

## COMPLETION REPORT FOR PROJECT:

### Summary

**Participating UN Organisation:**

UNITED NATIONS OFFICE FOR PROJECT SERVICES –(UNOPS)

**SOT:**

WATSAN

**Project No. and Project Title:**

E3 – 1 - Rehabilitation of water distribution Networks in Al-Bat'ha and Al-Refa'ie town

**Project Location/Region/Province:**

Thi-Qar/ Nasiriya District and Al-Refa'ie District.

**Reporting Period:**

Final Report

**Report Number:**

4th – Final Report

Atlas Award Number: 54876

Atlas Project Number: 66876

**Counterpart organisations / implementing partners:**

MMPW – Ministry of Municipalities and Public Works

**Project cost:**

US\$1,529,051

**Abbreviations and acronyms:**

RFP – Request for Proposal

ITB – Invitation to Bid

TOR – Term of Reference

BOQ – Bill of Quantity

DoW – Directorate of Water

**Project Duration:**

Starting Date: April 2007

Completion Date : January 2008

Extended up to 31st December 2008

The overall project was handed over on 12th December 2008

## I. Purpose

### **Main objectives and outcomes expected as per approved Project/Programme/project document:**

Provide overall project objectives as well as outcomes expected of the project. Indicate agreed changes during course of project

For the towns of Al-Bat'ha and Al-Refa'ie in Thi-Qar Governorate:

#### Key Immediate Objective/s:

1. Establish a sustainable, cost-effective and financially viable project by restoring the existing water distribution network to become functionally efficient.
2. Improve the operational efficiency of the existing water distribution network to significantly enhance the quality and quantity of water supplied to the population.
3. Introduce new technology by providing new techniques and best practices on advance type of material available for use.

#### Outputs

1. Increase in the quantity of water available through reduction in network losses
2. Improvements to the health status of the population
3. Improvement to the quality of water through prevention of cross contamination and a Reduction in the number of hospital cases
4. Job opportunities for over 150 construction workers per day, and up to 50 technicians and engineers employable in the use of the new technology for further future projects.

### **Reference to how the programme/project related to the UN Assistance Strategy to Iraq and how it aimed to support Iraq national development goals and the Millennium Development Goals :**

The Development Goal of the project is to contribute towards improving the public health of the inhabitants by increasing the availability of safe drinking water in an effort to achieving the Millennium Development Goals set by the UN.

The project directly contributes towards achieving MDG Goal 7: "Ensure environmental sustainability" by reducing the proportion of people without access to safe drinking water and improved sanitation.

The project contributes to some extent towards the attainment of MGD's 4: Reduce child mortality; and to Goal 6: Combat HIV/AIDS, malaria and other diseases. Child mortality is improved and the incidence of malaria and other diseases is reduced through improved access to safe and adequate supplies of drinking water.

By significantly augmenting the quality and quantity of water supplied to 35,000 consumers in Al-Refa'ie and Al-Bath'a towns, the project also contributed to the UN Assistance Strategy for Iraq, Water and Sanitation Sector Outcome 1: "Increased sustainable access to safe water for urban and rural populations in 10 governorates especially the vulnerable."

## **Project Management arrangements**

Give a brief description of programme/project implementation and monitoring arrangements utilised including:

- Programme/project implementation and supervision arrangements; indicate in-country and region based capacity of organisation utilised ;
- Main international and national implementing partners involved, their specific roles and responsibilities in project implementation and their interaction with the agency;
- Indicate extent of cooperation with relevant line ministry
- Specific delivery mechanisms utilised
- Indicate intra cluster cooperation and goods/services other agencies supplied/ common services utilised;
- Details on arrangements for procuring and transporting programme/project inputs, to ensure local appropriateness and acceptability, as well as security and value-for-money under the circumstances – attach as annex 3 final list of contracts awarded;
- Systems for programme/project monitoring (including financial tracking and accounting audit), quality control (including lesson learning, and corrections), and impact assessment; methods for data collection and monitoring

The project was implemented by UNOPS, for the Ministry of Municipalities and Public Works and the Directorate of Water in Nasiriya and Al Refa'ie which are also the national implementing partners. The implementation was carried out in cooperation with local consultants and contractors.

