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REPUBLIC OF YEMEN

MINISTRY OF PUBLIC WORKS AND HIGHWAYS

RURAL ACCESS PROGRAM CENTRAL MANAGEMENT OFFICE

HAJDEH & MAKHADA-RASIAN-ALHAIAJEM-WADI AL MA'A
RURAL ROAD (37.94km),
TAIZ GOVERNORATE, YEMEN

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT REPORT (ESIA)

Jouzy
AN AXIANTA COMPANY

May 2014

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Executive Summary

Introduction

An Environmental and Social Impact Assessment (ESIA) study has been prepared for the Rural Access Program (RAP) under a contract signed between the Ministry of Public Works and Highways and Jouzy, on November 5th, 2013. It has been prepared in accordance with the World Bank Operational Directive (OP 4.01), Environmental Assessment. It also complies with the World Bank's relevant safeguards policies and the relevant Yemen regulations.

In addition, this ESIA report has been prepared with evidence that the project does not trigger any of the World Bank mandated Social Safeguard Policies. It justifies that all land requirements under the said project are met through voluntary donations with no displacement/ re-location of project affected populations.

Description of the Project

Hajdeh & Makhatah-Rasian-Alhaiajem rural road is located in the districts of Maqbanah and Shara'b Al Rawnah Districts of the Governorate of Taiz. The total length of the road is 37.94 km. Its elevation ranges from 715m above MSL to 1182m above MSL. The project consists of rehabilitating an existing dirt road comprising a track, 4 to 6m wide. In many inhabited areas along the alignment, the width is reduced to less than 4m. The road passes through terraced agriculture lands and non-arable lands. It crosses Rasian watercourse and passes near Issa Shrine, a cultural heritage site dating back to around 500 years. The main objective of improving Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road is to improve livelihood and to reduce the isolation of the rural population.

The design alignment is based on the existing alignment. The road will be widened to 6m asphalt with a 1m shoulder built on each side of the road where possible. At some pinch point, and in case it is technically unfeasible, the road will keep its same width. A voluntary land donation process has been prepared and signed by the landowners as a contribution to the road. The process is managed by the Beneficiary Committee and is documented in the annexes attached to the end of this ESIA report.

The main works that will be necessary for the construction of the road are: earthworks as a result of the re-profiling of the horizontal and vertical profiles of the roads, filling, grading, leveling of sub-grade, asphalting, construction of channels for runoff drainage, retaining walls/gabions for soil stabilization and construction of culverts for stream water crossings.

605 plots owned by 362 persons are affected by the widening and the rehabilitation of the road. These plots cover an area of 54,592$m^{2,}$ divided into 39,191m^2 of agricultural lands and 15,400m^2 of non-arable lands. The loss of land acquisition is less than 10% for all the owners. Consequently, there is no need for a resettlement plan especially that all the concerned persons agreed to donate land.

Legal and administrative framework

The World Bank Safeguard Policy triggered is the Environmental Assessment OP 4.01. As the land needed for the project was voluntarily donated (see the annexes Nos. 2 to 5), the WB Safeguard Policy on Involuntary Resettlement OP 4.12 is not triggered. The project was classified as category B. This category is justified because the expected adverse environmental and social impacts will be limited in most cases, temporary and for the most part reversible.

The most relevant law in Yemen related to environment is Law 26, Protection of the Environment (1995). It is worth mentioning that Yemen ratified a large number of International Environmental Agreements and Conventions.

The central organization responsible for the coordination of decisions and actions related to the road projects is the Ministry of Public Works and Highways (MoPWH) that administers among others, the Rural Access Program. Several organizations are also directly involved in road related projects such as, the Ministry of Water and Environment (MoWE), the Ministry of Agriculture and Irrigation (MAI), the Ministry of Finance (MoF), the General Authority for Land Survey and Urban Planning (GALSUP), the Local Councils and many existing Non Governmental Agencies (NGOs)

As the Project was classified under Category B, affected groups and local NGOs should be consulted at least once about the project's environmental aspects and their views taken into account.

Baseline Data

Physical Environment

Topography and Land Use
The Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road is located at an elevation that varies between 715 and 1182m above MSL. The topography is accentuated in some locations with slopes reaching 16%.

Geology and Soil
The rocks are, in their majority volcanic. Due to the high difference in temperature between day and night, rocks are breaking down and the widening of the road may lead to erosion. In the design of the Project, retaining walls were allocated at critical points.

Climate and Precipitation
The Taiz governorate has an arid to semi-arid climate, characterized by cold nights and hot days. Its elevation ranges between 700-1500m above MSL. Mean temperatures range between 17 to 25 degrees centigrade. The hottest month is July and the coldest is December. Relative humidity is between 31-51%. The area is characterized by an average yearly rainfall of 450mm. Rainfall, however can reach 600mm. It rains all year round but the highest wet season starts from May, intensifies towards the end of July-August and stops in October. The dry season extends from November to March. The rainfall recharges the groundwater but also runs on the ground surface in the valleys (Wadis).

Hydrology and Runoff
Several temporal water streams cross the existing road the major one being Rasian river. A hydrological study was conducted and different culverts were located at the water crossings to prevent disruption of the natural watercourses.

Water Harvesting
Water harvesting allows the farmers to supplement the amount of rainfall with runoff water collected from uncultivated areas and roads and conveyed to the cultivated lands. Farmers usually build bumps on the roads to canalize water to their lands.

Air Quality
Unfortunately, no data exists on the air quality in the project area. Due to the absence of industries, the level of exhaust emissions in the air is expected to be low. However, from the site visit, one can note the high level of dust covering all the vegetation along the road.

Noise

Typical existing noise levels near the project site are generally limited because the project site is located in a relatively underdeveloped area. Cars encountered were relatively old and slowly driven at low gear due to the rough terrain. Noise comes from the engines, transmission, exhaust and suspension of the vehicles and from frictional contact between the tires and the hard road. On the other hand, weekly markets are held in some villages. People from adjoining villages visit the market for shopping. The movement and gathering of the people cause high levels of noise.

There are two schools (Zeid Bin Haritha and 7 July), which are considered as noise sensitive facilities as they are located in the vicinity of the road

Waste Disposal

From the site visit and discussions with the residents in the area of the Project, it was noticed that the common practice is to discard solid waste in pits near houses and burn it when it accumulates. Meanwhile a blowing wind may spread waste in the surrounding environment. The nearest common non-sanitary waste disposal facility is a waste dump in Taiz, at some 25 km distance from the site.

Biodiversity

In the considered Project, the road already exists although unpaved and not very wide. The lands that will be affected by the widening of the road are mainly non-arable or cultivated by cereals and fodder crops. Cattle, goats, donkeys and camels can be found in the area. During the site visit, the observed fauna and flora are not those of particular interest and no protected or endangered species were identified. The road does not affect any sensitive, specially designated area or protected species.

Socio-Economic Conditions

Population and Economic Activity

The population served directly by the road belongs to 6 Sub-districts and is estimated at some 85,529 persons. The population served indirectly by the Project belongs to Beni Salah, Al – Ashgob, Mirab, Al Aasd, Al Haiagem, Bani Swmaia Sub-Districts and is about 394,702. The life expectancy is 65 years. Around 50% of the inhabitants of the project area can be classified below the poverty line and 40% under the food poverty line (ref. National Poverty Survey, 2002).

Health Facilities

According to the socio-economic survey, the health facilities in the Project area are very limited in terms of equipment and personnel. Most of the residents have to go to Taiz for medical consultation. In the present conditions and even in critical health cases such as difficulties during delivery of babies, cars cannot drive at a speed higher than 5-10 km/hour. Consequently, the road is a main obstacle for access to health services. In total there are 62 health facilities in the project area.

Education

There are 19 schools in the villages along the road as noticed during site visit and discussions with the residents. It should be noted that the main barrier to education is the distances to the schools under the present road conditions especially for the secondary education level.

Employment

Agriculture is the main source of income for the population served by the road, the main agricultural crop being Corns. Kat is grown only in Al Hajajim area. Soils are fertile but agriculture is mainly rain fed and consequently, yields are very limited and almost nil in a dry year. This has lead to the abandonment of agriculture and to expatriation. From the site visit; one can notice the high number of abandoned lands. The project area is known for the high number of emigrants that left the area looking for job opportunities. The main income of the population in the area comes from money transfers.

Archaeology and cultural heritage

One site of some archaeological significance was identified within the Project site, Maqam Issa (Issa Shrine). The site, however, is not affected by the road works as it is at a distance of around 300m to the proposed road alignment. During execution of works, if other archaeological sites are encountered, authorities should be contacted.

Potential Social and Environmental Impacts

A scoping matrix (adopted from the SEA-RAP2) was used to identify impacts that should be given attention. Input from the public consultation was considered and incorporated in the list of potential impacts. These impacts were classified in terms of: Type (negligible, uncertain, positive, negative), Effect (direct, indirect), Change (temporary, permanent), Extent (localized, extensive) and Degree (minor, major reversible or major irreversible).

None of the impacts identified were evaluated as major irreversible. Most impacts are considered negligible. Impacts of more significance are short-term and reversible except for the land used in widening the road which although minor in long term and irreversible.

Impacts are listed below in order of significance starting from permanent irreversible to temporary reversible:

Project activities identified as causing potentially permanent irreversible impacts:

1. Permanent land acquisition (A-1.2)
    a. Widening the road (A-1.2.1)
    b. Pinch points (A-1.2.2)
    c. Changes of alignment (A-1.2.3)
    d. Waste dumping (A-1.2.4)
2. Slope stabilization (A-1.4)
3. Disposal of Cut Material and Surplus Fill (A-1.6)
4. Borrow Pits and Quarry Areas (A-1.7)

Project activities identified as causing potentially temporary reversible impacts:

1. Dust and Potential Pollution form Construction Machinery, Stored Materials and Spoil Heaps (A-3.1)
2. Alteration of water harvesting patterns (A-2.4)
3. Cross-Drainage and Scour effects (A-2.5)
4. Noise Nuisance from Construction Works (A-3.3)
5. Management of Construction site compound (A-1.5)
    a. Management of Petroleum Products (A-1.5.2)
    b. Solid and Liquid Waste Disposal (A-1.5.1)
    c. Living and Sanitation facilities (A-1.5.3)
6. Discharge to sensitive areas (A-2.6.6)
7. Destruction and re-location of utility services (A-5.3)

8. Temporary land acquisition (A-1.3)
    a. Location and operation of the Site compound (A-1.3.1).
    b. Diversion and haul roads (A.1.3.2)

No cumulative impacts of the project are expected. The baseline conditions do not indicate any possibility of significant cumulative impacts. Similarly, no other infrastructure projects, that could give rise to cumulative impacts, are expected during the road project implementation.

During the construction phase, the project will have minor negative impacts and positive impacts through income generation created by the hiring of local workers. However, during operation, the majority of the impacts will be positive.

Mitigation measures

The Mitigation measures include actions needed to mitigate the previously identified negative impacts and enhance the positive impacts. The mitigation measures make sure that the construction, and maintenance of the road are compatible with the protection of the existing environment and maintain the welfare of the people affected by the Project. The cost of mitigation measures is expected to reach 50,000 USD (excluding items included already in the BoQ). The majority of the proposed mitigation activities is part of the works and listed in the BOQ Environmental Works. In addition, the General Contract Specifications and Regulations contain specific environmental, health and safety requirements for proper management of construction waste, waste fuel, oil and lubricants, noise and dust levels, and use and proper maintenance of equipment.

Environmental and Social Management Plan

An Environmental and Social Management Plan (ESMP) was prepared for the Project. It aims at addressing the environmental safeguards required during the Project implementation. The presence of a proper environmental management plan is extremely useful so that recommendations in terms of mitigation and monitoring are effectively implemented. The ESMP is essentially a guidance document to be continually referred to during the construction and operation of the Project. The ESMP for the Project is summarized in the following table.

Environmental and Social Monitoring Plan

The Monitoring Plan is a vital aspect of the Environmental and Social Management Plan (ESMP) to ensure that mitigation measures are being performed and that they are effective. The main purposes of the monitoring plan are the warning of responsible authorities of unforeseen negative impacts or when an impact indicator approaches a critical level and the provision of information such as the responsible agencies, frequency, location and indicators for each measure**.** The total cost of the monitoring plan is estimated at 35,000 US$ for the total duration of the execution works of the road.

Social Consultations

Consultations with men and women in the project area were conducted separately during the preparation of this ESIA. Results of the men consultations can be summarized as follows:

1. All residents are convinced of the positive economic, social and health impacts of the road widening and paving on their lives.

2. None of landowners donated land more than 10% of their total land holding and the majority of them just donated less than 1% of their landholding.
3. Land donation is voluntary.
4. Different plots are owned by one same owner
5. Because of the rugged terrain, and dependence on the Monsoon, land revenues are low The population hopes to increase revenues after the completion of the road works as they will be able to supply crops with water they bring from the valleys by means of tankers.
6. Some residents expressed their concern over the suspension of the project without completing the process of asphalting. Their land will be excavated and lost without a result; they wanted the project to be completed in all its phases.
7. Transport is expensive especially for the sick.
8. Some resident showed lack of confidence in the implementation of the project as they were promised implementation several times long time ago.
9. Most residents showed their willingness to help during the implementation process.
10. Most of the population did not express displeasure with the problems that accompany the implementation process such as the noise and dust, and the temporary disruption of some services

Women Consultation

The aim of this consultation was to solicit the views and concerns of women on the construction of the road and incorporate them into this ESIA and the contract documents of the Project. A gender expert undertook the consultations in four villages along the road, interviewed women from different levels and discussed with them the expected impact and the appropriate mitigation measures with regard to daily activities.

Results of the women consultations can be summarized as follows:

- In Wadi Al Sohi village, women expressed their concerns because of the increasing risk of accidents and the safety of their child especially outside the school gates, and they pointed out the need for the installation of signs and speed bumps in order to reduce vehicles speed
- In Al Joraebib village many women were worried about the danger on their lives near the mosque of the valley because the vehicle's speed might be faster as a result of the road maintenance. Particularly, women get the water from this place, usually with the company of their children. They proposed to put signs and speed bumps in this region.
- In Alarwoth village some women asked for the installation of speed bumps in Al Arakeb area in the center of the village

Table i: Environmental and Social Management Plan (ESMP) during the construction phase

Potential Impact	Mitigation	Responsibility		Additional Cost US $	
	Mitigation Activities	Implementation	Monitoring	Mitigation Measures	Monitoring
A.1 Land Resources					
A-1.1 Site Survey Investigation	No special mitigation measure is needed				
A-1.2 Permanent Land Acquisition	-Voluntary donation files prepared -Proper selection of dumping site -Selection of dumping site will be clearly demarcated with sign boards, directions	Beneficiary Committee and Environmental and Social Unit in cooperation with contractor and Resident Engineer	Environment and Social Specialist/ Consultant	None	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist with camera and car expenses (35,000 USD)
A-1.3 Temporary Land Acquisition	-Proper location of site offices and plants -Re-instatement of the lot to its initial condition -Proper Management of all solid and liquid wastes	Contractor and resident engineer	Environment and Social Specialist/ Consultant	Included in A.1-5	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-1.4 Slope Stabilization	-Construct retaining walls and gabions -Limit earthworks to the minimum required	Contractor and resident engineer	Environment and Social Specialist/ Consultant	Cost included in the BoQ	Cost included in the supervision
A-1.5 Management of Construction site Compound	-Location of workers camp at least few kilometers from residential areas - Storage of hydrocarbon products in sealed containers - Collection, storage and safe disposal of solid and liquid waste (including sewage)	Contractor	Environment and Social Specialist/ Consultant	4,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-1.6 Disposal of Cut Material and Surplus Fill	-Get approval on the disposal site location -Transport the excess surplus material to vacant and approved areas -Cover the trucks with sheets - Prepare and implement Construction Waste Management Plan	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-1.7 Borrow Pits and Quarry Areas	-Get the base course from existing quarries in Taiz to prevent disruption of visual amenities	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	
A- Hydrology and Water Resources					
A-2.1 Sources of construction water	-Contractor to negotiate access to water with the local communities	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	None	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-2.2 Pollution from wastewater, diesel or asphalt spills from site compounds and machinery	-Do not use contaminated water for dust suppression -Do not keep the soil exposed in the rainy season - Keep liquid fuel, oil and lubricates in sealed containers. -Undertake ad hoc repairs ad refueling in designated sealed and lined locations with a sump -Develop contingency plans in the event of a spill -Maintain waste storage -Locate stockpiles away from storm water -Limit the height & slope of stockpiles -Divert the overflow around work areas -Inspect regularly the erosion and sedimentation controls -Develop contingency plans in the event of a spill	Contractor	Environment and Social Specialist/ Consultant	5,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-2.3 Flood protection in Wadi	-Install culverts as per the design	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-2.4 Alteration of water harvesting patterns	-Install irrigation steel pipes for encasing water pipes -Avoid irreversible destruction of water patterns	Contractor, Design Engineer Resident Engineer and Beneficiary Committee	Resident Engineer	14,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental
A-2.4 Cross drainage and scour effects	-Install culverts at designated locations and sizes as per the hydrological study -Install ditches and rip rap as per the design	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time

A-2.5 Discharge to Adjacent Lands: - Unstable slopes -Rock Surface - Channel in a stack - Graveyards - Terraces -Other sensitive areas	-Install Drainage culverts and lined ditches to accommodate channel flow.	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included under A-2.4	Cost included in salary of 1 part time social & environmental specialist
A-1 Air Quality and Noise Nuisance					
A-3.1 Dust & Potential air pollutants from construction, Machinery, stored material and spoil heaps	-Minimize the disturbance areas of land by staging the work -Cover dusty vehicles carrying fine grade materials -Restrict vehicle movement to defined access -Regular spraying of water during dry and windy weather conditions -Cover material stockpiles -Minimize excavation and transfer in windy days -Control drop height of excavated materials -Minimize the height & slope of stockpiles -Regular maintenance and inspection of the construction machinery against leakages -Appropriate placement of stockpiles -Daily visual inspection -Minimize the number of fuel & chemical storage places -Ensure proper storage of volatile fuels	Contractor	Environment and Social Specialist/ Consultant	15,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-3.2 Smoke from burning of waste materials	-Do not burn waste material -Properly locate storage areas -Regularly transfer waste from Project	Contractor	Environment and Social Specialist/ Consultant	2,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-3.3 Noise Nuisance from Construction Works	-Regular maintenance of construction equipment -Work in day time near settlements -Work outside of school hours near schools -Make sure all personnel have and use hearing protection -Prepare contingency plans to deal with noise complaints	Contractor	Environment and Social Specialist/ Consultant	5,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-4 Biological Resources					
A-4.1Conversion of Degradation of a critical and non-critical Natural habitat.	-The Contractor is not allowed to cut trees other than those necessary to conduct the works -Unblocking of culverts to allow passage of small animals -Plant new bushes and provide necessary irrigation if bushes are destroyed during works.	Contractor	Environment and Social Specialist/ Consultant	5,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-4.2Damage to Biological Resources By Construction Equipment	-The Contractor is not allowed to cut trees other than those necessary to conduct the works -Plant new bushes and provide necessary irrigation if bushes are destroyed during works.	Contractor	Environment and Social Specialist/ Consultant	See A-4.1	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-4.3 Damage to Biological Resources by Construction Workers	-The Contractor is not allowed to cut trees other than those necessary to conduct the works -Unblocking of culverts to allow passage for small animals -Plant new bushes and provide necessary irrigation if bushes are destroyed during works.	Contractor	Environment and Social Specialist/ Consultant	See A-4.1	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-4 Expected Impacts on Socio-Economic and Cultural Resources					
A-5.1 Tribal tensions	No special mitigation measure needed			None	
A-5.2 Land acquisition	-Land donation files prepared			None	
A-5.3 Destruction or relocation of utility services	-Arrange relocation with locals -Provide alternatives when service is shut down- -Contractor to make an effort to shorten the period of shutdown	Contractor, Resident Engineer and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-5.4 Public health and safety at construction site -Safety and health for the construction workers -Public safety at the site and interaction between the workers and the Public	-Barriers erected at high risk areas -Installation of warning signs -Provision of adequate lighting on the road	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-5.5 Road closure and detours	-Contractor to obtain approvals from the locals	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	None	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-5.6 Graveyards and Burials	No special mitigation measure needed			None	
A-5.7 Known archaeological and Historic Sites	No special mitigation needed			None	
A-5.8 Chance finds of Cultural Resources or other socio-economic resources	-If cultural resources are found, cease excavation and contact local authorities	Contractor	Environment and Social Specialist/ Consultant	To be determined	
A-5.9 Gender considerations	-Install traffic signs and bumps for road safety near schools and for animal crossings as well as at the location of Mosque in Al-Joreaib village	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-5.10 Employment	-Employ local residents when feasible -Contract local companies when feasible	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	None	
TOTAL				**50,000 USD**	**35,000 USD**

Table ii: Environmental and Social Management Plan during the maintenance phase

Potential Impact	Mitigation	Responsibility		Additional Cost per average per year US $	
	Mitigation Measures	Implementation	Monitoring	Mitigation Measures	Monitoring
B-1 Land Resources					
B-1.1 Slope stabilization	-Regularly maintain the stabilization measures and protection works	Contractor	Environment and Social Specialist/Consultant	Cost will be included in the maintenance BOQ	
B-1.2 Agricultural land or terrace Damage during maintenance	-Maintain in good conditions the drainage system and the shoulders -Follow Safety, Health and	Contractor	Environment and Social Specialist/Consultant	Cost will be included in the maintenance BOQ	
B-1.3 Maintenance of contractor site compounds, materials and equipment storage	-Follow Safety, Health and Environmental Regulations	Contractor	Environment and Social Specialist/Consultant		
B-1.4 Management of induced development	-No special mitigation measure needed	Contractor	Environment and Social Specialist/Consultant		
B.2 Hydrology and Water Resources					
B-2.1 Water Harvesting	-Regular maintenance of water harvesting structures	Contractor	Environment and Social Specialist/	Cost will be included in the maintenance BOQ	
B-2.2 Blockage of cross drains/culverts - Uncontrolled discharge	-Regular maintenance of the drainage structures	Contractor	Environment and Social Specialist/ Consultant	Cost will be included in the maintenance BOQ	
B-2.3 Erosion of road platform from drainage discharge	-Regular maintenance of retaining walls, gabions and rip rap	Contractor	Environment and Social Specialist/ Consultant	Cost will be included in the maintenance BOQ	
B-2.4 Pollution from Vehicle leakage or accidents with hazardous cargo	-Timely clean up following spills or accidents	Contractor	Environment and Social Specialist/ Consultant		
B-3 Air Quality and Noise					

B-3.1 Dust and Potential Pollution from Construction Machinery	-No special mitigation measure needed			
B-3.2 Noise Nuisance from maintenance works	-No special mitigation measure needed			
(Provisional B3.3) air Pollution form Vehicles	-MoT issues regulations for the regular maintenance of the vehicles and the use of lead free fuels	Contractor	Environment and Social Specialist/ Consultant	
(Provisional B-3.4) Noise Nuisance from Vehicles	-No special mitigation measure needed			
B.-4 Biological Resources				
B-4.1 Damage to Biological Resources by Construction Equipment	-No special mitigation measure needed			
B-4.2 Damage to Biological Resources by Construction Workers	-No special mitigation measure needed			
(provisional B-4.3) Increased pressure on Biological Resources from induced Development	-Maintain culverts unblocked for passage by small animals -No special mitigation measure needed			Cost will be included in the maintenance BOQ
B.-4 Socio-Economic and Cultural Resources				
B-5.1 Increased Road Accidents	-Maintain speed reduction signs and bumps	Contractor	Environment and Social Specialist/Consultant	Cost will be included in the maintenance BOQ
B-5.2 Public Health and Safety during Maintenance	- Safety rules followed -installation of waring traffic signs -Health and safety regulations displayed in English and Arabic in the maintenance	Contractor	Environment and Social Specialist/ Consultant	Cost will be included in the maintenance BOQ
B-5.3 Socio-economic measures	-No special mitigation measure needed			
B-5.4 Chance finds Cultural Resources or Other Socio-Economic Resources	- If found during maintenance, the local Authority should be contacted	Contractor	Environment and Social Specialist/ Consultant	

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LIST OF ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
BL	Beneficiary List
BOQ	Bill of Quantity
BP	Bank procedures
CO	Carbon Monoxide
CSO	Central Statistical Organization
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPA	Environmental Protection Authority
EPC	Environment Protection Council
FAO	Food and Agriculture Organization
GALSUP	General Authority for Land Survey and Urban Planning
GARWSP	General Authority for Rural Water Supply
GOY	Government of Yemen
GP	Good Practices
HC	Hydro Carbon
MoAI	Ministry of Agriculture and Irrigation
MoF	Ministry of Finance
MoWE	Ministry of Water and Environment
MPWH	Ministry of Public Works and Highways
MSL	Mean Sea Level
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organization
NO	Nitrogen Oxides
NWRA	National Water Resources Authority
OP	Operational Procedure
RAP	Rural Access Program
RAPCMO	Rural Access Program Central Management Office
RMF	Road Maintenance Fund
ROW	Right Of Way
SEA	Sectoral Environmental Assessment
SO_2	Sulphur Oxide
TSP	Total Suspended Particulates
WB	World Bank

LIST OF NOMENCLATURE

%	Percentage
°C	Degree Celsius
cm	Centimeter
m^3	Cubic meter
Km	Kilometer
KW	Kilo Watt
m	Meter
mm	Millimeter
No.	Number
US $	United States Dollar
m^2	Square meter

1 Introduction

1.1 Introduction of the Project

Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a Rural Road Project is located in Taiz Governorate, Maqbanah and Shara'b Al Rawnah Districts, South West of Yemen, 256 km South of the Capital Sana'a in the highlands (see figure below).

Figure 1: **General location of Taiz in the Republic of Yemen**
(Ref. Yemen Ministry of Tourism - http://www.yementourism.com)

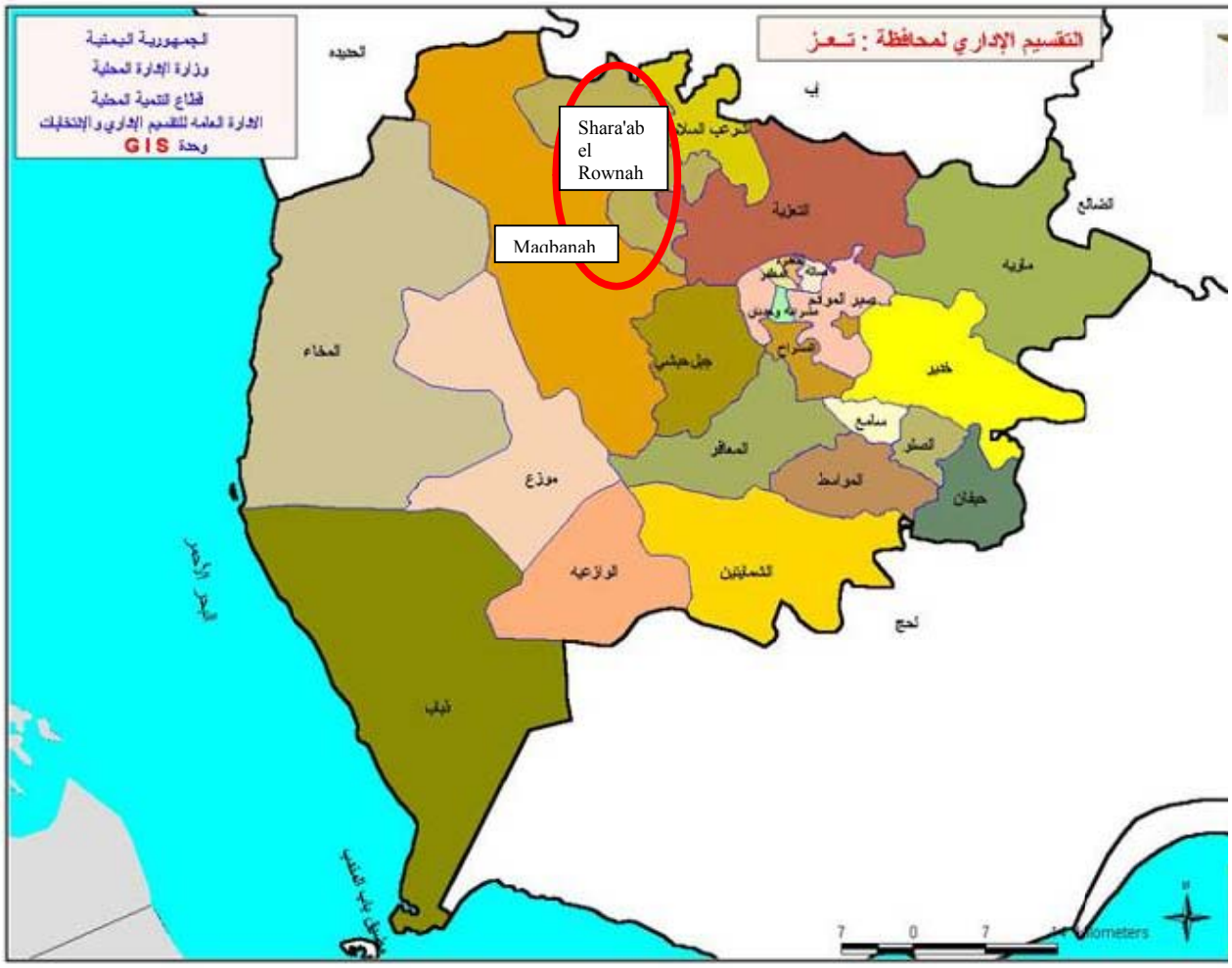


Figure 2: Hajdeh & Makhatah-Rasian-Alhaiajem Road alignment within Taiz districts
(Ref. Yemen Ministry of Tourism - http://www.yementourism.com)

The Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a road is an existing unpaved road located in the western Highland of Yemen, about 25 km North West of the city of Taiz (the Capital City of the Taiz Governorate). It has a total length of 37.94 km. The alignment starts in the proximity of the locally known "Hajdeh market" (Souk Hajdeh) and ends up at the intersection with the asphalted road that connects the village of El Rawnah to the Liberty Market (Souk Al Hourriah). It is estimated to serve directly a total population of 85,529 persons (ref. Central Statistical Organization- 2013). It is estimated to serve a total population of 394,702 persons distributed in around 40 villages (see table 1).

Table 1: List of some villages served by Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road

Station	Village Name
First 9+090 m (designed by Al Sultan)	
0+200	Hajdah village
1+000	Qaryat Wadi as Sahayl
3+000	Al Mahal village
6+500	Al Makhadah village
7+200	Rasian village
Mid (designed by CEC)	
0+000	Al Nuzaiha village
0+375	Al Khudeirah village
0+900	An Najd al Abyad village
1+000	Kahfat Al Ajbaar village
2+050	Homeikah village
3+150	Al Khoothir village
5+050	Al Buraih village
5+525	Dar el Harf village
6+925	Al Jubail village
7+625	Al Utyah village
9+025	Al Masakinah village
10+150	Al Karadeha village
10+500	Al Awared village
11+100	Al Horaikah village
12+000	Al Mirab village
12+400	Bayt Al wadi village
12+700	Beer el Banat village
14+525	Al Aroodh village
14+900	Al A'arooth village
16+400	Al Jurf village
17+000	Mara'eet village
19+500	Shawqal village
20+375	Al Lukaid village
22+050	Al Shara'ib village
24+175	Wadi el Ma'a village
24+800	Al Antari village
27+175	Al Aqaba village
28+050	Al Musayrab village
30+400	Al Qorjah village
30+600	Hassan village
31+250	Horeiqa village
32+250	Al Najd village
32+914	Arrawnah village
Last 3+000 m (designed by Al Sultan)	
1+500	El Rawnah
Additional (designed by CEC)	
0+500	Al Sohaila village
1+250	Bani zeiad and Al Aklou villages

1.2 Author

This ESIA was prepared by JOUZY An Axianta Company for the Rural Access Program (RAP), a World Bank funded Program for the Government of Yemen (GOY) through the Ministry of Public Works and Highways (MPWH) and in particular the Rural Access Program Central Management Office (RAPCMO).

1.3 Objectives of the ESIA

The Environmental and Social Impact Assessment (ESIA) is intended to identify the potential environmental and social impacts associated with the project "Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a Rural Road". It also intends to assist RAPCMO consider the potential environmental and social issues related to the road project and approve it to proceed.

The measures to mitigate the potential impacts on the environment are identified in the Environmental and Social Management Plan (ESMP). The aim of the EMP is to provide guidance to contractors and operators on how to minimize the severity of the identified impacts.

1.4 Environmental Screening

Jouzy was appointed by RAPCMO (Consultancy Contract No. 131-12 dated November 5, 2013) to review and update the Environmental and Social Impact Assessment (ESIA) for the Project "Hajdeh & Makhatah-Rasian-Alhaiajem Rural Road". Jouzy has prepared the ESIA in accordance with the World Bank Guidelines for Conducting Environmental and Social Impact Assessment as per WB OP 4.01 (revised April 2013), the results of the Environmental screening classify the proposed Project under Category B.

2 Description of the Project

The Rural Access Program (RAP) is a World Bank funded Program for the Government of Yemen (GOY) through the Ministry of Public Works and Highways (MPWH) and in particular the established Rural Access Program Central Management Office (RAPCMO).

In March 2007, Consulting Engineering Centre (CEC) provided consultancy services for RAPCMO and submitted a detailed design and tender documents comprising an ESIA for Rasian-Al Soheylah-Al Aruth-Wadi Al Maa' Rural Road (station 9+075 to station 32+750) and for an additional road of 1540m. In May 2010, Al-Sultan Engineering Office provided consultancy services for RAPCMO and submitted a detailed design and tender documents comprising an ESIA for Hajdeh-Makhatah-Rasian Rural road (station 0+000 to station 9+075) and only the detailed design and tender documents for Alakabah-Wadi el Maa' Rural road (station 32+750 to station 34+300.)

In 2013, Jouzy was awarded the consultancy services for the supervision of Hajdeh & Makhatah-Rasian-Alhaiajem Rural Road grouping the 4 above-mentioned roads into 1 project and the combination and update of the ESIA studies.

The main objective of the Project is to reduce the isolation of villages adjacent to the road and provide access to the network of national roads.

2.1 Existing situation

The road consist of a straight road from station X=372066.984 Y= 1502562.472 to X= 368004.604 Y=1523928.708 with a branch going out at station X=363390.837 Y=1519016.449 of a length 1.5 km.

The following table 2 gives a description of the different sections of the road and the following figure 3 shows its general road profile

Table 2: Description of the different sections of the Road

No.	Station (m)		Elevation (m)		Slope (%)	Description
	From	To	From	To		
1	0+000	8+026	943	715	1 to 10	The width of the road is 4-5 m and decreases to 3m in specific locations. The road is descending It passes through several villages, mainly cultivated and some non-arable lands, next to a school, a cemetery, a spring and across a storm watercourse and finally reaches Rasian river.
2	8+026	22+521	715	1182	3	The width of the road is 4-5m The road is ascending. It passes through several villages, next to markets, and schools and across a storm watercourse and rolling terrain and non-arable lands.
3	22+521	28+337	1182	820	2 to 10	The width of the road is 3-4m The road is descending with very risky stretches due to its narrowness and the depth of the valleys on its sides. It passes through villages, next to a school and across arable and non-arable land
4	28+337	34+300	820	959	2 to 16	The width of the road is 4 to 5 m The road is ascending. It passes through villages, next to a school, a market and across a storm water course and non-arable land
Branch	0+000 (branch on 13+450)	1+540	1185	1205	6 to 16%	Road is almost flat serving many villages

The following figures 4 to 8, present typical photos for different road sections

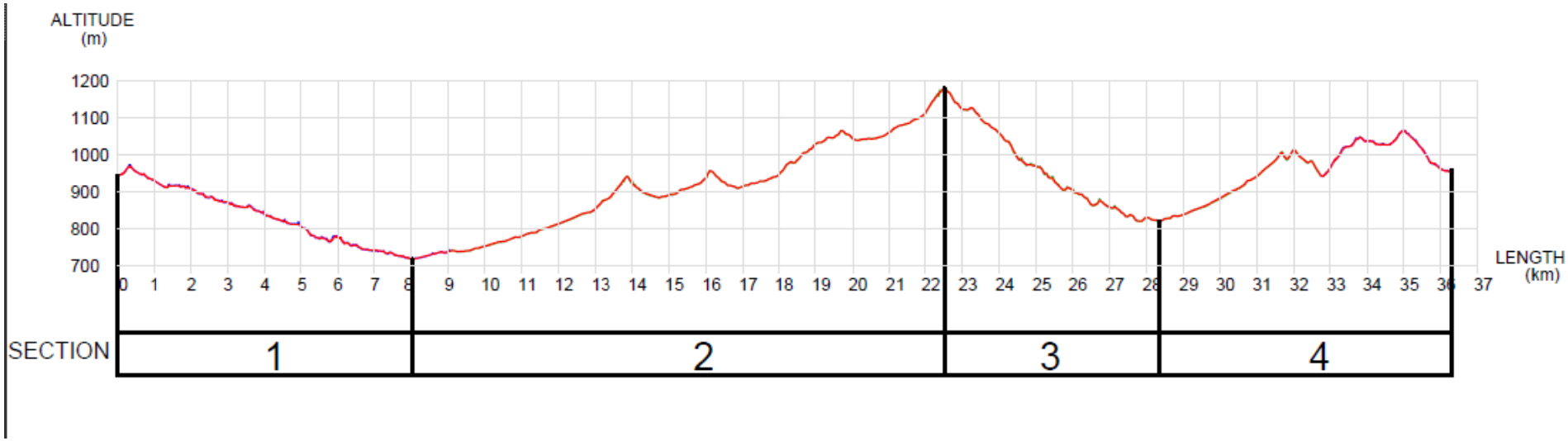


Figure 3: **General profile for the road**

Typical photos of the different road sections are presented below.

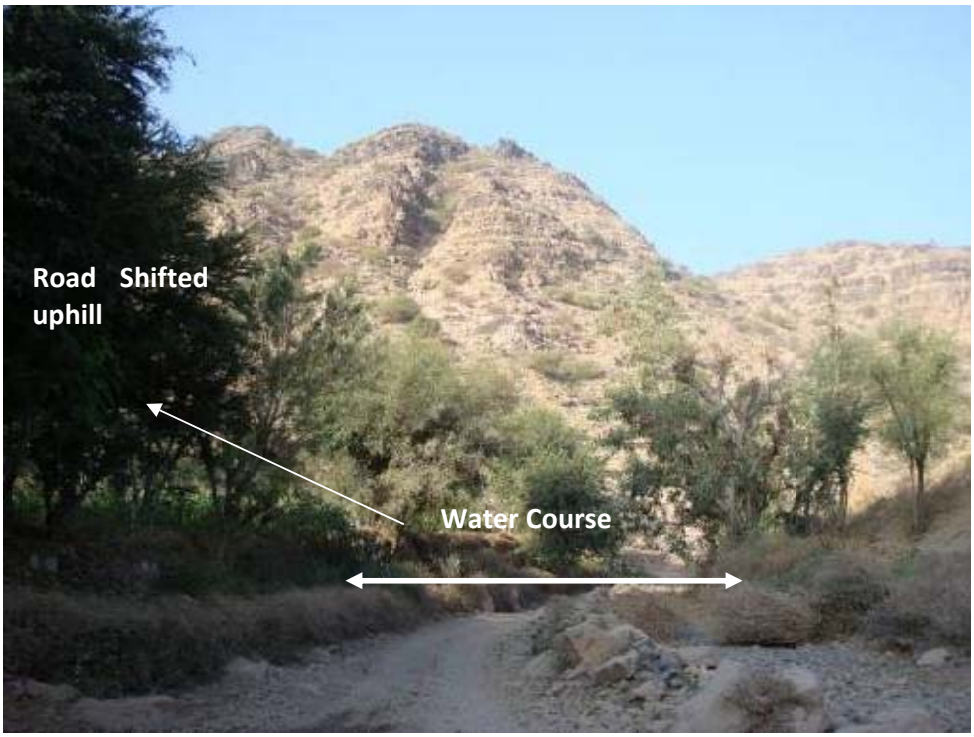


Figure 4: typical photo for the first part of Section 1, the road currently running in a storm water course was shifted uphill

Figure 5: Typical photo of Second part of Section 1

Figure 6: Typical photo of section 2 where the road was shifted and works are undergoing

Figure 7: Typical photo of section where the road is very risky in some stretches

Figure 8: **Typical photos for section 4 where the road is very narrow**

2.2 Proposed Road alignment alternatives

The design alignment is based on the existing alignment. The road will be widened to 6m asphalt with a 1m shoulder built on each side where possible. The alignment has been shifted from the existing one in few locations for the following reasons:

- To improve the design elements at sharp curves. Nevertheless, in its majority, the road will still be within a couple of meters of the existing track.
- To prevent running across Wadi beds. Usually these watercourses are flooded during the rainy season and they hinder circulation. Consequently, alternative alignments are proposed (see figure below).

Figure 9: Existing road running in the temporary watercourse

- To prevent running on dangerous sliding soils and next to risky valleys. As noticed during the site visit, the works were undergoing as shown in the following pictures. A local donor provided the necessary budget.

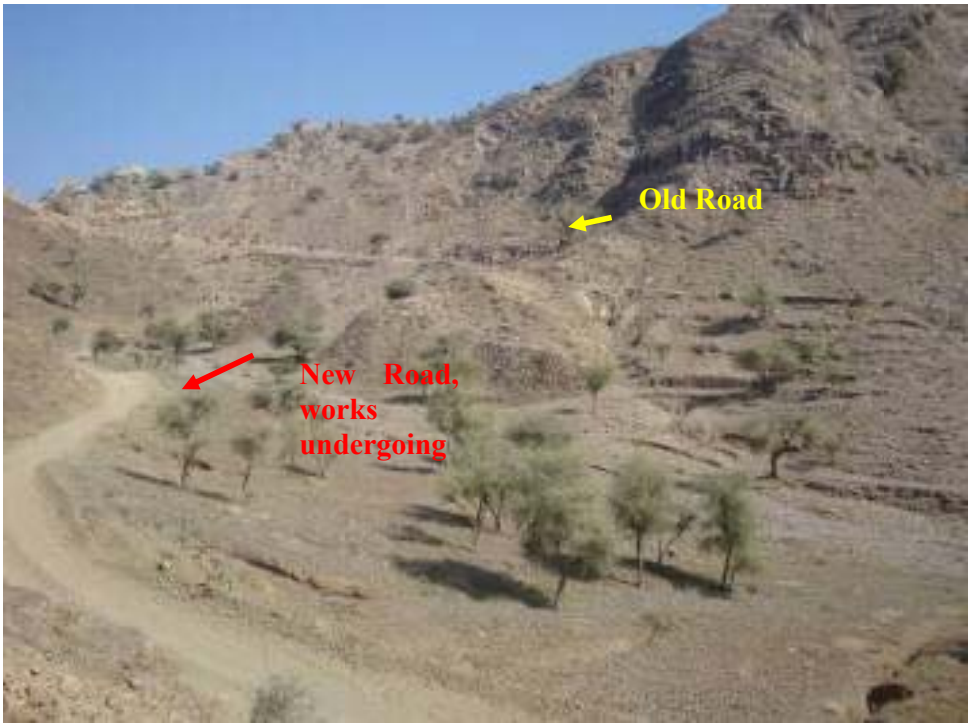


Figure 10: Works undergoing on the construction of the road shift

2.3 Works involved

The main works that will be necessary for the construction of the road are: earthworks as a result of the re-profiling of the horizontal and vertical profiles of the roads, filling, grading, installation of sub-grade, asphalting, construction of channels for runoff drainage, retaining walls/gabions for soil stabilization and installation of culverts for stream water crossings.

