APPENDIX 14-1

PRIORITIZATION CRITERIA FOR LOCAL ROAD

Appendix 14-1

PRIORITIZATION CRITERIA FOR LOCAL ROAD

14.1.1 Procedure

Great efforts have been made for constructing the primary and secondary roads during last two (2) decades in Sultanate of Oman. As the results, the primary and secondary road networks are almost developed although there are still needs for some improvement and construction newly. However, improvement of local roads is now under-way. Therefore, in this chapter, priority process of those local roads is presented below;

The priority process consists of the following steps;

Step 1: Collection of data / information of Local Roads using by Application Format

These data and information of the local road as shown in Form 1 are used not only for local road identification but also for local road appraisal/prioritization.

Step 2: Listing of Local Road Projects

Based on the collected data/information in Step 2, listing of the local road project as shown in Form 2 is made. This listing shall be preferably made by the Governorate/Region.

Step 4: Computation of Scoring by Projects

The scoring of selected factors as shown in Form 3 is made and total score shall be computed by each local road.

Step 5: Prioritization of the Local Road Project

Based on the scoring made in Step 4, the prioritization of the local road projects is determined. In this step, political factor shall be also taken into accounts.

Step 6: Implementation Program

Based on the prioritization of the local road and availability of budget of each year, the implementation program for local roads shall be formulated.

14.1.2 Prioritization Criteria

Principally, prioritization criteria for road project consist of the following factors:

a. Construction cost factor,
b. Traffic factor,
c. Economic factor,
d. Social factor, and
e. Other factor such as national security factor, political factor, etc.

In the formulation of the master plan, the above-mentioned prioritization criteria were adopted for primary and secondary roads. However, since local roads are serviced for smaller areas and less traffic compared with the primary and secondary roads, it is necessary to simplify prioritization criteria.

Based on the field investigation and findings from the study, the following prioritization criteria for the local roads are proposed in this study:

a. Magnitude of Construction Cost
   - Magnitude of construction cost: Magnitude of construction cost is one of basic factor of prioritization. If construction cost of local road A is more expensive than that of local road B, the local road A shall be given to higher priority than the local road B.

b. Access to trunk road:
   - Access to trunk road is one of prioritization factors. If the candidate local road to be improved is a direct access to trunk one, this local road shall be given to higher priority.

c. Scale of Population Size
   - Scale of household population size: Population within influence area of the local road is a basic information and very important data. If population within the influence area of local road A is larger in scale than that of local road B, the local road A shall be given to higher priority than the local road B. The population data can be obtained from 'Socio-Economic Atlas (1993 population census base)' Information & Document Center, Ministry of Development, November 1997. Population census data in 2003 would be available by Ministry of National Economy.

d. Social factors

- Disparity index of household income: Poverty alleviation of rural peoples is one of important policy in the national development. If household income within the influence area of the local road will be able to obtain either statistically or actually, it can be considered very useful social factor for judging regional imbalance. If household income within the influence area of local road A is lower than that of local road B, the local road A shall be given to higher priority than the local road B in order to alleviate poverty of peoples.
- Distance from Wilayat Center: This is somewhat one of social imbalance factors. Wilayah center principally provides basic social infrastructural facilities such as local government offices, schools, health care centers, clinics, markets, etc. If distance of local road is far from Wilayat Center, it shall be higher priority due to receive a little social benefit from Wilayat Center.

e. Other factors

- Political factor: This is one of priority factors. But it shall not be depending on this factor.

14.1.3 Application Form

Form 1 shows the application form of the local roads. All candidate local roads to be improved shall be filled up all items in this Application Form. .

14.1.4 Listing of Candidate Local Roads

From 2 shows long list of candidate local road and their information and data. Based on collected application form of the candidate local roads, Form 12.1-2 shall be filled up.

14.1.5 Scoring of Candidate Local Roads

Form 3-1 shows an example of scoring of above mentioned factors. Based on the information / data collected in the above-mentioned step, scoring of each local road project is computed and filed up in Form 3-2.

Weight of each factor shall be considered to calculate the score of the candidate local roads taking into account its importance. Form 3-2 shows an example of weight of each factor. The scoring shall be made the following formula:

$SC_i = \Sigma SC_i^{Fk} X WE^{Fk}$

Where: SC_i: Score of local project road i

SC_i^{Fk}: Score of local road i of factor Fk

WE^{Fk}: Weight of factor Fk

14.1.6 Prioritization of the Local Road Projects

Prioritization of the local road projects shall be given in order of total scoring order of each factor.

14.1.7 Implementation Program of the Local Road

Based on the prioritization order of the local road and availability of budget of each year, the implementation program for local roads shall be formulated.

FORM 1

LOCAL ROAD PROJECT FORM

1. Name of Road……

2. Location: Wilayat ……., Governorate/Region……..

3. Administrative Classification of Project Road……. ……

4. Access to Trunk Road: a. Direct access to trunk road,
   b. Secondary Access to trunk road,
   c. Tertiary Access or More to trunk road

5. Distance to Wilayat Center……km

6. Total Length……..km

7. Road Data

Section	Length of Sub- section (km)	Terrain	Cross- Section Carriageway Width (m)	Surface Type	Surface Condition	Remarks

Notes: Terrain is classified as Flat, Rolling, and Mountainous
Surface Type: AC: Asphalt concrete pavement, BST: Bituminous surface treatment, G: Gravel surface, E: Earth road
Surface Condition: PP: Passable by passenger car, P4: Passable by 4-wheel drive vehicle, IM: Impassable

8. Socio-economic Data

		Total for Entire Area
Number of Houses Served		
Population Served		
	Omanie	
	Expatriate	
Average Household Income		
No. of Vehicles within Road Influence Area		

Note: Attached map indicating general location of proposed project

FORM 2

LISTING OF LOCAL ROAD PROJECT

Governorate / Region……

No.	Name of Project	Wilayah	Far from Wilayat Center (km)	Connection to Trunk Road	Road Data					Socio-Economic Data				Remarks
					Length of Road (km)	Terrain	Surface Type	Surface Condition	Construction Cost	No. of Villages	Population Served	% Share of Omanie	Av. HH Income	

FORM 3-1

SCORING OF FACTORS

	Evaluation Factor	Indicators	How to Measure	Score
1	Magnitude of Construction Cost	• Road improvement costs consisting improvement rehabilitation or new construction costs	• To estimate improvement cost of each local road (improvement, rehabilitation or new construction) using unit cost by terrain and surface type.	Scoring may be made as follows: Score 5: PC < RO 1.0 mil Score 4: RO 1.0 < PC < RO 2.5 mil Score 3: RO 2.5 < PC < RO 5.0 mil Score 2: RO 5.0 < PC < RO 10.0 mil Score 1: RO 10.0 < PC
2	Access to Trunk Road (Paved National Road)	• How to access trunk road (Paved national road)	• Road network configuration	Scoring may be made as follows: Score 5: Direct access Score 3: Secondary access Score 1: Tertiary and more access
3	Scale of Population	• Number of population within influence area of each local road	• Socio-economic Atlas published by Ministry of Information • To get information from '2003 Population Census'	Scoring may be made as follows: Score 5: PP > 2,000 Score 4: 2,000 > PP > 1,000 Score 3: 1,000 > PP > 500 Score 2: 500 > PP > 200 Score 1: 200 > PP
4	Imbalance of Household Income	• Disparity of average household income within influence area of each local road	• To get information from 'Household expenditure and income survey (HEIS)'	Scoring may be made as follows: Score 5: DI > 3.0 Score 4: 3.0 > DI > 2.0 Score 3: 2.0 > DI > 1.5 Score 2: 1.5 > DI > 1.0 Score 1: DI > 1.0
5	Distance From Wilayat Center	• Distance from Wilayat Center to the Local Road	• To measure Distance from Wilayat Center to the Local Road	Scoring may be made as follows: Score 5: DS > 50 km Score 4: 40km > DS > 30km Score 4: 30 km > DS > 20km Score 4: 20km > DS > 10km Score 1: 10km > DS

Note: PC: construction cost, PP: Number of population, DI: Disparity index of household income, DS: Distance from Wilayat center

FORM 3-2

SCORING OF CANDIDATE LOCAL ROAD PROJECTS

Governorate/Region……,,

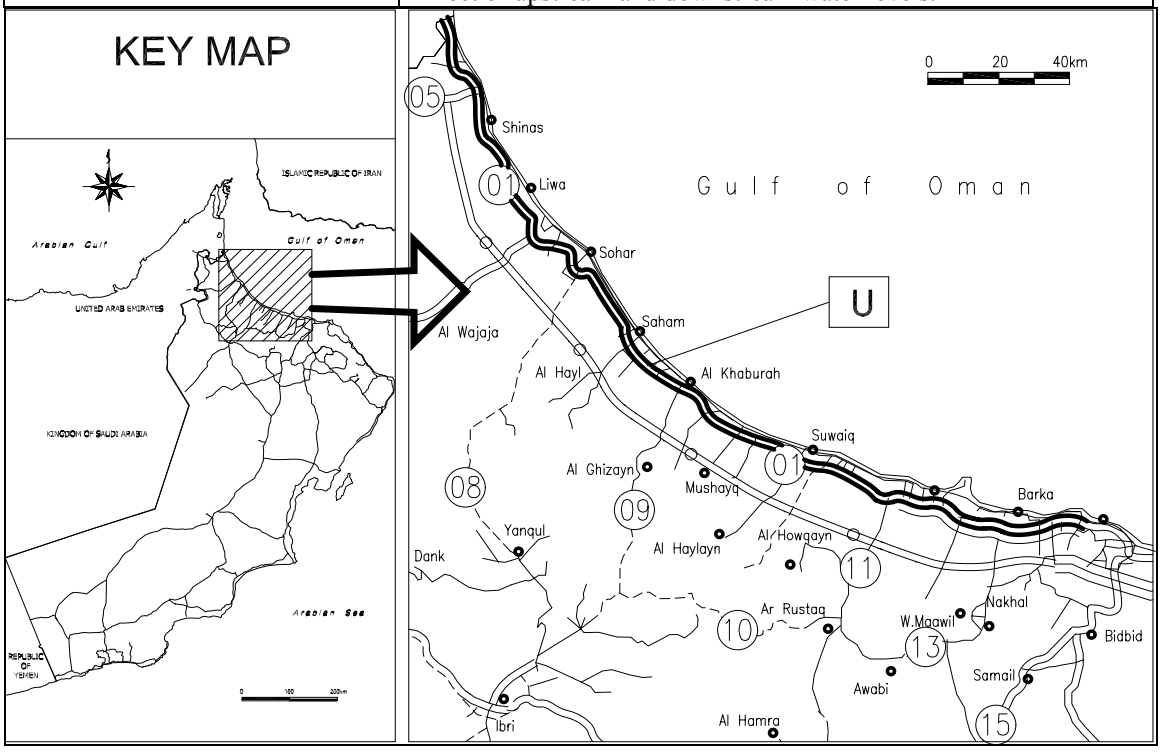
No.	Project Name	1	2	3	4	5	6	7
		Magnitude of Construction cost	Access to Trunk Road	Scale of Population	Disparity Index of HH Income	Distance from Wilayat Center	Others, if any	Total Score
	Weight of Each Factor	30	10	30	20	10	-	100

APPENDIX 14-2

PROJECT PROFILES

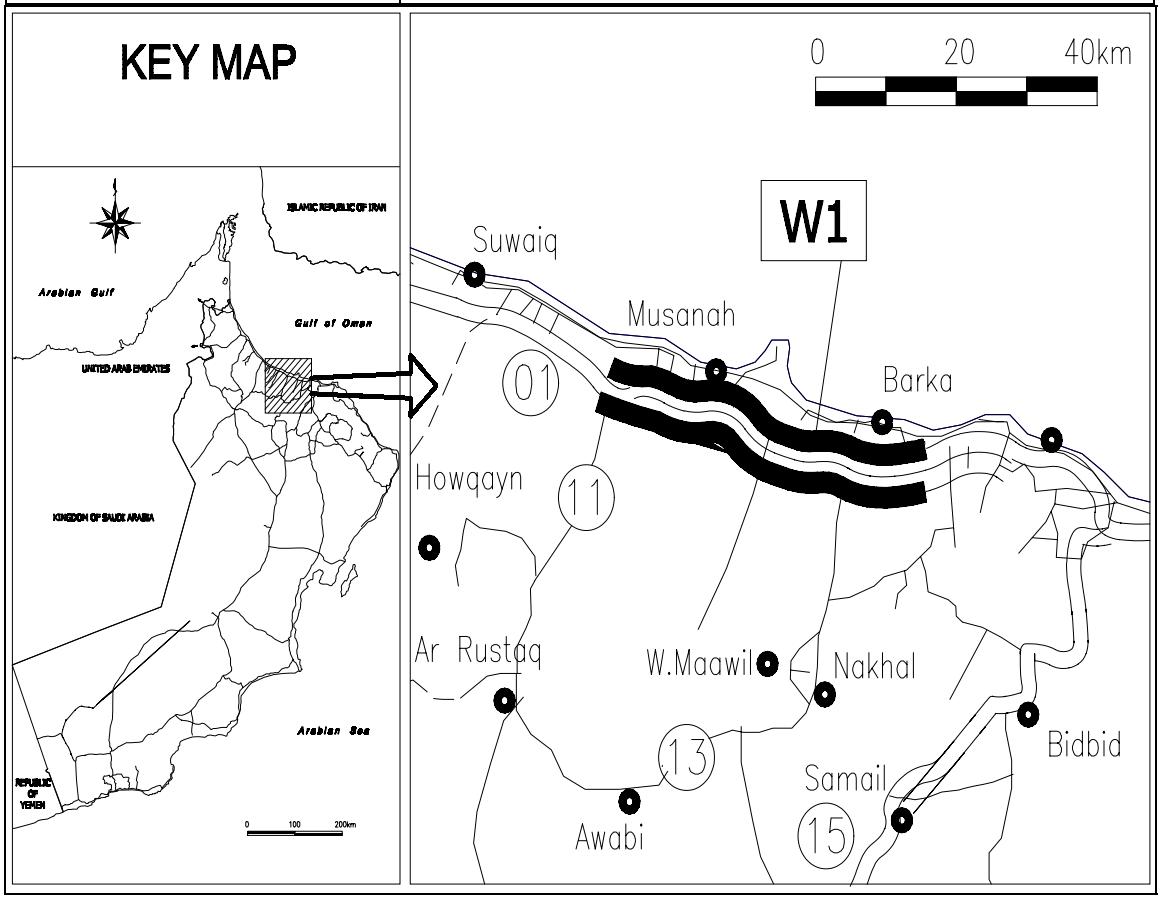
Project Profile **Project Number: U1**

Name		Upgrading Batinah Highway			**Region:** Batinah
Existing Road Condition		- 4-Lane 2-Way Dual Carriageway - Design Speed 120 km/hr			
Objective		- Batinah Highway is one of the most important links. Due to rains at certain locations that are provided only by Irish Crossing the road is subjected to be closed for several hours/days every year. The major objective of this project is to upgrade the existing critical I/C to obtain all weather highway. - Conversion of I/C at certain locations where there are a probability that water height can become > 25 cm to multi-functions Box Culverts. The multi-functions BC will be used for pedestrian or vehicles crossing during dry seasons.			
Segment					**Total (km)**
Location	**From**	Barka			
	To	Khatmat Milahah			
Length (km)		237			237
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	264,000	369,000	398,000	606,000
Work Item		Construction of multi-functions Box Culverts at (23) locations along the highway to replace the existing Irish Crossing. And upgrading of at grade intersections.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 28,246 874 29,120			
Implementation Plan		8th 5-Year Development Plan			
Implementation Schedule	**From**	2011			
	To	2015			
Environmental Impact		(Moderate) Effect of upstream and downstream water levels.			



Project Profile **Project Number:** W1

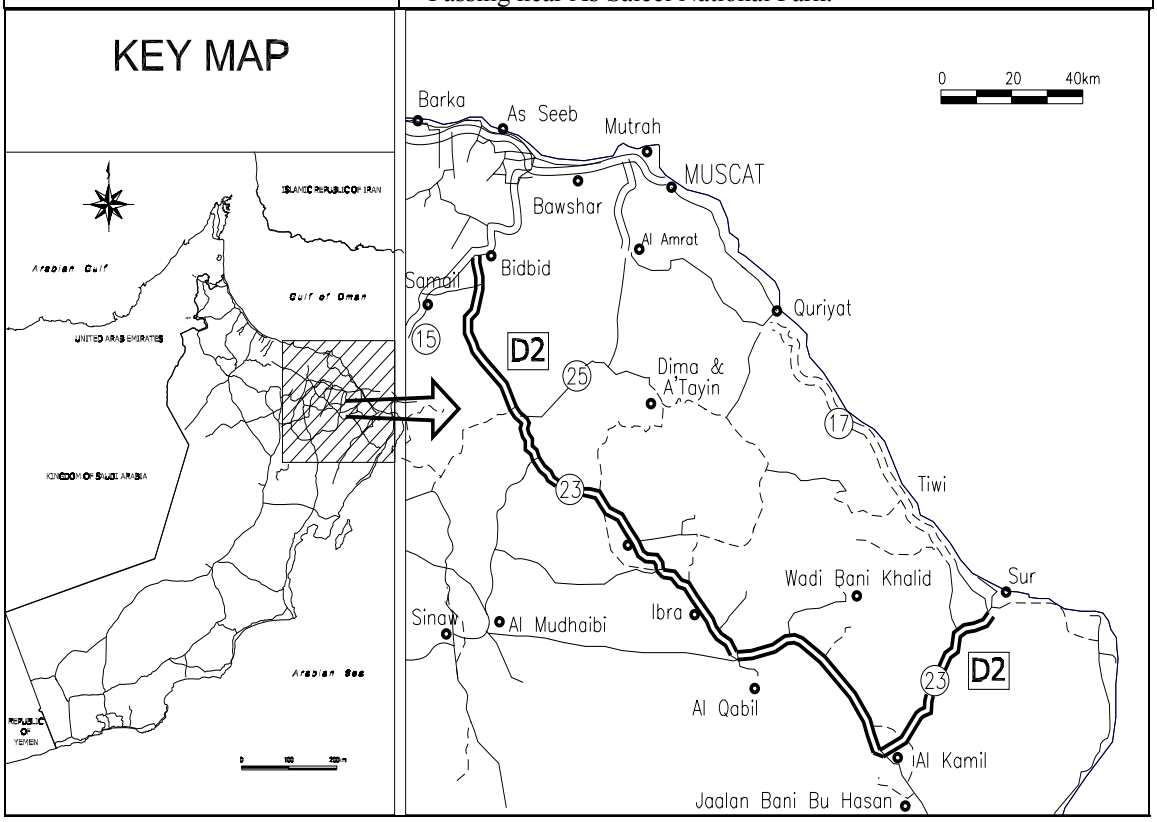
Name		Widening of Bait Al Barakah – Barka			**Region:** Batinah
Existing Road Condition		- 4-Lane 2-Way Dual Carriageway - Design Speed 120 km/hr			
Objective		- Widening to 6-Lane 2-Way Dual Carriageway to accommodate future traffic volume. - Alleviation of future traffic congestion.			
Segment		W1-1	W1-2		**Total (km)**
Location	**From**	Bait Al Barakah	Barka		
	To	Barka	Al Muladdah		
Length (km)		21.00	33.00		54.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	26,400	36,900	39,800	60,600
Work Item		Widen to 6-Lane Dual Carriageway Road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,908 122 2,030	 2,789 116 2,904		
Implementation Plan		11th 5-Year Development Plan			
Implementation Schedule	**From**	2028	2028		
	To	2030	2030		
Environmental Impact		(Moderate) Increased traffic volume.			



Project Profile **Project Number:** D2

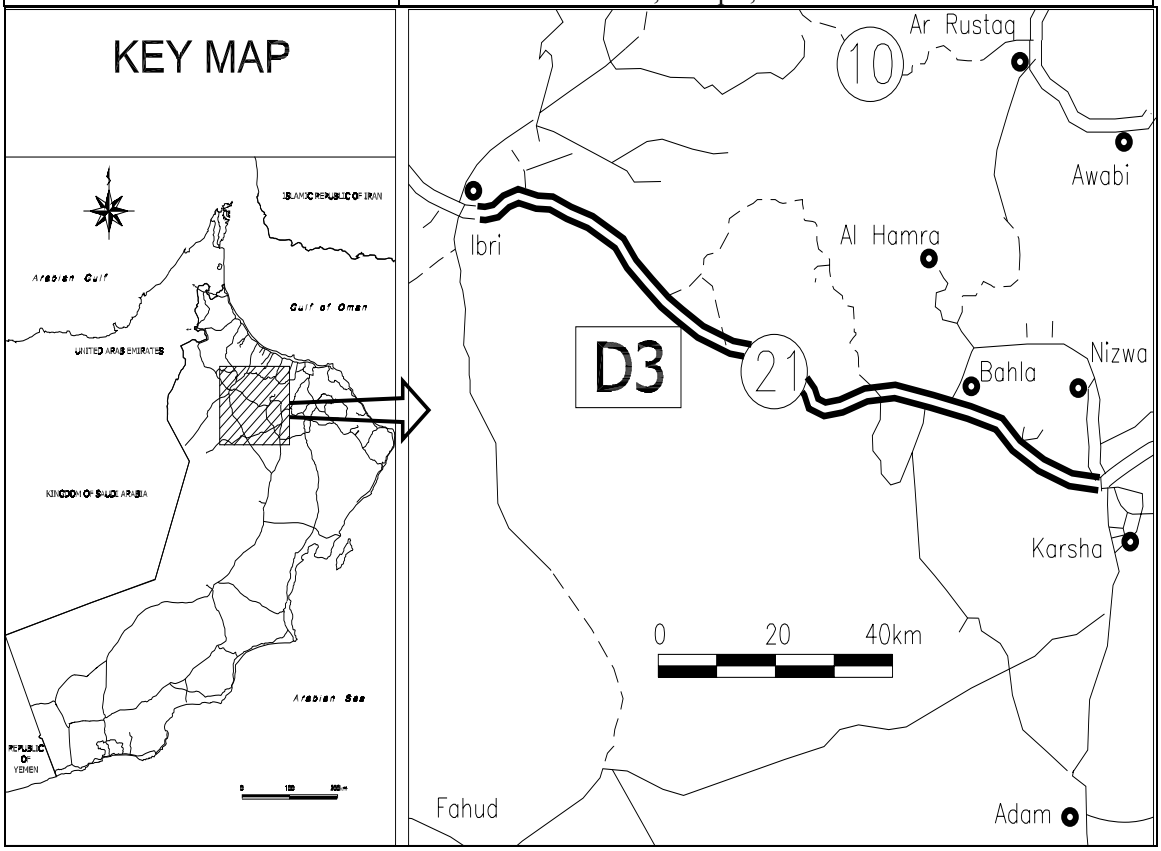
Name		Bidbid - Sur			**Region:** A'Sharqiya	
Existing Road Condition		National Road No. 23, 2-Lane Primary Highway				
Objective		Dualization to 4-lane divided Highway, to accommodate the future expected ADT. Securing safe and smooth, long distance, high speed traffic on this major primary road.				
Segment					**Total (km)**	
Location	**From**	Bidbid				
	To	Sur				
Length (km)		277			277	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	9,000	2,700	4,000	10,400	
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond to the requirements of a dualized highway of 120 km/hr design speed.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 27,930 1,783 29,713				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2022				
	To	2026				
Environmental Impact		(Moderate) - Increased traffic volume. - Alteration of topography. - Passing near As Saleel National Park.				

KEY MAP



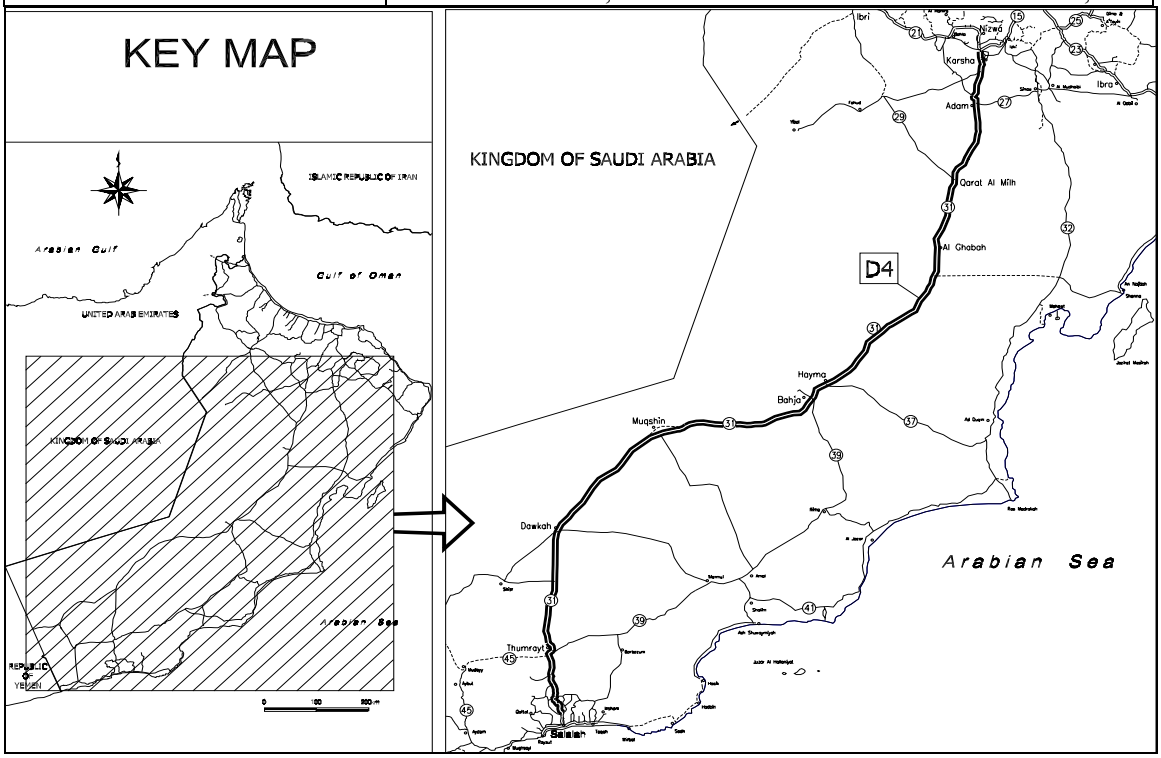
Project Profile **Project Number:** D3

Name		Nizwa – Bahala - Ibri			**Region:** A'Dakhliyah	
Existing Road Condition		National Road No. 21, 2-Lane Primary Highway				
Objective		Dualization to 4-lane divided Highway, to accommodate the future expected ADT. Securing safe and smooth, long distance, high speed traffic on this major primary road.				
Segment		D3-1	D3-2		**Total (km)**	
Location	**From**	Nizwa	Bahla			
	To	Bahla	Ibri			
Length (km)		40	85		125	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	5,600	6,200	4,800	9,700	
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 10,810 690 11,500	 14,100 900 15,000			
Implementation Plan		7th 5-Year Development Plan				
Implementation Schedule	**From**	2006	2006			
	To	2008	2008			
Environmental Impact		(Moderate/Significant) - Passing beside Bahla Fort (World Heritage). - Relocation of houses, mosque, etc.				