Actual execution of the civil works for this project was undertaken by a qualified and experienced Iraqi-based contractor. The contractor was selected by a competitive bidding process in accordance with UNOPS procurement procedures. This was done using UNOPS up-to-date database of more than 1,000 contractors of varying size and expertise who operate in Iraq as well as a database of costs of key construction materials and rates that continues to be updated on a monthly basis. Together with a network of experienced local engineers UNOPS is in a unique position among UN agencies to ensure that bid prices are realistic and competitive, contractors are capable of implementing the work at hand, and that value for money is achieved through on-site monitoring and inspection

UNOPS had a national staff presence in the South and was carrying out supervision missions. Allowance for such missions has been made in the budget.

The delivery mechanism was based on the use of national staff carrying out detailed assessments, design work and on-site monitoring and inspection of the works constructed by the contractor, under the guidance of an international project manager based in Amman. The project manager was responsible for direction of a number of projects.

The project was designed around full cooperation with the Ministry of Municipalities and

Public Works (MMPW) and the Directorate of Water and Sanitation.

The Government instrumentalities have shown particular interest and provided continuous assistance in making available all details and personnel to assess the requirements as well as handing over studies done previously by other governmental ministries, consultants and contractors which facilitated the work of UNOPS on ground.

Following the successful model established for other projects, a similar mechanism recently implemented in Iraq by UNOPS, representatives of the Ministry of Municipalities and Public Works and the Directorate of Water and Sanitation were invited to form part of a committee that provided oversight to project execution and ultimately sign off a project acceptance. UNOPS national project staff supported and facilitated meetings of this committee.

The project manager, backed up by the UNOPS staff in Iraq, continuously has overseen project implementation, and ensured transparent procurement and timely delivery of required materials. UNOPS engineers have also provided inspection and monitoring of project activities in the field and supported the project manager in the overall monitoring and supervision of project implementation.

Internal project review was conducted from time to time for assessing performance, contribution to related outcomes, and determining lessons for broader application. Such reviews involved all key project stakeholders, and focused on the extent to which progress was being made towards outputs, and that these remain aligned to appropriate outcomes.

UNOPS used standard UN accounting procedures with delegated authority to the Iraq Country Director allowing efficient project processing and payments. UNOPS administered funds received under this project in accordance with the Financial Regulations and Rules applicable to UNOPS. All financial accounts and statements were subjected to the internal and external auditing procedures laid down in such Financial Regulations and Rules.

Regular audit of projects managed by UNOPS is undertaken through external auditors and/or internal auditors. Audit is a useful tool to verify compliance with applicable procedures, rules and regulations, and provides reassurance to UNOPS clients that funds are used for the intended purposes and in conformity with international best practice.

The preparation of tender documents and specifications, tender evaluation, contracting and procurement, is done in the UNOPS IQOC Office based in Amman. The list of contractor's are given in Annex-3

UNOPS already has systems in place for project monitoring and quality control. The system relies on a clear segregation of functions and a system of checks and balances between the works of Consultants on the ground, Contractors, and the local authorities.

Daily monitoring on site was done by Iraqi staff working for UNOPS; UNOPS staff completed the final review of all requests for financial disbursements as well as administrative oversight. Tendering was carried out from the Amman office, while quality control and progress monitoring is being carried out with the local authorities to ensure consistency.

The project was designed in full cooperation with the Ministry of Municipalities and Public Works (MMPW) and the Directorate of Water and Sanitation.

The Government showed particular interest and provided continuous assistance in making all necessary information and personnel available to assess the requirements.

## II. Resources

### Total approved budget and summary of resources used for the programme/project from the UNDG Iraq Trust Fund (and non-Trust Fund resources where applicable):

#### UNDG ITF funds received.

Project expenditure and amount still available to the project at completion of activities. Please include here explanations of the use of funds according to the 10 broad categories and explain any deviations of project expenditure vs original budget

Indicate approved budget revisions

Indicate other funding sources available to the project

If resources still available indicate proposed use

Total budget funded by UNDG ITF - US\$ US\$1,529,051

Personnel: **\$276000**

Contracts: **\$950000**

Training: **\$50,000**

Transport: **\$0**

Supplies and commodities: **\$54,000**

Equipment: **\$17,000**

Travel: **\$28,087**

Miscellaneous: **\$28,020**

Security: **\$36,000**

Agency Management Support: **\$89,944**

Total expenditure as of December 2008 amount to **\$832667**

Funds remaining: **\$ 696384** plus Cumulative interest earning **\$31 078,66**

The details of the project costs and revision are given in the Annex-2.