Following table 3 is the summary Bill of Quantities (BOQ) developed for Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road. It gives a brief overview of the works that will be done during the execution of works.

Table 3: Summary BOQ of the works needed

DESCRIPTION OF ITEMS	UNIT	QUANTITY
ENGINEER'S FACILITIES		
Provide a rented site office, housing and accommodation for the Engineer staff as describe in Specific Specification	Monthly Rate	**18**
Provide a rented three (3) vehicle for the Engineer staff including Operation cost such as, fuel, oil, lubricants, Driver, insurance, and maintenance. …Etc. as describe in Specific Specification	Monthly Rate / Vehicle	**54**
Provide a rented laboratory equipment for the Engineer staff including Operation cost as describe in Specific Specification	Monthly Rate	**18**
Provide a rented Survey Equipment for the Engineer staff including Operation cost describe in Specific Specification	Monthly Rate	**18**
EARTH WORKS - EXCAVATION		
Roadway Common excavation	m^3	**287,004**
Roadway Rock excavation	m^3	**212,743**
Fill of suitable material from common excavation and/or rock excavation within all haulage distance.	**m^3**	**188,413**
Fill of borrow material including excavation of the borrow pits and hauling the material to fill locations within all haulage distance	**m^3**	**11,500**
EARTH WORKS - OTHERS		
Disposal of surplus and/or unsuitable excavated material outside the right- of- way to the locations approved by the engineer	**m^3**	**175,665**
Sub-grade preparation to the design limits specified on the drawings	m^2	**334,700**
PAVEMENT WORKS		
BASE COURSE AND SURFACING		
Granular Base Course layer 150mm thick compacted to specified AASHTO modified density as per Specification	m^3	**45,937**
Provide and Spray Bitumen Prime Coat as per Specification	m^2	**251,313**
Provide and Lay Asphalt Concrete Wearing Course 40mm thick	m^3	**9,937**
Stone pavement (250mm thick)	m^2	**3,820**
STRUCTURAL WORKS		
Structural Excavation and Backfill (for Culverts, Retaining Walls, Irish Crossings)	m^3	**30,110**
Concrete type "C" Class 110/25 (Traffic Sign Foundations, Retaining Walls, Irish crossing and Breast Walls Blinding Beds)	m^3	**477**
Concrete type "A" Class 210/20 (Culvert Top Slab, Irish Crossings Cut off Wall & Slab)	m^3	**855**
Concrete type "A" Class 210/20 (Road Pavement) 15 cm.	m^3	**573**
Cyclopean concrete Class 210/20 complete as per Specification and shown on Drawings (Culvert Beds ,Retaining Walls Foundations Road Pavement)	m^3	**4,627**
High Tensile steel bar reinforcement grade – 40 (Culvert Top Slab, Road Pavement)	ton	**64**
High Tensile steel bar reinforcement grade – 60 (Culvert Top Slab, Road Pavement)	ton	**115**
Grouted Riprap at Irish crossing, road side ditches , slope Protection, and Culverts Inlet & Outlet.(25cm thick)	m^2	**99,045**
Gabions for Irish crossings, Slope Protection & Mudarrajat complete as per Specification and shown on Drawings.	m^3	**6,418**
Stone masonry Dressed Coursed as per Specification and shown on Drawings (Retaining Walls, Culverts & Safety Barriers).	m^3	**29,933**
Boulder Masonry for Retaining Walls, Culverts & Safety Barriers	m^3	**2,470**
INCIDENTAL CONSTRUCTION		
Project Name Board (Comprised of 7 reflected 3 mm thick Aluminum sheets with their support, fittings and concrete foundation).	No.	**4**
Small Signs (not exceeding 1sqm area)	No.	**65**
Single post sign support	No.	**65**
Reflectorized Pavement Marking (Thermoplastic)	m	**123,765**
Relocation of Existing walls	m	**2,699**
Relocation of Existing fences	m	**650**
Relocation of Existing Electric Pole	No.	**16**
Relocation of Existing Telephone Pole	No.	**16**
Removal of existing water pipe	No.	**4,250**

ENVIRONMENTAL WORKS		
Provide and lay Irrigation Pipes MS 300mm dia. Including Excavation and Backfilling	**m**	**1,500**
Provide and lay Reinforced Concrete Pipe Culvert 120cm dia. including plain concrete for cradle & sand for fill as per typical drawings	**m**	**1,710**
Random Dry Stone Masonry for agriculture Land as Retaining Walls With Thickness not less than 25cm for each Stone including excavation and filling	**m^2**	**3,310**

2.4 Land Acquisition

605 plots owned by 362 persons are affected by the widening and the rehabilitation of the road. The loss of income is less than 10% for all the plots. Consequently there is no need for a resettlement plan especially that all the concerned owners agreed to donate land (See the details of voluntary land donation process in Section 5.2.1 and annexes 2 and 4).

3 Legal and administrative framework

The present section will discuss existing laws and regulations in Yemen related to environmental, road and water resources management, as well as the institutions that will be involved directly and indirectly in the construction of Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road and its operation. It will also summaries the World Bank environmental and social safeguards procedures.

3.1 National Legal Framework

The most relevant laws related to road projects are presented in the table 4 below

Table 4: List of Major Laws/Decrees/Orders relevant to roads Projects

Year	Law No.	Description
1990	Decree of the Prime Minister 94	Establishment of the Environment Protection Council (EPC).
1995		Adoption of the National Environmental Action Plan (NEAP)
1995	Law No.26	Protection of the Environment
2002	Law No.33	Water Law (9 chapters and 82 articles)
1991	Yemeni Constitution (articles 7, 18, 19 and 20)	Land Acquisition and Private Property
2002	Civil Law (articles 118, 119 and 120)	Land Acquisition and public ownership
1995	Law No. 21	State Land and Real Estate
1995	Law No.1 (Articles 12 – 16 on temporary acquisition, Articles 21, 27 provisions for land acquisition	Land acquisition for the public interest
1992	Waqf Law no 23 year 1992 and The Republican Decree 99, 1996)	Waqf/Endowment Land
1991	Yemeni Constitution, Article 7, para (C) and Civil Law, Articles 761, 765, 770, 1159)	Agriculture Land

It is worth mentioning that Yemen ratified a number of International Environmental Agreements and Conventions. These are listed in table 5 below.

Table 5: List of Conventions and International Agreements that were ratified by Yemen

Ratification Date	Name
1980	Convention Concerning the Protection of World Cultural and Natural Heritage
1992	Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal
1995	Convention on Biological Diversity
1995	Convention for the Protection of the Ozone Layer
1995	Protocol on Substances that Deplete the Ozone Layer
1995	Convention on the Control of the Trans boundary Movement of Hazardous Wastes and their Disposal
1995	Framework Convention on Climate Change
1995	Convention on Biological Diversity
1996	United Nations Convention to Combat Desertification UNCCD
1997	Convention on International Trade in Endangered Species of Wild Fauna and Flora
2002	The Convention on the Conservation of Migratory Species of Wild Animals
2004	Kyoto protocol (Framework Convention on Climate Change)

3.2 Involved Authorities

The central organization responsible for the coordination of decisions and actions related to the road projects is the Ministry of Public Works and Highways (MoPWH) that administers among others, the Rural Access Program.

Several organizations are directly involved in road related projects:

- The Ministry of Water and Environment (MoWE) is responsible for water supply and sanitation. Four agencies report to the MoWE:
    - The National Water Resources Authority (NWRA) manages water resources on a sustainable basis, ensures satisfaction of basic water needs and establishes a system of water allocation.
    - The National Water and Sewerage Authority (NWSA) manages urban water supply.
    - The General Authority for Rural Water Supply (GARWSP) manages rural water supply.
    - The Environment Protection Authority (EPA).
- The Ministry of Agriculture and Irrigation (MAI): is responsible for the sustainable water management in the irrigation sector and the setting up of operation and maintenance of irrigation structures. Moreover, MAI should provide protection from floods, and erosion of soil, maintain agricultural terraces and prevent the uncontrolled expansion of industrial or other infrastructure.
- The Ministry of Finance (MoF), and within it the Department of Public Domain, maintains urban land records such as registers of transactions, sales, and purchase leases.
- The General Authority for Land Survey and Urban Planning (GALSUP) is responsible for all land related tasks such as planning, preparation, concession/ownership contracts, notarization and the execution of expropriation processes.
- Local Councils, represent executive authority on the level of governorates (local Administration Law number 4/2002). They play a role in the control and the solving of land donation issues.
- Non-Governmental Organizations (NGOs) play roles in increasing public awareness on environmental or health matters; others support people in need.

3.3 Public Consultation

The affected groups and local NGOs were consulted about the project's environmental and social aspects and their views were taken into account. During the public consultation, all relevant materials were presented in a form and language that is understandable and accessible to the group to be consulted and resulted in a general consensus that the Project is needed and should follow the design track (see section 8). However, in the construction period stage some consultation may be needed especially that in some spots the lands and properties are subject to donation for the widening of the road alignment.

3.4 World Bank environmental and social safeguards and policies

The World Bank has ten operational safeguard policies, which apply to various development projects that the Bank is either implementing or funding. The purpose of these policies is to ensure that social and environmental risks are prevented or at least minimized while increasing socio-economic benefits of approved projects in addition to preserving the environment. These policies have a means to increase the effectiveness and positive impacts of development projects supported by the Bank. The World Bank Safeguard Policy triggered is the Environmental Assessment (OP 4.01). As the land needed for the project was voluntarily donated (see Section 5.2.1 and the annex 4), the WB Safeguard Policy on Involuntary Resettlement (OP 4.12) is not triggered. Table 6 shows the related and the triggered World Bank Safeguard Policies.

Table 6: World Bank Safeguard Policies Triggered in Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a Rural Road

Policy		Reference	Applicability
1	Environmental Assessment	OP 4.01	Yes
2	Involuntary Resettlement	OP 4.12	No
3	Natural Habitats	OP 4.04	No
4	Physical Cultural Resources	OP 4.11	No
5	Pest Management	OP 4.09	No
6	Indigenous Peoples	OP 4.10	No
7	Forestry	OP 4.36	No
8	Safety of Dams	OP 4.37	No
9	Projects in Disputed Areas	OP 7.60	No
10	Projects on International Waterways	OP 7.50	No

The scope of works and the expected minor environmental and social impacts of the project allow to classify the project as category B under the Bank Safeguards Policy on Environmental Assessment OP 4.01.

The Environmental Assessment takes into account the natural environment (air, water, and land); human health and safety; and social aspects (involuntary resettlement, physical cultural resources, etc.) in addition to trans-boundary and global environmental aspects.

Useful guidelines and manuals that need to be considered during the ESMP phase of the project include:

- The World Bank Participation Sourcebook
- Safeguard Policy Basics – Redbook
- Environmental, Health and Safety (EHS) General Guidelines issued by the World Bank
- Roads and the Environment. A Handbook. World Bank Technical Paper 376.
- Doing Better Business through Effective Public Consultation and Disclosure – A good Practice Manual, issued by IFC.

4 Baseline Data

This section will discuss the existing conditions of Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a Rural Road area. It comprises a description of the physical, biological and socio-economic environment.

4.1 Physical Environment

4.1.1 Topography and Land Use

The elevation of the Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road varies between 715m and 1182m above MSL. The topography is accentuated in some places with steep slopes reaching 16%.

Most of the plots along the road are either cultivated, non-arable or built.

4.1.2 Geology and Soil

The rocks are, in their majority volcanic. Due to the high difference in temperature between day and night, rocks are breaking down and the widening of the road may lead to erosion.

Figure 11: Photos of typical rock in the project area

In the Project design, retaining walls for reducing the impact of erosion were allocated at critical points as shown in the following table 7:

Table 7: Location of the retaining walls or gabion in Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road

Station		Station	
From	**To**	**From**	**To**
First 9+090 m (designed by Al Sultan)			
1+150	1+350 (R)	2+625	2+650 (R)
1+375	1+400 (R)	3+150	3+200 (R)
1+550	1+600 (R)	3+700	3+815 (spring?)
1+650	1+687 (R)	4+610	4+650 (R)
1+725	1+1810 (R)	4+800	4+875 (R)
1+800	1+825 (R)	4+975	5+025 (R)
1+860	1+885 (R)	5+400	5+450 (L)
1+950	2+025 (R)	6+015	6+040 (R)
2+225	2+275 (R)	6+300	6+325 (R)
2+375	2+450 (R)	6+450	6+475 (R)
Mid (designed by CEC)			
4+440	4+480 9(R)	13+675	13+775 (R)
4+640	4+660 (L)	13+925	14+000 (R)
4+875	4+900 (L)	14+000	14+025 (R)
6+775	6+910 (L)	14+075	14+125 (R)
6+910	6+930 (R)	14+200	14+275 (R)
6+910	6+960 (L)	15+295	15+325 (R)
7+050	7+125 (L)	16+240	16+260 (R)
7+525	7+675 (L)	16+315	16+335 (R)
8+000	8+150 (L)	16+415	16+500 (L)
9+375	9+450 (R)	16+500	16+550 (L)
13+260	13+275 (L)		
Last 3+000 m (designed by Al Sultan)			
0+175	0+225 (L)	2+025	2+065 (L)
0+400	0+500 (L)	2+060	2+090 (L)
0+675	0+815 (L)	2+240	2+275 (L)
0+865	0+890 (L)	2+325	2+350 (L)
0+975	1+000 (R)	2+435	2+465 (L)
1+075	1+125 (L)	2+710	2+740 (L)
1+350	1+375 (L)	2+920	3+075 (R)
1+750	1+815 (L)		
Additional (designed by CEC)			
0+580	0+610 (R)	1+185	1+350 (R)
0+625	0+700(R)	1+500	1+540

4.1.3 Climate and Meteorology

The following figure shows the different climatic zones in Yemen. Taiz governorate has a semi-arid to arid climate. The mean monthly temperatures range between 17 to 32 degrees centigrade. The hottest month is July and the coldest is January. Relative humidity is around 40 (FAO, 1997- Ess Annex 1).

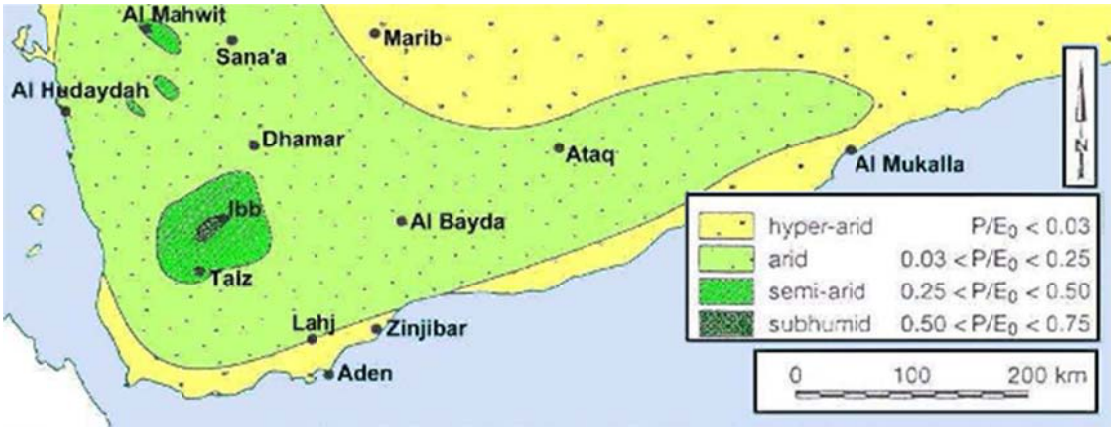


Figure 12: Climatic Zones in the project area

(Ref.: http://www.yemenwater.org/wp-content/uploads/2013/03/Hydrology-of-Yemen.pdf)

4.1.4 Precipitation

The area is characterized by two rainy seasons. The average yearly rainfall varies between 300 and 600mm as shown in the isohyetal map below and Annex 1. The first rainy season starts in April and stops by the end of June. The second season starts mid August and ends in mid-September-October. The dry season extends from November to March. Rainfall recharges groundwater but also runs on the ground surface in the valleys (Wadis). (ref. FAO, Agro-climatic Resources of Yemen, part 1 Agro-Climatic Inventory, 1997)

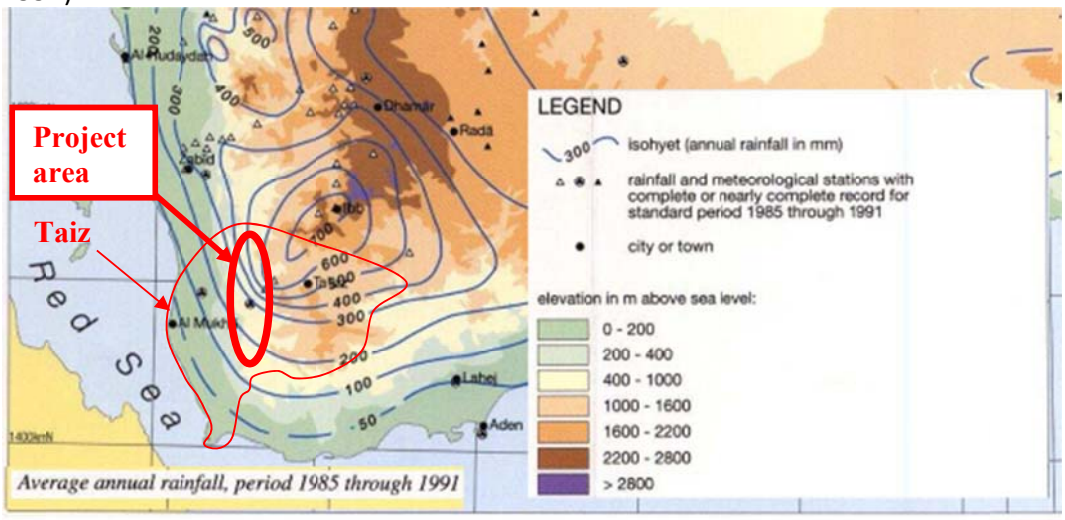


Figure 13: Average annual rainfall in Taiz

(Ref.: http://www.yemenwater.org/wp-content/uploads/2013/03/Hydrology-of-Yemen.pdf)

4.1.5 Hydrology and Runoff

The existing road is crossed by several temporal water streams (see figure below).

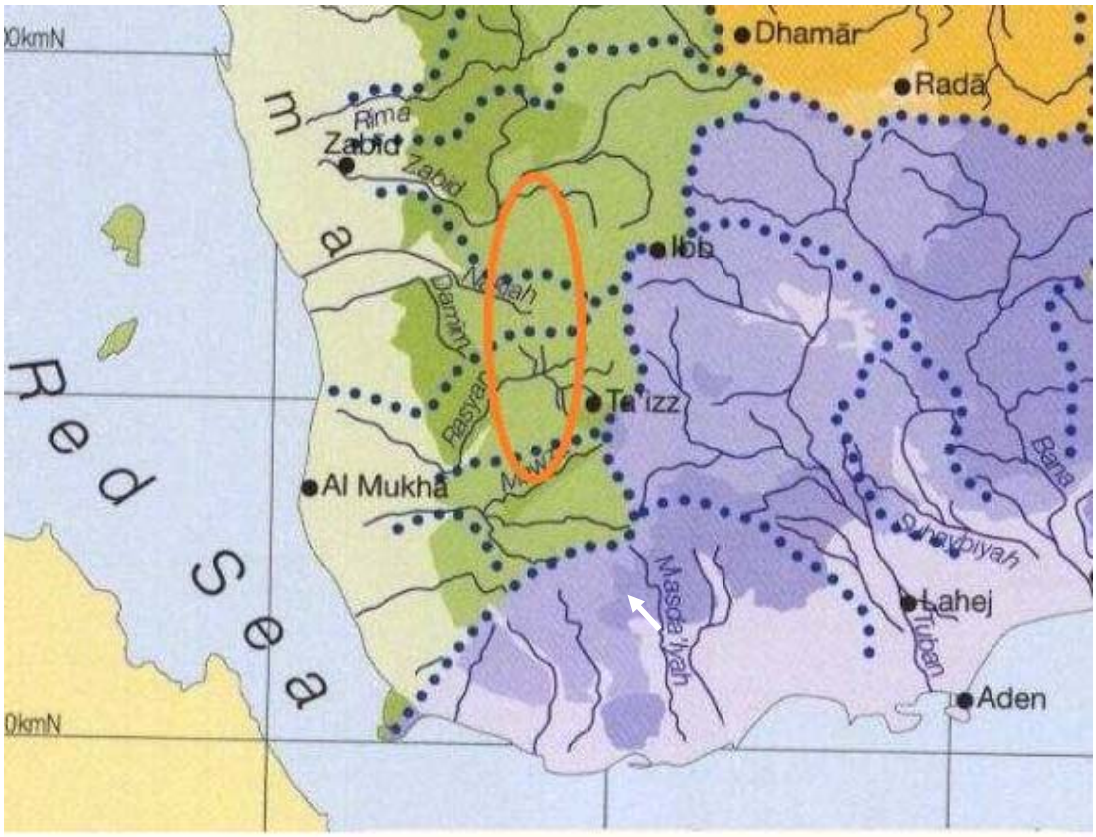
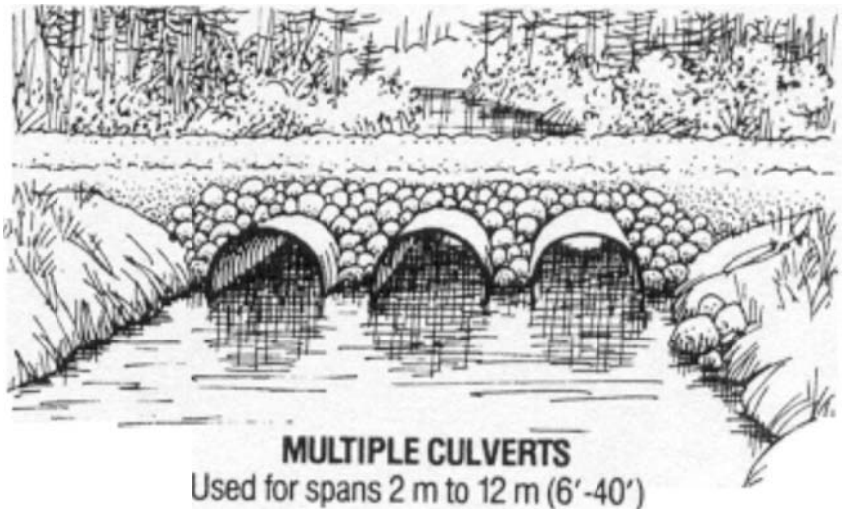


Figure 14: Main Surface Water drainage Basin in the Project area
(Ref.: http://www.yemenwater.org/wp-content/uploads/2013/03/Hydrology-of-Yemen.pdf) ***(Extract)***

According to the "Water Resources management Regions of Yemen" report, the Rasian catchment area is 1,990 km^2 and its average annual surface flow is 12 Mm^3. (Ref Rypkove, V. 1999, Water Resources Management Regions of Yemen).

Figure 15: Existing road runs in Rasian river

A hydrological study was conducted and multiple culverts were allocated at different locations to prevent disruption of the natural watercourses as shown in the following figure and listed in the table 8 below.



(Ref. Environmental Guidelines For Access Roads and Water Crossings)

Figure 16: Multiple culverts design

Table 8: Location of culverts in Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a Rural Road

Station	No. (Dimensions mxm)	Station	No. (Dimensions mxm)	Station	No. (Dimensions mxm)
1+950	1 (1x1)	4+521	2(2x2)	6+550	1(1.5x1.5)
1+350	1 (1x1)	4+628	2(1.5x1.5)	6+675	1(1.5x1.5)
1+462.5	**3(1.5x1.5) Wadi al Sahey**	**5+052**	**1(1.5x1.5)**	**6+850**	**3(1.5x1.5) Storm Water**
1+525	1(1x1)	5+271	3(2x2) Spring	6+975	2(1.5x1.5)
1+873	2(1.5x1.5)	5+400	1(1.5x1.5)	7+100	2(1x1)
2+252	2(1.5x1.5)	5+506	3(2x2) Storm Water	7+375	1(1.5x1.5)
2+402	1(1.5x1.5)	5+650	1(1x1)	7+700	1(1x1)
2+475	1(1.5x1.5)	5+755	3(2x2)Storm Water Course	7+835	1(1x1)
2+675	1(1.5x1.5)	5+913	1(1x1)	8+025	5(2x2) Rasian River
3+000	**3(1.5x1.5) Storm Water**	**6+025**	**1(1x1)**	**8+275**	**1(1x1)**
3+795	1(1.5x1.5)	6+175	1(1x1)	8+900	1 (1.5x1.5
4+000	3(2x2)				
ADD 9+090					
0+185	1(1x1.5)	7+790	5(1x2) Storm Water Course	15+660	1(1x1)
0+600	1(1x1)	8+050	2(1x2)	16+365	1(1x1)
0+965	1(1x1)	8+300	1(1x1)	16+420	1(1x1)
1+305	1(1x1)	9+320	2(1x1.5)	16+710	4(2x2)Storm Water Course
1+685	1(1x1)	9+635	1(1x1)	17+340	1(1x1)
1+855	1(1x1)	9+790	1(1x1)	17+515	1(2x2)
2+250	1(1x1)	10+075	1(1x1)	17+865	1(1x1.5)
2+530	1(1x1.5)	10+390	1(1x1)	18+010	1(1x1)
2+650	1(1x1)	10+750	1(1x1)	18+400	1(1x1)
2+950	1(1x1)	11+075	1(1x1)	18+770	1(1x1)
3+350	2(1x1)	11+310	1(1x1)	19+085	1(1x1)
3+775	1(1x1)	11+425	2(1x1.5)	19+250	1(1x1)
4+025	1(1x1)	12+200	1(1x1)	19+655	1(1x1)
4+150	1(1x1)	12+480	1(1x1)	19+740	1(1x1)
4+350	1(1x1)	12+825	1(1x1.5)	20+425	2(1x1.5)
4+450	1(1x1)	13+525	1(1x1)	21+300	1(1x1)
4+525	1(1x1)	13+750	2(1x1)	21+970	1(1x1)
5+200	2(1x2)	13+875	1(1x1)	22+095	1(1x1)
5+675	1(1x1)	13+925	1(1x1)	22+320	1(1x1)
5+840	1(1x1)	13+975	1(1x1)	22+740	2(1x1.5)
6+025	1(1x2)	14+055	1(1x1.5)	23+300	1(1x1)
6+885	1(1x1)	14+310	1(1x1.5)	23+500	1(1x1)
7+515	1(1x1)	14+580	1(1x1)	23+570	1(1x1)
ADD 9+090 PLUS 23+750					

0+50	2(1x1)	0+987.5	2(1.5X1.5)	1+800	1(1x1)
0+200	1(1x1)	1+200	1(1x1)	2+050	1(1x1)
0+425	1(1.5x1.5)	1+275	3X(2X2) Wadi el Ma'a	3+000	3(1.5x1.5)
0+800	2(1.5x1.5)	1+625	1(1x1)	3+150	1(1x1)
Additional 1+540m					
0+495	1(1x1)	1+085	1(1x1)		
0+890	1(1x1)	1+435	1(1x1)		

4.1.6 Water Harvesting

Water harvesting allows the farmers to supplement rainfall with runoff water collected from uncultivated areas and roads and conveyed to the cultivated lands. Farmers usually build bumps on the roads to canalize water to their lands.

Figure 17: Runoff Harvesting for irrigation uses

4.1.7 Air Quality

Unfortunately, no data exists on air quality in the project area. Due to the absence of industries, the concentration of exhaust emission in the air is likely to be low. However, from the site visit one can note the high level of dust covering all the vegetation along the road. Furthermore, and due to the rough condition of the road, all encountered cars were heavy four-wheel drive vehicles with large engines that emit more pollutants than do light and less powerful ones.

Figure 18: Dust generated by traffic

4.1.8 Noise

Typical existing noise levels near the project site are generally limited because the project site is located in a relatively underdeveloped area. Cars encountered were relatively old and slowly driven at low gear due to the rough terrain. Noise comes from the engines, transmission, exhaust and suspension of the vehicles and from frictional contact between the tires and the hard road.

Weekly markets are held in some villages. People from adjoining villages visit the market for shopping. The movement and gathering of the people cause high levels of noise.

There are two schools (Zeid Bin Haritha and 7 July), which are considered as noise sensitive facilities as they are located in the vicinity of the road

4.1.9 Waste Disposal

From the site visit and discussions with the residents in the area of the Project, it was noticed that the common practice is to discard the solid waste in pits near the houses and to burn it when it accumulates (see figure below). Meanwhile a blowing wind may spread waste in the surrounding environment. The nearest common unsanitary waste disposal facility is a waste dump in Taiz, at some 25 km distance from the site.

Figure 19: Solid Waste spread in the environment

4.1.10 Road Network and safety

According to the CSO 2010 statistical yearbook, there are around 1,137 km of asphalted roads in Taiz that constitute 7% of the total road length in the Governorate and the rest are gravel topped or earthen roads. Some residential units do not have any access to a transport network. However, the length of asphalted roads is growing. Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a road is risky in some places and prone to car accidents mainly due to sliding especially in rainy weather (see figures below).

Figure 20: Unsafe portion of road where car sliding left 2 women injured recently

Figure 21: Locals helping move the car (during site visit)

4.2 Biological Environment

According to the Ministry of Water and Environment (MoWE), about 2,810 plant species were recorded in Yemen. The major threats to flora are agriculture, over-grazing, urbanization, tree cutting and wind erosion. The fauna comprises 71 recorded mammal species, 5 species of gazelle and more than 363 species of birds. The major threats to fauna are hunting and destruction of habitats due to deforestation and urbanization and killing of animals perceived as dangerous.

However, in the considered Project, the road already exists although unpaved and not very wide. The lands that will be affected by the widening of the road are mainly non-arable or cultivated by cereals and fodder crops. Cattle, goats, donkeys and camels are found in the area. During the site visit, the observed fauna and flora are not those of one particular interest to the environment and no protected or endangered species were identified. The road does not affect any sensitive, specially designated area or protected species.

The following photos present such species observed during site visits.

Figure 22: Photos of Flora taken along the road

Figure 23: Photos of Fauna taken in the vicinity of the Road

4.3 Socio-Economic Conditions

As a result of the socio-economic survey and study, the socio-economic environment of the Project is detailed below.

4.3.1 Population and Economic Poverty Status

The population served directly by the road belongs to 6 Sub-districts and is estimated at some 85,529 persons as shown in the Table 9 below.

Table 9: Population directly served by the Road

Sub district	Population served
Bani Salah	21737
Al-Ashjob	11657
Mirab	19166
AL-Aasd	14622
Al-Hiagim	9445
Bani Swmaia	8900
Total	**85529**

Ref.: CSO Population Projection (2013)

The population served indirectly by the Project belongs to 2 Districts and is about 394,702 persons (See table 10 below)

Table 10: Population indirectly served by the Road

Governorate & District	Total	Area (km^2)	Population Density
Shrab Al-Rwonah Dis.	146052	420.5	347
Maqbnah Dis.	248650	1160	214

Tanking the average of the 2 districts, more than 49% of the inhabitants of the project area can be classified below the poverty line and 40% under the food poverty line (ref. National Poverty Survey, 2002). Below is a comparative table showing the poverty status in the Project area (see table 11)

Table 11: Comparative table of the Poverty Status in the Project area

Location	% Of Population under Basic needs poverty	% Of Population under Food Poverty
Yemen	34	27
Taiz Governorate	41.1	32.9
Shrab Al-Rwonah District	55	45.9
Maqbnah District	43.2	35.1

(Ref.: National Poverty Survey NPS, 2002)

4.3.2 Health Facilities

According to the socio-economic survey, the health facilities in the Project area are very limited in terms of equipment and personnel. Most of the resident have to go to Taiz for medical consultation. In the present conditions and even in critical health cases such as difficulties during delivery of babies, cars cannot drive at a speed higher than 5-10 km/hour. Consequently, the road is a main obstacle for access to health services.

The health facilities in the two districts of Sharab el Rawnah and Maqbaneh are distributed as shown in the table 12 below.

Table 12: Health Facilities in the project area

		Hospital	Health Centre	Health Unit
Shrab Al-Rwonah Dis.	24	2	9	13
Maqbnah Dis.	38	2	16	20

(Ref.: التقرير الصحي الشامل, وزارة الصحة والسكان)

4.3.3 Education

There are 19 schools in the villages along the road. It should be noted that the main barrier to education is the distances to the schools under the present road conditions especially for the secondary education level. Table 13 below lists the schools and their offered educational level.

Table 13: Schools in the project area

School name	School location	Education level	Gender
Zeid bin Haritha	Wadi el Sahi	Primary - Secondary	For Girls
Hamoud Serhan	Al Akhshoub	Primary	Mixed
Al Saadah	Al Akhshoub	Primary	Mixed
Al Hamzah	Al Ghounieh	Primary	For Girls
Jamal Jamil	Al Ghounieh	Primary - Secondary	For Boys
Al Mithak	Al Masakneh	Primary	Mixed
7 July	Al Wata	Primary	Mixed
Al Withak al Watani	Al Waira	Primary	For Boys
13 June	Naksan	Primary - Secondary	Mixed
Al taawon	Al Sheileh	Primary - Secondary	Mixed
Al Farouq	Al Ahroud	Primary - Secondary	For Boys
Safiat bin Abed al Matlab	Al Ahroud	Primary - Secondary	For Girls
Al Asad	Al Khalidieh	Primary - Secondary	Mixed
Abou Bikr	Shawkab	Primary - Secondary	Mixed
Mahmadan	Mahmadan	Primary - Secondary	For Boys
Samia	Mahmadan	Primary - Secondary	For Girls
Al Shahid Yasin Abdel Majed	Wadi el Ma'a	Primary - Secondary	For Girls
Khadijeh	Wadi el Ma'a	Primary - Secondary	For Boys
Mohamad Abdel Malek	Al Hayajem	Primary - Secondary	Mixed

Below is a photo taken during site visit of young girls going to school on foot.

Figure 24: Young girls going to school

4.3.4 Employment

Agriculture is the main source of income for the population served by the road, with the main agricultural crop being corns. Kat is grown only in the Hajajim area. Soils are fertile but agriculture is mainly rain fed and consequently, yields are very limited and almost nil in a dry year. This has lead to the abandonment of agriculture and to expatriation of the population. Form the site visit; one can notice the high number of abandoned lands. The project area is known for the high number of emigrants that left the area looking for job opportunities. The main income of the population in the area comes from money transfers.

4.3.5 Access to market

Usually women go to the market on foot and transport the goods on their heads as shown in the below figure.

Figure 25: Woman coming back from the market

4.3.6 Access to services

According to the socio-economic survey, the main water sources in the Project area are wells and small springs. Runoff water is also collected in concrete reservoirs. There are water supply networks in the villages bordering the road but the majority is not functional due to pumps running out of order. Residents rely sometimes on cisterns transporting water at the price of 13$ for 1m^3 of water. The price is extremely high compared to the income of the population.

Figure 26: Pipe along the road that needs to be relocated for road widening

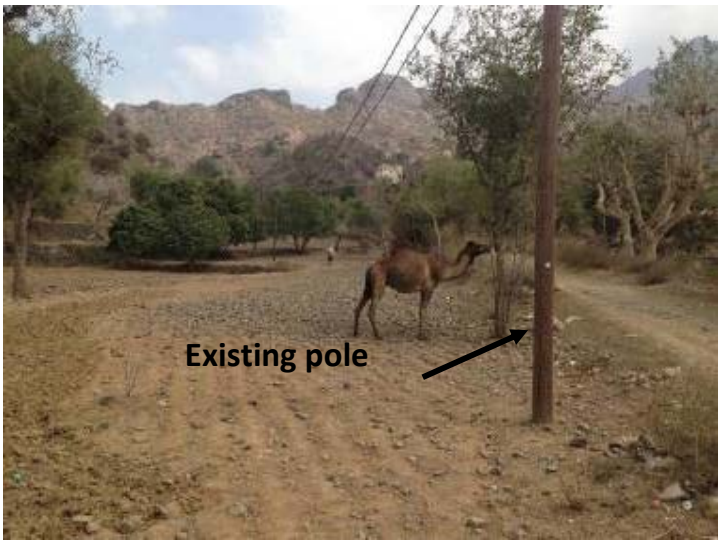


Figure 27: Electrical Pole at the roadside that needs to be relocated for road widening

According to the socio-economic survey, approximately 30% of the residents, get, on average, 8 hours/day of power supply from Al Borj cement factory for the lump sum price of 4.2 $/month. Another part of the population relies either on generators that supply electricity for a limited period during the day and at higher rates than supply from Al Borj; the rest do not have any power supply.

There is no telephone network (land line) in the area of the Project; residents rely on mobile phones as 3 telecommunication companies cover the area.

4.3.7 Archaeology and cultural heritage

One site of some archaeological significance was identified within the Project, site Maqam Issa (Issa Shrine). The site, however, is not affected by the road works as it is at 40m distance from the existing road and 300m from the proposed road alignment. During execution of works, if other archaeological sites are encountered, authorities should be contacted.

Figure 28: Issa Shrine near Rasian water course

5 Potential Environmental and Social Impacts

The impact of Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road will be discussed in this section.

5.1 Scoping of Impacts

The following scoping matrix (table 14 adopted from the SEA-RAP2 and adapted) was used to identify impacts that should be given attention. Input from the public consultation was considered and incorporated in the list of potential impacts.

These impacts are classified in terms of: Type (negligible, uncertain, positive, negative), Effect (direct, indirect), Change (temporary, permanent), Extent (localized, extensive) and Degree (minor, major reversible or major irreversible).

None of the impacts identified were evaluated as major irreversible. Most impacts are considered negligible. Impacts of more significance are short-term and reversible except for the land acquisition in widening the road which although minor in long term and irreversible.

Impacts are listed below in order of importance starting from permanent irreversible to temporary reversible:

Project activities potentially causing permanent irreversible impacts

1. Permanent land acquisition (A-1.2)
    a. Widening the road (A-1.2.1)
    b. Pinch points (A-1.2.2)
    c. New alignment (A-1.2.3)
    d. Dumping sites (A-1.2.4)
2. Slope stabilization (A-1.4)
3. Disposal of Cut Material and Surplus Fill (A-1.6)
4. Borrow Pits and Quarry Areas (A-1.7)

Project activities causing potentially temporary reversible impacts

1. Dust and Potential Pollution form Construction Machinery, Stored Materials and Spoil Heaps (A-3.1)
2. Alteration of water harvesting patterns (A-2.4)
3. Cross-Drainage and Scour effects (A-2.5)
4. Noise Nuisance from Construction Works (A-3.3)
5. Management of Construction site compound (A-1.5)
    a. Management of Petroleum Products (A-1.5.2)
    b. Solid and Liquid Waste Disposal (A-1.5.1)
    c. Living and Sanitation facilities (A-1.5.3)
6. Discharge to other sensitive areas (A-2.6.6)
7. Destruction and re-location of utility services (A-5.3)
8. Temporary land use (A-1.3)

a. Site compound (A-1.3.1). To be located with least negative impact on land resources, hydrology and social fabric
b. Diversion and haul roads (A.1.3.2)

No cumulative impacts of the project are expected. The baseline conditions do not indicate any possibility of significant cumulative impacts. Similarly, no other infrastructure projects, that could give rise to cumulative impacts, are expected during the road project implementation.

During the pre-construction and the construction phase, the project will have minor negative impacts and positive impacts through income generation created by the hiring of local workers. However, during operation, the majority of the impacts will be positive.