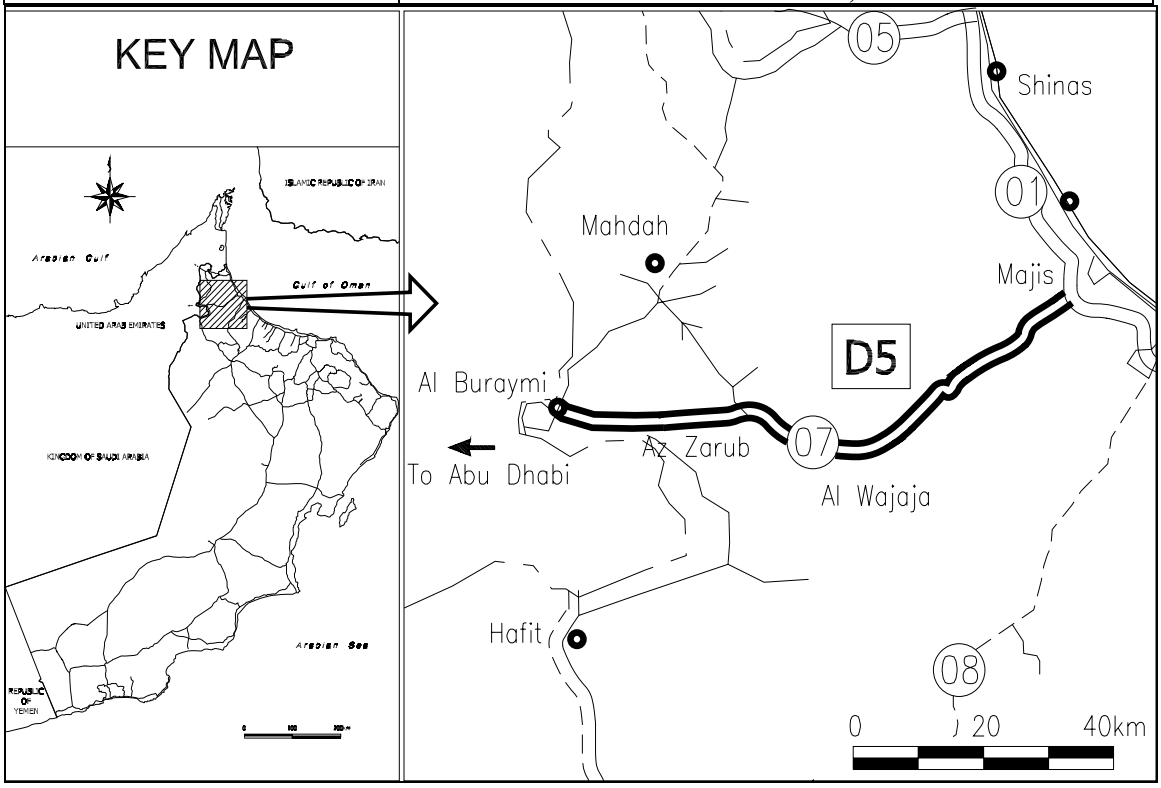
Project Profile **Project Number:** D4

Name		Karsha-Al Ghaba-Thumrayt-Salalah				**Region:** A'Dakhliya/Wusta /Dhofar	
Existing Road Condition		National Road No. 31, 2-Lane Primary Highway					
Objective		Dualization to 4-lane divided Highway, to accommodate the future expected ADT. Securing safe and smooth, long distance, high speed traffic on this major primary road.					
Segment		D4-1	D4-2	D4-3	D4-4	D4-5	**Total (km)**
Location	**From**	Karsha	Al Ghaba	Hayama	Muntasr	Thumrayt	
	To	Al Ghaba	Hayama	Muntasr	Thumrayt	Salalah	
Length (km)		196	174	200	200	71	841
Traffic Volume	**Year**	**2005**		**2010**	**2020**		**2030**
	PCU/day	2,400		3,100	4,700		11,400
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed.					
Cost (1,000 RO)							
Construction		16,213	14,393	16,544	16,544	5,873	
Engineering		1,035	919	1,056	1,056	375	
Total		17,248	15,312	17,600	17,600	6,248	
Implementation Plan		8th	8th	9th	9th	9th	
Implementation Schedule	**From**	2011	2013	2016	2016	2020	
	To	2015	2016	2019	2020	2022	
Environmental Impact		(Slight) for Segment D4-2 & D4-3, (Slight/Moderate) for Segment D4-1 & D4-4 and (Moderate Impact) for Segment D4-5. D4-1 Influence to cultural heritage. D4-2 and D4-3 Insignificant impact. D4-4 Influence to cultural heritage. D4-5 Increased traffic volume, Deforestation by excavation and embankment, and Increased accident of domestic animals, etc					



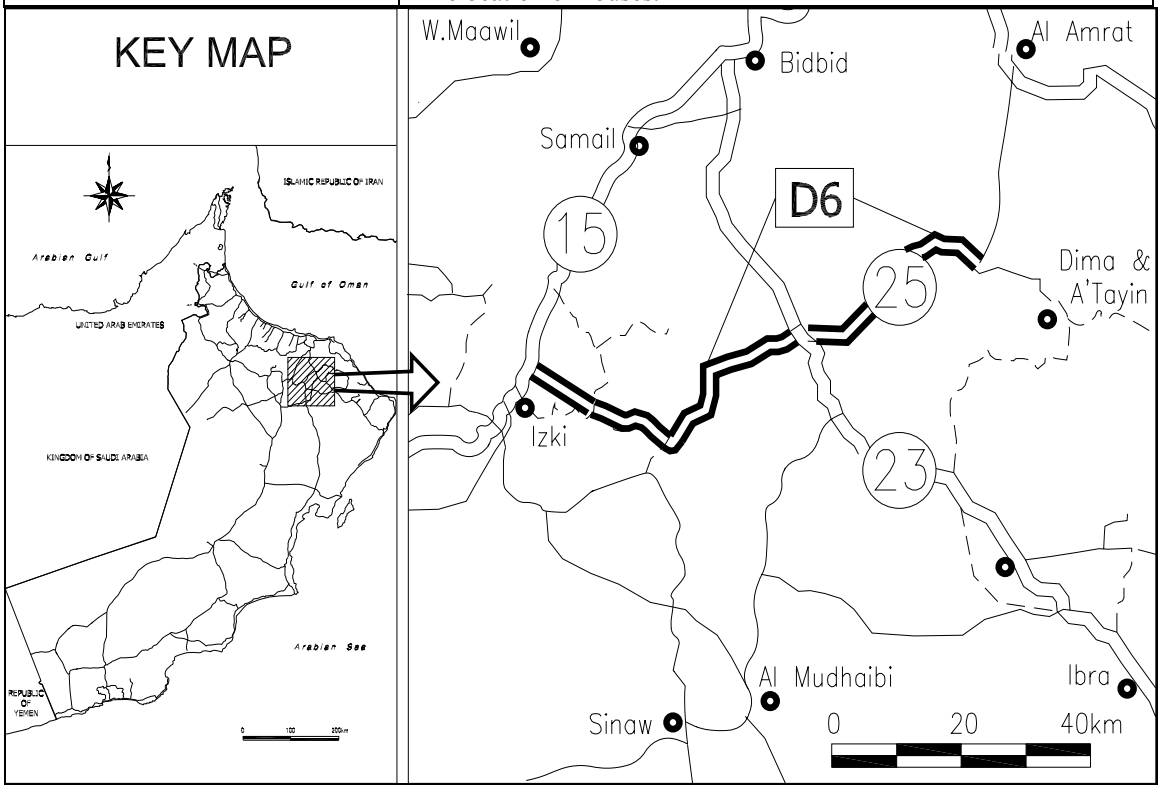
Project Profile **Project Number:** D5

Name		Majis (Sohar) – Az Zarub - Buraymi			**Region:** Batinah /A'Dhahira	
Existing Road Condition		National Road No. 07, 2-Lane Primary Highway				
Objective		Dualization of main primary road to UAE (National Road No. 7) to accommodate the future expected ADT. Securing safe and smooth, long distance, high speed traffic on this major primary road.				
Segment		D5-1	D5-2		**Total (km)**	
Location	**From**	Majis	Az Zarub			
	To	Az Zarub	Buraymi			
Length (km)		81	16		97	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	5,400	3,900	7,400	12,100	
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed.				
Cost (1,000 RO)						
Construction		39,844	1,323			
Engineering		2,546	85			
Total		42,430	1,408			
Implementation Plan		7th	8th			
Implementation Schedule	**From**	2006	2011			
	To	2009	2013			
Environmental Impact		(Moderate) - Increased traffic volume. - Alteration of topography. - Deforestation by excavation and embankment. - Increased accident of domestic animals, etc.				



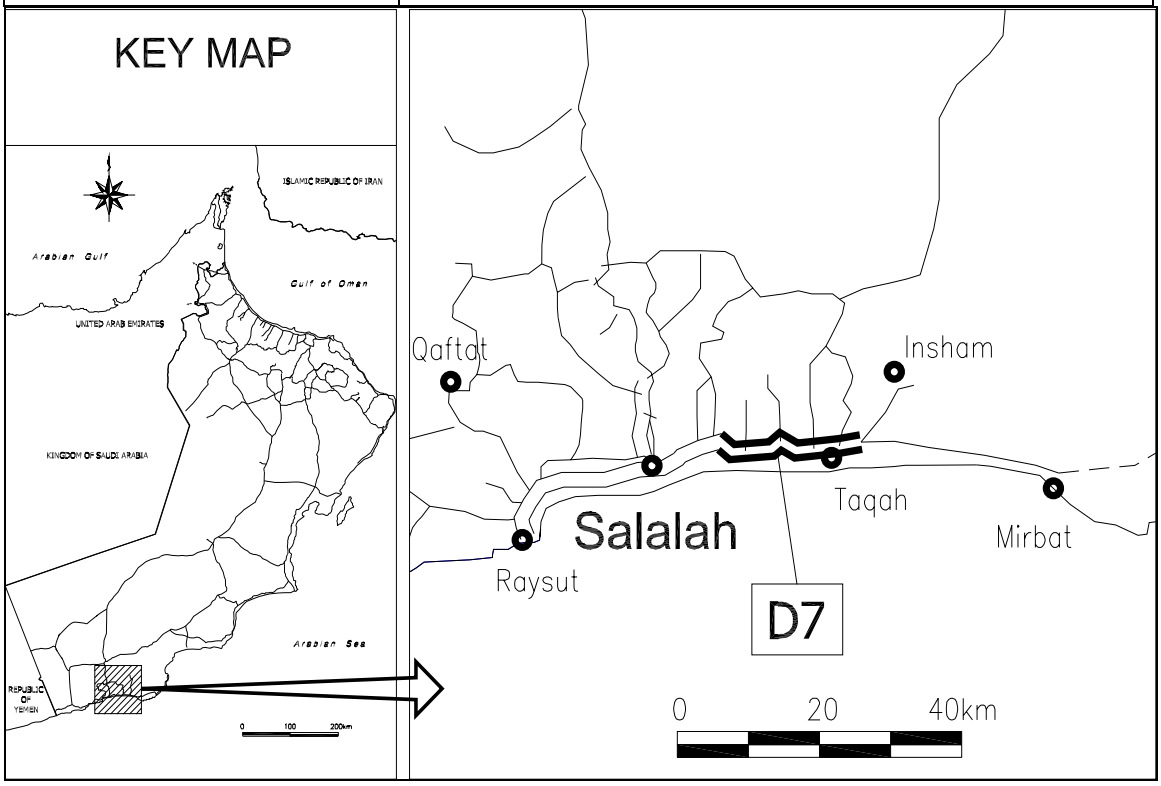
Project Profile **Project Number:** D6

Name		Mizbar – Qaryatan - Izki			**Region:** A'Sharqiya
Existing Road Condition		National Road No. 25, 2-Lane Primary Highway			
Objective		Detour route for NR No. 15. Dualization of NR 25 to accommodate the future expected heavily trafficked. The construction will consider the reasonable counter measures regarding wadi floods.			
Segment					**Total (km)**
Location	**From**	Mizbar			
	To	Izki			
Length (km)		85			85
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	1,200	1,500	2,500	4,400
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 12,305 785 13,090			
Implementation Plan		9th 5-Year Development Plan			
Implementation Schedule	**From**	2016			
	To	2018			
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Relocation of houses.			



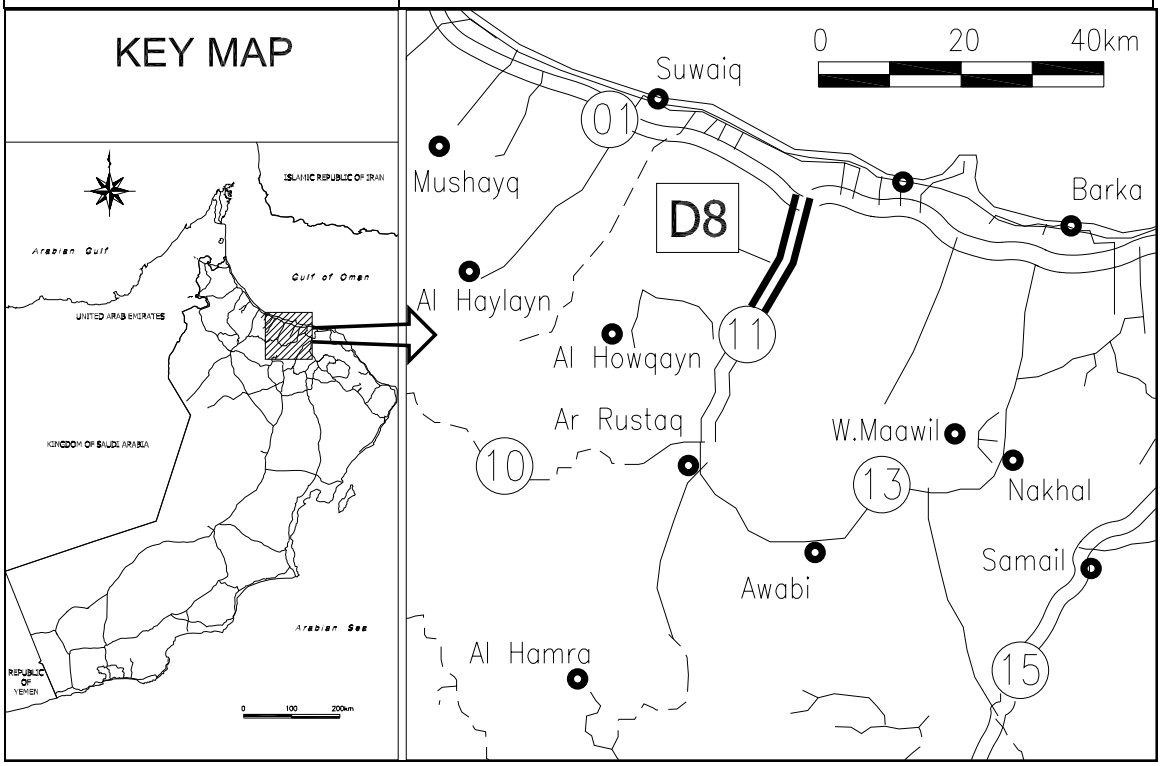
Project Profile **Project Number:** D7

Name		Ma'mura - Taqah			**Region:** Dhofar
Existing Road Condition		Extension of National Road No. 49, 2-Lane Highway			
Objective		Extension of existing dualized road (NR 49) from Salalah towards east. Securing safe and smooth, long distance, high speed traffic on this major primary road.			
Segment					**Total (km)**
Location	**From**	Ma'mura			
	To	Taqah			
Length (km)		20.0			20.0
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	2,800	3,300	4,600	8,600
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,654 106 1,760			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2006			
	To	2007			
Environmental Impact		(Slight) Insignificant impact.			



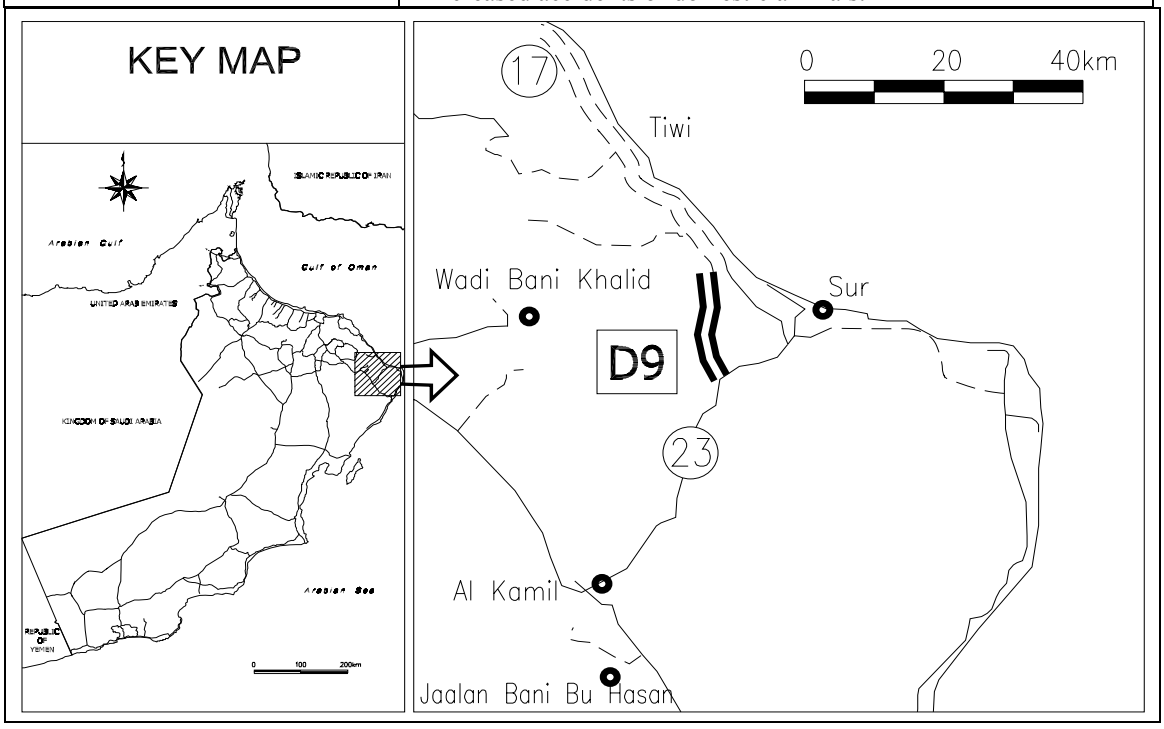
Project Profile **Project Number:** D8

Name		Muladdah – Hazm Road			**Region:** Batinah	
Existing Road Condition		2-lane road, extension of already dualized section of NR 11.				
Objective		Dualize to become an extension of the existing dualized road (NR 11) Rustaq-Hazm section. Strengthening road network in baraka-Al Awaabi-Rustaq-Al Muladdah area.				
Segment					**Total (km)**	
Location	**From**	Muladdah				
	To	Hazm				
Length (km)		24.0			24.0	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	8,000	9,400	7,900	14,400	
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,985 127 2,112				
Implementation Plan		7th 5-Year Development Plan				
Implementation Schedule	**From**	2009				
	To	2011				
Environmental Impact		(Slight/Moderate) - Deforestation by excavation and embankment. - Influence to cultural heritage. - Increased accidents of domestic animals.				



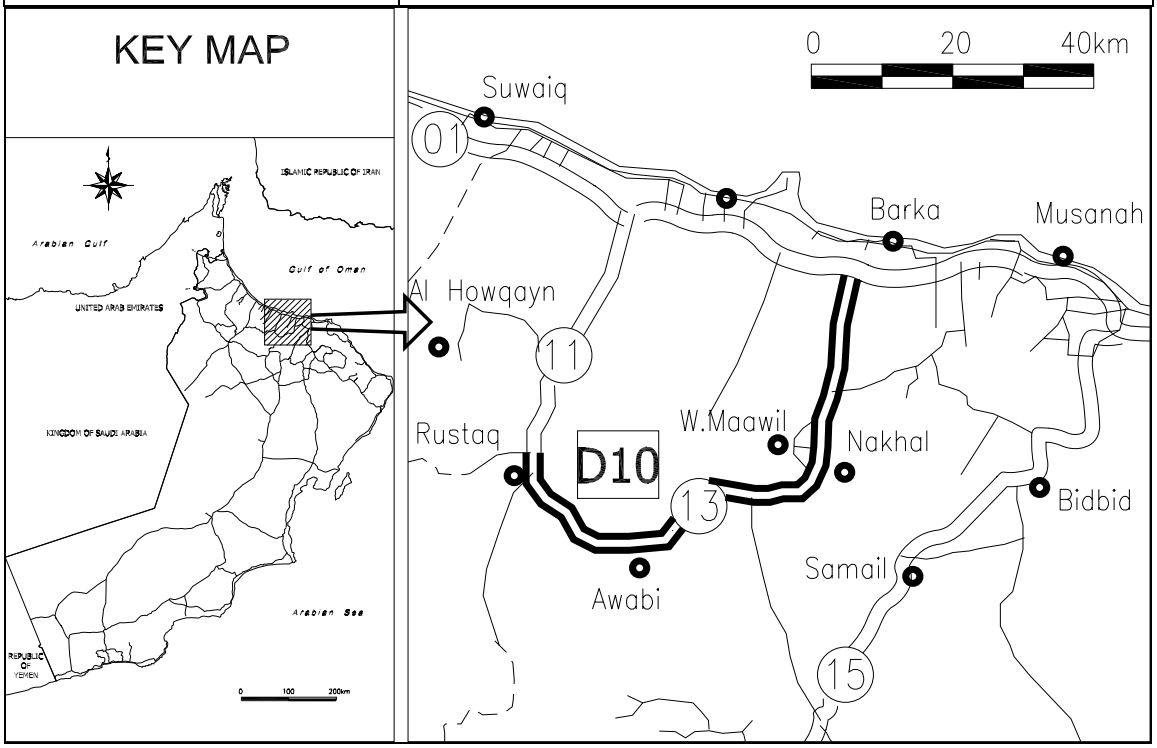
Project Profile **Project Number:** D9

Name		**Quriyat – Sur Phase III**			**Region:** A'Sharaqiya
Existing Road Condition		Road connect NR 17 and NR 23 outside the urbanized area of Sur.			
Objective		Continuation of Dualization of NR 17 plus construction of dualized road bypassing the urbainized area of Sur to connect with NR 23. Securing safe and smooth, long distance, high speed traffic on this major primary road.			
Segment					**Total (km)**
Location	**From**	Qalhat			
	To	Sur			
Length (km)		18.00			18.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	8,200	4,500	6,400	15,200
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed			
Cost (1,000 RO)					
Construction		4,593			
Engineering		293			
Total		4,886			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2009			
	To	2010			
Environmental Impact		(Slight/Moderate) - Increased traffic volume. - Alteration of topography - Deforestation by excavation and embankment. - Influence to cultural heritage. - Increased accidents of domestic animals.			



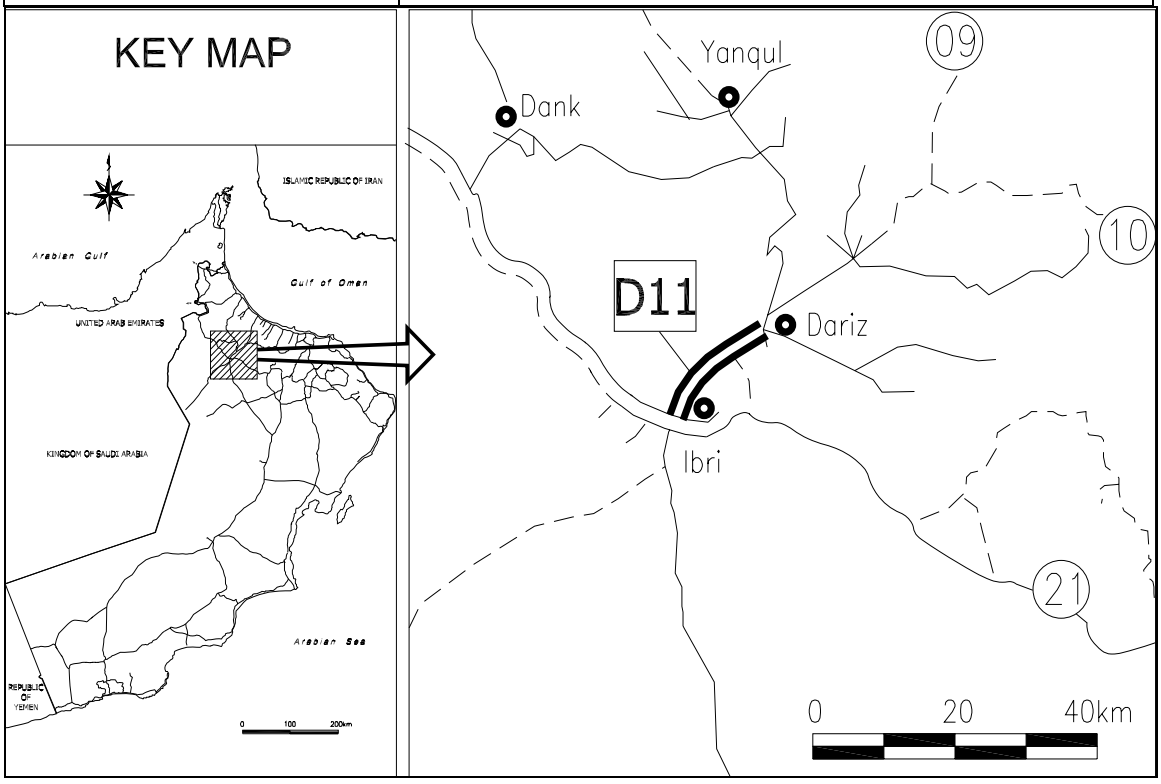
Project Profile **Project Number:** D10

Name		Baraka – Rustaq Road			**Region:** Batinah
Existing Road Condition		Important Primary 2-lane National Road No. 13 connecting Baraka and Rustaq to Ibri.			
Objective		Complete a circuit of dualized road (Baraka-Rustaq-Muladdah (NR 13 and NR 11). Securing safe and smooth, long distance, high speed traffic on this major primary road.			
Segment					**Total (km)**
Location	**From**	Baraka			
	To	Rustaq			
Length (km)		84.00			84.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	1,600	3,600	1,500	2,200
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 8,499 543 9,042			
Implementation Plan		8th 5-Year Development Plan			
Implementation Schedule	**From**	2011			
	To	2014			
Environmental Impact		(Slight/Moderate) - Influence to cultural heritage. - Increased accidents of domestic animals.			



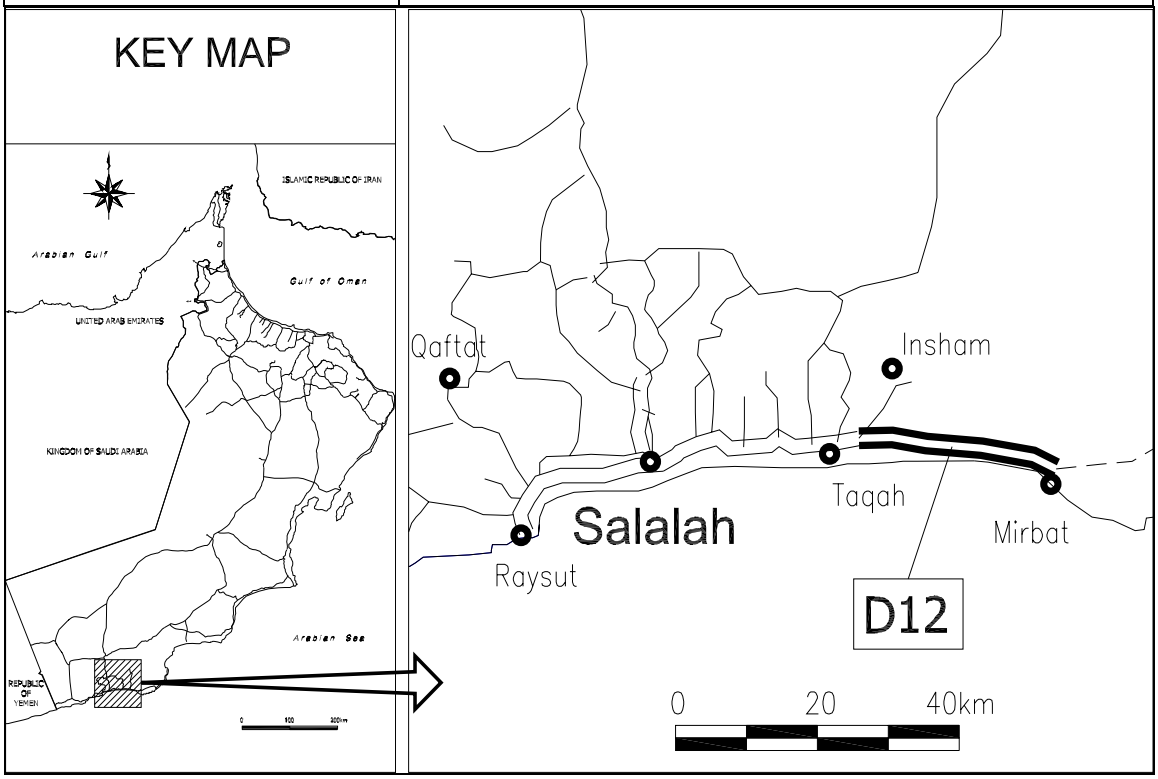
Project Profile **Project Number:** D11

Name		Ibri – Ad Dariz Road			**Region:** A' Dhahira
Existing Road Condition		2-lane AC paved road with paved shoulders 0.5 ~ 1.5 m width.			
Objective		- This road act as a connection between NR 21 and NR 9. Through the NR 9 the road will be connected to NR 10. Furthermore through NR 10 the road will becomes connected to both NR 11 and NR 13 - The road is an important link connecting Ibri with major cities along the coast such as Rustaq, Sohar and Baraka - The road is important concerning the expected future traffic volumes			
Segment					**Total (km)**
Location	**From**	NR 21			
	To	NR 09			
Length (km)		19.00			19.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	2,700	3,900	7,400	12,100
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,572 100 1,672			
Implementation Plan		8th 5-Year Development Plan			
Implementation Schedule	**From**	2011			
	To	2012			
Environmental Impact		(Moderate) Relocation of some houses.			



