates and representatives (the "Operator Indemnified Parties") from and against any and all claims (in whatever form and to the fullest extent permitted by law) arising out of or in any way connected with, but only to the extent of, any gross negligence, fraud or willful misconduct of Owner or anyone acting on Owner's behalf or under its instructions (other than Operator and its suppliers, subcontractors, vendors, and their subcontractors and vendors and any employee or agent of the foregoing), in connection with this Agreement and Owner's obligations thereunder.

10.2 ENVIRONMENTAL LIABILITY

- (a) Operator Liability: Operator shall not be responsible for claims directly or indirectly related to hazardous materials present at the Project before the date of this Agreement, except to the extent Operator acted with respect to such materials in a grossly negligent manner. Owner shall defend, indemnify and hold Operator harmless against such claims, except to the extent such claims arise from Operator's grossly negligent or intentional acts.
- (b) Owner's Liability: Owner shall not be responsible for claims directly related to hazardous materials at the Project arising out of the grossly negligent or intentional acts of Operator. This provision of the Agreement shall not be

construed to require Operator to take corrective action with respect to any hazardous materials at the Project before the date of this Agreement.

- (c) **Governmental Actions:** If action is required at the Project to comply with any applicable environmental laws during the term of this Agreement, Owner (with Operator's assistance) shall be responsible for the costs of compliance. Costs for such compliance action shall only be incurred by Operator only with Owner's prior written consent, unless a governmental authority requires Operator to incur such costs and expenses prior to obtaining such written consent.

11 LIMITATIONS OF LIABILITY

11.1 LIMITATIONS OF LIABILITY

- (a) **Consequential Damages:** Notwithstanding any provision in this Agreement to the contrary, Operator and Owner each agree not to assert against the other any claim, demand or suit for consequential, incidental, indirect or special damages arising from any aspect of the performance or nonperformance of the other party or any third-party engaged by such other party under this Agreement, and each party hereto waives any such claim, demand or suit against the other in connection with this Agreement.
- (b) **Damages Limited to Annual Operating Fee:** The aggregate liability of Operator [except for those claims that are subject to the provisions of Sub-Clause 10.1(a) (*Indemnification by Operator*)] shall in no event exceed, during any Contract Year, the Annual Operating Fee payable to Operator during such Contract Year plus the amount necessary to satisfy Operator's indemnification responsibilities under Clause 10.
- (c) **Limited Personal Liability :** Operator and Owner each understand and agree that there shall be absolutely no personal liability on the part of any of the members, partners, officers, employees, directors, agents, authorized representatives or Affiliates of Owner or Operator for the payment of any amounts due hereunder, or performance of any obligations hereunder. Operator shall look solely to the assets of Owner for the satisfaction of each and every remedy of Operator in the event of any breach by Owner. Owner shall look solely to the assets of Operator for the satisfaction of each and every remedy of Owner in the event of any breach by Operator.
- (d) **Survival:** The parties further agree that the waivers and disclaimers of liability, indemnities, releases from liability, and limitations on liability expressed in this Agreement shall survive termination or expiration of this Agreement, and shall apply at all times (unless otherwise expressly indicated), regardless of fault, negligence, strict liability, or breach of warranty of the party indemnified, released or whose liabilities are limited, and shall extend to the members, partners, principals, officers, employees, controlling persons, executives, directors, agents, authorized representatives, and affiliates of such party.

- (e) **Exclusivity.** The provisions of this Agreement constitute Operator's and Owner's exclusive liability, respectively, to each other, and Operator's and Owner's exclusive remedy, respectively, with respect to the Services to be performed hereunder and Owner hereby releases Operator performing Services hereunder, and Operator hereby releases Owner performing its obligations hereunder, from any further liability.

12 CONFIDENTIALITY

12.1 Operator

Operator agrees to hold in confidence for a period *as mentioned in PCC* from the date of disclosure, any information supplied to Operator by Owner or others acting on its behalf. Operator further agrees, to the extent requested by the supplier of such information, to require its subcontractors, vendors, suppliers and employees to enter into appropriate nondisclosure agreements relative to such information, prior to the receipt thereof.

12.2 Owner

Owner agrees to hold in confidence for a period *as mentioned in PCC* from the date of disclosure, any information supplied to Owner by Operator or others acting on its behalf, provided that Owner may disclose such information as is reasonably necessary but without affecting the proprietary (intellectual property) rights, if any of the Operator or others. Owner further agrees, to the extent requested by the supplier of such information, to require its members and contractors to enter into such appropriate nondisclosure agreements relative to such information, prior to their receipt thereof.

12.3 Exceptions

The provisions of this Clause shall not apply to information that was in the public domain, was already in the receiving party's possession, or was received lawfully and free of any obligation to treat it as confidential.

12.4 Required Disclosure

If a receiving party or any of its respective representatives is required by applicable law to disclose any of the information that is otherwise required to remain confidential pursuant to this Clause 12, the receiving party will notify the other party promptly in writing so that the other party may seek a protective order or other appropriate remedy (which the receiving party will not oppose), or, in the other party's sole discretion, waive compliance with the terms of this Agreement.

13 TITLE, DOCUMENTS AND DATA

13.1 Materials and Equipment

Title to all materials, equipment, tools, supplies, consumables, spare parts and other items purchased or obtained by Operator on a Reimbursable Cost basis hereunder shall pass immediately to and vest in Owner upon the passage of title from the vendor or supplier thereof, provided, however, that such transfer of title shall in no way affect Operator's obligations as set forth in this Agreement.

13.2 Documents

All materials and documents prepared or developed by Operator, its employees, representatives or contractors in connection with the Project or performance of the Services, including all manuals, data, drawings, plans, specifications, reports and accounts, shall become Owner's property when prepared, and Operator, its agents, employees, representatives, or contractors shall not use such materials and documents for any purpose other than performance of the Services, without Owner's prior written approval. All such materials and documents, together with any materials and documents furnished to Operator, its agents, employees, representatives, or contractors by Owner, shall be delivered to Owner upon expiration or termination of this Agreement and before final payment is made to Operator.

13.3 Review By Owner

All materials and documents referred to in Sub-Clause 13.2 hereof shall be made available for review by Owner (including their agents or advisors) at all reasonable times during development and promptly upon completion. All such materials and documents required to be submitted for approval by Owner shall be prepared and processed in accordance with the requirements and specifications set forth in the Administrative Procedures Manual. However, Owner's approval of materials and documents submitted by Operator shall not relieve Operator of its responsibility for the correctness thereof or of its obligation to meet all requirements of this Agreement.

13.4 Proprietary Information

Where materials or documents prepared or developed by Operator or its agents, employees, representatives or contractors contain proprietary information, systems, techniques, or know-how acquired from third parties by Operator or others acting on its behalf, such persons or entities shall retain all rights to use or dispose of such information, provided, however, that Owner shall have the right to the same to the extent necessary for Water Supply & Sanitation of the Project.

14 RESOLUTION OF DISPUTES

14.1 Resolution Through Discussions

If any dispute or difference of any kind (a Dispute") arises between Owner and Operator in connection with, or arising out of, this Agreement, the Owner and Operator within thirty (30) days shall attempt to settle such Dispute in the first instance through discussions. The designated representatives of Owner and Operator shall promptly confer and exert their best efforts in good faith to reach a reasonable and equitable resolution of such Dispute. If the representatives are unable to resolve the Dispute within five (5) calendar days, the Dispute shall be referred within two (2) calendar days of the lapse of the five (5) calendar day period to the responsible senior management of each party for resolution. Neither party shall seek any other means of resolving any Dispute arising in connection with this Agreement until the responsible senior management of Owner and Operator have had at least five (5) Business Days to resolve the Dispute following referral of the Dispute to them. If the parties are unable to resolve the Dispute using the procedure described in this Clause, either party may deliver notice to the other party of its intent to submit the Dispute to arbitration ("Arbitration Notice"). The Arbitration Notice shall include the specific issues concerning the Dispute which must be resolved by the arbitration.

14.2 Arbitration

Any Dispute arising out of, or in connection with, this Agreement and not settled by the procedure prescribed in Sub-Clause 14.1, shall (regardless of the nature of the Dispute) be finally settled in accordance with Arbitration Act 1940 as amended or any statutory modification or re-enactment thereof for the time being in force the place of arbitration shall be *as mentioned in PCC*.

14.3 Continued Performance

During the pendency of any arbitration, Operator and Owner shall continue to perform their obligations under this Agreement.

CLAUSE 15 MISCELLANEOUS PROVISIONS

15.1 Assignment

Neither Owner nor Operator party may assign its rights or obligations under this Agreement without the prior written consent of the other party hereto, except that this Agreement may be assigned by Owner without such prior consent to any successor of Owner, to a person or entity acquiring all or substantially all of the Project, or any purchaser of the Project upon the exercise of remedies under a Project Agreement.

15.2 Access to Project

(a) Owner: Owner, and their respective agents and representatives shall have access at all times to the Project and any documents, materials and records and accounts relating to Project operations for purposes of inspection and review. Upon the request of Owner, or their respective agents and representatives, Operator shall make available to such persons or entities and provide them with access to any operating data and all operating logs.

(b) Cooperation: During any such inspection or review of the Project, each of Owner, and their respective agents and representatives shall use its reasonable commercial efforts to cause authorized visitors to comply with Operator's safety and security procedures and to conduct such inspection and review in a manner which causes minimal interference with Operator's activities. Operator agrees to cooperate fully with Owner, and their respective agents and representatives in providing requested information and documentation for the support of any financial or legal transactions associated with the Project.

15.3 Force Majeure

If either Owner or Operator is rendered wholly or partially unable to perform its obligations under this Agreement (other than payment obligations) due to a Force Majeure Event, the party affected by such Force Majeure Event shall be excused from whatever performance is impaired by such Force Majeure Event, provided that the affected party promptly, upon learning of such Force Majeure Event and ascertaining that it will affect its performance hereunder, (i) promptly gives notice to the other party stating the nature of the Force Majeure Event, its anticipated duration, and any action being taken to avoid or minimize its effect and (ii) uses its reasonable commercial efforts to remedy its inability to perform. The suspension of performance shall be of no greater scope and no longer duration than that which is necessary. No obligations of either party which arose before the occurrence causing the suspension of performance and which could and should have been fully performed before such occurrence shall be excused as a result of such occurrence. The burden of proof shall be on the party asserting excuse from performance due to a Force Majeure Event.

15.4 Amendments

No amendments or modifications of this Agreement shall be valid unless evidenced in writing and signed by duly authorized representatives of both parties.

15.5 Survival

Notwithstanding any provisions herein to the contrary, the obligations set forth in Clauses 7, 10, 12 and 14, and the limitations of liabilities set forth in Clause 11, shall survive in full force despite the expiration or termination of this Agreement.

15.6 No Waiver

It is understood and agreed that any delay, waiver or omission by Owner or Operator with respect to enforcement of required performance by the other under this Agreement shall not be construed to be a waiver by Owner or Operator of any subsequent breach or default of the same or other required performance on the part of Owner or Operator.

15.7 Notices

All notices and other communications (collectively "Notices") required or permitted under this Agreement shall be in writing and shall be given to each party at its address or fax number set forth in this Sub-Clause 15.8 or at such other address or fax number as hereafter specified as provided in this Section 15.8. All Notices shall be:

- (i) delivered personally, or
- (ii) sent by fax, electronic mail, telegraph, registered or certified mail (return receipt requested and postage prepaid), or
- (iii) sent by a nationally recognized overnight courier service. Notices shall be deemed to have been given
 - (A) when transmitted if sent by fax, electronic mail, or telegraph (provided the transmittal is confirmed), or
 - (B) upon receipt by the intended recipient if given by any other means.

Notices shall be sent to the following addresses:

To Operator:

[As mentioned in the Contract Agreement]

To Owner:

[As mentioned in the Contract Agreement]

15.8 Fines and Penalties

If during the term of this Agreement any governmental or regulatory authority or agency assesses any fines or penalties against Operator or Owner arising from Operator's failure to operate and maintain the Project in accordance with applicable Laws without Owner's prior written consent, such fines and penalties shall, subject to the limitations set forth in Clause 11, be the sole responsibility of Operator and shall not be deemed a Reimbursable Cost.

15.9 Representations and Warranties

Each party represents and warrants to the other party that:

- (a) such party has the full power and authority to execute, deliver and perform this Agreement and to carry out the transactions contemplated hereby;
- (b) to the best of such party's knowledge, the execution, delivery and performance by such party of this Agreement, does not and will not materially conflict with any legal, contractual, or organizational requirement of such party; and
- (c) there are no pending or threatened legal, administrative, or other proceedings that if adversely determined, could reasonably be expected to have a material adverse effect on such party's ability to perform its obligations under this Agreement.

15.10 Counterparts

The parties may execute this Agreement in counterparts, which shall, in the aggregate, when signed by both parties constitute one instrument. Thereafter, each counterpart shall be deemed an original instrument as against any party who has signed it.

15.11 Governing Law

This Agreement is executed and intended to be performed *as mentioned in PCC* and the laws of country shall govern its construction, interpretation and effect.

15.12 Partial Invalidity

If any term, provision, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the rest of this Agreement shall remain in full force and effect and in no way be affected, impaired or invalidated.

15.13 Captions

Titles or captions of Clauses contained in this Agreement are inserted as a matter of convenience and for reference, and do not affect the scope or meaning of this Agreement or the intent of any provision hereof.

15.14 Amounts

All amounts of money in this Agreement are denominated in the currency *as mentioned in PCC*.

15.15 Performance Security

The successful Bidder shall furnish to the owner a Performance Security to the Employer in the prescribed form. The said Security shall be furnished by the Contractor within 07 days after the receipt of the Letter of Acceptance. The Performance Security shall be of an amount equal to 5% of the Contract Price stated in the Letter of Acceptance. Such Security shall, at the option of the bidder, be in the form of either (a) bank guarantee from any Scheduled Bank in Pakistan or (b) bank guarantee from a bank located outside Pakistan duly counter-guaranteed by a Scheduled Bank in Pakistan. The cost of complying with requirements of this Sub-Clause shall be borne by the operator / Contractor.

**PARTICULAR CONDITIONS
OF
CONTRACT**

PARTICULAR CONDITIONS OF CONTRACT

1 AGREEMENT

- 1.2 *Effective date is the signing date of contract agreement between the owner and the operator for the purpose of this Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro contract based on two party agreement, the term owner constitute as Secretary, Public Health Engineering & Rural Development Department, Government of Sindh & the term operator / contractor is constitute as representative of contractor / operator.*
- 1.3 *The owner may hire a consultant who will perform the function of monitoring / vetting / evaluating the performance of contractor specified in consultancy contract of the project or as well as any other assignment assigned to consultancy firm in relation to this contract agreement.*
- 1.3.1 *Any subsequent Document mutually agreed and signed by the owner and operator shall be the part of contract agreement.*

2 DEFINITIONS

Business day of Pakistan are Monday to Friday, Time 9:00 AM To 5:00 PM. The projects means Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro

Location of the Project is in all districts of Sindh Province.

This is two party agreement.

5 COMPENSATION AND PAYMENT

- 5.2 Upon satisfactory performance of Water Supply & Sanitation reflected through performance certificate issued by the owner. The owner pay the monthly amount of derived on pro rata basis from the schedule of prices.

The escalation factor and its calculation method for the subsequent year after the first year will be based on the either of the following:-

- I. Inflection factor of 10% will be applicable for the subsequent years of O&M or escalation factor formula of Pakistan Engineering Council (PEC). The owner will decide the use of escalation factor.

8 TERM AND TERMINATION

- 8.1 The term of this agreement is initially for a period of 1 year effective from the date of signing of agreement / issuance of work order. The contract is extendable for a period of further 4 years (Total 5 years) subject to the issuance of satisfactory performance certificate issued by the owner.

This agreement is subject to earlier termination pursuant to Sub Clauses 8.2, 8.3, 8.4, 8.5 or 8.6.

- 8.8 Severance cost for each of operator employee shall not be more than the salary of the employer mentioned in the breakdown of the itemized cost in appendices B to Bid, if provided, otherwise no severance cost will be paid by the owner.

12 CONFIDENTIALITY

- 12.1 The operator keep the confidentiality for a period of 10 years.

- 12.2 The owner keep the confidentiality for a period of 5 years.

14 RESOLUTION OF DISPUTES

- 14.2 The place for arbitration shall be Karachi Sindh *Pakistan*..

15 MISCELLANEOUS PROVISIONS

- 15.7 Mention the complete address of Owner

Attn: Name of representative designated pursuant to Sub-Clause 1.4

Mention the complete address of Operator

To be filled upon award of contract

- 15.11 Governing Law will be *Islamic Republic of Pakistan*.

- 15.14 Amounts of money shall be dominated in currency of *Islamic Republic of Pakistan Rupees*.

- 15.15 The Performance Security shall be of an amount equal to 5% of the Contract Price stated in the Letter of Acceptance. Such Security shall, at the option of the bidder, be in the form of either (a) bank guarantee from any Scheduled Bank in Pakistan or (b) bank guarantee from a bank located outside Pakistan duly counter-guaranteed by a Scheduled Bank in Pakistan. The cost of complying with requirements of this Sub-Clause shall be borne by the operator / Contractor.

STANDARD FORMS

STANDARD FORMS

- Form of Bid Security
(Bank Guarantee)
- Form of Contract Agreement
- Form of Performance Security
(Bank Guarantee/Insurance Bond)
- Form of Bank Guarantee for Advance Payment

FORM OF BID SECURITY
(Bank Guarantee)

Guarantee No. _____
Executed on _____
Expiry date _____

Name of Guarantor (Bank) with address: _____
(Scheduled Bank in Pakistan)

Name of Principal (Bidder) with address: _____

Penal Sum of Security (express in words and figures): _____

Bid Reference No. _____ Date of Bid Opening _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bid and at the request of the said Principal, we the Guarantor above-named are held and firmly bound unto the _____, (hereinafter called the "Owner") in the sum stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying Bid numbered dated as above for _____ (Particulars of Bid) to the said Owner; and

WHEREAS, the Owner has required as a condition for considering the said Bid that the Principal furnishes a Bid Security in the above said sum to the Owner, conditioned as under:

- (1) that the Bid Security shall remain valid for a period 28 days beyond the period of validity of the Bid;
- (2) that in the event of;
 - (a) the Principal withdraws his Bid during the period of validity of Bid, or
 - (b) the Principal does not accept the correction of his Bid Price, pursuant to Sub-Clause 24.2 of Instructions to Bidders, or
 - (c) failure of the successful bidder to
 - (i) furnish the required Performance Security, in accordance with Clause 34 of Instructions to Bidders, or
 - (ii) sign the proposed Contract Agreement, in accordance with Clause 35 of Instructions to Bidders,

then the entire sum be paid immediately to the said Owner as liquidated damages and not as penalty for the successful bidder's failure to perform.

NOW THEREFORE, if the successful bidder shall, within the period specified therefor, on the prescribed form presented to him for signature enter into a formal Contract with the said Owner in accordance with his Bid as accepted and furnish within twenty eight (28) days of his being requested to do so, a Performance Security with good and sufficient surety , as may be required, upon the form prescribed by the said Owner for the faithful performance and proper fulfilment of the said Contract or in the event of non-withdrawal of the said Bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Guarantor shall forthwith pay to the Owner the said sum stated above upon first written demand of the Owner without cavil or argument and without requiring the Owner to prove or to show grounds or reasons for such demand notice of which shall be sent by the Owner by registered post duly addressed to the Guarantor at its address given above.

PROVIDED ALSO THAT the Owner shall be the sole and final judge for deciding whether the Principal has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Guarantor shall pay without objection the sum stated above upon first written demand from the Owner forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor has executed the instrument under its seal on the date indicated above, the name and seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

Witness:

1. _____

Corporate Secretary (Seal)

2. _____

(Name, Title & Address)

Guarantor (Bank)

Signature _____

Name _____

Title _____

Corporate Guarantor (Seal)

FORM OF CONTRACT AGREEMENT

This AGREEMENT (hereinafter called the "Agreement") is made and entered into the ____ day of _____ (month) 20____ by and between */Legal name, form and country of Project Owner/* (hereinafter called the "Owner"), and */Legal name, form and country ofl* (hereinafter called the "Operator").