Table 14: Scoping Matrix for Potential Impacts for the Project

Hajdeh & Makhatah-Rasian-Alhaiajem – Wadi Al Ma'a Rural Road (37.94 Km)					Governorate: Taiz														April 2014
ASPECT	PHASE	Item No.	SUB-PROJECT ACTIVITIES		POTENTIAL IMPACT CHARACTERISTICS														Comments
					Type				Effect		Change		Extent		Degree				
					None or Negligible	Uncertain (to be determined)	Positive	Negative	Direct	Indirect	Temporary	Permanent	Localized	Extensive	Minor	Major & reversible	Major& Irreversible		
LAND RESOURCES	*A1 - Construction*	A-1.1	Site survey Investigation		X														
		A-1.2	Permanent Land Acquisition																
			A-1.2.1	Widening				X	X			X	X		X				Land taking but through donations
			A-1.2.2	Pinch Point (agricultural or non-arable land)				X	X			X	X		X				Land taking but through donations
			A-1.2.3	Local Re-Alignment / New Alignment				X	X			X	X		X				Additional land used however reduces the risk of running in a water course. New alignment but agreed to by Beneficiary Committee
			A-1.2.4	Dumping Sites				X	X			X	X		X				Land taking, dust, noise
		A-1.3	Temporary Land Use																
			A-1.3.1	Site Compound				X	X		X		X		X				Potential pollution from chemical and domestic spillage and waste
			A-1.3.2	Diversion and Haul Road				X	X		X		X		X				
		A-1.4	Slope Stabilization					X	X		X		X		X				Proper stabilization structures such as retaining walls and gabions have already been included in the design
		A-1.5	Management of Construction Site Compound																
			A-1.5.1	Solid and Liquid Waste Disposal				X	X		X		X		X				Collect, separate recyclables and compost organic waste
			A-1.5.2	Management of Petroleum Products and Paving Material				X	X		X		X		X				Properly collect and dispose products
			A-1.5.3	Living and Sanitation Facilities				X	X		X		X		X				Potential pollution by wastewater
		A-1.6	Disposal of Cut Material and Surplus Fill					X	X			X			X				Voluntary land donation for use as disposal site. Material can be dumped in old quarries for rehabilitation
		A-1.7	Borrow Pits and Quarry Areas					X	X			X			X				Use of existing quarries in Taiz
	B1 - Maintenance	B- 1.1	Slope Stabilization		X														
		B- 1.2	Agricultural Land or Terrace Damage During Maintenance		X														
		B- 1.3	Maintenance of Contractor Site Compound, Material and Equipment Storage		X														
		B- 1.4	Management of Induced Development		X														

Hajdeh & Makhatah-Rasian-Alhaiajem – Wadi Al Ma'a Rural Road (37.94Km)				Governorate: Taiz														April, 2014
				POTENTIAL IMPACT CHARACTERISTICS														
				Type				Effect		Change		Extent		Degree				
ASPECT	PHASE	Item No.	SUB-PROJECT ACTIVITIES	Negligible	Uncertain (to be determined)	Positive	Negative	Direct	Indirect	Temporary	Permanent	Localized	Extensive	Minor & reversible	Major & reversible	Major& Irreversible		Comments
HYDROLOGY AND WATER RESOURCES	*A2 - Construction*	A-2.1	Sources of Construction water	X														Acquire approval for use of water from locals
		A-2.2	Pollution by wastewater, Diesel or Asphalt Spills from Site Compound and Machinery	X														Proper waste management procedures to be instated
		A-2.3	Flood Protection in Wadi	X														Culverts have been included in the design where Wadis are crossed by the road.
		A-2.4	Alteration of Water Harvesting Patterns				X	X		X		X		X				Minor temporary disturbance since irrigation pipes are to be installed
		A-2.5	Cross Drainage and Scour Effects				X	X		X		X		X				Culverts and gabions are included in the design
		A-2.6	Discharge to Adjacent Lands:															
			A-2.6.1 Discharge to Unstable Slopes	X														Slope stabilization included in the design. No stream modification
			A-2.6.2 Discharge to Rock Surface	X														Slope stabilization included in the design. No stream modification
			A-2.6.3 Discharge to Channel in a Stack	X														None
			A-2.6.4 Discharge to Graveyards	X														None
			A-2.6.5 Discharge to Terraces	X														Water is diverted to terraces by locals for irrigation
			A-2.6.6 Discharge to Other Sensitive Areas or Structures				X	X		X		X		X				Minor impact on the Rasian river during the construction of culverts
	B2 - Maintenance	B-2.1	Water Harvesting	X														None
		B-2.2	Blockage of Cross Drainage / Culverts from Uncontrolled Discharges	X														None
		B-2.3	Erosion of Road Platform from Drainage Discharge, soil erosion	X														None
		B-2.4	Pollution from Vehicles Diesel and Oil Spills or Accidents with Hazardous Cargo	X														None
AIR QUALITY AND NOISE NUISANCE	*A3 - Construction*	A-3.1	Dust & Potential Pollution from Construction Machinery, Stored Materials and Spoil Heaps				X	X		X		X		X				Mostly dust
		A-3.2	Smoke from Burning of Waste Materials	X														Waste control measures instated
		A-3.3	Noise Nuisance from construction works				X	X		X		X		X				
	B3- Maintenance	B-3.1	Dust & Potential Pollution from Construction Machinery	X														None
		B-3.2	Noise Nuisance from maintenance works	X														None
		B-3.3	Air Pollution form Vehicles	X														
		B3.4	Noise Nuisance from Vehicles	X														

Hajdeh & Makhatah-Rasian-Alhaiajem – Wadi Al Ma'a Rural Road (37.94 Km)				Governorate: Taiz														April 2014
				POTENTIAL IMPACT CHARACTERISTICS														
				Type				Effect		Change		Extent		Degree				
ASPECT	PHASE	Item No.	SUB-PROJECT ACTIVITIES	Negligible	Uncertain (to be determined)	Positive	Negative Negative	Direct	Indirect	Temporary	Permanent	Localized	Extensive	Minor & reversible	Major & reversible	Major& Irreversible		Comments
BIOLOGICAL RESOURCES	A4 - Construction	A-4.1	Conversion or Degradation of a Critical or non-Critical Natural Habitats	X														No cricitcal habitats
		A-4.2	Damage to Biological Resources by Construction Equipment	X														None
		A-4.3	Damage to Biological Resources by Construction Workers	X														None
	B4- Mainten ance	B-4.1	Damage to Biological Resources by Construction Equipment	X														None
		B-4.2	Damage to Biological Resources by Construction Workers	X														None
		B-4.3	Increased pressure on Biological Resources from induced	X														
SOCIO-ECONOMIC AND CULTURAL	A5 - Construction	A-5.1	Tribal Tensions	X														None
		A-5.2	Land Taking	X														Voluntary land donations agreed to by owners
		A-5.3	Destruction or Re-Location of Utility Services (Electricity and Phone Pole Lines, Water Pipes)				X	X		X		X		X				Relocation of water pipe and electric poles included in works by contractor
		A-5.4	Public Health and Safety at Construction Site															
		A-5.4.1	Safety and Health for the Construction Workers	X														Health and safety measures instated at workers camps
		A-5.4.2	Public Safety at the Site and Interaction between the Workers and the Public				X	X		X		X		X				Measures taken to minimize works-locals interaction
		A-5.5	Road Closure and Detours	X														To be announced to population when needed. Current traffic not heavy
		A-5.6	Graveyards and Burials	X														One cultural heritage site but not affected by road
		A-5.7	Known Archaeological and Historic Sites	X														One site but far from the road works
		A-5.8	Chance Finds of Cultural Resources or Other Socio-Economic Resources	X														None
		A-5.9	Gender Considerations			X		X			X		X					
		A-5.10	Employment			X		X		X		X						
	B5 - Maintenance	B-5.1	Increased Road Accidents	X														Signage and proper speed limiting bumps include n the design
		B-5.2	Public Health and Safety During Maintenance															
		B-5.2.1	Maintenance Works Site Risks to Workers and the Public				X	X		X		X		X				Health and safety measures in place
		B-5.2.2	Health Risks from Compound Sanitation and Communicable Diseases	X														Health and safety measures in place
		B-5.3	Socio-Economic Benefits			X		X	X		X	X						Long term benefits from increased mobility, trade, community interconnectivity, comfort, access to services and schooling especially for girls
		B-5.4	Chance Finds of Cultural Resources or Other Socio-Economic Resources	X														

5.2 Impacts during Construction Phase

5.2.1 Land Resources

5.2.1.1 Site Survey Investigations

(A-1.1) The topographic surveys and the geotechnical investigations took place during the design phase of the project. Their impacts were negligible.

5.2.1.2 Permanent Land Donation

(A-1.2) Further to the development of the detailed design, it was clear that land acquisition is unavoidable and mainly to widen the existing alignment from a width of 4m to a width of 6m plus 1m from each side as road shoulders. Land acquisition will also be needed at pinch points and where the road alignment was shifted (end of the road).

According to the final design alignment, the discussions with the Technical Department Engineers in the Rural Access Program and the land survey carried out, the construction of the proposed road will need 54,591m^2 of additional land. The new land mainly involves two types (arid land and agricultural land). According to the survey, it will need 15,400 m^2 of arid land and 39,191 m^2 of agricultural land.

All lands needed for the project involve 605 plots owned by 362 landowners. All the lands will be obtained through voluntary land donation. The process of land donation is managed by the Beneficiary Committee (BC) in consultation with local people. A Social Framework Agreement (SFA) has been prepared, which documents the process of land donation (Annex 2).

During the process of the preparation of this ESIA, extensive consultations have been carried out with people potentially affected and beneficiaries in the communities along the road. All land owners were well informed about the project and the following key principles of the voluntary land donation through village meetings organized by the BCs.

- The project must not be site specific
- The impacts must be minor, that is, involve no more than 10 percent of the area of any holding and require no physical relocation
- The land required to meet technical project criteria must be identified by the affected community, not by line agencies or project authority
- Verification (for example, notarized or witnessed statements) of the voluntary nature of land donations must be obtained from *each* person donating land
- If any loss of income or physical displacement is envisaged, verification of voluntary acceptance of community-devised mitigation measures must be obtained from those expected to be adversely affected

After the village meeting, BC obtained signatures from all landowners to ensure they are willing to donate their land. Based on the final land donation table with signature of landowners, none of landowners will donate their land exceeding 10% of their total land holding (Annex 5).

The process of consultation and land donation signature was supervised by a Supervising Committee established in each village (Annex 4). These Committees confirmed all people

are willing to donate their land for the construction of the road without any coercion. The committee will also supervise the actual donation process during project implementation.

All landowners are well informed about the principles of the land donation. They can make the decision to donate the land or not without any coercion.

The project will include multi-level arrangements for registering and addressing grievances and complaints from landowners and project beneficiaries. The primary purpose of the project grievance management mechanism is to provide clear and accountable means for them to raise complaints and seek remedies when they believe they have been harmed by the project.

The grievance management system relies both on informal or customary means for resolving local property issues as well as a formal mechanism established for project management purposes. Customary arrangements often resolve issues in a timely and effective manner because they are already known within the locality and because local people may be more inclined to accept results as legitimate.

Any affected person may lodge a complaint through the formal GRM process, regardless of whether informal or customary arrangements for addressing the issue have been pursued. The RAP CMO will designate an official as the contact person for receiving complaints. If the grievance cannot be resolved to the satisfaction of the affected person at local level, the affected person may raise the complaint to the RAP CMO. The project grievance management system is available to all affected persons, without charge.

If a grievance remains unresolved following application of the Grievance Redress Mechanism, the affected person can initiate legal proceedings in accordance with governorate and national law (Yemen Constitution, Article 51) and may have recourse to the Appellate Court or Supreme Court, as warranted.

The landowners or beneficiaries can send their complaints and concerns directly to:

1. Supervising Committee[1] at village level
2. Beneficiary Committee
3. Local council, and
4. RAP CMO.

Upon initial receipt of oral or written complaints, the responsible contact person within the supervising committee conducts an initial review of relevant circumstances and provides an initial response to the affected person within 15 days.

If the person is not satisfied with the solution, he or she can approach to BC, then BC should respond to the person with a recommendation for resolution within 15 days.

If resolution is not achieved or imminent at the BC within 15days of receipt, or if the affected person is not satisfied with the recommended action reached, the complaint is elevated to local council or RAP CMO.

[1] Supervising committee was established as a sub-committee of Beneficiary Committee at village level. Each committee has 4-5 members who are nominated by the Beneficiary Committee and they are in most cases the educated people in the village.

Local Council or RAP CMO should seek any additional information it deems relevant and respond to the affected person within 30 days after receipt of the complaint.

If a grievance remains unresolved through the Grievance Redress Mechanism, the affected person can initiate legal proceedings in accordance with governorate and national law (Yemen Constitution, Article 51) and may have recourse to the Appellate Court or Supreme Court, as warranted. In addition, there will be a need for a disposal site or several disposal sites as the volume of the excavations is estimated to reach **175,665 m^3**.

5.2.1.3 Temporary Land Use

(A-1.3) Temporary land acquisition will be needed for the establishment of site offices and plants, it will have an impact on land use, however, limited in space (around 10,000 m^2) and time (around 18 months). The site compound, if not located and managed properly could have negative impacts on the environment such as disturbance of the natural flora and fauna, contamination of ground water and soils, disturbance of the local communities. Temporary land acquisition will also be needed for diversion and haul roads.

5.2.1.4 Slope Stabilization

(A-1.4) The road will follow the existing alignment but will entail more cuts than fills. Some erosion is expected especially where the road width is to be enlarged. The erosion may also lead to some temporary sedimentation in the natural drainage ways. There will be possibilities of landslides, slips and slumps or other mass movement in the road cuts leading to erosion where the route alignment crosses unstable areas. For example rock slope protection was applied to the following road sections as illustrated in the design documents:

0+800	to	1+065.00,
2+450	to	2+675,
5+480	to	5+625,
20+540	to	20+650,
20+910	to	21+000,
21+000	to	21+125,
21+370	to	1+425 and
21+520	to	21+550

Furthermore, more than 22km roadside ditches and breast walls were provided and listed under structural work in the BOQ

5.2.1.5 Management of Construction Site Compound

(A-1.5) If inappropriately located, the construction site could damage the land as it may cause fire, damage trees and affect the land use. Furthermore if not managed properly, solid and liquid waste, that is disposed off inadequately, can be a source of nuisance to the workers themselves, to the local communities and to the local environment.

5.2.1.6 Disposal of Cut material and Surplus Fill

(A-1.6) If the cut material is disposed off along the side of the roads, it may damage vegetation and agricultural lands.

5.2.1.7 Borrow Pits and Quarry areas

(A-1.7) The amount of fill, as provided in the BOQ, is estimated to be around 200,000 m^3. Therefore, it may lead to soil erosion and generate dust and noise and disturbance to the residents and the natural flora and fauna.

5.2.2 Hydrology and Water Resources

5.2.2.1 Sources of Construction Water

(A-2.1) As water sources are very scarce in the area, the contractor needs for water during the construction phase may be felt as competition over the resource.

5.2.2.2 Pollution by Wastewater, Diesel or Asphalt Spills from Site compound and Machinery

(A2.2) The Construction of the Project has the potential to impact soil and groundwater quality through contamination. Potential sources of soil and groundwater contamination include:

- Oil, grease and fuel in equipment stationing areas.
- Use of contaminated water (from water tankers) for dust suppression and wash-down of vehicles and machinery on site;
- Litter and construction waste;
- Construction plant and workers' temporarily residence

These contaminants may enter the groundwater as a result of:

- Exposure of standing groundwater to pollutants during soil excavation These pollutants may arise through wind deposition, direct dumping and/or rainfall runoff;
- Spills and leaks from poorly maintained construction vehicles;
- Infiltration of contaminated storm water;

Execution of works near watercourses especially Rasian river can lead to downstream pollution on water, affecting flora, fauna and people.

5.2.2.3 Flood Protection in Wadi

(A2.3) As the road is crossing many temporary watercourses, there will be a potential for flood.

5.2.2.4 Alteration of Water Harvesting Patterns

(A2.4) As discussed in previous sections of the report, local farmers have simple water harvesting structures. Many of these are located along the road and are likely to be destroyed during the construction works. This may lead to changes in the allocations patterns and to conflicts among the farmers.

5.2.2.5 Cross Drainage and Scour effects

(A2.5) As per the design drawings, along the road there are some fill sections. If the soil is not adequately compacted, cross drainage and scour can appear. Scour could also appear if gabions, culverts and retaining walls are not properly located and installed.

5.2.2.6 Discharge to Adjacent lands

(A2.6) Flows are not intended to discharge to adjacent lands (unstable slopes, rock surfaces, channel in a stack, graveyards, terraces or other sensitive areas or

structures). However, if construction takes place during the rainy season, water may be accidentally diverted to those sensitive locations leading to temporary erosion, scouring and flooding.

5.2.3 Air Quality and Noise Nuisance

5.2.3.1 Dust & Potential Pollution from Construction Machinery, Stored materials and Soil Heaps

(A-3.1) The primary source of potential air quality impacts during the construction phase is fugitive dust emissions generated from earthworks activities. Dust (or particulate matter) may be generated from the following activities:

- Blasting and crushing of rocks
- Excavation of soils
- Movement of construction vehicles on unsealed pathways;
- Wind blowing over stockpiled and exposed soils,
- Loading and unloading of materials on site;
- Emissions from uncovered truckloads.

The generation of high levels of dust has the potential to negatively impact the health and safety of earthwork laborers and residents of the villages, reduce visibility, and retard plant growth in the surrounding areas.

Increases in exhaust emissions are expected at the Project site, as a result of construction vehicles and machinery. Exhaust emissions are likely to include nitrogen oxides (NOx), carbon monoxide (CO), sulphur oxides (SO_2), hydrocarbons (HC), and total suspended particulates (TSP). These emissions have the potential to negatively impact the health of workers at the Project site.

Volatile emissions may also be expected during the earthworks phase, from solvents and fuels stored or used on the Project site. Volatile emissions have the potential to negatively impact the health of workers at the Project site.

5.2.3.2 Smoke from Burning of Waste Materials

(A-3.2) Burning of waste material during the construction period may lead to air pollution from smoke emissions.

5.2.3.3 Noise nuisance from construction works

(A-3.3) Earthwork activities and heavy machines are expected to elevate ambient noise levels in areas within the Project site for certain periods. Construction works are likely to occur for 8 to 9 hours a day, 5 to 6 days a week. Potential sources of noise during bulk earthworks include truck and vehicle movements to and from, and across the Project site.

The existing sensitive receivers to noise in the Project site are mainly the villages and in particular the 2 schools that are directly along the road (ref. to table 15 below). They will probably remain in operation throughout the Project, and as such, will be impacted by the construction noise and additional traffic, which will need to be mitigated against. Noise may also disturb wildlife in the vicinity of the work area.

Table 15: Schools in the project area that may be affected during construction works

Station	School Name	Village	Distance from the road (m)
0+980	Zeid bin Haritha	Wadi el Sahi	On the border of the road
18+050	7 July		At 6m distance from the road

5.2.4 Biological Resources

(A-4.1, A-4.2, A-4.3) As many parts of the Project site are developed, and the alignment is known not to traverse any natural reserve or wetland, the potential impacts that may occur during construction include:

- Soil disturbance through the use of heavy trucks;
- Dust and exhaust emissions from vehicles and machinery;
- Destruction of small bushes

Considering that the road exists, the construction phase will not pose a serious impact to the neighboring habitats. However, livestock circulating in the Project area may be at risk. Livestock owners need to be aware of the risk they are facing and may be causing to passengers in cars when grazing or moving cattle on or along the roadside

5.2.5 Socio-Economic and Cultural

5.2.5.1 Tribal Tensions

(A-5.1) There are no known pre-existing conflicts or sources of tribal tension that could affect project implementation.

5.2.5.2 Land acquisition

(A-5.2) The project will entail the taking of land for widening the road, haul roads and diversion roads. However, Locals expressed their willingness to donate part of their lands. Accordingly a land donation process has been prepared and documented (see Section 5.2.1 and Annex 2, 4 and 5).

5.2.5.3 Destruction or Re-Location of Utility Services

(A-5.3) Construction activities may need the relocation of some water pipes and electric poles that will cause a temporary shutdown of the water supply and electricity.

5.2.5.4 Public Health and Safety at construction site

(A-5.4) Accidents from the use of machinery and unsanitary conditions of the site plant may affect safety and health of the workers and the locals in the project area.

5.2.5.5 Road Closure and Detours

(A-5.5) Construction works will take place on existing roads. Schools will stay in operation until the completion of the project. Construction activities have the potential to impact the access and safety of residents if not appropriately managed.

Road traffic will be generated during the construction phase by the following:

- Transport of construction material and equipment. This may include a number of large trucks and semi-trailers to transport excavators and land moving equipment to the Project site;
- Transport of construction personnel between the Project site and temporary accommodation;
- Degradation of local roads due to increased traffic levels and a large number of larger and heavier vehicles;
- Reduction in traffic efficiencies along the transport routes and roads surrounding the Project site.

5.2.5.6 Graveyards and Burials

(A-5.6) The road passes near graveyards but does not affect any.

5.2.5.7 Known Archaeological and Historic Sites

(A-5.7) There one site of some archaeological significance. The site, however, is at a distance far from the proposed alignment and not affected by the works.

5.2.5.8 Chance Finds of cultural resources or other socio-economic resources

(A-5.8) In the event of chance finds of cultural heritage the authorities should be notified.

5.2.5.9 Gender Considerations

(A-5.9) During the consultation with women that was carried out by a woman social specialist, some positive impacts and concerns of the potential road project were identified, mainly:

- Access to market: women spend a considerable amount of their time commuting back and forth to the markets. The Project will reduce the time needed for this task and could potentially reduce the price of goods to be purchased and widen the options for selling products at good prices.
- Education: girls and women are in general responsible for getting water for the household. When the road is improved, less time will be needed to get the water which permits girls to attend school
- Access to health care: In case of illness, emergency or during delivery, people may die because of the adverse condition of the road, the time needed to reach the hospital or simply because they can't afford the high transportation costs to access the hospitals in Taiz and Ibb. The construction of the road will alleviate this problem.
- Safety: women expressed their concern about the safety of their children near the schools and asked for the installation of signs and bumps for road safety.
- Communication: The road will permit the enhancement of social relations, as it will facilitate visits between relatives in the surrounding villages.

5.2.5.10 Employment

(A-5.10) The rehabilitation of Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a rural road, will have a positive impact on the area through:

- Employing a considerable number of construction workers at the anticipated peak of the construction phase;

- Providing employment opportunities for a number of people within the region such as contractors;
- Providing indirect income from construction work and purchase of material and supplies.

5.3 Impacts during Maintenance and Operation Phase

The operation of the road will be associated with several positive and negative impacts discussed in the coming subsections.

5.3.1 Land Resources

5.3.1.1 Slope stabilization

(B-1.1) Even if all the protection measures are implemented properly during the construction phase, new areas with vulnerable slopes may be identified. The associated risks, however, are very limited.

5.3.1.2 Agricultural land or Terrace Damage During Maintenance

(B-1.2) The potential destruction of the terraces or agricultural land would be negligible during the maintenance phase.

5.3.1.3 Maintenance of contractor site compounds, materials and equipment storage

(B-1.3) The impact of the contractor's plant during the maintenance phase is minor. The main concern is land and water pollution due to inadequate disposal of solid and liquid waste and accidental spills of oil or petroleum products that may also affect biological resources.

5.3.1.4 Management of induced development

(B-1.4) A positive impact of the road improvement is to induce development in the area through the establishment of new shops and houses and the ease of transport. However, the induced development may increase the pressure on biological resources, mainly, wood cutting, grazing, and collision between cars and animals crossing the roads.

5.3.2 Hydrology and Water Resources

5.3.2.1 Water harvesting

(B-2.1) As irrigation pipes were installed during construction, the existing water harvesting systems will not be affected during the road operation.

5.3.2.2 Blockage of cross drains/culverts - Uncontrolled discharge

(B-2.2) During maintenance works, transport of excavation or fill material during storms or floods may lead to blockage of cross drains and culverts thus to uncontrolled discharges in the valleys and across the roads.

5.3.2.3 *Erosion of road platform from drainage discharge*

(B-2.3) If culverts are adequately installed during the construction phase, no erosion should take place from drainage discharge.

5.3.2.4 *Pollution from vehicle leakage or accidents with hazardous cargo*

(B-2.4) Potential water quality impacts during the operation phase will primarily be caused by storm events resulting in the discharge of leaked pollutants, such as hydrocarbons, in the aquifers thus polluting the groundwater, or be transmitted to nearby areas. This environmental impact already exists on the existing road but will be intensified as traffic may increase.

5.3.3 Air Quality and Noise

5.3.3.1 *Dust and Potential Pollution from Construction Machinery*

(B-3.1) The impact of dust and pollution from the construction machinery during maintenance is negligible.

5.3.3.2 *Noise Nuisance from maintenance works*

(B-3.2) The impact of noise from construction machinery during maintenance is negligible.

5.3.3.3 *Air Pollution from Vehicles*

As a result of the increasing number of vehicles circulating on the rehabilitated road, the air quality is expected to deteriorate because of exhaust emissions and higher concentrations of carbon dioxide, carbon monoxide and, hydrocarbons. However, lighter cars with small engines and newer models will be able to circulate on the improved roads which reduces the extent of the expected air pollution. Furthermore, less dust will be generated, as the road will be paved.

5.3.3.4 *Noise Nuisance from Vehicles*

Noise will typically be an impact associated with the road as long as it is in operation. It is not envisaged that the daily traffic flow will increase to such an extent that the noise levels will present a problem. An improvement in the quality of the road will probably result in a decrease of noise levels but the gradually rising traffic volume will increase it.

5.3.4 Biological Resources

5.3.4.1 *Damage to Biological resources by Construction Equipment*

(B-4.1) The impact of damage to biological resources by construction equipment during maintenance is negligible. It involves mainly unblocking of culverts that may induce a temporary fragmentation of small habitats mainly due to temporary isolation of habitats.

5.3.4.2 *Damage to Biological resources by Construction Workers*

(B-4.2) The impact of damage to biological resources by construction workers during maintenance is negligible.

5.3.4.3 Increased Pressure on Biological Resources from Induced Development

The improvement of access may lead to increased pressure on the area's biological resources, such as increased woodcutting for firewood, timber and charcoal, and increased grazing. During the operational period, road accidents may kill domestic livestock utilizing verge habitats or crossing the roads.

5.3.5 Socio-Economic and Cultural Resources

5.3.5.1 Increased Road Accidents

(B-5.1) The risk associated with the expected increase of vehicular traffic and transport is mainly the increase in the number of injuries or loss of life due to car accidents.

5.3.5.2 Public health and safety during maintenance

(B-5.2) Although not occurring at the same intensity as the construction period, maintenance activities will still entail similar basic health and safety concerns for the workers and their interaction with the community.

5.3.5.3 Socio-Economic Benefits

The operational phase of the Project could provide a number of positive impacts, including the following:

- Improvement of the standard of living for a number of people and families in the region by the generation of additional commercial opportunities and access to new employment centers
- Induced development: roadside commercial, industrial, residential,...
- Reduction in the transport costs
- Increased access to markets for local products
- Better access to health care and other social services
- Increase in local land values
- Easier access to schools
- Reduction in the travel time
- Reduction in the operation costs of vehicles

However, the facility in transport may lead to certain negative impacts such as the migration of populations to the region induced by the improved services causing social and economic disruption

5.4 Summary of the Impacts

The analysis of impacts that may be incurred during the construction works showed that some might be negative. As for the operation phase, the project will pose some minor negative environmental impacts; if these are appropriately mitigated, the benefits of the project will largely outweigh its negative aspects.

6 Analysis of the alternatives

Alternatives to the project have higher negative environmental impacts. Consequently, the "No Action Scenario" would be compared to the Project implementation scenario.

The previous section showed clearly that the Project would be associated with several positive impacts and some minor negative impacts especially during the construction phase. The latter, if properly mitigated, will have their magnitude certainly decrease and will enhance the benefits of the project. The main benefit will be the contribution to the improvement of the socio-economic conditions of the area and the reduction of pollution and nuisance from dust and cars driving through watercourses. The following table 16 shows a comparison of the two scenarios based on different parameters. Evidently, the benefits that will arise from the project will outweigh its negative impacts.

Table 16: Comparative Evaluation of the project's alternatives

Parameter	***Project Implementation***	***"No Action Scenario"***
Land Resources	Minor negative impact (--)	No significant impact (0)
Hydrology and Water Resources	Low negative impact (-)	High negative impact (---)
Air Quality and Noise Nuisance	Low negative impact (-)	High negative impact (---)
Biological resources	No significant impact (0)	No significant impact (0)
Socio-economic and Cultural	High positive impact (+++)	High negative impact (---)

7 Environmental and Social Management Plan (ESMP)

The Environmental and Social Management Plan (ESMP) aims at addressing the environmental safeguards required during the Project implementation. The presence of a proper environmental management plan is extremely useful so that recommendations in terms of mitigation and monitoring are effectively implemented. The ESMP is essentially a guidance document to be continually referred to during the construction and operation of the Project.

7.1 Responsibilities for implementation

The responsibilities for the implementation and monitoring of the ESMP are shown below.

The *Implementing Contractor* is responsible for implementing the project in full compliance with the ESMP, making sure that all mitigation measures are duly implemented. *The Contractor* has the responsibility to ensure that all persons working on the Project (including subcontractors and their employees) comply with the environmental requirements outlined in this ESMP. The Contractor must prepare a Construction Plan that meets these requirements. He shall fully coordinate with the World Bank, RAPCMO and the Consultant during site inspections.

The Supervising Consultant has the responsibility to ensure the environmental, health and safety aspects of the construction and operational phases are duly followed and managed. The Supervising Consultant is primarily responsible for monitoring compliance of the works with the environmental and social mitigation measures. The Supervising Consultant should hire a social and an environmental specialist for the total duration of the construction work (estimated at 18 months) on part time basis. Their fees are estimated at 2000 US$/month. The social and environmental specialists shall be responsible for the implementation of all the mitigation measures identified in the EMP and the solution of environmental and social issues that may be encountered during the execution of works. The task comprise:

- Weekly Site inspection
- Documentation of the feedback from stakeholders and other affected people
- Photographic documentation
- Reporting on site inspections clearly identifying areas of Contractor's compliance and non-compliance with the ESMP and recommendation on actions to be taken.
- Production of monthly progress monitoring reports.

The World Bank will monitor the implementation of road specific ESIAs/ESMPs and other Safeguard related documents (SFAs, Resettlement Plans etc.). In particular, the Bank will ensure that proper monitoring takes place and that the reports are filed regularly.

The MoPWH and in particular the Environmental and Social Unit (E&S U) of RAPCMO is responsible for supervision of the Monitoring of the implementation of the proposed environmental and social measures for Hajdeh & Makhatah-Rasian-Alhaiajem-Wadi Al Ma'a Project. Being the executing agency, it is understood that it has access to any component of the project, however, it is advisable to have a clear clause in the TORs that states that authorized officers from RAPCMO may any time enter any premise to examine, inspect, control, monitor, take samples, examine books, records or documents and take photos. Access to all sites of the project shall be assured. The RAPCMO will also review the reports submitted by the Consultant.

The environmental and social management capacity of the RAPCMO is insufficient particularly regarding the process of impact assessment, social impacts, mitigation measures, and monitoring. The agency needs training and case studies to upgrade its capacity.

The Beneficiary Committee is responsible for the coordination with RAPCMO authorized officers, the Consultant, in particular the Social and Environmental Specialist (ESS) and the Contractor to solve arising issues resulting from road construction and maintenance.

The *Road Maintenance Fund (RMF)* and those institutions responsible for road safety will be consulted with during post construction road maintenance activities.

7.2 Mitigation Plan

The Mitigation Plan lists the actions needed to mitigate the previously identified negative impacts and enhance the positive impacts. The mitigation plan shall make sure that all reasonable measures are taken to ensure that the construction, and maintenance of the road are compatible with the protection of the existing environment and maintain the welfare of the people affected by the Project.
The cost of mitigation measures is expected to reach 50,000 USD (excluding items included already in the BoQ). The majority of the proposed ESMP mitigation activities are part of the works and listed in the BOQ Environmental Works.

The General Specifications and Regulations contain specific environmental, health and safety requirements for:

- Proper management of construction waste;
- Control measures for waste fuel;
- Oil and lubricants;
- Reduction of noise and dust levels;
- Rehabilitation of areas used for construction detours;
- Sites used for temporary storage of construction materials; and
- Use and proper maintenance of equipment with appropriate noise and smoke abatement controls.

The following table 17 summarizes the relevant clauses in standard construction contracts.

Table 17: Clauses relevant to mitigation measures in the Standard Construction Contracts

Clause	Subject
4.1 to 4.10	General Requirements
5.1 to 5.16	Safety Requirements
6.1 to 6.5	Environmental and Health Requirements
7.1 to 7.5	Additional Requirements for Work in Public Areas
8	Contractor's Site Check List

7.3 Mitigation of Impacts during Construction Phase

7.3.1 Land Resources

7.3.1.1 Site Survey Investigation

(A-1.1) There is no need for mitigation measures.

7.3.1.2 Permanent Land Donation

(A-1.2) The land acquisition impact is mitigated by the voluntary donation of the lands. (see. Annex 4).

The impact of the dumping site will be mitigated by the choice of its location at a distance far from sensitive people to avoid dust and noise nuisance. The location of the site should be approved by the Engineer, and the Beneficiary Committee.

7.3.1.3 Temporary Land Use

(A-1.3) Temporary land acquisition will be needed for the establishment of site offices and plants. The location of the site plant shall be agreed upon with the Beneficiary Committee and the Project Manager before the start of the works. It should be located at distance far enough from the nearest residential area in order to minimize the disturbance to the local communities. The site plant shall be managed properly to prevent disturbance of the natural flora and fauna, contamination of ground water and soils, and disturbance to the local communities. After completion of the works, the Contractor shall re-instate the location of the camp to its initial conditions.

The mitigation measures for solid and liquid waste disposal, spillage of fuel and lubricants and the inappropriate discharge of sewage are to comply with clauses 6.4 and 17.2.2 of the Environmental and Safety Regulations regarding solid waste and general housekeeping. The contractor must comply with the safety, health and environmental requirements in terms of the management of all solid and liquid wastes, material and equipment storage and possibility of fuel leakage. In general, the site compound must be kept clean and tidy at all times during the implementation stage for possible site inspection and monitoring.

7.3.1.4 Slope Stabilization

(A-1.4) The implementation of the proper stabilization structures such as retaining walls and gabion have been already included in the design and shall enhance the slope stabilization. The contractor shall limit earthworks to the minimum required for the proposed road.

7.3.1.5 Management of Construction Site Compound

(A-1.5) The construction site should be located to avoid damage to the land and should be managed properly. Solid and liquid waste should be disposed off adequately to prevent nuisance to the workers themselves, to the local communities and the local environment. The mitigation measures for solid and liquid waste disposal, spillage of fuel and lubricants and discharge of sewage, are to comply with clauses 6.4 of the General Safety, Health & Environmental Regulations regarding solid waste and general

housekeeping. The contractor must comply with safety, health and environmental requirements in terms of the management of all solid and liquid wastes, material and equipment storage and the possibility of fuel leakage. In general, the site compound must be kept clean and tidy at all times during the implementation stage for possible site inspection and monitoring. The site must be located at a far enough distance from the nearest residential areas so as to minimize disturbance to the local communities.

7.3.1.6 Disposal of Cut material and Surplus Fill

(A-1.6) According to the Health, Safety and Environmental Regulations Clauses, the contractor must comply with the orders of the Engineer and must transport the excess surplus material to a vacant area. All trucks transporting material must be covered with sheets to prevent air pollution from dust. The contractor must get the approval of the Beneficiary Committee for the disposal site. At the time of drafting the ESMP locations of the disposal sites were not known. Once the contractor agrees with the local authorities the disposal locations, he will have to prepare Waste Management Plan.

7.3.1.7 Borrow Pits and Quarry areas

(A-1.7) The contractor must get the base course material for the road from local already eroded material or from Quarries in Taiz rather than establish new quarries next to the site to prevent disruption of visual amenities.

7.3.2 Hydrology and Water Resources

7.3.2.1 Sources of Construction Water

(A-2.1) The contractor will have to negotiate access to water with the locals to avoid conflicts with the local communities.

7.3.2.2 Pollution by Wastewater, Diesel or Asphalt Spills from the Site compound and Machinery

(A2.2) The groundwater quality may be protected from potential contamination sources by applying the following measures:

- Manage the equipment stationing areas and the site compound in general according to the Health, Safety and Environmental Regulations Clauses. Spill control measures should be implemented to prevent spills from infiltrating into the groundwater table. Measures should include appropriate materials handling and storage procedures, and development of contingency plans in the event of a spill.
- Do not use contaminated water (from water tankers) for dust suppression and wash down of vehicles and machinery on site;
- Do not keep the soil exposed in the rainy season
- Maintain and contain waste storage areas to eliminate the potential for leachate or run-off to contaminate soils and water;
- Implement waste management measures to prevent litter and debris from entering soil excavations and contaminating the ground and surface water
- Locate stockpiles on flat areas, away from storm water. Ensure that sediment or erosion cannot reach a waterway;

- Limit the height and slope of stockpiles to minimize erosion of unconsolidated materials during rainfall events;
- Divert overland flow around work areas / construction sites;
- Regularly inspect of all erosion and sedimentation controls during the construction period to ensure their continued effectiveness;
- Develop a contingency plans to be followed in the event of a spill.

Special care should be taken during execution of works near watercourse especially near Rasian river to prevent pollution.

7.3.2.3 Flood Protection in Wadi

(A2.3) If the culverts that are included in the design are installed properly and at the set locations, the impact of the flood would be mitigated.

7.3.2.4 Alteration of Water Harvesting Patterns

(A-2.4) Several mitigation measures have been incorporated into the design and the project works. The design included irrigation steel pipes for encasing water pipes used by farmers. The contractor must avoid the irreversible destruction of water patterns during implementation, which may lead to social conflicts regarding the established water rights among the farmers.

7.3.2.5 Cross Drainage and Scour effects

(A-2.5) Culverts have been assigned in the design at required locations in accordance with a hydrological study. The design includes also the assignment of ditches with riprap works to avoid erosion of new fill areas. If properly installed, the scour effects are mitigated.

7.3.2.6 Discharge to Adjacent lands

(A-2.6) In order to avoid adverse effects on downstream lands, drainage culverts and lined ditches with riprap structures were included in the design to accommodate the flow in the channel.

7.3.3 Air Quality and Noise Nuisance

7.3.3.1 Dust & Potential Pollution from Construction Machinery, Stored materials and Soil Heaps

(A-3.1) The following measures should be implemented during the construction phase of the Project to minimize the potential for dust generation:

- Minimize the area of land to be disturbed at any one time by staging of construction activities and the progressive implementation of the works;
- Cover and do not overload dusty vehicle loads transported to, from and within the Project site with sheets;
- Restrict the movement of vehicles to defined access to minimize dust emissions;
- Regularly use water trucks to suppress dust while ensuring no run off from operation;
- Enclosures and cover, by impervious sheeting, any aggregate or other dusty material stockpiles;
- Minimize excavation and transfer operations of surface materials on windy days,

- Limit the drop height of excavated materials to a minimum to limit fugitive dust generation from unloading as far as practicable;
- Minimize the height and slope of stockpiles to ensure erosion of unconsolidated materials during rainfall events does not occur;
- Construction Project Manager to visually inspect dust generation and to recommend mitigation measures;

A number of mitigation and management measures can be initiated to reduce air quality impacts from construction machinery, vessels and vehicle exhausts. These include:

- Use of modern machinery, with adequate pollution control devices
- Proper and efficient use and operation of construction machinery and vehicles by qualified and workers;
- Implementation of a regular maintenance and inspection program for all construction plant and vehicles (Inspection to be done by the Construction Project Manager);
- Minimization of unnecessary operations of construction machinery, including efficiency of trip times and reduction of double handling through appropriate placement of stockpiles, haul roads, works depots and work areas. This will also aid in fuel efficiency and will assist in reducing the overall costs associated with unnecessary fuel consumption;
- Daily visual checking by inspectors or site supervisors to ensure the above recommendations are followed, particularly with regards to smoky emissions from vehicles and plants; smoky equipment should be given defect notices and taken out of service until repaired and approved for re-deployment by site supervisors.

The above mitigation measures will also contribute to minimizing the emissions of greenhouse gases.

The following mitigation measures will control volatile emissions during the construction phase. Many of these measures will also be required from a safety viewpoint with regards to the use and storage of dangerous goods:

- Ensure all machinery is in working order and not leaking fuel or volatile emissions from fuel tanks or fuel lines;
- Minimize and properly manage; the number of fuel and chemical storage area;
- Ensure proper on site storage of volatile fuels and chemicals in appropriately sealed containers, in cool, covered areas with adequate venting;
- Equip and maintain construction vehicles and machinery during the works to minimize exhaust emissions.

7.3.3.2 Smoke from Burning of Waste Materials (A-3.2)

- (A-3.2) The waste material shall not be burned but be disposed off properly (the Taiz Dump could be an option);
- Waste storage areas should be located in a cleared area outside of identified drainage lines, and should be afforded protection from wind to prevent wind driven litter on site;
- Wastes should be regularly transported from the Project site to an appropriate landfill.

7.3.3.3 *Noise nuisance from construction works*

(A-3.3) The following management measures should be adopted to minimize noise impacts during earthworks:

- Make sure all machinery and vehicles are regularly maintained and broken parts are replaced immediately;
- Make sure all machinery and vehicles are operated efficiently and according to the manufacturers specifications, by trained and qualified operators;
- Make sure that activities likely to cause adverse noise impacts are timed to have least impact on surrounding land users and other site activities (such as schools and hospitals),
- Make sure all personnel are issued with hearing protection and are advised of its proper use;
- Consultation with the Beneficiary Committee to set earthwork hours with affected residents and nearby sensitive receivers;
- Make sure contingency plans are in place to deal with noise control if complaints are received during the earthworks phase.

To address the potential impacts on schools, during construction, the following mitigation measures are recommended:

- Construction works within 100m of schools should be restricted to outside school hours (such as before and after school, during school holidays or weekends, or left as the final stage of works);
- Wire fence meshing, dust screens or wooden hoardings should be installed along the boundaries of the construction areas to delineate it and therefore decrease impacts and the potential for interaction between them, the school and the construction works;
- The access points for construction vehicles should be at a minimum distance of 100m from the school access point

7.3.4 *Biological resources*

(A-4.1, A-4.2, A- 4.3). Destruction of small bushes shall be mitigated by the plantation and the installation of irrigation for the new bushes. The contractor should not be allowed to remove any tree other than those necessary to conduct the works.

It will also be necessary to add signs as per RAPCMO's requirements such as "CROSSING AHEAD" (advisory sign) or "GIVE WAY TO STOCK" and "STOP" (regulatory signs) to facilitate the crossing of the road by the animals.

7.3.5 *Socio-Economic and Cultural*

7.3.5.1 *Tribal Tensions*

(A-5.1) There are no known pre-existing conflicts in the area of the project and no mitigation measures are needed.

7.3.5.2 *Land acquisition*

(A-5.2) The mitigation measure of the land acquisition is the land donation agreement that has been agreed to by locals in support of the project (ref. to Annex 4).

7.3.5.3 Destruction or Re-Location of Utility Services

(A-5.3) The contractor shall arrange for the relocation of the water pipes and the electric poles with the local council, beneficiary committee, community leaders and local people. He shall also provide alternatives for water supply and electricity when they are shutdown. The contractor will also make efforts to shorten the period of shutdown. The relocation of these facilities has been incorporated into the project total cost as a pay item to the contractor.

7.3.5.4 Public Health and Safety at construction site

(A-5.4) The contractor shall abide by the Health, Safety and Environmental Regulations.

- Barriers erected in high risk areas to protect laborers and visitors of the Project site;
- Installation of warning signs
- Provision of adequate lighting on site road;

7.3.5.5 Road Closure and Detours

(A-5.5) The contractor shall obtain approvals from the locals prior to the closure and detouring of the roads

7.3.5.6 Graveyards and Burials

(A-5.6) There is no need for mitigation measures, as the graveyards are not affected by the road widening.

7.3.5.7 Known Archaeological and Historic Sites

(A-5.7) There are no archaeological and historical sites in the project area affected by the works and no mitigation measures are needed. The existing site in not affected by the road works.

7.3.5.8 Chance Finds of cultural resources or other socio-economic resources

(A-5.8) If cultural resources are found during construction works, then the excavation works should cease and local authorities and experts should be contacted directly for site inspection

7.3.5.9 Gender Considerations

(A-5.9) Installation of traffic signs and bumps, as requested by the consulted women, for road safety especially near schools and where animals are crossing the road are already included in the design.

7.3.5.10 Employment

(A-5.10) As the impact of the road on employment is not negative but rather positive, there is no need for mitigation measures.

- However, Local residents should be employed during the construction phases when feasible;
- Local companies should be contracted to supply construction goods and services whenever feasible;

7.3.5.11 Communication

The Contractor shall provide the community with the name of the company's representative as a reference for complaints; The contractor shall also provide community notice boards at centralized locations such as schools or local retail areas with information relating to on-going construction activities to facilitate communication with the locals.

7.4 Mitigation of Impacts during Maintenance and Operation Phase

7.4.1 Land Resources

7.4.1.1 Slope stabilization

(B-1.1) No mitigation measure is needed if regular maintenance of stabilization measures and protection works is undergoing during the maintenance of the Project as required in the contract data

7.4.1.2 Agricultural land or Terrace Damage During Maintenance

(B-1.2) No special mitigation measure is needed if the General Regulations on Safety, Health and Environmental (Clause 6.6) are adhered to.

7.4.1.3 Maintenance of contractor site compounds, materials and equipment storage

(B-1.3) No special mitigation measure is needed if the 1) General Regulations on. Safety, Health and Environmental Regulations Clauses 6.1, 6.4; and 2) other Regulations and Requirements Clauses 17.3, 17.4, 17.5 are followed

7.4.1.4 Management of induced development

(B-1.4) No special mitigation measure is needed

7.4.2 Hydrology and Water Resources

7.4.2.1 Water harvesting

(B-2.1) No special mitigation measure is needed other than the regular maintenance of the water harvesting structures

7.4.2.2 Blockage of cross drains/culverts - Uncontrolled discharge

(B-2.2) No special mitigation measure is needed other than the regular maintenance of the drainage structures

7.4.2.3 Erosion of road platform from drainage discharge

(B-2.3) No special mitigation measure is needed other than the regular maintenance of the retaining walls, gabions and riprap structures.