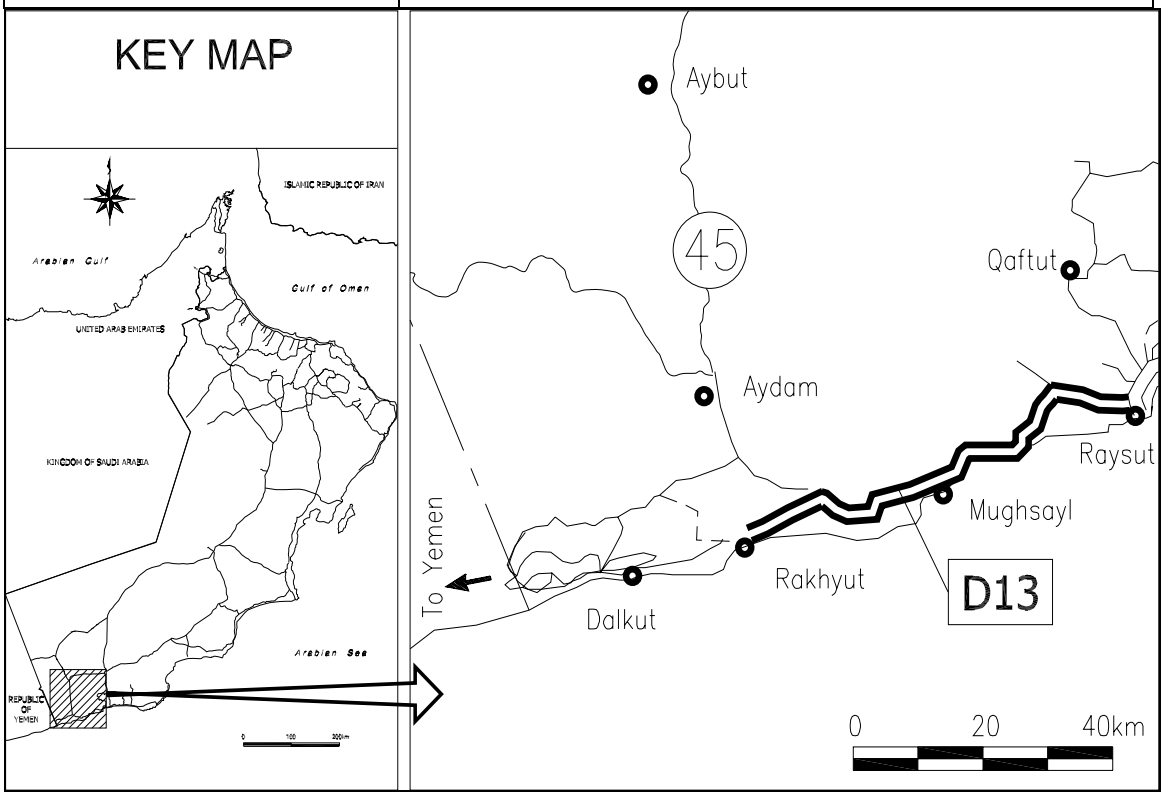
Project Profile **Project Number:** D 12

Name		Taqah - Mirbat			**Region:** Dhofar
Existing Road Condition		Extension of National Road No. 49in the east direction, 2-Lane Highway.			
Objective		Extension of existing dualized road (NR 49) from Salalah towards east. The road will create an easy access between Taqah and Mirbat that will decrease the required travel time.			
Segment					**Total (km)**
Location	**From**	Taqah			
	To	Mirbat			
Length (km)		16.00			16.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	2,800	3,300	4,600	8,600
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed			
Cost (1,000 RO)					
Construction		1324			
Engineering		84			
Total		1,408			
Implementation Plan		8th 5-Year Development Plan			
Implementation Schedule	**From**	2015			
	To	2016			
Environmental Impact		(Slight/Moderate) Increase accident of domestic animals.			



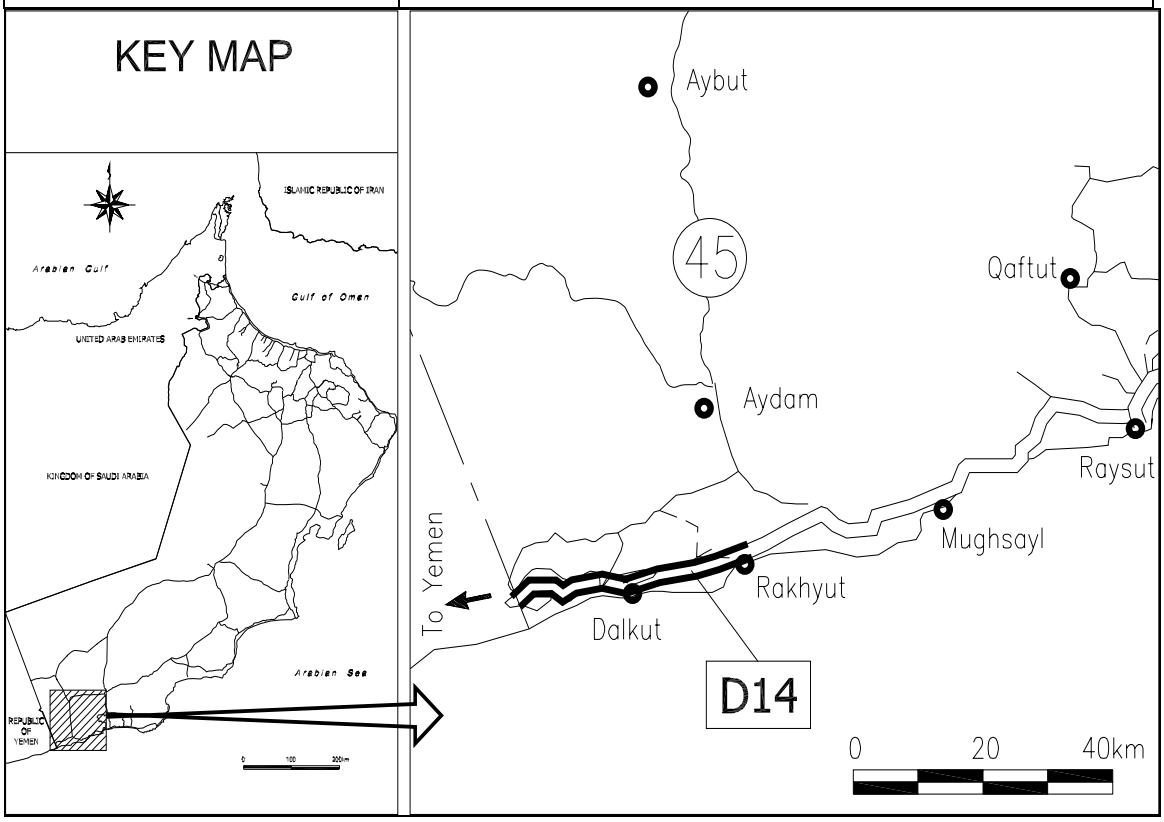
Project Profile **Project Number:** D13

Name		Raysut - Rakhyut			**Region:** Dhofar	
Existing Road Condition		Paved, 2-lane, 2-way, undivided highway				
Objective		Extension of the existing dualized road NR 47 in the west direction from Salalah. The road will create an easy access among Rakhyut, Mughsayl and Raysut that will decrease the required travel time.				
Segment					**Total (km)**	
Location	**From**	Raysut				
	To	Rakhyut				
Length (km)		80.00			80.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	1000	1,000	1,300	2,400	
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed				
Cost (1,000 RO)						
Construction		11,581				
Engineering		739				
Total		12,320				
Implementation Plan		12th 5-Year Development Plan				
Implementation Schedule	**From**	2031				
	To					
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Increased accidents of domestic animals.				



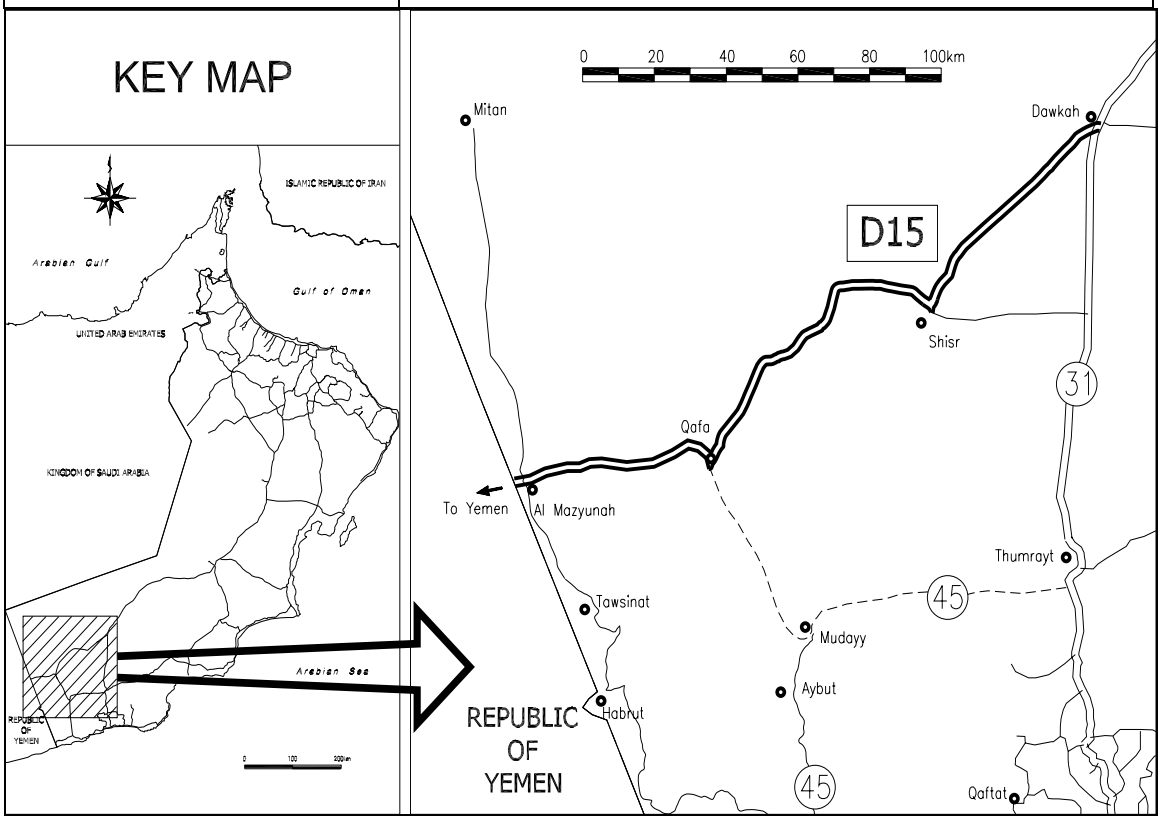
Project Profile **Project Number:** D14

Name		Rakhyut – Yemen Border			**Region:** Dhofar	
Existing Road Condition		Paved, 2-lane, 2-way, undivided highway				
Objective		Extension of the existing dualized road NR 47 in the west direction from Salalah. The road will create an easy access between Rakhyut and Dalkut that will decrease the required travel time.				
Segment					**Total (km)**	
Location	**From**	Rakhyut				
	To	Yemen Border				
Length (km)		45.00			45.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	1,000	1,000	1,300	2,400	
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed				
Cost (1,000 RO)						
Construction		6514				
Engineering		416				
Total		6,930				
Implementation Plan		12th 5-Year Development Plan				
Implementation Schedule	**From**	2031				
	To					
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Relocation of houses.				



Project Profile **Project Number:** D15

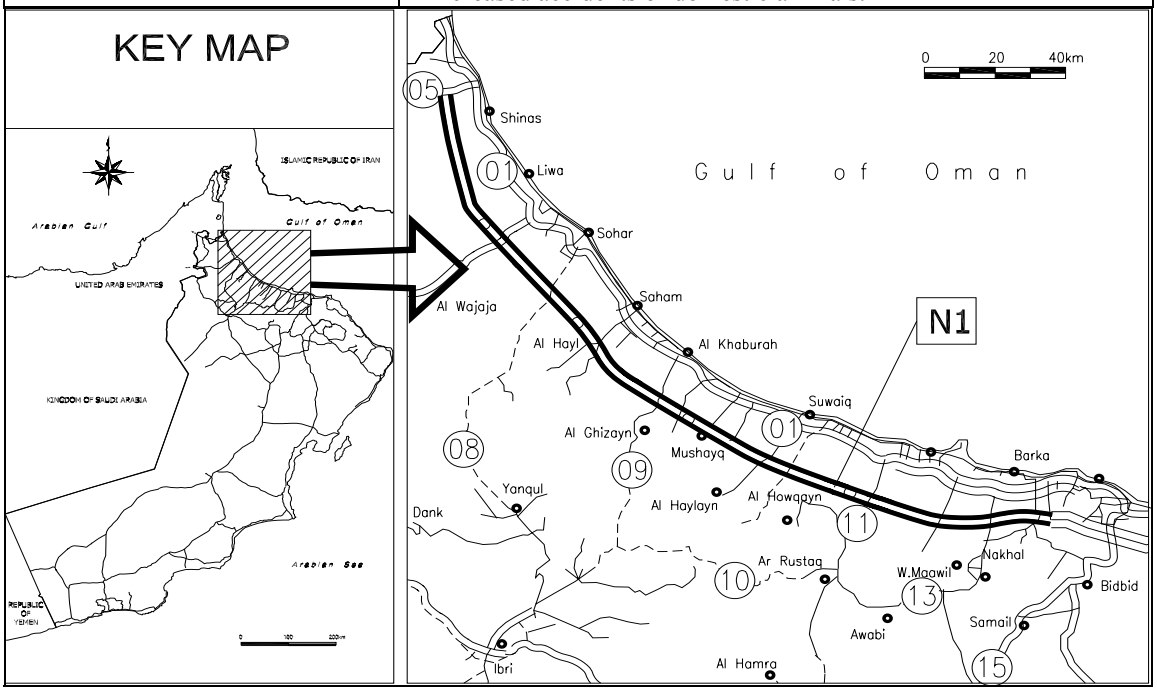
Name		Dawhak – Al Mazyunah			**Region:** Dhofar	
Existing Road Condition		Graded road				
Objective		Dualization of road connecting NR 31 and Yemen border. Strengthening of alternate/shortcut route for ESCWA Route M100.				
Segment					**Total (km)**	
Location	**From**	Dawhak				
	To	Al Mazyunah				
Length (km)		226.00			226.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	200	200	200	400	
Work Item		Construction of additional 2-lane, median, shoulders and improvement of existing road alignment to correspond the requirements of a dualized highway with 120 km/hr design speed				
Cost (1,000 RO)						
Construction		18,695				
Engineering		1,193				
Total		19,888				
Implementation Plan		12th 5-Year Development Plan				
Implementation Schedule	**From**	2031				
	To					
Environmental Impact		(Slight) Insignificant Impact.				



Project Profile **Project Number:** N1

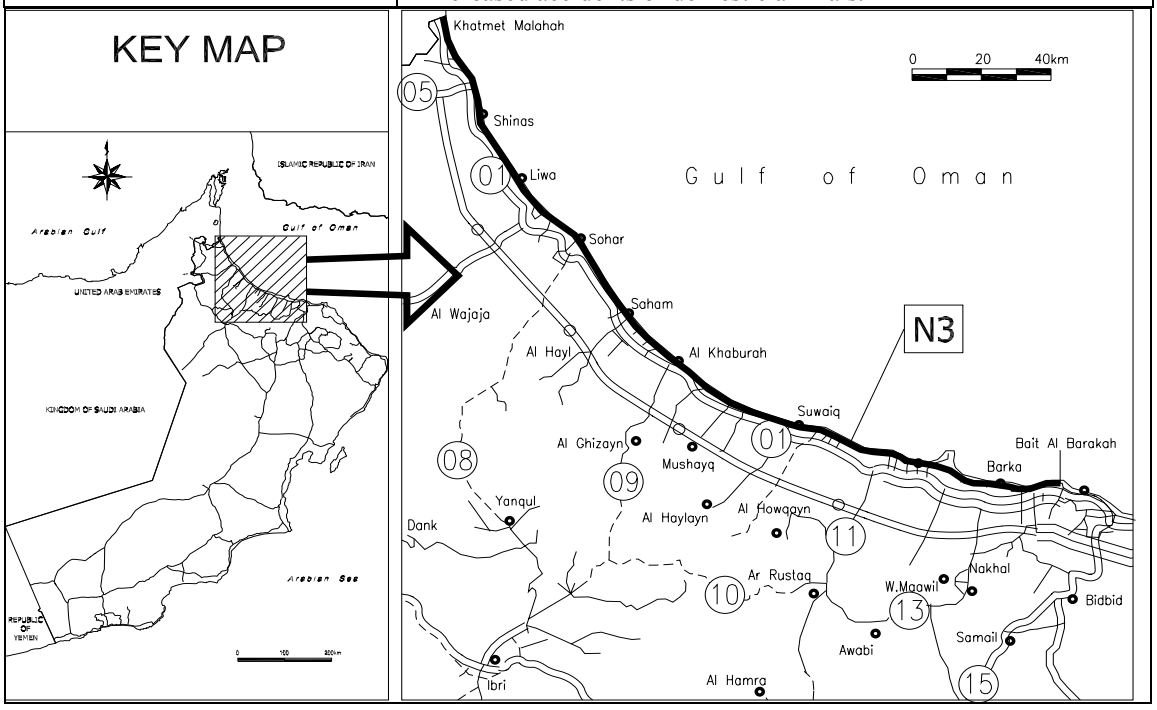
Name		New Batinah Expressway				**Region:** Batinah	
Existing Road Condition		New road					
Objective		• Mitigate traffic congestion on the existing Batinah /Highway. • To cater for the future traffic along the coastal area. • The road wills strength the connection of Oman with neighboring countries. • The road will support the future implemented plans for development of Batinah Region.					
Segment		N1-1	N1-2	N1-3	N1-4	N1-5	**Total (km)**
Location	**From**	Baraka	Musa-naah	Musha-yq	Saham	Sohar	
	To	Musa-naah	Musha-yq	Saham	Sohar	Bound-ary	
Length (km)		58	60	53	26	49	246
Traffic Volume	**Year**	**2005**	**2010**	**2020**			**2030**
	PCU/day	--	--	25,300			41,500
Work Item		Construction of 4-lane, 2-way divided expressway along Batinah Region. The road will be designed taken into consideration Standard, Specifications and Oman Design Manuals.					
Cost (1,000 RO)							
Construction		31,012	29,411	26,297	13,000	24,369	
Engineering		1,979	1,877	1,322	830	1,555	
Total		32,991	31,288	27,975	13,830	25,924	132,008
Implementation Plan		8th	8th	8th	9th	9th	
Implementation Schedule	**From**	2011	2012	2013	2016	2016	
	To	2015	2016	2016	2019	2019	
Environmental Impact		(Moderate) For all segments the expected impacts are: - Increased traffic volume. - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage. - Increased accidents of domestic animals.					

KEY MAP



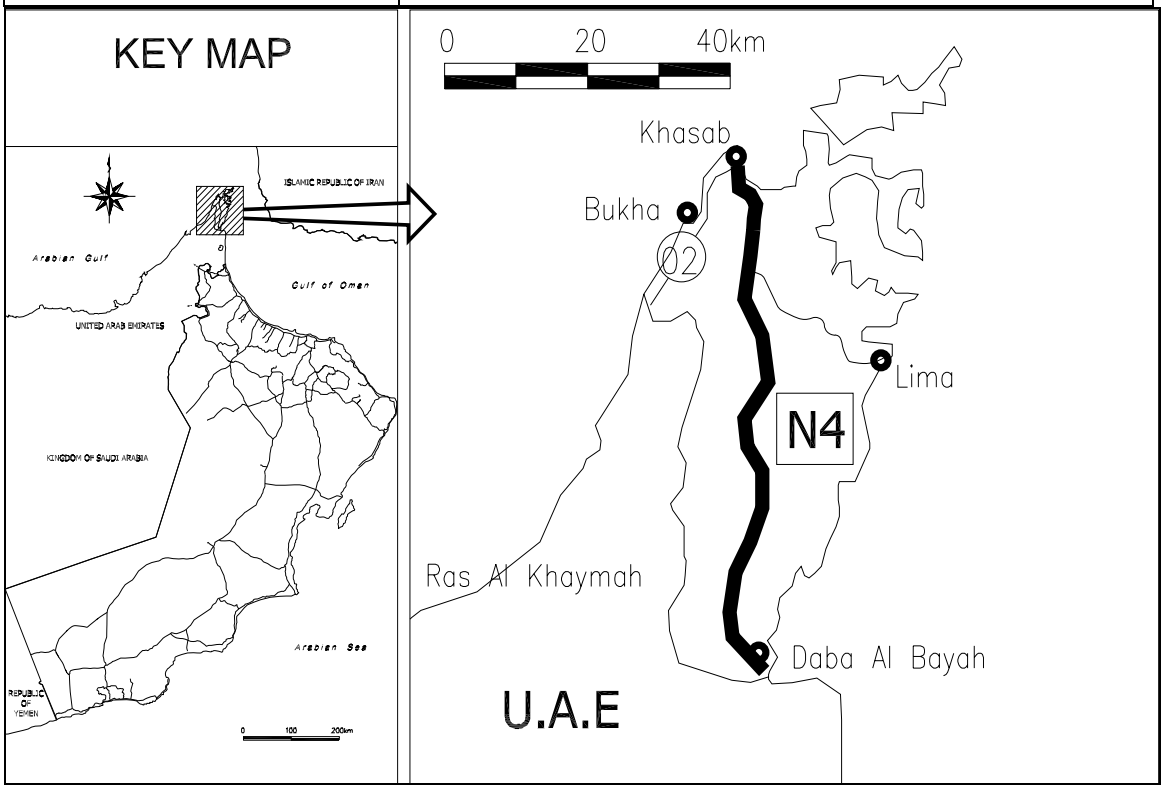
Project Profile **Project Number:** N3

Name		Bait Al Barakah – Khatmet Malahah, Coastal				**Region:** Batinah	
Existing Road Condition		At some areas 7m wide carriageway width, AC/ST surface generally in good condition.					
Objective		• Mitigate traffic congestion on the existing Batinah /Highway • To cater for heavy local traffic along the coast and relive the congestion on Batinah Highway • Promote better communication among the cities along the coast					
Segment		N3-1	N3-2	N3-3	N3-4	N3-5	**Total (km)**
Location	**From**	Bait Al Baraka	Baraka	Suwayq	Saham	Sohar	
	To	Baraka	Suwayq	Saham	Sohar	Khatmet Malahah	
Length (km)		17.00	53.00	71.00	30	84	255.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**			**2030**
	PCU/day	--	--	700			3,200
Work Item		Construction of 2-lane, 2-way highway					
Cost (1,000 RO)							
Construction		1230	3836	5139	2171	6080	
Engineering		79	245		139	388	
Total		1,309	4,081	5,467	2,310	6,468	
Implementation Plan		9th	9th	10th	9th	11th	
Implementation Schedule	**From**	2019	2020	2022	2019	2026	
	To	2021	2022	2025	2021	2030	
Environmental Impact		(Moderate) - Increased traffic volume. - Alteration of topography. - Deforestation by excavation and embankment. - Relocation of houses. - Increased accidents of domestic animals.					



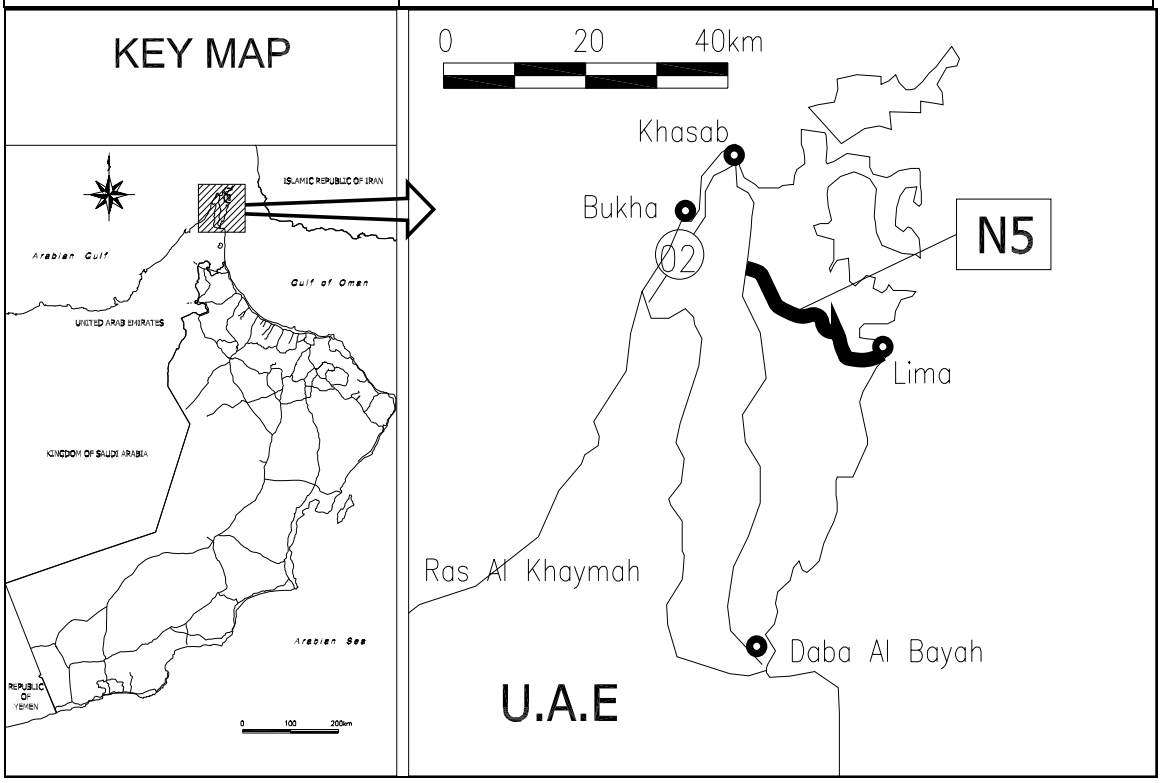
Project Profile **Project Number:** N4

Name		Diba - Khasab			**Region:** Musandam
Existing Road Condition		Existing road is a track road with many section with substandard geometry and dangerous to travel.			
Objective		Upgrading the track road to 2-lane paved road following the standards to facilitate the connection with UAE and to help the development of Musandam Governorate.			
Segment					**Total (km)**
Location	**From**	Diba			
	To	Khasab			
Length (km)		95			95
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	700	1,400	2,000	2,900
Work Item		Construction of 2-lane, 2-way highway			
Cost (1,000 RO)					
Construction		23,915			
Engineering		1,525			
Total		25,441			
Implementation Plan		7^{th} 5-Year Development Plan			
Implementation Schedule	**From**	2006			
	To	2010			
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.			