WHEREAS, Owner owns and desires to contract for the Project,

WHEREAS, Operator provides said work and management services for *Projects* and has agreed to provide those services for the Project on the terms and conditions set forth in this Agreement,

NOW this Agreement witnessed as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents after incorporating addenda, if any except those parts relating to Instructions to Bidders shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) The Contract Agreement;
 - (b) The Letter of Award;
 - (c) The completed Form of Bid;
 - (d) The Particular Conditions of Contract;
 - (e) The General Conditions of Contract;
 - (f) The priced Schedule of Prices;
 - (g) Completed Appendices to Bid ;
 - (i) The Specifications-Technical and Special Provisions
 - (h) The Drawings;
 - (i) any other
3. In Consideration _____ Operator Covenants _____

4. The Owner hereby covenants _____

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed on the day, month and year first before written in accordance with their respective laws..

/Legal Name of Owner /

By: _____

Witness: _____

Name:
Title:
Seal:

Name:
Address:

/Legal Name of Operator/

By: _____

Witness: _____

Name:
Title:
Seal:

Name:
Address:

FORM OF PERFORMANCE SECURITY
(Bank Guarantee/ Insurance Bond)

Guarantee No. _____
Executed on _____
Expiry date _____

Name of Guarantor (Bank/Approved Insurance Company) with
address: _____

Name of Principal (Contractor) with address: _____

Penal Sum of Security (express in words and figures)

Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bidding Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly bound unto the _____ (hereinafter called the "Owner") in the penal sum of the amount stated above for the payment of which sum well and truly to be made to the said Owner, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has accepted the Owner's above said Letter of Acceptance for _____ (Name of Contract) for the _____ (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Owner, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of Sub-Clause 8.7, Project Condition at End of Term,, , of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, _____ (the Guarantor), waiving all objections and defences under the Contract, do hereby irrevocably and independently guarantee to pay to the Owner without delay upon the Owner's first written demand without cavil or arguments and without requiring the Owner to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Owner's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Owner's designated Bank & Account Number.

PROVIDED ALSO THAT the Owner shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Owner forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Guarantor (Bank/Approved Insurance Co.)

Witness:

1. _____

Signature _____

Corporate Secretary (Seal)

Name _____

Title _____

2. _____

Name, Title & Address

Corporate Guarantor (Seal)

FORM OF BANK GUARANTEE FOR ADVANCE PAYMENT

Guarantee No. _____
Executed on _____
Expiry date _____

WHEREAS _____ (hereinafter called the Owner) has entered into a Contract for _____

_____ (Particulars of Contract), with

_____ (hereinafter called the Contractor).

AND WHEREAS the Owner has agreed to give advance to the Contractor, at the Contractor's request, an amount of _____ (Rs. _____) which amount shall be advanced to the Contractor as per provisions of the Contract.

AND WHEREAS the Owner has asked the Contractor to furnish Guarantee to secure advance payment for performance of his obligations under the said Contract.

AND WHEREAS _____ (Bank) (hereinafter called the Guarantor) at the request of the Contractor and in consideration of the Owner agreeing to make the above advance to the Contractor, has agreed to furnish the said Guarantee.

NOW THEREFORE the Guarantor hereby guarantees that the Contractor shall use the advance for the purpose of above mentioned Contract and if he fails, and commits default in fulfillment of any of his obligations for which the advance payment is made, the Guarantor shall be liable to the Owner for payment not exceeding the aforementioned amount.

Notice in writing of any default, of which the Owner shall be the sole and final judge, as aforesaid, on the part of the Contractor, shall be given by the Owner to the Guarantor, and on such first written demand payment shall be made by the Guarantor of all sums then due under this Guarantee without any reference to the Contractor and without any objection.

This guarantee shall come into force as soon as the advance payment has been credited to the account of the Contractor.

This guarantee shall expire not later than _____ by which date we must have received any claims by registered letter, telegram, telex or telefax.

It is understood that you will return this Guarantee to us on expiry or after settlement of the total amount to be claimed hereunder.

Witness:

1. _____

Corporate Secretary (Seal)

2. _____

Name, Title & Address

Guarantor (Bank)

Signature _____

Name _____

Title _____

Corporate Guarantor (Seal)

SPECIFICATIONS
SPECIAL PROVISIONS

The Specification of the Rehabilitation / Repair of Proposed Filter Plants Taluka
Sehwan District Jamshoro or equivalent or higher than the specification of the
said work.

SPECIFICATIONS
TECHNICAL PROVISIONS

The technical provision of the Rehabilitation / Repair of Proposed Filter Plants
Taluka Sehwan District Jamshoro

BIDDING DATA

The following specific data for the works to be tendered shall complement, amend, or supplement the provisions in the Instructions to Bidders. Wherever there is a conflict, the provisions herein shall prevail over those in the Instructions to Bidders

Instructions to Bidders

Clause Reference

1.1	Name of Procuring Agency :	Executive Engineer Public Health Engineering Division Jamshoro
	Description of Works :	Rehabilitation / Repair of Proposed Filter Plants Taluka Sehwan District Jamshoro.
	Estimate Cost	Rs.268.391 million
	Completion period	24 Months
5.1 (a)	Procuring Agency's address:	Address: Office of Executive Engineer PHED Jamshoro Near Railway Crossing Kotri @ Deputy Commissioner Office Kotri
10.3	Bid shall be quoted entirely in : The payment shall be made in :	Pak Rupees Pak Rupees
11.2	The bidder has the Financial, Technical and constructional capability necessary to perform the Contract as follows:	Mentioned in NIT and advertised in News Papers
12.1	Bidder shall furnish documentation as set out in Bidding Data	A detailed description of the Works, essential technical and performance characteristics:
13.1	Amount of Bid Security:	Rs.13.420 million
14.1	Period of Bid Validity:	90 Days
14.4	Number of copies of the bid to be completed and returned:	One (01) Original
14.6	Procuring Agency's Address for the Purpose of Bid Submission	Address: Office of Executive Engineer PHED Jamshoro Near Railway Crossing Kotri @ Deputy Commissioner Office Jamshoro @ Kotri

15.1 Deadline for submission of bids:

Call Deposit Receipt (CDR) will be received physically/through courier up to date 24/08/2026 at 10:30 AM

16.1 Venue, time, and date of bid opening:

Venue: Office of the Executive Engineer Public Health Engineering Division Jamshoro located near Railway Crossing Kotri @ Deputy Commissioner Office Jamshoro @ Kotri

Time: 11:00 AM Date: 24/ 08/2026

16.4 Responsiveness of Bids:

- (i) Bid is valid till required period,
- (ii) Bid prices are Price adjustment
- (iii) Completion period offered is within specified limits,
- (iv) Bidder is eligible to Bid and possesses the requisite experience, capability and qualification.
- (v) Bid does not deviate from basic technical requirements and
- (vi) Bids are generally in order, etc.

EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG:(DEV) DIVISION
JAMSHORO

DRAWINGS

BILL OF QUANTITIES

NAME OF WORK:- REHABILITATION / REPAIR OF PROPOSED FILTER PLANTS TALUKA SEHWAN DISTRICT JAMSHORO.

1	REHABILITATION / REPAIR OF RO PLANT AT WAHUR UC WAHUR.					
S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
		PART - A - ONE TIME REPLACEMENT				
1	48	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/tyoe polyamide thin-film composite (TFC) Operating and Cleaning Limits Mximum Operating Temperature ay 1130F (450C) Maximum Operating pressure 6000 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0) PH Range, continuous operating a 2-11 pH range, short-Term cleaing (30 min) b 1- 13 Maximum Feed silt Density Index (SDI) SDI 5Free Chlorine Tolerance <0.1 ppm The Cost i/c cartage & installation at site .Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD Islamkot. NSI	225,000	P:Mem:	10,800,000
2			Replacement of Media in Sand Vessel with new one as required under the standard specification of RO Plant Rate approved by Director General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI			
	390	Kgs	i) Coarse Sand.	35.00	P:Kg	13,650
	30	Kgs	ii) Fine Sand.	35.00	P:Kg	1,050
	15	Kgs	iii) Glass Grains	1,500.00	P:Kg	22,500
3	300	Kgs	Replacement of Carbon Media Srilanka made or Equivalent (Rate approved by Director General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	850	P:Kg	255,000
					Total - A	11,092,200
		PART - B - (ROUTINE MAINTENANCE)				
1	900	Liters	Anti-scalant dozing Sodium Hypochlorite Citric Acid /CIP Chemicals (Concentration)Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	1,000.00	P:Liters	900,000
2	36.00	Nos	Cartridge Filter slim of 40" (Accomodating 28 Filters to be changed in every month) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 2636 Dated 02-10-2023) NSI	1,000.00	Each	36,000
3	36.00	Nos	Bag Filter of 20" (Accomodating 16 Filters to be changed after 02 months) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 2636 Dated 02-10-2023) NSI	500.00	Each	18,000
4			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greesing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete. NSI			
	2.0	Sets	a)Feed Pump 15 HP (11 KWatt) ESI No :1 P-127)	19,500.00	P:Set	39,000
	2.0	Sets	b)Repair of Sullage pump (NonCollaging) of size of centrifugalKSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
	2.0	Sets	c)High Pressure Pump 60 HP (45 KW) ESI No :1 P-127)	60,000.00	P:Set	120,000
	2.0	Sets	d)Repair of Sullage pump (NonCollaging) of size of centrifugalKSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
5	9819.2	Liters	Consumption of Diesel (M.R) .	270.00	P:Liters	2,651,189
					TOTAL - B	3,863,789
		PART - C - (NON-ROUTINE MAINTENANCE)				
1	6.00	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.I No 19-P-107)	1,800.00	Each	10,800
2	1.00	No	Supply and fixing in position online TDS meter Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	18,000.00	P:No	18,000
3	2.00	Nos	Supply and fixing of 55 KW VFD (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025)	350,000.00	Each	700,000
4	2.00	Nos	Supplying and Fixing of Multimedia Vessel of 42x72size pentair made or Equivalent Rate Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	350,000.00	Each	700,000
5	4.00	Nos	Dosing Pump Capacity 5 Liters at 5 Bar Pressure for dosing Anti Scalent , Sodium Hypochlorite/CIP of FEKO or Equivalent made. Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	30,000.00	Each	120,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
6	4.00	Nos	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	Each	90,000
7	1.00	No	Repair of already installed Electric Panel rate include replacement of burnt contractor, main breaker internal wiring. The payment will be made to contractor upon the submission of receipts for the claims duly signed by the vendor and recommended by the Engineer incharge of the site. (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022) NSI	10,000.00	P.No	10,000
8	1.00	No	150 Kva Genrator Repair (R.A. Approved) NSI .	519,980.00	P.No	519,980
9	100.00	Rft	Providing & laying (Main or Sub main)PVC insulated & PVC sheeted with 4 core copper conductor 600/1000 volts size 16mm2 (ESI No: 80 .P-9)	1,937.18	P:Rft	193,718
10	60.00	Rft	Providing & laying (Main or Sub main)PVC insulated & PVC sheeted with 4 core copper conductor 600/1000 volts size 25mm2 (ESI No: 81 .P-9)	2,538.04	P:Rft	152,282
					TOTAL	2,514,780
		(I) PUMPING MACHINERY @ BORING (02 Nos)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality tobe tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1.'x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I,Pipe with nut botls testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm ²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I/M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
				Total Cost of 02 Nos =		1,839,258
		(II) TUBE WELL (02 Nos)				
1	1.00	Job	Vrertical Electrical rounding test including evoulution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test NSI	25,000.00	P.Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of cashing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P.Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.INO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P.Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P.Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P.Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P.Rft	24,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved).NSI	1,500.00	P:No	1,500
					TOTAL	879,718
				Total Cost of 02 Nos =		1,759,436
ABSTRACT OF COST						
S #	ame of Group			Schedule Item	Non Schedule Item	Total
1	PART - A - ONE TIME REPLACEMENT			-	11,092,200	11,092,200
2	PART - B - (ROUTINE MAINTENANCE)			159,000	3,704,789	3,863,789
3	PART - C - (NON-ROUTINE MAINTENANCE)			1,056,800	1,457,980	2,514,780
4	(I) PUMPING MACHINERY @ BORING (02 Nos)			228,398	1,610,860	1,839,258
5	(II) TUBE WELL (02 Nos)			1,701,036	58,400	1,759,436
			Total	3,145,234	17,924,229	21,069,463
2	REHABILITATION / REPAIR OF RO PLANT AT DAIM JI MIYANI					
			REHABILITATION / REPAIR WORK			
1	3.0	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/tyoe polyamide thin-film composite (TFC) Operating and Cleaning Limits Mzximum Operating Temperature ay 1130F (450C) Maximum Operating pressure 6000 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0) PH Range, continuous operating a 2-11 pH range, short-Term cleaing (30 min) b 1- 13 Maximum Feed silt Density Index (SDI) SDI 5Free Chlorine Tolerance <0.1 ppm The Cost i/c cartage & installation at site .Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	225,000	P:Memb:	675,000
2	1.0	No	Fiber glass tanks of approved quality and make. (Master Brand & Popular Brand)(iii) 500 Gallons (S.S.I No: 3.iii P-109)	39,800.00	P:No	39,800
3	6.0	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.M I No : 31-P-90)	1,800.00	Each	10,800
4	220.0	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051. (PHSI No.1 (d) P-26) 75mm	249.94	P:Rft	54,987
5	2.0	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a 1)P-18 75mm	950	Each	1,900
6	3.0	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b 1)P-18 75mm	1,188	Each	3,564
7	2.0	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d 1)P-19 75mm	1,426.00	Each	2,852
8	2.0	Nos	HDPE-100 END CAP PHE S.M I (11 (c 2)P-18	480.00	Each	960
9	3.0	Nos	Handle Valves (Italy) W.S.I v(25 (6) P-106	1,950.00	Each	5,850
10	3.0	Nos	HDPE-100 REDUCERPHE S.M I (14 (g 1)P-20	725.00	Each	2,175
11	2.0	Nos	Cast Iron Fittings Air valve double acting (Local)PHE S.M I (5 (8)P-74	4,133.34	Each	8,267
12	14.0	Joints	But Fusion Joint. (S.M.I.No. H P/20).	936.00	P:Joint	13,104
13	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemtn. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
14	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq. Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
15	416.00	Sft	Cement plaster (Ratio 1:4) Upto 12' height (3/8" thick) (GSI NO 11 - (a) P.NO: 38)	37.78	P:Sft	15,716
16	416.00	Sft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (b) P.NO: 38)	37.02	P:Sft	15,400
17	264.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividiing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Sft	38,280
18	321.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	147,766
19	416.00	Sft	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40)	62.98	P:Sft	26,200
20	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-45	27.90	P:Sft	21,706
21	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
22	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL	1,502,057
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	REHABILITATION / REPAIR WORK			827,057	675,000	1,502,057
			Total	827,057	675,000	1,502,057
3	REHABILITATION / REPAIR OF RO PLANT AT KHAIR MUHAMMAD JAMALI UC WAHUR					
			REHABILITATION / REPAIR WORK			
1	4.00	Membrane	Replacement of existing UF Membranes size 4"x40" with new membranes having the original made/make of Pall UK or of Equivalent Standard & specification with two (2) year warranty period (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 1803 Dated 16-09-2022) NSI	66,516	P:Mem:	266,064
2	1.00	No	Supply and fixing in position High Pressure pump of 4 HP with motor i/c assembling and labour charges etc complete. Approved by Chief Engineer PHED Hyderabad DB/CE/(O&M)/ 1803 Dated 16-09-2022) NSI	140,000.00	P:No	140,000
3	2.00	Nos	Bag Filter of 20" (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022) NSI	500.00	Each	1,000
					TOTAL	407,064
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	REHABILITATION / REPAIR WORK			-	407,064	407,064
			Total	-	407,064	407,064
4	REHABILITATION / REPAIR OF RO PLANT AT ALI HASSAN SHAHANI					
			REHABILITATION / REPAIR WORK			
1	1.00	No	Supply and fixing of Single phase deep well pump of 1.5 hp double line for boring i/c all accessories labour charges etc complete (R.A approved by Chief Engineer PHED hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022 NSI	25,200	P: No	25,200
2	4.00	Nos	Fiber glass tanks of approved quality and make. (Master Brand & Popular Brand) 500 Gallon (M.S.S.I No: 3.iii P-92)	39,800.00	Each	159,200
3	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8" and 3/4" square bars 4" centre to centre with locking arrangement. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
4	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq. Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
5	416.00	Sft	Cement plaster (Ratio 1:4) Upto 12' height (3/8" thick) (GSI NO 11 - (a) P.NO: 38)	37.78	P:Sft	15,716
	416.00	Sft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (b) P.NO: 38)	37.01	P:Sft	15,396
7	264.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Sft	38,280
8	416.00	Sft	Preparing the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40)	62.98	P:Sft	26,200
9	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 3 P-48)	27.90	P:Sft	21,706
10	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449
11	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL	719,428
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	REHABILITATION / REPAIR WORK			694,228	25,200	719,428
			Total	694,228	25,200	719,428