7.4.2.4 Pollution from vehicle leakage or accidents with hazardous cargo

(B-2.4) The Contractor shall immediately and appropriately clean up following spills or accidents with hazardous cargo.

7.4.3 Air Quality and Noise

7.4.3.1 *Dust and Potential Pollution from Construction Machinery*

(B-3.1) Negligible emissions are expected accordingly no special mitigation measure is needed.

7.4.3.2 *Noise Nuisance from maintenance works*

(B-3.2) Noise generation is expected to be minimal and for a short period consequently no special mitigation measure is needed

7.4.3.3 *Air Pollution from Vehicles*

The regulations of the Ministry of Transport enforce regular vehicle maintenance and the use of lead free fuels.

7.4.3.4 *Noise Nuisance from Vehicles*

Noise generation is expected to be minimal and for a short period consequently no special mitigation measure is needed.

7.4.4 Biological Resources

7.4.4.1 *Damage to Biological resources by Construction Equipment*

(B-4.1) No biological sensitive areas in the vicinity of the project. No special mitigation measure is needed.

7.4.4.2 *Damage to Biological resources by Construction Workers*

(B-4.2) No biologically sensitive areas in the vicinity of the project. No special mitigation measure is needed.

7.4.4.3 *Increased Pressure on Biological Resources from Induced Development*

No biologically sensitive areas in the vicinity of the Project. No special mitigation measure is needed.

7.4.5 Socio-Economic and Cultural Resources

7.4.5.1 *Increased Road Accidents*

(B-5.1) The speed reduction measures such as the signs and bumps must be maintained.

7.4.5.2 *Public health and safety during maintenance*

(B-5.2) The safety rules for work operations, such as equipment operation procedures, safety barriers, warning signs, protective hard hats, shoes and clothing for workers shall be enforced; first aid and medical kits shall be provided. A safety Officer shall be appointed; Health and safety regulations shall be clearly displayed in English and Arabic in the maintenance plant.

7.4.5.3 *Socio-Economic Benefits*

(B-5.3) No negative social impacts are foreseen. There is no need for mitigation measures.

7.4.5.4 *Chance finds of Cultural Resources or Other Socio-Economic Resources*

(B-5.4) If found during maintenance, the local Authority should be contacted.

7.5 Monitoring Plan

The Monitoring Plan is a vital aspect of the Environmental Management Plan to ensure that mitigation measures are being performed as described in the previous section and to make sure they are effective. The main purposes of the conduction of a monitoring plan are the warning of responsible authorities of unforeseen negative impacts or when an impact indicator approaches a critical level and the provision of information such as about the responsible agencies, frequency, location and indicators for each measure.

The monitoring program will comprise site inspections and photographic documentation on weekly basis designed to determine contractor compliance or otherwise with the ESMP and other applicable regulations. It also anticipated that additional inspections would be required in response to complaints by local communities. An additional two visits per quarter may be required.

The costs of the monitoring program during the construction works include the costs of 1 part time environmental specialist and 1 part time social specialist with vehicle and camera. They are expected to reach 35,000 USD.

The following tables 18 and 19 summarize the environmental management Plan for the Project during construction and maintenance phases.

Table 18: Summary Environmental Management Plan during construction phase

Potential Impact	Mitigation	Responsibility		Additional Cost US $	
	Mitigation Activities	Implementation	Monitoring	Mitigation Measures	Monitoring
A.1 Land Resources					
A-1.1 Site Survey Investigation	No special mitigation measure is needed				
A-1.2 Permanent Land Acquisition	-Voluntary donation files prepared -Proper selection of dumping site	Beneficiary Committee and Environmental and Social Unit in cooperation with contractor and Resident Engineer	Environment and Social Specialist/ Consultant	None	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist with camera and car expenses (35,000 USD)
A-1.3 Temporary Land Acquisition	-Proper location of site offices and plants -Re-instatement of the lot to its initial condition -Proper Management of all solid and liquid wastes	Contractor	Environment and Social Specialist/ Consultant	Included in A.1-5	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-1.4 Slope Stabilization	-Construct retaining walls and gabions -Limit earthworks to the minimum required	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BoQ	Cost included in the supervision

A-1.5 Management of Construction site Compound	-Location of workers camp at least few kilometers from residential areas - Storage of hydrocarbon products in sealed containers - Collection, storage and safe disposal of solid and liquid waste (including sewage)	Contractor	Environment and Social Specialist/ Consultant	4,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-1.6 Disposal of Cut Material and Surplus Fill	-Get approval on the disposal site location -Transport the excess surplus material to vacant and approved areas -Cover the trucks with sheets - Prepare and implement Construction Waste Management Plan	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-1.7 Borrow Pits and Quarry Areas	-Get the base course from existing quarries in Taiz to prevent disruption of visual amenities	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	
A- Hydrology and Water Resources					
A-2.1 Sources of construction water	-Contractor to negotiate access to water with the local communities	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	None	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-2.2 Pollution from wastewater, diesel or asphalt spills from site compounds and machinery	-Do not use contaminated water for dust suppression -Do not keep the soil exposed in the rainy season - Keep liquid fuel, oil and lubricates in sealed containers. -Undertake ad hoc repairs ad refueling in designated sealed and lined locations with a sump -Develop contingency plans in the event of a spill -Maintain waste storage -Locate stockpiles away from storm water -Limit the height & slope of stockpiles -Divert the overflow around work areas -Inspect regularly the erosion and sedimentation controls -Develop contingency plans in the event of a spill	Contractor	Environment and Social Specialist/ Consultant	5,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-2.3 Flood protection in Wade	-Install culverts as per the design	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-2.4 Alteration of water harvesting patterns	-Install irrigation steel pipes for encasing water pipes -Avoid irreversible destruction of water patterns	Contractor, Design Engineer Resident Engineer and Beneficiary Committee	Resident Engineer	14,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental
A-2.4 Cross drainage and scour effects	-Install culverts at designated locations and sizes as per the hydrological study -Install ditches and rip rap as per the design	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time

A-2.5 Discharge to Adjacent Lands: - Unstable slopes -Rock Surface - Channel in a stack - Graveyards - Terraces -Other sensitive areas	-Install Drainage culverts and lined ditches to accommodate channel flow.	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included under A-2.4	Cost included in salary of 1 part time social & environmental specialist
A-1 Air Quality and Noise Nuisance					
A-3.1 Dust & Potential air pollutants from construction, Machinery, stored material and spoil heaps	-Minimize the disturbance areas of land by staging the work -Cover dusty vehicles carrying fine grade materials -Restrict vehicle movement to defined access -Regular spraying of water during dry and windy weather conditions -Cover material stockpiles -Minimize excavation and transfer in windy days -Control drop height of excavated materials -Minimize the height & slope of stockpiles -Regular maintenance and inspection of the construction machinery against leakages -Appropriate placement of stockpiles -Daily visual inspection -Minimize the number of fuel & chemical storage places -Ensure proper storage of volatile fuels	Contractor	Environment and Social Specialist/ Consultant	15,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-3.2 Smoke from burning of waste materials	-Do not burn waste material -Properly locate storage areas -Regularly transfer waste from Project	Contractor	Environment and Social Specialist/ Consultant	2,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-3.3 Noise Nuisance from Construction Works	-Regular maintenance of construction equipment -Work in day time near settlements -Work outside of school hours near schools -Make sure all personnel have and use hearing protection -Prepare contingency plans to deal with noise complaints	Contractor	Environment and Social Specialist/ Consultant	5,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-4 Biological Resources					
A-4.1Conversion of Degradation of a critical and non-critical Natural habitat.	-The Contractor is not allowed to cut trees other than those necessary to conduct the works -Unblocking of culverts to allow passage of small animals -Plant new bushes and provide necessary irrigation if bushes are destroyed during works.	Contractor	Environment and Social Specialist/ Consultant	5,000 USD	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-4.2Damage to Biological Resources By Construction Equipment	-The Contractor is not allowed to cut trees other than those necessary to conduct the works -Plant new bushes and provide necessary irrigation if bushes are destroyed during works.	Contractor	Environment and Social Specialist/ Consultant	See A-4.1	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-4.3 Damage to Biological Resources by Construction Workers	-The Contractor is not allowed to cut trees other than those necessary to conduct the works -Unblocking of culverts to allow passage for small animals -Plant new bushes and provide necessary irrigation if bushes are destroyed during works.	Contractor	Environment and Social Specialist/ Consultant	See A-4.1	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-4 Expected Impacts on Socio-Economic and Cultural Resources					
A-5.1 Tribal tensions	No special mitigation measure needed			None	
A-5.2 Land acquisition	-Land donation files prepared			None	
A-5.3 Destruction or relocation of utility services	-Arrange relocation with locals -Provide alternatives when service is shut down- -Contractor to make an effort to shorten the period of shutdown	Contractor, Resident Engineer and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-5.4 Public health and safety at construction site -Safety and health for the construction workers -Public safety at the site and interaction between the workers and the Public	-Barriers erected at high risk areas -Installation of warning signs -Provision of adequate lighting on the road	Contractor	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist

A-5.5 Road closure and detours	-Contractor to obtain approvals from the locals	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	None	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-5.6 Graveyards and Burials	No special mitigation measure needed			None	
A-5.7 Known archaeological and Historic Sites	No special mitigation needed			None	
A-5.8 Chance finds of Cultural Resources or other socio-economic resources	-If cultural resources are found, cease excavation and contact local authorities	Contractor	Environment and Social Specialist/ Consultant	To be determined	
A-5.9 Gender considerations	-Install traffic signs and bumps for road safety near schools and for animal crossings	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	Cost included in the BOQ	Cost included in salary of 1 part time social specialist and 1 part time environmental specialist
A-5.10 Employment	-Employ local residents when feasible -Contract local companies when feasible	Contractor and Beneficiary Committee	Environment and Social Specialist/ Consultant	None	
TOTAL				**50,000 USD**	**35,000 USD**

Table 19: Summary of Environmental Management Plan during Maintenance Phase

Potential Impact	Mitigation	Responsibility		Additional Cost per average per year US $	
	Mitigation Measures	Implementation	Monitoring	Mitigation Measures	Monitoring
B-1 Land Resources					
B-1.1 Slope stabilization	-Regularly maintain the stabilization measures and protection works	Contractor	Environment and Social Specialist/Consultant	Cost will be included in the maintenance BOQ	
B-1.2 Agricultural land or terrace Damage during maintenance	-Maintain in good conditions the drainage system and the shoulders -Follow Safety, Health and	Contractor	Environment and Social Specialist/Consultant	Cost will be included in the maintenance BOQ	
B-1.3 Maintenance of contractor site compounds, materials and equipment storage	-Follow Safety, Health and Environmental Regulations	Contractor	Environment and Social Specialist/Consultant		
B-1.4 Management of induced development	-No special mitigation measure needed	Contractor	Environment and Social Specialist/Consultant		
B.2 Hydrology and Water Resources					
B-2.1 Water Harvesting	-Regular maintenance of water harvesting structures	Contractor	Environment and Social Specialist/	Cost will be included in the maintenance BOQ	
B-2.2 Blockage of cross drains/culverts - Uncontrolled discharge	-Regular maintenance of the drainage structures	Contractor	Environment and Social Specialist/ Consultant	Cost will be included in the maintenance BOQ	
B-2.3 Erosion of road platform from drainage discharge	-Regular maintenance of retaining walls, gabions and rip rap	Contractor	Environment and Social Specialist/ Consultant	Cost will be included in the maintenance BOQ	
B-2.4 Pollution from Vehicle leakage or accidents with hazardous cargo	-Timely clean up following spills or accidents	Contractor	Environment and Social Specialist/ Consultant		
B-3 Air Quality and Noise					

B-3.1 Dust and Potential Pollution from Construction Machinery	-No special mitigation measure needed			
B-3.2 Noise Nuisance from maintenance works	-No special mitigation measure needed			
(Provisional B3.3) air Pollution form Vehicles	-MoT issues regulations for the regular maintenance of the vehicles and the use of lead free fuels	Contractor	Environment and Social Specialist/ Consultant	
(Provisional B-3.4) Noise Nuisance from Vehicles	-No special mitigation measure needed			
B.-4 Biological Resources				
B-4.1 Damage to Biological Resources by Construction Equipment	-No special mitigation measure needed			
B-4.2 Damage to Biological Resources by Construction Workers	-No special mitigation measure needed			
(provisional B-4.3) Increased pressure on Biological Resources from induced Development	-Maintain culverts unblocked for passage by small animals -No special mitigation measure needed			Cost will be included in the maintenance BOQ
B.-4 Socio-Economic and Cultural Resources				
B-5.1 Increased Road Accidents	-Maintain speed reduction signs and bumps	Contractor	Environment and Social Specialist/Consultant	Cost will be included in the maintenance BOQ
B-5.2 Public Health and Safety during Maintenance	- Safety rules followed -Installation of waring traffic signs -Health and safety regulations displayed in English and Arabic in the maintenance	Contractor	Environment and Social Specialist/ Consultant	Cost will be included in the maintenance BOQ
B-5.3 Socio-economic measures	-No special mitigation measure needed			
B-5.4 Chance finds Cultural Resources or Other Socio-Economic Resources	- If found during maintenance, the local Authority should be contacted	Contractor	Environment and Social Specialist/ Consultant	

8 Social Consultations

8.1 Objectives of the Consultations

The objectives of the social consultations can be summarized as follows:

1. To provide a forum for the initial definition of critical environmental and social issues; in particular the people who are likely to be affected by the Project
2. To understand, the concerns of regional stakeholders and potentially affected people around key development issues and their linkages to the environment and social development.
3. To identify whether the project will create social problems or tribal disputes, or destroy sensitive areas of the population such as graveyards, and cultural attractions
4. To confirm the suitability of the initial list of beneficiary communities selected for consultations and
5. To obtain assistance by contacting leading members of target communities whenever necessary.
6. To inform the land owners whose lands are affected by the road widening about their right that:
    a. The land donation should be without any coercion
    b. The donation should not affect their income by more than 10%
    c. The donation should not destroy any home or facilities vital to the population forcing them to resettlement

8.2 Consultation Process

The following process was implemented during consultation:

1. Members of the beneficiaries have been contacted and informed about the field visit and were asked to inform the largest number of people in the region about meeting them and consulting with them
2. Survey forms were prepared to question locals about their point of view *vis a vis* the asphalting of the road, along with their expectations, their fears and their contributions to the implementation of the project. (See sample forms in the Appendix).
3. The field visit was conducted on January 29th, 2014, the populations in the four regions were met, and, their point of views were collected individually, by filling up the survey form:
    - Souk Al Zahira and the number of attendees was 12 persons
    - Al Sheile Bir el Banat and the number of attendees was 15 persons,
    - Mirab, and the number of attendees was 25 persons
    - and Al Hayajem and the number of attendees was 22 persons

    In addition, the points of views were taken also individually, for some residents in a number of areas, through questionnaires
4. During the collective and individual social consultations, the audience was briefed about the project and the goals of social consulting. The policy of land donation was explained, and the fact that the donation must be voluntary and without coercion, and that it should not result in an economic or social loss to the donor. People were

also asked about their concerns regarding the implementation of the project, and whether it will lead to social conflict.

5. A list of all the land owners, whose land shall be donated for the purpose of the road widening, was prepared using the road alignment and showing the portion that shall be donated, the location of the land with reference to the road (left or right), the size of the cut-outs, and the income value of the land that will be donated.
6. During the meetings, four committees of landowners were formed under the direct supervision of the social expert. They handled all the communication with the owners of land that will be donated in favor of the expansion of the road, and the tenants who are in charge of the cultivation of these lands. It informed them of the land donation policy, and asked them whether they want to donate or not, and if voluntary donation is accepted. Their fingerprints or signatures were taken as a proof of their consent.
7. The views and comments of those present were written and photos were taken.
8. The formed committee went to all the regions concerned by the road and communicated with the landowners, as well as with the tenants face to face or by telephone and explained the project to them, and in case they consented to donate a part of their lands, then they would authorize a person to sign on their behalf.

8.3 Men Consultations

The men consultation was conducted by the consultant during the preparation of this ESIA as shown in the table 20 below.

Table 20: Men Consultation

Villages Surveyed	Survey Date	No of men
Souk Az zahira	29 January. 2014	**12**
Al Swhila	29 January. 2014	**15**
Mirab	29 January. 2014	**25**
Al Hayajem	29 January. 2014	**22**

The following photos were taken during men consultation

Figure 29: Photos taken during men consultations

8.3.1 Findings of the Men Consultations

During the consultation process the following information and opinions were gathered:

1. All residents are convinced of the positive economic, social and health impacts of the road widening and paving on their lives.
2. The total donated land is less than 10% of the total area of the owned land with the majority being less than 1%.
3. Land donation is voluntary.
4. Different plots are owned by one same owner
5. Because of the rugged terrain, and dependence on the Monsoon, land revenues are low The population hopes to increase revenues after the completion of the road works as they will be able to supply crops with water they bring from the valleys by means of tankers.
6. Some residents expressed their concern over the suspension of the project without completing the process of asphalting. Their land will be excavated and lost without a result; they wanted the project to be completed in all its phases.
7. Transport is expensive especially for the sick.
8. Some resident showed lack of confidence in the implementation of the project as they were promised implementation several times long time ago.
9. Most residents showed their willingness to help during the implementation process.
10. Most of the population did not express displeasure with the problems that accompany the implementation process such as the noise and dust, and the temporary disruption of some services

8.4 Women Consultations

The aim of this consultation was to solicit the views and concerns of women on the construction of the road and incorporate them into this ESIA and the contract documents of the Project. A gender expert undertook the consultations in four villages along the road, interviewed women from different levels and discussed with them the expected impact and the appropriate mitigation measures with regard to daily activities. Table 21 below shows the number of women consulted in different villages.

Table 21: Women Consultation

Villages Surveyed	Survey Date	No of women
Wadi Al Sahi	6 Feb. 2014	25
Al Makhatah	6 Feb. 2014	18
Al Joraebib	6 Feb. 2014	17
Alarwoth	6 Feb. 2014	30

8.4.1 Findings of the Women Consultations

Women see the significant benefits of the road as well as they have concern of the road construction.

- In Wadi Al Sahi village, women expressed their concerns because of the increasing risk of accidents and the safety of their child especially outside the school gates, and they pointed out the need for the installation of signs and speed bumps in order to reduce vehicles speed

- In Al Joraebib village many women were worried about the danger of speedy cars on their lives near the mosque in the valley as they get their water from this place , many times with the company of their children. They proposed to put signs and speed bumps in this region.

- In Alarwoth village some women asked for the installation of speed bumps in Al Arakeb area in the middle of the village

The consulted women were concerned by the fact that the widening and the pavement of the road may increase the number of accidents as it passes through the villages. Women pointed to the need to install signs and speed bumps in order to reduce speed.

Annexes

Annex 1: Meteorological Data for Tai'z
Annex 2: Social Framework Agreement in Arabic
Annex 3: List of Beneficiary Committee
Annex 4: Land Donation Process Arabic version
Annex 5: Land Donation Process English version
Annex 6: List of Affected People Attendance sheet
Annex 7: Survey sample Form

Annex 1: Meteorological Data for Tai'z

Warazan Station Meteorological data representative for the Project area in Tai'z
(Ref. Bruggeman, Agro-Climatic Resources of Yemen, Part 1 Agro-Climatic Inventory, FAO, 1997)

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station: Warazan (agro-)meteorological
latitude: 13°25'
longitude: 44°14
altitude: 1100 m
average 1989, 1992-1993

		Temperature (°C) max	min	mean	RH %	sun hrs	radiation MJ/m²/d	winds m/s	PET mm/d	mm/dec	rainfall (mm) average	1989	1992	1993
	dec-1	26.5	13.9	20.2	50	7.8	13.6	1.6	3.7	37	0.7	1.0	1.0	0.0
Jan	dec-2	26.0	14.1	20.0	51	7.5	13.5	1.7	3.8	38	1.3	0.0	2.0	2.0
	dec-3	26.6	14.1	20.3	50	7.5	13.8	1.7	3.9	39	1.7	0.0	0.0	5.0
	dec-4	27.4	14.1	20.7	49	7.4	14.2	1.8	4.1	41	7.7	16.0	3.0	4.0
Feb	dec-5	27.9	14.1	21.0	49	7.4	14.6	1.8	4.3	43	2.0	0.0	4.0	2.0
	dec-6	28.6	14.6	21.6	46	8.0	15.7	1.8	4.6	46	2.7	0.0	8.0	0.0
	dec-7	29.7	15.3	22.5	40	8.8	16.9	1.9	5.1	51	0.0	0.0	0.0	0.0
Mar	dec-8	30.2	15.6	22.9	38	9.1	17.7	1.9	5.4	54	0.0	0.0	0.0	0.0
	dec-9	30.6	16.2	23.4	37	9.0	17.8	1.9	5.5	55	0.0	0.0	0.0	0.0
	dec-10	31.2	16.9	24.1	36	8.9	17.8	1.9	5.7	57	17.7	0.0	53.0	0.0
Apr	dec-11	31.5	17.3	24.4	35	8.8	17.8	1.9	5.7	57	6.3	0.0	2.0	17.0
	dec-12	32.7	18.0	25.3	34	9.2	18.2	1.9	5.9	59	4.3	0.0	0.0	13.0
	dec-13	34.3	18.9	26.6	32	9.7	18.7	1.8	6.2	62	9.0	0.0	4.0	23.0
May	dec-14	35.1	19.3	27.2	31	9.9	18.9	1.8	6.2	62	31.7	21.0	60.0	14.0
	dec-15	35.8	19.8	27.7	32	9.5	18.3	1.7	6.1	61	16.7	1.0	0.0	49.0
	dec-16	36.3	20.5	28.4	35	8.8	17.5	1.6	5.9	59	20.3	45.0	8.0	8.0
Jun	dec-17	36.6	20.8	28.7	36	8.5	17.1	1.6	5.8	58	21.0	21.0	21.0	21.0
	dec-18	36.4	21.0	28.7	34	8.2	16.6	1.6	5.8	58	28.7	2.0	42.0	42.0
	dec-19	36.0	21.1	28.6	32	7.7	16.1	1.8	5.9	59	17.0	0.0	37.0	14.0
Jul	dec-20	35.9	21.2	28.5	30	7.5	15.9	1.8	6.0	60	18.0	4.0	36.0	14.0
	dec-21	35.8	20.6	28.2	32	7.6	16.1	1.7	5.8	58	23.7	2.0	34.0	35.0
	dec-22	35.8	19.8	27.8	34	7.7	16.3	1.6	5.7	57	38.3	34.0	42.0	39.0
Aug	dec-23	35.8	19.4	27.6	35	7.8	16.4	1.6	5.6	56	41.7	73.0	31.0	21.0
	dec-24	35.3	19.1	27.2	37	7.9	16.6	1.5	5.4	54	28.0	7.0	45.0	32.0
	dec-25	34.7	18.8	26.8	40	8.2	16.8	1.4	5.2	52	25.7	6.0	36.0	35.0
Sep	dec-26	34.5	18.6	26.5	42	8.3	16.7	1.3	5.1	51	40.7	0.0	15.0	107.0
	dec-27	33.8	17.9	25.8	42	8.9	17.2	1.3	5.1	51	14.3	10.0	24.0	9.0
	dec-28	33.0	16.8	24.9	42	9.7	17.9	1.4	5.0	50	8.0	0.0	22.0	2.0
Oct	dec-29	32.5	16.3	24.4	42	10.2	17.9	1.4	5.0	50	17.7	0.0	0.0	53.0
	dec-30	31.5	15.5	23.5	44	10.2	17.5	1.4	4.7	47	8.3	0.0	0.0	25.0
	dec-31	30.2	14.4	22.3	47	10.2	17.0	1.5	4.5	45	0.0	0.0	0.0	0.0
Nov	dec-32	29.5	13.8	21.7	49	10.2	16.6	1.5	4.3	43	0.0	0.0	0.0	0.0
	dec-33	28.8	13.7	21.3	49	9.7	15.6	1.5	4.0	40	0.3	0.0	0.0	1.0
	dec-34	27.9	13.7	20.8	49	8.9	14.6	1.5	3.8	38	1.3	2.0	2.0	0.0
Dec	dec-35	27.4	13.6	20.5	49	8.5	14.1	1.5	3.7	37	3.3	10.0	0.0	0.0
	dec-36	26.9	13.6	20.4	49	8.2	13.8	1.6	3.7	37	0.3	0.0	1.0	0.0
Year		31.9	17.0	24.5	40	8.6	5922	1.6	5.1	1822	456	256	533	587
										P/PET	0.3	0.1	0.3	0.3

Agro-Climatic Resources of Yemen Annex I.13

The annual rate of rainfall in Taiz Governorate

Year	2003	2004	2005	2006	2011	2012
Rainfall rate (mm)	737	744	661	493	432	453

Source
Central Bureau of Statistics Yearbook for the years 2004, 2005, 2006, 2007, 2012.2013

Annex 2: Social framework Agreement in Arabic

بسم الله الرحمن الرحيم

إتفاقية الإطار الإجتماعي لمشروع طريق
((هجدة – المخاضة – رسيان – الهياجم)) محافظة تعز

بناءً على القانون رقم 14 لعام 2001م والخاص بالاتفاقية الموقعة بين الحكومة اليمنية ووكالة التنمية الدولية (IDA) في 2 أغسطس عام 2001م بخصوص برنامج تنمية الطرق الريفية

ونظراً لأن وحدة تنفيذ برنامج تنمية الطرق الريفية التابعة لوزارة الأشغال العامة والطرق سوف تقوم بتحسين وتطوير الطرق الموصلة بين التجمعات السكانية في الوحده الإدارية **بمديريتي** (هجدة ومقبنة) – **محافظة- تعز**

وبعد التنسيق و التشاور مع الأخ **محافظ المحافظة**

رئيس المجلس المحلي بتشكيل لجنة من الوجهاء والأعيان والنواب وأعضاء المجلس المحلي وممثلي المرأة في الوحده الإدارية المشار إليها. والذي حددها قرار المحافظ رقم (١٦١) للعام 2014م والمرفق صورة منه.

وبناءً على الدراسة البيئية والإجتماعية الأولية لمنطقة الطريق فقد تم _____ الموافق : __/ __/2014م الإتفاق بين كل من :-

- المهندس/ محمد ناجي المحيا- القائم باعمال مدير عام برنامج تنمية الطرق الريفية (وحدة تنفيذ المشروع الرئيسية) بوزارة الأشغال العامة والطرق.
- الأخ / محمد سليمان الوطني (عضو مجلس النواب) – رئيس اللجنة المشكلة من الوجهاء والأعيان والنواب وأعضاء المجلس المحلي وممثلي المرأة بالوحدات الإدارية وذلك على مايلي :-

1. مكونات المشروع :-

الهدف: -

يهدف المشروع إلى توفير طرق معبدة للتجمعات المستفيدة من الطريق إلى الأسواق والخدمات العامة وذلك من خلال:

- ✓ تحسين الطريق الموجود إلى أفضل مستوى ممكن .
- ✓ المحافظة على هذا المستوى من خلال الصيانة المستمرة والدورية .

المسار الحالي للمشروع :-

يعتبر هذا الطريق من ضمن مشاريع برنامج تنمية الطرق الريفية لمحافظة تعز

ويقع بداية المشروع في مدينة هجدة حيث يخدم عدد من القرى والمحلات التي تقع في مديريتي (هجدة ومقبنة)

ويبدأ المشروع من مدينة هجدة الواقعة على الطريق الإسفلتي تعز – إب الحديدة وينتهي في تقاطعا الطريق الاسفلتي تعز – شرعب

ويبلغ طول الطريق حوالي36 كيلومتر.

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الأعمال المقترحة:

سيتم تنفيذ جميع الأعمال المقترحة ضمن المسار الحالي للطريق والذي يقدر طوله بحوالي 36 كيلومتر.
الأعمال المتوقعة تتضمن إستكمال الأعمال الترابية والأعمال الإنشائية بالإضافة إلى أعمال طبقات الرصف بما فيها الإسفلت.

الأماكن الضيقة:

سيتضمن الطريق إستقطاع لبعض الأراضي الزراعية الواقعة في حرم الطريق في الأماكن الضيقه إذا لزم الأمر حسب الكشف المرفق دون دفع أي تعويضات وكذلك عند وجود بعض الأشجار التي تقع في حرم الطريق فإنه إذا اقتضت الضرورة الفنية إزالة مثل هذه الأشجار فسوف يتم إزالتها دون دفع أي تعويضات.

2. مهام مشروع تنمية الطرق الريفية :-

سيقوم برنامج تنمية الطرق الريفية (وحدة تنفيذ المشروع الرئيسية) والتابع لوزارة الأشغال العامة والطرق بتمويل وتحسين الطريق الحالي إلى افضل مستوى ممكن وفقاً لمكونات المشروع المحددة في البند السابق وبما لا يخل بحق الوحدة في أي تعديلات قد تراها مناسبة سواء في المكونات أو تغيير المسار أو التمويل.

3. مهام اللجنة و مسئولياتها:-

سيكون من مهام اللجنة و فقاً لقرار رئيس المجلس المحلي المشار إليه المساعدة على تحقيق الأهداف الاتية :-

3.1 الموافقة على إتفاقية الإطار الاجتماعي و ضمان تنفيذها.

3.2 التعاون مع برنامج تنمية الطرق الريفية لتحقيق أهداف المشروع بحسب طبيعة التحسينات التى يتطلبها الطريق.

3.3 مساعدة برنامج تنمية الطرق الريفية على تجنب الأثار السلبية الناتجة عن تنفيذ الطريق سواء على البيئة أو المجتمع و التخفيف منها إلى أدنى درجة.

3.4 العمل على حل المشاكل التي قد تنجم عن أعمال التنفيذ سواء مع المواطنين أو مع الجهات الحكومية أو المحلية.

3.5 ستعمل اللجنة على إعطاء هذا الطريق أولوية الصيانة ضمن مخصصات صيانة الطرق للمجالس المحلية.

3.6 جمع التبرعات اللازمة لضمان إستمرارية أعمال صيانة الطريق وفقاً للقوانين النافذة في حالة عدم وجود التمويل الكافي لأعمال الصيانة.

3.7 مساعدة برنامج تنمية الطرق الريفية و المهندس المقيم و المقاول في إنجاز التصاميم و تنفيذ كافة أعمال التحسين المطلوبة للطريق.

3.8 مساعدة الوحدة لتوفير أراضي من أملاك الدولة أو المواطنين أو الوقف للأغراض الآتية :-

- مواقع مؤقتة للكنب و المستودعات و المعدات
- التحويلات المؤقتة للطرق أثناء فترة العمل فيها
- المواقع التي سيتم رمي المخلفات فيها لتجنب الأضرار بالأراضي الزراعية
- مصادر المياه لأغراض الإنشاء
- أي مواقع أخرى سيتم الاحتياج إليها

3.9 اللجنة ستساعد المهندس المقيم والمقاول في الحصول على موافقة فك وتركيب أنابيب المياه الموجودة في حرم الطريق وتجنب الأضرار بها خلال فترة التنفيذ بما لا يؤثر على المواطنين حيث ستقوم اللجنة بالتنسيق مع المواطنين والمهندس المقيم والمقاول لتحديد أزمنة وفترات انقطاع المياه.

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3.10 اللجنة ستساعد المهندس المقيم والمقاول في الحصول على موافقة فك وتركيب أعمدة الكهرباء والهاتف الموجودة في حرم الطريق وتجنب الأضرار بها خلال فترة التنفيذ بما لا يؤثر على المواطنين حيث ستقوم اللجنة بالتنسيق مع المواطنين والمهندس المقيم والمقاول لتحديد أزمنة وفترات الفك و التركيب.

3.11 اللجنة ستساعد المهندس المقيم والمقاول في الحصول على موافقة إغلاق الطريق وبما لا يؤثر على المواطنين حيث ستقوم اللجنة بالتنسيق مع المواطنين و المهندس المقيم والمقاول لتحديد أزمنة وفترات الإغلاق .

3.12 اللجنة ستساعد المهندس المقيم والمقاول في تجنب الأضرار بالمقابر والمزارات المحاذية للطريق.

3.13 اللجنة سوف تساعد في المناقشات بين برنامج تنمية الطرق الريفية والمهندس المقيم والمقاول من جهة والمواطنين من جهة أخرى للوصول إلى حلول مناسبة فيما يخص أنظمة حصاد المياه الحالية التي تستخدم الطريق كقنوات لمرور المياه إلى المدرجات والبرك .

3.14 اللجنة سوف تنسق مع المقاول لضمان حماية معدات ومواد المقاول من السرقة أو إتلافها وإتخاذ التدابير المناسبة لحماية الأطفال والسكان من مخاطر مواقع الإنشاء والمعدات.

3.15 ستقوم اللجنة بأي مهام أخرى قد يتطلبها المشروع مستقبلاً.

المرفقات:-

- قرار المحافظ بتشكيل اللجنة
- كشف توقيعات المواطنين بالموافقة على إستقطاع جزء من الأراضي

التوقيعات:-

الطرف الثاني : رئيس اللجنة	الطرف الأول برنامج تنمية الطرق الريفية
الاسم / محمد سيف عبد اللطيف	الاسم / م/ محمد [illegible]
التوقيع/	التوقيع/
التاريخ/ ٢٠/٢/٢٠١٤م	التاريخ/

يعتـــــــــــــــمد ،،،

محافظ محافظة : شرقي احمد هائل

الإسم أ/ التوقيع/

3/3

Annex 3: List of Beneficiary Committee

بسم الله الرحمن الرحيم

الجمهوريه اليمنيه

محافظة تعز

٠١٤/٢/٢٣

قرار محافظ محافظة تعز رقم (١٣١) لعام 2014م

بشأن تشكيل لجنة للموافقة على اتفاقية الإطار الاجتماعي لمشروع طريق:-

(هجدة – المخاضة – رسيان – الهياجم)

بعد الاطلاع على القانون رقم (4) لسنة 2000م بشأن السلطة المحلية .

وعلى القرار الجمهوري رقم (269) لسنة 2000م بشأن اللائحة التنفيذية لقانون السلطة المحلية . ولما تقتضيه المصلحة العامة .

//قـرر//

مادة أولى :- يتم تشكيل لجنة للموافقة على اتفاقية الإطار الاجتماعي لمشروع طريق:

هجدة – المخاضة – رسيان – الهياجم

على النحو التالي :-

م	الاسم	الصفة
1	محمد [illegible] عبداللطيف	رئيساً
2	عبدالحميد [illegible]	عضواً
3	[illegible]	عضواً
4	[illegible]	عضواً
5	[illegible]	عضواً
6	[illegible]	عضواً
7	[illegible]	عضواً
8	[illegible]	عضواً
9	[illegible]	عضواً
10	[illegible]	عضواً
11	[illegible]	عضواً
12	[illegible]	عضواً

ثانية :- تقوم اللجنة بالمهام التالية :-

3.1 الموافقة على اتفاقية الاطار الاجتماعي و ضمان تنفيذها

3.2 التعاون مع برنامج تنمية الطرق الريفية لتحقيق أهداف المشروع بحسب طبيعة التحسينات التي يتطلبها المشروع

3.3 مساعدة برنامج تنمية الطرق الريفية على تجنب الآثار السلبية الناتجة عن تنفيذ المشروع سواء على البيئة أو المجتمع والتخفيف منها إلى أدنى درجة.

3.4 العمل على حل المشاكل التي قد تنجم عن أعمال التنفيذ سواء مع المواطنين أو مع الجهات الحكومية أو المحلية

3.5 ستعمل اللجنة على اعطاء هذا المشروع اولوية الصيانة ضمن مخصصات صيانة الطرق للمجالس المحلية

3.6 جمع التبرعات اللازمة لضمان استمرارية أعمال صيانة الطريق وفقاً للقوانين النافذة في حالة عدم وجود التمويل الكافي لاعمال الصيانة.

بسم الله الرحمن الرحيم

الجمـــــهوريه اليمنيـــــــه

محافظـــة تعـــز

3.7 مساعدة برنامج تنمية الطرق الريفية و المهندس المقيم و المقاول في إنجاز التصاميم و تنفيذ كافة أعمال التحسين المطلوبة للمشروع.

3.8 مساعدة برنامج تنمية الطرق الريفية لتوفير اراضي من املاك الدولة او المواطنين او الوقف للاغراض الآتية :-

- مواقع مؤقتة للكنب و المستودعات و المعدات
- التحويلات المؤقتة للطرق اثناء فترة العمل فيها
- مواقع المواد مع مداخلها
- المواقع التي سيتم رمي المخلفات فيها لتجنب الأضرار بالأراضي الزراعية
- مصادر المياه لأغراض الإنشاء
- أي مواقع أو مساحات أخرى سيتم الاحتياج أليها بما في ذلك المساحات اللازمة التي يحتاج إ ليها حرم الطريق في المناطق أخرجه (زراعيه أو حضريه) .

3.9 اللجنة ستساعد المهندس المقيم والمقاول في الحصول على موافقة فك وتركيب انابيب المياة وسبل المياة الموجودة في حرم الطريق وتجنب الأضرار بها خلال فترة التنفيذ بما لا يؤثر على المواطنين حيث ستقوم اللجنة بالتنسيق مع المواطنين و المهندس المقيم و المقاول لتحديد ازمنة و فترات انقطاع المياه .

3.10 اللجنة ستساعد المهندس المقيم والمقاول في الحصول على موافقة اغلاق الطريق وبما لا يؤثر على المواطنين حيث ستقوم اللجنة بالتنسيق مع المواطنين و المهندس المقيم و المقاول لتحديد ازمنة و فترات الاغلاق .

3.11 اللجنة ستساعد المهندس المقيم والمقاول في تجنب الأضرار بالمقابر و المزارات المحاذية للطريق

3.12 أنظمة حصاد المياه الحالية تستخدم الطريق كقنوات لمرور المياه إلى المدرجات والبرك. اللجنة سوف تساعد في المناقشات بين مشروع تنمية الطرق الريفية والمهندس المقيم والمقاول من جهة والمواطنين من جهة أخرى للوصول الى حلول مناسبة في هذا الخصوص .

3.13 اللجنة سوف تنسق مع المقاول لضمان حماية معدات ومواد المقاول من السرقة أو أتلافها واتخاذ التدابير المناسبة لحماية الأطفال و السكان من مخاطر مواقع الإنشاء والمعدات

3.14 ستقوم اللجنة باي مهام اخرى قد يتطلبها المشروع مستقبلاً.

مادة ثالثة :- تبداء اللجنة بمباشرة عملها ابتداء من تاريخ / /2014 م وعلى اللجنة بعد الانتهاء من عملها رفع تقرير إلينا

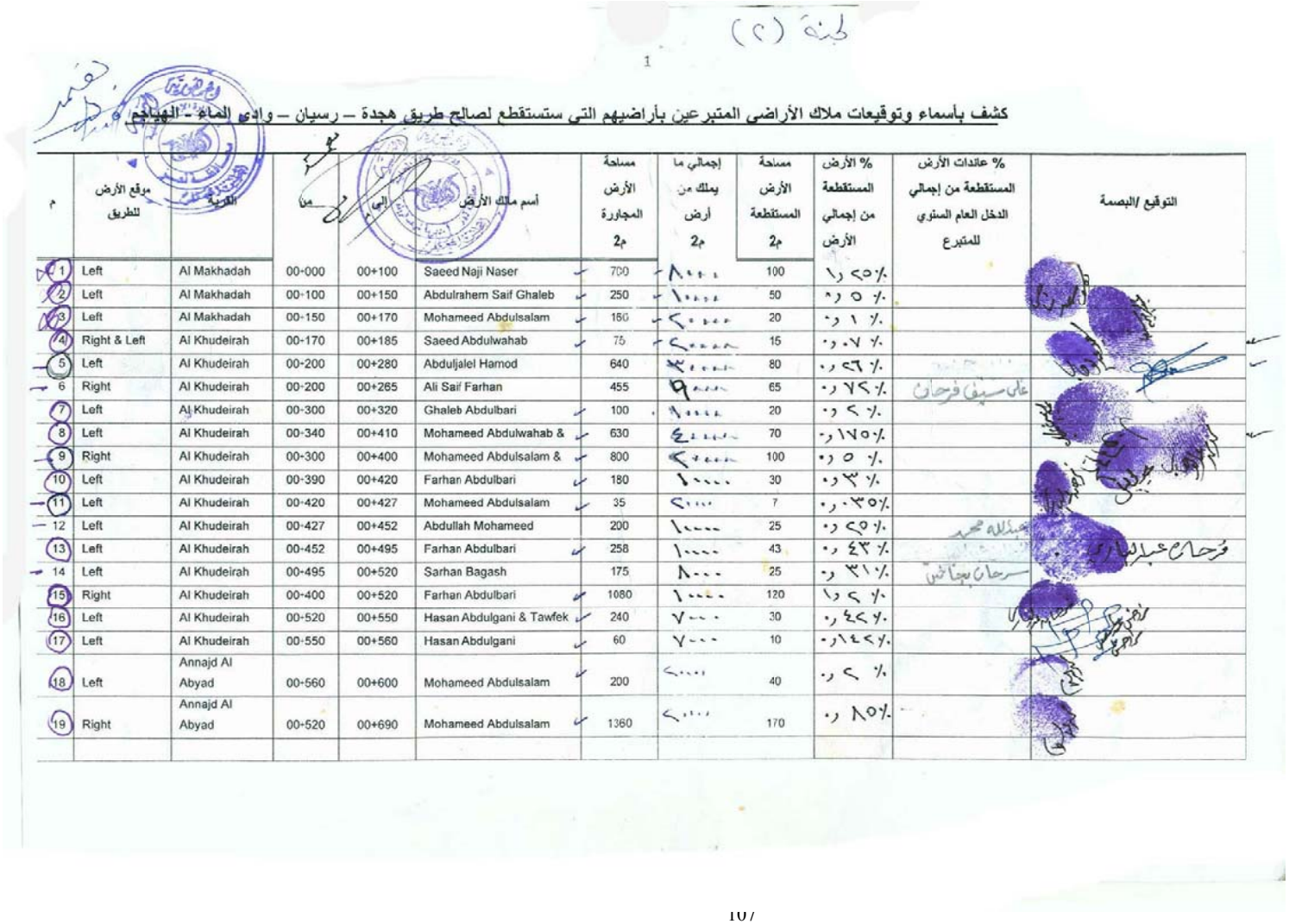
مادة رابعة :- يعمل بهذا القرار من تاريخ صدوره و على الجهات المختصة العمل بموجبة .