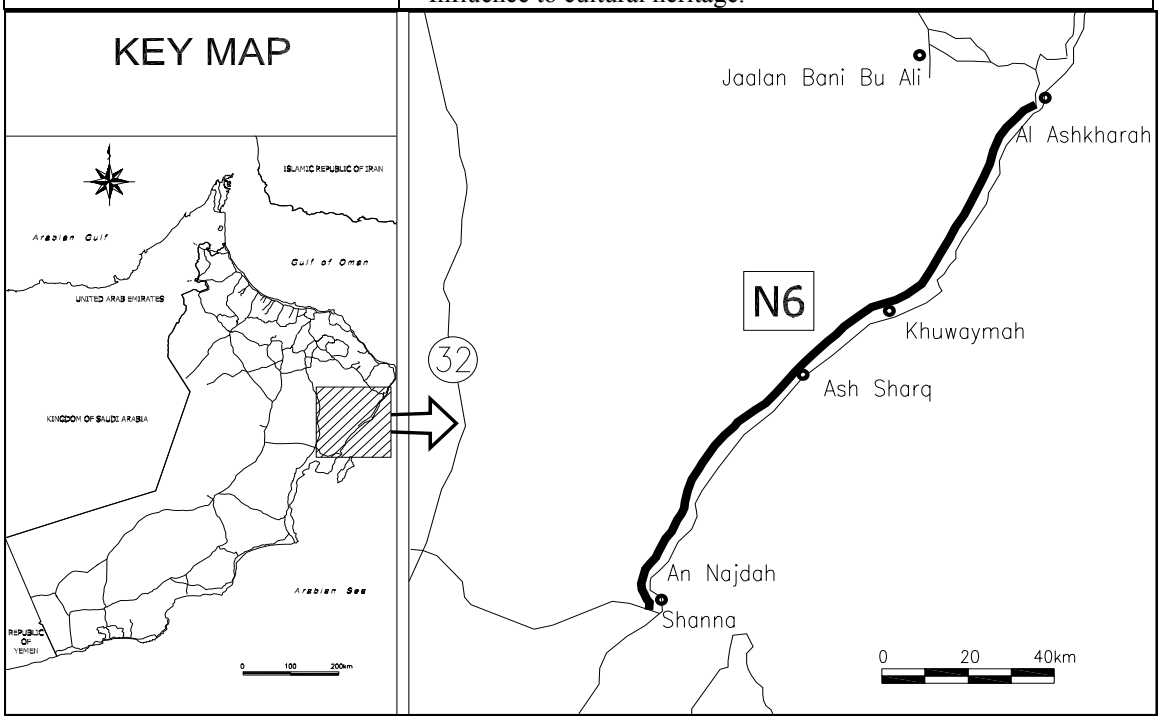
Project Profile **Project Number:** N5

Name		Lima Link - Khassab			**Region:** Musandam	
Existing Road Condition		There is existing AC road.				
Objective		This road is necessary for enhancernent of communication between the two cities as well as promotion of tourism.				
Segment					**Total (km)**	
Location	**From**	Lima Link				
	To	Khassab				
Length (km)		25			25	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	----	100	200	300	
Work Item		Construction of 2-lane, 2-way highway .				
Cost (1,000 RO)						
Construction		3,807				
Engineering		243				
Total		4,050				
Implementation Plan		7^{th} 5-Year Development plan				
Implementation Schedule	**From**	2009				
	To	2011				
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.				



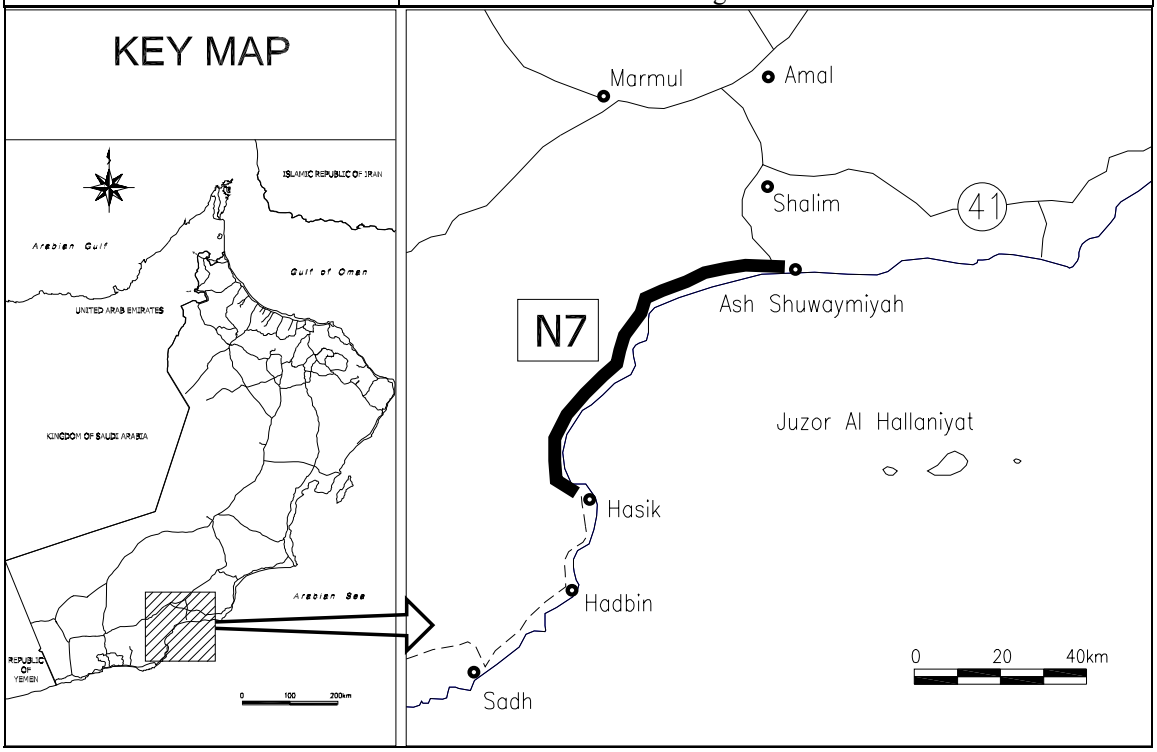
Project Profile **Project Number:** N6

Name		Al Ashkharah - Shanna			**Region:** A'Sharqiyq
Existing Road Condition		Part graded road, part track road and part there is no road.			
Objective		Construction of a missing link and complete circuit of Ibra-Alkmil-Ashkharah-Hij-Sinaw. The road will create an easy access between Al Ashkharah and Shanna that will decrease the required travel time.			
Segment					**Total (km)**
Location	**From**	Al Ashkharah			
	To	Shanna			
Length (km)		164			164
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	---	400	200	300
Work Item		Construction of 2-lane, 2-way highway.			
Cost (1,000 RO)					
Construction		14,100			
Engineering		900			
Total		15,000			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2008			
	To	2012			
Environmental Impact		(Moderate/Significant) - Alteration of topography. - Influence to sand desert wildlife. - Permanent occurrence of sand storm. - Influence to cultural heritage.			



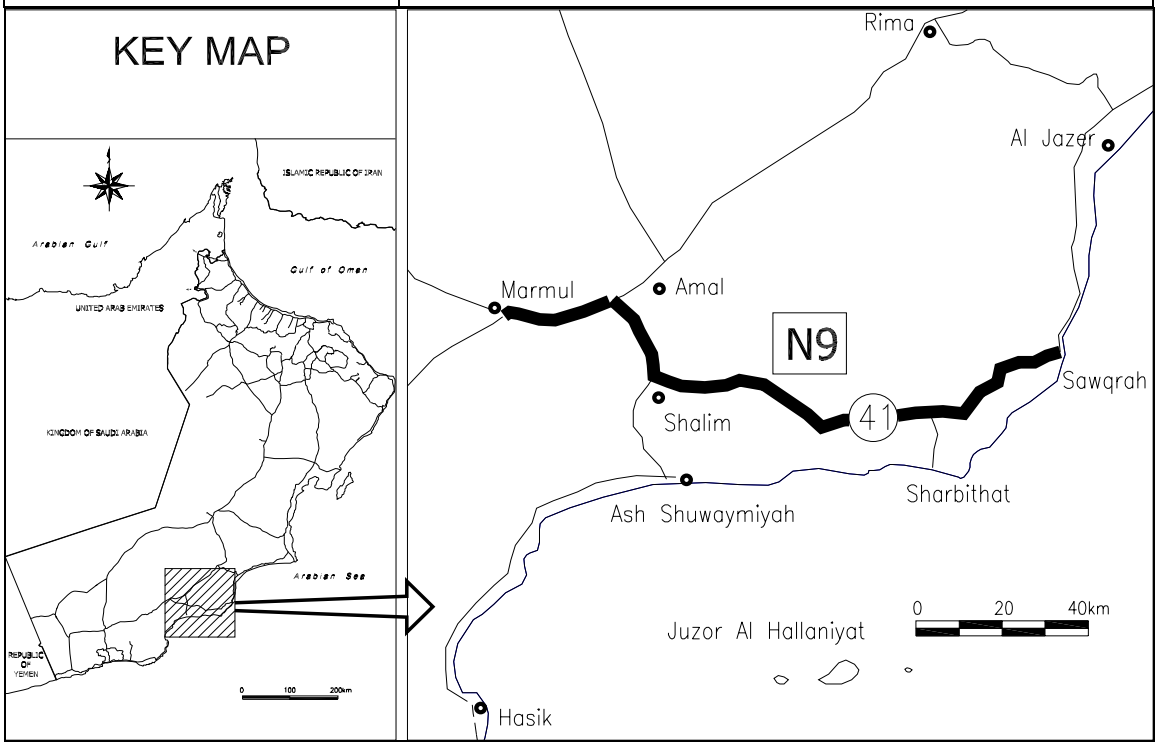
Project Profile **Project Number:** N7

Name		Hasik - Shuwaymiyah			**Region:** Dhofar	
Existing Road Condition		There is no road and the area is highly environment-sensitive (road pass through important natural reserve).				
Objective		Construction of this missing link as 2-lane road to complete the circuit of Salalah-Sadah-Hasik-Shuwaymiya-Marmul-Thumarayt.				
Segment						**Total (km)**
Location	**From**	Hasik				
	To	Shuwaymiyah				
Length (km)		114.00				80.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**		**2030**
	PCU/day	---	---	500		300
Work Item		Construction of 2-way, 2-lane Road				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 37,856 1,170 39,026				
Implementation Plan		7th 5-Year Development Plan				
Implementation Schedule	**From**	2006				
	To	2010				
Environmental Impact		(Significant) - Alteration of topography. - Influence of inlet and wadi mouths. - Passing in the Jabel Samhan Natural Reserve - Influence of mountainous and marine wildlife. - Influence to cultural heritage				



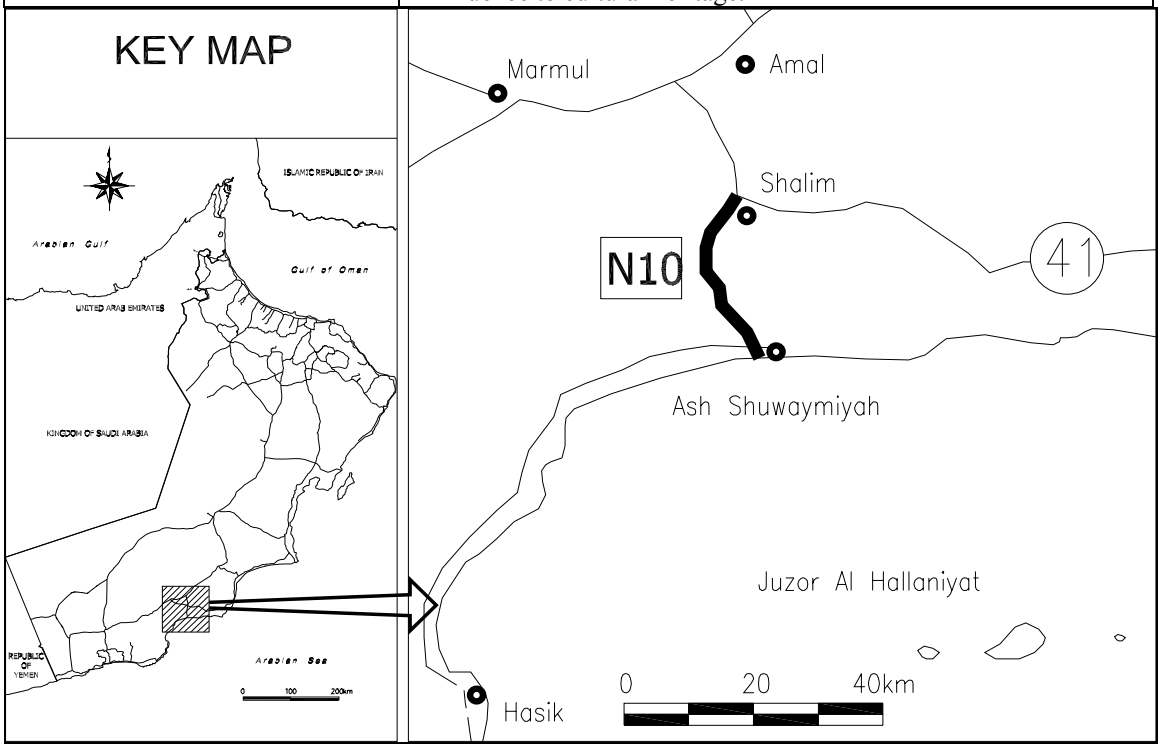
Project Profile **Project Number:** N9

Name		Marmul-Shelim-Sharbithat-Sawqrah			**Region:** Dhofar
Existing Road Condition		Graded NR No. 41			
Objective		Connect Dhofar with Northern Oman. The road will create an easy access among Marmul, Shelim, Sharbithat and Sawqrah that will decrease the required travel time.			
Segment					**Total (km)**
Location	**From**	Marmul			
	To	Sawqrah			
Length (km)		140			140
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	---	300	100	700
Work Item		Upgrade the graded road to 2-lane paved road with standards of primary road.			
Cost (1,000 RO)					
Construction		6,392			
Engineering		408			
Total		6,800			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2008			
	To	2011			
Environmental Impact		(Slight/Moderate) Passing near the Jabel Samhan Natural Reserve.			



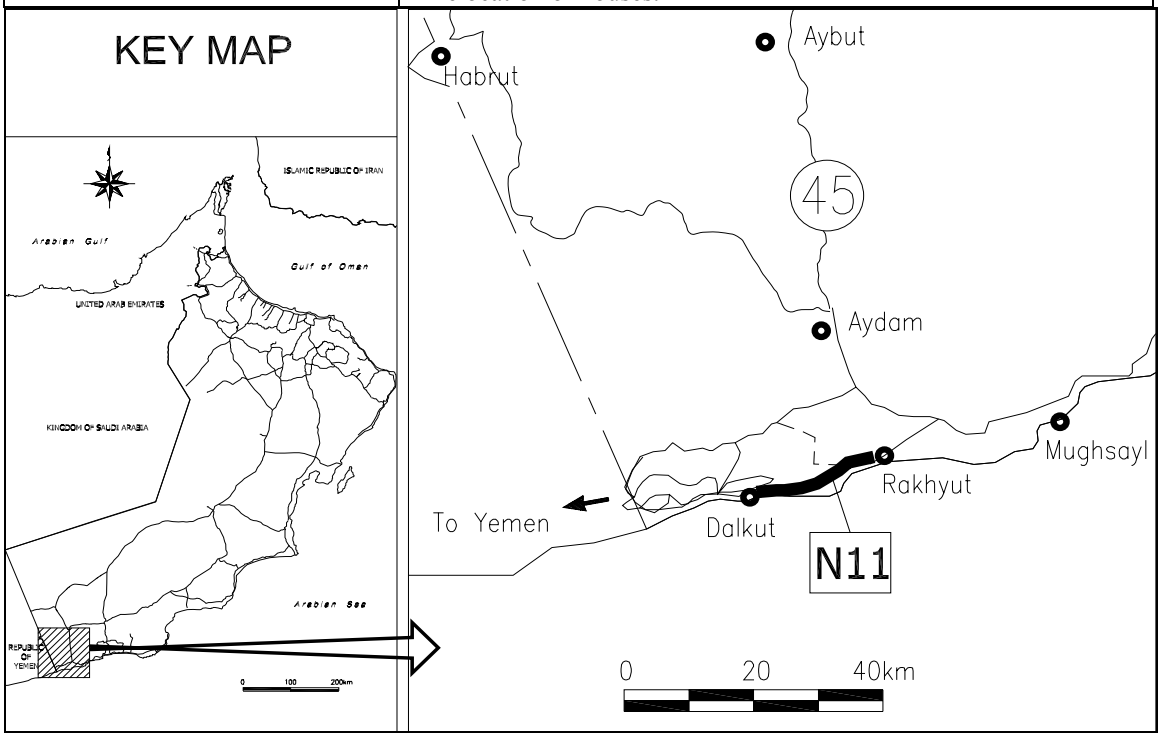
Project Profile **Project Number:** N10

Name		Shelim - Shuwaymiyah			**Region:** Dhofar
Existing Road Condition		Graded NR No. 42.			
Objective		Connect Dhofar with Northern Oman. The road will create an easy access between Shelim and Shuwaymiyah that will decrease the required travel time.			
Segment					**Total (km)**
Location	**From**	Sawqrah			
	To	Shuwaymiyah			
Length (km)		48			48
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day		200	300	500
Work Item		Upgrade the graded road to 2-lane paved road with standards of primary road.			
Cost (1,000 RO)					
Construction		3,069			
Engineering		196			
Total		3,265			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2006			
	To	2008			
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Passing near the Jabel Samhan Natural Reserve. - Influence to cultural heritage.			



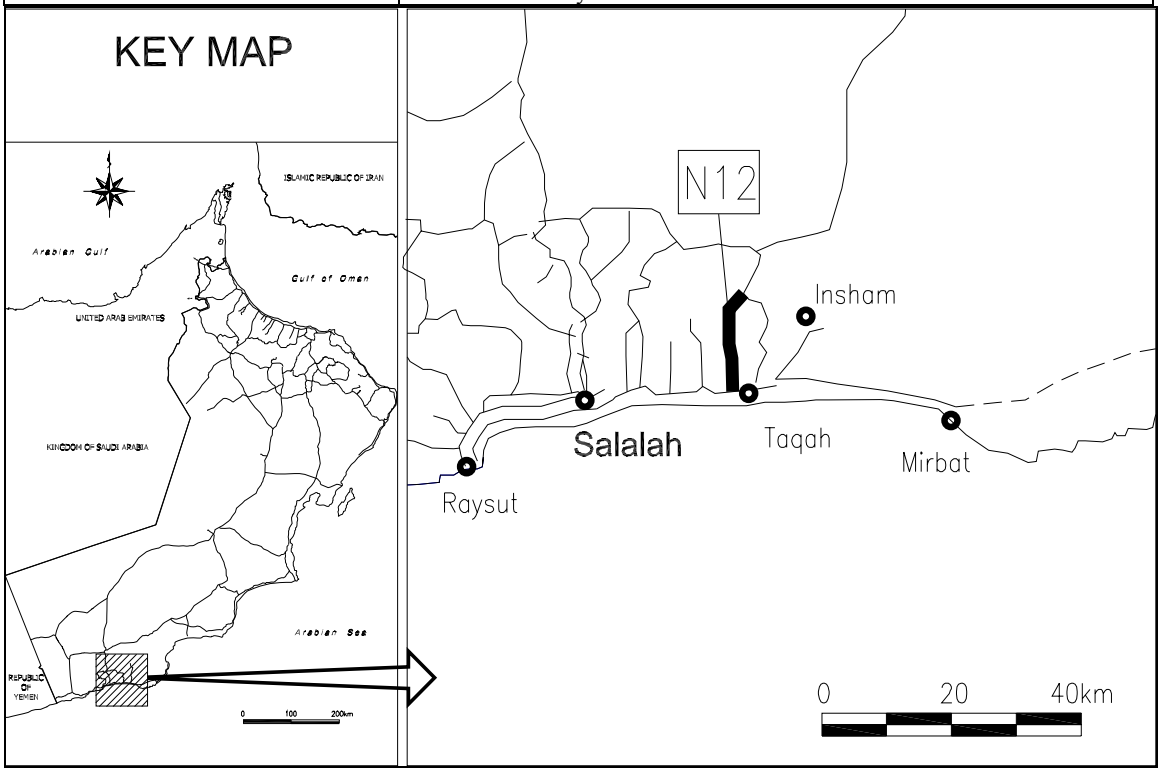
Project Profile **Project Number:** N11

Name		Rakhyut – Dalkut Coastal Road			**Region:** Dhofar
Existing Road Condition		There is no direct road.			
Objective		The road will directly connect the center of Wilayat Rakhyut with the center of Wilayat Dalkut along the sea coast. The road will promote the tourist and commercial activities in Wilayat Rakhyut and Wilayat Dalkut. Shortcut between the two cities in place of existing pass through NR 45 and NR 47.			
Segment					**Total (km)**
Location	**From**	Rakhyut			
	To	Dalkut			
Length (km)		25.00			25.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	----	900	1,200	2,100
Work Item		Construct 2-way, 2-lane primary road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		1,810 115 1,925			
Implementation Plan		10th 5-Year Development Plan			
Implementation Schedule	**From**	2023			
	To	2024			
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage. - Relocation of houses.			



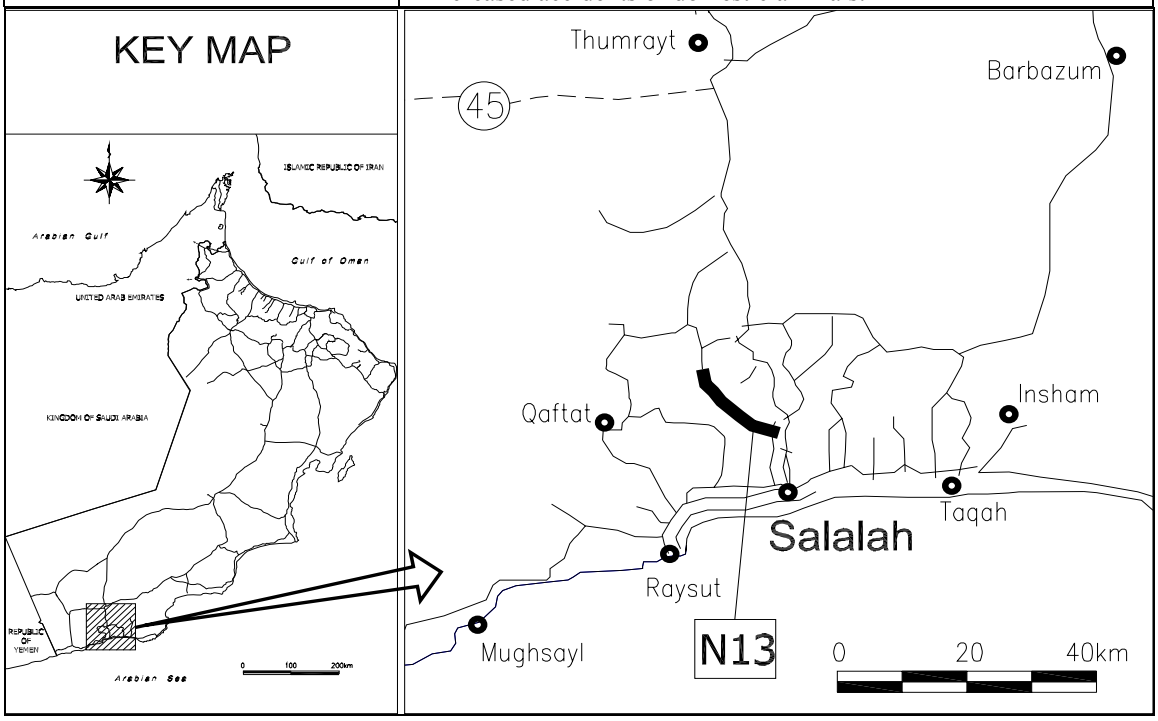
Project Profile **Project Number**: N12

Name		Madinat Al Haq - Nashib			**Region:** Dhofar
Existing Road Condition		Graded road			
Objective		Formation of the road network. The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**	Madinat Al Haq			
	To	Nashib			
Length (km)		28.00			28.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	---	---	---	600
Work Item		Construct 2-way, 2-lane secondary road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 7,106 454 7,560			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2009			
	To	2011			
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment.			



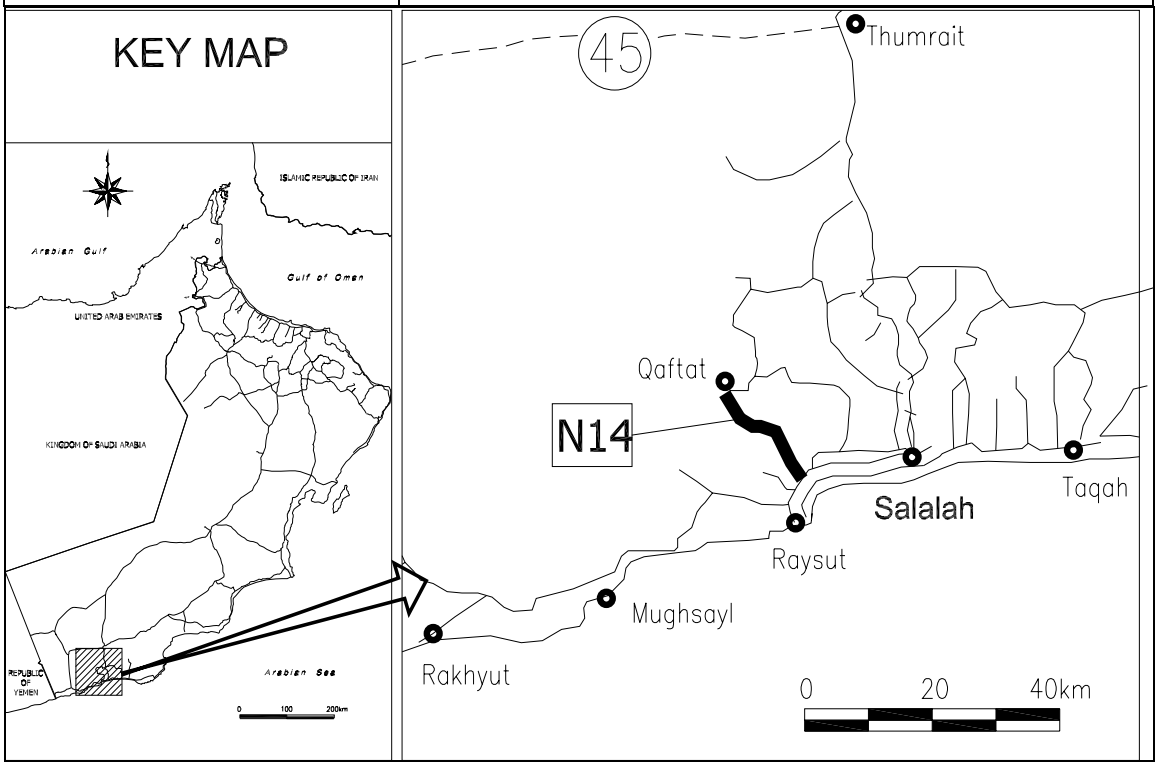
Project Profile **Project Number:** N13

Name		Hujaif – Jahnin - Asir			**Region:** Dhofar	
Existing Road Condition		Graded road				
Objective		This road is an alternative for Salalah-Thumrayt road in case of emergency. This road serves many residents around the pass of the road. The road pass through important mountain area in dhofar, therefore, it is very important to promote the tourist activities in this area especially during autumn season.				
Segment					**Total (km)**	
Location	**From**	Hujaif				
	To	Asir				
Length (km)		22			22	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day					
Work Item		Construct 2-way, 2-lane secondary road				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 5584 356 5,940				
Implementation Plan		8th 5-Year Development Plan				
Implementation Schedule	**From**	2013				
	To	2016				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage. - Increased accidents of domestic animals.				