S #:	Quantity	Description of Item to be executed at site	Rate	Unit	Amount
1	2	3	4	5	6
5	REHABILITATION / REPAIR OF RO PLANT AT GULSHER MAHAR UC WAHUR				
		PART - A R.O PLANT			
	1.00	Supplying / installing fitting and testing reverse osmosis (R.O) plant i/c transportation at site of work. Reverse Osmosis (R.O) Plant 5000 gpd upto 5000 /5000 TDS make by So Safe Water Techno, or equivalent,Pre-Filtration RAW Water Feed Pump 2 HP CNP/CRP (China Make) No.2. So-Safe Sand Filter FRP 20-72 with 3 Way Multiport Valve 1 No.3. So-Safe Carbon Filter FRP 16-65 with 3 Way Multiport Valve No.4. Antisallent Dozing System with Storage Tank (80 Ltrs) 1 No.. So-Safe Reverse Osmosis System with Qty 1 Membranes 8" x 40" 1 Set. Jumbo Housing 20" 2 Nos. Automatic Programmable Logic Control (PLC) 1 No. So-Safe Ultra Violet Sterilizer System UV 870 1 No.. Feed /Product Water Storage Tank 1600 Liters 1 Nos.. Post Pressure Pump 1 No. Pressure Gauges & UPVC Fitting Sch 80 1 Job. Skid Structure (Powder Coded) 1 Nos. Header With Tapes (4 Nos) Superior Quality 1 Job Piping UPVC : Sch-80 Feed / Product Water Storage Tank Capacity : 1600 gallons Qty : 1 Nos Make : Master or equivalent Materia : PE.Float switches Qty : 3 Nos So Safe UV Sterilizer. Sterilization Process The UV sterilizer operates using a low-pressure mercury vapor to produce the UV energy necessary to kill the micro-organisms that can live in our water. There are five major groups of micro-organisms that are destroyed with ultraviolet sterilizers; viruses, bacteria, fungi, algae and protozoa. UV light destroys the DNA structure and prohibits reproduction. Since the cell is now sterilized and cannot reproduce it is considered dead and no longer a threat. Specifications Model: UV 870 Flow: 10 GPM amp: Hardened glass, slim Line Lamp life: 10,000 hours Nominal lamp length: 33.7/8" Power consumption: 39 watts Ultraviolet output: 14 watts Design pressure: 125 psi Operating pressure: 75 psi Inlet outlet: 1" Operating temperature: 35° - 100° F Ultraviolet dosage: 30,000-mw sec/cm² Quantity: 1 No. (UV lamp is protected in a high transmission, pure, fused quartz jacket for peak UV dosage.) Warranty: One year (UV lamp is not warranted as it may be fused due to electric fluctuation) Pressure Gauge & UPVC Fitting Piping & Fitting :- All UPVC(Food Grade) Schedule :- 80 Size :- 1", ¾", ½" Make :- Hydroseal Canada High impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading and access. Low impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading. Unique product water flow meter panel mounted. Automatic R/O membrane flush system. Flush the Reverse Osmosis membranes periodically with raw feed water. Thermal over load motor protection Low-pressure safety cutout switch.Make : Danfoss Poland Heavy-duty high-pressure tubing. Watertight power wiring shrouding. FDA approved components and material. Factory tested and sterilized. Tagging and identification of instrumentation. Export crating. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass. Motor starter pre wired motor starter with start delay.Product Tank full cut out switch. Feed tank low cut out switch Phase sequence change cut out switch. To protect the motor from reverse running.Tank full indicator light High pressures pump trip indication light High pressures pump indication light. Auto manual mode. Feed pump running indication light. Dozing pump running indication light. Voltage indicator. Online tds meter feed and product side. Blending line Carbon filter post side Make: So Safe Size : 13" x 54" Qty: 1 No Type: Manual B2Media: Activated carbon CIP system.This system is required to flush the membrane with the product water as well as use to clean the membranes with chemicals.Tank: 100 gallons, Pump : CNP, Power : 1 hp, Filter : 20" jumbo utilised during the filter cycle. Activate Carbon Granular activated carbon coconut shell based acid washed Made in Malaysia / Sri Lanka Packing : 25 kg bags Antisallent Type: Metering Pump Make: Imported Quantity: 1 No. Chemical tank capacity: 80 gallons Qty: 1 No. Material: PE Reverse Osmosis System Make: So-Safe Model: SS-5,000DX-BWV Maximum feed water: Up to 5000 ppm TDS Temperature: 25° C (+/- 15%) Capacity: 5,000 GPD Electricity: 380 VAC / 50 Hz Rejection: 98% Product water: <200 ppm Special Features of Reverse Osmosis System Lightweight non-corrosive mild steel frame. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn. Size: 20" Jumbo Make : Italy Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, heavy-duty. Make: CNP Material : SS304 High rejection thin film composite FDA approval membrane. DOW chemical. Model : BW30-400 Size : 8" x 40" Make : Dupont/toray/LG/ Suez Qty: 1 no. Automatic operation. Automatic liquid non-corrosive high-pressure regulator valve. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desired high pressure out of the high-pressure pump.Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is utilized during the filter cycle. Filter Media High-grade silica 0.45 mm grade washed and graded. ½", ¾", and 1" in size with accurate bedding in the sand filter shell.So-Safe Granular Activated Carbon Filter Model: FRP-16 Flow rate: 15 US GPM Pressure drop: 5 psi Material of filtration chamber: FRP Test pressure: 150 psi Dia: 16" Height: 54" Inlet & outlet: 1" Valve: multiport valve Threeway	2,761,000		
1	No			P:No	2,761,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
		Special Features Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150. Process GAC (Granular Activated Carbon) used in this filter is specially graded for water purification. It adsorbs most of the organic chemicals, chlorine, insecticides and pesticides etc. It removes odor and gives water a natural taste.Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is Raw Water Feed Pump Quantity: 1 No. Make: CNP/CRP (Make China) Material: SS 304 Horse power: 2 HP Electrical: 380v / 50Hz Flow Rate: 14 GPM So~Safe Pressure Sand Filter Model: FRP-20 Make: So Safe Flow rate: 20 GPM continuous Test pressure: 150 psi Operating pressure: up to 75 psi Pressure drop: 5 psi Filtration chamber: 20" x 72" Media: silica sand, Gravel and anthracite. Material of filtration chamber: FRP Total height: 6 ft Inlet & outlet: 1" Valve: Multiport valve Threeway SPECIAL FEATURES Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150 psi Process The So~Safe pressure sand filter uses a multimedia filtration process. Large particulate matter is captured by coarser, lighter media near the top of the filter bed. Smaller particles continue down to the successive lower media levels where particles as small as 25 microns are retained by finer heavier media. The density differences between the media allows for layer separation after backwashing All Kind of Civil WorkTo provide feed water & product water storage tank nears to system. To provide electric supply 3 phase connection for the system. To provide operator to operate filter & R.O Plant. Replacement of cartridge & R.O maintenance. Food & Accommodation during the work (3 persons). Transportation from Hyderabad to your site.Skid Structure: -Skid :- Lightweight Powder Coded Qty :- 1 Nos.Header with Tapes: -Pipe :- Stainless Steel Size :- 1½" Qty of Header :- 1 No. Tapes :- Superior Qualityty of Tapes :- 4 Nos. NSI				
					TOTAL - A	2,761,000
		(I) TUBE WELL (01 No)				
1	1.00	Job	Vrertical Electrical rounding test including evoulution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of casing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.INO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P:Rft	50,670

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P.Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P.Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P.Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO; 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718
		(II) SOLAR SYSTEM				
1	8250.00	Watt	Providing Installing Solar Plates 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	42.00	P:Watt	346,500
					TOTAL	346,500
		(III) PUMPING MACHINERY @ BORING (01 No)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1.'x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I./M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
		(IV) CIVIL WORK				
1	6.00	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.M I No : 31-P-107)	1,800.00	Each	10,800
2	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8" and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
3	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
4	416.00	Sft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Sft	15,716
5	416.00	Sft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.01	P:Sft	15,396
6	264.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividiing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31).	145.00	P:Sft	38,280
7	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35).	460.33	P:Sft	156,973
8	416.00	Sft	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40).	62.98	P:Sft	26,200
9	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48.	27.90	P:Sft	21,706
10	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48).	13.43	P:Sft	10,449
11	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL	702,801
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A R.O PLANT			-	2,761,000	2,761,000
2	(I) TUBE WELL (01 No)			850,518	29,200	879,718
3	(II) SOLAR SYSTEM			346,500	-	346,500
4	(III) PUMPING MACHINERY @ BORING (01 No)			114,199	805,430	919,629
5	(IV) CIVIL WORK			702,801	-	702,801
	Total			2,014,018	3,595,630	5,609,648
6 REHABILITATION / REPAIR OF RO PLANT AT NANGAR KHAN BROHI UC JAFARABAD						
		PART - A R.O PLANT				
			Supplying / installing fitting and testing reverse osmosis (R.O) plant i/c transportation at site of work. Reverse Osmosis (R.O) Plant 5000 gpd upto 5000 /5000 TDS make by So Safe Water Techno, or equivalent,Pre-Filtration RAW Water Feed Pump 2 HP CNP/CRP (China Make) No.2. So~Safe Sand Filter FRP 20-72 with 3 Way Multiport Valve 1 No.3. So~Safe Carbon Filter FRP 16-65 with 3 Way Multiport Valve No.4. Antisallent Dozing System with Storage Tank (80 Ltrs) 1 No.. So~Safe Reverse Osmosis System with Qty 1 Membranes 8" x 40" 1 Set. Jumbo Housing 20" 2 Nos. Automatic Programmable Logic Control (PLC) 1 No. So~Safe Ultra Violet Sterilizer System UV 870 1 No.. Feed /Product Water Storage Tank 1600 Liters 1 Nos.. Post Pressure Pump 1 No. Pressure Gauges & UPVC Fitting Sch 80 1 Job. Skid Structure (Powder Coded) 1 Nos. Header With Tapes (4 Nos) Superior Quality 1 Job Piping UPVC : Sch-80 Feed / Product Water Storage Tank Capacity : 1600 gallons Qty : 1 Nos Make : Master or equivalent Materia : PE.Float switches Qty : 3 Nos So Safe UV Sterilizer. Sterilization Process The UV sterilizer operates using a low-pressure mercury vapor to produce the UV energy necessary to kill the micro-organisms that can live in our water. There are five major groups of micro-organisms that are destroyed with ultraviolet sterilizers; viruses, bacteria, fungi, algae and protozoa. UV light destroys the DNA structure and prohibits reproduction. Since the cell is now sterilized and cannot reproduce it is considered dead and no longer a threat. Specifications Model: UV 870 Flow: 10 GPM amp: Hardened glass, slim Line Lamp life: 10,000 hours Nominal lamp length: 33.7/8" Power consumption: 39 watts Ultraviolet output: 14 watts Design pressure: 125 psi Operating pressure: 75 psi Inlet outlet: 1" Operating temperature: 35° - 100° F Ultraviolet dosage: 30,000-mw sec/cm² Quantity: 1 No. (UV lamp is protected in a high transmission, pure, fused quartz jacket for peak UV dosage.) Warranty: One year (UV lamp is not warranted as it may be fused due to electric fluctuation) Pressure Gauge & UPVC Fitting Piping & Fitting :- All UPVC(Food Grade) Schedule :- 80 Size :- 1", ¾", ½" Make :- Hydroseal Canada High impact liquid filled pressure gauge 2.5" in			

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
1	1.00	No	diameter mounted on a main control panel for better reading and access. Low impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading. Unique product water flow meter panel mounted. Automatic R/O membrane flush system. Flush the Reverse Osmosis membranes periodically with raw feed water. Thermal over load motor protection Low-pressure safety cutout switch. Make : Danfoss Poland Heavy-duty high-pressure tubing. Watertight power wiring shrouding. FDA approved components and material. Factory tested and sterilized. Tagging and identification of instrumentation. Export crating. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass. Motor starter pre wired motor starter with start delay. Product Tank full cut out switch. Feed tank low cut out switch Phase sequence change cut out switch. To protect the motor from reverse running. Tank full indicator light High pressures pump trip indication light High pressures pump indication light. Auto manual mode. Feed pump running indication light. Dozing pump running indication light. Voltage indicator. Online tds meter feed and product side. Blending line Carbon filter post side Make: So Safe Size : 13" x 54" Qty: 1 No Type: Manual B2Media: Activated carbon CIP system. This system is required to flush the membrane with the product water as well as use to clean the membranes with chemicals. Tank: 100 gallons, Pump : CNP, Power : 1 hp, Filter : 20" jumbo utilised during the filter cycle. Activate Carbon Granular activated carbon coconut shell based acid washed Made in Malaysia / Sri Lanka Packing : 25 kg bags Antisallent Type: Metering Pump Make: Imported Quantity: 1 No. Chemical tank capacity: 80 gallons Qty: 1 No. Material: PE Reverse Osmosis System Make: So~Safe Model: SS-5,000DX-BW Maximum feed water: Up to 5000 ppm TDS Temperature: 25° C (+/- 15%) Capacity: 5,000 GPD Electricity: 380 VAC / 50 Hz Rejection: 98% Product water: <200 ppm Special Features of Reverse Osmosis System Lightweight non-corrosive mild steel frame. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn. Size: 20" Jumbo Make : Italy Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, heavy-duty. Make: CNP Material : SS304 High rejection thin film composite FDA approval membrane. DOW chemical. Model : BW30-400 Size : 8" x 40" Make : Dupont/toray/LG/ Suez Qty: 1 no. Automatic operation. Automatic liquid non-corrosive high-pressure regulator valve. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desired high pressure out of the high-pressure pump. Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is utilized during the filter cycle. Filter Media High-grade silica 0.45 mm grade washed and graded. ½", ¾", and 1" in size with accurate bedding in the sand filter shell. So~Safe Granular Activated Carbon Filter Model: FRP-16 Flow rate: 15 US GPM Pressure drop: 5 psi Material of filtration chamber: FRP Test pressure: 150 psi Dia: 16" Height: 54" Inlet & outlet: 1" Valve: multiport valve Threeway Special Features Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150. Process GAC (Granular Activated Carbon) used in this filter is specially graded for water purification. It adsorbs most of the organic chemicals, chlorine, insecticides and pesticides etc. It removes odor and gives water a natural taste. Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is Raw Water Feed Pump Quantity: 1 No. Make: CNP/CRP (Make China) Material: SS 304 Horse power: 2 HP Electrical: 380v / 50Hz Flow Rate: 14 GPM So~Safe Pressure Sand Filter Model: FRP-20 Make: So Safe Flow rate: 20 GPM continuous Test pressure: 150 psi Operating pressure: up to 75 psi Pressure drop: 5 psi Filtration chamber: 20" x 72" Media: silica sand, Gravel and anthracite. Material of filtration chamber: FRP Total height: 6 ft Inlet & outlet: 1" Valve: Multiport valve Threeway SPECIAL FEATURES Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150 psi Process The So~Safe pressure sand filter uses a multimedia filtration process. Large particulate matter is captured by coarser, lighter media near the top of the filter bed. Smaller particles continue down to the successive lower media levels where particles as small as 25 microns are retained by finer heavier media. The density differences between the media allows for layer separation after backwashing All Kind of Civil Work To provide	2,761,000	P:No	2,761,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
			Feed water & product water storage tank nears to system. To provide electric supply & phase connection for the system. To provide operator to operate filter & R.O Plant. Replacement of cartridge & R.O maintenance. Food & Accommodation during the work (3 persons). Transportation from Hyderabad to your site. Skid Structure: -Skid :- Lightweight Powder Coded Qty :- 1 Nos. Header with Tapes: -Pipe :- Stainless Steel Size :- 1½" Qty of Header :- 1 No. Tapes :- Superior Quality of Tapes :- 4 Nos. NSI			
					TOTAL - A	2,761,000
		(I) TUBE WELL (01 No)				
1	1.00	Job	Vertical Electrical sounding test including evolution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of casing pipe. (P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of strats from bore holes (P.H.S.I.NO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles. (P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHS.I.No.01,P-44)	1,266.76	P:Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHS.I.No.15,P-45)	1,266.76	P:Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P:Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P:Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718
		(II) PUMPING MACHINERY @ BORING (01 No)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P:Set	805,430

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1, P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate having the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.No:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1'.x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I./M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
		(IV) SOLAR SYSTEM				
1	13100.00	Watt	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	42.00	P:Watt	550,200
2	1.00	Job	VFD Drive off-Gird 18 KW 3 phase Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	145,000.00	P:Job	145,000
3	13100.00	Watt	PV Balance of system earth ground mounted structure (6 KW to 10KW) Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	67.00	P:Watt	877,700
4	13100.00	Watt	Complete wiring and installing. Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	20.00	P:Watt	262,000
					TOTAL	1,834,900
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A R.O PLANT			-	2,761,000	2,761,000
2	(I) TUBE WELL (01 No)			850,518	29,200	879,718
3	(II) PUMPING MACHINERY @ BORING (01 No)			114,199	805,430	919,629
4	(IV) SOLAR SYSTEM			1,834,900	-	1,834,900
	Total			2,799,617	3,595,630	6,395,247
7	REHABILITATION / REPAIR OF RO PLANT AT URS PANHYAR UC JAFARABAD					
	PART - A - ONE TIME REPLACEMENT					
1	48	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/type polyamide thin-Film composite (TFC) Operating and Cleaning Limits Maximum Operating Temperature at 113°F (45°C) Maximum Operating pressure 600 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0 bar) pH Range, continuous operation a 2-11 pH range, short-Term cleaning (30 min) b 1-13 Maximum Feed Silt Density Index (SDI) SDI 5 Free Chlorine Tolerance <0.1 ppm (Quotation Attached) The cost i/c cartage & installation at site. NSI	225,000	P:Membr:	10,800,000
2			Replacement of Media in Sand Vessel with new one as required under the standard specification of RO Plant Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 2636 Dated 02-10-2023) NSI			
	390	Kgs	i) Coarse Sand.	35.00	P:Kg	13,650
	30	Kgs	ii) Fine Sand.	35.00	P:Kg	1,050
	15	Kgs	iii) Glass Grains	1,500.00	P:Kg	22,500
3	300	Kgs	Replacement of Carbon Media Srilanka made or Equivalent (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 2636 Dated 02-10-2023) NSI	850.00	P:Kg	255,000
					Total - A	11,092,200

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
		PART - B - (ROUTINE MAINTENANCE)				
1	900	Liters	Anti-scalant dosing Sodium Hypochlorite Citric Acid /CIP Chemicals (Concentration)Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	1,000.00	P:Liters	900,000
2	36.00	Nos	Cartridge Filter slim of 40" (Accommodating 28 Filters to be changed in every month) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/2636 Dated 02-10-2023) NSI	1,000.00	Each	36,000
3	36.00	Nos	Bag Filter of 20" (Accommodating 16 Filters to be changed after 02 months) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/2636 Dated 02-10-2023) NSI	500.00	Each	18,000
4			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greasing, seal replacement, impeller setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete.			
	2.0	Sets	a)Feed Pump 15 HP (11 KWatt) ESI No :1 P-127)	19,500.00	P:Set	39,000
	2.0	Sets	b)Repair of Sullage pump (NonCollaging) of size of centrifugalkSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
	2.0	Sets	c)High Pressure Pump 60 HP (45 KW) ESI No :1 P-127)	60,000.00	P:Set	120,000
	2.0	Sets	d)Repair of Sullage pump (NonCollaging) of size of centrifugalkSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
5	9819.2	Liters	Consumption of Diesel (M.R) .	270.00	P:Liters	2,651,189
					TOTAL - B	3,863,789
		PART - C - (NON-ROUTINE MAINTENANCE)				
1	6.00	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.I No 19-P-107)	1,800.00	Each	10,800
2	1.00	No	Supply and fixing in position online TDS meter Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	18,000.00	P:No	18,000
3	2.00	Nos	Supply and fixing of 55 KW VFD (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025)	350,000.00	Each	700,000
5	4.00	Nos	Dosing Pump Capacity 5 Liters at 5 Bar Pressure for dosing Anti Scalent , Sodium Hypochlorite/CIP of FEKO or Equivalent made. Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	30,000.00	Each	120,000
6	4.00	Nos	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	Each	90,000
9	1.00	No	150 Kva Genrator Repair (R.A Attached) NSI	519,980.00	P:No	519,980
					TOTAL - C	1,458,780
		(I) PUMPING MACHINERY @ BORING (02 Nos)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P:Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO;9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1'.x1.0') copper plate i/c excavation of all kind earth 12" ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut botls testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I/M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
				Total Cost of 2 Nos =		1,839,258
		(II) TUBE WELL (02 Nos)				
1	1.00	Job	Vrterical Electrical rounding test including evoulution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P.Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of cashing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P.Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.INO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P.Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P.Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P.Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P.Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Curryng complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved).	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R.).(Rate approved).	1,500.00	P:No	1,500
					TOTAL	879,718
				Total Cost of 2 Nos =		1,759,436
		(III) REPAIR OF CIVIL WORK				
4	300.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051. (PHE viII (E(f) P-26)	505.07	P:Rft	151,521
5	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a 1)P-18	2,019	Each	4,038
6	2.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b 1)P-18	2,524	Each	5,048
7	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d 4)P-19	3,029.00	Each	6,058
8	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c 1)P-18	730.00	Each	1,460
9	1.00	No	Gate gun metal (Light pattern) SLRM v(24 P-106).	1,850.00	P:No	1,850
10	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g 4)P-20	1,250.00	Each	3,750
11	1.00	No	Cast Iron Fittings Air valve Single acting PHE S.M I (5 (9)P-74	20,130.00	P:No	20,130
12	9.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	1,560.00	P:Joint	14,040
13	96.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	225,158
14	64.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	71,942
17	4000.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Sft	580,000
18	3982.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	1,833,034
21	7200.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	96,696
22	7200.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	64,152
					TOTAL	3,078,877

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A - ONE TIME REPLACEMENT			-	11,092,200	11,092,200
2	PART - B - (ROUTINE MAINTENANCE)			159,000	3,704,789	3,863,789
3	PART - C - (NON-ROUTINE MAINTENANCE)			710,800	747,980	1,458,780
4	(I) PUMPING MACHINERY @ BORING (02 Nos)			228,398	1,610,860	1,839,258
5	(II) TUBE WELL (02 Nos)			1,701,036	58,400	1,759,436
6	(III) REPAIR OF CIVIL WORK			3,078,877	-	3,078,877
	Total			5,878,111	17,214,229	23,092,340
8	REHABILITATION / REPAIR OF RO PLANT AT KOOR MIYANI UC JAFARABAD					
			REHABILITATION / REPAIR WORK			
1	4.00	Membrane	Replacement of existing UF Membranes size 4"x40" with new membranes having the original made/make of Pall UK or of Equivalent Standard & specification with two (2) year warranty period (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 1803 Dated 16-09-2022) NSI	66,516	P:Memb:	266,064
2	1.00	No	Supply and fixing of Multi Media Vessel of Pentair made or Equivalent (16"x 65")(Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 1759 Dated 31-08-2022) NSI	20,300.00	P:No	20,300
3	600.00	Watt	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the 135th Meeting of Standing Rates Committee (SRC) Sindh held on 24th October 2024 Vide No. IV/2-IV-SO(RATES)/2024 Dated 08-11-2024	42.00	P:Watt	25,200
4	1.00	No	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	P:No	22,500
5	1.00	No	Repair of already installed Electric Panel rate include replacement of burnt contractor, main breaker internal wiring. The payment will be made to contractor upon the submission of receipts for the claims duly signed by the vendor and recommended by the Engineer incharge of the site(Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022) NSI	10,000	P:No	10,000
6	1.00	No	Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greasing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 1759 Dated 31-08-2022). NSI	13,500	P:No	13,500
7	180.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051. (PHE VIII (E(f) P-26)	249.94	P:Rft	44,989
8	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a) 1)P-18	950.00	Each	1,900
9	3.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b) 1)P-18	1,188.00	Each	3,564
10	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d) 1)P-19	1,426.00	Each	2,852
12	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c) 1)P-18	480.00	Each	960
13	3.00	Nos	Handle Valves (Italy) W.S.I v(25 (6) P-106	1,950.00	Each	5,850
14	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g) 1)P-20	725.00	Each	2,175
16	2.00	Nos	Cast Iron Fittings Air valve double acting (Local)PHE S.M I (5 (8)P-74	4,133.34	Each	8,267
17	12.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	936.00	P:Joint	11,232
18	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
19	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
20	416.00	Sft	Cement plaster (Ratio 1:4) Upto 12' height (3/8" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Sft	15,716
21	416.00	Sft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.02	P:Sft	15,400
22	264.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Sft	38,280
23	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	156,973
24	416.00	Sft	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40) 02 Coats	62.98	P:Sft	26,200
25	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-45	27.90	P:Sft	21,706
26	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449
27	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL	1,131,358