صدر بديوان المحافظة

بتاريخ / /1435هـ الموافق / /2014م

محافظ محافظة تعـــز
رئيس المجلس المحلي

Annex 4: Land Donation Process Arabic version



(٢) لجنة

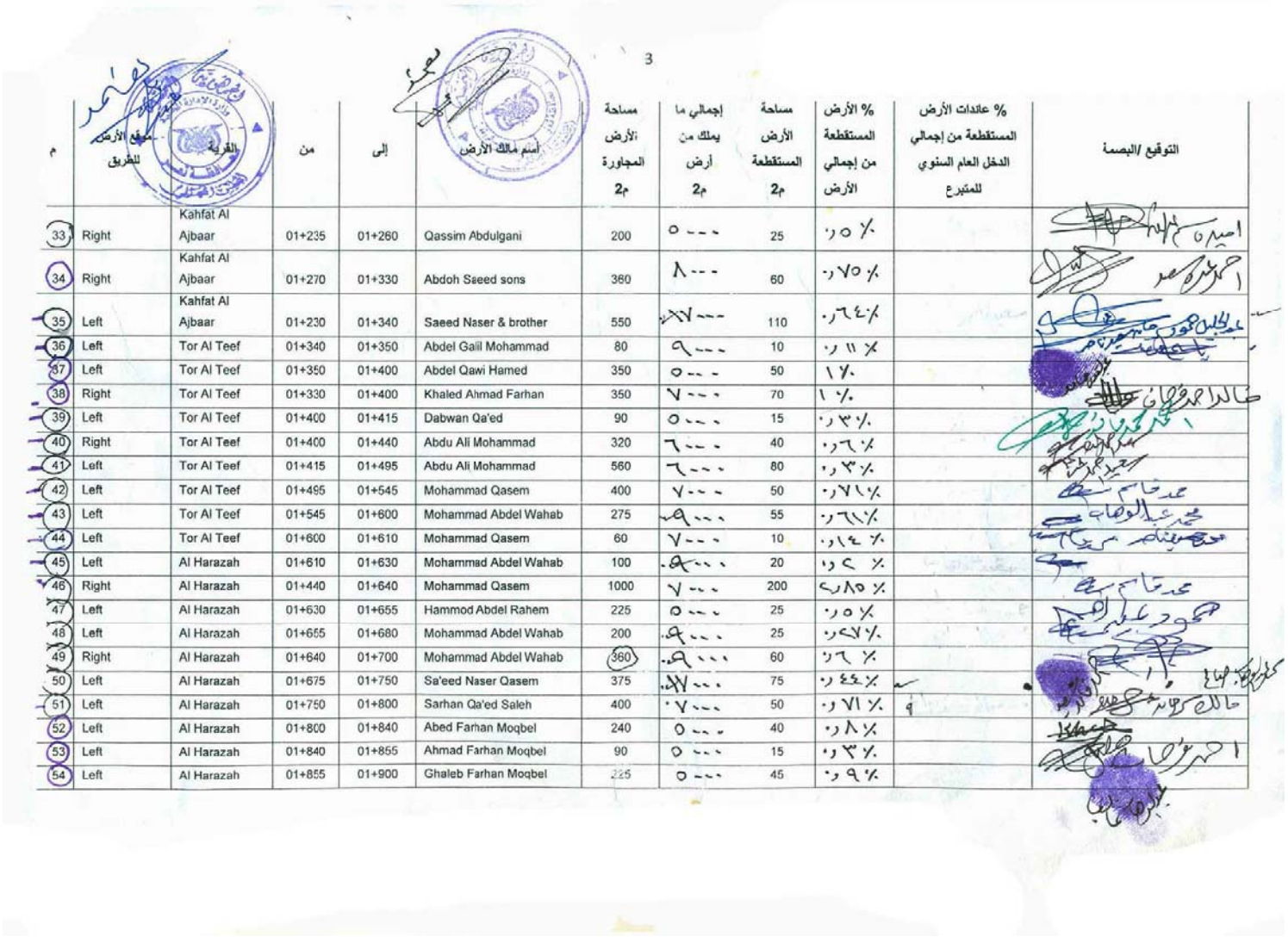
1

كشف بأسماء وتوقيعات ملاك الأراضي المتبرعين بأراضيهم التي ستستقطع لصالح طريق هجدة – رسيان – وادي الماء – الهياجم

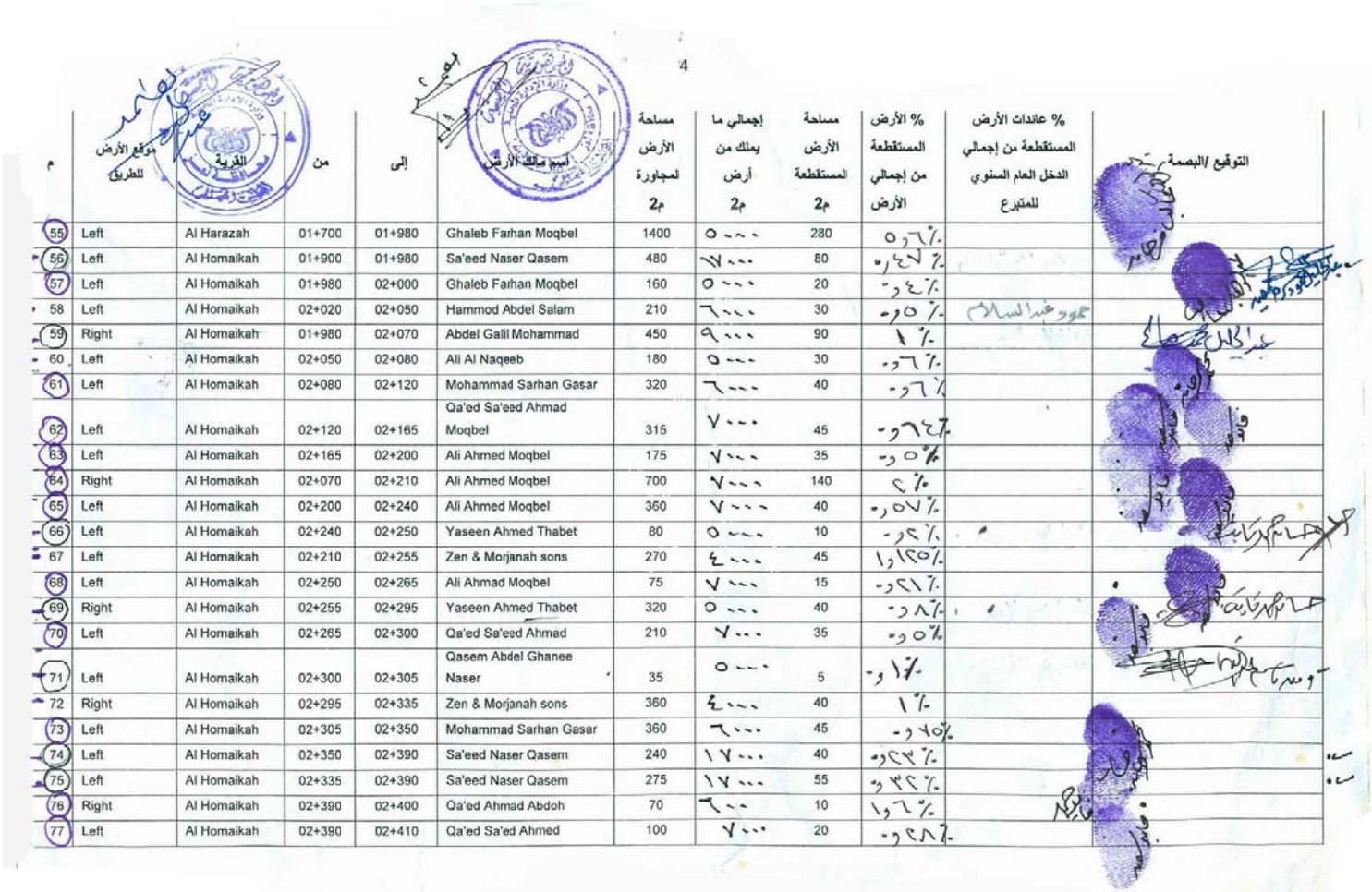
م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
1	Left	Al Makhadah	00-000	00+100	Saeed Naji Naser	700	٨٠٠٠	100	١٫٢٥٪		
2	Left	Al Makhadah	00-100	00+150	Abdulrahem Saif Ghaleb	250	١٠٠٠٠	50	٠٫٥ ٪		
3	Left	Al Makhadah	00-150	00+170	Mohameed Abdulsalam	160	٢٠٠٠٠	20	٠٫١ ٪		
4	Right & Left	Al Khudeirah	00-170	00+185	Saeed Abdulwahab	75	٢٠٠٠٠	15	٠٫٠٧ ٪		
5	Left	Al Khudeirah	00-200	00+280	Abduljalel Hamod	640	٣٠٠٠٠	80	٠٫٢٦ ٪		
6	Right	Al Khudeirah	00-200	00+265	Ali Saif Farhan	455	٩٠٠٠	65	٠٫٧٢٪	علي سيف فرحان	
7	Left	Al Khudeirah	00-300	00+320	Ghaleb Abdulbari	100	٨٠٠٠٠	20	٠٫٢ ٪		
8	Left	Al Khudeirah	00-340	00+410	Mohameed Abdulwahab &	630	٤٠٠٠٠	70	٠٫١٧٥٪		
9	Right	Al Khudeirah	00-300	00+400	Mohameed Abdulsalam &	800	٢٠٠٠٠	100	٠٫٥ ٪		
10	Left	Al Khudeirah	00-390	00+420	Farhan Abdulbari	180	١٠٠٠٠	30	٠٫٣ ٪		
11	Left	Al Khudeirah	00-420	00+427	Mohameed Abdulsalam	35	٢٠٠٠	7	٠٫٠٣٥٪		
12	Left	Al Khudeirah	00-427	00+452	Abdullah Mohameed	200	١٠٠٠٠	25	٠٫٢٥٪	عبدالله محمد	
13	Left	Al Khudeirah	00-452	00+495	Farhan Abdulbari	258	١٠٠٠٠	43	٠٫٤٣٪	فرحان عبدالباري	
14	Left	Al Khudeirah	00-495	00+520	Sarhan Bagash	175	٨٠٠٠	25	٠٫٣١٪	سرحان بجاش	
15	Right	Al Khudeirah	00-400	00+520	Farhan Abdulbari	1080	١٠٠٠٠	120	١٫٢ ٪		
16	Left	Al Khudeirah	00-520	00+550	Hasan Abdulgani & Tawfek	240	٧٠٠٠	30	٠٫٤٢٪		
17	Left	Al Khudeirah	00-550	00+560	Hasan Abdulgani	60	٧٠٠٠	10	٠٫١٤٢٪		
18	Left	Annajd Al Abyad	00-560	00+600	Mohameed Abdulsalam	200	٥٠٠٠	40	٠٫٢ ٪		
19	Right	Annajd Al Abyad	00-520	00+690	Mohameed Abdulsalam	1360	٢٠٠٠	170	٠٫٨٥٪		

2

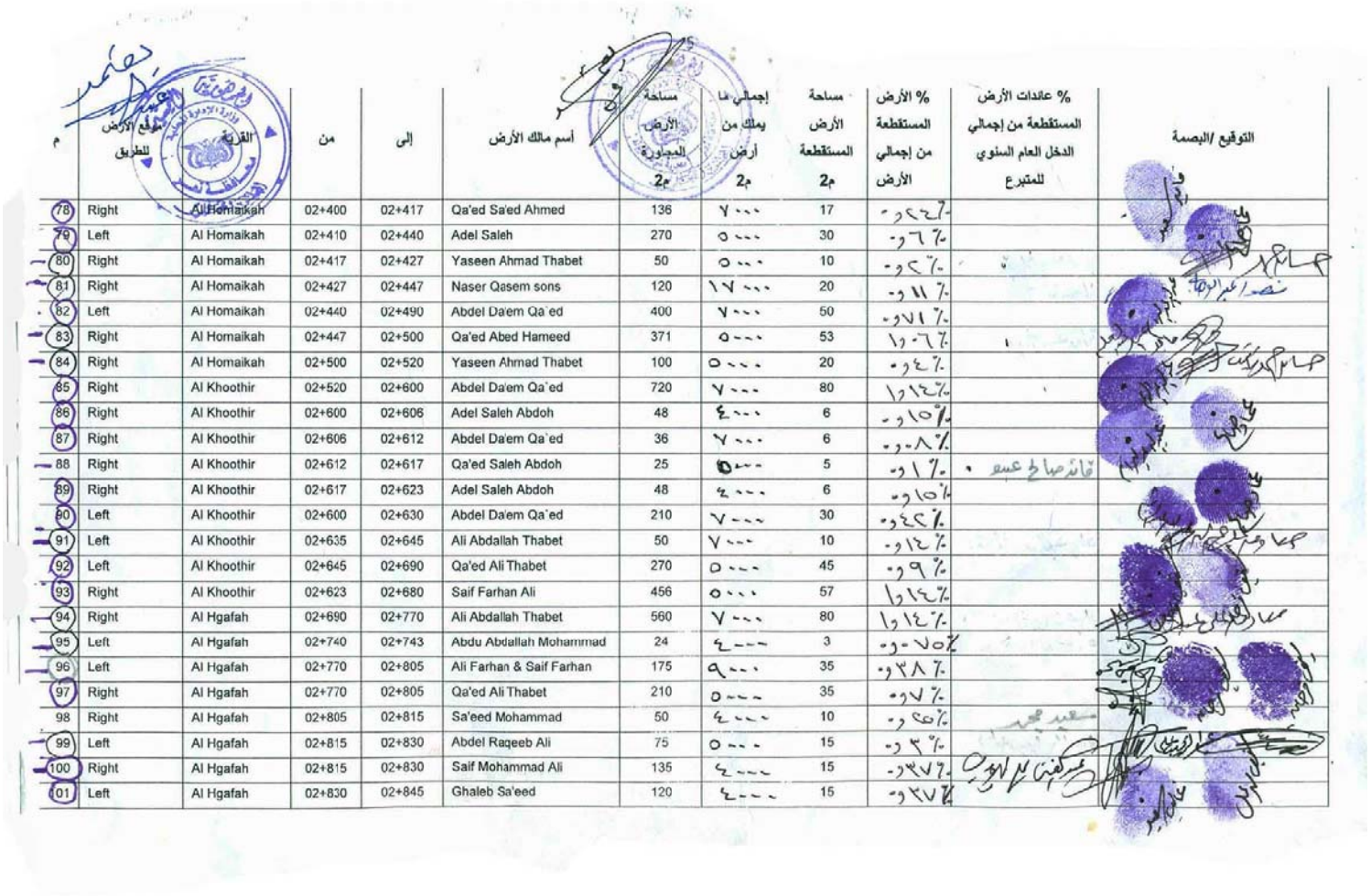
م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
20	Left	Annajd Al Abyad	00+700	00+750	Ali Farhan Saif	350	٩٠٠٠	50	٠,٥٪	علي فرحان سيف	
21	Right	Annajd Al Abyad	00+690	00+810	Abdulwahab Farhan	600	٤٠٠٠٠	120	٠,٣٪	عبدالوهاب فرحان	
22	Left	Annajd Al Abyad	00+750	00+815	Abdulwahab Farhan	390	٤٠٠٠٠	65	٠,١٦٪	〃 〃	
23	Left	Annajd Al Abyad	00+815	00+850	Ali Farhan Saif	280	٩٠٠٠	35	٠,٣٪	علي فرحان سيف	
24	Right	Annajd Al Abyad	00+810	00+890	Khaled Saeed Saif	560	٨٠٠٠	80	١٪	خالد سعيد سيف	
25	Right	Annajd Al Abyad	00+880	00+950	Warathat Ali Qassim	350	٢٠٠٠٠	70	٠,٣٥٪		
26	Left	Annajd Al Abyad	00+850	00+995	Qaed Saeed Naser	725	١٥٠٠٠	145	٠,٩٦٪		
27	Right	Annajd Al Abyad	00+980	01+030	Abduljalel Mohameed	450	٩٠٠٠	50	٠,٥٥٪	عبد الجليل محمد	
28	Right	Kahfat Al Ajbaar	01+000	01+100	Dabwan Mohameed Qaed	800	١٠٠٠٠	100	١٪		
29	Right	Kahfat Al Ajbaar	01+100	01+140	Hameed Mohameed Saif	240	٨٠٠٠	40	٠,٥٪		
30	Right	Kahfat Al Ajbaar	01+140	01+146	Mohameed Sarhan Gasar	30	٦٠٠٠	6	٠,١٪		
31	Right	Kahfat Al Ajbaar	01+146	01+230	Hamod Saif Saleh	504	٧٠٠٠	84	١,٢٪		
32	Left	Kahfat Al Ajbaar	01+170	01+230	Dabwan Mohameed Qaed	420	١٠٠٠٠	60	٠,٦٪		



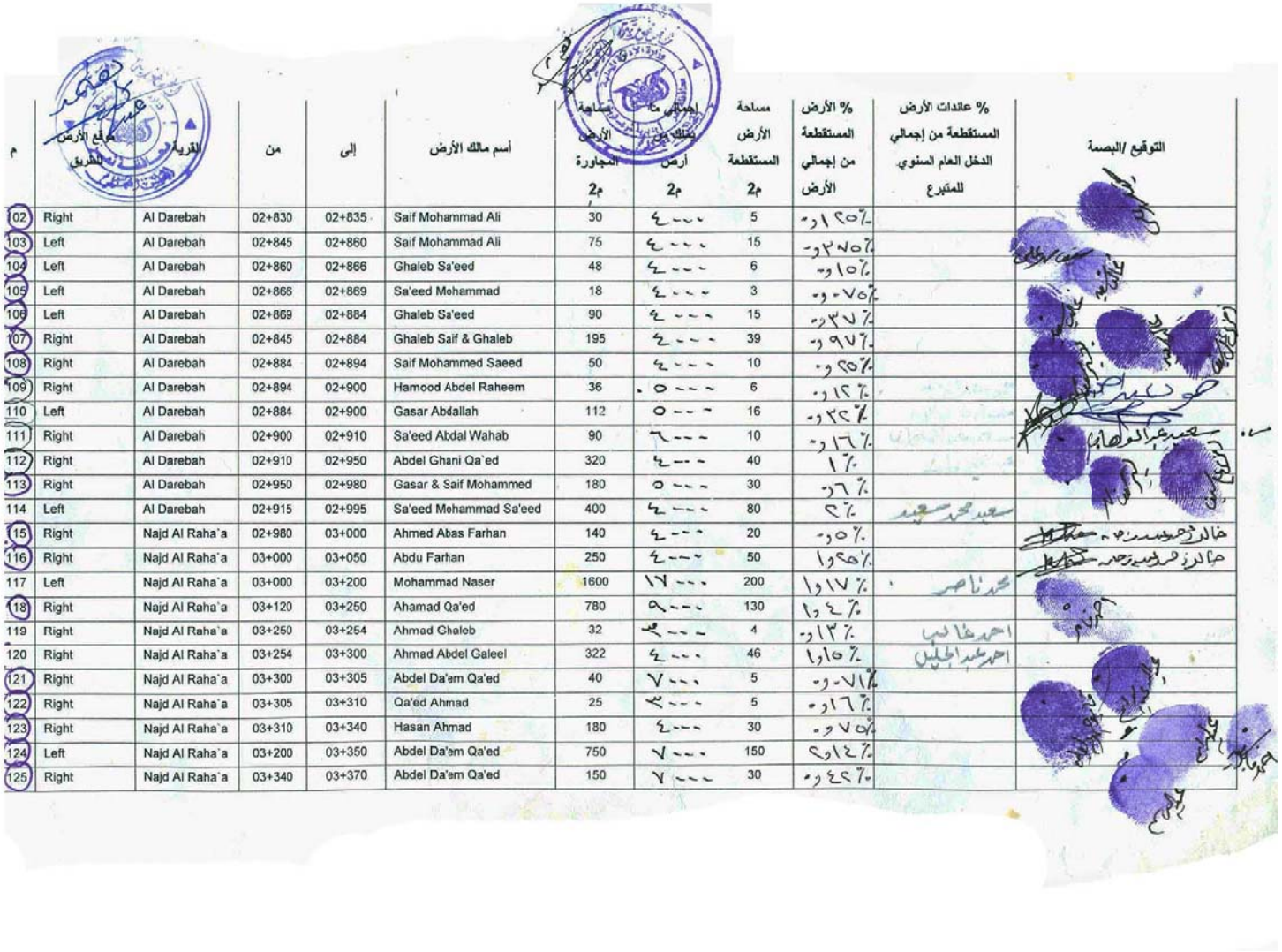
م	موقع الأرض بالطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
33	Right	Kahfat Al Ajbaar	01+235	01+260	Qassim Abdulgani	200	٥٠٠٠	25	٠٫٥ ٪		
34	Right	Kahfat Al Ajbaar	01+270	01+330	Abdoh Saeed sons	360	٨٠٠٠	60	٠٫٧٥ ٪		
35	Left	Kahfat Al Ajbaar	01+230	01+340	Saeed Naser & brother	550	٢٧٠٠٠	110	٠٫٦٤٪		
36	Left	Tor Al Teef	01+340	01+350	Abdel Galil Mohammad	80	٩٠٠٠	10	٠٫١١ ٪		
37	Left	Tor Al Teef	01+350	01+400	Abdel Qawi Hamed	350	٥٠٠٠	50	١ ٪		
38	Right	Tor Al Teef	01+330	01+400	Khaled Ahmad Farhan	350	٧٠٠٠	70	١ ٪		
39	Left	Tor Al Teef	01+400	01+415	Dabwan Qa'ed	90	٥٠٠٠	15	٠٫٣٪		
40	Right	Tor Al Teef	01+400	01+440	Abdu Ali Mohammad	320	٦٠٠٠	40	٠٫٦ ٪		
41	Left	Tor Al Teef	01+415	01+495	Abdu Ali Mohammad	560	٦٠٠٠	80	٠٫٣ ٪		
42	Left	Tor Al Teef	01+495	01+545	Mohammad Qasem	400	٧٠٠٠	50	٠٫٧١٪		
43	Left	Tor Al Teef	01+545	01+600	Mohammad Abdel Wahab	275	٩٠٠٠	55	٠٫٦١٪		
44	Left	Tor Al Teef	01+600	01+610	Mohammad Qasem	60	٧٠٠٠	10	٠٫١٤ ٪		
45	Left	Al Harazah	01+610	01+630	Mohammad Abdel Wahab	100	٠٫٨٠٠٠	20	٠٫٢ ٪		
46	Right	Al Harazah	01+440	01+640	Mohammad Qasem	1000	٧٠٠٠	200	٢٫٨٥ ٪		
47	Left	Al Harazah	01+630	01+655	Hammod Abdel Rahem	225	٥٠٠٠	25	٠٫٥ ٪		
48	Left	Al Harazah	01+655	01+680	Mohammad Abdel Wahab	200	٠٫٩٠٠٠	25	٠٫٢٧٪		
49	Right	Al Harazah	01+640	01+700	Mohammad Abdel Wahab	360	٠٫٩٠٠٠	60	٠٫٦ ٪		
50	Left	Al Harazah	01+675	01+750	Sa'eed Naser Qasem	375	٠٫٨٧٠٠٠	75	٠٫٤٤٪		
51	Left	Al Harazah	01+750	01+800	Sarhan Qa'ed Saleh	400	٠٧٠٠٠	50	٠٫٧١ ٪		
52	Left	Al Harazah	01+800	01+840	Abed Farhan Moqbel	240	٥٠٠٠	40	٠٫٨٪		
53	Left	Al Harazah	01+840	01+855	Ahmad Farhan Moqbel	90	٥٠٠٠	15	٠٫٣٪		
54	Left	Al Harazah	01+855	01+900	Ghaleb Farhan Moqbel	225	٥٠٠٠	45	٠٫٩٪		



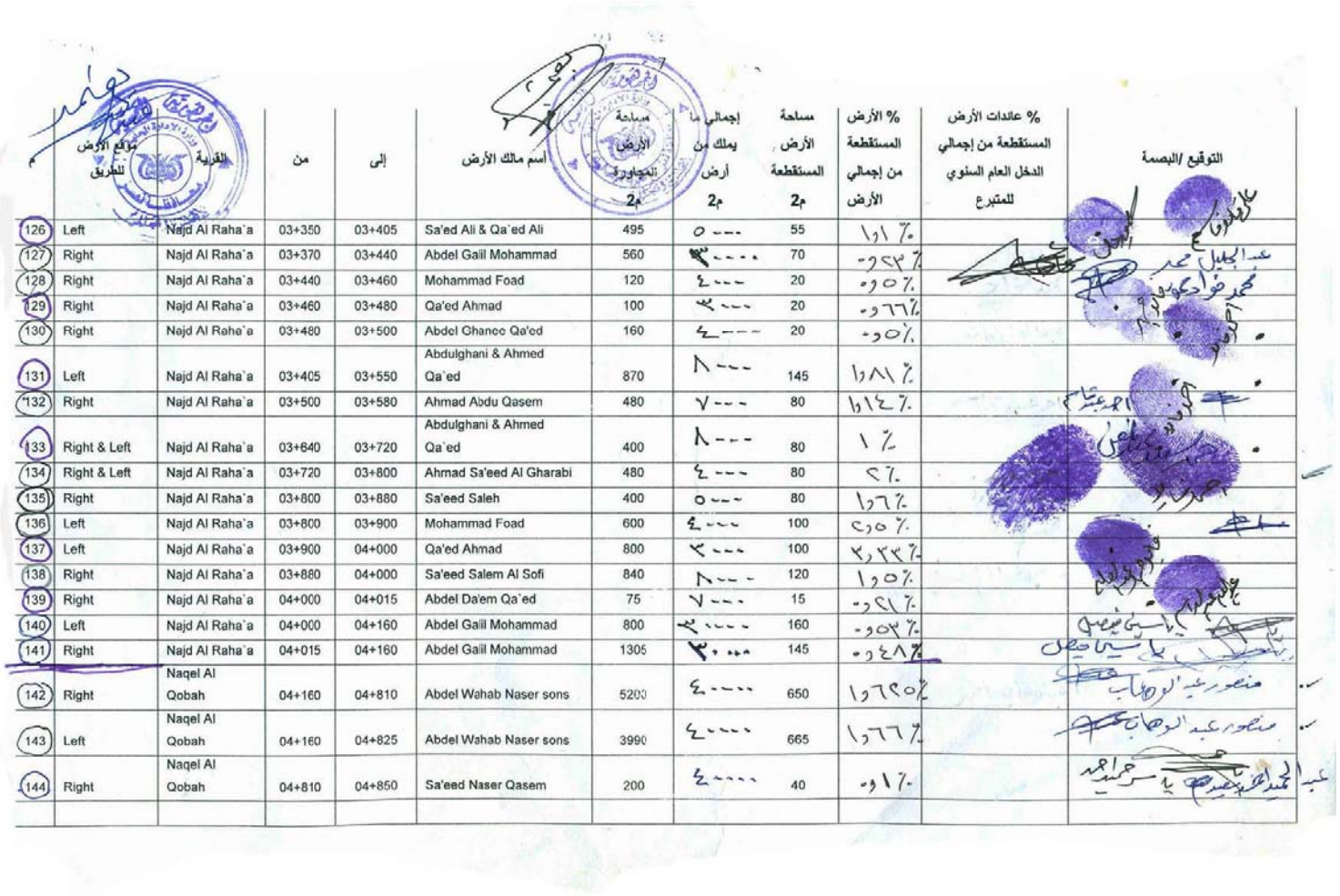
م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
55	Left	Al Harazah	01+700	01+980	Ghaleb Farhan Moqbel	1400	٥٠٠٠	280	٥٫٦٪		
56	Left	Al Homaikah	01+900	01+980	Sa'eed Naser Qasem	480	٣٠٠٠	80	٠٫٤٪		
57	Left	Al Homaikah	01+980	02+000	Ghaleb Farhan Moqbel	160	٥٠٠٠	20	٠٫٤٪		
58	Left	Al Homaikah	02+020	02+050	Hammod Abdel Salam	210	٦٠٠٠	30	٠٫٥٪		
59	Right	Al Homaikah	01+980	02+070	Abdel Galil Mohammad	450	٩٠٠٠	90	١٪		
60	Left	Al Homaikah	02+050	02+080	Ali Al Naqeeb	180	٥٠٠٠	30	٠٫٦٪		
61	Left	Al Homaikah	02+080	02+120	Mohammad Sarhan Gasar	320	٦٠٠٠	40	٠٫٦٪		
62	Left	Al Homaikah	02+120	02+165	Qa'ed Sa'eed Ahmad Moqbel	315	٧٠٠٠	45	٠٫٦٤٪		
63	Left	Al Homaikah	02+165	02+200	Ali Ahmed Moqbel	175	٧٠٠٠	35	٠٫٥٪		
64	Right	Al Homaikah	02+070	02+210	Ali Ahmed Moqbel	700	٧٠٠٠	140	٢٪		
65	Left	Al Homaikah	02+200	02+240	Ali Ahmed Moqbel	360	٧٠٠٠	40	٠٫٥٧٪		
66	Left	Al Homaikah	02+240	02+250	Yaseen Ahmed Thabet	80	٥٠٠٠	10	٠٫٢٪		
67	Left	Al Homaikah	02+210	02+255	Zen & Morjanah sons	270	٤٠٠٠	45	١٫١٢٥٪		
68	Left	Al Homaikah	02+250	02+265	Ali Ahmad Moqbel	75	٧٠٠٠	15	٠٫٢١٪		
69	Right	Al Homaikah	02+255	02+295	Yaseen Ahmed Thabet	320	٥٠٠٠	40	٠٫٨٪		
70	Left	Al Homaikah	02+265	02+300	Qa'ed Sa'eed Ahmad	210	٧٠٠٠	35	٠٫٥٪		
71	Left	Al Homaikah	02+300	02+305	Qasem Abdel Ghanee Naser	35	٥٠٠٠	5	٠٫١٪		
72	Right	Al Homaikah	02+295	02+335	Zen & Morjanah sons	360	٤٠٠٠	40	١٪		
73	Left	Al Homaikah	02+305	02+350	Mohammad Sarhan Gasar	360	٦٠٠٠	45	٠٫٧٥٪		
74	Left	Al Homaikah	02+350	02+390	Sa'eed Naser Qasem	240	١٧٠٠٠	40	٠٫٢٤٪		
75	Left	Al Homaikah	02+335	02+390	Sa'eed Naser Qasem	275	١٧٠٠٠	55	٠٫٣٢٪		
76	Right	Al Homaikah	02+390	02+400	Qa'ed Ahmad Abdoh	70	٦٠٠٠	10	١٫٦٪		
77	Left	Al Homaikah	02+390	02+410	Qa'ed Sa'ed Ahmed	100	٧٠٠٠	20	٠٫٢٨٪		



م	موقع الأرض بالطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة 2م	إجمالي ما يملك من أرض 2م	مساحة الأرض المستقطعة 2م	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
78	Right	Al Homaikah	02+400	02+417	Qa'ed Sa'ed Ahmed	136	٢٠٠٠	17	٠٫٨٥٪		
79	Left	Al Homaikah	02+410	02+440	Adel Saleh	270	٥٠٠٠	30	٠٫٦٪		
80	Right	Al Homaikah	02+417	02+427	Yaseen Ahmad Thabet	50	٥٠٠٠	10	٠٫٢٪		
81	Right	Al Homaikah	02+427	02+447	Naser Qasem sons	120	١٧٠٠٠	20	٠٫١١٪		
82	Left	Al Homaikah	02+440	02+490	Abdel Da'em Qa`ed	400	٧٠٠٠	50	٠٫٧١٪		
83	Right	Al Homaikah	02+447	02+500	Qa'ed Abed Hameed	371	٥٠٠٠	53	١٫٠٦٪		
84	Right	Al Homaikah	02+500	02+520	Yaseen Ahmad Thabet	100	٥٠٠٠	20	٠٫٤٪		
85	Right	Al Khoothir	02+520	02+600	Abdel Da'em Qa`ed	720	٧٠٠٠	80	١٫١٤٪		
86	Right	Al Khoothir	02+600	02+606	Adel Saleh Abdoh	48	٤٠٠٠	6	٠٫١٥٪		
87	Right	Al Khoothir	02+606	02+612	Abdel Da'em Qa`ed	36	٧٠٠٠	6	٠٫٠٨٪		
88	Right	Al Khoothir	02+612	02+617	Qa'ed Saleh Abdoh	25	٥٠٠٠	5	٠٫١٪		
89	Right	Al Khoothir	02+617	02+623	Adel Saleh Abdoh	48	٤٠٠٠	6	٠٫١٥٪		
90	Left	Al Khoothir	02+600	02+630	Abdel Da'em Qa`ed	210	٧٠٠٠	30	٠٫٤٢٪		
91	Left	Al Khoothir	02+635	02+645	Ali Abdallah Thabet	50	٧٠٠٠	10	٠٫١٤٪		
92	Left	Al Khoothir	02+645	02+690	Qa'ed Ali Thabet	270	٥٠٠٠	45	٠٫٩٪		
93	Right	Al Khoothir	02+623	02+680	Saif Farhan Ali	456	٥٠٠٠	57	١٫١٤٪		
94	Right	Al Hgafah	02+690	02+770	Ali Abdallah Thabet	560	٧٠٠٠	80	١٫١٤٪		
95	Left	Al Hgafah	02+740	02+743	Abdu Abdallah Mohammad	24	٤٠٠٠	3	٠٫٠٧٥٪		
96	Left	Al Hgafah	02+770	02+805	Ali Farhan & Saif Farhan	175	٩٠٠٠	35	٠٫٣٨٪		
97	Right	Al Hgafah	02+770	02+805	Qa'ed Ali Thabet	210	٥٠٠٠	35	٠٫٧٪		
98	Right	Al Hgafah	02+805	02+815	Sa'eed Mohammad	50	٤٠٠٠	10	٠٫٢٥٪		
99	Left	Al Hgafah	02+815	02+830	Abdel Raqeeb Ali	75	٥٠٠٠	15	٠٫٣٪		
100	Right	Al Hgafah	02+815	02+830	Saif Mohammad Ali	135	٤٠٠٠	15	٠٫٢٧٪		
101	Left	Al Hgafah	02+830	02+845	Ghaleb Sa'eed	120	٤٠٠٠	15	٠٫٢٧٪		



م	موقع الأرض بالطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي مساحة الأرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
102	Right	Al Darebah	02+830	02+835	Saif Mohammad Ali	30	٤٠٠٠	5	٠٫١٢٥٪		
103	Left	Al Darebah	02+845	02+860	Saif Mohammad Ali	75	٤٠٠٠	15	٠٫٣٧٥٪		
104	Left	Al Darebah	02+860	02+866	Ghaleb Sa'eed	48	٤٠٠٠	6	٠٫١٥٪		
105	Left	Al Darebah	02+865	02+869	Sa'eed Mohammad	18	٤٠٠٠	3	٠٫٠٧٥٪		
106	Left	Al Darebah	02+869	02+884	Ghaleb Sa'eed	90	٤٠٠٠	15	٠٫٣٧٪		
107	Right	Al Darebah	02+845	02+884	Ghaleb Saif & Ghaleb	195	٤٠٠٠	39	٠٫٩٧٪		
108	Right	Al Darebah	02+884	02+894	Saif Mohammed Saeed	50	٤٠٠٠	10	٠٫٢٥٪		
109	Right	Al Darebah	02+894	02+900	Hamood Abdel Raheem	36	٥٠٠٠	6	٠٫١٢٪		
110	Left	Al Darebah	02+884	02+900	Gasar Abdallah	112	٥٠٠٠	16	٠٫٣٢٪		
111	Right	Al Darebah	02+900	02+910	Sa'eed Abdal Wahab	90	٦٠٠٠	10	٠٫١٦٪		
112	Right	Al Darebah	02+910	02+950	Abdel Ghani Qa'ed	320	٤٠٠٠	40	١٪		
113	Right	Al Darebah	02+950	02+980	Gasar & Saif Mohammed	180	٥٠٠٠	30	٠٫٦٪		
114	Left	Al Darebah	02+915	02+995	Sa'eed Mohammad Sa'eed	400	٤٠٠٠	80	٢٪	سعيد محمد سعيد	
15	Right	Najd Al Raha'a	02+980	03+000	Ahmed Abas Farhan	140	٤٠٠٠	20	٠٫٥٪		
116	Right	Najd Al Raha'a	03+000	03+050	Abdu Farhan	250	٤٠٠٠	50	١٫٢٥٪		
117	Left	Najd Al Raha'a	03+000	03+200	Mohammad Naser	1600	١٧٠٠٠	200	١٫١٧٪	محمد ناصر	
18	Right	Najd Al Raha'a	03+120	03+250	Ahamad Qa'ed	780	٩٠٠٠	130	١٫٤٪		
119	Right	Najd Al Raha'a	03+250	03+254	Ahmed Ghaleb	32	٤٠٠٠	4	٠٫١٣٪	احمد غالب	
120	Right	Najd Al Raha'a	03+254	03+300	Ahmad Abdel Galeel	322	٤٠٠٠	46	١٫١٥٪	احمد عبد الجليل	
121	Right	Najd Al Raha'a	03+300	03+305	Abdel Da'am Qa'ed	40	٧٠٠٠	5	٠٫٠٧١٪		
122	Right	Najd Al Raha'a	03+305	03+310	Qa'ed Ahmad	25	٨٠٠٠	5	٠٫١٦٪		
123	Right	Najd Al Raha'a	03+310	03+340	Hasan Ahmad	180	٤٠٠٠	30	٠٫٧٥٪		
124	Left	Najd Al Raha'a	03+200	03+350	Abdel Da'am Qa'ed	750	٧٠٠٠	150	٢٫١٤٪		
125	Right	Najd Al Raha'a	03+340	03+370	Abdel Da'am Qa'ed	150	٧٠٠٠	30	٠٫٤٢٪		



م	موقع الأرض بالطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
126	Left	Najd Al Raha`a	03+350	03+405	Sa'ed Ali & Qa`ed Ali	495	٥٠٠٠	55	١٫١ ٪		
127	Right	Najd Al Raha`a	03+370	03+440	Abdel Gaill Mohammad	560	٣٠٠٠٠	70	٠٫٢٣ ٪		
128	Right	Najd Al Raha`a	03+440	03+460	Mohammad Foad	120	٤٠٠٠	20	٠٫٥ ٪		
129	Right	Najd Al Raha`a	03+460	03+480	Qa'ed Ahmad	100	٣٠٠٠	20	٠٫٦٦ ٪		
130	Right	Najd Al Raha`a	03+480	03+500	Abdel Ghance Qa'ed	160	٤٠٠٠	20	٠٫٥ ٪		
131	Left	Najd Al Raha`a	03+405	03+550	Abdulghani & Ahmed Qa`ed	870	٨٠٠٠	145	١٫٨١ ٪		
132	Right	Najd Al Raha`a	03+500	03+580	Ahmad Abdu Qasem	480	٧٠٠٠	80	١٫١٤ ٪		
133	Right & Left	Najd Al Raha`a	03+640	03+720	Abdulghani & Ahmed Qa`ed	400	٨٠٠٠	80	١ ٪		
134	Right & Left	Najd Al Raha`a	03+720	03+800	Ahmad Sa'eed Al Gharabi	480	٤٠٠٠	80	٢ ٪		
135	Right	Najd Al Raha`a	03+800	03+880	Sa'eed Saleh	400	٥٠٠٠	80	١٫٦ ٪		
136	Left	Najd Al Raha`a	03+800	03+900	Mohammad Foad	600	٤٠٠٠٠	100	٢٫٥ ٪		
137	Left	Najd Al Raha`a	03+900	04+000	Qa'ed Ahmad	800	٢٠٠٠٠	100	٢٫٢٢ ٪		
138	Right	Najd Al Raha`a	03+880	04+000	Sa'eed Salem Al Sofi	840	٨٠٠٠٠	120	١٫٥ ٪		
139	Right	Najd Al Raha`a	04+000	04+015	Abdel Da'em Qa`ed	75	٧٠٠٠	15	٠٫٢١ ٪		
140	Left	Najd Al Raha`a	04+000	04+160	Abdel Gaill Mohammad	800	٣٠٠٠٠	160	٠٫٥٣ ٪		
141	Right	Najd Al Raha`a	04+015	04+160	Abdel Gaill Mohammad	1305	٣٠٠٠٠	145	٠٫٤٨ ٪		
142	Right	Naqel Al Qobah	04+160	04+810	Abdel Wahab Naser sons	5200	٤٠٠٠٠	650	١٫٦٢٥ ٪		
143	Left	Naqel Al Qobah	04+160	04+825	Abdel Wahab Naser sons	3990	٤٠٠٠٠	665	١٫٦٦ ٪		
144	Right	Naqel Al Qobah	04+810	04+850	Sa'eed Naser Qasem	200	٤٠٠٠٠	40	٠٫١ ٪		

م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من الأرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
145	Left	Naqel Al Qobah	04+825	04+890	Qasem Saleh	390	٥٠٠٠	65	١٫٣٪		
146	Right	Naqel Al Qobah	04+890	04+915	Sa'eed Abdel Aziz	175	٤٠٠٠	25	٠٫٦٢٪		
147	Left	Naqel Al Qobah	04+890	04+960	Abdel Wahab Naser	630	٤٠٠٠	70	١٫٧٪		
148	Right	Naqel Al Qobah	04+890	04+975	Qasem abdel Ghani	680	٥٠٠٠	85	١٫٧٪		
149	Right	Naqel Al Qobah	04+890	05+130	Bani Khaled Ahmed	1440	١٥٠٠٠	240	١٫٦٪		
150	Right	Naqel Al Qobah	04+890	04+930	Ahmad Sa'eed Abdel Ghani	200	٧٠٠٠	40	٥٫٧١٪		
151	Left	Naqel Al Qobah	04+960	05+270	Bani Khaled Ahmed	2170	١٥٠٠٠	310	٢٫٠٦٪		
152	Left	Naqel Al Qobah	05+270	05+285	Maroan Abdel qader	75	٥٠٠٠	15	٠٫٢٪		
153	Left	Naqel Al Qobah	05+285	05+340	Bani Khaled Ahmed	440	١٥٠٠٠	55	٠٫٢٦٪		
154	Right	Naqel Al Qobah	05+280	05+400	Ma'moon Ali Khaled	1080	٥٠٠٠	120	٢٫٤٪		
155	Left	Naqel Al Qobah	05+340	05+440	Abdel Galeel Saleh	500	٦٠٠٠	100	١٫٦٦٪		
156	Left	Naqel Al Qobah	05+440	05+600	Bani Khaled Ahmed	960	١٥٠٠٠	160	١٫٠٦٪		
157	Left	Naqel Al Qobah	05+600	05+660	Maroan Abdel qader	480	٥٠٠٠	60	١٫٢٪		
158	Left	Al Jabobah	05+660	05+700	Bani Khaled Ahmed	280	١٥٠٠٠	40	٠٫٢٦٪		