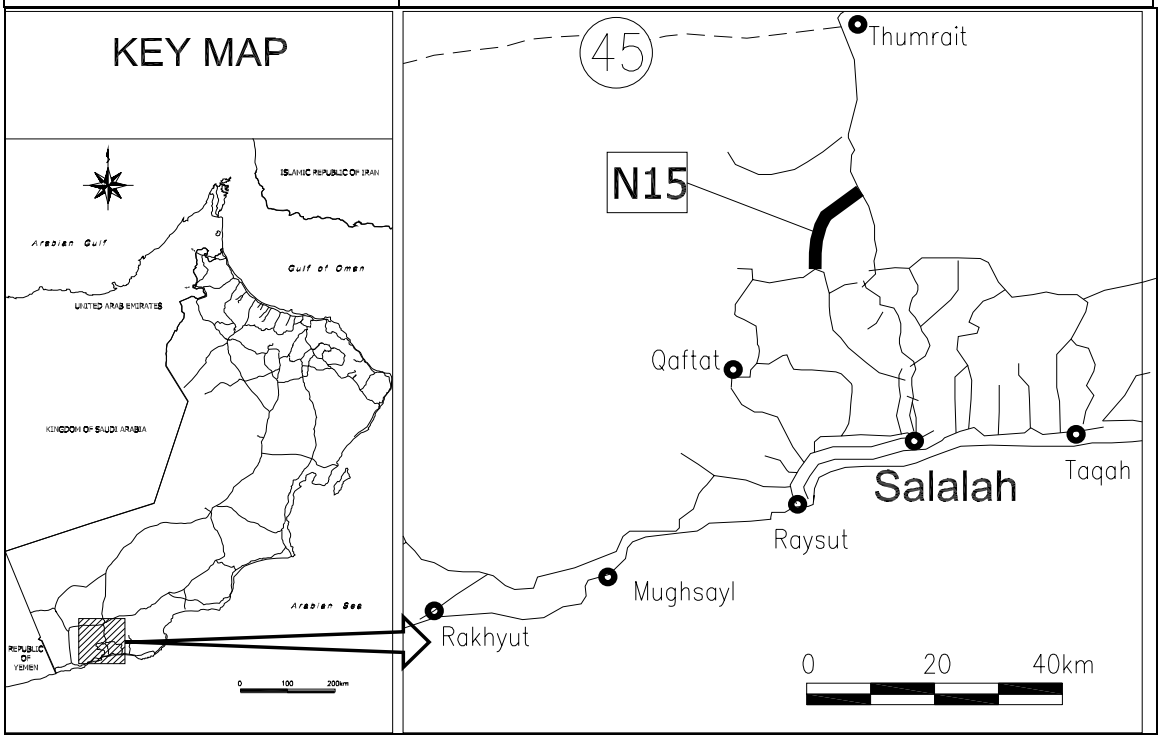
Project Profile **Project Number:** N14

Name		Teetam – Qaftut Road 9			**Region:** Dhofar
Existing Road Condition		This road connect Teetam region with Qafut mountain area in Raysut Region This road include the Qafut roadblock Qafut roadblock is very dangerous for the road users especial in autumn			
Objective		The area is attractive tourist spot and construct of paved road will promote the tourist activities in this area			
Segment					**Total (km)**
Location	**From**	Teetam			
	To	Qaftut			
Length (km)		12.00			12.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construct of 2-lane, 2-way road			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3046 194 3,240			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2006			
	To	2008			
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Increased accidents of domestic animals.			



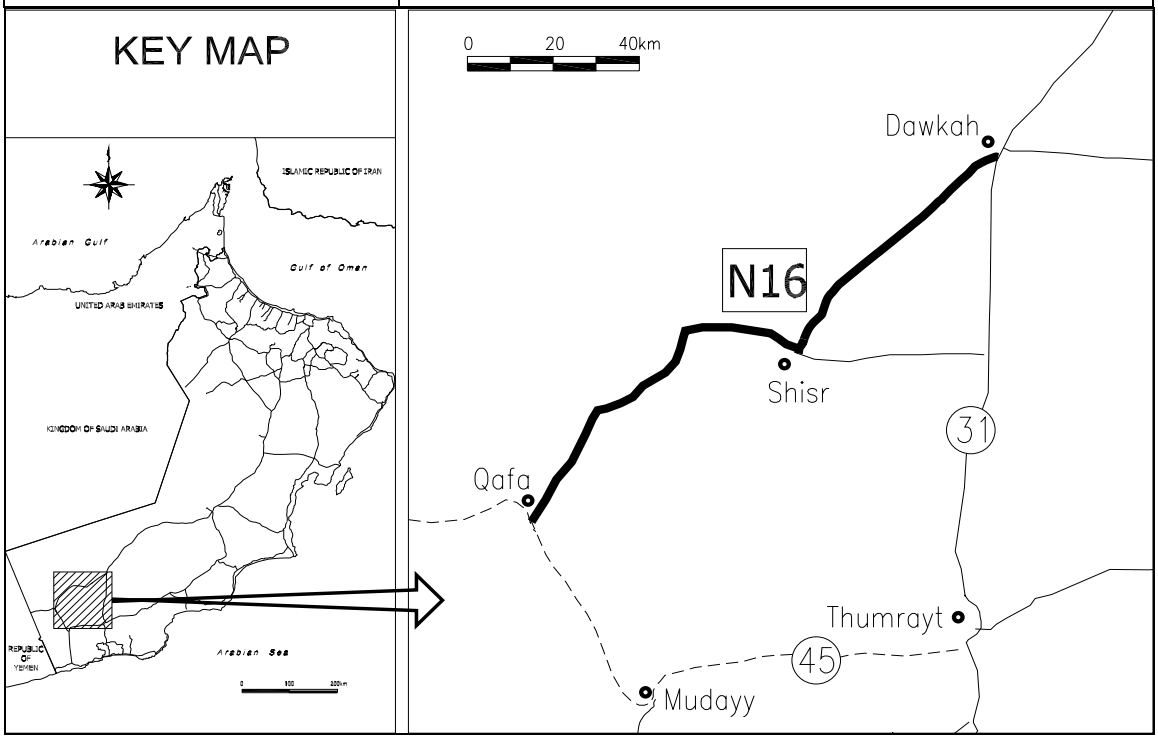
Project Profile **Project Number:** N15

Name		Haluf -Masahilah			**Region:** Dhofar
Existing Road Condition		Mountainous road pass through pastoral areas characterized with wonderful natural landscape especially during autumn season.			
Objective		Promote the tourist activities on the area where the road will be passed. Offer social and economic Services to the residents on the area.			
Segment					**Total (km)**
Location	**From**	Haluf			
	To	Masahilah			
Length (km)		14			14
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construct of 2-lane road through mountainous terrain.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3553 227 3,780			
Implementation Plan		10th 5-Year Development Plan			
Implementation Schedule	**From**	2024			
	To	2025			
Environmental Impact		(Slight/Moderate) Increased accidents of domestic animals.			



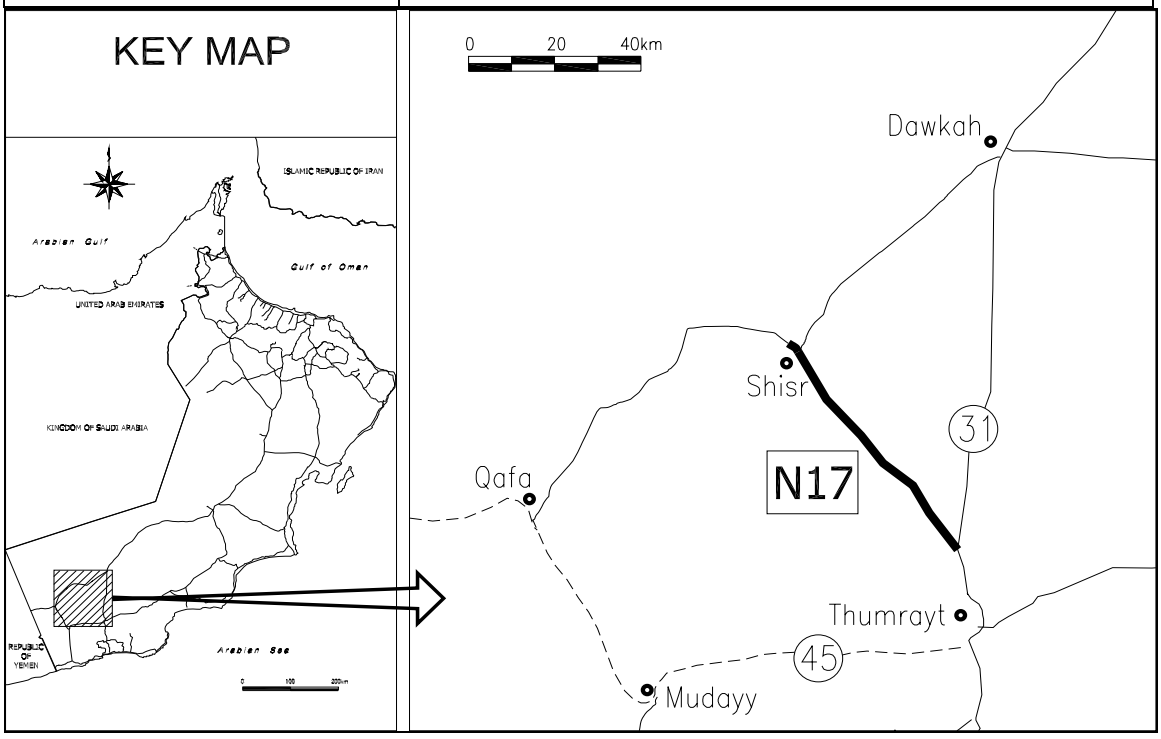
Project Profile **Project Number:** N16

Name		Dawkah – Shisur – Qafaa			**Region:** Dhofar
Existing Road Condition		Graded road, 2-lane, 2-way.			
Objective		Strengthen the connection of NR 31 to Yemen border. The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**	Dawkah			
	To	Qafaa			
Length (km)		156			156
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	700	1700	3,600	9,200
Work Item		Construction of 2-way, 2-lane paved primary road.			
Cost (1,000 RO)					
Construction		11,913			
Engineering		99			
Total		12,012			
Implementation Plan		9th 5-Year Development Plan			
Implementation Schedule	**From**	2016			
	To	2020			
Environmental Impact		(Slight/Moderate) Influence to cultural heritage.			



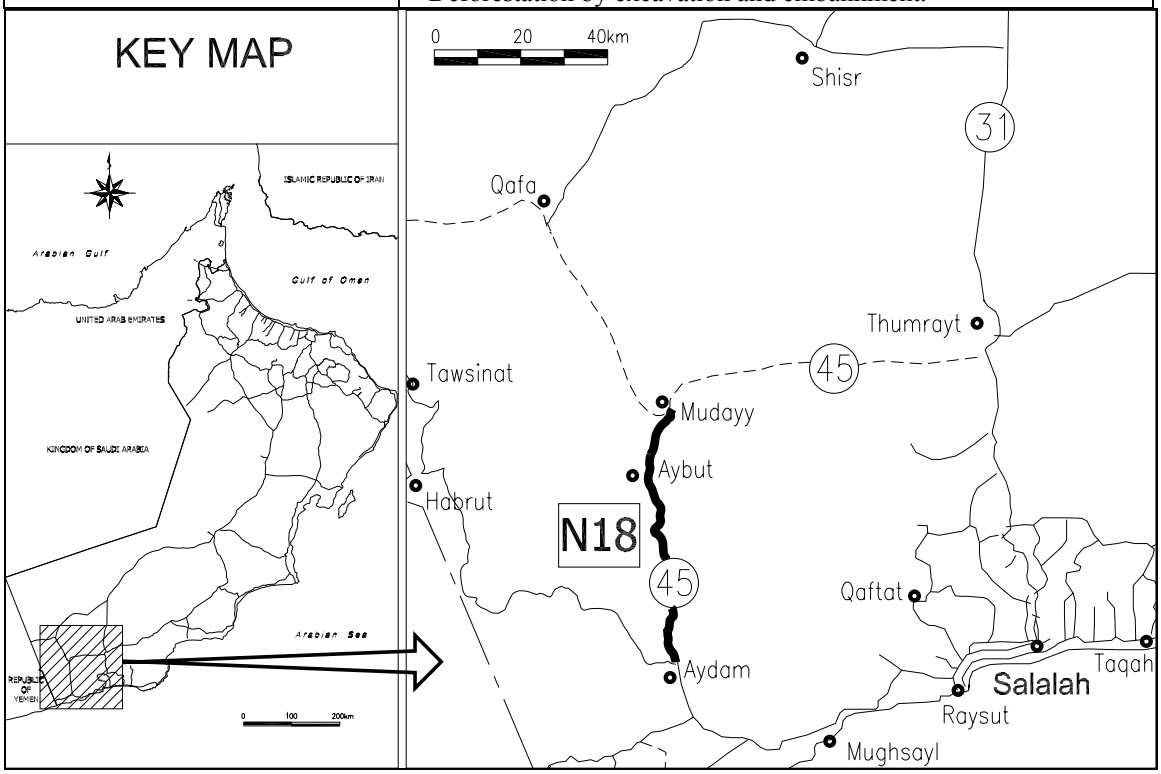
Project Profile **Project Number:** N17

Name		Wadi Haruf - Shisur			**Region:** Dhofar	
Existing Road Condition		Graded NR 43.				
Objective		Shortcut for the Project Road No. N16 (NR 31). The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.				
Segment						**Total (km)**
Location	**From**	Wadi Haruf				
	To	Shisur				
Length (km)		83				83
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day				200	
Work Item		Construction of 2-way, 2-lane paved primary road.				
Cost (1,000 RO)						
Construction		6,007				
Engineering		384				
Total		6,391				
Implementation Plan		11th 5-Year Development Plan				
Implementation Schedule	**From**	2026				
	To	2029				
Environmental Impact		(Slight/Moderate) Influence to cultural heritage.				



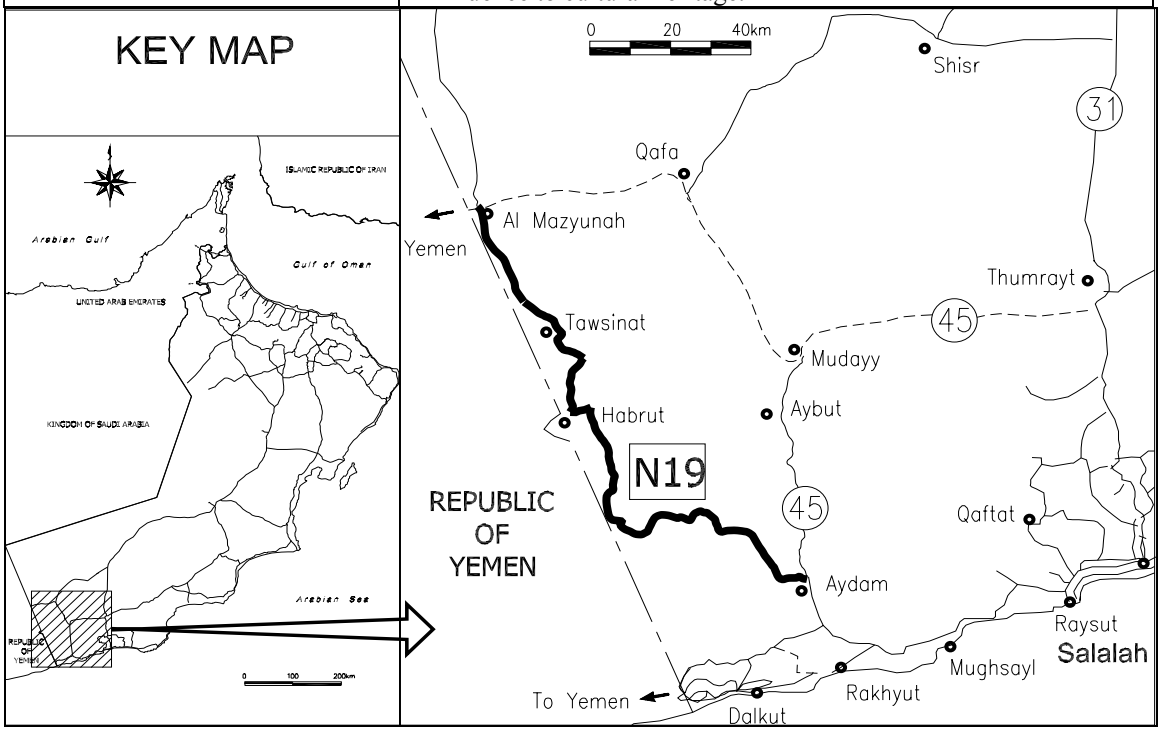
Project Profile **Project Number:** N18

Name		Mudayy-Aybut-Aydam			**Region:** Dhofar
Existing Road Condition		National Graded 2-lane road No. 45.			
Objective		An alternative route for the NR 31 passes across the mountainous terrain. To accommodate the traffic volume increases to the border with Yemen.			
Segment					**Total (km)**
Location	**From**	Mudayy			
	To	Mudayy			
Length (km)		71.00			71.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	1,200	3,100	4,700	11,400
Work Item		Construction of 2-way, 2-lane paved primary road.			
Cost (1,000 RO)					
Construction		9,010			
Engineering		575			
Total		9,585			
Implementation Plan		9th 5-Year Development Plan			
Implementation Schedule	**From**	2019			
	To	2021			
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment.			



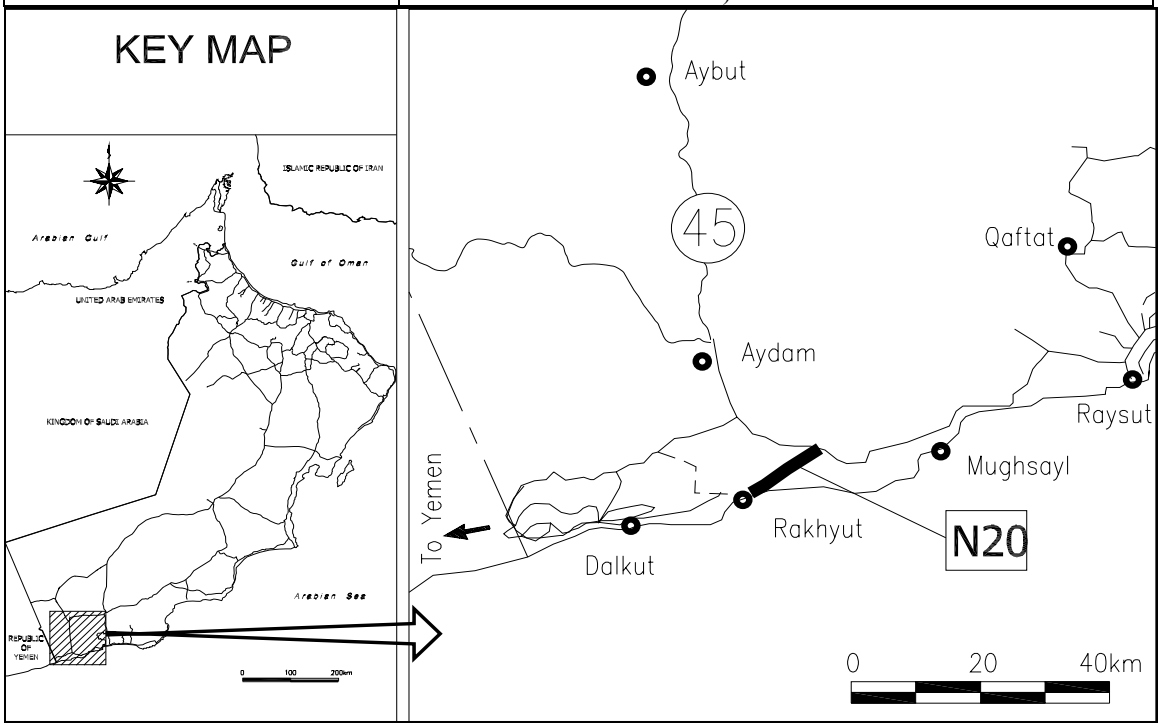
Project Profile **Project Number:** N19

Name		Al Mazyunah – Tawsinat – Habrut - Aydam			**Region:** Dhofar
Existing Road Condition		Graded 2-lane, 2-way road along the border with Yemen.			
Objective		After the development of Al Mazyunah Gate, the traffic volumes are increased. This road will mitigate the traffic congestion along Mazyunah-Thumrayt road. It will be a shortcut for the traffic from Mazyunah to western region of Dhofar Governorate bypassing Thumrayt, Salalah and mountainous area with its cloudy weather in autumn.			
Segment					**Total (km)**
Location	**From**	Al Mazyunah			
	To	Aydam			
Length (km)		120			120
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construction of 2-way, 2-lane paved primary road.			
Cost (1,000 RO)					
Construction		20,304			
Engineering		1,296			
Total		21,600			
Implementation Plan		9th 5-Year Development Plan			
Implementation Schedule	**From**	2019			
	To	2022			
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.			



Project Profile **Project Number:** N20

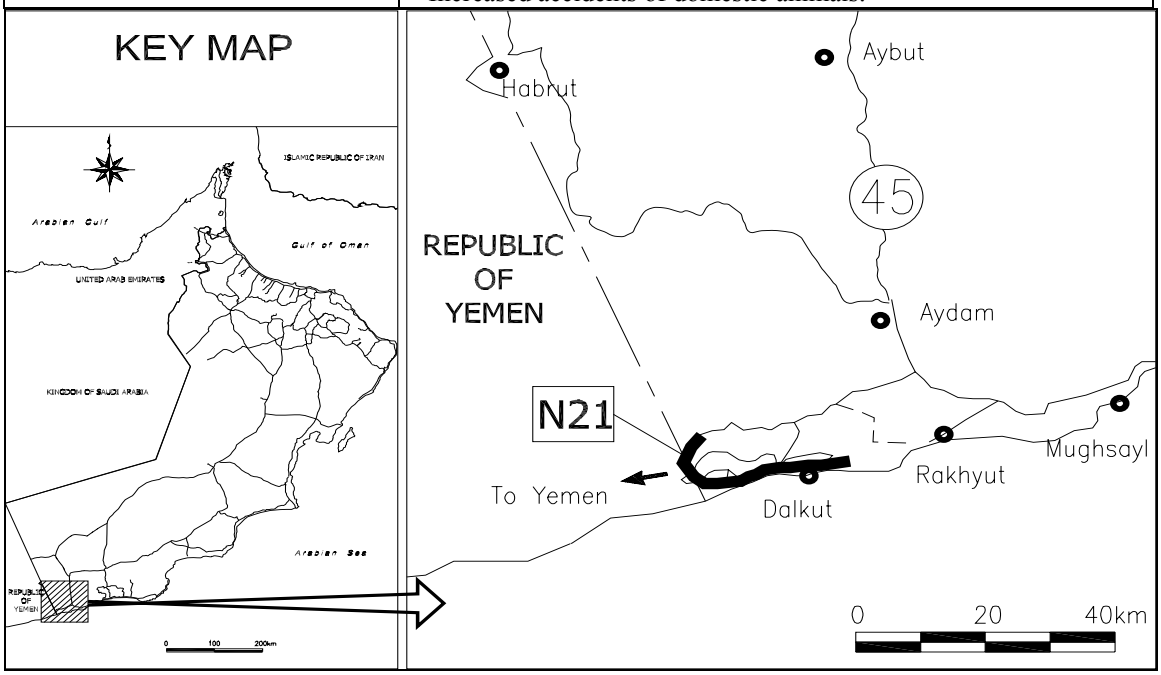
Name		Shahb Asayb - Rakhyut			**Region:** Dhofar	
Existing Road Condition		Track road.				
Objective		The road will directly connect Wilayat Rakhyut with Shabb Asayb. he road will create shortcut for about 25 km extra length for the traffic coming from Salalah to Rakhyut. The road therefore will promote the tourist, commercial, and social activities in Wilayat Rakhyut.				
Segment					**Total (km)**	
Location	**From**	Shahb Asayb				
	To	Rakhyut				
Length (km)		16			16	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	400	1,000	1,200	2,100	
Work Item		Construction of 2-way, 2-lane paved road.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 4061 259 4,320				
Implementation Plan		8th 5-Year Development Plan				
Implementation Schedule	**From**	2014				
	To	2015				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Increased accidents of domestic animals. - Relocation of some houses.)				



Project Profile **Project Number:** N21

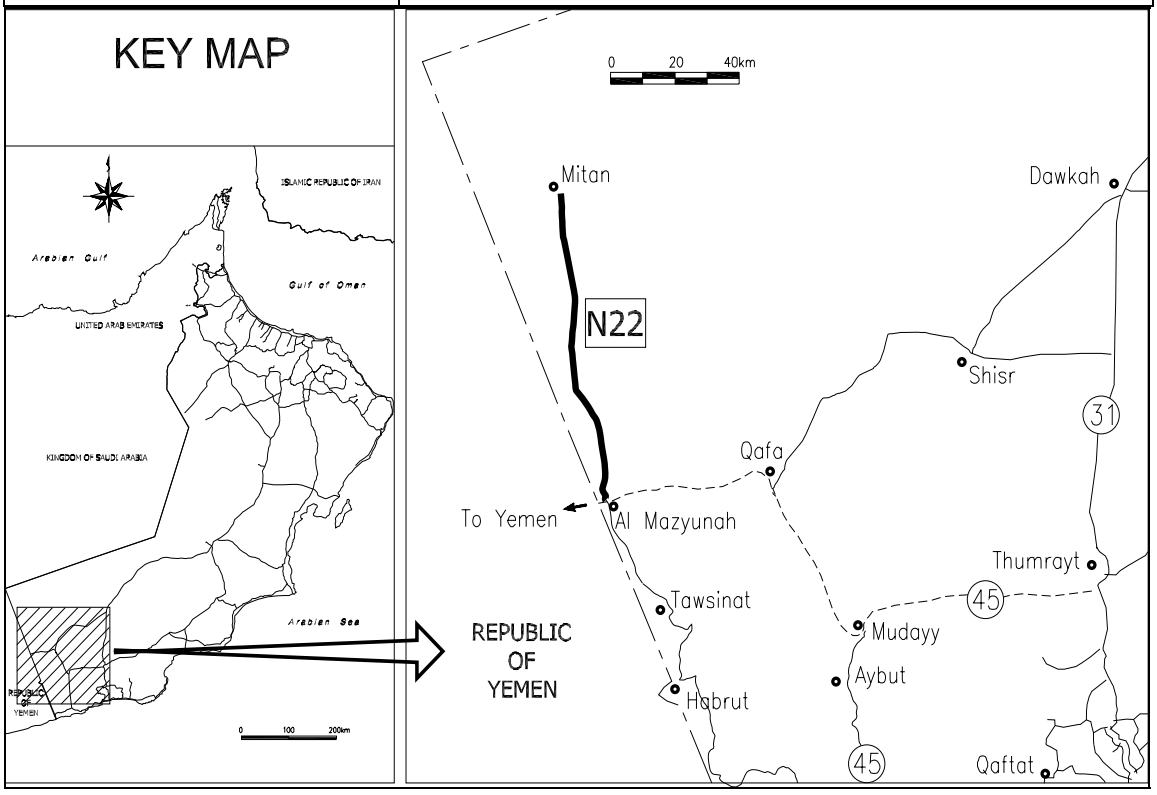
Name		Dalkut – Khadrafi - Sarfait			**Region:** Dhofar	
Existing Road Condition		The existing road is a single carriageway constructed in 1998 by Ministry of Defense. The road is located in the severely mountain area on the southern region of Dhofar. The road was subjected to different damages due to heavy rain and becomes too dangerous under the current heavy traffic.				
Objective		Rehabilitate the road taken into consideration that these severe damages are happened since there was no study for the required road protections and lack of drainage structures and the substandard adopted during the sub base compaction. Due to the especial weather condition in the area, it becomes an interesting tourist spot. The area plus its tourist activities also characterized with the commercial and social activities since it is located on the boundary with Yemen.				
Segment						**Total (km)**
Location	**From**	Dalkut				
	To	Sarfait				
Length (km)		14.00				14.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day					
Work Item		Rehabilitate of the existing road based on the HDM standards.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3553 227 3,780				
Implementation Plan		8th 5-Year Development Plan				
Implementation Schedule	**From**	2011				
	To	2012				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Increased accidents of domestic animals.				