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	REHABILITATION / REPAIR WORK			773,794	357,564	1,131,358
	Total			773,794	357,564	1,131,358
9	REHABILITATION / REPAIR OF RO PLANT AT SANGPUR UC JAFARABAD					
	PART - A - ONE TIME REPLACEMENT					
1	60	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/type polyamide thin-Film composite (TFC) Operating and Cleaning Limits Maximum Operating Temperature at 113°F (45°C) Maximum Operating pressure 600 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0 bar) pH Range, continuous operation a 2-11 pH range, short-Term cleaning (30 min) b 1-13 Maximum Feed Silt Density Index (SDI) SDI 5 Free Chlorine Tolerance <0.1 ppm (Quotation Attached) The cost i/c cartage & installation at site..Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	225,000	P:Memb:	13,500,000
2			Replacement of Media in Sand Vessel with new one as required under the standard specification of RO Plant.Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI			
	390	Kgs	i) Coarse Sand.	35.00	P:Kg	13,650
	30	Kgs	ii) Fine Sand.	35.00	P:Kg	1,050
	15	Kgs	iii) Glass Grains	1,500.00	P:Kg	22,500
3	300	Kgs	Replacement of Carbon Media Srilanka made or Equivalent .Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	850	P:Kg	255,000
					Total - A	13,792,200
	PART - B - (ROUTINE MAINTENANCE)					
1	1080	Liters	Anti-scalant dozing Sodium Hypochlorite Citric Acid /CIP Chemicals (Concentration)Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	1,000.00	P:Liters	1,080,000
2	36.00	Nos	Cartridge Filter slim of 40" (Accomodating 28 Filters to be changed in every month) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/2636 Dated 02-10-2023) NSI	1,000.00	Each	36,000
3	36.00	Nos	Bag Filter of 20" (Accomodating 16 Filters to be changed after 02 months) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/2636 Dated 02-10-2023) NSI	500.00	Each	18,000
4			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greasing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete.			
	2.0	Sets	a)Feed Pump 15 HP (11 KWatt) ESI No :1 P-127)	19,500.00	P:Set	39,000
	2.0	Sets	b)Repair of Sullage pump (NonCollaging) of size of centrifugalkSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
	2.0	Sets	c)High Pressure Pump 60 HP (45 KW) ESI No :1 P-127)	60,000.00	P:Set	120,000
	2.0	Sets	d)Repair of Sullage pump (NonCollaging) of size of centrifugalkSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
5	9819.2	Liters	Consumption of Diesel (M.R) .	270.00	P:Liters	2,651,189
					TOTAL - B	4,043,789
	PART - C - (NON-ROUTINE MAINTENANCE)					
1	6.00	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.I No 19-P-107)	1,800.00	Each	10,800
2	1.00	No	Supply and fixing in position online TDS meter Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	18,000.00	P:No	18,000
3	1.00	No	Supply and fixing of 55 KW VFD (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025)	350,000.00	P:No	350,000
4	2.00	Nos	Supplying and Fixing fiber glass tank approved quality and design and wall thickness as specified i/c cost of nuts , bolts and fixing in plateform of cement concrete 1:3:6 and make in connections for in let out and ou-let and over lflow pipes etc complete (500 Gallon) (W.S.S.I.No:3,(c),P/92).	39,800.00	Each	79,600

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
5	2.00	Nos	Supply and fixing of Multimedia Vessel of 42x72 size Pentair made or Equivalent Rate Approved by Director General (RO/UF) PHED Hyderabad vide MO DG/Ro/UF /35 Dated 6-03-2025 1.5 MGD NSI	350,000.00	Each	700,000
6	1.00	Nos	Dosing Pump Capacity 5 Liters at 5 Bar Pressure for dosing Anti Scalent , Sodium Hypochlorite/CIP of FEKO or Equivalent made. Rate Approved by Director General (RO/UF) PHED Hyderabad vide MO DG/Ro/UF /35 Dated 6-03-2025 1.5 MGD NSI	30,000.00	Each	30,000
7	2.00	Nos	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved by Director General (RO/UF) PHED Hyderabad vide MO DG/Ro/UF /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	Each	45,000
8	1.00	Job	150 Kva Generator Repair NSI	519,980.00	P:Job	519,980
					TOTAL - C	1,753,380
		(I) PUMPING MACHINERY @ BORING (02 Nos)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR) dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate having of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1'.x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm ²) copper conductor in 3/4" dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I./M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
					Total Cost of 2 Nos =	1,839,258
		(II) TUBE WELL (02 Nos)				
1	1.00	Job	Vrterical Electrical rounding test including evolution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P.Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of casing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P.Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.I.NO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P.Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P.Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P.Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P.Rft	24,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO; 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718
				Total Cost of 2 Nos =		1,759,436
		(III) REPAIR OF CIVIL WORK				
4	300.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051. (PHE viII (E(f) P-26)	505.07	P:Rft	151,521
5	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a 1)P-18	2,019	Each	4,038
6	2.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b 1)P-18	2,524	Each	5,048
7	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d 4)P-19	3,029.00	Each	6,058
8	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c 1)P-18	730.00	Each	1,460
9	1.00	No	Gate gun metal (Light pattern) SLRM v(24 P-106).	1,850.00	P:No	1,850
10	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g 4)P-20	1,250.00	Each	3,750
11	1.00	No	Cast Iron Fittings Air valve Single acting PHE S.M I (5 (9)P-74	20,130.00	P:No	20,130
12	9.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	1,560.00	P:Joint	14,040
13	96.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	225,158
14	64.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	71,942
17	4000.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividiing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Sft	580,000
18	3982.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	1,833,034
21	7200.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	96,696
22	7200.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	64,152
					TOTAL	3,078,877
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A - ONE TIME REPLACEMENT			-	13,792,200	13,792,200
2	PART - B - (ROUTINE MAINTENANCE)			159,000	3,884,789	4,043,789
3	PART - C - (NON-ROUTINE MAINTENANCE)			440,400	1,312,980	1,753,380
4	(I) PUMPING MACHINERY @ BORING (02 Nos)			228,398	1,610,860	1,839,258
5	(II) TUBE WELL (02 Nos)			1,701,036	58,400	1,759,436
6	(III) REPAIR OF CIVIL WORK			3,078,877	-	3,078,877
	Total			5,607,711	20,659,229	26,266,940
10	REHABILITATION / REPAIR OF RO PLANT AT SOBHO KHAN LUND / PARTO KHAN LUND UC JAFARABAD					
		REPAIR & REHABILITATION WORK				
1	1.00	Membrane	Replacement of existing UF Membranes size 4"x40" with new membranes having the original made/make of Pall UK or of Equivalent Standard & specification with two (2) year warranty period (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 1803 Dated 16-09-2022) NSI	66,516	P:Membr:	66,516
2	2.00	Nos	Fiber glass tanks of approved quality and make. (Master Brand & Popular Brand) 500 Gallon (M.S.S.I No: 3.iii P-92) NSI	39,800.00	Each	79,600
3	1650.00	Watts	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the 135th Meeting of Standing Rates Committee (SRC) Sindh held on 24th October 2024 Vide No. IV/2-IV-SO(RATES)/2024 Dated 08-11-2024	42.00	P:Watt	69,300
4	180.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051. (PHSI No 101 P-26)	249.94	P:Rft	44,989
5	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a 1)P-18 75mm	950	Each	1,900
6	3.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b 1)P-18 75mm	1,188	Each	3,564

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
7	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d 1)P-19 75mm	1,426.00	Each	2,852
8	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c 2)P-18	480.00	Each	960
9	3.00	Nos	Handle Valves (Italy) W.S.I v(25 (6) P-106	1,950.00	Each	5,850
10	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g 1)P-20	725.00	Each	2,175
11	2.00	Nos	Cast Iron Fittings Air valve double acting (Local)PHE S.M I (5 (8)P-74	4,133.34	Each	8,267
12	14.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	936.00	P:Joint	13,104
13	1.00	No	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	Each	22,500
14	1.00	No	Repair of already installed Electric Panel rate include replacement of burnt contractor, main breaker internal wiring. The payment will be made to contractor upon the submission of receipts for the claims duly signed by the vendor and recommended by the Engineer incharge of the site. (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022) NSI	10,000.00	Each	10,000
15	1.00	No	Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greasing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete. (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1803 Dated 16-09-2022) NSI (Grundfos/EU or Equivalent a) High Pressure Pump 3 HP	18,000.00	Each	18,000
16	1.00	No	Supply and fixing of VFD Drive Off-Grid of 7.5 KW 3 Phase (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025)	110,000.00	P:No	110,000
					TOTAL	459,577
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	REPAIR & REHABILITATION WORK			163,261	296,316	459,577
	Total			163,261	296,316	459,577
11	REHABILITATION / REPAIR OF RO PLANT AT WALI MUHAMMAD RODHRANI UC JAFARABAD					
	PART - A R.O PLANT					
			Supplying / installing fitting and testing reverse osmosis (R.O) plant i/c transportation at site of work. Reverse Osmosis (R.O) Plant 5000 gpd upto 5000 /5000 TDS make by So Safe Water Techno, or equivalent,Pre-Filtration RAW Water Feed Pump 2 HP CNP/CRP (China Make) No.2. So-Safe Sand Filter FRP 20-72 with 3 Way Multiport Valve 1 No.3. So-Safe Carbon Filter FRP 16-65 with 3 Way Multiport Valve No.4. Antisallent Dozing System with Storage Tank (80 Ltrs) 1 No.. So-Safe Reverse Osmosis System with Qty 1 Membranes 8" x 40" 1 Set. Jumbo Housing 20" 2 Nos. Automatic Programmable Logic Control (PLC) 1 No. So-Safe Ultra Violet Sterilizer System UV 870 1 No.. Feed /Product Water Storage Tank 1600 Liters 1 Nos.. Post Pressure Pump 1 No. Pressure Gauges & UPVC Fitting Sch 80 1 Job. Skid Structure (Powder Coded) 1 Nos. Header With Tapes (4 Nos) Superior Quality 1 Job Piping UPVC : Sch-80 Feed / Product Water Storage Tank Capacity : 1600 gallons Qty : 1 Nos Make : Master or equivalent Materia : PE.Float switches Qty : 3 Nos So Safe UV Sterilizer. Sterilization Process The UV sterilizer operates using a low-pressure mercury vapor to produce the UV energy necessary to kill the micro-organisms that can live in our water. There are five major groups of micro-organisms that are destroyed with ultraviolet sterilizers; viruses, bacteria, fungi, algae and protozoa. UV light destroys the DNA structure and prohibits reproduction. Since the cell is now sterilized and cannot reproduce it is considered dead and no longer a threat. Specifications Model: UV 870 Flow: 10 GPM amp: Hardened glass, slim Line Lamp life: 10,000 hours Nominal lamp length: 33.7/8" Power consumption: 39 watts Ultraviolet output: 14 watts Design pressure: 125 psi Operating pressure: 75 psi Inlet outlet: 1" Operating temperature: 35° - 100° F Ultraviolet dosage: 30,000-mw sec/cm² Quantity: 1 No. (UV lamp is protected in a high transmission, pure, fused quartz jacket for peak UV dosage.) Warranty: One year (UV lamp is not warranted as it may be fused due to electric fluctuation) Pressure Gauge & UPVC Fitting Piping & Fitting :- All UPVC(Food Grade) Schedule :- 80 Size :- 1", ¾", ½" Make :- Hydroseal Canada High impact liquid filled pressure gaeue 2.5" in			

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
1	1.00	No	diameter mounted on a main control panel for better reading and access. Low impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading. Unique product water flow meter panel mounted. Automatic R/O membrane flush system. Flush the Reverse Osmosis membranes periodically with raw feed water. Thermal over load motor protection Low-pressure safety cutout switch. Make : Danfoss Poland Heavy-duty high-pressure tubing. Watertight power wiring shrouding. FDA approved components and material. Factory tested and sterilized. Tagging and identification of instrumentation. Export crating. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass. Motor starter pre wired motor starter with start delay. Product Tank full cut out switch. Feed tank low cut out switch Phase sequence change cut out switch. To protect the motor from reverse running. Tank full indicator light High pressures pump trip indication light High pressures pump indication light. Auto manual mode. Feed pump running indication light. Dozing pump running indication light. Voltage indicator. Online tds meter feed and product side. Blending line Carbon filter post side Make: So Safe Size : 13" x 54" Qty: 1 No Type: Manual B2Media: Activated carbon CIP system. This system is required to flush the membrane with the product water as well as use to clean the membranes with chemicals. Tank: 100 gallons, Pump : CNP, Power : 1 hp, Filter : 20" jumbo utilised during the filter cycle. Activate Carbon Granular activated carbon coconut shell based acid washed Made in Malaysia / Sri Lanka Packing : 25 kg bags Antisallent Type: Metering Pump Make: Imported Quantity: 1 No. Chemical tank capacity: 80 gallons Qty: 1 No. Material: PE Reverse Osmosis System Make: So~Safe Model: SS-5,000DX-BW Maximum feed water: Up to 5000 ppm TDS Temperature: 25° C (+/- 15%) Capacity: 5,000 GPD Electricity: 380 VAC / 50 Hz Rejection: 98% Product water: <200 ppm Special Features of Reverse Osmosis System Lightweight non-corrosive mild steel frame. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn. Size: 20" Jumbo Make : Italy Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, heavy-duty. Make: CNP Material : SS304 High rejection thin film composite FDA approval membrane. DOW chemical. Model : BW30-400 Size : 8" x 40" Make : Dupont/toray/LG/ Suez Qty: 1 no. Automatic operation. Automatic liquid non-corrosive high-pressure regulator valve. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desired high pressure out of the high-pressure pump. Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is utilized during the filter cycle. Filter Media High-grade silica 0.45 mm grade washed and graded. ½", ¾", and 1" in size with accurate bedding in the sand filter shell. So~Safe Granular Activated Carbon Filter Model: FRP-16 Flow rate: 15 US GPM Pressure drop: 5 psi Material of filtration chamber: FRP Test pressure: 150 psi Dia: 16" Height: 54" Inlet & outlet: 1" Valve: multiport valve Threeway Special Features Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150. Process GAC (Granular Activated Carbon) used in this filter is specially graded for water purification. It adsorbs most of the organic chemicals, chlorine, insecticides and pesticides etc. It removes odor and gives water a natural taste. Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is Raw Water Feed Pump Quantity: 1 No. Make: CNP/CRP (Make China) Material: SS 304 Horse power: 2 HP Electrical: 380v / 50Hz Flow Rate: 14 GPM So~Safe Pressure Sand Filter Model: FRP-20 Make: So Safe Flow rate: 20 GPM continuous Test pressure: 150 psi Operating pressure: up to 75 psi Pressure drop: 5 psi Filtration chamber: 20" x 72" Media: silica sand, Gravel and anthracite. Material of filtration chamber: FRP Total height: 6 ft Inlet & outlet: 1" Valve: Multiport valve Threeway SPECIAL FEATURES Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150 psi Process The So~Safe pressure sand filter uses a multimedia filtration process. Large particulate matter is captured by coarser, lighter media near the top of the filter bed. Smaller particles continue down to the successive lower media levels where particles as small	2,761,000	P:No	2,761,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
			at 25 microns are retained by finer heavier media. The density differences between the media allows for layer separation after backwashing All Kind of Civil WorkTo provide feed water & product water storage tank nears to system. To provide electric supply 3 phase connection for the system. To provide operator to operate filter & R.O Plant. Replacement of cartridge & R.O maintenance. Food & Accommodation during the work (3 persons). Transportation from Hyderabad to your site.Skid Structure: -Skid :- Lightweight Powder Coded Qty :- 1 Nos.Header with Tapes: -Pipe :- Stainless Steel Size :- 1½" Qty of Header :- 1 No. Tapes :- Superior Quality of Tapes :- 4 Nos. NSI			
					TOTAL - A	2,761,000
		(I) TUBE WELL (01 No)				
1	1.00	Job	Vrertical Electrical rounding test including evoulution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of cashing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.I.NO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P:Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P:Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P:Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P:Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718
		(II) PUMPING MACHINERY @ BORING (01 No)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P:Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality tobe tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P:Rft	12,821

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M))-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1.'x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm ²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M))-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I/M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
		(III) SOLAR PANEL				
1	8250.00	Watt	Providing Installing Solar Panel 330 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	42.00	P:Watt	346,500
					TOTAL	346,500
		(IV) REPAIR WORK				
1	6.00	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.M I No : 31-P-107)	1,800.00	Each	10,800
2	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
3	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq. Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
4	416.00	Sft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Sft	15,716
5	416.00	Sft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.01	P:Sft	15,396
6	264.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividiing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31).	145.00	P:Sft	38,280
7	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35).	460.33	P:Sft	156,973
8	416.00	Sft	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40).	62.98	P:Sft	26,200
9	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48.	27.90	P:Sft	21,706
10	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48).	13.43	P:Sft	10,449
11	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL	702,801
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A R.O PLANT			-	2,761,000	2,761,000
2	(I) TUBE WELL (01 No)			850,518	29,200	879,718
3	(II) PUMPING MACHINERY @ BORING (01 No)			114,199	805,430	919,629
4	(III) SOLAR PANEL			346,500	-	346,500
5	(IV) REPAIR WORK			702,801	-	702,801
	Total			2,014,018	3,595,630	5,609,648