م	موقع الأرض بالطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
159	Right	Al Jabobah	05+400	05+750	Bani Khaled Ahmed	1750	١٥٠٠٠	350	٢٣٫٣ %		
160	Left	Al Jabobah	05+700	05+800	Saleh Abdel Ghani sons	500	٥٠٠٠	100	٢ %		
161	Left	Al Jabobah	05+800	05+900	Saif Ahmad Sa'eed	900	٤٠٠٠	100	٢٫٥ %		
162	Right	Al Jobobah	05+750	05+930	Ghaleb radman	1440	٦٠٠٠	180	٣ %		
163	Left	Al Jabobah	05+900	05+960	Yaser Ahmed Sa'eed	360	٥٠٠٠	60	١٫٢ %		
164	Right	Al Jabobah	05+930	06+000	Naser Qasem sons	350	١٠٠٠٠	70	٠٫٧ %		
165	Left	Al Jabobah	05+960	06+000	Abdel Galil Mohammad	320	٩٠٠٠	40	٠٫٤٤ %		
166	Left	Al Jabobah	06+000	06+040	Abdel Wahab naser	240	٤٠٠٠	40	١٫٠ %		
167	Left	Al Jabobah	06+040	06+090	Ahmed Sa'eed Naser	400	٤٠٠٠	50	١٫٢٥ %		
168	Right	Al Jabobah	06+000	06+150	Ali Qa'ed Mohammad	1050	١٤٠٠٠	150	٠٫٧٥ %		
169	Right	Al Jabobah	06+150	06+240	Ghaleb Abdel Ra'oof	450	٥٠٠٠	90	١٫٨ %		
170	Left	Al Jabobah	06+240	06+280	Naji Khaled	320	٥٠٠٠	40	٠٫٨ %		
171	Left	Al Jabobah	06+280	06+300	Foad Hamood	140	٤٠٠٠	20	٠٫٥ %		
172	Left	Al Jabobah	06+300	06+400	Saif Ghaleb Abdel Ra'oof	800	٥٠٠٠	100	٢ %		
173	Left	Al Jabobah	06+400	06+435	Ahmed Abed	175	٥٠٠٠	35	٠٫٧ %		
174	Left	Al Jabobah	06+435	06+465	Abdel Galeel Saleh	180	٤٠٠٠	30	٠٫٧٥ %		
175	Right	Al Jabobah	06+240	06+490	Ahmed Sa'ed naser	1250	٤٠٠٠٠	250	٠٫٦٢ %		
176	Right	Al Jabobah	06+490	06+500	Ahmed Sa'ed naser	50	٤٠٠٠	10	٠٫٢٥ %		
77	Left	Al Jobael	06+465	06+500	Ahmed Sa'ed naser	315	٤٠٠٠٠	35	٠٫٠٨ %		
78	Right	Al Jobael	06+890	06+900	Mohammad Ali Khaled	80	٥٠٠٠	10	٠٫٢ %		
79	Right	Al Jobael	07+100	07+200	Abdel Galeel Daboan	500	٥٠٠٠	100	٢ %		
80	Right	Al Jobael	07+400	07+415	Abdel Ghani	120	٤٠٠٠	15	٠٫٣٧ %		

م	موقع الأرض بالطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة 2م	إجمالي مساحة يملكه من الأرض 2م	مساحة الأرض المستقطعة 2م	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
159	Right	Al Jabobah	05+400	05+750	Bani Khaled Ahmed	1750	١٥٠٠٠	350	٢٣٪		
160	Left	Al Jabobah	05+700	05+800	Saleh Abdel Ghani sons	500	٥٠٠٠	100	٢٪		
161	Left	Al Jabobah	05+800	05+900	Saif Ahmad Sa'eed	900	٤٠٠٠	100	٢٫٥٪		
162	Right	Al Jabobah	05+750	05+930	Ghaleb radman	1440	٦٠٠٠	180	٣٪	غالب رضمان	
163	Left	Al Jabobah	05+900	05+960	Yaser Ahmed Sa'eed	360	٥٠٠٠	60	١٫٢٪		
164	Right	Al Jabobah	05+930	06+000	Naser Qasem sons	350	١٠٠٠٠	70	٠٫٧٪		
165	Left	Al Jabobah	05+960	06+000	Abdel Galil Mohammad	320	٩٠٠٠	40	٠٫٤٪		
166	Left	Al Jabobah	06+000	06+040	Abdel Wahab naser	240	٤٠٠٠٠	40	٠٫١٪		
167	Left	Al Jabobah	06+040	06+090	Ahmed Sa'eed Naser	400	٤٠٠٠٠	50	٠٫١٢٪		
168	Right	Al Jabobah	06+000	06+150	Ali Qa'ed Mohammad	1050	٢٠٠٠٠	150	٠٫٧٥٪		
169	Right	Al Jabobah	06+150	06+240	Ghaleb Abdel Ra'oof	450	٥٠٠٠	90	١٫٨٪		
170	Left	Al Jabobah	06+240	06+280	Naji Khaled	320	٥٠٠٠	40	٠٫٨٪		
171	Left	Al Jabobah	06+280	06+300	Foad Hamood	140	٤٠٠٠٠	20	٠٫٥٪		
172	Left	Al Jabobah	06+300	06+400	Saif Ghaleb Abdel Ra'oof	800	٥٠٠٠	100	٢٪		
173	Left	Al Jabobah	06+400	06+435	Ahmed Abed	175	٥٠٠٠	35	٠٫٧٪		
174	Left	Al Jabobah	06+435	06+465	Abdel Galeel Saleh	180	٤٠٠٠	30	٠٫٧٥٪		
175	Right	Al Jabobah	06+240	06+490	Ahmed Sa'ed naser	1250	٤٠٠٠٠	250	٠٫٦٢٪		
176	Right	Al Jabobah	06+490	06+500	Ahmed Sa'ed naser	50	٤٠٠٠٠	10	٠٫٢٪		
177	Left	Al Jobael	06+465	06+500	Ahmed Sa'ed naser	315	٤٠٠٠٠	35	٠٫٨٪		
178	Right	Al Jobael	06+890	06+900	Mohammad Ali Khaled	80	٥٠٠٠	10	٠٫٢٪		
179	Right	Al Jobael	07+100	07+200	Abdel Galeel Daboan	500	٥٠٠٠	100	٢٪		
180	Right	Al Jobael	07+400	07+415	Abdel Ghani	120	٤٠٠٠	15	٠٫٣٧٪		

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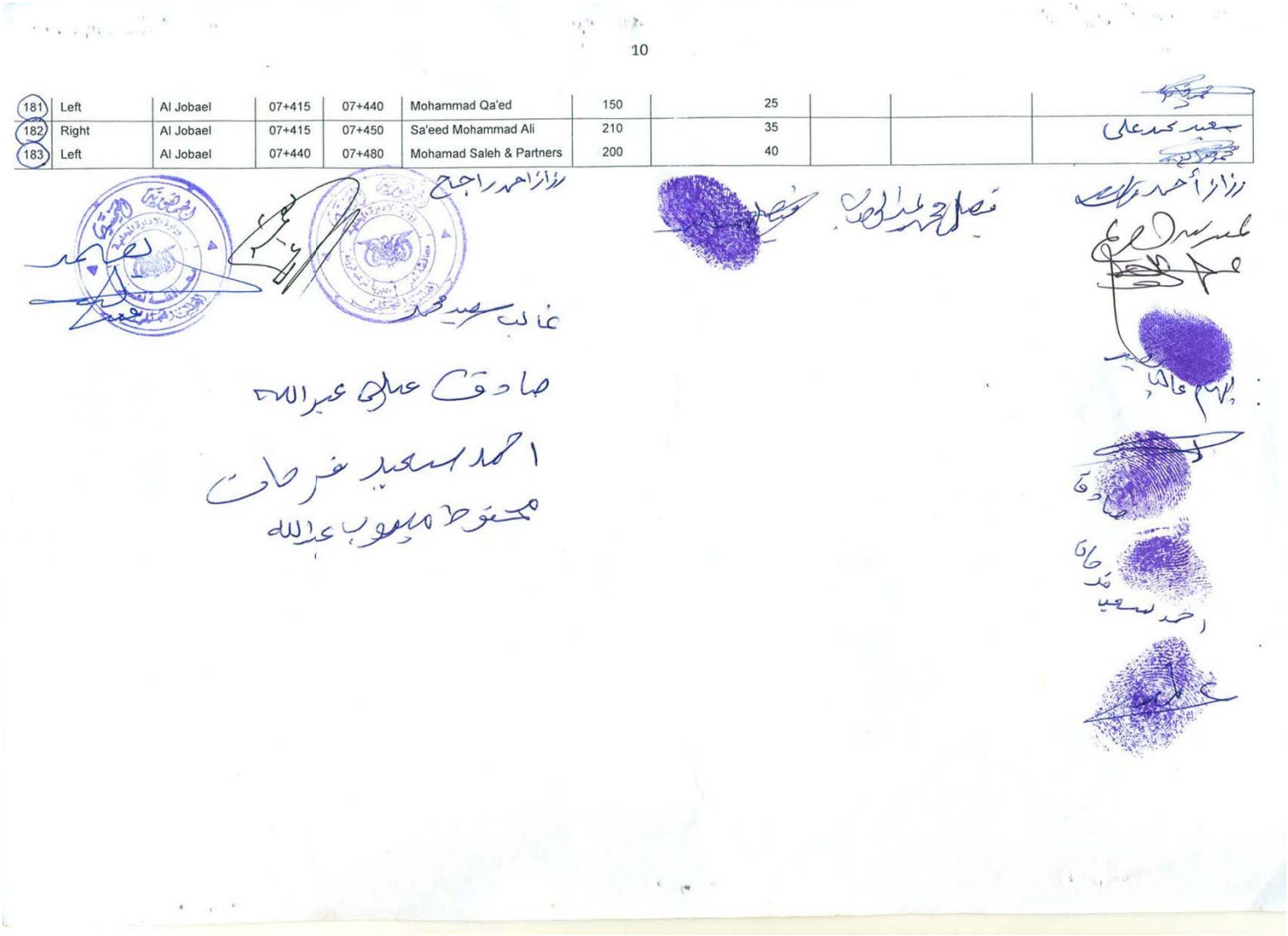
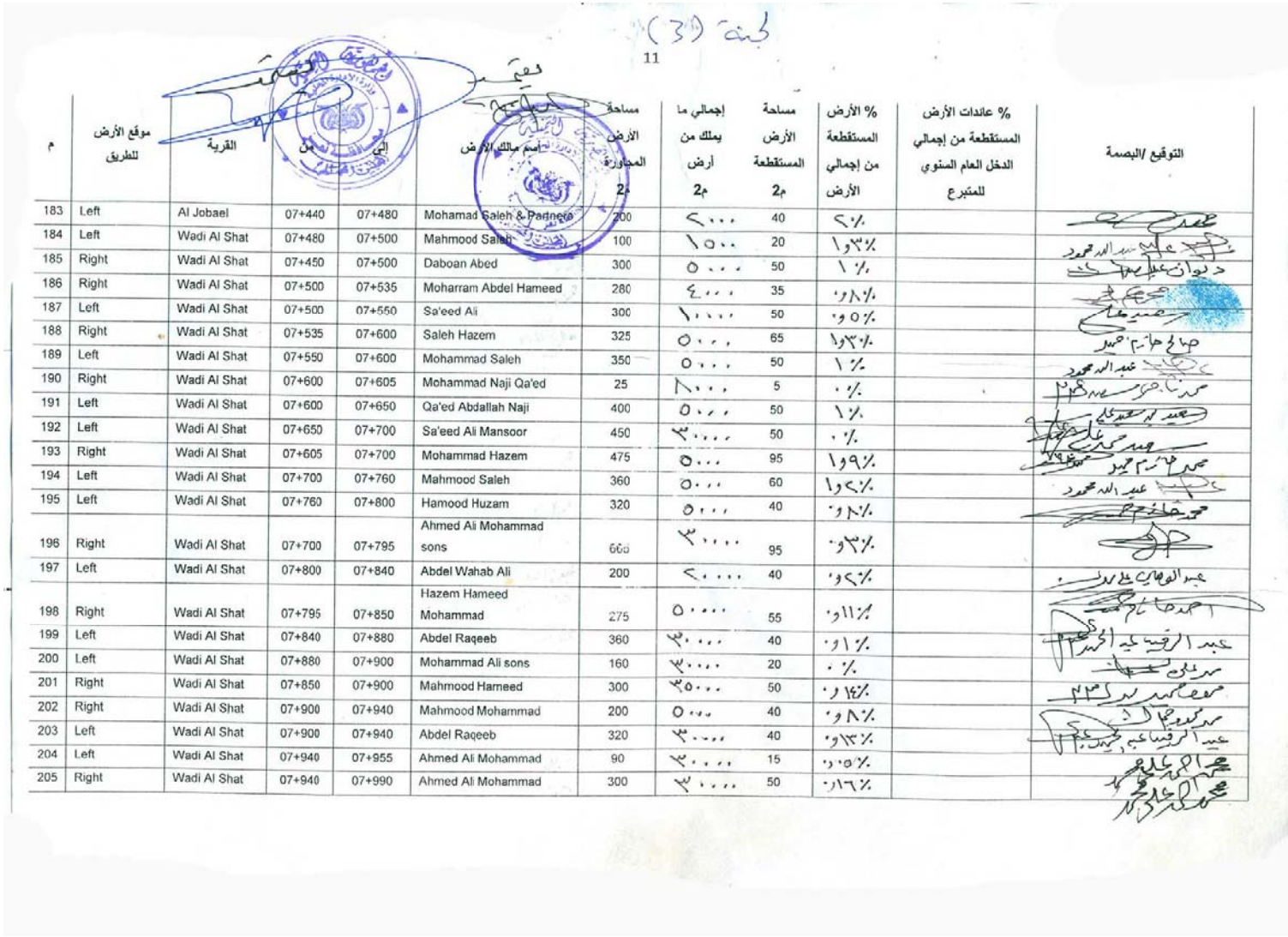
181	Left	Al Jobael	07+415	07+440	Mohammad Qa'ed	150	25			
182	Right	Al Jobael	07+415	07+450	Sa'eed Mohammad Ali	210	35			
183	Left	Al Jobael	07+440	07+480	Mohamad Saleh & Partners	200	40			





(31)

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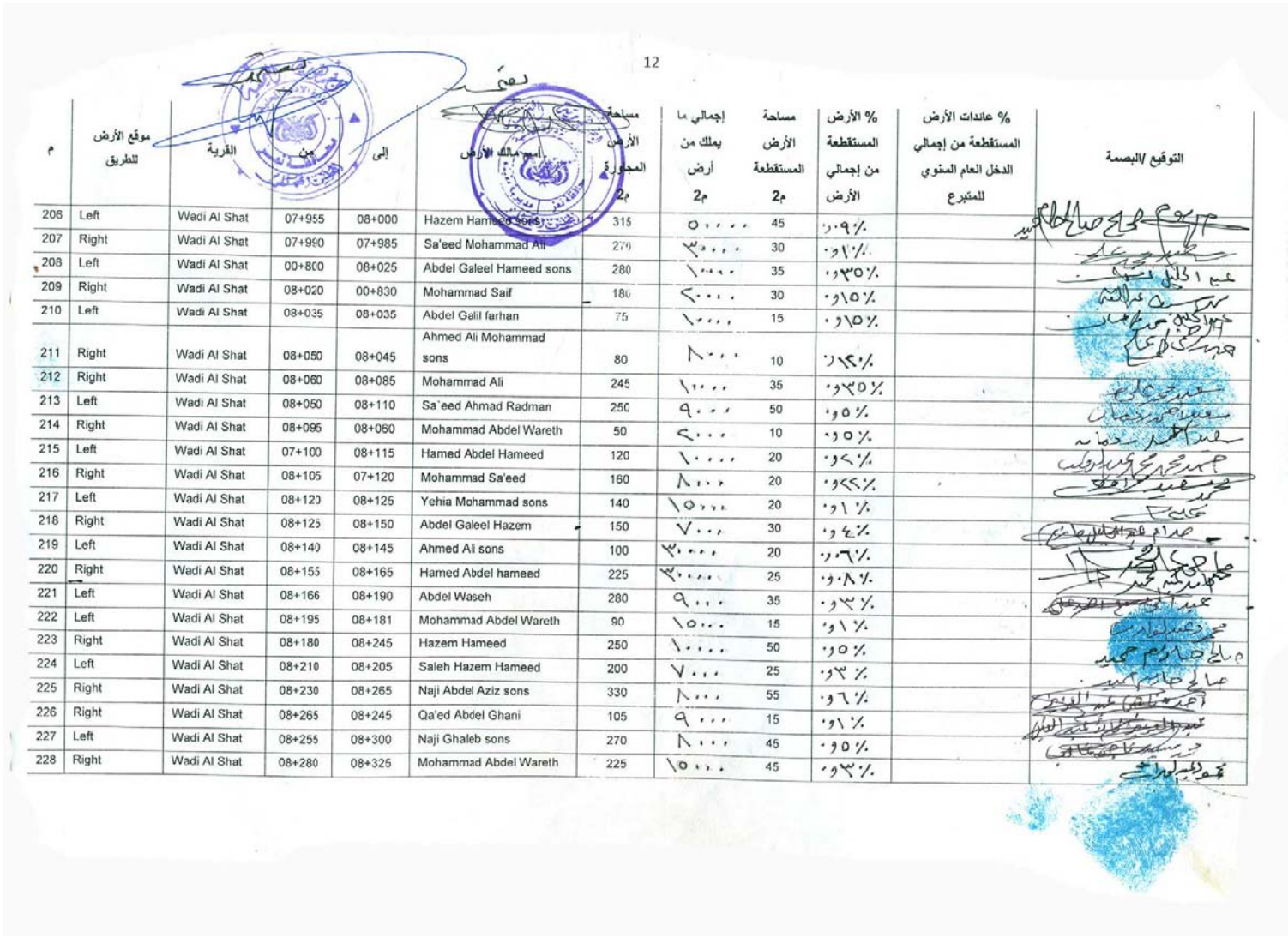
م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
183	Left	Al Jobael	07+440	07+480	Mohamad Saleh & Partner	200	٢٠٠٠	40	٢٪		
184	Left	Wadi Al Shat	07+480	07+500	Mahmood Saleh	100	١٥٠٠	20	١و٣٪		
185	Right	Wadi Al Shat	07+450	07+500	Daboan Abed	300	٥٠٠٠	50	١٪		
186	Right	Wadi Al Shat	07+500	07+535	Moharram Abdel Hameed	280	٤٠٠٠	35	٠و٨٪		
187	Left	Wadi Al Shat	07+500	07+550	Sa'eed Ali	300	١٠٠٠٠	50	٠و٥٪		
188	Right	Wadi Al Shat	07+535	07+600	Saleh Hazem	325	٥٠٠٠	65	١و٣٠٪		
189	Left	Wadi Al Shat	07+550	07+600	Mohammad Saleh	350	٥٠٠٠	50	١٪		
190	Right	Wadi Al Shat	07+600	07+605	Mohammad Naji Qa'ed	25	٨٠٠٠	5	٠٪		
191	Left	Wadi Al Shat	07+600	07+650	Qa'ed Abdallah Naji	400	٥٠٠٠	50	١٪		
192	Left	Wadi Al Shat	07+650	07+700	Sa'eed Ali Mansoor	450	٢٠٠٠٠	50	٠٪		
193	Right	Wadi Al Shat	07+605	07+700	Mohammad Hazem	475	٥٠٠٠	95	١و٩٪		
194	Left	Wadi Al Shat	07+700	07+760	Mahmood Saleh	360	٥٠٠٠	60	١و٢٪		
195	Left	Wadi Al Shat	07+760	07+800	Hamood Huzam	320	٥٠٠٠	40	٠و٨٪		
196	Right	Wadi Al Shat	07+700	07+795	Ahmed Ali Mohammad sons	600	٣٠٠٠٠	95	٠و٣٪		
197	Left	Wadi Al Shat	07+800	07+840	Abdel Wahab Ali	200	٢٠٠٠٠	40	٠و٢٪		
198	Right	Wadi Al Shat	07+795	07+850	Hazem Hameed Mohammad	275	٥٠٠٠٠	55	٠و١١٪		
199	Left	Wadi Al Shat	07+840	07+880	Abdel Raqeeb	360	٤٠٠٠٠	40	٠و١٪		
200	Left	Wadi Al Shat	07+880	07+900	Mohammad Ali sons	160	٢٠٠٠٠	20	٠٪		
201	Right	Wadi Al Shat	07+850	07+900	Mahmood Hameed	300	٢٥٠٠٠	50	٠و١٤٪		
202	Right	Wadi Al Shat	07+900	07+940	Mahmood Mohammad	200	٥٠٠٠	40	٠و٨٪		
203	Left	Wadi Al Shat	07+900	07+940	Abdel Raqeeb	320	٤٠٠٠٠	40	٠و١٣٪		
204	Left	Wadi Al Shat	07+940	07+955	Ahmed Ali Mohammad	90	٢٠٠٠٠	15	٠و٠٥٪		
205	Right	Wadi Al Shat	07+940	07+990	Ahmed Ali Mohammad	300	٣٠٠٠٠	50	٠و١٦٪		



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م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المحجوزة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
206	Left	Wadi Al Shat	07+955	08+000	Hazem Hameed sons	315	٥٠٠٠٠	45	٠٫٠٩٪		
207	Right	Wadi Al Shat	07+960	07+985	Sa'eed Mohammad Ali	270	٣٠٠٠٠	30	٠٫١٠٪		
208	Left	Wadi Al Shat	00+800	08+025	Abdel Galeel Hameed sons	280	١٠٠٠٠	35	٠٫٣٥٪		
209	Right	Wadi Al Shat	08+020	00+830	Mohammad Saif	180	٢٠٠٠٠	30	٠٫١٥٪		
210	Left	Wadi Al Shat	08+035	08+035	Abdel Galil farhan	75	١٠٠٠٠	15	٠٫١٥٪		
211	Right	Wadi Al Shat	08+050	08+045	Ahmed Ali Mohammad sons	80	٨٠٠٠	10	٠٫١٢٪		
212	Right	Wadi Al Shat	08+060	08+085	Mohammad Ali	245	١٠٠٠٠	35	٠٫٣٥٪		
213	Left	Wadi Al Shat	08+050	08+110	Sa'eed Ahmad Radman	250	٩٠٠٠	50	٠٫٥٪		
214	Right	Wadi Al Shat	08+095	08+060	Mohammad Abdel Wareth	50	٢٠٠٠	10	٠٫٥٪		
215	Left	Wadi Al Shat	07+100	08+115	Hamed Abdel Hameed	120	١٠٠٠٠	20	٠٫٢٪		
216	Right	Wadi Al Shat	08+105	07+120	Mohammad Sa'eed	160	٨٠٠٠	20	٠٫٢٢٪		
217	Left	Wadi Al Shat	08+120	08+125	Yehia Mohammad sons	140	١٥٠٠٠	20	٠٫١٪		
218	Right	Wadi Al Shat	08+125	08+150	Abdel Galeel Hazem	150	٧٠٠٠	30	٠٫٤٪		
219	Left	Wadi Al Shat	08+140	08+145	Ahmed Ali sons	100	٣٠٠٠٠	20	٠٫٠٦٪		
220	Right	Wadi Al Shat	08+155	08+165	Hamed Abdel hameed	225	٣٠٠٠٠	25	٠٫٠٨٪		
221	Left	Wadi Al Shat	08+166	08+190	Abdel Waseh	280	٩٠٠٠	35	٠٫٣٪		
222	Left	Wadi Al Shat	08+195	08+181	Mohammad Abdel Wareth	90	١٥٠٠٠	15	٠٫١٪		
223	Right	Wadi Al Shat	08+180	08+245	Hazem Hameed	250	١٠٠٠٠	50	٠٫٥٪		
224	Left	Wadi Al Shat	08+210	08+205	Saleh Hazem Hameed	200	٧٠٠٠	25	٠٫٣٪		
225	Right	Wadi Al Shat	08+230	08+265	Naji Abdel Aziz sons	330	٨٠٠٠	55	٠٫٦٪		
226	Right	Wadi Al Shat	08+265	08+245	Qa'ed Abdel Ghani	105	٩٠٠٠	15	٠٫١٪		
227	Left	Wadi Al Shat	08+255	08+300	Naji Ghaleb sons	270	٨٠٠٠	45	٠٫٥٪		
228	Right	Wadi Al Shat	08+280	08+325	Mohammad Abdel Wareth	225	١٥٠٠٠	45	٠٫٣٪		

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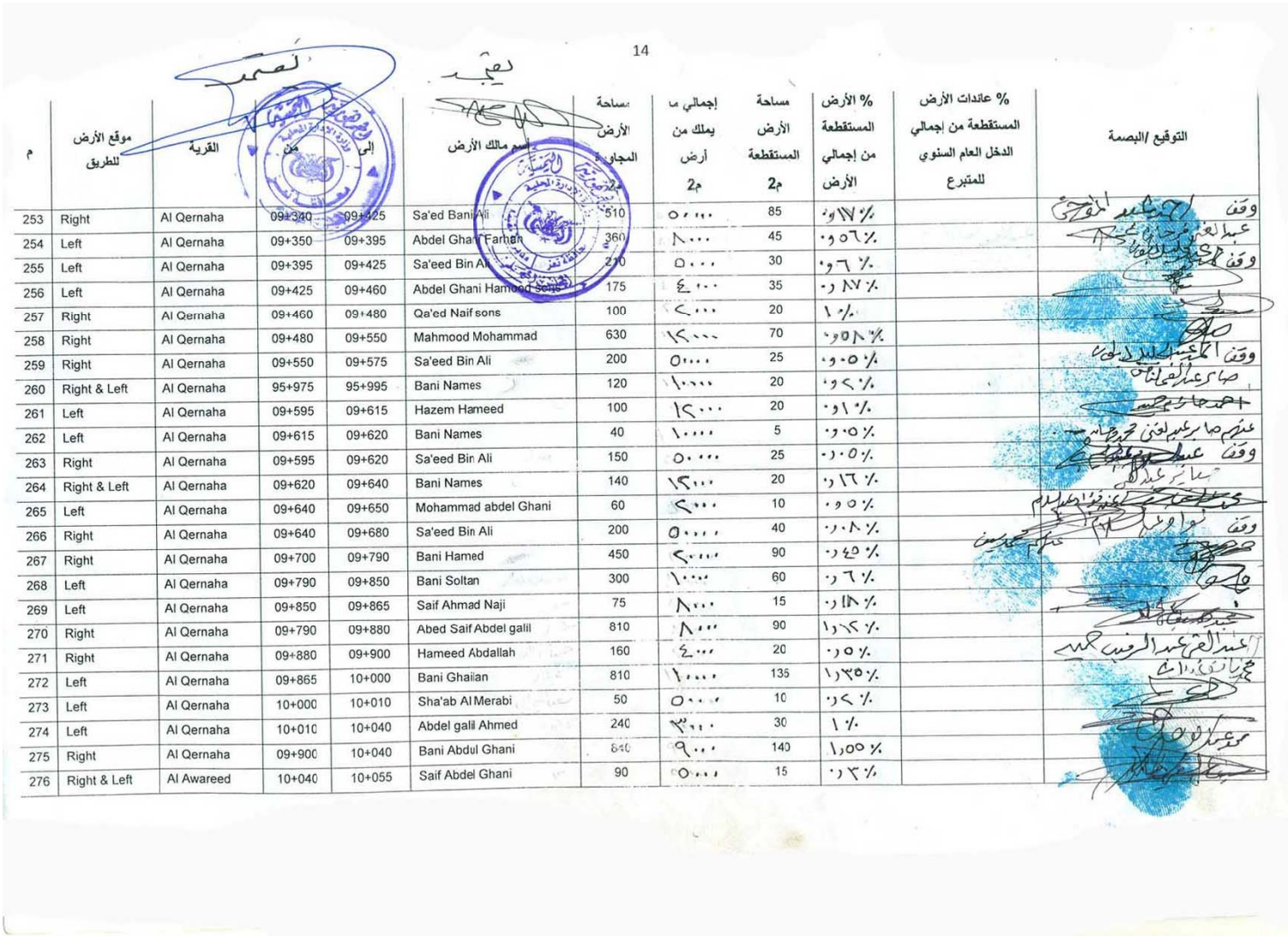
م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
229	Left	Wadi Al Shat	08+300	08+350	Abdel galeel Mohammed	400	٩٠٠٠	50	٠٫٥٪		
230	Right	Wadi Al Shat	08+325	08+395	Sa'eed Naji	490	٨٠٠٠	70	٠٫٨٪		
231	Left	Wadi Al Shat	08+350	08+395	Mohammad Hameed	225	١٥٠٠٠	45	٠٫٣٪		
232	Left	Wadi Al Shat	08+395	08+415	Yehia Mohammad	120	١٠٠٠٠	20	٠٫٢٪		
233	Left	Wadi Al Shat	08+415	08+427	Mohammad Yehia	96	١٠٠٠٠	12	٠٫١٢٪		
234	Left	Wadi Al Shat	08+427	08+435	Saif Abdu farhan	56	١٠٠٠٠	8	٠٫٠٨٪		
235	Left	Wadi Al Shat	08+435	08+455	Sa'eed Naji Ghaleb	160	٨٠٠٠	20	٠٫٢٥٪		
236	Left	Wadi Al Shat	08+455	08+520	Nasr Naji Ghaleb	325	٤٠٠٠	65	١٫٦٪		
237	Right & Left	Bani Hamed	08+845	08+890	Bani Hamed	225	١٥٠٠٠	45	٠٫٣٠٪		
238	Left	Al Awareed	08+890	09+000	Sa'eed Ahmed radman	990	٩٠٠٠	110	١٫١٪		
239	Right	Al Awareed	08+890	09+000	Mohammad Ali sons	880	١٠٠٠٠	110	١٫١٪		
240	Right	Al Awareed	09+000	09+050	Bani Hamed	300	١٥٠٠٠	50	٠٫٣٪		
241	Right	Al Qernaha	09+050	09+110	Bani Names	300	٨٠٠٠	60	٠٫٧٥٪		
242	Left	Al Qernaha	09+050	09+110	Bani Names	480	٨٠٠٠	60	٠٫٧٥٪		
243	Right	Al Qernaha	09+110	09+180	Bani Abas	420	٢٠٠٠	70	٣٫٥٪		
244	Left	Al Qernaha	09+110	09+180	Bani Abas	420	٢٠٠٠	70	٣٫٥٪		
245	Right	Al Qernaha	09+180	09+230	Bani Names	250	٨٠٠٠	50	٠٫٦٪		
246	Right	Al Qernaha	09+230	09+270	Bani Names	200	٨٠٠٠	40	٠٫٥٪		
247	Left	Al Qernaha	09+180	09+270	Bani Names	540	٨٠٠٠	90	١٫١٢٪		
248	Right	Al Qernaha	09+270	09+295	Saif Nasr	125	٤٠٠٠	25	٠٫٦٢٪		
249	Left	Al Qernaha	09+270	09+295	Saif Nasr	200	٤٠٠٠	25	٠٫٦٢٪		
250	Left	Al Qernaha	09+265	09+310	Abdel Waseh Abdel Galeel	315	٨٠٠٠	45	٠٫٥٦٪		
251	Right	Al Qernaha	09+295	09+340	Bani Hamed	225	١٥٠٠٠	45	٠٫٣٪		
252	Left	Al Qernaha	09+340	09+350	Saif Mohammed	50	٤٠٠٠	10	٠٫٢٥٪		



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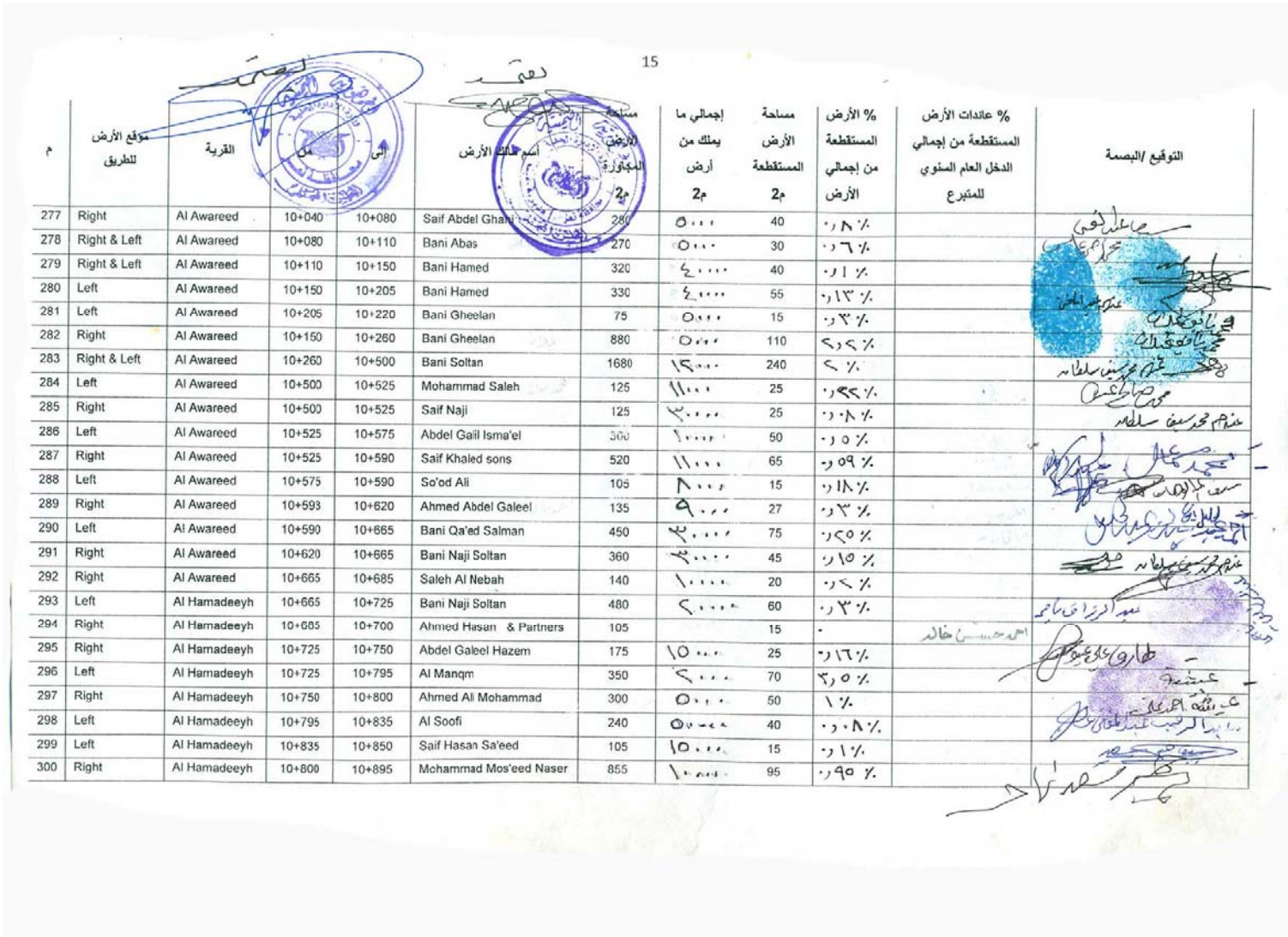
م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
253	Right	Al Qernaha	09+340	09+425	Sa'ed Bani Ali	510	٥٠٠٠٠	85	٠٫١٧٪		
254	Left	Al Qernaha	09+350	09+395	Abdel Ghani Farhan	360	٨٠٠٠	45	٠٫٥٦٪		
255	Left	Al Qernaha	09+395	09+425	Sa'eed Bin Ali	210	٥٠٠٠	30	٠٫٦٪		
256	Left	Al Qernaha	09+425	09+460	Abdel Ghani Hamood Sons	175	٤٠٠٠	35	٠٫٨٧٪		
257	Right	Al Qernaha	09+460	09+480	Qa'ed Naif sons	100	٢٠٠٠	20	١٪		
258	Right	Al Qernaha	09+480	09+550	Mahmood Mohammad	630	١٢٠٠٠	70	٠٫٥٨٪		
259	Right	Al Qernaha	09+550	09+575	Sa'eed Bin Ali	200	٥٠٠٠	25	٠٫٥٪		
260	Right & Left	Al Qernaha	95+975	95+995	Bani Names	120	١٠٠٠٠	20	٠٫٢٪		
261	Left	Al Qernaha	09+595	09+615	Hazem Hameed	100	١٢٠٠٠	20	٠٫١٠٪		
262	Left	Al Qernaha	09+615	09+620	Bani Names	40	١٠٠٠٠	5	٠٫٠٥٪		
263	Right	Al Qernaha	09+595	09+620	Sa'eed Bin Ali	150	٥٠٠٠٠	25	٠٫٠٥٪		
264	Right & Left	Al Qernaha	09+620	09+640	Bani Names	140	١٢٠٠٠	20	٠٫١٦٪		
265	Left	Al Qernaha	09+640	09+650	Mohammad abdel Ghani	60	٢٠٠٠	10	٠٫٠٥٪		
266	Right	Al Qernaha	09+640	09+680	Sa'eed Bin Ali	200	٥٠٠٠٠	40	٠٫٠٨٪		
267	Right	Al Qernaha	09+700	09+790	Bani Hamed	450	٢٠٠٠٠	90	٠٫٤٥٪		
268	Left	Al Qernaha	09+790	09+850	Bani Soltan	300	١٠٠٠٠	60	٠٫٦٪		
269	Left	Al Qernaha	09+850	09+865	Saif Ahmad Naji	75	٨٠٠٠	15	٠٫١٨٪		
270	Right	Al Qernaha	09+790	09+880	Abed Saif Abdel galil	810	٨٠٠٠	90	١٫٢٪		
271	Right	Al Qernaha	09+880	09+900	Hameed Abdallah	160	٤٠٠٠	20	٠٫٥٪		
272	Left	Al Qernaha	09+865	10+000	Bani Ghailan	810	١٠٠٠٠	135	١٫٣٥٪		
273	Left	Al Qernaha	10+000	10+010	Sha'ab Al Merabi	50	٥٠٠٠	10	٠٫٢٪		
274	Left	Al Qernaha	10+010	10+040	Abdel galil Ahmed	240	٣٠٠٠	30	١٪		
275	Right	Al Qernaha	09+900	10+040	Bani Abdul Ghani	840	٩٠٠٠	140	١٫٥٥٪		
276	Right & Left	Al Awareed	10+040	10+055	Saif Abdel Ghani	90	٥٠٠٠	15	٠٫٣٪		



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م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
277	Right	Al Awareed	10+040	10+080	Saif Abdel Ghani	280	٥٠٠٠	40	٠٫٨ ٪		
278	Right & Left	Al Awareed	10+080	10+110	Bani Abas	270	٥٠٠٠	30	٠٫٦ ٪		
279	Right & Left	Al Awareed	10+110	10+150	Bani Hamed	320	٤٠٠٠٠	40	٠٫١ ٪		
280	Left	Al Awareed	10+150	10+205	Bani Hamed	330	٤٠٠٠٠	55	٠٫١٣ ٪		
281	Left	Al Awareed	10+205	10+220	Bani Gheelan	75	٥٠٠٠	15	٠٫٣ ٪		
282	Right	Al Awareed	10+150	10+260	Bani Gheelan	880	٥٠٠٠	110	٢٫٢ ٪		
283	Right & Left	Al Awareed	10+260	10+500	Bani Soltan	1680	١٣٠٠٠	240	٢ ٪		
284	Left	Al Awareed	10+500	10+525	Mohammad Saleh	125	١١٠٠٠	25	٠٫٢٢ ٪		
285	Right	Al Awareed	10+500	10+525	Saif Naji	125	٢٠٠٠٠	25	٠٫٠٨ ٪		
286	Left	Al Awareed	10+525	10+575	Abdel Gaill Isma'el	300	١٠٠٠٠	50	٠٫١ ٪		
287	Right	Al Awareed	10+525	10+590	Saif Khaled sons	520	١١٠٠٠	65	٠٫٥٩ ٪		
288	Left	Al Awareed	10+575	10+590	So'od Ali	105	٨٠٠٠	15	٠٫١٨ ٪		
289	Right	Al Awareed	10+593	10+620	Ahmed Abdel Galeel	135	٩٠٠٠	27	٠٫٣ ٪		
290	Left	Al Awareed	10+590	10+665	Bani Qa'ed Salman	450	٢٠٠٠٠	75	٠٫٢٥ ٪		
291	Right	Al Awareed	10+620	10+665	Bani Naji Soltan	360	٣٠٠٠٠	45	٠٫١٥ ٪		
292	Right	Al Awareed	10+665	10+685	Saleh Al Nebah	140	١٠٠٠٠	20	٠٫٢ ٪		
293	Left	Al Hamadeeyh	10+665	10+725	Bani Naji Soltan	480	٢٠٠٠٠	60	٠٫٣ ٪		
294	Right	Al Hamadeeyh	10+685	10+700	Ahmed Hasan & Partners	105		15	-		
295	Right	Al Hamadeeyh	10+725	10+750	Abdel Galeel Hazem	175	١٥٠٠٠	25	٠٫١٦ ٪		
296	Left	Al Hamadeeyh	10+725	10+795	Al Manqm	350	٢٠٠٠	70	٣٫٥ ٪		
297	Right	Al Hamadeeyh	10+750	10+800	Ahmed Ali Mohammad	300	٥٠٠٠	50	١ ٪		
298	Left	Al Hamadeeyh	10+795	10+835	Al Soofi	240	٥٠٠٠	40	٠٫٠٨ ٪		
299	Left	Al Hamadeeyh	10+835	10+850	Saif Hasan Sa'eed	105	١٥٠٠٠	15	٠٫١ ٪		
300	Right	Al Hamadeeyh	10+800	10+895	Mohammad Mos'eed Naser	855	١٠٠٠٠	95	٠٫٩٥ ٪		

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م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
301	Left	Al Hamadeeyh	10+855	10+895	Hameed Ali Rajeh	320	١٠٠٠٠	40	٠٫٤٪		
302	Left	Al Hamadeeyh	10+895	10+925	Ali Abdu	180	٨٠٠٠	30	٠٫٣٧٥٪		
303	Left	Al Hamadeeyh	10+925	10+950	Ha'el Abdel Galeel	125	٥٠٠٠	25	٠٫٥٪		
304	Left	Al Hamadeeyh	10+955	10+965	Mohammad Saif Soltan	80	٥٠٠٠٠	10	٠٫٠٢٪		
305	Left	Al Hamadeeyh	10+965	11+000	Mohammad Abed Farhan	245	٥٠٠٠	35	٠٫٧٪		
306	Right	Al Hamadeeyh	11+000	11+005	Mohammad Hasan Ali	45	١٠٠٠٠	5	٠٫٠٥٪		
307	Right	Al Hamadeeyh	11+005	11+015	Haza' Daboan	80	٥٠٠٠٠	10	٠٫٠٢٪		
308	Right	Al Hamadeeyh	11+015	11+040	Saleh Abdel Aziz	150	١٥٠٠٠	25	٠٫١٦٪		
309	Left	Al Hamadeeyh	11+000	11+050	Sa'eed Mohammad Abdallah	250	١٥٠٠٠	50	٠٫٣٣٪		
310	Right	Al Hamadeeyh	11+040	11+070	Ahmed Abed	240	١٠٠٠٠	30	٠٫٢٪		
311	Left	Al Hamadeeyh	11+050	11+095	Mohammad Abdel Galeel	315	٥٠٠٠	45	٠٫٩٪		
312	Left	Al Hamadeeyh	11+095	11+120	Nasr Ali Ahmed	125	٣٠٠٠٠	25	٠٫٠٨٪		
313	Right	Al Hamadeeyh	11+070	11+120	Ali hasan Qa'ed	250	٥٠٠٠	50	١٪		
314	Left	Al Hamadeeyh	11+120	11+135	Mohammad Isma'eel	90	١٠٠٠٠	15	٠٫١٥٪		
315	Left	Al Hamadeeyh	11+135	11+155	Mohammad Hasan	160	٢٠٠٠٠	20	٠٫١٪		
316	Right	Al Hamadeeyh	11+120	11+170	Ali Saif Naser	350	١٠٠٠٠	50	٠٫٥٪		
317	Left	Al Hamadeeyh	11+155	11+175	Mohammad Naser	100	٣٠٠٠٠	20	٠٫٠٦٪		
318	Right	Al Hamadeeyh	11+170	11+180	Abdel Maqeed	60	١٥٠٠٠	10	٠٫٠٦٪		
319	Left	Al Hamadeeyh	11+175	11+240	Abdel Ghani Sa'eed	520	٣٥٠٠٠	65	٠٫١٨٪		
320	Left	Al Hamadeeyh	11+240	11+280	Abdallah nasr	280	٥٠٠٠	40	٠٫٨٪		
321	Left	Al Hamadeeyh	11+280	11+295	Ha'el Hasan Qa;ed	120	٢٠٠٠٠	15	٠٫٠٧٪		
322	Right	Al Hamadeeyh	11+180	11+295	Bani Baker	575	٥٠٠٠٠	115	٠٫٢٣٪		
323	Right	Al Hamadeeyh	11+295	11+325	Ha'el hasan	180	٢٠٠٠	30	١٫٥٪		