KEY MAP



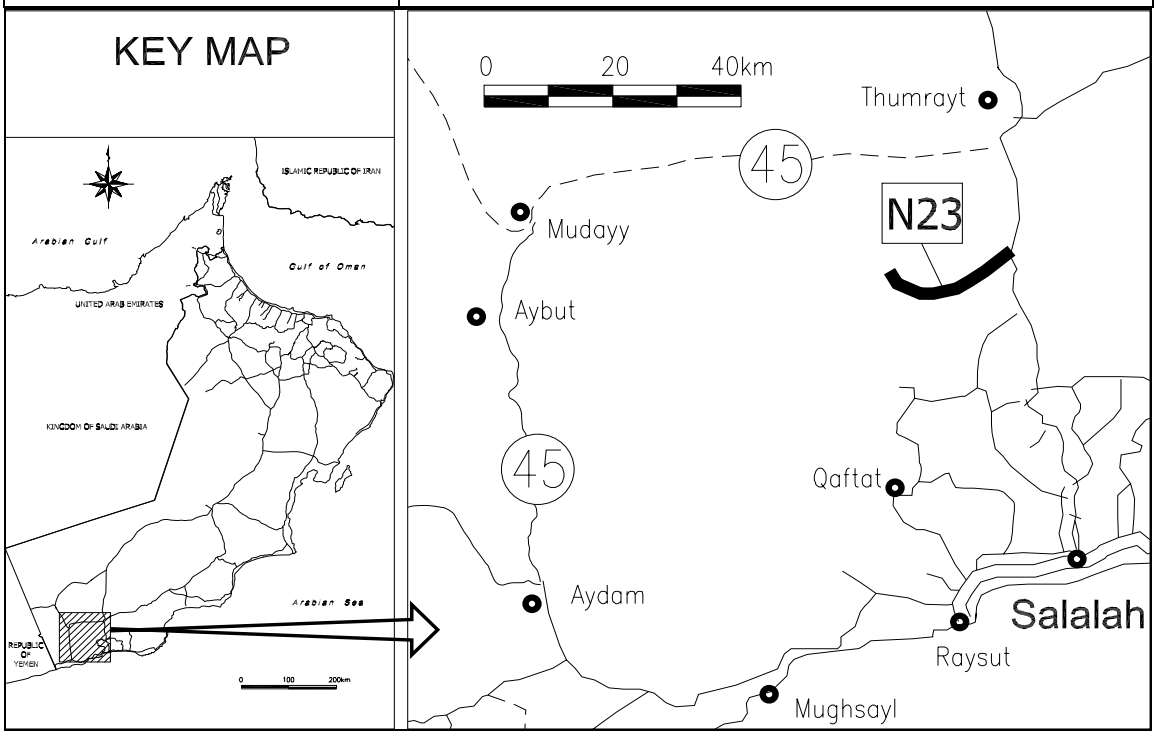
Project Profile **Project Number:** N22

Name		Al Mazyunah - Mitan			**Region:** Dhofar	
Existing Road Condition		Graded road along the boundary with the Republic of Yemen.				
Objective		After the development of Al Mazyunah Gate, the traffic volumes are increased. The road will be constructed to cope with this traffic increase and as an extension to Project No. N19.				
Segment						**Total (km)**
Location	**From**	Al Mazyunah				
	To	Mitan				
Length (km)		96				96
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day					
Work Item		Construction of 2-way, 2-lane paved road				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 6,948 444 7,392				
Implementation Plan		9th 5-Year Development				
Implementation Schedule	**From**	2016				
	To	2019				
Environmental Impact		(Slight) Insignificant impact.				



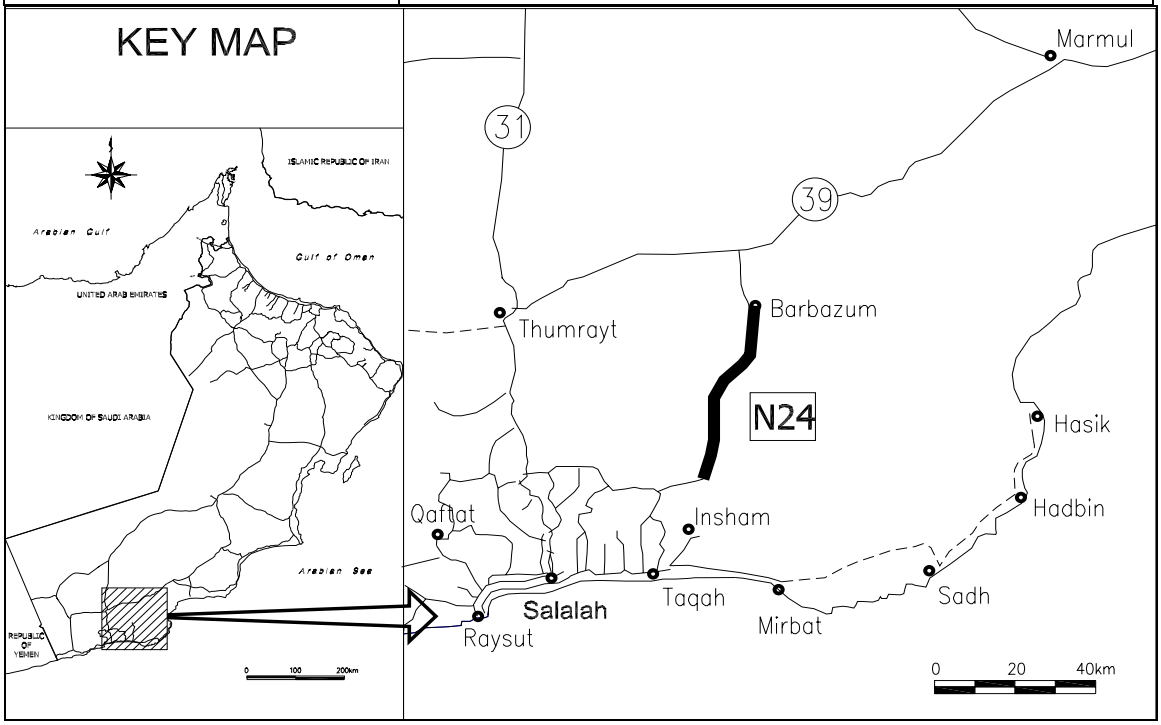
Project Profile **Project Number:** N23

Name		Hajaif - Masahilah			**Region:** Dhofar
Existing Road Condition		Graded road.			
Objective		The road will serve the large number of citizens and the defense camps and will support the economic and social development of the area.			
Segment					**Total (km)**
Location	**From**	Hajaif			
	To	Masahilah			
Length (km)		25			25
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construction of 2-lane paved roads.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3173 202 3,375			
Implementation Plan		11th 5-Year Development Plan			
Implementation Schedule	**From**	2029			
	To	2030			
Environmental Impact		(Slight) Insignificant impact.			



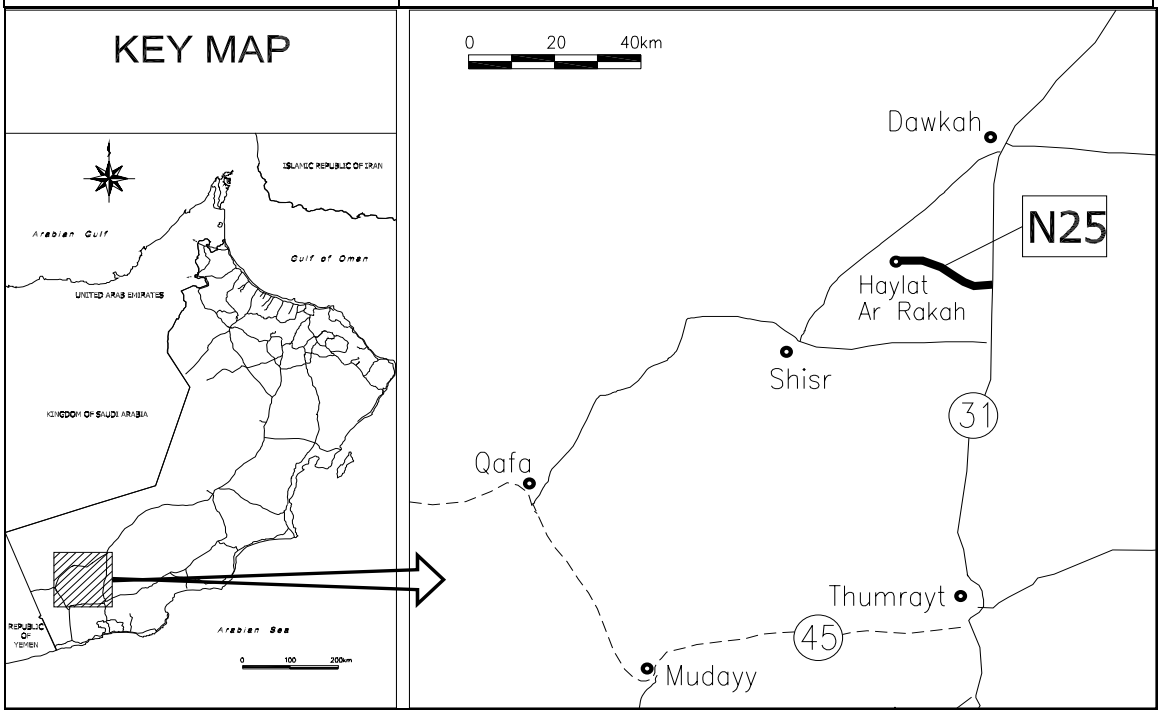
Project Profile **Project Number:** N24

Name		Jibjat - Barbazum			**Region:** Dhofar
Existing Road Condition		Small length as graded road and the rest classified under others types of unpaved roads.			
Objective		Act as detour route for NR 31 across mountainous range. The existing of the road can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**	Jibjat			
	To	Barbazum			
Length (km)		65			65
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construction of 2-lane paved roads			
Cost (1,000 RO)					
Construction		16,497			
Engineering		1,053			
Total		17,550			
Implementation Plan		11th 5-Year Development Plan			
Implementation Schedule	**From**	2026			
	To	2028			
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Passing near "Jabel Samhan Natural Reserve". - Increased accidents of domestic animals.			



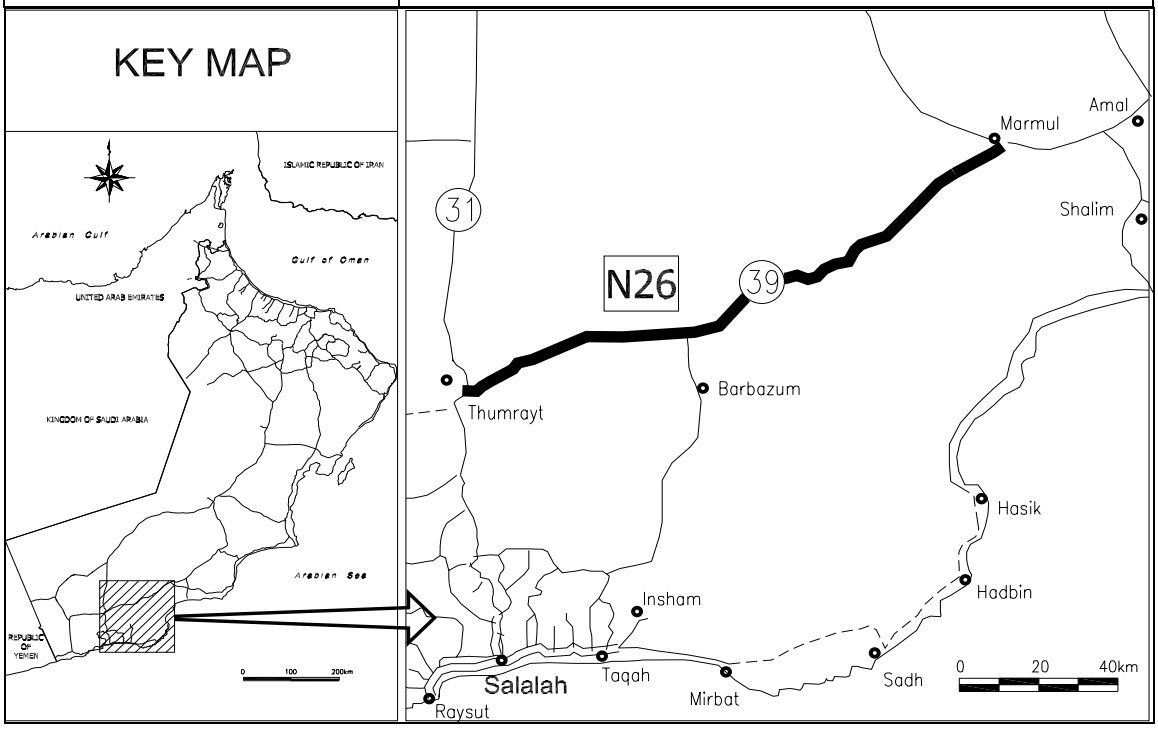
Project Profile **Project Number:** N25

Name		Haylat – Ar Rakah			**Region:** Dhofar
Existing Road Condition		New road			
Objective		Strengthen the local road network in Dhofar Region. The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**	Haylat			
	To	Ar Rakah			
Length (km)		25			25
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construct 2-way, 2-lane secondary road.			
Cost (1,000 RO)					
Construction		1,810			
Engineering		115			
Total		1,925			
Implementation Plan		10th 5-Year Development Plan			
Implementation Schedule	**From**	2021			
	To	2022			
Environmental Impact		(Slight) Insignificant impact.			



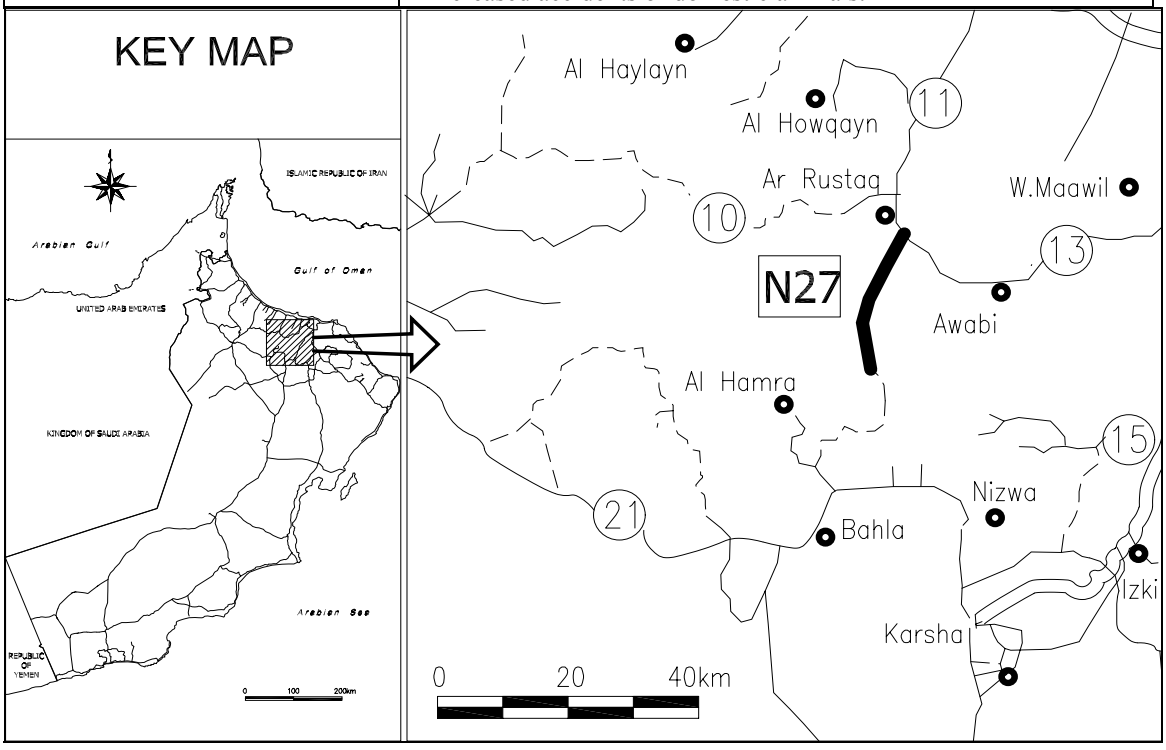
Project Profile **Project Number**: N26

Name		Thumrait - Marmul			**Region:** Dhofar
Existing Road Condition		NR 39, graded road except short length next to Marmual is paved.			
Objective		Upgrade the road to primary paved road to connect Dhofar with northern Oman. The road will support the national integration.			
Segment					**Total (km)**
Location	**From**	Thumrait			
	To	Marmul			
Length (km)		86.00			86.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	200	600	100	700
Work Item		Upgrade the existing graded road to paved road following the standard of primary 2-way, 2-lane highway.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 5,112 326 5,438			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2008			
	To	2010			
Environmental Impact		(Slight) Insignificant impact.			



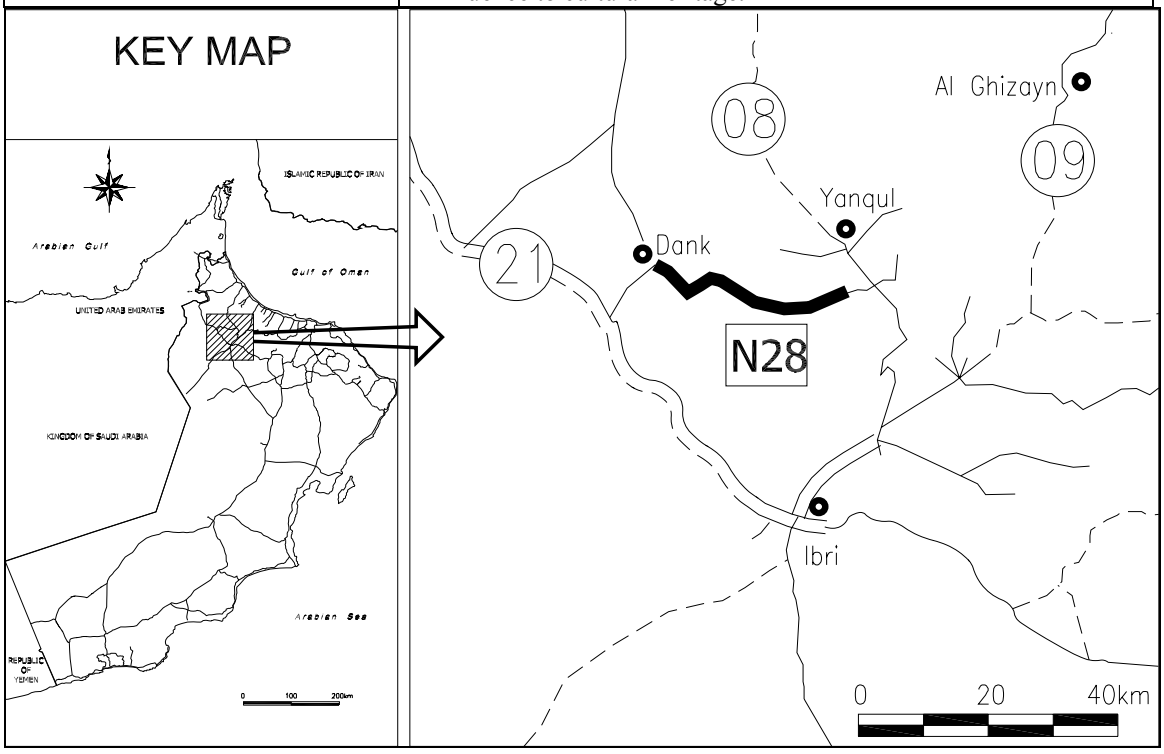
Project Profile **Project Number:**N27

Name		Hatt – Rustaq Road Stage (4)			**Region:** Batinah / A'Dhakhliyah	
Existing Road Condition		Graded road.				
Objective		Strengthen the connection between A'Dhakhliyah Region and the coastal area of Batinah Region. Upgrading the existing graded road to secondary paved road.				
Segment						**Total (km)**
Location	**From**	Hatt				
	To	Rustaq				
Length (km)		28.3				28.3
Traffic Volume	**Year**	**2005**	**2010**	**2020**		**2030**
	PCU/day	----	3,000	6,100		11,000
Work Item		Upgrading the existing graded road to secondary paved road.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 8,181 236 8,417				
Implementation Plan		7th 5-Year Development Plan				
Implementation Schedule	**From**	2006				
	To	2009				
Environmental Impact		(Moderate) - Increased traffic volume. - Alteration of topography. - Deforestation by excavation and embankment. - Increased accidents of domestic animals.				



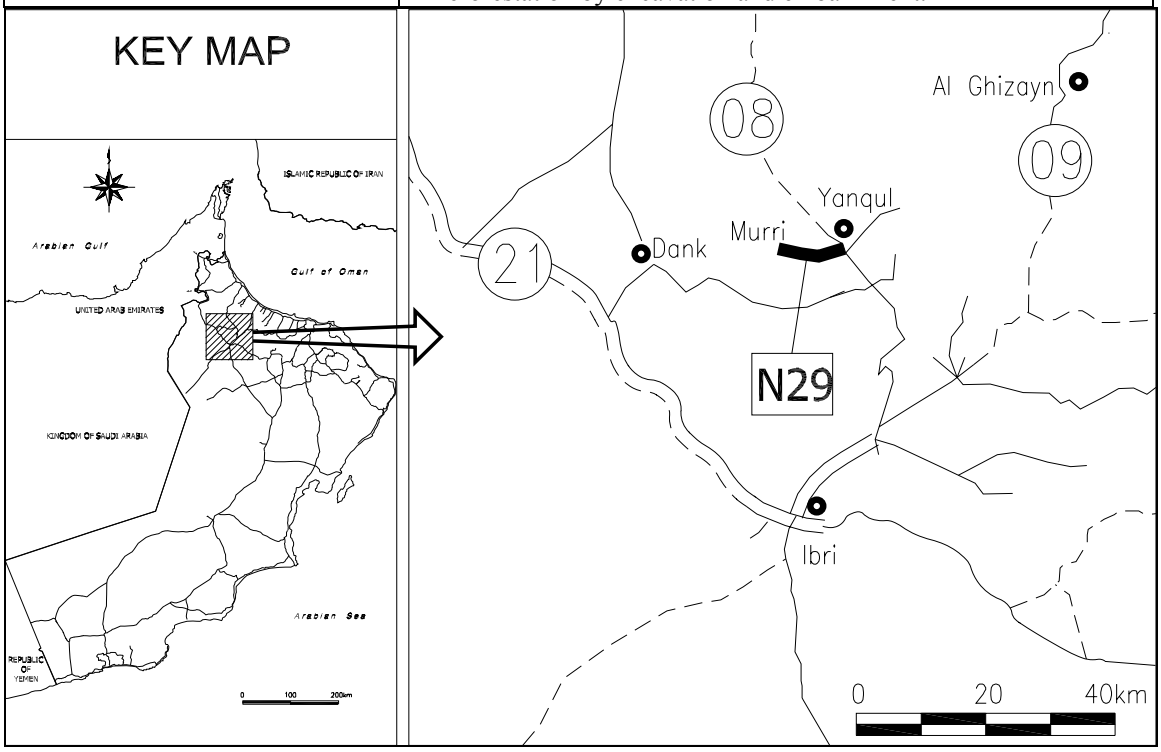
Project Profile **Project Number:** N28

Name		Yanqul – Fida - Dank			**Region:** A'Dhahira	
Existing Road Condition		Non-classified track road				
Objective		To connect the two Wilayat centers Yanqual and Dank. Provide a detour route in case of closure of NR 09 (Ibri-Dariz) due to wadi flood. Strength the road network.				
Segment						**Total (km)**
Location	**From**	Yanqul				
	To	Dank				
Length (km)		41.00				41.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**		**2030**
	PCU/day	----	300	1,100		1,100
Work Item		Construct a new 2-lane paved road.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 9,306 594 9,900				
Implementation Plan		7th 5-Year Development Plan				
Implementation Schedule	**From**	2009				
	To	2011				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.				



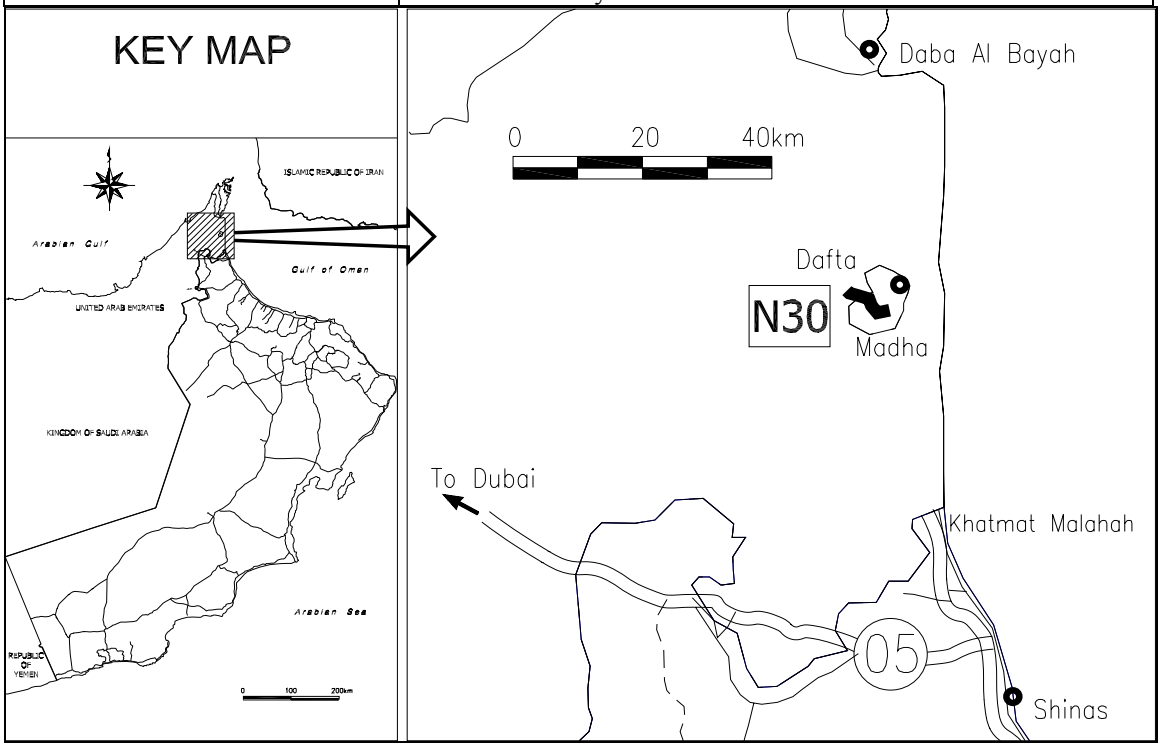
Project Profile **Project Number:** N29

Name		Yanqual - Murry			**Region:** A'Dhahira
Existing Road Condition		Non-classified track road			
Objective		To connect Murry to the center of Wilayat Yanqual. Strength the road network. Provide a detour route in case of closure of NR 09 (Ibri-Dariz) due to wadi flood.			
Segment					**Total (km)**
Location	**From**	Yanqual			
	To	Murry			
Length (km)		26			26
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construct secondary 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 6599 421 7,020			
Implementation Plan		8th 5-Year Development Plan			
Implementation Schedule	**From**	2011			
	To	2013			
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment.			



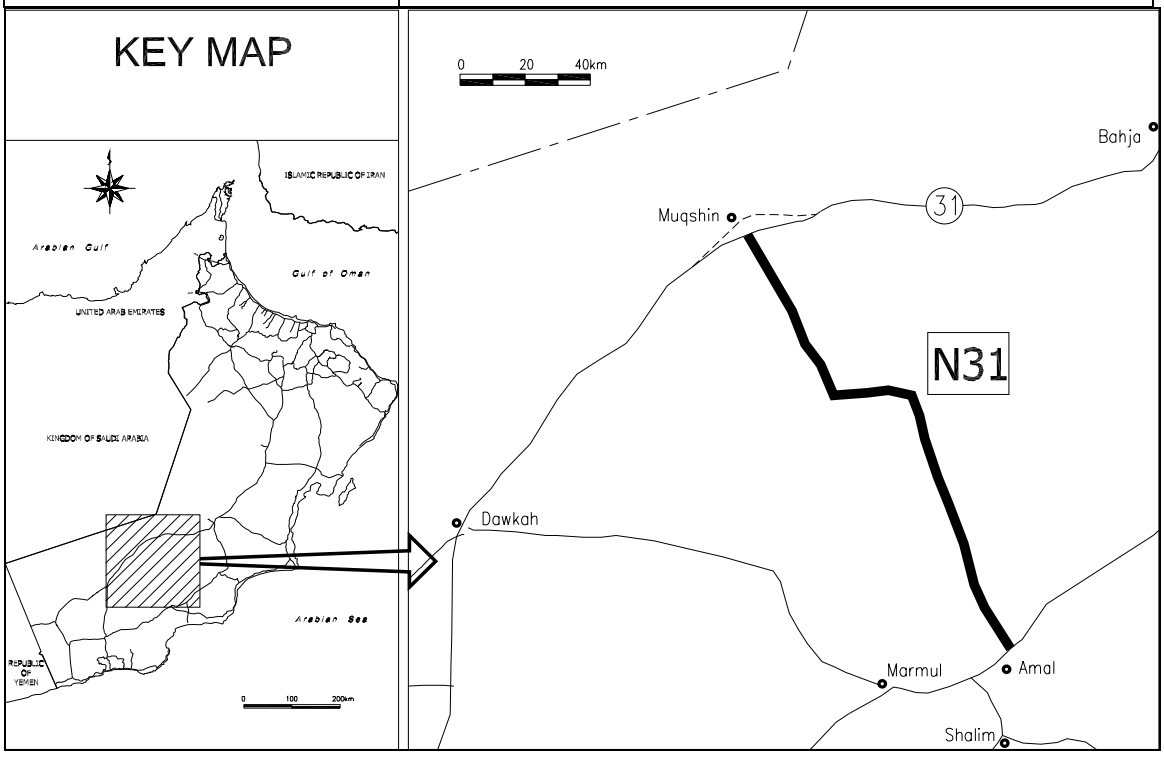
Project Profile **Project Number:** N30

Name		Madha - Dafta			**Region:** Musandam	
Existing Road Condition		Non-classified track road partly passing UAE territory.				
Objective		Important road for Oman Nation integration.				
Segment						**Total (km)**
Location	**From**	Madha				
	To	Dafta				
Length (km)		15.00				15.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**		**2030**
	PCU/day					
Work Item		Construct of 2-lane paved highway.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 5,002 144 5,146				
Implementation Plan		7th 5-Year Development Plan				
Implementation Schedule	**From**	2006				
	To	2009				
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment.				