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
12	REHABILITATION / REPAIR OF RO PLANT AT IBRAHIM RODHRANI UC JAFARABAD					
		PART - A REPAIR WORK				
1	2.00	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/tyoe polyamide thin-film composite (TFC) Operating and Cleaning Limits Mzximum Operating Temperature ay 1130F (450C) Maximum Operating pressure 6000 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0) PH Range, continuous operating a 2-11 pH range, short-Term cleaing (30 min) b 1- 13 Maximum Feed silt Density Index (SDI) SDI 5Free Chlorine Tolerance <0.1 ppm The Cost i/c cartage & installation at site .Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	225,000	P:Mem:	450,000
2	1.00	No	Fiber glass tanks of approved quality and make. (Master Brand & Popular Brand)(iii) 500 Gallons (S.S.I No: 3.iii P-55)	39,800.00	P:No	39,800
3	1.00	No	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	P:No	22,500
4	1.00	No	Repair of already installed Electric Panel rate include replacement of burnt contractor, main breaker internal wiring. The payment will be made to contractor upon the submission of receipts for the claims duly signed by the vendor and recommended by the Engineer incharge of the site. (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022) NSI	10,000.00	P:No	10,000
5			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greesing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete. (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1803 Dated 16-09-2022) NSI (Grundfos/EU or Equivalent			
6	1.00	No	a)Feed Pump 2 HP	15,000	Each	15,000
7	1.00	No	b) High Pressure Pump 4 HP	18,000.00	Each	18,000
					TOTAL - A	555,300
		(I) PUMP ROOM (SIZE 25' x 15') (01 No)				
1	423.63	Cft	Excavation in foundation of building bridges & other structures i/c dag-belling dressing refilling around the structure with excavated earth watering ramming lead upto one chain & lift up to 5 ft (CSI.No.18 P-3)	11.88	P:Cft	5,033
2	255.07	Cft	Cement Concrete bricks or stone ballast 1 1/2" to 2" gauge ratio 1:4:8 (GSI No:4 P10)	296.69	P:Cft	75,677
3	868.50	Sft	Errection and removal of centering for R.C.C or plain cement concrete works of deodar wood)2nd class)(for partal wood) (Vertical) (G.S.I.NO:19(b),P/13)	106.48	P:Sft	92,478
4	457.88	Cft	Cement concrete plain i/c placing compacting finishing and curing complete(i/c screening and washing of stone aggregate without shuttering (G.S.I.NO:5(f)P/11). (Ratio 1:3:6)	388.67	P:Cft	177,964
5	652.88	Cft	Pucca Brick work in ground floor i/c striking of joints in cement sand mortar 1:6 (CSI No:5 P-16)	381.18	P:Cft	248,865
6	48.00	Sft	Making and fixing steel grated door complete with Locking arrangement angle iron frame 2" x 2" 3/8" & 3/4" sq bars 4" centre to centre (CSI NO.23 P-63)	2,345.40	P:Sft	112,579
7	4.00	Cwt	Fabrication of heavy steel work with angles tees flat iron round iron and sheet iron for making trusses girders tanks etc i/c cutting diverting handling assembling and fixing but excluding erection in position(GSIN:2,(a) P-62).	20,366.45	P:Cwt	81,466
8	4.00	Cwt	Erection and fitting in position of iron trusses staging of water Tanks etc (G S I No: 5 P 68)	824.85	P:Cwt	3,299
9	421.84	Cft	R.C.C work i/c all labour and material except the cost of steel; reinforcement and its labour for bending and binding which will be paid seperately. This rates also i/c all kinds forms moduls lifitting shuttering ;curing rendering and finishing the exposed surface i/c screening and washing of shingle (a) RC work in roof slab beas coloumns rafts lintles and other structural member laid in situ or precast laid in position in all respect ratio(1:2:4) 90 lbs cement 2 cft sand 4 cft shingle 1/8" to 1/4" guage (G.S.I.NO:6 (i) P/11)	717.59	P:Cft	302,708
10	18.83	Cwt	Fabrication of mild steel reinforcement for cement concrete i/c cutting bending laying in position making joints and fastening i/c cost of binding wire also includes removal of rust from bars (CSI NO.7 P-12)	18,271.01	P:Cwt	344,043
11	137.92	Sft	Supplying & Fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc, complete (weight not to be less than 3.7 lbs/sq foot of finished grill (GSI.No.26 P/63)	1,124.40	P:Sft	155,077
12	1355.15	Cft	Filling watering and ramming earth under floor with surpuse eart from foundation lead up to one chaina and lift upto 5 ft (GSINO: 21 P/3)	6.50	P:Cft	8,808

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
13	964.875	Sft	Providing and laying 2" thick topping cement concrete(1:2:4)i/c surface finishing and dividing into panels (GSI.No.13 P/31)	108.75	P:Sft	104,930
14	1443.08	Sft	Cement plaster (1:4) upto 12'ft height 3/8" thick (G.S.I.No. 11 (a) P/38).	37.78	P:Sft	54,520
15	1443.08	Sft	Cement plaster (1:6) upto 12'ft height 1/2"thick (G.S.I.No. 13 (b) P/38).	37.02	P:Sft	53,423
16	2886.16	Sft	Floating coat of cement (GSI No: 14 P-38)	22.63	P:Sft	65,314
17	945.08	Sft	Laying floors of approved with glazed tiles 1/4" thick floor of approved colour and size jointing with white cement and laid over 1:2 cement sand mortar 3/4" thick including grouting with maching colour and finishing etc complete (GSI No 25 P/31)	325.40	P:Sft	307,529
18	371.84	Sft	Preparing and painting of doors & windows any type i/c edge (GSI No 5 P-49) Three Coats	25.52	P:Sft	9,489
19	1967.33	Sft	Priming coat of chalk (GSI.NO.23 P-39)	3.59	P:Sft	7,063
20	514.08	Sft	Distempering two coats (GSINO:24 P-39)	17.23	P:Sft	8,858
21	779.0	Sft	Providing and fixing GUTKA BRICK facing 2-1/2"x9"x2-1/4" size of approve design set in cement mortar 1:3 i/c filling the joints with white cement slurry colour pigment for making i/c levelling smooth finishing curring and scaffolding etc complete as per specification and directed by the Engineer Incharge (GSI No 103).	531.28	P:Sft	413,867
					TOTAL	2,632,990
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A REPAIR WORK			39,800	515,500	555,300
2	(I) PUMP ROOM (SIZE 25' x 15') (01 No)			2,632,990	-	2,632,990
	Total			2,672,790	515,500	3,188,290
13	REHABILITATION / REPAIR OF RO PLANT AT MOULA BUX MALLAH UC BUBAK TALUKA SEHWAN DISTRICT JAMSHORO					
	PART - A R.O PLANT					
			Supplying / installing fitting and testing reverse osmosis (R.O) plant i/c transportation at site of work. Reverse Osmosis (R.O) Plant 5000 gpd upto 5000 /5000 TDS make by So Safe Water Techno, or equalivent,Pre-Filtration RAW Water Feed Pump 2 HP CNP/CRP (China Make) No.2. So-Safe Sand Filter FRP 20-72 with 3 Way Multiport Valve 1 No.3. So-Safe Carbon Filter FRP 16-65 with 3 Way Multiport Valve No.4. Antisallent Dosing System with Storage Tank (80 Ltrs) 1 No.. So-Safe Reverse Osmosis System with Qty 1 Membranes 8" x 40" 1 Set. Jumbo Housing 20" 2 Nos. Automatic Programmable Logic Control (PLC) 1 No. So-Safe Ultra Violet Sterilizer System UV 870 1 No.. Feed /Product Water Storage Tank 1600 Liters 1 Nos.. Post Pressure Pump 1 No. Pressure Gauges & UPVC Fitting Sch 80 1 Job. Skid Structure (Powder Coded) 1 Nos. Header With Tapes (4 Nos) Superior Quality 1 Job Piping UPVC : Sch-80 Feed / Product Water Storage Tank Capacity : 1600 gallons Qty : 1 Nos Make : Master or equivalent Materia : PE.Float switches Qty : 3 Nos So Safe UV Sterilizer. Sterilization Process The UV sterilizer operates using a low-pressure mercury vapor to produce the UV energy necessary to kill the micro-organisms that can live in our water. There are five major groups of micro-organisms that are destroyed with ultraviolet sterilizers; viruses, bacteria, fungi, algae and protozoa. UV light destroys the DNA structure and prohibits reproduction. Since the cell is now sterilized and cannot reproduce it is considered dead and no longer a threat. Specifications Model: UV 870 Flow: 10 GPM amp: Hardened glass, slim Line Lamp life: 10,000 hours Nominal lamp length: 33.7/8" Power consumption: 39 watts Ultraviolet output: 14 watts Design pressure: 125 psi Operating pressure: 75 psi Inlet outlet: 1" Operating temperature: 35° - 100° F Ultraviolet dosage: 30,000-mw sec/cm² Quantity: 1 No. (UV lamp is protected in a high transmission, pure, fused quartz jacket for peak UV dosage.) Warranty: One year (UV lamp is not warranted as it may be fused due to electric fluctuation) Pressure Gauge & UPVC Fitting Piping & Fitting :- All UPVC(Food Grade) Schedule :- 80 Size :- 1", ¾", ½" Make :- Hydroseal Canada High impact liquid filled pressure gauge 2.5" in			

S #:	Quantity	Description of Item to be executed at site	Rate	Unit	Amount
1	2	3	4	5	6
1	1.00	No diameter mounted on a main control panel for better reading and access. Low impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading. Unique product water flow meter panel mounted. Automatic R/O membrane flush system. Flush the Reverse Osmosis membranes periodically with raw feed water. Thermal over load motor protection Low-pressure safety cutout switch. Make : Danfoss Poland Heavy-duty high-pressure tubing. Watertight power wiring shrouding. FDA approved components and material. Factory tested and sterilized. Tagging and identification of instrumentation. Export crating. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass. Motor starter pre wired motor starter with start delay. Product Tank full cut out switch. Feed tank low cut out switch Phase sequence change cut out switch. To protect the motor from reverse running. Tank full indicator light High pressures pump trip indication light High pressures pump indication light. Auto manual mode. Feed pump running indication light. Dozing pump running indication light. Voltage indicator. Online tds meter feed and product side. Blending line Carbon filter post side Make: So Safe Size : 13" x 54" Qty: 1 No Type: Manual B2Media: Activated carbon CIP system. This system is required to flush the membrane with the product water as well as use to clean the membranes with chemicals. Tank: 100 gallons, Pump : CNP, Power : 1 hp, Filter : 20" jumbo utilised during the filter cycle. Activate Carbon Granular activated carbon coconut shell based acid washed Made in Malaysia / Sri Lanka Packing : 25 kg bags Antisallent Type: Metering Pump Make: Imported Quantity: 1 No. Chemical tank capacity: 80 gallons Qty: 1 No. Material: PE Reverse Osmosis System Make: So~Safe Model: SS-5,000DX-BW Maximum feed water: Up to 5000 ppm TDS Temperature: 25° C (+/- 15%) Capacity: 5,000 GPD Electricity: 380 VAC / 50 Hz Rejection: 98% Product water: <200 ppm Special Features of Reverse Osmosis System Lightweight non-corrosive mild steel frame. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn. Size: 20" Jumbo Make : Italy Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, heavy-duty. Make: CNP Material : SS304 High rejection thin film composite FDA approval membrane. DOW chemical. Model : BW30-400 Size : 8" x 40" Make : Dupont/toray/LG/ Suez Qty: 1 no. Automatic operation. Automatic liquid non-corrosive high-pressure regulator valve. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desired high pressure out of the high-pressure pump. Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is utilized during the filter cycle. Filter Media High-grade silica 0.45 mm grade washed and graded. ½", ¾", and 1" in size with accurate bedding in the sand filter shell. So~Safe Granular Activated Carbon Filter Model: FRP-16 Flow rate: 15 US GPM Pressure drop: 5 psi Material of filtration chamber: FRP Test pressure: 150 psi Dia: 16" Height: 54" Inlet & outlet: 1" Valve: multiport valve Threeway Special Features Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron.	2,761,000	P:No	2,761,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
		Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150. Process GAC (Granular Activated Carbon) used in this filter is specially graded for water purification. It adsorbs most of the organic chemicals, chlorine, insecticides and pesticides etc. It removes odor and gives water a natural taste. Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is Raw Water Feed Pump Quantity: 1 No. Make: CNP/CRP (Make China) Material: SS 304 Horse power: 2 HP Electrical: 380v / 50Hz Flow Rate: 14 GPM So-Safe Pressure Sand Filter Model: FRP-20 Make: So Safe Flow rate: 20 GPM continuous Test pressure: 150 psi Operating pressure: up to 75 psi Pressure drop: 5 psi Filtration chamber: 20" x 72" Media: silica sand, Gravel and anthracite. Material of filtration chamber: FRP Total height: 6 ft Inlet & outlet: 1" Valve: Multiport valve Threeway SPECIAL FEATURES Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150 psi Process The So-Safe pressure sand filter uses a multimedia filtration process. Large particulate matter is captured by coarser, lighter media near the top of the filter bed. Smaller particles continue down to the successive lower media levels where particles as small as 25 microns are retained by finer heavier media. The density differences between the media allows for layer separation after backwashing All Kind of Civil Work To provide feed water & product water storage tank nears to system. To provide electric supply 3 phase connection for the system. To provide operator to operate filter & R.O Plant. Replacement of cartridge & R.O maintenance. Food & Accommodation during the work (3 persons). Transportation from Hyderabad to your site. Skid Structure: -Skid :- Lightweight Powder Coded Qty :- 1 Nos. Header with Tapes: -Pipe :- Stainless Steel Size :- 1½" Qty of Header :- 1 No. Tapes :- Superior Quality of Tapes :- 4 Nos. NSI				
					TOTAL - A	2,761,000
		(I) TUBE WELL (01 No)				
1	1.00	Job	Vertical Electrical rounding test including evolution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of casing pipe. (P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of strats from bore holes (P.H.S.I.NO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles. (P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P:Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P:Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P:Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P:Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap for Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
		(II) PUMPING MACHINERY @ BORING (01 No)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO;9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P.No	6,500
6	1	No	P/F Earthing Set (1.'x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I,Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P.No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm ²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P.No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I./M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO;1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
		(III) SOLAR SYSTEM				
1	13100.00	Watt	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	42.00	P:Watt	550,200
2	1.00	Job	VFD Drive off-Gird 18 KW 3 phase Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	145,000.00	P:Job	145,000
3	13100.00	Watt	PV Balance of system earth ground mounted structure (6 KW to 10KW) Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	67.00	P:Watt	877,700
4	13100.00	Watt	Complete wiring and installing. Rate approved in the decision of the Standing Rates Committee (SRC) Sindh.	20.00	P:Watt	262,000
					TOTAL	1,834,900
		(IV) REPAIR WORK				
1	6.00	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.M I No : 31-P-107)	1,800.00	Each	10,800
2	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8" and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
3	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
4	416.00	Sft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Sft	15,716
5	416.00	Sft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.02	P:Sft	15,400
6	264.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividiing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31).	145.00	P:Sft	38,280
7	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35).	460.33	P:Sft	156,973

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
8	416.00	Sft	Preparing the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40).	39.38	P:Sft	16,382
9	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48.	27.90	P:Sft	21,706
10	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48).	13.43	P:Sft	10,449
11	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL	692,987
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A R.O PLANT			-	2,761,000	2,761,000
2	(I) TUBE WELL (01 No)			850,518	29,200	879,718
3	(II) PUMPING MACHINERY @ BORING (01 No)			114,199	805,430	919,629
4	(III) SOLAR SYSTEM			1,834,900	-	1,834,900
5	(IV) REPAIR WORK			692,987	-	692,987
	Total			3,492,604	3,595,630	7,088,234
14	REHABILITATION / REPAIR OF RO PLANT AT BUBAK UC BUBAK					
	PART - A - ONE TIME REPLACEMENT					
1	60	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/type polyamide thin-Film composite (TFC) Operating and Cleaning Limits Maximum Operating Temperature at 113°F (45°C) Maximum Operating pressure 600 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0 bar) pH Range, continuous operation a 2-11 pH range, short-Term cleaning (30 min) b 1-13 Maximum Feed Silt Density Index (SDI) SDI 5 Free Chlorine Tolerance <0.1 ppm (Quotation Attached) The cost i/c cartage & installation at site..Rate Approved by Director General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	225,000	P:Memb:	13,500,000
2			Replacement of Media in Sand Vessel with new one as required under the standard specification of RO Plant.Rate Approved by Director General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI			
	390	Kgs	i) Coarse Sand.	35.00	P:Kg	13,650
	30	Kgs	ii) Fine Sand.	35.00	P:Kg	1,050
	15	Kgs	iii) Glass Grains	1,500.00	P:Kg	22,500
3	300	Kgs	Replacement of Carbon Media Srilanka made or Equivalent .Rate Approved by Director General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	850	P:Kg	255,000
					Total - A	13,792,200
	PART - B - (ROUTINE MAINTENANCE)					
1	1080	Liters	Anti-scalant dosing Sodium Hypochlorite Citric Acid /CIP Chemicals (Concentration)Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	1,000.00	P:Liters	1,080,000
2	36.00	Nos	Cartridge Filter slim of 40" (Accommodating 28 Filters to be changed in every month) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/2636 Dated 02-10-2023) NSI	1,000.00	Each	36,000
3	36.00	Nos	Bag Filter of 20" (Accommodating 16 Filters to be changed after 02 months) (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/2636 Dated 02-10-2023) NSI	500.00	Each	18,000
4			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greasing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete.			
	2.0	Sets	a)Feed Pump 15 HP (11 KWatt) ESI No :1 P-127)	19,500.00	P:Set	39,000
	2.0	Sets	b)Repair of Sullage pump (NonCollaging) of size of centrifugalKSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
	2.0	Sets	c)High Pressure Pump 60 HP (45 KW) ESI No :1 P-127)	60,000.00	P:Set	120,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
	2.0	Sets	d)Repair of Sullage pump (NonCollaging) of size of centrifugalkSB type various size i/c bearing shaft Gland bushes and router i/c all labour charging etc complete and taking out the pump from its fixed position,refitting the same to its original position testing ofhead one week etc complete (all sizes) (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/DWE/ 2100 Dated 30-10-2019) NSI	24,900.00	P:Set	49,800
5	9819.2	Liters	Consumption of Diesel (M.R) .	270.00	P:Liters	2,651,189
					TOTAL - B	4,043,789
PART - C - (NON-ROUTINE MAINTENANCE)						
1	6.00	Nos	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.I No 19-P-107)	1,800.00	Each	10,800
2	1.00	No	Supply and fixing in position online TDS meter Rate Approved by Chief Engineer PHED Hyderabad vide NO.DB /CE/O&M /1803 Dated 16-09-2022. NSI	18,000.00	P:No	18,000
3	1.00	No	Supply and fixing of 55 KW VFD (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025)	350,000.00	P:No	350,000
4	2.00	Nos	Supplying and Fixing fiber glass tank approved quality and design and wall thickness as specified i/c cost of nuts , bolts and fixing in plateform of cement concrete 1:3:6 and make in connections for in let out and ou-let and over lflow pipes etc complete (500 Gallon) (W.S.S.I.No:3,(c),P/92).	39,800.00	Each	79,600
5	2.00	Nos	Supply and fixing of Multimedia Vessel of 42x72 size Pentair made or Equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	350,000.00	Each	700,000
6	1.00	Nos	Dosing Pump Capacity 5 Liters at 5 Bar Pressure for dosing Anti Scalent , Sodium Hypochlorite/CIP of FEKO or Equivalent made. Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	30,000.00	Each	30,000
7	2.00	Nos	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	Each	45,000
8	1.00	Job	150 Kva Genrator Repair (R.A Attached). NSI	519,980.00	P:Job	519,980
					TOTAL - C	1,753,380
(I) PUMPING MACHINERY @ BORING (02 Nos)						
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1, P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.No:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1.'x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I,Pipe with nut botls testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P/12)	360.00	Each	2,405
10	7	Joints	Jointing C.I./M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
				Total Cost of 2 Nos =		1,839,258

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
		(II) TUBE WELL (02 Nos)				
1	1.00	Job	Vrterical Electrical rounding test including evoulution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of cashing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.INO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P:Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P:Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P:Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P:Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Curryng complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718
				Total Cost of 02 Nos =		1,759,436
		(III) REPAIR OF CIVIL WORK				
4	300.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051. (PHE vIII (E(f) P-26)	505.07	P:Rft	151,521
5	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a 1)P-18	2,019	Each	4,038
6	2.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b 1)P-18	2,524	Each	5,048
7	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d 4)P-19	3,029.00	Each	6,058
8	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c 1)P-18	730.00	Each	1,460
9	3.00	Nos	Gate gun metal (Light pattern) SLRM v(24 P-106).	1,950.00	Each	5,850
10	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g 4)P-20	725.00	Each	2,175
11	1.00	No	Cast Iron Fittings Air valve Single acting PHE S.M I (5 (9)P-74	20,130.00	P:No	20,130
12	13.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	936.00	P:Joint	12,168
13	96.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	225,158
14	64.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	71,942
17	4000.00	Sft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividiing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Sft	580,000
18	3982.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	1,833,034
21	7200.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	96,696
22	7200.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	64,152
					TOTAL	3,079,430
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A - ONE TIME REPLACEMENT			-	13,792,200	13,792,200
2	PART - B - (ROUTINE MAINTENANCE)			159,000	3,884,789	4,043,789
3	PART - C - (NON-ROUTINE MAINTENANCE)			440,400	1,312,980	1,753,380
4	(I) PUMPING MACHINERY @ BORING (02 Nos)			228,398	1,610,860	1,839,258
5	(II) TUBE WELL (02 Nos)			1,701,036	58,400	1,759,436
6	(III) REPAIR OF CIVIL WORK			3,079,430	-	3,079,430
	Total			5,608,264	20,659,229	26,267,493