#### Human Resources

Indicate number, type (operations/programme) and level of staff used for the project in two categories national and international. Please be careful to indicate where staff are shared with other projects

No	International	Location
1	Project Manager	Amman
Sub-Total = 1		
No	National	Location
1	Field Coordinator	Baghdad
1	Programme Officer	Amman
2	Field Engineers	Al-Bat'ha and Al-Refa'ie
1	Operations logistic facilitator	Baghdad

Sub-Total = 5	
Total = 6	

### Project Assets

Assets purchased under the project and their disposal

The details of the asset purchased under the project and their disposal details are attached in Annex- 4. These assets were transferred to other projects of similar nature in the region to use for the benefit of the people.

### III. Results

**An assessment of the extent to which the programme/project component / programme /project has achieved the outcomes and outputs expected**

Please begin with one succinct paragraph summarising what has been the impact of the project

Particularly emphasize impact on basic service delivery, employment creation, capacity development, and policy dialogue. Provide quantitative and qualitative details.

Has the original problem the project sought to address been adequately solved –Who have been the main beneficiaries, and how have they benefited? Which other stakeholders have gained or lost as a result of the programme/project? How was stakeholder participation handled?

Compare results achieved against project benchmarks and to the extent possible targets/benchmarks identified in UN/WB Joint Needs Assessments and/or UN Assistance Strategy and National Development Goals

Complete log frame results matrix comparing results foreseen and those achieved and attach as annex 1.

The project addressed the problem associated with an imminent collapse of the water network systems in Al Bat'ha and Al Refa'ie.

For the past two decades, no investment to improve the water network system in general had been made and this fact in combination with a rapid increase of the inhabitants of the two towns during the past five years (caused by an influx of internally displaced persons choosing to resettle in this relatively safe area of Iraq) resulted in the failure of the existing water network to meet the . requirements of the current population.

The project has progressed well in collaboration with the local water authority officials. A local engineering consultant was selected through an RFP process who performed exceptionally in fully achieving the verification and technical solution objective of the project by carrying out extensive investigations to assess the conditions and proposing an appropriate, practical and economical solution to lay the network in the most efficient manner in order to serve as many people as possible.

The selected contractor has shown great enthusiasm, capacity and flexibility in progressing with the project expeditiously under extremely challenging circumstances. He has succeeded in completing the networks in both areas despite the deteriorating security conditions (The government has launched an armed operation against militias in February 2007. In the process; he has generated employment for over 150 labourers, 10 Engineers & technicians and enhanced the technical knowledge and capacity of the water authority staff together with the help of the consultant.

The contractor encountered unforeseen technical difficulties during the excavations with exceptionally heavy concrete casting and people illegally extending their houses across the paths of the streets, and has addressed these issues effectively with re-routing of water networks and in some case jack hammering kilometres of underground old cast.

Works completed to extend the water network have already helped in preventing the spread of water related diseases and thereby brought about a reduction in the no. of related hospital

cases recorded.

The medium outcome of the project is summarized as follow:

- Network losses were reduced.
- Attainment of the project outcomes associated with the reduction in the incidence of water borne diseases will take some time to become evident
- Physical works on the water supply mains for the population of the two cities was guaranteed for the foreseeable future.

The Annex -1 contains the result matrix which provides the details of objectives achieved.

### **Main activities undertaken and achievements/ impacts:**

Please focus on those activities funded by the UNDG ITF. If it is unavoidable to mention related non UNDG ITF activities to demonstrate impact please make clearly indicated what can be attributed to the UNDG ITF and what not.

Main activities undertaken during this period include

#### **Al-Bath'a Town**

- The work relating to the laying of 9,881 m water network was completed and efforts in boosting the quality of water to its optimum levels were successfully accomplished
- All the civil work related to fixing 14 valves was completed
- 1000 house connections were provided
- All networks were tested and proved to be of high efficiency

#### **Al-Refa'ie Town**

- The work relating to the laying of 11970m water network was completed
- All the civil work related to fixing 23 valves was completed
- 925 house connections were provided
- All networks were tested and proved to be of high efficiency

All the steps above were closely monitored by a committee of engineers from Al Refa'ie and Al-Bath'a water directorate in addition to the UNOPS site engineer. All networks, valves and house connections were tested and the results were successful.