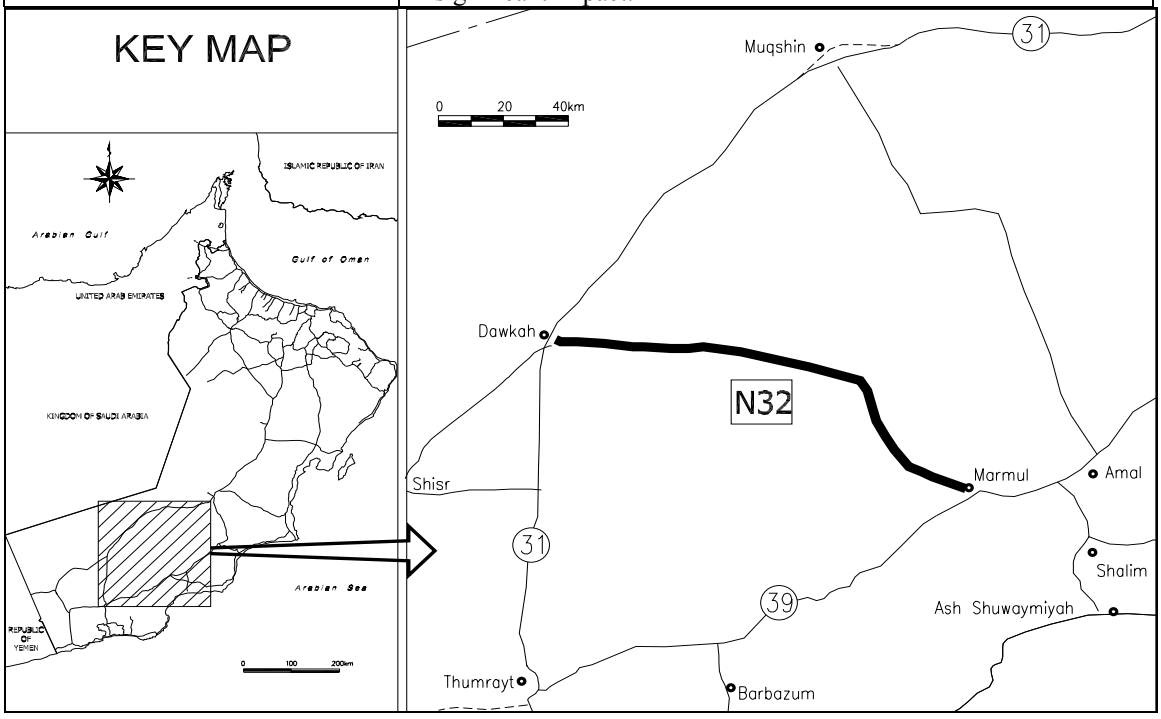
Project Profile **Project Number:** N31

Name		Amal - Muqshin			**Region:** Dhofar
Existing Road Condition		Part classified as graded road and part comes under non-classified track roads.			
Objective		Construction of 2-lane secondary road connecting primary roads NR 31 and NR 39. Connect of the coastal area to the inland areas. The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**	Amal			
	To	Muqshin			
Length (km)		180.00			180.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	---	---	---	0.00
Work Item		Construction of 2-lane secondary road			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 13,028 831 13,860			
Implementation Plan		11th 5-Year Development Plan			
Implementation Schedule	**From**	2026			
	To	2030			
Environmental Impact		(Slight) Insignificant impact.			



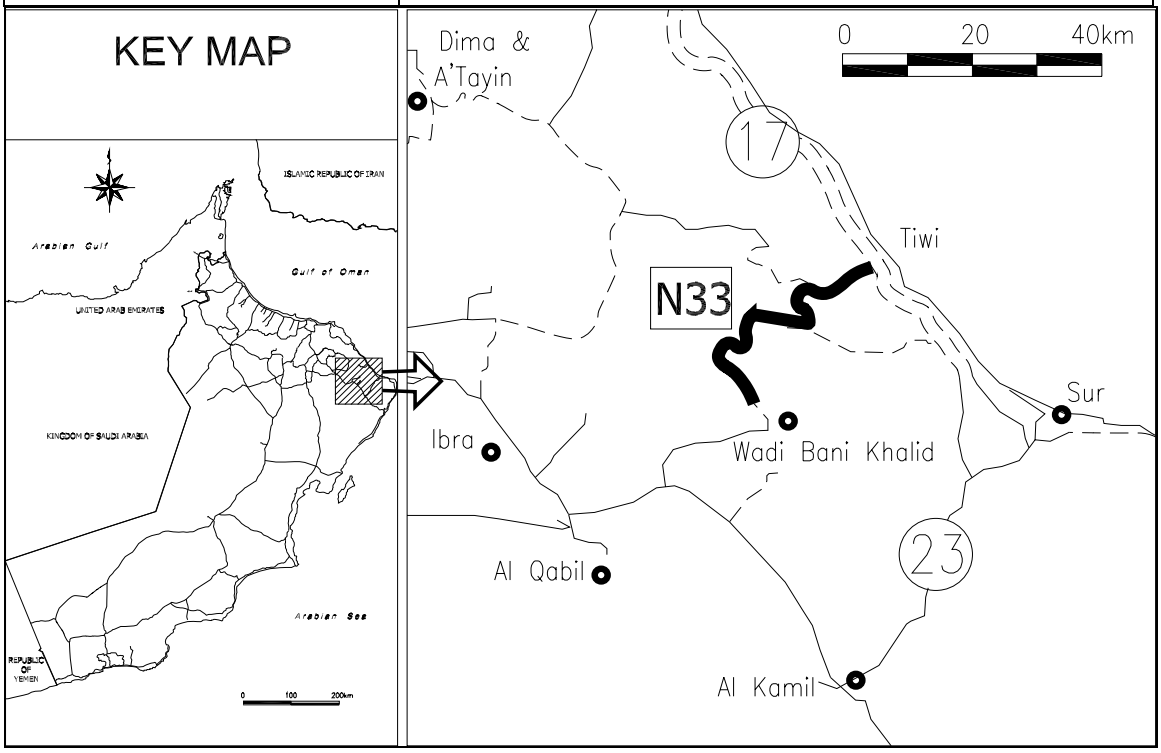
Project Profile **Project Number:** N32

Name		Marmul - Dawhak			**Region:** Dhofar
Existing Road Condition		Part classified as graded road and part comes under non-classified track roads.			
Objective		Construction of 2-lane secondary road connecting primary roads NR 31 and NR 39. Connect of the coastal area to the inland areas. The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**	Marmul			
	To	Dawhak			
Length (km)		140.00			140.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	----	----	----	0.00
Work Item		Construction of 2-lane secondary road			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 10,133 647 10,780			
Implementation Plan		11th 5-Year Development Plan			
Implementation Schedule	**From**	2026			
	To	2030			
Environmental Impact		(Slight) Insignificant impact.			



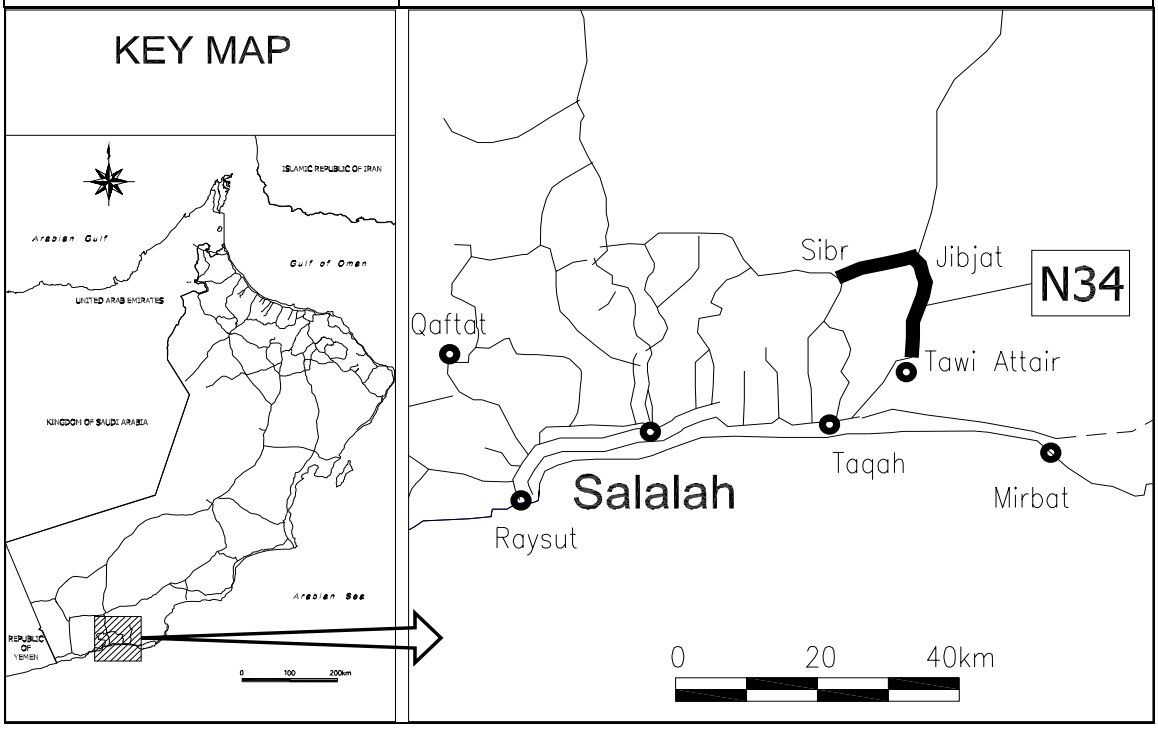
Project Profile **Project Number:** N33

Name		Tiwi - Ismaiyah			**Region:** A' Sharqiyah	
Existing Road Condition		Non-classfied track road				
Objective		Construction of road crossing the mountain range. The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**	Tiwi				
	To	Ismaiyah				
Length (km)		60			60	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day					
Work Item		2-lane road pass through mountain terrain.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 15,228 972 16,200				
Implementation Plan		9th 5-Year Development Plan				
Implementation Schedule	**From**	2019				
	To	2022				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Increased accidents of domestic animals.				



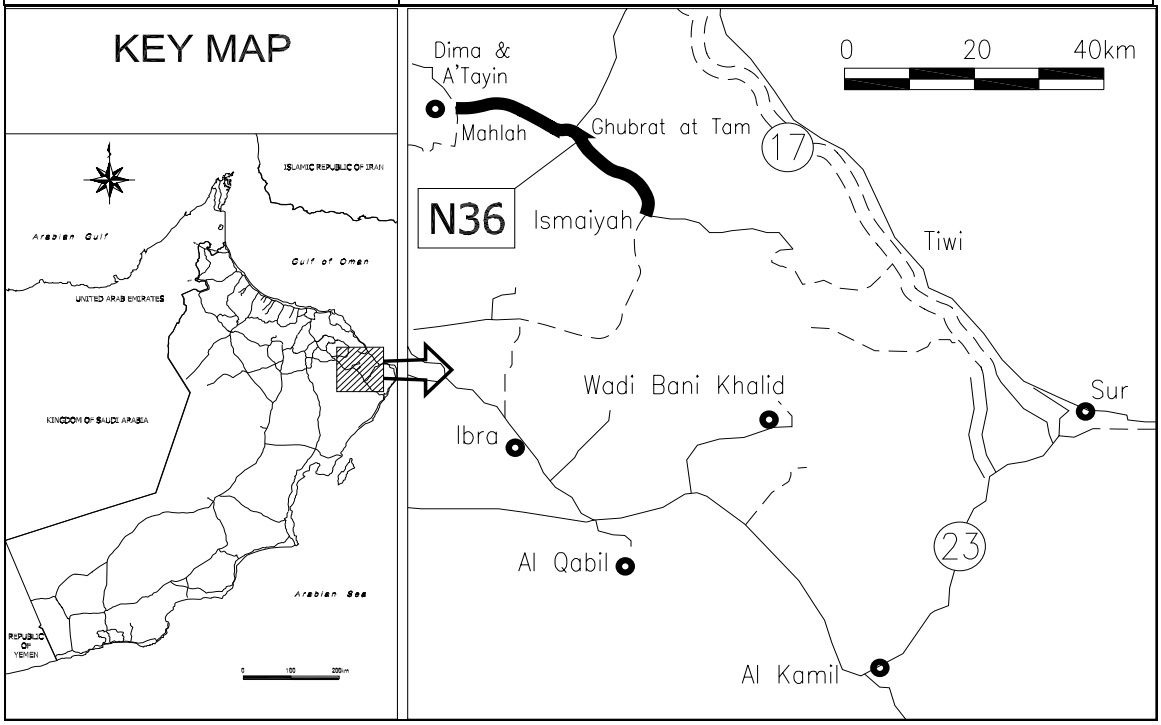
Project Profile **Project Number:** N34

Name		Tawi – Attair - Jibjat			**Region:** Dhofar	
Existing Road Condition		Track road, non-classified.				
Objective		Provision of detour route for NR 31 across the mountain range. The road is a continuation of Project Road No. N24.				
Segment						**Total (km)**
Location	**From**	Tawi				
	To	Jibjat				
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	----	----	----	600	
Work Item		Paved 2-lane secondary road				
Cost (1,000 RO)						
Construction		10,406				
Engineering		664				
Total		11,070				
Implementation Plan		9th 5-Year Development Plan				
Implementation Schedule	**From**	2018				
	To	2021				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment.				



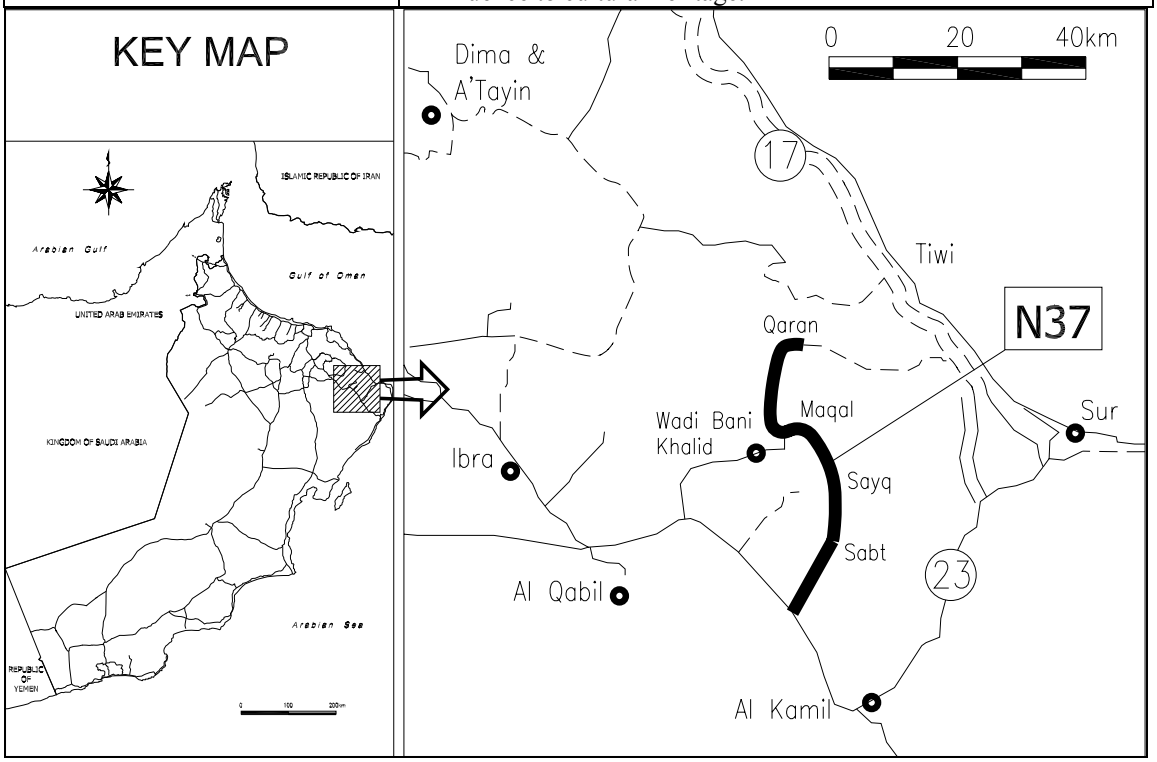
Project Profile **Project Number:** N36

Name		Mahlah – Ghubrat at Tam - Ismaiyah			**Region:** A'Sharqiya
Existing Road Condition		Graded road, extension of paved NR road 25.			
Objective		Serve as the relay between the road from the coast and road from the southern side of mountain range. Promote development of agriculture and tourism in Dima A Tayin area.			
Segment					**Total (km)**
Location	**From**	Mahlah			
	To	Ismaiyah			
Length (km)		38.00			45.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	800	1,800	2,700	7,400
Work Item		Upgrade the existing graded road to 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 6,108 175 6,283			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2007			
	To	2010			
Environmental Impact		(Moderate) - Deforestation by excavation and embankment. - Influence to cultural heritage. - Increased accidents of domestic animals.			



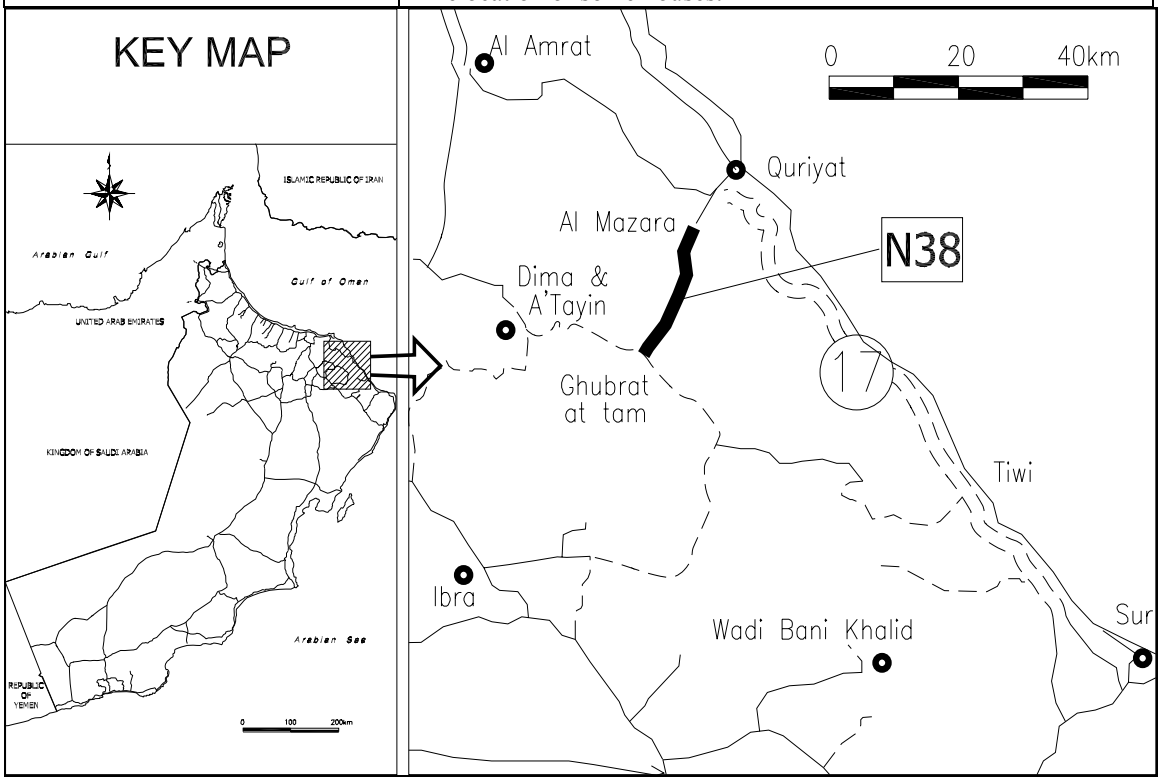
Project Profile **Project Number:** N37

Name		Qaran – Maqal – Sabt – NR 23			**Region:** A'Sharqiya	
Existing Road Condition		Graded road.				
Objective		This road together with the road project N36 form road network crossing the mountain range. This road with road project N36 also will promote development of agriculture and tourism in Dima A'Tayin area.				
Segment					**Total (km)**	
Location	**From**	Qaran				
	To	NR 23				
Length (km)		55.00			55.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	800	1,800	2,700	7,400	
Work Item		Upgrade the existing graded road to 2-lane paved road.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 11,238 717 11,955				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2022				
	To	2025				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.				



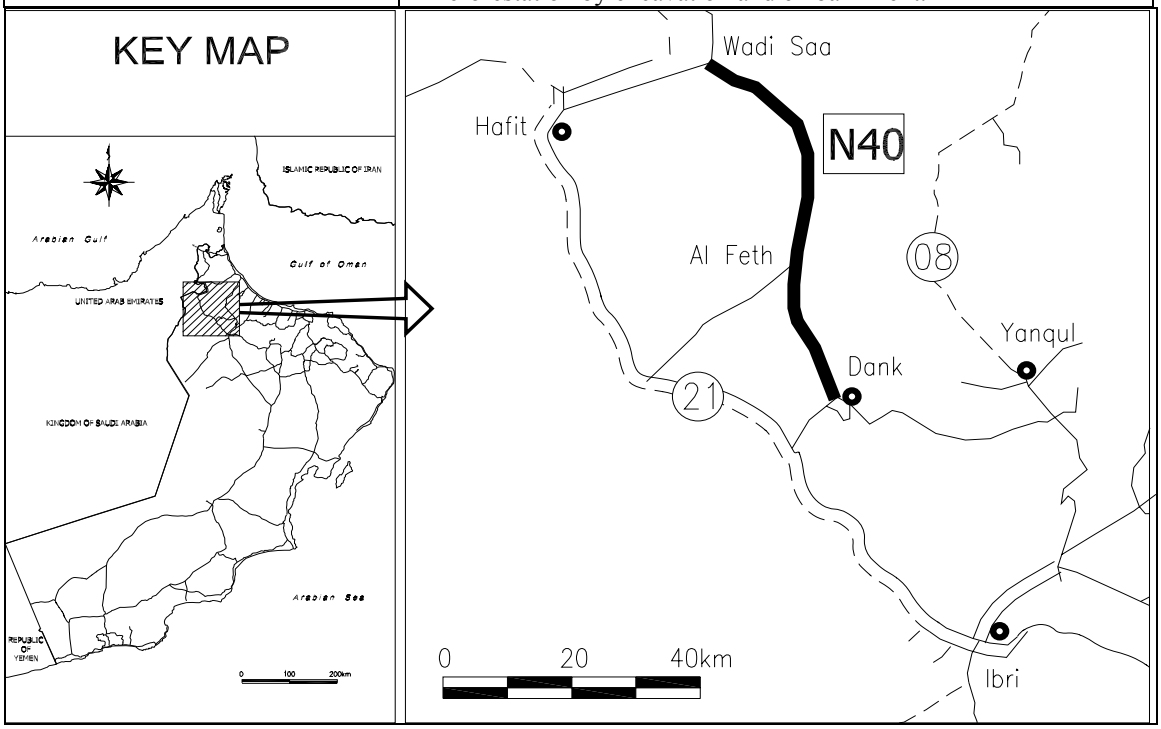
Project Profile **Project Number:** N38

Name		Al Mazari – Ghubrat at Tam			**Region:** Muscat/Sharqiya	
Existing Road Condition		There is no road.				
Objective		Road to cross the mountain range. The road can also act as detour road. The existing of the road can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**	Al Mazari				
	To	Ghubrat at Tam				
Length (km)		80.00			80.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day				4,400	
Work Item		Construct a new 2-lane paved road crossing the mountain range				
Cost (1,000 RO)						
Construction		20,304				
Engineering		1,296				
Total		21,600				
Implementation Plan		11th 5-Year Development Plan				
Implementation Schedule	**From**	2026				
	To	2030				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage. - Relocation of some houses.				



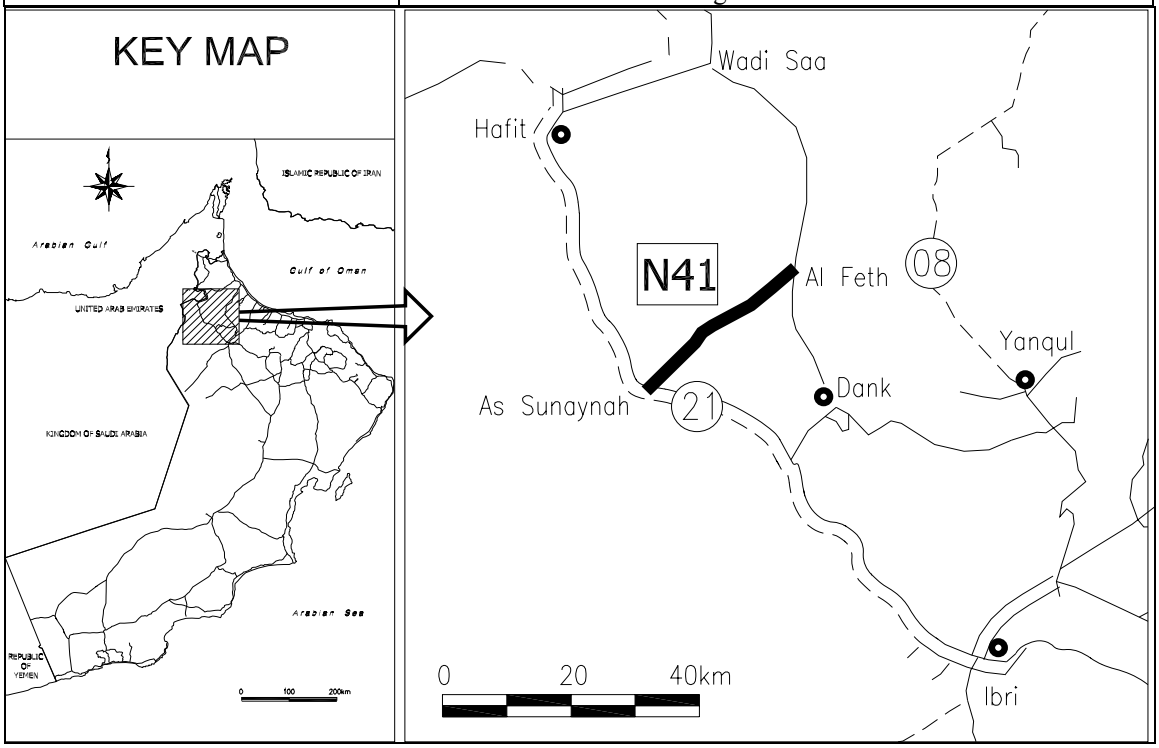
Project Profile **Project Number:** N40

Name		Wadi Saa – Al Deth - Dank			**Region:** A'Dhahira	
Existing Road Condition		Non-classified track road.				
Objective		Provide a detoure route in case of closure of NR 09 (Ibri-Dariz) due to wadi flood. The existing of the road can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**	Wadi Saa				
	To	Dank				
Length (km)		80.00			80.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day				2,100	
Work Item		Construct a new 2-lane paved road.				
Cost (1,000 RO)						
Construction		20,304				
Engineering		1,296				
Total		21,600				
Implementation Plan		9th 5-Year Development Plan				
Implementation Schedule	**From**	2020				
	To	2024				
Environmental Impact		(Slight/Moderate) - Alteration of topography. - Deforestation by excavation and embankment.				