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
15	REHABILITATION / REPAIR OF RO PLANT AT FAIZ MUHAMMAD RODHRANI / JAM KHAN RODHRANI UC BUBAK					
			REHABILITATION / REPAIR WORK			
1	1.00	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/tyoe polyamide thin-film composite (TFC) Operating and Cleaning Limits Mzximum Operating Temperature ay 1130F (450C) Maximum Operating pressure 6000 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0) PH Range, continuous operating a 2-11 pH range, short-Term cleaing (30 min) b 1- 13 Maximum Feed silt Density Index (SDI) SDI 5Free Chlorine Tolerance <0.1 ppm The Cost i/c cartage & installation at site .Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	225,000	P:Memb:	225,000
2	1.00	No	Volumetric Water Meter / Flow Meter 2" 150GPM (Good Quality) China Made or equivalent Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	22,500.00	P:No	22,500
					TOTAL	247,500
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	REHABILITATION / REPAIR WORK			-	247,500	247,500
	Total			-	247,500	247,500
16	REHABILITATION / REPAIR OF RO PLANT AT MIYANI-I UC BUBAK					
	REHABILITATION / REPAIR WORK					
1	1.00	Membrane	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/tyoe polyamide thin-film composite (TFC) Operating and Cleaning Limits Mzximum Operating Temperature ay 1130F (450C) Maximum Operating pressure 6000 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0) PH Range, continuous operating a 2-11 pH range, short-Term cleaing (30 min) b 1- 13 Maximum Feed silt Density Index (SDI) SDI 5Free Chlorine Tolerance <0.1 ppm The Cost i/c cartage & installation at site .Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD NSI	225,000	P:Memb:	225,000
2	2.00	Nos	Bag Filter of 20" (Rate approved by Chief Engineer (O&M) PHED Hyderabad Vide No. DB/CE/(O&M)/ 1759 Dated 31-08-2022) NSI	500.00	Each	1,000
3	1.00	No	Fiber glass tanks of approved quality and make. (Master Brand & Popular Brand)(iii) 500 Gallons (S.S.I No: 3.iii P-55)	39,800.00	P:No	39,800
4	1.00	No	VFD Drive off-Gird 11 W 3 phase (Rate approved in the decision of the 135th Meeting of Standing Rates Committee (SRC) Sindh held on 24th October 2024 Vide No. IV/2-IV-SO(RATES)/2024 Dated 08-11-2024)	130,000.00	P:No	130,000
5	1.00	No	Supply and fixing of VFD Drive Off-Grid of 2.2 KW 3 Phase (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025)	70,000.00	P:No	70,000
6			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greesing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete. (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1803 Dated 16-09-2022) (Grundfos/EU or Equivalent NSI			
	1.00	No	a)Feed Pump 1 HP	13,500.00	P:No	13,500
	1.00	No	b) High Pressure Pump 3 HP	18,000.00	P:No	18,000
7	2640.00	Watts	Providing Installing Solar Panel 330 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the 135th Meeting of Standing Rates Committee (SRC) Sindh held on 24th October 2024 Vide No. IV/2-IV-SO(RATES)/2024 Dated 08-11-2024	42.00	P:Watt	110,880
8	1.00	No	Supplying and Fixing of New MCU 40 HP (Rate Approved) NSI	60,000.00	Each	60,000
9	150.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051.(PHS I.No. P/)	249.94	P:Rft	37,491
10	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a) 1)P-18	950	Each	1,900
11	3.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b) 1)P-18	1,188	Each	3,564
12	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d) 1)P-19	1,426.00	Each	2,852
13	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c) 1)P-18	480.00	Each	960
14	3.00	Nos	Handle Valves (Italy) W.S.I v(25 (6) P-106	1,950.00	Each	5,850
15	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g) 1)P-20	725.00	Each	2,175
16	2.00	Nos	Cast Iron Fittings Air valve double acting (Local)PHE S.M I (5 (8)P-74	4,133.34	Each	8,267
17	12.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	936.00	P:Joint	11,232

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
18	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
19	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq. Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
20	416.00	Cft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Cft	15,716
21	416.00	Cft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.02	P:Cft	15,400
22	264.00	Cft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividiing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Cft	38,280
23	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	156,973
24	416.00	Cft	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40)	62.92	P:Cft	26,200
25	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48	27.90	P:Sft	21,706
26	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449
27	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint.(i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL	1,434,476
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	REHABILITATION / REPAIR WORK			1,116,976	317,500	1,434,476
	Total			1,116,976	317,500	1,434,476
17	REHABILITATION / REPAIR OF RO PLANT AT MIYANI-II UC BUBAK					
		PART - A - REHABILITATION WORK				
1	3.00	Membrane	Replacement of existing RO Membranes size 4"x40" with new membranes having the original made/make of Pall UK or of Equivalent Standard & Specification with two (2) year warranty period (Rate approved by Chief Engineer (O&M) PHED Hyderabad vide No.DB/CE/(O&M)/1803 Dated 16-09-2022) NSI	66,516	P:Memb:	199,548
2	1	No	Supply and fixing of VFD Drive Off-Grid of 7.5 KW 3 Phase (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025)	110,000.00	Each	110,000
3	1	No	Supply and fixing of VFD Drive Off-Grid of 2.2 KW 3 Phase (Rate approved in the decision of the 137th Meeting of Standing Rates Committee (SRC) Sindh held on 24th April 2025 Vide No. IV/2-IV-SO(RATES)/2024 Dated 27-05-2025) NSI	70,000.00	Each	70,000
4	1	No	Supply and fixing of Single phase deep well pump of 1.5 hp double line for boring i/c all accessories labour charges etc complete (R.A approved by Chief Engineer PHED hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022 NSI	25,200.00	Each	25,200
5	1	No	Slim or jumbo cartridge of 20"(Rate approved by C.E PHED HYD:vide NoDB/CE O&M 1759, dated 31-8-2022). NSI	1,000	Each	1,000
6	1	No	Supply and fixing of Solar Invertor, Crown company or equivalent of 5 KVA (4000W). NSI	450,000.00	Each	450,000
7	1.00	Nos	Supply and fixing of Multimedia Vessel of Pentair made or Equivalent (16"x65") (Rate approved by Chief Engineer (O&M) PHED Hyderabad vide No.DB/CE/(O&M)/ 1759 dated 31-08-2022) NSI	20,300.00	Each	20,300
8	2.00	Nos	Fiber glass tanks of approved quality and make. (Master Brand & Popular Brand) 500 Gallons (GSINo:3 iii Page - 92)	39,800.00	Each	79,600
9			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greasing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete. NSI			
	1.0	No	Grundfor/EU or Equivalent (a) Feed Tank 1 HP	13,500.00	P:Set	13,500
	1.0	No	(b) High Pressure Pump 3 HP	18,000.00	P:Set	18,000
10	150.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051 (PHSI.No. P/) 75mm	249.94	P:Rft	37,491
11	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a 1)P-18	950.00	Each	1,900
12	3.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b 1)P-18	1,188.00	Each	3,564
13	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d 1)P-19	1,426.00	Each	2,852
14	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c 1)P-18	480.00	Each	960
15	3.00	Nos	Handle Valves (Italy) W.S.I v(25 (6) P-106	1,950.00	Each	5,850
16	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g 1)P-20	725.00	Each	2,175
17	2.00	Nos	Cast Iron Fittings Air valve double acting (Local)PHE S.M I (5 (8)P-74 2"dia	4,133.34	Each	8,267
18	11.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	936.00	P:Joint	10,296

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
19	48.00	Sft	Making & fixing steel grated door with 1/16" thickness including angle iron frame 2" x 2" 3/8" and 3/4" square bars 4" centre to centre with locking arrangement. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
20	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq. Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
21	416.00	Cft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Cft	15,716
22	416.00	Cft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.02	P:Cft	15,400
23	264.00	Cft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Cft	38,280
24	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	156,973
25	416.00	Cft	Preparing the surface and painting with weather coat I/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40)	62.98	P:Sft	26,200
26	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48)	27.90	P:Sft	21,706
27	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449
28	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint.(i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL - A	1,752,508
		(I)TUBE WELL (01 No)				
1	1.00	Job	Vertical Electrical sounding test including evolution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of casing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of strats from bore holes (P.H.S.I.NO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P:Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P:Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P:Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P:Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap for Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718

ABSTRACT OF COST

S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A - REHABILITATION WORK			954,960	797,548	1,752,508
2	(I)TUBE WELL (01 No)			850,518	29,200	879,718
	Total			1,805,478	826,748	2,632,226
18	REHABILITATION / REPAIR OF RO PLANT AT MIYANI-III UC BUBAK					
		PART - A - REHABILITATION WORK				
1	3.00	Membrance	Replacement of existing RO Membranes size 4"x40" with new membranes having the original made/make of Pall UK or of Equivalent Standard & Specification with two (2) year warranty period (Rate approved by Chief Engineer (O&M) PHED Hyderabad vide No.DB/CE/(O&M)/1803 Dated 16-09-2022) NSI	66,516	P:Memb:	199,548

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
2	1	No	Supply and fixing of Single phase deep well pump of 1.5 hp double line for boring i/c all accessories labour charges etc complete (R.A approved by Chief Engineer PHED hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022 NSI	25,200.00	Each	25,200
3	1	No	Slim or jumbo cartridge of 20"(Rate approved by C.E PHED HYD:vide NoDB/CE O&M 1759, dated 31-8-2022). NSI	1,000	Each	1,000
4	1	No	Supply and fixing of Solar Invertor, Crown company or equivalent of 5 KVA (4000W). NSI	450,000.00	Each	450,000
5	1.00	Nos	Supply and fixing of Multimedia Vessel of Pentair made or Equivalent (16"x65") (Rate approved by Chief Engineer (O&M) PHED Hyderabad vide No.DB/CE/(O&M)/ 1759 dated 31-08-2022) NSI	20,300.00	Each	20,300
6	2.00	Nos	Fiber glass tanks of approved quality and make. (Master Brand & Popular Brand) 500 Gallons (GSINo:3 iii Page - 92)	39,800.00	Each	79,600
7	1650.00	Watt	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the 135th Meeting of Standing Rates Committee (SRC) Sindh held on 24th October 2024 Vide No. IV/2-IV-SO(RATES)/2024 Dated 08-11-2024	42.00	P:Watt	69,300
8			Repair of already installed Pumping Machinery which includes rewinding of motor, replacement of Ball bearing of Motor & Pump, greasing, seal replacement, impellar setting, labour charges for pulling of the pumping set from bore and refixing in the bore after repair, transportation charges etc complete. NSI			
	1.0	No	Grundfor/EU or Equivalent (a) Feed Tank 1 HP	13,500.00	P:Set	13,500
	1.0	No	(b) High Pressure Pump 3 HP	18,000.00	P:Set	18,000
9	140.00	Rft	Providing,Laying & Fixing in trench i/c fitting, jointing & testing etc complete in all respect the high Density Polythylene PE pipes (HDPE-100) for W/S confirming ISO 4427/DIN8074/8075 B.S 3580 & PSI 3051 (PHSI.No. P/) 75mm	249.94	P:Rft	34,992
10	2.00	Nos	HDPE-100 Elbow 45'o (outer dia)PHE S.M I (11 (a 1)P-18	950.00	Each	1,900
11	3.00	Nos	HDPE-100 Elbow 90'o (outer dia)PHE S.M I (11 (b 1)P-18	1,188.00	Each	3,564
12	2.00	Nos	HDPE-100 Equal Tee (outer dia)PHE S.M I (14 (d 1)P-19	1,426.00	Each	2,852
13	2.00	Nos	HDPE-100 END CAP PHE S.M I (11 (c 1)P-18	480.00	Each	960
14	3.00	Nos	Handle Valves (Italy) W.S.I v(25 (6) P-106	1,950.00	Each	5,850
15	3.00	Nos	HDPE-100 REDUCERPHE S.M I (14 (g 1)P-20	725.00	Each	2,175
16	2.00	Nos	Cast Iron Fittings Air valve double acting (Local)PHE S.M I (5 (8)P-74 2"dia	4,133.34	Each	8,267
17	11.00	Joints	But Fusion Joint. (S.M.I.No. H P/20).	936.00	P:Joint	10,296
18	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
19	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
20	416.00	Cft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Cft	15,716
21	416.00	Cft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.02	P:Cft	15,400
22	264.00	Cft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Cft	38,280
23	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	156,973
24	416.00	Cft	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40)	62.98	P:Sft	26,200
25	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48)	27.90	P:Sft	21,706
26	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449
27	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint.(i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					TOTAL - A	1,639,309

ABSTRACT OF COST				
S #	Name of Group	Schedule Item	Non Schedule Item	Total
1	PART - A - REHABILITATION WORK	911,761	727,548	1,639,309
	Total	911,761	727,548	1,639,309

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
19	REHABILITATION / REPAIR OF RO PLANT AT RASOOL BUX RODHRANI / QADIR BUX RODHRANI UC BUBAK TALUKA SEHWAN DISTRICT JAMSHORO					
		PART - A R.O PLANT				
1			Supplying / installing fitting and testing reverse osmosis (R.O) plant i/c transportation at site of work. Reverse Osmosis (R.O) Plant 5000 gpd upto 5000 /5000 TDS make by So Safe Water Techno, or equivalent,Pre-Filtration RAW Water Feed Pump 2 HP CNP/CRP (China Make) No.2. So-Safe Sand Filter FRP 20-72 with 3 Way Multiport Valve 1 No.3. So-Safe Carbon Filter FRP 16-65 with 3 Way Multiport Valve No.4. Antisallent Dozing System with Storage Tank (80 Ltrs) 1 No.. So-Safe Reverse Osmosis System with Qty 1 Membranes 8" x 40" 1 Set. Jumbo Housing 20" 2 Nos. Automatic Programmable Logic Control (PLC) 1 No. So-Safe Ultra Violet Sterilizer System UV 870 1 No.. Feed /Product Water Storage Tank 1600 Liters 1 Nos.. Post Pressure Pump 1 No. Pressure Gauges & UPVC Fitting Sch 80 1 Job. Skid Structure (Powder Coded) 1 Nos. Header With Tapes (4 Nos) Superior Quality 1 Job Piping UPVC : Sch-80 Feed / Product Water Storage Tank Capacity : 1600 gallons Qty : 1 Nos Make : Master or equivalent Materia : PE.Float switches Qty : 3 Nos So Safe UV Sterilizer. Sterilization Process The UV sterilizer operates using a low-pressure mercury vapor to produce the UV energy necessary to kill the micro-organisms that can live in our water. There are five major groups of micro-organisms that are destroyed with ultraviolet sterilizers; viruses, bacteria, fungi, algae and protozoa. UV light destroys the DNA structure and prohibits reproduction. Since the cell is now sterilized and cannot reproduce it is considered dead and no longer a threat. Specifications Model: UV 870 Flow: 10 GPM amp: Hardened glass, slim Line Lamp life: 10,000 hours Nominal lamp length: 33.7/8" Power consumption: 39 watts Ultraviolet output: 14 watts Design pressure: 125 psi Operating pressure: 75 psi Inlet outlet: 1" Operating temperature: 35° - 100° F Ultraviolet dosage: 30,000-mw sec/cm² Quantity: 1 No. (UV lamp is protected in a high transmission, pure, fused quartz jacket for peak UV dosage.) Warranty: One year (UV lamp is not warranted as it may be fused due to electric fluctuation) Pressure Gauge & UPVC Fitting Piping & Fitting : All UPVC(Food Grade) Schedule :- 80 Size :- 1", ¾", ½" Make :- Hydroseal Canada High impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading and access. Low impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading. Unique product water flow meter panel mounted. Automatic R/O membrane flush system. Flush the Reverse Osmosis membranes periodically with raw feed water. Thermal over load motor protection Low-pressure safety cutout switch.Make : Danfoss Poland Heavy-duty high-pressure tubing. Watertight power wiring shrouding. FDA approved components and material. Factory tested and sterilized. Tagging and identification of instrumentation. Export crating. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass. Motor starter pre wired motor starter with start delay.Product Tank full cut out switch. Feed tank low cut out switch Phase sequence change out cut switch. To protect the motor from reverse running.Tank full indicator light High pressures pump trip indication light High pressures pump indication light. Auto manual mode. Feed pump running indication light. Dozing pump running indication light. Voltage indicator. Online tds meter feed and product side. Blending line Carbon filter post side Make: So Safe Size : 13" x 54" Qty: 1 No Type: Manual B2Media: Activated carbon CIP system.This system is required to flush the membrane with the product water as well as use to clean the membranes with chemicals.Tank: 100 gallons, Pump : CNP, Power : 1 hp, Filter : 20" jumbo utilised during the filter cycle. Activate Carbon Granular activated carbon coconut shell based acid washed Made in Malaysia / Sri Lanka Packing : 25 kg bags Antisallent Type: Metering Pump Make: Imported Quantity: 1 No. Chemical tank capacity: 80 gallons Qty: 1 No. Material: PE Reverse Osmosis System Make: So-Safe Model: SS-5,000DX-BW Maximum feed water: Up to 5000 ppm TDS Temperature: 25° C (+/- 15%) Capacity: 5,000 GPD Electricity: 380 VAC / 50 Hz Rejection: 98% Product water: <200 ppm Special Features of Reverse Osmosis System Lightweight non-corrosive mild steel frame. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn. Size: 20" Jumbo Make : Italy Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, heavy-duty. Make: CNP Material : SS304 High rejection thin film composite FDA approval membrane. DOW chemical. Model : BW30-400 Size : 8" x 40" Make : Dupont/toray/LG/ Suez Qty: 1 no. Automatic operation. Automatic liquid non-corrosive high-pressure regulator valve. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desired high pressure out of the high-pressure pump.Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is utilized during the filter cycle. Filter Media High-grade silica 0.45 mm grade washed and graded. ½", ¾", and ¼" in size with accurate bedding in the sand filter shell.So-Safe Granular Activated Carbon Filter Model: FRP-16 Flow rate: 15 US GPM Pressure drop: 5 psi Material of filtration chamber: FRP Test pressure: 150 psi Dia: 16" Height: 54" Inlet & outlet: 1" Valve: multiport valve Threeway Special Features Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150. Process GAC (Granular Activated Carbon) used in this filter is specially graded for water purification. It adsorbs most of the organic chemicals, chlorine, insecticides and pesticides etc. It removes odor and gives water a natural taste.Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is Raw Water Feed Pump Quantity: 1 No. Make: CNP/CRP (Make China) Material: SS 304 Horse power: 2 HP Electrical: 380v / 50Hz Flow Rate: 14 GPM So-Safe Pressure Sand Filter Model: FRP-20 Make: So Safe Flow rate: 20 GPM continuous Test pressure: 150 psi Operating pressure: up to 75 psi Pressure drop: 5 psi Filtration chamber: 20" x 72" Media: silica sand, Gravel and anthracite. Material of filtration chamber: FRP Total height: 6 ft Inlet & outlet: 1" Valve: Multiport valve Threeway SPECIAL FEATURES Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150 psi Process The So-Safe pressure sand filter uses a multimedia filtration process. Large particulate matter is captured by coarser, lighter media near the top of the filter bed. Smaller particles continue down to the successive lower media levels where particles as small as 25 microns are retained by finer heavier media. The density differences between the media allows for layer separation after backwashing All Kind of Civil WorkTo provide feed water & product water storage tank nears to system. To provide electric supply 3 phase connection for the system. To provide operator to operate filter & R.O Plant. Replacement of cartridge & R.O maintenance. Food & Accommodation during the work (3 persons). Transportation from Hyderabad to your site.Skid Structure: -Skid :- Lightweight Powder Coded Qty :- 1 Nos.Header with Tapes: - Pipe :- Stainless Steel Size :- 1½" Qty of Header :- 1 No. Tapes :- Superior Quality of Tapes :- 4 Nos. R.A.Approved NSI			
	1.00	Set		2,761,000.00	P:Set	2,761,000
					TOTAL - A	2,761,000
		(I) TUBE WELL (01 No)				
1	1.00	Job	Vrertical Electrical rounding test including evoulution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of cashing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.INO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374