**Finally the two network projects were completed on the 12th December 2008. Attached is the completion letter from the Director of ThiQar water directorate at the end of the report.**

### **Implementation constraints, lessons learned from addressing these and knowledge gained from assessments, evaluations and studies that have taken place during the project:**

Please be straightforward in this section. Iraqi officials and donors are keen to be informed of lessons learned (both positive and negative) to guide future design and implementation of similar operations

Include major external factors affecting implementation and outcomes and the steps taken in programme/project implementation to address, and minimise or mitigate the potential risks;

Detail major findings of evaluation reports where relevant and indicate how recommendations were followed in project implementation.

Provide table of monitoring, evaluation, inspection and audit missions undertaken.

UNOPS worked hand in hand with Thi-Qar/ Nasiriya District and Al-Rifa'ie District Water authorities for implementation of the project. This has helped UNOPS to carry out a smooth hand over of the project site to the contractor for implementation and final handing over of the site to beneficiaries. Worth noting however, was that due to their daily work in maintaining the services functioning for the public, the local authorities were not always in the position to extend their attention to solve particular problems arising during project implementation. At times this caused delays to activities. In order to avoid the need for extension of projects, such delays should be considered during project proposal preparation.

**Key partnerships and inter-agency collaboration, impact on results:**

The project was designed in full cooperation with the Ministry of Municipalities and Public Works (MMPW) and the Directorate of Water and Sanitation. The Government instrumentalities have shown particular interest and provided continuous assistance in making available all details and personnel to assess the requirements as well as handing over the studies previously done by other governmental ministries, consultants and contractors in order to facilitate the work of UNOPS on the ground.

**Highlights and cross cutting issues pertinent to the results e.g. gender disaggregation, policy engagement and participation of the public:**

Were the needs of particularly vulnerable or marginalised groups addressed?

How did the beneficiaries of the programme/project participate in its development and delivery?

How did men and women benefit from the programme/project? How were gender inequalities handled?

Were environmental concerns addressed including environmental impact/risk assessment where relevant?

Were there any specific issues in relation to the security situation?

How did the project contribute to capacity building in ministries and elsewhere?

Improved access to water will benefit to both men and women equally.

The project encouraged female employment with UNOPS putting much pressure on the Water authorities to provide employment opportunities for female engineers. The outcome was that two of the supervising engineers from the ThiQar Water Directorate were women. Women were also encouraged to seek employment on the project.

Women and children are usually saddled with responsibility for collecting water for the household. Improvements in the water supply system are expected to directly benefit some

members of this group of consumers.

Interestingly, during implementation, it has been noted that female heads of households are cooking food to sell to construction workers on site. It is expected that such an important development contributes to employment creation and thus income generation in these areas and might also become an option for a number of women that reside along the pipeline routes while pipes are being laid.

There was no negative environmental effect in and around the project area cause to implementation of this project,

#### **IV. Follow up actions and sustainability**

**Priority actions that should be supported/implemented following completion of project to build on achievements and partnerships rectify shortcomings encountered and use the lessons learned during the project with strong emphasis on achieving sustainability of the outcomes:**

Indicate relevant follow up UNDG ITF project or project proposal where appropriate

The water network was rehabilitated/extended under this project to provide potable water to the people of Al-Bath'a and Al-Refai'e towns. The water networks require regular maintenance during operation of the systems in order to be sustained for longer periods of time. Following handover of the networks, the local Water Authorities of Al-Bath'a and Al-Refai'e will be in charge of conducting these maintenance activities.

**Indication of major adjustments in the strategies, targets or key outcomes and outputs:**

Explain here any significant adjustments that had to be made and compare final outcomes and outputs with those originally foreseen