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م	موقع الأرض للطريق	القرية	من	إلى	إسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
324	Left	Al Hamadeeyh	11+295	11+325	Mohammad Abdu	150	١٠٠٠٠	30	٠٫٣ ٪		
325	Left	Al Hamadeeyh	11+325	11+350	Abdel Ghani Sa'ed	125	١١٠٠٠	25	٠٫٢٣ ٪		
326	Left	Al Hamadeeyh	11+350	11+356	Mohammad Abdel Rahman	64	١٠٠٠٠	6	٠٫٠٦ ٪		
327	Left	Al Hamadeeyh	11+360	11+375	Abdel aziz Senan & Brothers	120	٢٠٠٠٠	15	٠٫٠٧ ٪		
328	Left	Al Hamadeeyh	11+375	11+420	Ahmed Mohammad	270	٨٠٠٠	45	٠٫٥٦ ٪		
329	Right	Al Baseeq	11+350	11+440	Abdel aziz Senan sons	450	٢٠٠٠٠	90	٠٫٤٥ ٪		
330	Left	Al Baseeq	11+440	11+490	Abdel Salam Qa'ed	400	١٠٠٠٠	50	٠٫٥ ٪		
331	Left	Al Baseeq	11+490	11+575	Bani Baker	510	٢٥٠٠٠	85	٠٫٣٤ ٪		
332	Right	Al Baseeq	11+440	11+525	Bani Baker	510	٢٥٠٠٠	85	٠٫٣٤ ٪		
333	Left	Al Baseeq	11+575	11+640	Bani Soltan	325	٣٠٠٠٠	65	٠٫٢١ ٪		
334	Right	Al Baseeq	11+625	11+690	Bani Moqbel	520	٣٠٠٠٠	65	٠٫٢١ ٪		
335	Right	Al Baseeq	11+690	11+695	Bani Soltan	30	٣٠٠٠٠	5	٠٫٠١٦ ٪		
336	Right	Al Baseeq	11+715	11+745	Bani Saif Abdallah	180	٣٠٠٠٠	30	٠٫١ ٪		
337	Left	Al Baseeq	11+640	11+745	Bani Soltan	525	٤٠٠٠٠	105	٠٫٢٥ ٪		
338	Right	Al Baseeq	11+745	11+790	Bani Baker	270	٢٥٠٠٠	45	٠٫١٨ ٪		
339	Left	Al Baseeq	11+745	11+800	Bani Saif Abdallah	440	٤٠٠٠٠	55	٠٫١٨ ٪		
340	Left	Al Baseeq	11+800	11+815	Bani Moqbel	105	٤٠٠٠٠	15	٠٫٠٥ ٪		
341	Right	Beer Al Bent	11+790	11+840	Bani Baker	450	٢٥٠٠٠	50	٠٫٢ ٪		
342	Right	Beer Al Bent	11+840	11+950	Bani Moqbel	880	٤٠٠٠٠	110	٠٫٣٦ ٪		
343	Left	Beer Al Bent	11+815	12+050	Ashab Yammen	1880	٤٠٠٠٠	235	٠٫٧٨ ٪		
344	Right	Beer Al Bent	11+950	12+080	Bani Soltan	650	٤٠٠٠٠	130	٠٫٤٣ ٪		
345	Left	Beer Al Bent	12+050	12+095	Bani Saif Abdallah	270	٤٠٠٠٠	45	٠٫١٥ ٪		
346	Right	Beer Al Bent	12+080	12+100	Bani Saif Abdallah	100	٤٠٠٠٠	20	٠٫٠٦ ٪		

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م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
347	Right	Beer Al Bent	12+125	12+150	Bani Saif Abdallah	125	٢٠٠٠٠	25	٠٫٠٨ ٪		
348	Left	Beer Al Bent	12+135	12+180	Bani Soltan	405	٣٠٠٠٠	45	٠٫١٥ ٪		
349	Right	Beer Al Bent	12+150	12+195	Mohammad Radman sons	450	١٥٠٠٠	45	٠٫٣٠ ٪		
350	Right	Beer Al Bent	12+195	12+200	Bani Baker	40	٢٥٠٠٠	5	٠٫٠٢ ٪		
351	Right	Beer Al Bent	12+200	12+220	Bani Moqbel	120	٣٠٠٠٠	20	٠٫٠٦ ٪		
352	Right	Beer Al Bent	12+220	12+265	Bani Soltan	225	٣٠٠٠٠	45	٠٫١٥ ٪		
353	Right	Beer Al Bent	12+265	12+295	Mohammad Radman sons	240	١٥٠٠٠	30	٠٫٢ ٪		
354	Left	Beer Al Bent	12+180	12+700	Bani Saif	3120	٣٠٠٠٠	520	١٫٧٣ ٪		
355	Right	Beer Al Bent	12+295	12+700	Bani Saif	2025	٣٠٠٠٠	405	١٫٣٥ ٪		
356	Right & Left	Naqeel Hrbeh	12+725	13+250	Shmisan Naqeel Hrbeh	4725	٤٠٠٠٠	525	١٫٣١ ٪		
357	Left	Naqeel Hrbeh	13+250	13+275	Bani An'am	200	١٠٠٠٠	25	٠٫٢٥ ٪		
358	Left	Naqeel Hrbeh	13+275	13+340	Sa'eed Soltan sons	390	٩٠٠٠	65	٠٫٧٢ ٪		
359	Right	Naqeel Hrbeh	13+250	13+340	Yehia Ali sons	450	١٥٠٠٠	90	٠٫٦ ٪		
360	Left	Naqeel Hrbeh	13+340	13+450	Isma'eel Abdel Ghani	880	١٥٠٠٠	110	٠٫٧٣ ٪		
361	Right	Naqeel Hrbeh	13+340	13+495	Bani An'am	930	١٠٠٠٠	155	١٫٥٥ ٪		
362	Right	Naqeel Hrbeh	13+495	13+515	Ahmad Abdel Salam	120	١٢٠٠٠	20	٠٫١٦ ٪		
363	Left	Naqeel Hrbeh	13+450	13+515	Abdel Satar Yehia sons	455	١٠٠٠٠	65	٠٫٦٥ ٪		
364	Right	Naqeel Hrbeh	13+515	13+595	Daboan Abdel Rahman	720	٨٠٠٠	80	١ ٪		
365	Left	Naqeel Hrbeh	13+515	13+595	Bani An'am	640	١٠٠٠٠	80	٠٫٨ ٪		
366	Left	Naqeel Hrbeh	13+595	13+640	Ahmad Abdel Salam	270	١٢٠٠٠	45	٠٫٣٧ ٪		
367	Right	Naqeel Hrbeh	13+595	13+640	Ahmad Abdel Salam	315	١٢٠٠٠	45	٠٫٣٧ ٪		
368	Right	Al Shabe	13+640	13+660	Om Ahmad Nasr	100	٢٠٠٠	20	١ ٪		
369	Left	Al Shabe	13+640	13+660	Abdel Da'eem Ahmad	160	١١٠٠٠	20	٠٫١٨ ٪		
370	Right	Al Shabe	13+660	13+700	Abdel Da'eem Ahmad	360	١١٠٠٠	40	٠٫٣٦ ٪		

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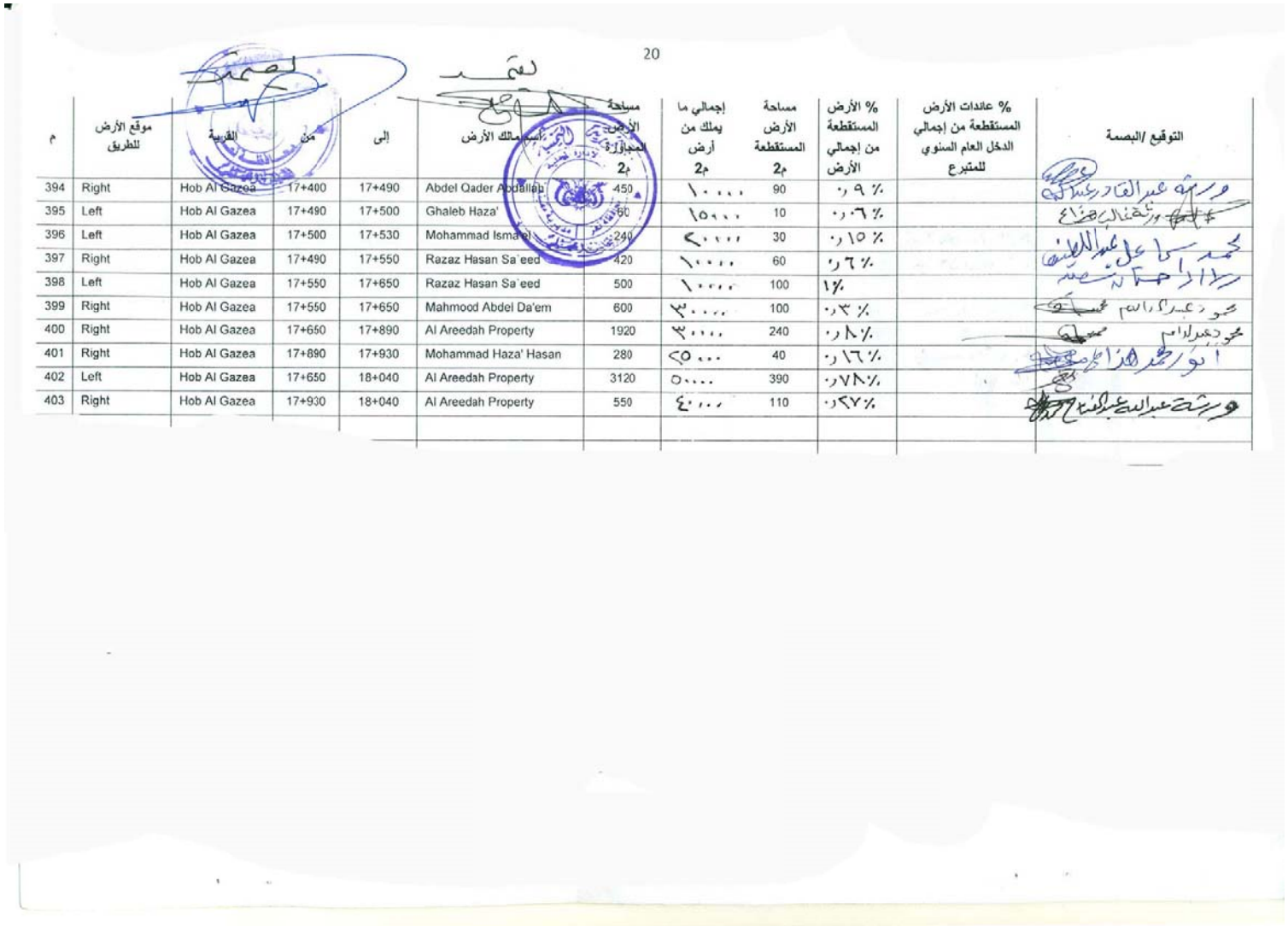
م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
371	Left	Al Shabe	13+660	13+700	A'aed Hasan	250	٣٠٠٠٠	40	٠٫١٣ ٪		
372	Left	Al Shabe	13+725	13+800	A'aed Hasan	375	٣٠٠٠٠	75	٠٫٢٥ ٪		
373	Right	Al Shabe	13+700	13+840	Ahmad Radman sons	840	١٠٠٠٠	140	١٫٤ ٪		
374	Left	Al Shabe	13+800	13+840	Isma'eel Ali	200	١٠٠٠٠	40	٠٫٤ ٪		
375	Right	Al Shabe	13+840	13+855	Ali Bin Ali	90	١١٠٠٠	15	٠٫١٣ ٪		
376	Left	Al Shabe	13+840	13+890	Ali Bin Ali	350	١١٠٠٠	50	٠٫٤٥ ٪		
377	Right	Al Shabe	13+855	13+900	A'eash Daboan	360	١٠٠٠٠	45	٠٫٤٥ ٪		
378	Right	Al Shabe	13+900	13+950	Yosef No'man	350	١١٠٠٠	50	٠٫٤٥ ٪		
379	Left	Al Shabe	13+890	13+970	Yosef No'man	640	١١٠٠٠	80	٠٫٧٩ ٪		
380	Left	Al Shabe	13+970	13+995	Dboan Ahmed	225	١٢٠٠٠	25	٠٫٢٠ ٪	محمد بوان العبدان	
381	Right	Al Shabe	13+950	14+000	Ward Hameed Nasr	450	٥٠٠٠	50	١٪		
382	Left	Al Shabe	13+995	14+000	Ward Hameed & Partners	50	٥٠٠٠	5	٠٫١٪		
383	Right	Al Arakeb	14+015	14+030	Bani Huzam Sharaf sons	120	٣٠٠٠٠	15	٠٫٠٥ ٪		
384	Right	Al Arakeb	14+030	14+050	Al Adenah	120	٣٠٠٠٠	20	٠٫٠٦ ٪	العبدنة	
385	Right	Al Arakeb	14+055	14+100	Daboan Ahmed sons	225	١٥٠٠٠	45	٠٫٣ ٪		
386	Left	Al Arakeb	14+200	14+225	Bani Huzsam Sharaf	200	٨٠٠٠٠	25	٠٫١٢ ٪		
387	Right	Al Arakeb	14+165	14+240	Bani Huzsam Sharaf	675	٨٠٠٠٠	75	٠٫٣٧ ٪		
388	Right	Hob Al Gazea	17+280	17+360	Ahmed Abdel Qaher	640	١٠٠٠٠	80	٠٫٨ ٪		
389	Left	Hob Al Gazea	17+280	17+360	Yaseen Abdel Galeel sons	480	٣٠٠٠٠	80	٠٫٢٦ ٪		
390	Left	Hob Al Gazea	17+360	17+400	Mohammad Abdallah Ghaleb	200	٢٠٠٠٠	40	٠٫٢ ٪		
391	Right	Hob Al Gazea	17+360	17+400	Nasr Redman	320	٢٥٠٠٠	40	٠٫١٦ ٪		
392	Left	Hob Al Gazea	17+400	17+430	Al Tahesh	210	٨٠٠٠	30	٠٫٣٧ ٪		
393	Left	Hob Al Gazea	17+430	17+490	Saleh Abdel Wareth	300	٢٠٠٠٠	60	٠٫٣ ٪		



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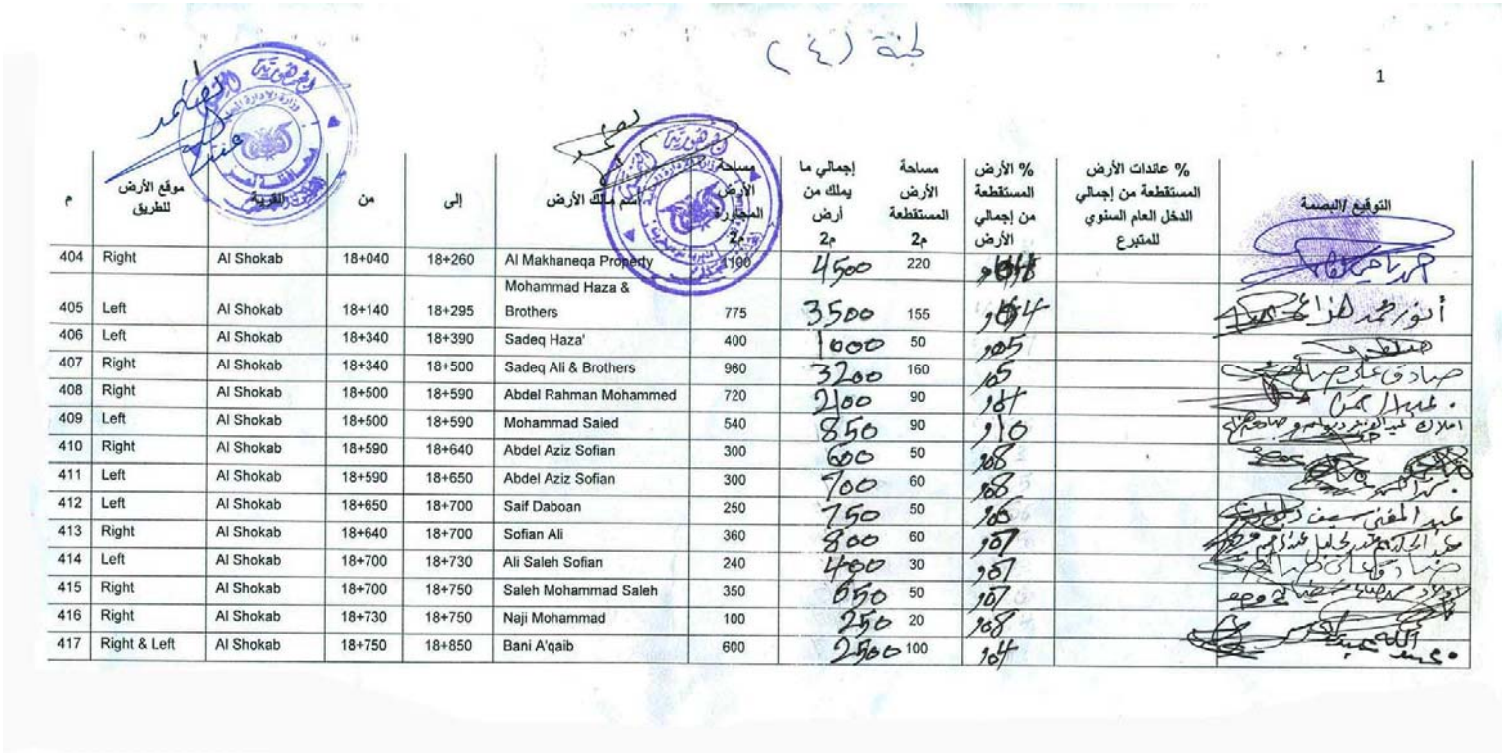
م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
394	Right	Hob Al Gazea	17+400	17+490	Abdel Qader Abdallah	450	١٠٠٠٠	90	٠٫٩ ٪		
395	Left	Hob Al Gazea	17+490	17+500	Ghaleb Haza'	60	١٥٠٠٠	10	٠٫٠٦ ٪		
396	Left	Hob Al Gazea	17+500	17+530	Mohammad Ismail	240	٢٠٠٠٠	30	٠٫١٥ ٪		
397	Right	Hob Al Gazea	17+490	17+550	Razaz Hasan Sa'eed	420	١٠٠٠٠	60	٠٫٦ ٪		
398	Left	Hob Al Gazea	17+550	17+650	Razaz Hasan Sa'eed	500	١٠٠٠٠	100	١٪		
399	Right	Hob Al Gazea	17+550	17+650	Mahmood Abdel Da'em	600	٣٠٠٠٠	100	٠٫٣ ٪		
400	Right	Hob Al Gazea	17+650	17+890	Al Areedah Property	1920	٣٠٠٠٠	240	٠٫٨٪		
401	Right	Hob Al Gazea	17+890	17+930	Mohammad Haza' Hasan	280	٢٥٠٠٠	40	٠٫١٦ ٪		
402	Left	Hob Al Gazea	17+650	18+040	Al Areedah Property	3120	٥٠٠٠٠	390	٠٫٧٨٪		
403	Right	Hob Al Gazea	17+930	18+040	Al Areedah Property	550	٤٠٠٠٠	110	٠٫٢٧٪		



لجنة (٤)

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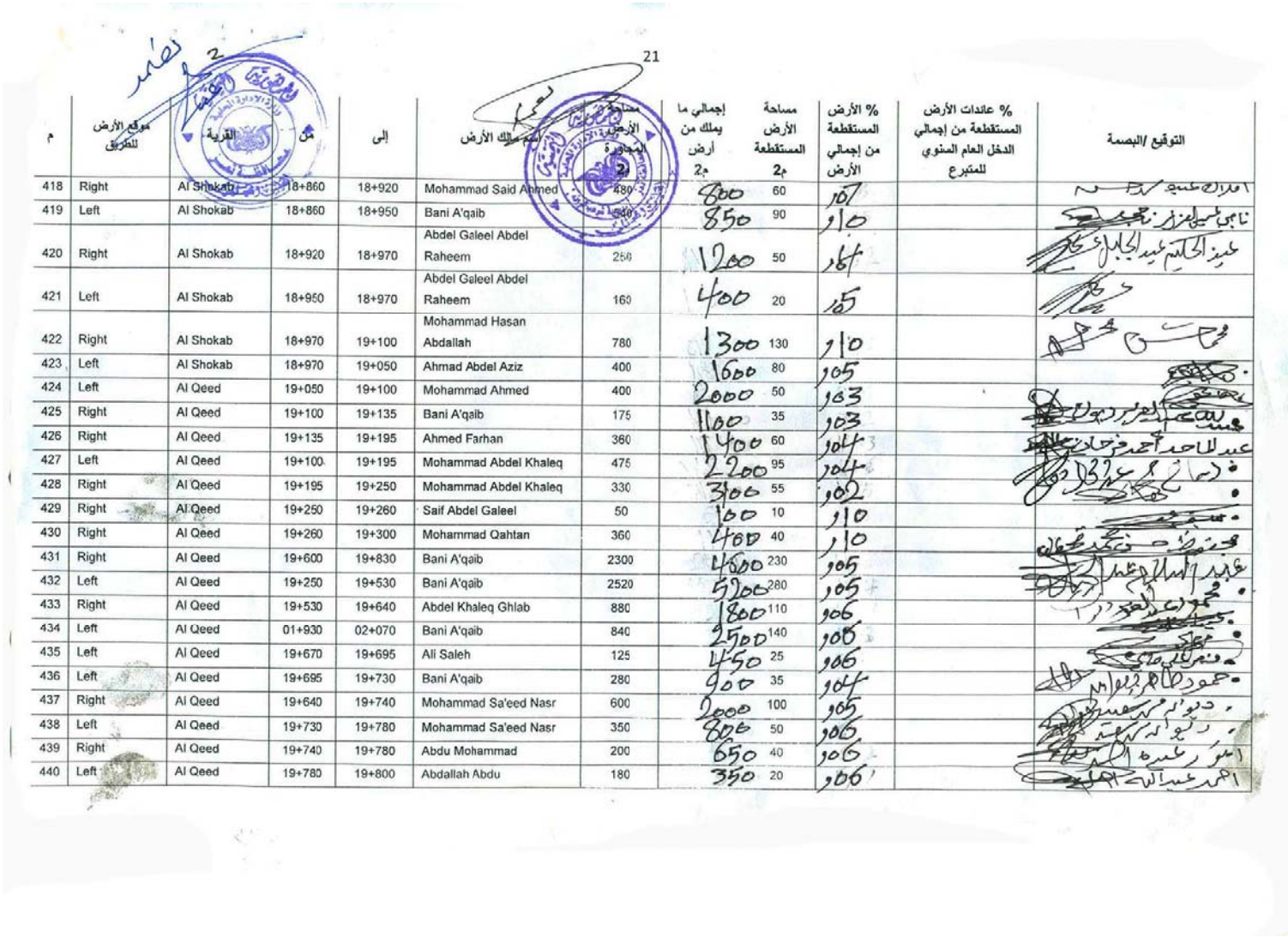
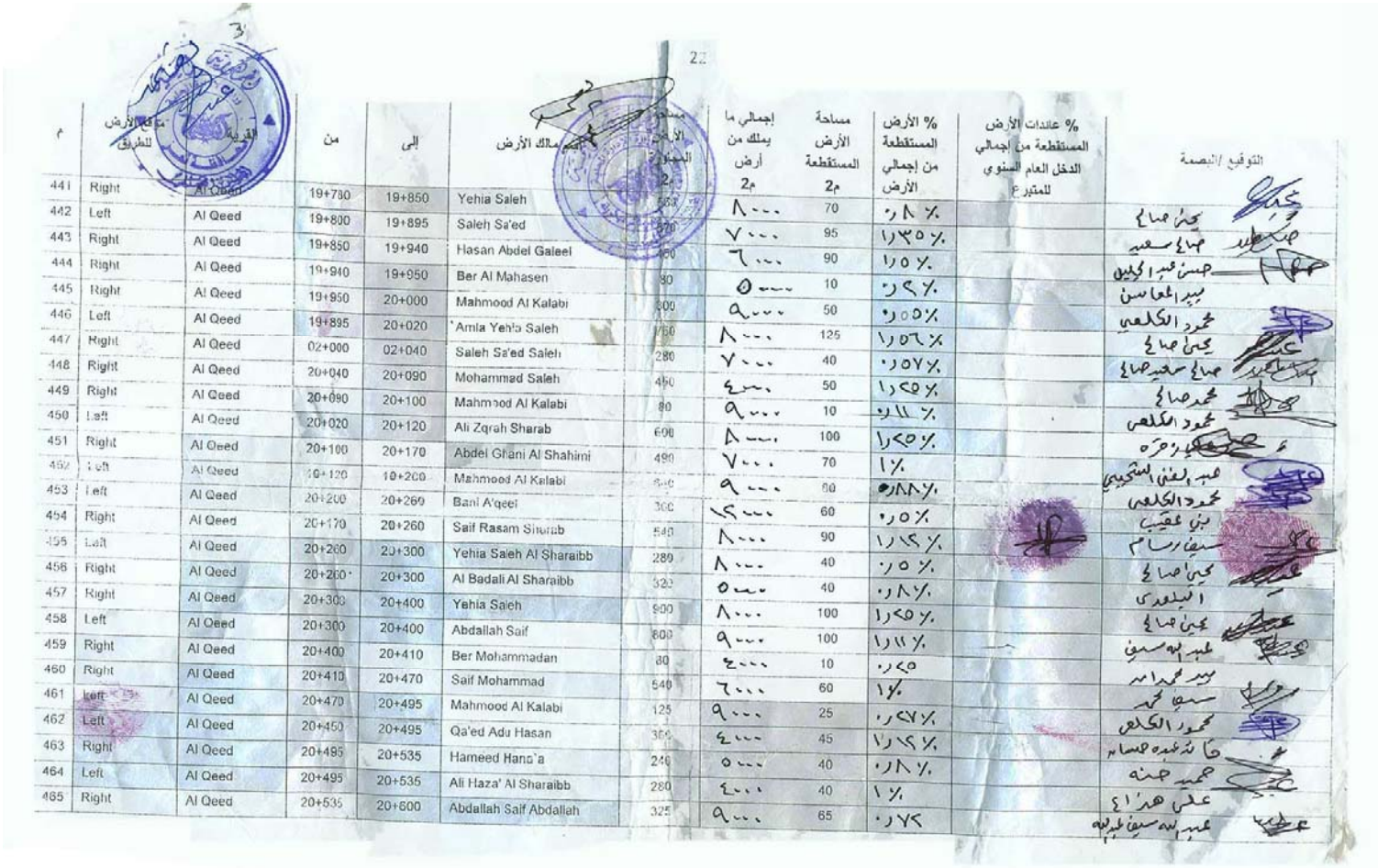
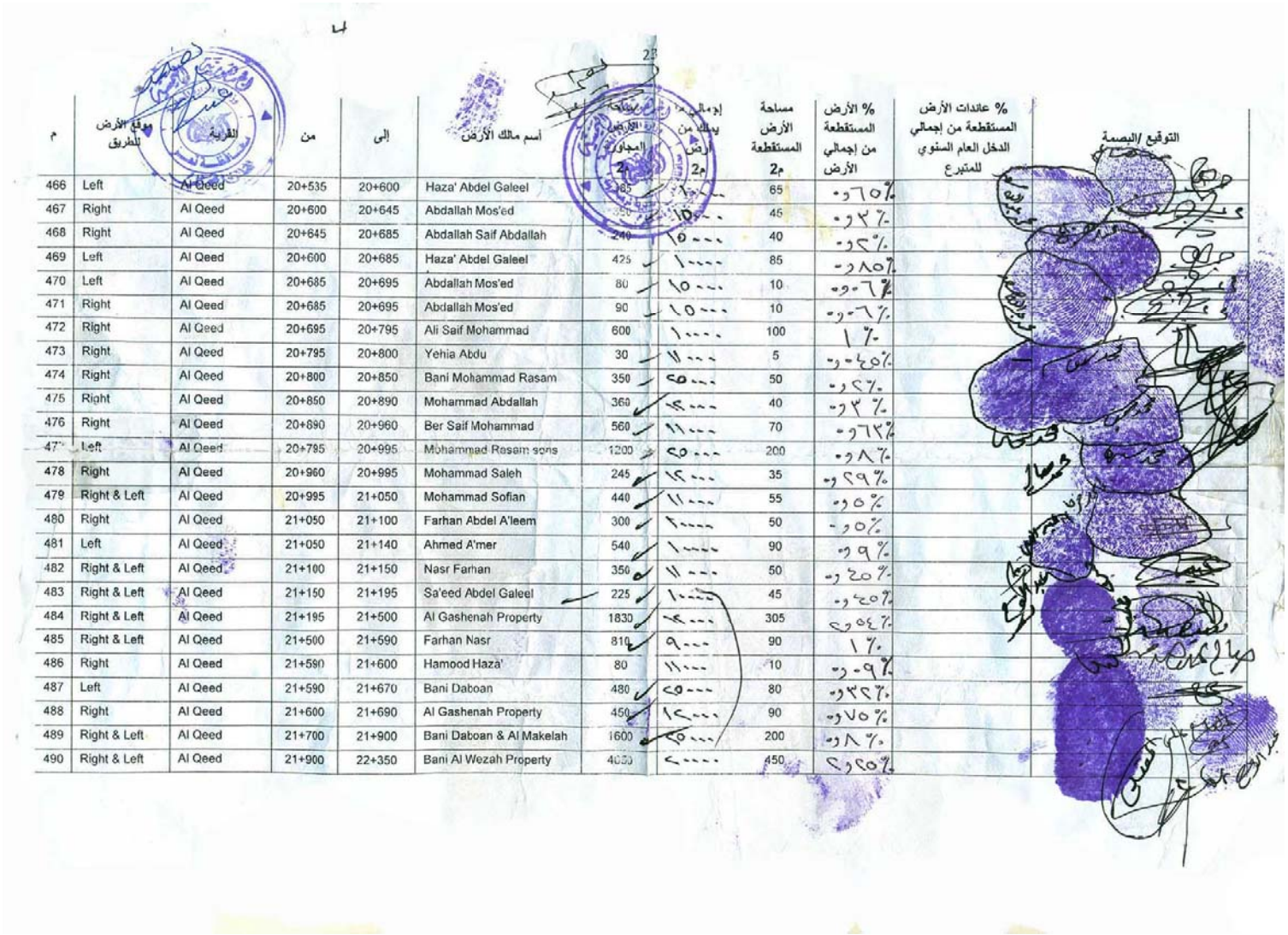
م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المتأثرة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
404	Right	Al Shokab	18+040	18+260	Al Makhaneqa Property	1100	4500	220			
405	Left	Al Shokab	18+140	18+295	Mohammad Haza & Brothers	775	3500	155			
406	Left	Al Shokab	18+340	18+390	Sadeq Haza'	400	1000	50			
407	Right	Al Shokab	18+340	18+500	Sadeq Ali & Brothers	960	3200	160			
408	Right	Al Shokab	18+500	18+590	Abdel Rahman Mohammed	720	2100	90			
409	Left	Al Shokab	18+500	18+590	Mohammad Saied	540	850	90			
410	Right	Al Shokab	18+590	18+640	Abdel Aziz Sofian	300	600	50			
411	Left	Al Shokab	18+590	18+650	Abdel Aziz Sofian	300	700	60			
412	Left	Al Shokab	18+650	18+700	Saif Daboan	250	750	50			
413	Right	Al Shokab	18+640	18+700	Sofian Ali	360	800	60			
414	Left	Al Shokab	18+700	18+730	Ali Saleh Sofian	240	400	30			
415	Right	Al Shokab	18+700	18+750	Saleh Mohammad Saleh	350	650	50			
416	Right	Al Shokab	18+730	18+750	Naji Mohammad	100	250	20			
417	Right & Left	Al Shokab	18+750	18+850	Bani A'qaib	600	2500	100			



م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
418	Right	Al Shokab	18+860	18+920	Mohammad Said Ahmed	480	800	60	7.5		
419	Left	Al Shokab	18+860	18+950	Bani A'qaib	640	850	90	10.6		
420	Right	Al Shokab	18+920	18+970	Abdel Galeel Abdel Raheem	250	1200	50	4.16		
421	Left	Al Shokab	18+950	18+970	Abdel Galeel Abdel Raheem	160	400	20	5		
422	Right	Al Shokab	18+970	19+100	Mohammad Hasan Abdallah	780	1300	130	10		
423	Left	Al Shokab	18+970	19+050	Ahmad Abdel Aziz	400	1600	80	5		
424	Left	Al Qeed	19+050	19+100	Mohammad Ahmed	400	2000	50	3		
425	Right	Al Qeed	19+100	19+135	Bani A'qaib	175	1100	35	3		
426	Right	Al Qeed	19+135	19+195	Ahmed Farhan	360	1400	60	4		
427	Left	Al Qeed	19+100	19+195	Mohammad Abdel Khaleq	475	2200	95	4		
428	Right	Al Qeed	19+195	19+250	Mohammad Abdel Khaleq	330	3300	55	2		
429	Right	Al Qeed	19+250	19+260	Saif Abdel Galeel	50	100	10	10		
430	Right	Al Qeed	19+260	19+300	Mohammad Qahtan	360	400	40	10		
431	Right	Al Qeed	19+600	19+830	Bani A'qaib	2300	4600	230	5		
432	Left	Al Qeed	19+250	19+530	Bani A'qaib	2520	5200	280	5		
433	Right	Al Qeed	19+530	19+640	Abdel Khaleq Ghlab	880	1800	110	6		
434	Left	Al Qeed	01+930	02+070	Bani A'qaib	840	2500	140	6		
435	Left	Al Qeed	19+670	19+695	Ali Saleh	125	450	25	6		
436	Left	Al Qeed	19+695	19+730	Bani A'qaib	280	900	35	4		
437	Right	Al Qeed	19+640	19+740	Mohammad Sa'eed Nasr	600	2000	100	5		
438	Left	Al Qeed	19+730	19+780	Mohammad Sa'eed Nasr	350	800	50	6		
439	Right	Al Qeed	19+740	19+780	Abdu Mohammad	200	650	40	6		
440	Left	Al Qeed	19+780	19+800	Abdallah Abdu	180	350	20	6		



م	موقع الأرض بالطريق	القرية	من	إلى	مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% علاقات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع / البصمة
441	Right	Al Qeed	19+730	19+850	Yehia Saleh	500	٨٠٠٠	70	٠٫٨ ٪		
442	Left	Al Qeed	19+800	19+895	Saleh Sa'ed	270	٧٠٠٠	95	١٫٣٥ ٪		
443	Right	Al Qeed	19+850	19+940	Hasan Abdel Galeel	80	٦٠٠٠	90	١٫٥ ٪		
444	Right	Al Qeed	19+940	19+950	Ber Al Mahasen	30	٥٠٠٠	10	٠٫٢ ٪		
445	Right	Al Qeed	19+950	20+000	Mahmood Al Kalabi	500	٩٠٠٠	50	٠٫٥ ٪		
446	Left	Al Qeed	19+895	20+020	'Amla Yehia Saleh	160	٨٠٠٠	125	١٫٥٦ ٪		
447	Right	Al Qeed	02+000	02+040	Saleh Sa'ed Saleh	280	٧٠٠٠	40	٠٫٥٧ ٪		
448	Right	Al Qeed	20+040	20+090	Mohammad Saleh	450	٤٠٠٠	50	١٫٢٥ ٪		
449	Right	Al Qeed	20+090	20+100	Mahmood Al Kalabi	80	٩٠٠٠	10	٠٫١١ ٪		
450	Left	Al Qeed	20+020	20+120	Ali Zqrah Sharab	600	٨٠٠٠	100	١٫٢٥ ٪		
451	Right	Al Qeed	20+100	20+170	Abdel Ghani Al Shahimi	490	٧٠٠٠	70	١ ٪		
452	Left	Al Qeed	20+120	20+200	Mahmood Al Kalabi	500	٩٠٠٠	80	٠٫٨٨ ٪		
453	Left	Al Qeed	20+200	20+269	Bani A'qeel	300	٦٥٠٠	60	٠٫٥ ٪		
454	Right	Al Qeed	20+170	20+260	Saif Rasam Sharab	540	٨٠٠٠	90	١٫١٢ ٪		
455	Left	Al Qeed	20+200	20+300	Yehia Saleh Al Sharaibb	280	٨٠٠٠	40	٠٫٥ ٪		
456	Right	Al Qeed	20+260	20+300	Al Badali Al Sharaibb	320	٥٠٠٠	40	٠٫٨ ٪		
457	Right	Al Qeed	20+300	20+400	Yehia Saleh	900	٨٠٠٠	100	١٫٢٥ ٪		
458	Left	Al Qeed	20+300	20+400	Abdallah Saif	600	٩٠٠٠	100	١٫١١ ٪		
459	Right	Al Qeed	20+400	20+410	Ber Mohammadan	80	٤٠٠٠	10	٠٫٢٥		
460	Right	Al Qeed	20+410	20+470	Saif Mohammad	540	٦٠٠٠	60	١٪		
461	Left	Al Qeed	20+470	20+495	Mahmood Al Kalabi	125	٩٠٠٠	25	٠٫٢٧ ٪		
462	Left	Al Qeed	20+450	20+495	Qa'ed Adu Hasan	350	٤٠٠٠	45	١٫١٢ ٪		
463	Right	Al Qeed	20+495	20+535	Hameed Hana'a	240	٥٠٠٠	40	٠٫٨ ٪		
464	Left	Al Qeed	20+495	20+535	Ali Haza' Al Sharaibb	280	٤٠٠٠	40	١ ٪		
465	Right	Al Qeed	20+535	20+600	Abdallah Saif Abdallah	325	٩٠٠٠	65	٠٫٧٢		



م	موقع الأرض للطريق	القرية	من	إلى	اسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ثمن الأرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع/البصمة
466	Left	Al Qeed	20+535	20+600	Haza' Abdel Galeel	385	١٠٠٠٠	65	٠٫٦٥٪		
467	Right	Al Qeed	20+600	20+645	Abdallah Mos'ed	240	١٥٠٠٠	45	٠٫٢٪		
468	Right	Al Qeed	20+645	20+685	Abdallah Saif Abdallah	240	١٥٠٠٠	40	٠٫٢٪		
469	Left	Al Qeed	20+600	20+685	Haza' Abdel Galeel	425	١٠٠٠٠	85	٠٫٨٥٪		
470	Left	Al Qeed	20+685	20+695	Abdallah Mos'ed	80	١٥٠٠٠	10	٠٫٠٦٪		
471	Right	Al Qeed	20+685	20+695	Abdallah Mos'ed	90	١٥٠٠٠	10	٠٫٠٦٪		
472	Right	Al Qeed	20+695	20+795	Ali Saif Mohammad	600	١٠٠٠٠	100	١٪		
473	Right	Al Qeed	20+795	20+800	Yehia Abdu	30	١١٠٠٠	5	٠٫٠٤٥٪		
474	Right	Al Qeed	20+800	20+850	Bani Mohammad Rasam	350	٨٥٠٠٠	50	٠٫٢٪		
475	Right	Al Qeed	20+850	20+890	Mohammad Abdallah	360	١٢٠٠٠	40	٠٫٣٪		
476	Right	Al Qeed	20+890	20+960	Ber Saif Mohammad	560	١١٠٠٠	70	٠٫٦٢٪		
477	Left	Al Qeed	20+785	20+995	Mohammad Rasam sons	1200	٨٥٠٠٠	200	٠٫٨٪		
478	Right	Al Qeed	20+960	20+995	Mohammad Saleh	245	١٢٠٠٠	35	٠٫٢٩٪		
479	Right & Left	Al Qeed	20+995	21+050	Mohammad Sofian	440	١١٠٠٠	55	٠٫٥٪		
480	Right	Al Qeed	21+050	21+100	Farhan Abdel A'leem	300	١٠٠٠٠	50	٠٫٥٪		
481	Left	Al Qeed	21+050	21+140	Ahmed A'mer	540	١٠٠٠٠	90	٠٫٩٪		
482	Right & Left	Al Qeed	21+100	21+150	Nasr Farhan	350	١١٠٠٠	50	٠٫٢٥٪		
483	Right & Left	Al Qeed	21+150	21+195	Sa'eed Abdel Galeel	225	١٠٠٠٠	45	٠٫٤٥٪		
484	Right & Left	Al Qeed	21+195	21+500	Al Gashenah Property	1830	١٢٠٠٠	305	٢٫٥٤٪		
485	Right & Left	Al Qeed	21+500	21+590	Farhan Nasr	810	٩٠٠٠	90	١٪		
486	Right	Al Qeed	21+590	21+600	Hamood Haza'	80	١١٠٠٠	10	٠٫٠٩٪		
487	Left	Al Qeed	21+590	21+670	Bani Daboan	480	٨٥٠٠٠	80	٠٫٢٢٪		
488	Right	Al Qeed	21+600	21+690	Al Gashenah Property	450	١٢٠٠٠	90	٠٫٧٥٪		
489	Right & Left	Al Qeed	21+700	21+900	Bani Daboan & Al Makelah	1600	٨٥٠٠٠	200	٠٫٨٪		
490	Right & Left	Al Qeed	21+900	22+350	Bani Al Wezah Property	4050	٨٠٠٠٠	450	٢٫٢٥٪		

لجنة (5)

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المتبقية م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
١	يمين	وادي الماء	٠	١٠٠	عبد الله بلبل محمد	٥٠٠	١١٠٠٠	١٠٠متر	٠,٩٠٪		
٢	شمال	" "	٠	١٠٠	بلبل حميد دبوان	٥٠٠	١١٠٠٠	١٠٠متر	٠,٩٠٪		
٣	يمين	" "	١٠٠	٢٠٠	فؤاد احمد محمد نصر	٥٠٠	١٠٠٠٠	١٠٠متر	١٪		
٤	"	" "	١٠٠	٤٠٠	عبد الرحمن علي	٢٥٠	٧٠٠٠	٥٠	٠,٧١٪		
٥	"	" "	١٠٠	٤٠٠	أمين وهبان عبد الجليل	٢٥٠	٨٠٠٠	٥٠متر	٠,٧١٪		
٦	شمال	" "	٢٠٠	٣٠٠	دبوان احمد	١٥٠	٦٠٠٠	٢٠متر	٠,٥٪		
٧	"	" "	٢٠٠	٤٠٠	رشاد احمد	١٥٠	٦٠٠٠	٢٠متر	٠,٥٪		
٨	يمين	" "	٢٠٠	٢٠٠	يوسف عبد الله	٥٠٠	٨٠٠٠	١٠٠متر	١,٢٥٪		غير موجود سقيفة
٩	شمال	" "	٢٠٠	٢٦٠	احمد محمد حسين	٣٠٠	٧٠٠٠	٦٠متر	٠,٨٥٪		
١٠	يمين	" "	٢٠٠	٢٦٠	احمد عبد الله عبد القادر	٣٠٠	٧٠٠٠	٦٠متر	٠,٨٥٪		
١١	شمال	" "	٣٨٠	٤١٠	محمد عبد القادر عامر	٥٠٠	٩٠٠٠	١٠٠متر	١,١٠٪		
١٢	يمين	" "	٤٨٠	٥٦٠	عبد الرحيم عبد الله غانم	٤٠٠	٩٠٠٠	٨٠متر	٠,٨٨٪		