S #:	Quantity		Description of Item to be executed at site	Rate	Unit	Amount
1	2		3	4	5	6
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P.Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P.Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P.Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P.Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO; 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718
			(II) PUMPING MACHINERY @ BORING (01 No)			
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1'x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm ²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P-12)	360.00	Each	2,405
10	7	Joints	Jointing C.I/M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
			(III) SOLAR SYSTEM			
1	8250.00	Watt	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the 135th Meeting of Standing Rates Committee (SRC) Sindh held on 24th October 2024 Vide No. IV/2-IV-SO(RATES)/2024 Dated 08-11-2024	42.00	P:Watt	346,500
					TOTAL	346,500
			(IV) CIVIL WORK			
1	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
2	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill).(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
3	416.00	Cft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Cft	15,716
4	416.00	Cft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.02	P:Cft	15,400
5	264.00	Cft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Cft	38,280
6	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	156,973

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
7	416.00	Cft	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40)	62.98	P:Sft	26,200
8	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48)	27.90	P:Sft	21,706
9	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449
10	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint.(i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					Total	692,005

ABSTRACT OF COST				
S #	Name of Group	Schedule Item	Non Schedule Item	Total
1	PART - A R.O PLANT	-	2,761,000	2,761,000
2	(I) TUBE WELL (01 No)	850,518	29,200	879,718
3	(II) PUMPING MACHINERY @ BORING (01 No)	114,199	805,430	919,629
4	(III) SOLAR SYSTEM	346,500	-	346,500
5	(IV) CIVIL WORK	692,005	-	692,005
	Total	2,003,222	3,595,630	5,598,852

20	REHABILITATION / REPAIR OF RO PLANT AT BUND MANCHAR RD 61 UC BUBAK			
	PART - A R.O PLANT			
1	No	Supplying / installing fitting and testing reverse osmosis (R.O) plant i/c transportation at site of work. Reverse Osmosis (R.O) Plant 5000 gpd upto 5000 /5000 TDS make by So Safe Water Techno, or equivalent,Pre-Filtration RAW Water Feed Pump 2 HP CNP/CRP (China Make) No.2. So-Safe Sand Filter FRP 20-72 with 3 Way Multiport Valve 1 No.3. So-Safe Carbon Filter FRP 16-65 with 3 Way Multiport Valve No.4. Antisallent Dozing System with Storage Tank (80 Ltrs) 1 No.. So-Safe Reverse Osmosis System with Qty 1 Membranes 8" x 40" 1 Set. Jumbo Housing 20" 2 Nos. Automatic Programmable Logic Control (PLC) 1 No. So-Safe Ultra Violet Sterilizer System UV 870 1 No.. Feed /Product Water Storage Tank 1600 Liters 1 Nos.. Post Pressure Pump 1 No. Pressure Gauges & UPVC Fitting Sch 80 1 Job. Skid Structure (Powder Coded) 1 Nos. Header With Tapes (4 Nos) Superior Quality 1 Job Piping UPVC : Sch-80 Feed / Product Water Storage Tank Capacity : 1600 gallons Qty : 1 Nos Make : Master or equivalent Materia : PE.Float switches Qty : 3 Nos So Safe UV Sterilizer. Sterilization Process The UV sterilizer operates using a low-pressure mercury vapor to produce the UV energy necessary to kill the micro-organisms that can live in our water. There are five major groups of micro-organisms that are destroyed with ultraviolet sterilizers; viruses, bacteria, fungi, algae and protozoa. UV light destroys the DNA structure and prohibits reproduction. Since the cell is now sterilized and cannot reproduce it is considered dead and no longer a threat. Specifications Model: UV 870 Flow: 10 GPM amp: Hardened glass, slim Line Lamp life: 10,000 hours Nominal lamp length: 33.7/8" Power consumption: 39 watts Ultraviolet output: 14 watts Design pressure: 125 psi Operating pressure: 75 psi Inlet outlet: 1" Operating temperature: 35° - 100° F Ultraviolet dosage: 30,000-mw sec/cm² Quantity: 1 No. (UV lamp is protected in a high transmission, pure, fused quartz jacket for peak UV dosage.) Warranty: One year (UV lamp is not warranted as it may be fused due to electric fluctuation) Pressure Gauge & UPVC Fitting Piping & Fitting :- All UPVC(Food Grade) Schedule :- 80 Size :- 1", ¾", ½" Make :- Hydroseal Canada High impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading and access. Low impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading. Unique product water flow meter panel mounted. Automatic R/O membrane flush system. Flush the Reverse Osmosis membranes periodically with raw feed water. Thermal over load motor protection Low-pressure safety cutout switch.Make : Danfoss Poland Heavy-duty high-pressure tubing. Watertight power wiring shrouding. FDA approved components and material. Factory tested and sterilized. Tagging and identification of instrumentation. Export crating. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass. Motor starter pre wired motor starter with start delay.Product Tank full cut out switch. Feed tank low cut out switch Phase sequence change cut out switch. To protect the motor from reverse running.Tank full indicator light High pressures pump trip indication light High pressures pump indication light. Auto manual mode. Feed pump running indication light. Dozing pump running indication light. Voltage indicator. Online tds meter feed and product side. Blending line Carbon filter post side Make: So Safe Size : 13" x 54" Qty: 1 No Type: Manual B2Media: Activated carbon CIP system.This system is required to flush the membrane with the product water as well as use to clean the membranes with chemicals.Tank: 100 gallons, Pump : CNP, Power : 1 hp, Filter : 20" jumbo utilised during the filter cycle. Activate Carbon Granular activated carbon coconut shell based acid washed Made in Malaysia / Sri Lanka Packing : 25 kg bags Antisallent Type: Metering Pump Make: Imported Quantity: 1 No. Chemical tank capacity: 80 gallons Qty: 1 No. Material: PE Reverse Osmosis System Make: So-Safe Model: SS-5,000DX-BW Maximum feed water: Up to 5000 ppm TDS Temperature: 25° C (+/- 15%) Capacity: 5,000 GPD Electricity: 380 VAC / 50 Hz Rejection: 98% Product water: <200 ppm Special Features of Reverse Osmosis System Lightweight non-corrosive mild steel frame. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn. Size: 20" Jumbo Make : Italy Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, heavy-duty. Make: CNP Material : SS304 High rejection thin film composite FDA approval membrane. DOW chemical. Model : BW30-400 Size : 8" x 40" Make : Dupont/toray/LG/ Suez Qty: 1 no. Automatic operation. Automatic liquid non-corrosive high-pressure regulator valve. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desired high pressure out of the high-pressure pump.Uniform Flow The shape of the filter is both attractive and functional. The spherical top and		

S #:	Quantity	Description of Item to be executed at site	Rate	Unit	Amount
1	2	3	4	5	6
		bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is utilized during the filter cycle. Filter Media High-grade silica 0.45 mm grade washed and graded. ½", ¾", and 1" in size with accurate bedding in the sand filter shell. So-Safe Granular Activated Carbon Filter Model: FRP-16 Flow rate: 15 US GPM Pressure drop: 5 psi Material of filtration chamber: FRP Test pressure: 150 psi Dia: 16" Height: 54" Inlet & outlet: 1" Valve: multiport valve Threeway Special Features Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150. Process GAC (Granular Activated Carbon) used in this filter is specially graded for water purification. It adsorbs most of the organic chemicals, chlorine, insecticides and pesticides etc. It removes odor and gives water a natural taste. Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is Raw Water Feed Pump Quantity: 1 No. Make: CNP/CRP (Make China) Material: SS 304 Horse power: 2 HP Electrical: 380v / 50Hz Flow Rate: 14 GPM So-Safe Pressure Sand Filter Model: FRP-20 Make: So Safe Flow rate: 20 GPM continuous Test pressure: 150 psi Operating pressure: up to 75 psi Pressure drop: 5 psi Filtration chamber: 20" x 72" Media: silica sand, Gravel and anthracite. Material of filtration chamber: FRP Total height: 6 ft Inlet & outlet: 1" Valve: Multiport valve Threeway SPECIAL FEATURES Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150 psi Process The So-Safe pressure sand filter uses a multimedia filtration process. Large particulate matter is captured by coarser, lighter media near the top of the filter bed. Smaller particles continue down to the successive lower media levels where particles as small as 25 microns are retained by finer heavier media. The density differences between the media allows for layer separation after backwashing All Kind of Civil Work To provide feed water & product water storage tank nears to system. To provide electric supply 3 phase connection for the system. To provide operator to operate filter & R.O Plant. Replacement of cartridge & R.O maintenance. Food & Accommodation during the work (3 persons). Transportation from Hyderabad to your site. Skid Structure: -Skid :- Lightweight Powder Coded Qty :- 1 Nos. Header with Tapes: -Pipe :- Stainless Steel Size :- 1½" Qty of Header :- 1 No. Tapes :- Superior Quality of Tapes :- 4 Nos. R.A. Approved NSI			

	1.00	Set		2,761,000.00	P:Set	2,761,000
					Total-A	2,761,000
		(I) TUBE WELL (01 No)				
1	1.00	Job	Vertical Electrical rounding test including evolution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of casing pipe. (P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.I.NO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles. (P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P:Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P:Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P:Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P:Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718

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1	2	3		4	5	6
		(II) PUMPING MACHINERY @ BORING (01 No)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality to be tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO:9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1'x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm ²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P-12)	360.00	Each	2,405
10	7	Joints	Jointing C.I/M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO:1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
		(III) SOLAR / CIVIL WORK				
1	8250.00	Watt	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the 135th Meeting of Standing Rates Committee (SRC) Sindh held on 24th October 2024 Vide No. IV/2-IV-SO(RATES)/2024 Dated 08-11-2024	42.00	P:Watt	346,500
2	6.00	No	Supply and fixing in position long bib cocks of superior quality with cp head 1/2"dia (S.S.M.I.No. 31 P/90)	1,800.00	Each	10,800
3	48.00	Sft	Making & fixing steel grated door with 1/16" thicksheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangemnt. (GSI NO 24 - (A) P.NO: 63)	2,345.40	P:Sft	112,579
4	256.00	Sft	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 Lbs./Sq . Foot of finished grill),(GSI NO 26 - (A) P.NO: 63)	1,124.10	P:Sft	287,770
5	416.00	Cft	Cement plaster (Ratio 1:4) Upto 12' height (3/4" thick) (GSI NO 11 - (C) P.NO: 38)	37.78	P:Cft	15,716
6	416.00	Cft	Cement plaster (Ratio 1:6) Upto 12' height (1/2" thick) (GSI NO 13 - (C) P.NO: 38)	37.02	P:Cft	15,400
7	264.00	Cft	Providing and laying 1" thick topping of cement concrete (1:2:4) including Surface finishing and dividing into panels:(3" Thick) (GSI NO: 16 (d) P.No 31)	145.00	P:Cft	38,280
8	341.00	Sft	Split tiles 5-1/4"x10-1/2"x3/8" thick Glossy glazed jointed in white cement and laid over 1:2 grey cement sand mortar 3/4" thick including finishing complete (Flooring and facing.) (GSI NO 65 C P.No 35)	460.33	P:Sft	156,973
9	416.00	Cft	Preparing the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make. (GSI NO 38 - (A) P.NO: 40)	62.98	P:Sft	26,200
10	778.00	Sft	Scraping, brushing and removing old paint from metal surface.(GSI No 30 P-48)	27.90	P:Sft	21,706
11	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint. (i) First Coat (GSI NO 4 - (A) P.NO: 48)	13.43	P:Sft	10,449
12	778.00	Sft	Painting corrugated surfaces, patent roofing, etc, with oil paint.(i) Each Subsequent Coat (GSI NO 4 - (A) P.NO: 48)	8.91	P:Sft	6,932
					Total	1,049,305

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A R.O PLANT			-	2,761,000	2,761,000
2	(I) TUBE WELL (01 No)			850,518	29,200	879,718
3	(II) PUMPING MACHINERY @ BORING (01 No)			114,199	805,430	919,629
4	(III) SOLAR / CIVIL WORK			1,049,305	-	1,049,305
	Total			2,014,022	3,595,630	5,609,652
21 REHABILITATION / REPAIR OF RO PLANT AT KARIM BUX MALLAH UC BUBAK						
		PART - A - ONE TIME REPLACEMENT				
1	2	Membrance	Replacement of existing RO Membranes size 8"x40" with new membranes having the original made/make of Filmtec/Toray/tyoe polyamide thin-film composite (TFC) Operating and Cleaning Limits Mzximum Operating Temperature ay 1130F (450C) Maximum Operating pressure 6000 psig (41-bar) Maximum Element pressure Drop 15 psig (1.0) PH Range, continuous operating a 2-11 pH range, short-Term cleaing (30 min) b 1- 13 Maximum Feed silt Density Index (SDI) SDI 5Free Chlorine Tolerance <0.1 ppm The Cost i/c cartage & installation at site .Rate Approved byDirector General (RO/UF)PHED Hyderabad vide MO DG/Ro/Uf /35 Dated 6-03-2025 1.5 MGD Islamkot. NSI	225,000	P:Membr:	450,000
2	1	No	Supply and fixing in position Feed pump of (2 HP) 1.5 kw with motor i/c assembling and labour charges etc complete. Refurbished (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022 NSI	39,200	Each	39,200
3	1	No	Supply and fixing in position long bib cocks of superior quality with c.p head 1/2" dia (S.S.M I No : 31-P-90)	1,800	Each	1,800
4	2	No	Bag Filter of 20" (Rate approved by Chief Engineer PHED Hyderabad Vide No. DB/CE/(O&M)/1759 Dated 31-08-2022) NSI	500	Each	1,000
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A - ONE TIME REPLACEMENT			1,800	490,200	492,000
	Total			1,800	490,200	492,000
22 SUPPLYING AND INSTALLING OF R.O PLANTS AT VARIOUS VILLAGES (09 NOS) OF TALUKA SEHWAN						
		PART - A R.O PLANT (09 NOS)				
			Name of (09 Nos) R.O. Plants 1. Ramzan Parhyar 2. Qadir Bux 3. Malook Mallah 4. Garkano 5. Bubak-I 6. Bubak-II 7. Ghair 8. Yousif Jamali 9. Bund Manchar RD-62			

S #:	Quantity	Description of Item to be executed at site	Rate	Unit	Amount
1	2	3	4	5	6
1	No	Supplying / installing fitting and testing reverse osmosis (R.O) plant i/c transportation at site of work. Reverse Osmosis (R.O) Plant 5000 gpd upto 5000 /5000 TDS make by So Safe Water Techno, or equivalent,Pre-Filtration RAW Water Feed Pump 2 HP CNP/CRP (China Make) No.2. So-Safe Sand Filter FRP 20-72 with 3 Way Multiport Valve 1 No.3. So-Safe Carbon Filter FRP 16-65 with 3 Way Multiport Valve No.4. Antisallent Dozing System with Storage Tank (80 Ltrs) 1 No.. So-Safe Reverse Osmosis System with Qty 1 Membranes 8" x 40" 1 Set. Jumbo Housing 20" 2 Nos. Automatic Programmable Logic Control (PLC) 1 No. So-Safe Ultra Violet Sterilizer System UV 870 1 No.. Feed /Product Water Storage Tank 1600 Liters 1 Nos.. Post Pressure Pump 1 No. Pressure Gauges & UPVC Fitting Sch 80 1 Job. Skid Structure (Powder Coded) 1 Nos. Header With Tapes (4 Nos) Superior Quality 1 Job Piping UPVC : Sch-80 Feed / Product Water Storage Tank Capacity : 1600 gallons Qty : 1 Nos Make : Master or equivalent Materia : PE.Float switches Qty : 3 Nos So Safe UV Sterilizer. Sterilization Process The UV sterilizer operates using a low-pressure mercury vapor to produce the UV energy necessary to kill the micro-organisms that can live in our water. There are five major groups of micro-organisms that are destroyed with ultraviolet sterilizers; viruses, bacteria, fungi, algae and protozoa. UV light destroys the DNA structure and prohibits reproduction. Since the cell is now sterilized and cannot reproduce it is considered dead and no longer a threat. Specifications Model: UV 870 Flow: 10 GPM amp: Hardened glass, slim Line Lamp life: 10,000 hours Nominal lamp length: 33.7/8" Power consumption: 39 watts Ultraviolet output: 14 watts Design pressure: 125 psi Operating pressure: 75 psi Inlet outlet: 1" Operating temperature: 35° - 100° F Ultraviolet dosage: 30,000-mw sec/cm² Quantity: 1 No. (UV lamp is protected in a high transmission, pure, fused quartz jacket for peak UV dosage.) Warranty: One year (UV lamp is not warranted as it may be fused due to electric fluctuation) Pressure Gauge & UPVC Fitting Piping & Fitting :- All UPVC(Food Grade) Schedule :- 80 Size :- 1", ¾", ½" Make :- Hydroseal Canada High impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading and access. Low impact liquid filled pressure gauge 2.5" in diameter mounted on a main control panel for better reading. Unique product water flow meter panel mounted. Automatic R/O membrane flush system. Flush the Reverse Osmosis membranes periodically with raw feed water. Thermal over load motor protection Low-pressure safety cutout switch.Make : Danfoss Poland Heavy-duty high-pressure tubing. Watertight power wiring shrouding. FDA approved components and material. Factory tested and sterilized. Tagging and identification of instrumentation. Export crating. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass. Motor starter pre wired motor starter with start delay.Product Tank full cut out switch. Feed tank low cut out switch Phase sequence change cut out switch. To protect the motor from reverse running.Tank full indicator light High pressures pump trip indication light High pressures pump indication light. Auto manual mode. Feed pump running indication light. Dozing pump running indication light. Voltage indicator. Online tds meter feed and product side. Blending line Carbon filter post side Make: So Safe Size : 13" x 54" Qty: 1 No Type: Manual B2Media: Activated carbon CIP system.This system is required to flush the membrane with the product water as well as use to clean the membranes with chemicals.Tank: 100 gallons, Pump : CNP, Power : 1 hp, Filter : 20" jumbo utilised during the filter cycle. Activate Carbon Granular activated carbon coconut shell based acid washed Made in Malaysia / Sri Lanka Packing : 25 kg bags Antisallent Type: Metering Pump Make: Imported Quantity: 1 No. Chemical tank capacity: 80 gallons Qty: 1 No. Material: PE Reverse Osmosis System Make: So-Safe Model: SS-5,000DX-BW Maximum feed water: Up to 5000 ppm TDS Temperature: 25° C (+/- 15%) Capacity: 5,000 GPD Electricity: 380 VAC / 50 Hz Rejection: 98% Product water: <200 ppm Special Features of Reverse Osmosis System Lightweight non-corrosive mild steel frame. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn. Size: 20" Jumbo Make : Italy Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, heavy-duty. Make: CNP Material : SS304 High rejection thin film composite FDA approval membrane. DOW chemical. Model : BW30-400 Size : 8" x 40" Make : Dupont/loray/LG/ Suez Qty: 1 no. Automatic operation. Automatic liquid non-corrosive high-pressure regulator valve. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desired high pressure out of the high-pressure pump.Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is utilized during the filter cycle. Filter Media High-grade silica 0.45 mm grade washed and graded. ½", ¾", and ¼" in size with accurate bedding in the sand filter shell.So-Safe Granular Activated Carbon Filter Model: FRP-16 Flow rate: 15 US GPM Pressure drop: 5 psi Material of filtration chamber: FRP Test pressure: 150 psi Dia: 16" Height: 54" Inlet & outlet: 1" Valve: multiport valve Threeway Special Features Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150. Process GAC (Granular Activated Carbon) used in this filter is specially graded for water purification. It adsorbs most of the organic chemicals, chlorine, insecticides and pesticides etc. It removes odor and gives water a natural taste.Uniform Flow The shape of the filter is both attractive and functional. The spherical top and bottom ends of the tank are designed to give uniform flow from both the inlet distribution and outlet collection assemblies. The system provides adequate distribution to uniformly expand the filter bed during backwash and the entire media bed is Raw Water Feed Pump Quantity: 1 No. Make: CNP/CRP (Make China) Material: SS 304 Horse power: 2 HP Electrical: 380v / 50Hz Flow Rate: 14 GPM So-Safe Pressure Sand Filter Model: FRP-20 Make: So Safe Flow rate: 20 GPM continuous Test pressure: 150 psi Operating pressure: up to 75 psi Pressure drop: 5 psi Filtration chamber: 20" x 72" Media: silica sand, Gravel and anthracite. Material of filtration chamber: FRP Total height: 6 ft Inlet & outlet: 1" Valve: Multiport valve Threeway SPECIAL FEATURES Automatic Air Bleed Valve This valve removes air inside the filtration chamber automatically on continuous basis adding safety to the vessel and better flow rate. Filter Bed All our filtration systems have maximum filtration bed of 3-ft in depth thus adding further clarity water down to 15-20 micron. Rugged Tanks Filtration shells are designed for 100 psi working pressure hydrostatically tested to 150 psi Process The So-Safe pressure sand filter uses a multimedia filtration process. Large particulate matter is captured by coarser, lighter media near the top of the filter bed. Smaller particles continue down to the successive lower media levels where particles as small as 25 microns are retained by finer heavier media. The density differences between the media allows for layer separation after backwashing All Kind of Civil WorkTo provide feed water & product water storage tank nears to system. To provide electric supply 3 phase connection for the system. To provide operator to operate filter & R.O Plant. Replacement of cartridge & R.O maintenance. Food & Accommodation during the work (3 persons). Transportation from Hyderabad to your site.Skid Structure :-Skid :- Lightweight Powder Coded Qty :- 1 Nos.Header with Tapes :-Pipe :- Stainless Steel Size :- 1½" Qty of Header :- 1 No. Tapes :- Superior Quality of Tapes :- 4 Nos. R.A.Approved NSI	2,761,000.00	P:Set	24,849,000
				Total-A	24,849,000