N/A

**Estimated Budget required:**

Budget required for any necessary follow up action

Not applicable

## Annex 1 Key Performance Indicators – Log Frame Matrix

Objectives	Measurable indicators	Means of verification	Important assumptions
<p><b>Development Objective</b></p> <p>To reduce the percentage of people without access to safe drinking water and sanitation and to contribute significantly to reaching the infant mortality rate and nutrition Millennium Development Goals; Through the recovery of water and sanitation coverage to 1990 levels.</p>	<p>Increased availability of potable water, and reduction in the number of hospital cases.</p>	<p>Reports from independent sources, Ministry of health/WHO/UNICEF statistics on health status, water quality analysis results.</p>	<p>The security situation in the area will not get significantly worse than at present.</p>
<p><b>Immediate Objectives:</b></p> <p><i>The immediate impact on the programme/project area or target group i.e. the change or benefit to be achieved by the programme/project:</i></p> <ol style="list-style-type: none"> <li>1. Increase the quantity available to consumers by minimising network losses</li> <li>2. Improving the quality of water produce for consumption</li> <li>3. Prevent contamination of the water treated.</li> <li>4. Increase the accessibility to water.</li> </ol>	<p><i>Quantitative ways of measuring or qualitative ways of judging timed achievement of purpose:</i></p> <p>Reduction in the number of people falling ill, admittance to hospitals.</p> <p>Demand for number of water tankers during the period and cost of water provided by private/commercial parties.</p> <p>Continued operation of the Water network.</p>	<p><i>Cost-effective methods and sources to quantify or assess indicators:</i></p> <p>Ministry of health / WHO / UNICEF assessments.</p> <p>Reports form Governorate authorities, media, independent bodies and religious authorities.</p> <p>MMPW assessments</p>	<p><b>(Immediate Objective to Development Objective)</b></p> <p><i>External conditions necessary if achieved programme/project purpose is to contribute to reaching programme/project goal:</i></p> <p>There are no external conditions necessary for the achieved programme /project to contribute to reaching the programme /project goal as the achievement will contribute directly towards the goal.</p>

<p><b>Outputs:</b></p> <p><i>The specifically deliverable results expected from the programme/project to attain the objectives:</i></p> <ol style="list-style-type: none"> <li>1. Improvements to the health status of the population</li> <li>2. Increase in the quantity of water available through reduction in network losses</li> <li>3. Improvement to the quality of water through prevention of cross contamination.</li> <li>4. Improving accessibility to safe water</li> <li>5. Reduction in the number of hospital cases</li> <li>6. Job opportunities for over 150 construction workers per day.</li> </ol>	<p><i>Quantitative ways of measuring or qualitative ways of judging timed production of outputs:</i></p> <p>Infant motility rate.</p> <p>Quantity of water distributed to /population served / no of complaints</p> <p>No of network repairs / leakage prevention. The Number of samples failing water quality analysis test</p> <p>Number of hospital cases recorded</p> <p>Number of workers employed</p>	<p><i>Cost-effective methods and sources to quantify or assess indicators:</i></p> <p>Reports form Governorate authorities, media, independent bodies and religious authorities &amp; NGO's</p>	<p><b>(Outputs to immediate objective)</b></p> <p><i>Factors out of programme/project control which, if present, could restrict progress from outputs to achieving programme/project objectives:</i></p> <p>Once the outputs are achieved there are no constraints on achieving the objectives</p>
<p><b>Activities:</b></p> <p><i>Tasks to be done to produce the outputs</i></p> <ol style="list-style-type: none"> <li>1. Repair &amp; replacement of approx 10km of the existing Network in both towns</li> </ol>	<p><b>Inputs:</b></p> <p><i>This is a summary of the programme/project budget (sub-budgets and total as in Annex B)</i></p> <ol style="list-style-type: none"> <li>1. Repair &amp; replacement of networks Modification including</li> </ol>	<p><i>Financial report</i></p> <p>UNOPS financial reports <i>ITF project reports with financial review</i></p>	<p><b>(Activity to output)</b></p> <p><i>Factors out of programme/project control which, if present, could restrict progress from activities to achieving outputs:</i></p> <p>Adverse security conditions.</p>

<p>2. Extensions to the existing network by nearly 20Km in both towns</p> <p>3. Modifications to the existing water distribution network with controlled zones.</p>	<p>zoning and control of existing network = \$ 400,000</p> <p>2. Extensions to network = \$700,000</p> <p>3. Supervision and project Management = \$429,051</p> <p><b>Total of US \$ 1,529,051</b></p>		
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**Annex 2  
PROJECT COSTS**

<b>CATEGORY</b>	<b>UNDG ITF approved budget</b>	<b>Actual COST (Disbursed till 31<sup>st</sup> December 2008)</b>	<b>Percentage of Approved</b>	<b>Budget Revision approved (16/06/2008)</b>	<b>Percentage of revision</b>
<b>1. Personnel</b> • including staff and consultants	261,000	\$194970.78	74.7	276,000	13
<b>2. Contracts</b> • including companies, professional services, grants	\$950,000	\$559982.47	58.95	\$950,000	
<b>3. Training</b>	\$50,000	0.00	0	\$50,000	
<b>4. Transport</b>	\$0	\$0	-	\$0	
<b>5. Supplies and commodities</b>	\$54,000	\$4424.67	8.19	\$54,000	
<b>6. Equipment</b>	\$17,000	\$3357.62	8.19	\$17,000	
<b>7. Travel</b>	\$43,087	\$4123.59	19.75	\$28,087	-35
<b>8. Security</b>	\$36,000	\$8378.72	23.27	\$36,000	
<b>9. Miscellaneous</b>	\$28,020	\$21929.03	78.26	\$28,020	
<b>10. Agency Management Support</b>	\$89,944	\$35500.00	39.47	\$89,944	
<b>Total Expenditure</b>	<b>\$1,529,051</b>	<b>\$832666.88</b>	<b>54.46</b>	<b>\$1,529,051</b>	