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع/البصمة
١٣	يمين شمال	وادي الماء	٥٦٠	٥٨٠	عبد الرؤف عبده خالد	١٠٠	٨٠٠٠	٥ متر٢	٠٫٢٥٪		
١٤	يمين	" "	٥٨٠	٦٦٠	طه عبده احمد	٤٠٠	١٠٠٠٠	٨٠ متر٢	٠٫٨٪		
١٥	شمال	" "	١٠٠	٢٠٠	طاهر احمد عبد الوهاب	١٥٠	٥٠٠٠	٣٠ متر٢	٠٫٦٪		
١٦			٦٦٠	٩٦٠			مناطق جبلية				
١٧	يمين	العنتري	٩٦٠	١٠٢٠	عبد الواسع عبده حسن	٣٠٠	١٠٠٠٠	٦٠ متر	٠٫٦٪		
١٨	يمين	" "	٩٦٠	١٠٢٠	يحانس حمود	٣٠٠	٨٠٠٠	٦٠ متر	٠٫٧٥٪		
١٩	شمال	"	٩٦٠	١٠٢٠	ديوان عبد الرحمن	٣٠٠	٧٠٠٠	٦٠ متر	٠٫٨٥٪		
٢٠	شمال ويمين	"	١٠٢٠	١٢٢٠			مناطق جبلية				
٢١	شمال الطريق	العنتري	١٢٢٠	١٢٨٠	صالح محمد فقر احمد	٦٠٠	١١٠٠٠	١٢٠ متر٢	١٫٠٩٪		
٢٢	يمين		١٢٨٠	١٤٢٠	عبده محمد صالح مفضل	٤٠٠	٧٠٠٠	٨٠ متر٢	١٫١٤٪		
٢٣	يمين		١٢٨٠	١٤٢٠	عبده محمد ديوان	٢٠٠	١٥٠٠٠	٤٠ متر٢	٠٫٢٦٪		
٢٤	شمال		١٢٨٠	١٤٢٠	عبد الواسع حمود	٢٠٠	١٥٠٠٠	٤٠ متر٢	٠٫٢٦٪		

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٢٥	شمال	العشرين	١٢٨٠	١٤٢٠	عنتر علي صالح	١٠٠	٨٠٠٠	٢٥٠ متر	٠٫٣٥ %		
٢٦	يمين	العشرين	١٤٢٠	١٥٢٠	اسماعيل محمد	٥٠٠	١٢٠٠٠	١٠٠ متر	٠٫٨٣ %		
٢٧	شمال	//	١٤٢٠	١٥٢٠	محمد أحمد عبدالله	٥٠٠	٩٦٠٠٠	١٠٠ متر	٠٫٦٩ %		
٢٨	يمين	//	١٥٢٠	١٧٢٠	محمد أحمد عبدالله	١٠٠٠	١٦٠٠٠	٢٠٠ متر	١٫٣٥ %		
٢٩	شمال	//	١٥٢٠	١٧٢٠	عبدالله محمد علي	١٥٠٠	٧٠٠٠	٢٠٠ متر	٤٫٢٨ %		
٣٠	شمال	العشرين	١٧٢٠	١٩٢٠	عبدالرزاق أحمد عبدالرب	١٥٠٠	١٥٠٠٠	٢٠٠ متر	١٫٣٠ %		
٣١	يمين	//	١٧٢٠	١٩٢٠	محمد أحمد عبدالله	١٥٠٠	١٦٠٠٠	٢٠٠ متر	١٫٨٧ %		
٣٢	يمين+شمال	العشرين	١٩٢٠	١٩٤٠	آمير أحمد عبدالله	٥٠٠	١٥٠٠٠	١٠٠ متر	٠٫٦٦ %		
٣٣	يمين+شمال	العشرين	١٩٢٠	٢٠٢٠	عبدالرزاق أحمد عبدالرب	٥٠٠	١٥٠٠٠	١٠٠ متر	٠٫٦٦ %		
٣٤	يمين	العشرين	٢٠٢٠	٢١٩٠	عبدالرزاق أحمد عبدالرب	٦٠٠	١٥٠٠٠	١٢٠ متر	٠٫٨٠ %		
٣٥	شمال	العشرين	٢٠٢٠	٢١٩٠	عبده محمد دعواه	٦٠٠	١٥٠٠٠	١٢٠ متر	٠٫٨٠ %		
٣٦	يمين شمال	العشرين	٢١٩٠ ٢١٩٠	٢٤١٠ ٢٤١٠	أنعام أحمد حسين عبده محمد دعواه	٦٠٠	١٠٠٠٠ ١٥٠٠٠	١٢٠ متر ١٢٠ متر	١٫٢ % ٠٫٨٠ %		

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٣٧	يمين	العتري	٢٣١٠	٢٣٩٠	جيلي						
٣٨	شمالي	العتري	٢٣١٠	٢٣٩٠	عبدالرحمن حميد سيت	٤٥٠	١٠٠٠٠	٩٠ متر٢	٠,٩٪		
٣٩	يمين	العتري	٢٣٩٠	٢٤٩٠	صالح عبدالرحمن عبدالكريم	٥٠٠	١١٠٠٠	١٠٠ متر٢	٠,٩٠٪		صالح عبدالرحمن
٤٠	شمال	"	٢٣٩٠	٢٤٩٠	صالح عبدالرحمن عبدالكريم	٥٠٠	١١٠٠٠	١٠٠ متر٢	٠,٩٠٪		صالح عبدالرحمن
٤١	يمين	"	٢٣٩٠	٢٤٩٠	هزاع ديوان فارع	٥٠٠	١٢٠٠٠	١٠٠ متر٢	٠,٨٣٪		هزاع ديوان
٤٢	يمين	العتري	٢٤٩٠	٢٦٤٠	أحمد محمد سيت	٧٥٠	١١٠٠٠	١٥٠ متر٢	١,٣٦٪		
٤٣	شمالي	العتري	٢٤٩٠	٢٦٤٠	أحمد محمد سيت	٧٥٠	١١٠٠٠	١٥٠ متر٢	١,٣٦٪		
٤٤	يمين	الكبيسة	٢٦٤٠	٢٧٩٠	شاطف حيليه						
٤٥	شمال	الكبيسة	٢٦٤٠	٢٧٩٠	شاطف حيلة						
٤٦	يمين	الكبيسة	٢٧٩٠	٢٨٩٠	هزاع ديوان فارع	٥٠٠	١٢٠٠٠	١٠٠ متر٢	٠,٨٣٪		محمد ديوان فارع
٤٧	شمال	الكبيسة	٢٧٩٠	٢٨٩٠	هزاع ديوان فارع	٥٠٠	١٢٠٠٠	١٠٠ متر٢	٠,٨٣٪		محمد ديوان فارع
٤٨	يمين	الكبيسة	٢٨٩٠	٣٠١٠	منازل مواطنين						

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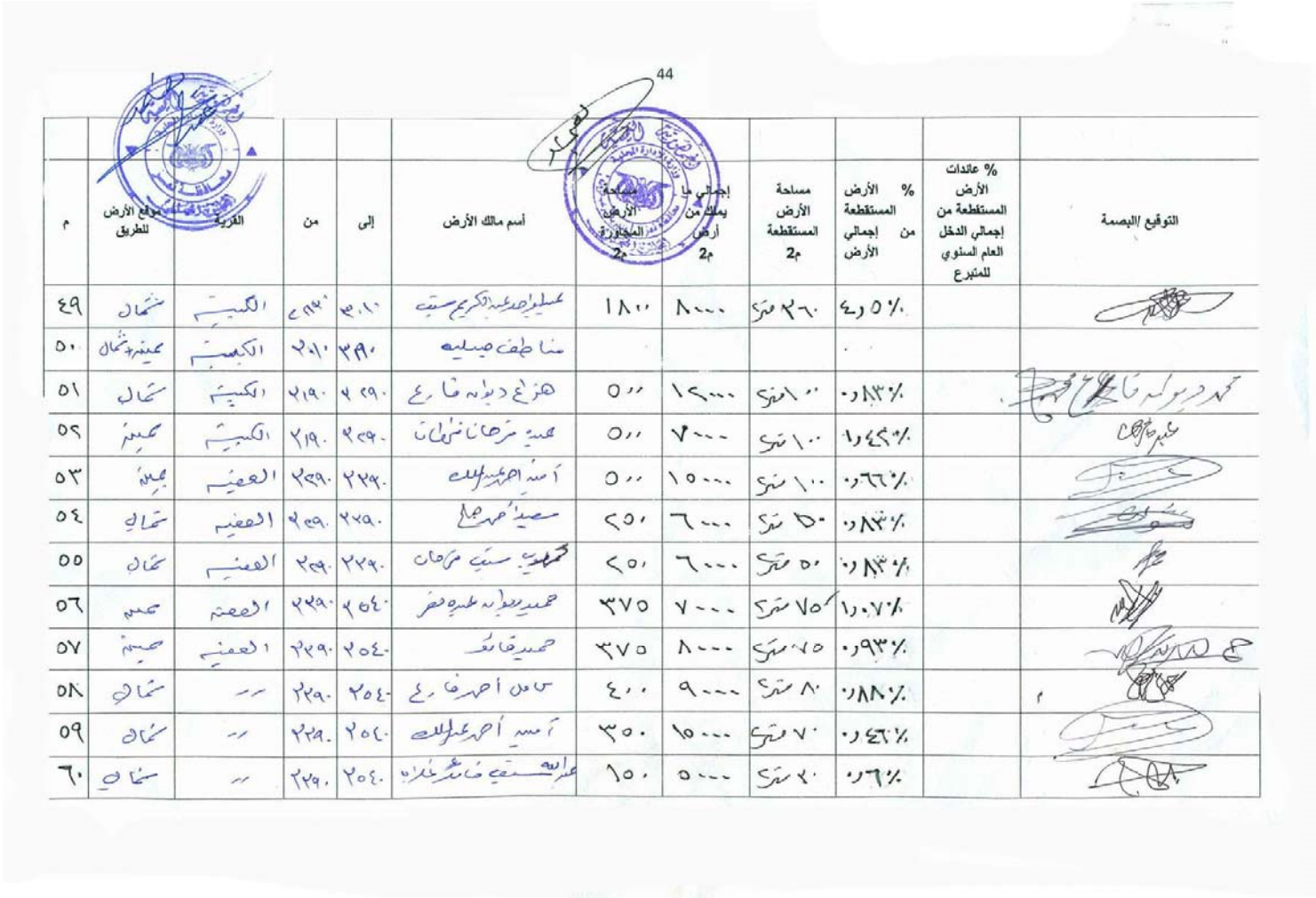

م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٤٩	شمال	الكبيسة	٢٢٩٠	٣٠١٠	عبدالواحد عبدالكريم سيف	١٨٠٠	٨٠٠٠	٢٦٠ متر٢	٤٫٥٪		
٥٠	يمين+شمال	الكبيسة	٢٠١٠	٣٢٩٠	مناطف جبليه						
٥١	شمال	الكبيسة	٢١٩٠	٢٢٩٠	هزاع ديوان فارع	٥٠٠	١٢٠٠٠	١٠٠ متر٢	٠٫٨٣٪		محمد ديوان فارع
٥٢	يمين	الكبيسة	٢١٩٠	٢٢٩٠	حميد فرحان فرحان	٥٠٠	٧٠٠٠	١٠٠ متر٢	١٫٤٢٪		عبدالله
٥٣	يمين	العفيه	٢٢٩٠	٢٢٩٠	أمين أحمد عبدالملك	٥٠٠	١٥٠٠٠	١٠٠ متر٢	٠٫٦٦٪		
٥٤	شمال	العفيه	٢٢٩٠	٢٢٩٠	سعيد أحمد صالح	٢٥٠	٦٠٠٠	٥٠ متر٢	٠٫٨٣٪		
٥٥	شمال	العفيه	٢٢٩٠	٢٢٩٠	محبوب سيف فرحان	٢٥٠	٦٠٠٠	٥٠ متر٢	٠٫٨٣٪		
٥٦	يمين	العفيه	٢٢٩٠	٢٥٤٠	حميد ديوان عبده نصر	٣٧٥	٧٠٠٠	٧٥ متر٢	١٫٠٧٪		
٥٧	يمين	العفيه	٢٢٩٠	٢٥٤٠	حميد قائد	٣٧٥	٨٠٠٠	٧٥ متر٢	٠٫٩٣٪		
٥٨	شمال	"	٢٢٩٠	٢٥٤٠	كامل أحمد فارع	٤٠٠	٩٠٠٠	٨٠ متر٢	٠٫٨٨٪		
٥٩	شمال	"	٢٢٩٠	٢٥٤٠	أمين أحمد عبدالملك	٣٥٠	١٥٠٠٠	٧٠ متر٢	٠٫٤٦٪		
٦٠	شمال	"	٢٢٩٠	٢٥٤٠	عبدالله سيف قائد غلاب	١٥٠	٥٠٠٠	٢٠ متر٢	٠٫٦٪		

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٦١	يمين	العفيفة	٢٥٤٠	٢٦٤٠	سعيد قائد	٥٠٠	٦٠٠٠	١٠٠ متر٢	١,٦٦٪		
٦٢	يمين	العفيفة	٢٥٤٠	٢٦٤٠	عبده حسن سيف	٥٠٠	٥٠٠٠	١٠٠ متر٢	٢٪		
٦٣	شمال	العفيفة	٢٥٤٠	٢٦٤٠	علي عبدالله حسن	٥٠٠	٩٠٠٠	١٠٠ متر٢	١,١٪		
٦٤	شمال	العفيفة	٢٥٤٠	٢٦٤٠	محمد عبدالجليل فرحان	٥٠٠	٦٠٠٠	١٠٠ متر٢	١,٦٪		
٦٥	يمين	"	٢٦٤٠	٢٧٤٠	أحمد سعيد فرحان	٧٥٠	١٠٠٠٠	١٥٠ متر٢	١,٥٪		
٦٦	شمال	"	٢٦٤٠	٢٧٤٠	سيف فرحان ناجي	٧٥٠	٩٠٠٠	١٥٠ متر٢	١,٦٪		
٦٧	شمال	"	٢٦٤٠	٢٧٤٠	عبدالله عبدالخالق	٥٠٠	٥٠٠٠	١٠٠ متر٢	٢٪		
٦٨	يمين	وادي المصنع	٢٧٤٠	٢٨٤٠	أمين أحمد عبدالملك	٧٥٠	١٥٠٠٠	١٥٠ متر٢	١٪		
٦٩	شمال	" "	٢٧٤٠	٢٨٤٠	حميد أحمد الصوفي	٧٥٠	٩٠٠٠	١٥٠ متر٢	١,٦٪		
٧٠	يمين	" "	٢٨٤٠	٢٩٤٠	أمين أحمد عبدالملك	٧٥٠	١٥٠٠٠	١٥٠ متر٢	١٪		
٧١	شمال	"	٢٨٤٠	٢٩٤٠	أحمد [illegible]	٧٥٠	١٠٠٠٠	١٥٠ متر٢	١,٥٪		
٧٢	شمال	"	٢٩٤٠	٣٠٤٠	محمود حميد قائد عبدالله أحمد سيف	٥٠٠ ٥٠٠	٥٠٠٠ ٥٠٠٠	١٠٠ متر٢ ١٠٠ متر٢	٢٪ ٢٪		

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٧٣	شمال	وادي الصنع	٢٩٤٠	٤٠٤٠	إبراهيم عبد الرضا عيل	٥٠٠	٦٠٠٠	١٠٠ متر٢	١٫٦٪		
٧٤	يمين	وادي الصنع	٤٠٤٠	٤٠١٤٠	حميد قائد سلفان	٣٧٥	٨٠٠٠	٧٥ متر٢	٠٫٩٣٪		
٧٥	يمين	وادي الصنع	٤٠٤٠	٤١٤٠	أمين غالب	٣٧٥	٧٠٠٠	٧٥ متر٢	١٫٠٧٪		
٧٦	شمال	وادي الصنع	٤٠٤٠	٤١٤٠	مرحمان زحامة	٣٧٥	٨٠٠٠	٧٥ متر٢	٠٫٩٣٪		
٧٧	شمال	وادي الصنع	٤١٤٠	٤٢٤٠	عمير مرد بوام	٤٠٠	٩٠٠٠	٨٠ متر٢	٠٫٨٨٪		
٧٨	شمال	وادي الصنع	٤١٤٠	٤٢٤٠	عبد الله ديوان عامر	٤٠٠	٧٠٠٠	٨٠ متر٢	١٫١٤٪		
٧٩	شمال	وادي الصنع	٤١٤٠	٤٢٤٠	سعيد عبد الله	٤٠٠	٦٠٠٠	٨٠ متر٢	١٫٣٣٪		
٨٠	يمين	وادي الصنع	٤١٤٠	٤٢٤٠	محمد أحمد عبد الملك	٣٧٥	١٦٠٠٠	٧٥ متر٢	٠٫٤٦٪		
٨١	يمين	وادي الصنع	٤١٤٠	٤٢٤٠	محمد عبد الجليل زحامة	٣٧٥	٦٠٠٠	٧٥ متر٢	١٫٢٥٪		
٨٢	يمين	وادي الصنع	٤١٤٠	٤٢٤٠	عبد الله [illegible]	٣٧٥	١٠٠٠٠	٧٥ متر٢	٠٫٧٥٪		
٨٣	يمين	وادي الصنع	٤٢٤٠	٤٣٤٠	إسماعيل حميد محمد	٥٠٠	٢٠٠٠	١٠٠ متر٢	٠٫٨٣٪		
٨٤	يمين	وادي الصنع	٤٢٤٠	٤٣٤٠	سعيد حميد محمد قائد	٥٠٠	٩٠٠٠	١٠٠ متر٢	١٫١٪		

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م	موقع الأرض للطريق	القرية	من	إلى	أسم ملك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٨٥	شمال	وادي الصنع	٤٢٤٠	٤٢٤٠	آمنة أحمد عبدالملك	٤٥٠	١٥٠٠٠	٩٠ متر٢	٠,٦٠٪		
٨٦	شمالي	وادي الصنع	٤٢٤٠	٤٣٤٠	عبده حمد تاجي	٣٧٥	٧٠٠٠	٧٥ متر٢	١,٠٧٪		
٨٧	شمالي	"	٤٢٤٠	٤٣٤٠	علي عبدالله حسن	٤٠٠	٩٠٠٠	٨٠ متر٢	٠,٨٨٪		
٨٨											
٨٩											
٩٠											
٩١											
٩٢											
٩٣											
٩٤											
٩٥											
٩٦											

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من الأرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٤٠	شق جديد	المحل وادي السحي									
٤١	شق جديد	المحل وادي السحي									
٤٢	شق جديد	المحل وادي السحي									
٤٣	شق جديد	المحل وادي السحي									
٤٤	شق جديد	المحل وادي السحي									

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م	موقع الأرض للطريق	القرية	من	إلى	أسم مالك الأرض	مساحة الأرض المجاورة م2	إجمالي ما يملك من أرض م2	مساحة الأرض المستقطعة م2	% الأرض المستقطعة من إجمالي الأرض	% عائدات الأرض المستقطعة من إجمالي الدخل العام السنوي للمتبرع	التوقيع /البصمة
٤٥	شق جديد	المحل وادي السحي			حزام عبد الكريم						
٤٦	شق جديد	المحل وادي السحي			محمد بن محمد ناصر						
٤٧	" "	" "			سعيد محمد حميد						
٤٨	شق جديد	المحل وادي السحي			[illegible]						
٤٩	شق جديد	المحل وادي السحي			علي عبد الكريم						
٥٠	شق جديد	المحل وادي السحي			رياض محمد سيف						
٥١	" "	" "			[illegible]						

Annex 5: Land Donation Process English version

Table Showing the total property of the Donation Persons, and the Percentage of land Loss

Sr. No.	Orientation W.R.T Road Center Line	Village Name	Station From	Station To	Affected Length (M)	Name of Donation Persons	Total Property (m2))	Land Donation Area (m2)	%Loss of Property
1	Left	Al Makhadah	00+000	00+100	100	Saeed Naji Naser	800	100	1.25%
2	Left	Al Makhadah	00+100	00+150	50	Abdulrahem Saif Ghaleb	10000	50	0.50%
3	Left	Al Makhadah	00+150	00+170	20	Mohameed Abdulsalam	20000	20	0.10%
4	Right & Left	Al Khudeirah	00+170	00+185	15	Saeed Abdulwahab	20000	15	0.75
5	Left	Al Khudeirah	00+200	00+280	80	Abduljalel Hamod	30000	80	0.28%
6	Right	Al Khudeirah	00+200	00+265	65	Ali Saif Farhan	900	65	0.70%
7	Left	Al Khudeirah	00+300	00+320	20	Ghaleb Abdulbari	10000	20	0.20%
8	Left	Al Khudeirah	00+340	00+410	70	Mohameed Abdulwahab &	40000	70	0.17%
9	Right	Al Khudeirah	00+300	00+400	100	Mohameed Abdulsalam &	20000	100	0.50%
10	Left	Al Khudeirah	00+390	00+420	30	Farhan Abdulbari	10000	30	0.30%
11	Left	Al Khudeirah	00+420	00+427	7	Mohameed Abdulsalam	2000	7	0.04%
12	Left	Al Khudeirah	00+427	00+452	25	Abdullah Mohameed	1000	25	0.25%
13	Left	Al Khudeirah	00+452	00+495	43	Farhan Abdulbari	10000	43	0.43%
14	Left	Al Khudeirah	00+495	00+520	25	Sarhan Bagash	8000	25	0.31%
15	Right	Al Khudeirah	00+400	00+520	120	Farhan Abdulbari	10000	120	1.20%
16	Left	Al Khudeirah	00+520	00+550	30	Hasan Abdulgani & Tawfek	7000	30	0.42%

Sr. No.	Orientation W.R.T Road Center Line	Village Name	Station From	Station To	Affected Length (M)	Name of Donation Persons	Total Property (m2))	Land Donation Area (m2)	%Loss of Property
17	Left	Al Khudeirah	00+550	00+560	10	Hasan Abdulgani	7000	10	0.01%
18	Left	Annajd Al Abyad	00+560	00+600	40	Mohameed Abdulsalam	20000	40	0.20%
19	Right	Annajd Al Abyad	00+520	00+690	170	Mohameed Abdulsalam	20000	170	0.80%
20	Left	Annajd Al Abyad	00+700	00+750	50	Ali Farhan Saif	9000	50	0.50%
21	Right	Annajd Al Abyad	00+690	00+810	120	Abdulwahab Farhan	40000	120	0.30%
22	Left	Annajd Al Abyad	00+750	00+815	65	Abdulwahab Farhan	40000	65	16%
23	Left	Annajd Al Abyad	00+815	00+850	35	Ali Farhan Saif	9000	35	0.30%
24	Right	Annajd Al Abyad	00+810	00+890	80	Khaled Saeed Saif	8000	80	1%
25	Right	Annajd Al Abyad	00+880	00+950	70	Warathat Ali Qassim	20000	70	0.35%
26	Left	Annajd Al Abyad	00+850	00+995	145	Qaed Saeed Naser	15000	145	1%
27	Right	Annajd Al Abyad	00+980	01+030	50	Abduljalel Mohameed	9000	50	0.50%
28	Right	Kahfat Al Ajbaar	01+000	01+100	100	Dabwan Mohameed Qaed	10000	100	1%
29	Right	Kahfat Al Ajbaar	01+100	01+140	40	Hameed Mohameed Saif	8000	40	0.50%
30	Right	Kahfat Al Ajbaar	01+140	01+146	6	Mohameed Sarhan Gasar	6000	6	0.01%

Sr. No.	Orientation W.R.T Road Center Line	Village Name	Station From	Station To	Affected Length (M)	Name of Donation Persons	Total Property (m2))	Land Donation Area (m2)	%Loss of Property
31	Right	Kahfat Al Ajbaar	01+146	01+230	84	Hamod Saif Saleh	7000	84	1.20%
32	Left	Kahfat Al Ajbaar	01+170	01+230	60	Dabwan Mohameed Qaed	10000	60	0.60%
33	Right	Kahfat Al Ajbaar	01+235	01+260	25	Qassim Abdulgani	5000	25	0.50%
34	Right	Kahfat Al Ajbaar	01+270	01+330	60	Abdoh Saeed sons	8000	60	0.75%
35	Left	Kahfat Al Ajbaar	01+230	01+340	110	Saeed Naser & brother	17000	110	0.64%
36	Left	Tor Al Teef	01+340	01+350	10	Abdel Galil Mohammad	9000	10	0.11%
37	Left	Tor Al Teef	01+350	01+400	50	Abdel Qawi Hamed	5000	50	1%
38	Right	Tor Al Teef	01+330	01+400	70	Khaled Ahmad Farhan	7000	70	1%
39	Left	Tor Al Teef	01+400	01+415	15	Dabwan Qa'ed	5000	15	0.30%
40	Right	Tor Al Teef	01+400	01+440	40	Abdu Ali Mohammad	6000	40	0.60%
41	Left	Tor Al Teef	01+415	01+495	80	Abdu Ali Mohammad	6000	80	1.30%
42	Left	Tor Al Teef	01+495	01+545	50	Mohammad Qasem	7000	50	0.70%
43	Left	Tor Al Teef	01+545	01+600	55	Mohammad Abdel Wahab	9000	55	0.20%
44	Left	Tor Al Teef	01+600	01+610	10	Mohammad Qasem	7000	10	0.14%
45	Left	Al Harazah	01+610	01+630	20	Mohammad Abdel Wahab	9000	20	0.27%
46	Right	Al Harazah	01+440	01+640	200	Mohammad Qasem	7000	200	2.80%
47	Left	Al Harazah	01+630	01+655	25	Hammod Abdel Rahem	5000	25	0.50%
48	Left	Al Harazah	01+655	01+680	25	Mohammad Abdel Wahab	9000	25	27%
49	Right	Al Harazah	01+640	01+700	60	Mohammad Abdel Wahab	9000	60	0.60%
50	Left	Al Harazah	01+675	01+750	75	Sa'eed Naser Qasem	17000	75	0.44%
51	Left	Al Harazah	01+750	01+800	50	Sarhan Qa'ed Saleh	7000	50	0.70%
52	Left	Al Harazah	01+800	01+840	40	Abed Farhan Moqbel	5000	40	0.80%

Sr. No.	Orientation W.R.T Road Center Line	Village Name	Station		Affected Length (M)	Name of Donation Persons	Total Property (m2))	Land Donation Area (m2)	%Loss of Property
			From	To					
53	Left	Al Harazah	01+840	01+855	15	Ahmad Farhan Moqbel	5000	15	0.30%
54	Left	Al Harazah	01+855	01+900	45	Ghaleb Farhan Moqbel	5000	45	0.90%
55	Left	Al Harazah	01+700	01+980	280	Ghaleb Farhan Moqbel	5000	280	5.60%
56	Left	Al Homaikah	01+900	01+980	80	Sa'eed Naser Qasem	17000	80	0.47%
57	Left	Al Homaikah	01+980	02+000	20	Ghaleb Farhan Moqbel	5000	20	0.40%
58	Left	Al Homaikah	02+020	02+050	30	Hammod Abdel Salam	6000	30	0.50%
59	Right	Al Homaikah	01+980	02+070	90	Abdel Galil Mohammad	9000	90	1%
60	Left	Al Homaikah	02+050	02+080	30	Ali Al Naqeeb	5000	30	0.60%
61	Left	Al Homaikah	02+080	02+120	40	Mohammad Sarhan Gasar	6000	40	0.60%
62	Left	Al Homaikah	02+120	02+165	45	Qa'ed Sa'eed Ahmad Moqbel	7000	45	0.60%
63	Left	Al Homaikah	02+165	02+200	35	Ali Ahmed Moqbel	7000	35	0.50%
64	Right	Al Homaikah	02+070	02+210	140	Ali Ahmed Moqbel	7000	140	2%
65	Left	Al Homaikah	02+200	02+240	40	Ali Ahmed Moqbel	7000	40	0.50%
66	Left	Al Homaikah	02+240	02+250	10	Yaseen Ahmed Thabet	5000	10	0.20%
67	Left	Al Homaikah	02+210	02+255	45	Zen & Morjanah sons	4000	45	1%
68	Left	Al Homaikah	02+250	02+265	15	Ali Ahmad Moqbel	7000	15	0.20%
69	Right	Al Homaikah	02+255	02+295	40	Yaseen Ahmed Thabet	5000	40	0.90%
70	Left	Al Homaikah	02+265	02+300	35	Qa'ed Sa'eed Ahmad	7000	35	0.50%
71	Left	Al Homaikah	02+300	02+305	5	Qasem Abdel Ghanee Naser	5000	5	0.10%
72	Right	Al Homaikah	02+295	02+335	40	Zen & Morjanah sons	4000	40	1%
73	Left	Al Homaikah	02+305	02+350	45	Mohammad Sarhan Gasar	6000	45	0.70%
74	Left	Al Homaikah	02+350	02+390	40	Sa'eed Naser Qasem	17000	40	0.23%

Sr. No.	Orientation W.R.T Road Center Line	Village Name	Station		Affected Length (M)	Name of Donation Persons	Total Property (m2))	Land Donation Area (m2)	%Loss of Property
			From	To					
75	Left	Al Homaikah	02+335	02+390	55	Sa'eed Naser Qasem	17000	55	0.30%
76	Right	Al Homaikah	02+390	02+400	10	Qa'ed Ahmad Abdoh	600	10	1.60%
77	Left	Al Homaikah	02+390	02+410	20	Qa'ed Sa'ed Ahmed	7000	20	0.50%
78	Right	Al Homaikah	02+400	02+417	17	Qa'ed Sa'ed Ahmed	7000	17	0.24%
79	Left	Al Homaikah	02+410	02+440	30	Adel Saleh	5000	30	0.60%
80	Right	Al Homaikah	02+417	02+427	10	Yaseen Ahmad Thabet	5000	10	0.50%
81	Right	Al Homaikah	02+427	02+447	20	Naser Qasem sons	17000	20	0.11%
82	Left	Al Homaikah	02+440	02+490	50	Abdel Da'em Qa`ed	7000	50	0.70%
83	Right	Al Homaikah	02+447	02+500	53	Qa'ed Abed Hameed	5000	53	1%
84	Right	Al Homaikah	02+500	02+520	20	Yaseen Ahmad Thabet	5000	20	0.40%
85	Right	Al Khoothir	02+520	02+600	80	Abdel Da'em Qa`ed	7000	80	1.10%
86	Right	Al Khoothir	02+600	02+606	6	Adel Saleh Abdoh	4000	6	0.15%
87	Right	Al Khoothir	02+606	02+612	6	Abdel Da'em Qa`ed	7000	6	0.08%
88	Right	Al Khoothir	02+612	02+617	5	Qa'ed Saleh Abdoh	5000	5	0.10%
89	Right	Al Khoothir	02+617	02+623	6	Adel Saleh Abdoh	4000	6	0.15%

Annex 6: List of Affected People Attendance sheet

لجنة (١)

بسم الله الرحمن الرحيم

نحن ملاك الأراضي الواقعة جوار الطريق الحالية (هجده – رسيان – المذاخنة– ميراب – الاعروض– وادي الماء – الهياجم) نساهم بالتبرع بالارض الخاصة بتوسعة الطريق لغرض السفلتة بحسب المخطط. وقد تم هذا التبرع بشكل طوعيّ، ومساهـة منا في تنفيذ هذا المشروع الهام لمنطقتنا، والذي يعتبر مصلحة عامة يستفيد منه الجميع.

كما أننا نلتزم بالمساعدة في تنفيذ المشروع وتذليل كل الصعاب للجهة المنفذة والمشرفة.

ومرفقا بهذا التعهد توقيعاتنا وبصماتنا التي تثبت ذلك.

والله الموفق

تم هذا في تاريخ:

المكان:

أعضاء اللجنة المشرفة:

١- ...

٢- ...

٣- ...

٤- ...

إشراف كلا من:

عبدالرحمن سلطان فرحان	عبدالناصر المودع	محمد سيف عبد العطيف
رئيس اللجنة	الاستشاري الاجتماعي/الاقتصادي	عضو مجلس النواب

لجنة (٢)

بسم الله الرحمن الرحيم

نحن ملاك الأراضي الواقعة جوار الطريق الحالية (هجده – رسيان – المخاضة– ميراب – الاعروض– وادي الماء – الهياجم) نساهم بالتبرع بالارض الخاصة بتوسعة الطريق لغرض السفلتة بحسب المخطط. وقد تم هذا التبرع بشكل طوعيّ، ومساهمة منا في تنفيذ هذا المشروع الهام لمنطقتنا، والذي يعتبر مصلحة عامة يستفيد منه الجميع.

كما أننا نلتزم بالمساعدة في تنفيذ المشروع وتذليل كل الصعاب للجهة المنفذة والمشرفة.

ومرفقا بهذا التعهد توقيعاتنا وبصماتنا التي تثبت ذلك.

والله الموفق

تم هذا في تاريخ:

المكان:

أعضاء اللجنة المشرفة:

١- ... ياسر علي عقلان

٢- ... احمد عبده سيد صالح

٣- ... خالد احمد عبده فرحان

٤- ... منصور عبد الوهاب ناصر

٥- محمد علي خالد

٦- عبد الرقيب عبد الله ثابت

إشراف كلاً من:

عبدالرحمن سلطان فرحان	عبدالناصر المودع	محمد سيف عبد اللطيف
رئيس اللجنة	الاستشاري الاجتماعي/الاقتصادي	عضو مجلس النواب

لجنة (٣)

بسم الله الرحمن الرحيم

نحن ملاك الأراضي الواقعة جوار الطريق الحالية (هجده – رسيان – المخاضة– ميراب – الاعروض– وادي الماء – الهياجم) نساهم بالتبرع بالارض الخاصة بتوسعة الطريق لغرض السفلتة بحسب المخطط. وقد تم هذا التبرع بشكل طوعيّ، ومساهمة منا في تنفيذ هذا المشروع الهام لمنطقتنا، والذي يعتبر مصلحة عامة يستفيد منه الجميع.

كما أننا نلتزم بالمساعدة في تنفيذ المشروع وتذليل كل الصعاب للجهة المنفذة والمشرفة.

ومرفقا بهذا التعهد توقيعاتنا وبصماتنا التي تثبت ذلك.

والله الموفق

تم هذا في تاريخ:

المكان: ميراب – العروض

أعضاء اللجنة المشرفة:

١- سيف قائد نائف

٢- أحمد حازم حميد

٣- عبد الرقيب عبد الحميد ٢٠١٤م

٤- عبد الغني عبد الله مسعد

٥- عبد المجيد صالح عبد الرحمن

إشراف كلا من:

عبدالرحمن سلطان فرحان	عبدالناصر المودع	محمد سيف عبد اللطيف
رئيس اللجنة	الاستشاري الاجتماعي/الاقتصادي	عضو مجلس النواب

لجنة (٤)

بسم الله الرحمن الرحيم

نحن ملاك الأراضي الواقعة جوار الطريق الحالية (هجده – رسيان – المخاضة– ميراب – الاعروض– وادي الماء – الهياجم) نساهم بالتبرع بالارض الخاصة بتوسعة الطريق لغرض السفلتة بحسب المخطط. وقد تم هذا التبرع بشكل طوعيّ، ومساهمة منا في تنفيذ هذا المشروع الهام لمنطقتنا، والذي يعتبر مصلحة عامة يستفيد منه الجميع.

كما أننا نلتزم بالمساعدة في تنفيذ المشروع وتذليل كل الصعاب للجهة المنفذة والمشرفة.

ومرفقا بهذا التعهد توقيعاتنا وبصماتنا التي تثبت ذلك.

والله الموفق

تم هذا في تاريخ:

المكان:

أعضاء اللجنة المشرفة:

١- محمد طاهر محمد هزاع

٢- محمد ناجي عبد العزيز

٣- جهاد محمد علي صالح سفيان

٤- عبد الحكيم عبد الجليل عبد الرحيم

إشراف كلا من:

عبدالرحمن سلطان فرحان	عبدالناصر المودع	محمد سيف عبد اللطيف
رئيس اللجنة	الاستشاري الاجتماعي/الاقتصادي	عضو مجلس النواب

لجنة (٥)

بسم الله الرحمن الرحيم

نحن ملاك الأراضي الواقعة جوار الطريق الحالية (هجده – رسيان – المخاضة – ميراب – الاعروض – وادي الماء – الهياجم) نساهم بالتبرع بالأرض الخاصة بتوسعة الطريق لغرض السلفتة بحسب المخطط وقد تم هذا التبرع بشكل طوعي ، ومساهمة منا في تنفيذ هذا المشروع الهام لمنطقتنا ، والذي يعتبر مصلحة عامة يستفيد منه الجميع.

كما أننا نلتزم بالمساعدة في تنفيذ المشروع وتذليل كل الصعاب للجهة المنفذة والمشرفة .

ومرفقا بهذا التعهد توقيعاتنا وبصماتنا التي تثبت ذلك.

والله الموفق

تم هذا في تاريخ: ٧/٢/٢٠١٤م

المكان: وادي الماء - الهياجم

أعضاء اللجنة المشرفة:

١- يمين فرحان عبدالجليل
٢- عيسى حميد ديوان سيف
٣- صالح محمد نعمة
٤- إسماعيل حميد محمد الحميري

إشراف كلا من :

عبدالرحمن سلطان فرحان	عبدالناصر المودع	محمد سيف عبداللطيف	عبدالحميد محمد فرحان
رئيس اللجنة	الاستشاري الاجتماعي / الاقتصادي	عضو مجلس النواب	عضو مجلس النواب

بسم الله الرحمن الرحيم

الجمهورية اليمنية
مجلس النواب
دائرة رقم ( )

الرقم:
التاريخ:
الموافق: ١٨/٢/٢٠١٤م

الأخ/ مدير برنامج تنمية الطرق الريفية المحترم

تحية طيبة وبعد

رداً على مذكرتكم بتاريخ ١٠/٢/٢٠١٤م الواردة إلينا بخصوص تغير المسار في منطقة الأجشوب الثقيل (القبة) والذي قام به المجلس المحلي نود الإحاطة أنه لا يوجد مانع لدينا من تغير المسار لمصلحة الطريق ولا يوجد أي ضرر على أي مستفيد من المنطقة وتقبلوا خالص تحياتنا

رئيس لجنة المستفيدين بعضو مجلس النواب

١٨/٢/٢٠١٤

محمد سيف عبد اللطيف

Annex 7: Survey sample Form

الاستشارات

١- الاسم: (اختياري) سمير يوسف نعمان

٢- المهنة : مدرس

٣- مصادر الدخل الأخرى إن وجد: وظيفة

٤- هل هناك مشاكل من مشروع الطريق؟ لا يمكن ان تكون هناك مشاكل

أ- حوادث من السيارات. (نعم) (لا)

ب- زيادة الضوضاء اثناء العمل. (نعم) (لا)

ت- خسارة محتملة من اقتطاع ارض (نعم) (لا)

ث- الرغبة بالتبرع الطوعي من الأرض لغرض التوسعة (نعم) (لا) .....

ج- هل هناك تأثير للطريق على مجاري المياه. (لا) (نعم) .....

ح- أي ازعاج من وجود العمال والمعدات اثنا العمل. (لا) (نعم).....

خ- أي مشاكل اخرى؟.....لا.....

٥- ماهي أهمية الطريق بالنسبة لك:

أ- ... توفير وسيلة نقل غير مكلفة

ب-.... نشر التعليم في الجامعات

٦- ما هي مساهمتك لإنجاح مشروع الطريق؟ استقطاع أرض - نحن رهن الطلب لا نستطيع تقديمه

الاستشارات

١- الاسم: (اختياري) علي هزاع عبد اللطيف

٢- المهنة : مزارع

٣- مصادر الدخل الأخرى إن وجد: / غربة خارج الوطن

٤- هل هناك مشاكل من مشروع الطريق؟ ✗

أ- حوادث من السيارات. (نعم) (لا)

ب- زيادة الضوضاء اثناء العمل. (نعم) (لا)

ت- خسارة محتملة من اقتطاع ارض (نعم) (لا)

ث- الرغبة بالتبرع الطوعي من الأرض لغرض التوسعة (نعم) (لا) .....

ج- هل هناك تأثير للطريق على مجاري المياه. (لا) (نعم) .....

ح- أي ازعاج من وجود العمال والمعدات اثنا العمل. (لا) (نعم).....

خ- أي مشاكل اخرى؟.....✗.....

٥- ماهي أهمية الطريق بالنسبة لك:

أ- ... تقريب المسافة وتكلفة السفر تقل

ب-.... التعليم (اطلاب مسيره)

٦- ما هي مساهمتك لإنجاح مشروع الطريق؟

أرض -

الاستشارات

١- الاسم: (اختياري) ناجد سيف محمد

٢- المهنة : بدون

٣- مصادر الدخل الأخرى إن وجد: من أنباءة

٤- هل هناك مشاكل من مشروع الطريق؟ لا

أ- حوادث من السيارات. (نعم) (لا)

ب- زيادة الضوضاء اثناء العمل. (نعم) (لا)

ت- خسارة محتملة من اقتطاع ارض (نعم) (لا)

ث- الرغبة بالتبرع الطوعي من الأرض لغرض التوسعة (نعم) (لا) .....

ج- هل هناك تأثير للطريق على مجاري المياه. (لا) (نعم) .....

ح- أي ازعاج من وجود العمال والمعدات اثنا العمل. (لا) (نعم).....

خ- أي مشاكل اخرى؟.....

٥- ماهي أهمية الطريق بالنسبة لك:

أ- ... سهولة المواصلة وأمنه من التقطع - سهولة اسعاف المرضى -

ب-.... التعليم ا يستحق الطلاب في الجامعات لمواصلة الدراسة

٦- ما هي مساهمتك لإنجاح مشروع الطريق؟

الأرض - التطوع لما نقدر عليه

الاستشارات

١- الاسم: (اختياري) [illegible]

٢- المهنة : [illegible]

٣- مصادر الدخل الأخرى إن وجد: -

٤- هل هناك مشاكل من مشروع الطريق؟ لا

أ- حوادث من السيارات. (نعم) (لا)

ب- زيادة الضوضاء اثناء العمل. (نعم) (لا)

ت- خسارة محتملة من اقتطاع ارض (نعم) (لا)

ث- الرغبة بالتبرع الطوعي من الأرض لغرض التوسعة (نعم) (لا) .....

ج-هل هناك تأثير للطريق على مجاري المياه. (لا) (نعم) .....

ح-أي ازعاج من وجود العمال والمعدات اثنا العمل. (لا) (نعم).....

خ-أي مشاكل اخرى؟.....X.....

٥-ماهي أهمية الطريق بالنسبة لك:

أ- ... [illegible]

ب-.... [illegible]

٦-ما هي مساهمتك لإنجاح مشروع الطريق؟ X

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