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
		(I) TUBE WELL (09 No)				
1	1.00	Job	Vrterical Electrical rounding test including evoulution, interpretation and compilation of Resistivity and Hydro-geological survey result and submission of report i/c all test (R.A.Approved) NSI	25,000.00	P:Job	25,000
2	100.00	Rft	Boring tube well in water bearing soil from G.L. upto 0' to 100'ft depth i/c sinking and with drawing of casing pipe.(P.H.S.I.NO:1, P/42)	5,083.30	P:Rft	508,330
3	1.00	No	Providing strong substantially build wooden locked box with compartments for preserving 2 lbs (1 kg) samples of strats. (P.H.S.I.NO:5, P/44)	12,387.60	P:No	12,388
4	4.00	Sample	Taking & preserving in box 2 lbs (1 kg) sample of starts from bore holes (P.H.S.I.NO:6, P/44)	2,880.00	P:Sample	11,520
5	4.00	Sample	Taking samples of water from bore holes and placing in two separate bottles.(P.H.S.I.NO: 7, P/44)	2,952.00	P:Sample	11,808
6	1.00	No	Supplying and fixing M.S. Bail plug 5'feet long etc: complete (P.H.S.I.M-8 (b) P/44)	15,373.80	P:No	15,374
7	40.00	Rft	Supplying and installing PVC strainer 'C' Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.01,P-44)	1,266.76	P:Rft	50,670
8	60.00	Rft	Supply and installing PVC Blind pipe "C" Class of approved design quality and make i/c necessary socket etc: complete. (PHSI.No.15,P-45)	1,266.76	P:Rft	76,006
9	100.00	Rft	Shrouding with graded bajri (3/8" to 1/8" or 9 to 3 mm) in between bore and blind pipe for the following diameter or strainers (P.H.S.I.NO:18, P/46)	1,301.93	P:Rft	130,193
10	100.00	Rft	Development of tube well testing of charges samples from laboratory (PHSINO:8(a),P-44)	240.00	P:Rft	24,000
11	17.30	Cft	Cement concrete plain i/c placing compacting finishing and Currying complete (i/c screening and washing of stone aggregate without shuttering (Ratio 1:2:4) (G.S.I.NO: 5 (a) P/11)	443.54	P:Cft	7,673
12	24.00	Sft	Erection and Removal of centering for RCC of plain cement concrete Work for Partial wood (G.S.I.No:19 b,P/13) Vertical	106.48	P:Sft	2,556
13	1.00	No	Supplying & fixing 8"dia M.S.Cap fr Security (R.A.Approved). NSI	2,700.00	P:No	2,700
14	1.00	No	Supplying and fixing centerlizer (N.S.I) (M.R).(Rate approved). NSI	1,500.00	P:No	1,500
					TOTAL	879,718
				Total Cost of 09 Nos =		7,917,462
		(II) R.O Pump Room (25' x 15') (09 Nos)				
1	423.63	Cft	Excavation in foundation of building bridges and other structures i/c bailing, dressing, filling around the structure with excavated earth, watering, ramming Lead up to one chain & lift up to 5.0' (CSI No:18 P-3)	11.88	P:Cft	5,033
2	255.07	Cft	Cement Concrete bricks or stone ballast 1 1/2" to 2" gauge ratio 1:4:8 (CSI No:4 P-10)	296.69	P:Cft	75,677
3	868.50	Sft	Erection and removal of centering for R.C.C or plain cement concrete works of deodar wood)2nd class)(for partial wood) (Vertical)(G.S.I.NO:19(b),P/13)	106.48	P:Sft	92,478
4	457.88	Cft	Cement concrete plain i/c placing compacting finishing and curing complete(i/c screening and washing of stone aggregate without shuttering(Ratio 1:3:6)(G.S.I.NO:5(f)p/11)	388.67	P:Cft	177,964
5	652.88	Cft	Pucca Brick work in ground floor i/c striking of joints in cement sand mortar 1:6 (CSI No. 5, P-16)	381.18	P:Cft	248,865
6	48.00	Sft	Making and fixing steel grated door complete with Locking arrangement angle iron frame 2" x 2" 3/8" & 3/4" sq bars 4" centre to centre (CSI NO.23 P-63)	2,345.40	P:Sft	112,579
7	4.000	Cwt	Fabrication of heavy steel work with angle, tees, flat iron, round iron & sheet iron for making trusses, girders, tands etc i/c cutting tanks etc i/c cutting, drilling rivetting, handling assembling & fixing but excluding erection in position (GSI NO.2 (a) P-62)	20,366.45	P:Cwt	81,466
8	4.000	Cwt	Erection & Fitting in position of iron trusses staging of water tank etc complete.(GSI NO.5 P-68)	824.85	P:Cwt	3,299
9	421.84	Cft	Reinforced cement concrete work inlcuding all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid seperately. This rates also includes all kinds of form moduls, lifting, shuttering curring rendering anf finishing the exposed surface (i/c screening and washing of shingle (a) R.C. work in roof slab, beams, columns, rafts, lintles and other structural members laid in situ or precast laid in position complete in all respect ratio 1:2:4 90 lbs cement 2 cft sand 4cft shingle 1/8"to 1/4"guage (G.S.I.No.6/i P-11)	717.59	P:Cft	302,708
10	18.83	Cwt	Fabrication of deformed reinforcement for cement concrete i/c cutting bending laying in position making joints and fastening i/c cost of binding wire also includes removal of rust from bars (CSI NO.7 P-12)	18,271.01	P:Cwt	344,043
11	137.92	Sft	S/F in position iron steel grill of 3/4"x1/4" size flate iron of approved design i/c painting 3 coats etc complete (weight not to be less than 3.7 lbs/sq of finished (GSI. No.26 P-63)	1,124.40	P:Sft	155,077
12	1355.15	Cft	Filling watering ramming in floor surplus earth from foundation lead upto one chain and lift upto 5 ft: (CSI No.21 P-3)	6.50	P:Sft	8,808
13	964.88	Sft	Providing Laying 2" thick CC Topping 1:2:4 i/c surface finishing and dividing into panels (CSI.NO.16 P-31)	108.75	P:Sft	104,931
14	1443.08	Sft	Cement plaster 1:4 upto 12' height 3/8" thick (CSI No:11(a) P-38)	37.78	P:Sft	54,520
15	1443.08	Sft	Cement plaster (1:4) upto 12ft height 3/8" thick (G.S.I.No. 10/c P/52).	37.02	P:Sft	53,423
16	2886.16	Sft	Floating coat of cement (GSI No:14 P-38)	22.63	P:Sft	65,314
17	945.08	Sft	Laying floors of approved with glazed tiles 1/4"thick floor of approved colour and size jointing with white cement and laid over 1:2 cement sand mortar 3/4"thick including grouting with maching colour and finishing etc complete (G.S.I.No. 25 P/31)	325.40	P:Sft	307,529
18	371.84	Sft	Preparing and painting of doors & window any type i/c edge (CSI.NO.5 P-49) Three coats	25.52	P:Sft	9,489
19	1967.33	Sft	Primary Coat of Chalk Distember (GSI.NO.23 P-39)	3.59	P:Sft	7,063

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
20	514.08	Sft	Distembering three coat (CSI.NO.24 P-39)	17.23	P:Sft	8,858
21	779.00	Sft	Providing and fixing GUTKA BRICK facing 2-1/2"x9"x2-1/4" size of approve design set in cement mortar 1:3 i/c filling the joints with white cement slurry colour pigment for making i/c levelling smooth finishing curring and scaffolding etc complete as per specification and directed by the Engineer Incharge (G.S.I.No. 103 P/74)	531.28	P:Sft	413,867
					TOTAL	2,632,991
				Total Cost of 09 Nos =		23,696,919
		(III) PUMPING MACHINERY @ BORING (09 NOS)				
1	1	Set	Providing & installing position i/c transportation to the site of work @ proposed villages in jurisdiction of Taluka Sehwan Flow Pak or equivalent Submersible Pump type HVP 17-3.0 HP Motor (3.0x400VX50HZX2900 RPM) 2 Pole complete capable to giving discharge 30 / 40 / 50 G.P.M. against the head of 120 ft i/c M.S. riser pipe of 2-1/2" dia 7 Nos: of 10'ft each with flanged ends. The flanges are no touched to accommodate the cable i/c of 2" dia containing bore hole cover plate with 90 bend sluice valve jacket, nuts and bolts and 2 sets of installation clamps (M.S) i/c nipple 2 1/2" dia (M.S) i/c 3.0 HP motor control unit consist of metallic box circuit breaker. Am-Meter selector switch volt meter volt meter selector switch electronic over current relay magnetic contractor under over voltage relay (EVR)dry running protection relay indication lamps and off switch i/c Electrodes and cable 1x1.50mmx90 m drop cable 3x6 mm x 131 meter cable clamps 45 Nos: cable termination kit etc: complete. (R.A Approved by Chief Engineer, PHED Vide No.DB/DWE/1607 dt 22-01-2026. NSI 3 BHP	805,430.00	P.Set	805,430
2	10.00	Rft	Providing G.I. Pipe of approved quality tobe tested with pressure head of 200 ft (S.S.I.No.1 , P/102)	1,282.12	P.Rft	12,821
3	2	Nos	Providing & fixing M.S. flange of 3" dia made out of M.S. plate heaving of the thickness and total weight as mentioned against each item. It include the cost of making holes, facing, welding, nut and bolts and rubber packing, white lead, filter cartage etc complete (M.S.I.No. 8/a P/).	2,451.00	Each	4,902
4	22.20	Kg	C.I. Tapper flate bottomed or central tapered flanged ends with holes Including turning and facing turning and facing of flanges for all size (P.H.S.I.M.I.NO;9, P/75)	360.00	P.Kg	7,992
5	1	No	Reflex valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-6, P/73)	6,500.00	P:No	6,500
6	1	No	P/F Earthing Set (1'.x1.0') copper plate i/c excavation of all kind earth 12' ft depth or if water comes out including salt / choracle mixed with G.I.Pipe with nut bolts testing topping etc complete (E.S.I.No. 252 P/23)	30,191.00	P:No	30,191
7	33.00	Rft	Providing laying (main or sub-main) PVC insulated with size 3-7/0.36 (4mm²) coper conductor in 3/4"dia PVC conduit on surface (E.S.I.No. 18 P/4)	916.79	P.Rft	30,254
8	1	No	C.I Sluice valve heavy pattern test pressure 300 lbs/sq; inch (P.H.S.(M)I-2, P/73)	8,200.00	P:No	8,200
9	6.68	Kg	Bend with flanged and work i/c jointing and fixing pf flanges for All size (PHSM.I.No.8,P-12)	360.00	Each	2,405
10	7	Joints	Jointing C.I/M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc: complete.(P.H.S.I.NO;1, P/41)	1,562.07	P.Joint	10,934
					TOTAL	919,629
				Total Cost of 09 Nos =		8,276,661
		(IV) SOLAR SYSTEM (13100 Watt) Each RO Plant (9 No RO Plant)				
1	13100.00	Watt	Providing Installing Solar Panel 550 / 650 watt Mono-PERC Grade-A Tire 1 solar panel. Rate approved in the decision of the Meeting of Standing Rates Committee (SRC) Sindh .	42.00	P:Watt	550,200
2	1.00	Job	VFD Drive off-Gird 15 W 3 phase Rate approved in the decision of the Meeting of Standing Rates Committee (SRC) Sindh	145,000.0	P:Job	145,000
3	13100.00	Watt	PV Balance of system earth ground mounted structure (6 KW to 10KW) Rate approved in the decision of the Meeting of Standing Rates Committee (SRC) Sindh PV Frame G.I.Angle PV Wire 8mm² A.C.Circuit breaker 32 amp PV Junction box (6x4) Control Panel box Ground / Earthing A.C. Wire 16mm² 3 core PV disconnected switch Iron made order poted rust proof plates	67.00	P:Watt	877,700
4	13100.00	Watt	Complete wiring and installing Rate approved in the decision of the Meeting of Standing Rates Committee (SRC) Sindh	20.00	P:Watt	262,000
					TOTAL	1,834,900
				Total Cost of 09 Nos =		16,514,100

S #:	Quantity	Description of Item to be executed at site		Rate	Unit	Amount
1	2	3		4	5	6
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A R.O PLANT (09 NOS)			-	24,849,000	24,849,000
2	(I) TUBE WELL (09 No)			7,654,662	262,800	7,917,462
3	(II) R.O Pump Room (25' x 15') (09 Nos)			23,696,919	-	23,696,919
4	(III) PUMPING MACHINERY @ BORING (09 NOS)			1,027,791	7,248,870	8,276,661
5	(IV) SOLAR SYSTEM (13100 Watt) Each RO Plant (9 No RO Plant)			16,514,100	-	16,514,100
	Total			48,893,472	32,360,670	81,254,142
OPERATION & MAINTENANCE COST OF (30 NOS) RO PLANTS FOR (24 MONTH)						
		PART - A MECHANICAL CHARGES				
1	720.00	Months	Provision for Oil, Lubricant, Cotton waste, grease, gland dori, packing coupling etc complete. NSI	10,000.00	P:Month	7,200,000
					Total-A	7,200,000
		PART - B - ANNUAL REPAIR CHARGES				
1	1.00	Job	Annual Repair Charges. NSI	1,413,946.00	P:Job	1,413,946
					TOTAL - B	1,413,946
		PART - C DISINFECTION				
1	5760	Nos	Bag filter cartage: Bag filter 20" jumbo size accomdating 4 filters tobe cganged after one month.(Rate Approve by Chief Engineer (O&M) PHED Hyderabad vide No.DB/CE/O&M/1759 dated 31-08-2022) NSI	500.00	Each	2,880,000
2	4320.00	Nos	Cartridge: Filter silm of 40" accomdating 14 filters tobe cganged in every month (Rate Approve by Chief Engineer (O&M) PHED Hyderabad vide No.DB/CE/O&M/1759 dated 31-08-2022) NSI	1,000.00	Each	4,320,000
3	2160	Liters	Antiscanlant dozing: Sodium Hypochlorite citric acid/CIP chemical (R.A.Approved) NSI	1,000.00	Each	2,160,000
					TOTAL - C	9,360,000
ABSTRACT OF COST						
S #	Name of Group			Schedule Item	Non Schedule Item	Total
1	PART - A MECHANICAL CHARGES			-	7,200,000	7,200,000
2	PART - B - ANNUAL REPAIR CHARGES			-	1,413,946	1,413,946
3	PART - C DISINFECTION			-	9,360,000	9,360,000
	Total			-	17,973,946	17,973,946
GENERAL ABSTRACT OF COST						
1	REHABILITATION / REPAIR OF RO PLANT AT WAHUR UC WAHUR.			3,145,234	17,924,229	21,069,463
2	REHABILITATION / REPAIR OF RO PLANT AT DAIM JI MIYANI			827,057	675,000	1,502,057
3	REHABILITATION / REPAIR OF RO PLANT AT KHAIR MUHAMMAD JAMALI UC WAHUR			-	407,064	407,064
4	REHABILITATION / REPAIR OF RO PLANT AT ALI HASSAN SHAHANI			694,228	25,200	719,428
5	REHABILITATION / REPAIR OF RO PLANT AT GULSHER MAHAR UC WAHUR			2,014,018	3,595,630	5,609,648
6	REHABILITATION / REPAIR OF RO PLANT AT NANGAR KHAN BROHI UC JAFARABAD			2,799,617	3,595,630	6,395,247
7	REHABILITATION / REPAIR OF RO PLANT AT URS PANHYAR UC JAFARABAD			5,878,111	17,214,229	23,092,340
8	REHABILITATION / REPAIR OF RO PLANT AT KOOR MIYANI UC JAFARABAD			773,794	357,564	1,131,358
9	REHABILITATION / REPAIR OF RO PLANT AT SANGPUR UC JAFARABAD			5,607,711	20,659,229	26,266,940
10	REHABILITATION / REPAIR OF RO PLANT AT SOBHO KHAN LUND / PARTO KHAN LUND UC JAFARABAD			163,261	296,316	459,577
11	REHABILITATION / REPAIR OF RO PLANT AT WALI MUHAMMAD RODHRANI UC JAFARABAD			2,014,018	3,595,630	5,609,648
12	REHABILITATION / REPAIR OF RO PLANT AT IBRAHIM RODHRANI UC JAFARABAD			2,672,790	515,500	3,188,290

S #:	Quantity	Description of Item to be executed at site	Rate	Unit	Amount
1	2	3	4	5	6
13		REHABILITATION / REPAIR OF RO PLANT AT MOULA BUX MALLAH UC BUBAK TALUKA SEHWAN DISTRICT JAMSHORO	3,492,604	3,595,630	7,088,234
14		REHABILITATION / REPAIR OF RO PLANT AT BUBAK UC BUBAK	5,608,264	20,659,229	26,267,493
15		REHABILITATION / REPAIR OF RO PLANT AT FAIZ MUHAMMAD RODHRANI / JAM KHAN RODHRANI UC BUBAK	-	247,500	247,500
16		REHABILITATION / REPAIR OF RO PLANT AT MIYANI-I UC BUBAK	1,116,976	317,500	1,434,476
17		REHABILITATION / REPAIR OF RO PLANT AT MIYANI-II UC BUBAK	1,805,478	826,748	2,632,226
18		REHABILITATION / REPAIR OF RO PLANT AT MIYANI-III UC BUBAK	911,761	727,548	1,639,309
19		REHABILITATION / REPAIR OF RO PLANT AT RASOOL BUX RODHRANI / QADIR BUX RODHRANI UC BUBAK TALUKA SEHWAN DISTRICT JAMSHORO	2,003,222	3,595,630	5,598,852
20		REHABILITATION / REPAIR OF RO PLANT AT BUND MANCHAR RD 61 UC BUBAK	2,014,022	3,595,630	5,609,652
21		REHABILITATION / REPAIR OF RO PLANT AT KARIM BUX MALLAH UC BUBAK	1,800	490,200	492,000
22		SUPPLYING AND INSTALLING OF R.O PLANTS AT VARIOUS VILLAGES (09 NOS) OF TALUKA SEHWAN	48,893,472	32,360,670	81,254,142
23		OPERATION & MAINTENANCE COST OF (30 NOS) RO PLANTS FOR (24 MONTH)	-	17,973,946	17,973,946
		Total	92,437,438	153,251,452	245,688,890

Total Amount of Composite Schedule items

Rs.

_____ % Above / Below on the rate of CSR amount to be added / deducted on the basis of premium

Rs.

Amount of Non-Schedule items

Rs.

Total Rs.

Add: amount of 5% S.R.B.

Rs.

Total Bid Cost

Rs.

In Words _____

Contractor / Firm


EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG: DIVISION
JAMSHORO