**Annex 3  
List of contract awards by procurement method**

- Contract for “Rehabilitation of Al-Bat’ha and Al-Refa’ie Water Network” was awarded to M/s Dubai Contracting Company based on competitive method to carry out the civil construction works on 21<sup>st</sup> October 2007.

Annex – 4  
List of Assets purchased in the project

**Year End Physical Inventory Report**

**UNOPS AIF - Inventory Control**

**Report to: 2009**

*d.m.*

Item Search Code	Description Remarks	Serial Number	Item Physical Location	Purchase US\$ Value	Depreciated US\$ Value	Date Received
<b>Project Code</b> <u>53651</u>						
<b>Stock Code</b> <u>381220</u> <u>Desks, office</u>						
381220-0056	Side desk with drawers / light color	N/A	G1-03 -Procurement	112.99	103.57	10/21/2008
<b>**** Class Code Sub-Total ****</b>				112.99	103.57	
<b>Stock Code</b> <u>388114</u> <u>Body armour, military, for extended wear</u>						
388114-0167	Body armour with ceramic and sweat wicking undershirt - Level II 8018		Security Office - Hosam	649.72	628.06	1/8/2009
<b>**** Class Code Sub-Total ****</b>				649.72	628.06	
<b>Stock Code</b> <u>452150</u> <u>Laptop computers and docking station</u>						
452150-0114	Sony Vaio TZ series with carrying case	5b623511	G1-12 - Farouk	2,822.03	2,163.56	7/24/2008
<b>**** Class Code Sub-Total ****</b>				2,822.03	2,163.56	
<b>Stock Code</b> <u>459112</u> <u>UPS exceeding 499 VA but not exceeding 1249</u>						
459112-0044	UPS AVRX 750U	9311BY00M57120	G2-04	93.22	27.19	10/24/2007
459112-0045	UPS AVRX 750U	9311BY00M57120	G2-04	93.22	27.19	10/24/2007
<b>**** Class Code Sub-Total ****</b>				186.44	54.38	
<b>**** Project Sub-Total ****</b>				3,771.18	2,949.57	
<b>**** Grand Total ****</b>				3,771.18	2,949.57	

Certificate from MMPW on receiving the completed works in Al-Bath'a and Al Refai'e Towns:

جمهورية العراق  
Ministry of Municipalities  
& Public Works (MMPW)  
General Directorate for Water  
GWA

وزارة البلديات والاعمال  
البلدية العامة لقطاع  
مديرية مياه محافظة  
القادسية

التاريخ:  
المحل:  
القسم:

Final handing  
over certificate

أمر اداري  
م/ أتجاز عمل

ان على ما جاء بالتقرير المرفوع من قبل لجان الإشراف الخاصة بأعادة  
تأهيل شبكة ماء قضاء الرفاعي وناحية البطحاء والممول من قبل  
منظمة (unops) والمنفذ من قبل شركة دبي للمقاولات العامة المحدودة تم  
انه العمل كما يلي

أ- إعادة تأهيل مشروع شبكة ماء قضاء الرفاعي بتاريخ ٢٠٠٨/١٢/١٩  
ب- شبكة ماء البطحاء بتاريخ ٢٠٠٨/١٢/٤

المهندس  
أحمد حسن علي  
معاون مدير ماء ذي قار  
٢٠٠٨/١٢/٤

تصديقه على هذا الأمر  
بمقتضى الختم

خه منه :-  
الوحدة الاداريه في قضاء الرفاعي /للتفضل بالاطلاع مع التقدير  
الوحدة الاداريه في ناحية البطحاء /للتفضل بالاطلاع مع التقدير  
التخطيط والمتابعة /مع الاوليات  
منظمة (unops)  
شركة دبي للمقاولات العامة المحدودة/للعلم  
الاضبارة العامة