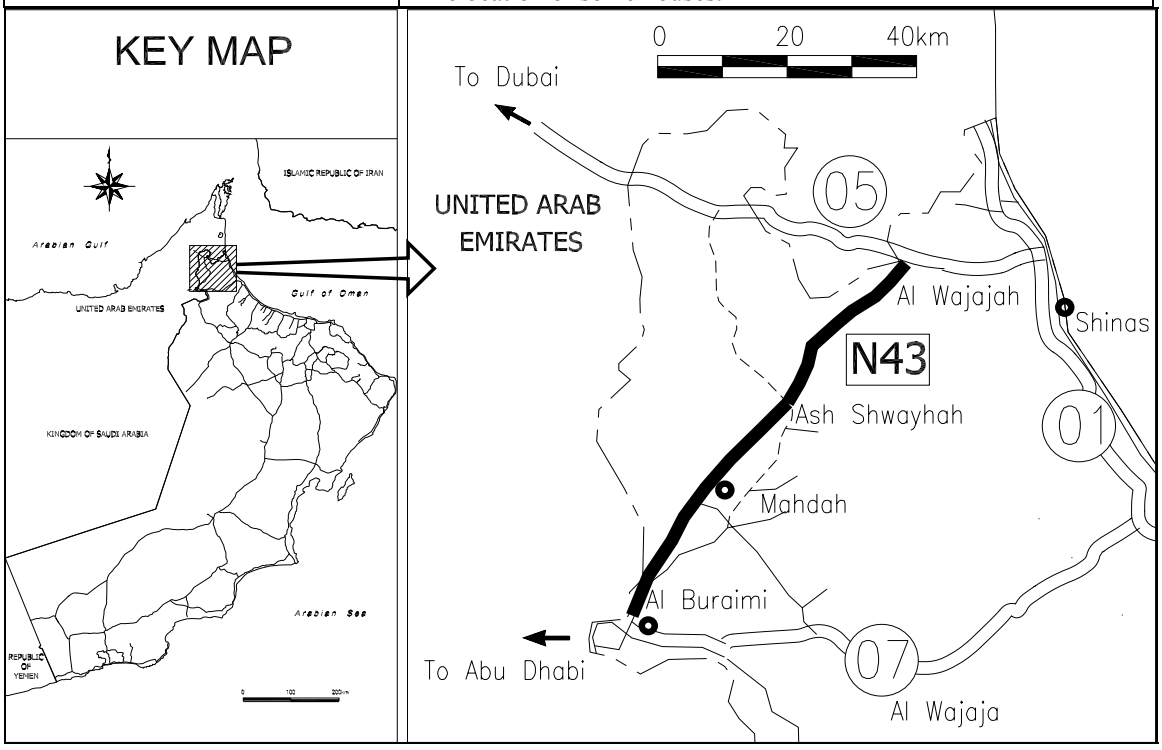
Project Profile **Project Number:** N41

Name		As Sunaynah – Al Feth – Al Wqba			**Region:** A'Dhahira	
Existing Road Condition		Non-classified track road.				
Objective		Provide a detoure route in case of closure of NR 09 (Ibri-Dariz) due to wadi flood. To form road network.				
Segment					**Total (km)**	
Location	**From**	As Sunaynah				
	To	Al Wqba				
Length (km)		45.00			45.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day			1,100	1,800	
Work Item		Construct a new 2-lane paved road.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 6,796 434 7,230				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2023				
	To	2025				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.				



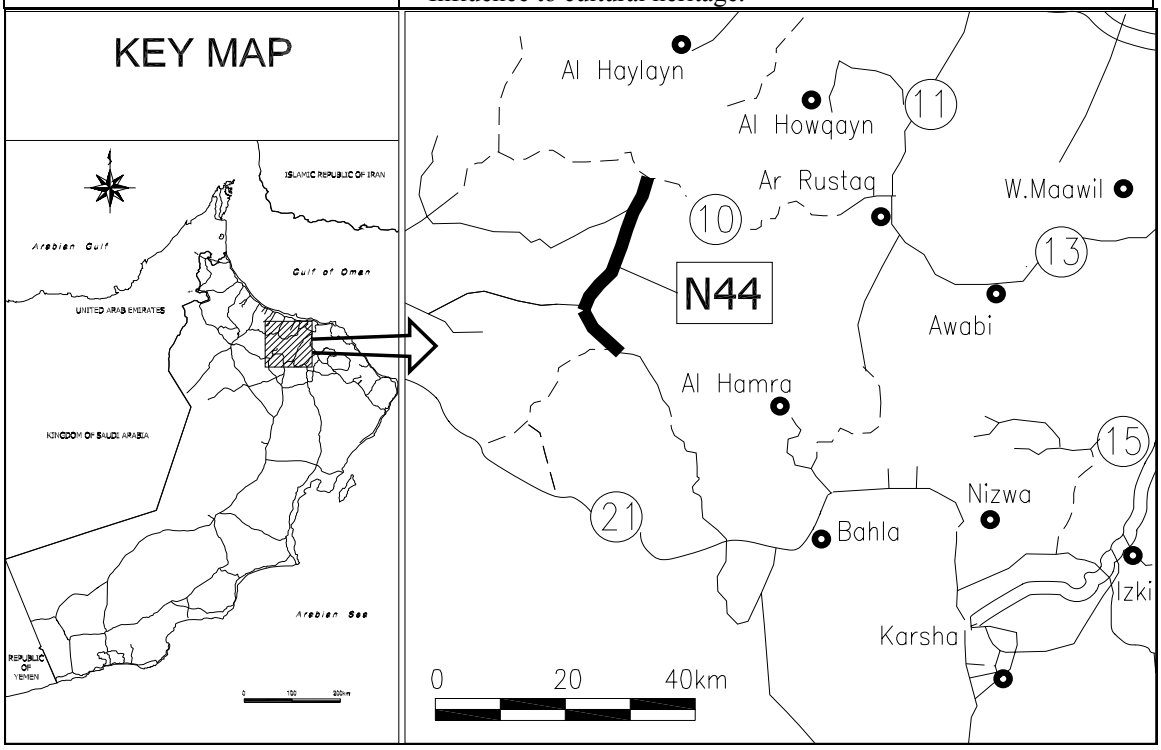
Project Profile **Project Number:** N43

Name		Al Wajajah – Ash Shwayhah – Al Buraymi			**Region:** A'Dhahira
Existing Road Condition		Non-classified track road.			
Objective		Connection to NR 05 which is important primary road/international route, passing through UAE territory. The project road is to provide bypass to pass Oman territory.			
Segment					**Total (km)**
Location	**From**	Al Wajajah			
	To	Ash Shwayhah			
Length (km)		80.00			80.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				200
Work Item		Construct a new 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 20,304 1,296 21,600			
Implementation Plan		11th 5-Year Development Plan			
Implementation Schedule	**From**	2026			
	To	2030			
Environmental Impact		(Moderate) - Influence to cultural heritage. - Relocation of some houses.			



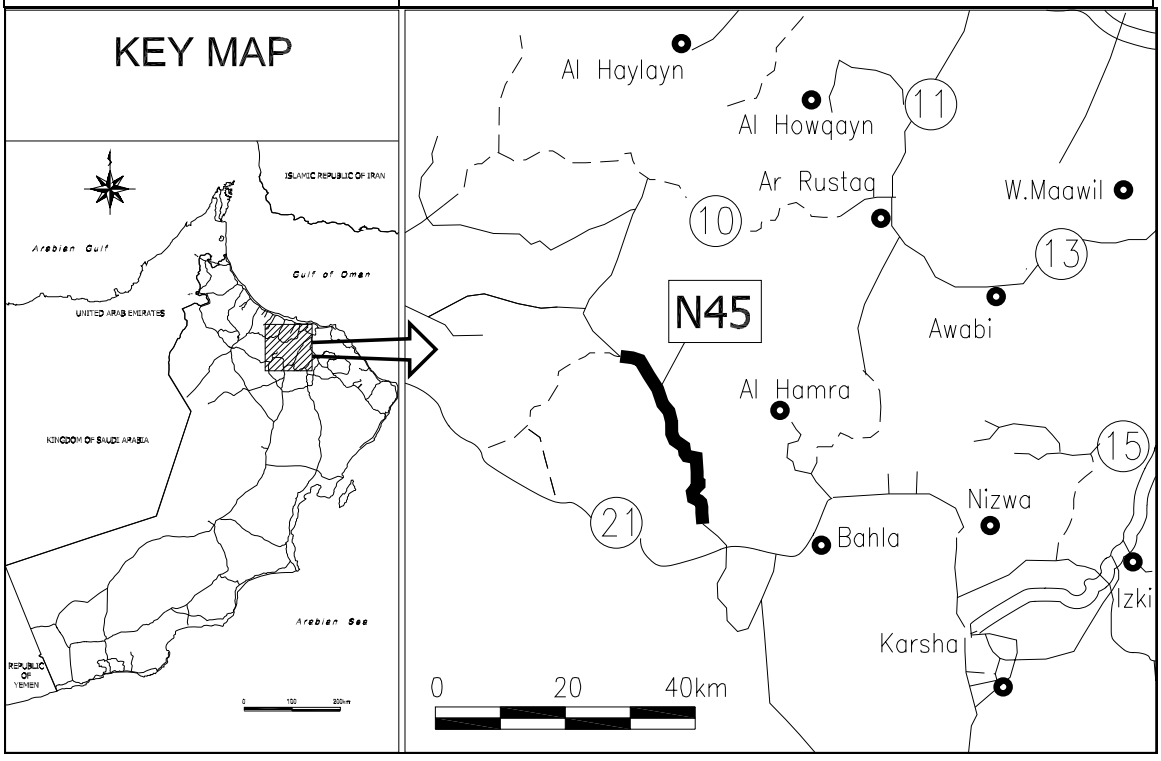
Project Profile **Project Number:** N44

Name		Murri – Ar Rumaylah – Al Ayn			**Region:** A'Dhahira
Existing Road Condition		Graded/track road			
Objective		Provide detour route for NR 09 and NR 10. Connect the roads under construction to the road network. The existing of the road can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**	Murri			
	To	Al Ayn			
Length (km)		30.00			30.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day		3,000	6,100	11,100
Work Item		Construct 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 7,614 486 8,100			
Implementation Plan		10th 5-Year Development Plan			
Implementation Schedule	**From**	2022			
	To	2024			
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.			



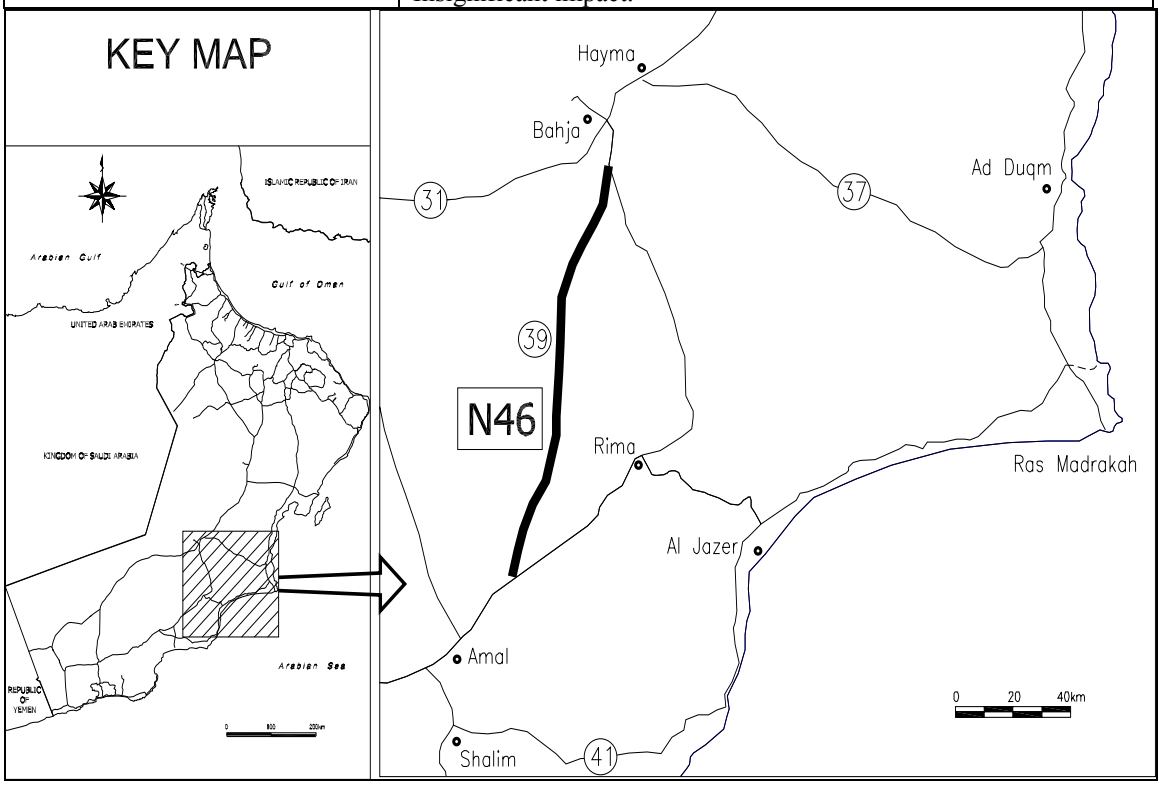
Project Profile **Project Number:** N45

Name		Al Ayn – Sint – Al Wadi Al Ala			**Region:** A'Dhahira	
Existing Road Condition		Graded/track road				
Objective		Provide detour route for NR 09 and NR 10. Connect the roads under construction to the road network. The existing of the road can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**	Al Ayn				
	To	Al Wadi Al Ala				
Length (km)		30.00			30.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day		1,300	2,600	5,800	
Work Item		Construct 2-lane paved road.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 7,614 486 8,100				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2024				
	To	2026				
Environmental Impact		(Moderate) - Alteration of topography. - Deforestation by excavation and embankment. - Influence to cultural heritage.				



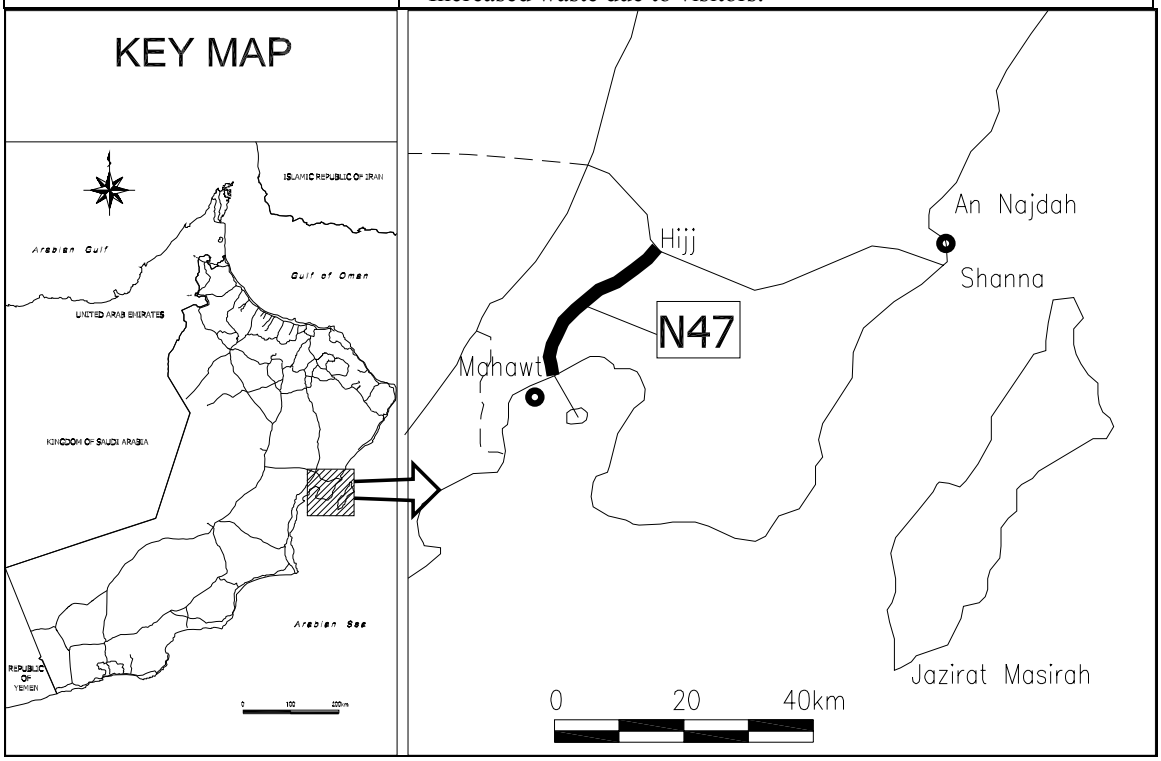
Project Profile **Project Number:** N46

Name		Bahja - Amal			**Region:** Al Wusta
Existing Road Condition		Graded road, NR 39.			
Objective		Construction of a secondary national road (NR 39) Existing paved PDO road can be transferred to DGR and redesigned as NR 39.			
Segment					**Total (km)**
Location	**From**	Bahja			
	To	Ama			
Length (km)		170.00			170.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	100	200	300	500
Work Item		Construction of a secondary national 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 12,305 785 13,090			
Implementation Plan		11th 5-Year Development Plan			
Implementation Schedule	**From**	2026			
	To	2030			
Environmental Impact		(Slight) Insignificant impact.			



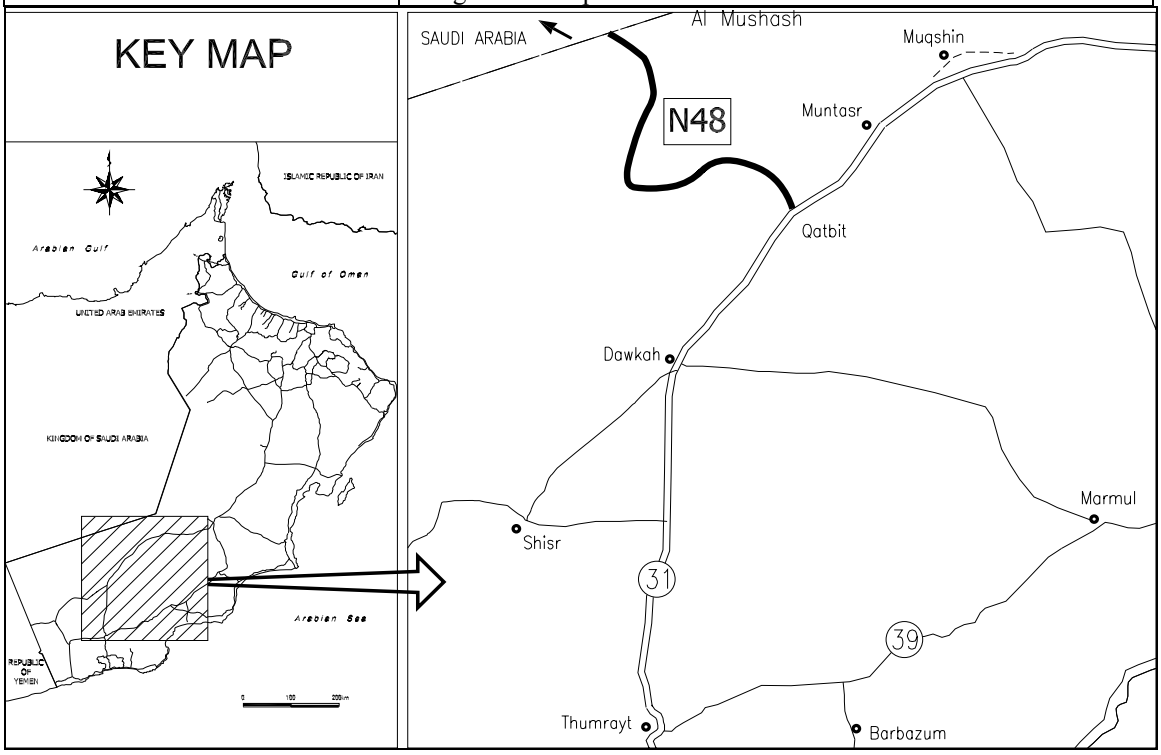
Project Profile **Project Number:** N47

Name		Al Hij - Flim			**Region:** Al Wusta
Existing Road Condition		Track road.			
Objective		Promote the activities of Mahawt island. Promote tourism of the area. Investigate of a sensitive environment area.			
Segment					**Total (km)**
Location	**From**	Al Hij			
	To	Flim			
Length (km)		19.00			18.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	100	400	500	800
Work Item		Construction of a secondary national 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,717 50 1,767			
Implementation Plan		7th 5-Year Development Plan			
Implementation Schedule	**From**	2006			
	To	2009			
Environmental Impact		(Significant) - Influence to marine wildlife and mangrove vegetation. - Influence to cultural heritage. - Increased waste due to visitors.			



Project Profile **Project Number:** N48

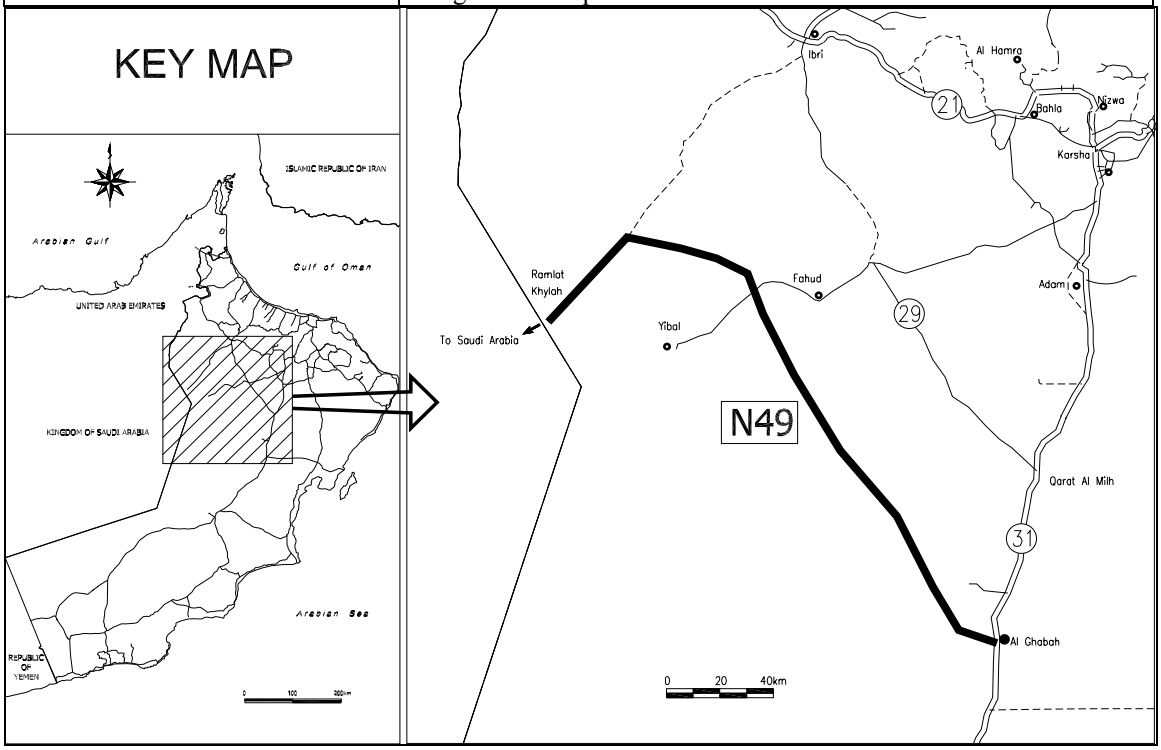
Name		Qatbit - Al Mushash			**Region:** Dhofar
Existing Road Condition		There is no road.			
Objective		Shortcut for traffic between Dhofar and Saudi Arabia. To be used by Haji Pilgrims. Strengthen the fish export from the coast to inner land.			
Segment					**Total (km)**
Location	**From**	Qatbit			
	To	Al Mushash			
Length (km)		152			152
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construct 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 6,287 401 6,688			
Implementation Plan		12 5-Year Development Plan			
Implementation Schedule	**From**	2031			
	To				
Environmental Impact		(Slight) Insignificant impact.			



Project Profile **Project Number:** N49

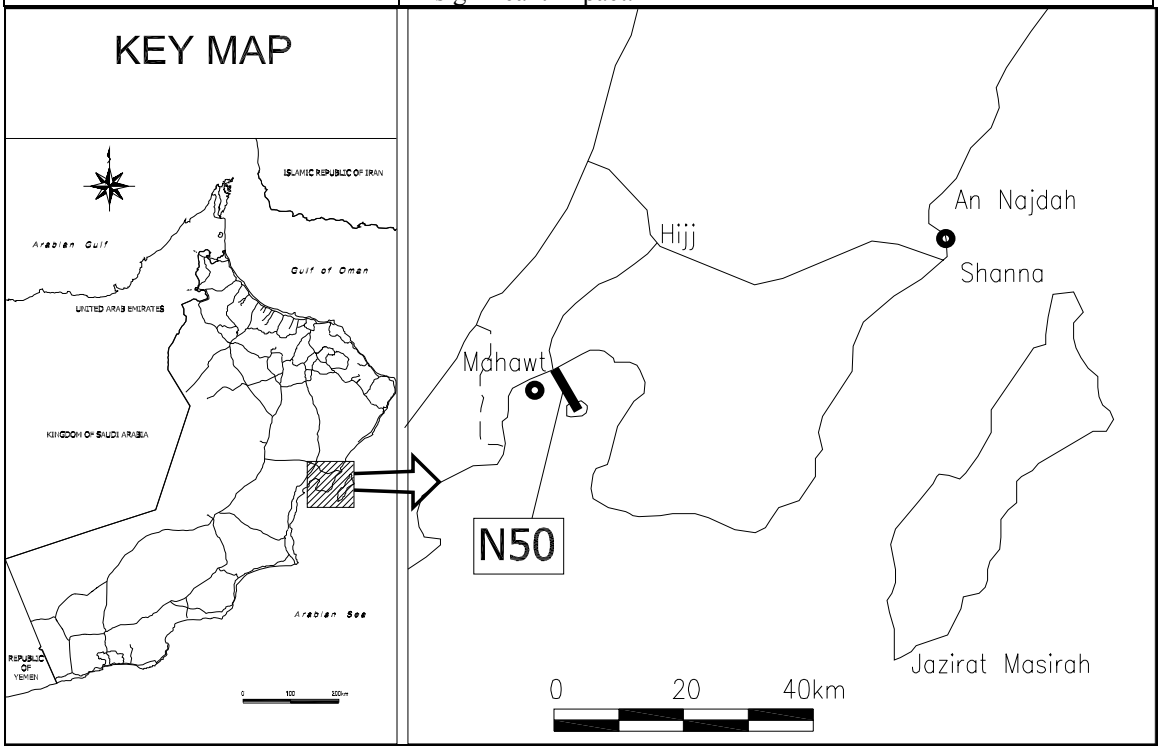
Name		Al Ghaba – Ramlet Khaylah (Saudi Border)			**Region:** A'Dakhliyah / A'Dhahira
Existing Road Condition		There is no road.			
Objective		Shortcut for traffic from Hayma/Salalah to Saudi Arabia. To be used by Haji Pilgrims. Some of the PDO roads may be used.			
Segment					**Total (km)**
Location	**From**	Al Ghaba			
	To	Ramlet Khaylah			
Length (km)		298.00			298.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construct 2-lane paved road.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 12,325 787 13,112			
Implementation Plan		12 5-Year Development Plan			
Implementation Schedule	**From**	2031			
	To				
Environmental Impact		(Slight) Insignificant impact.			

KEY MAP



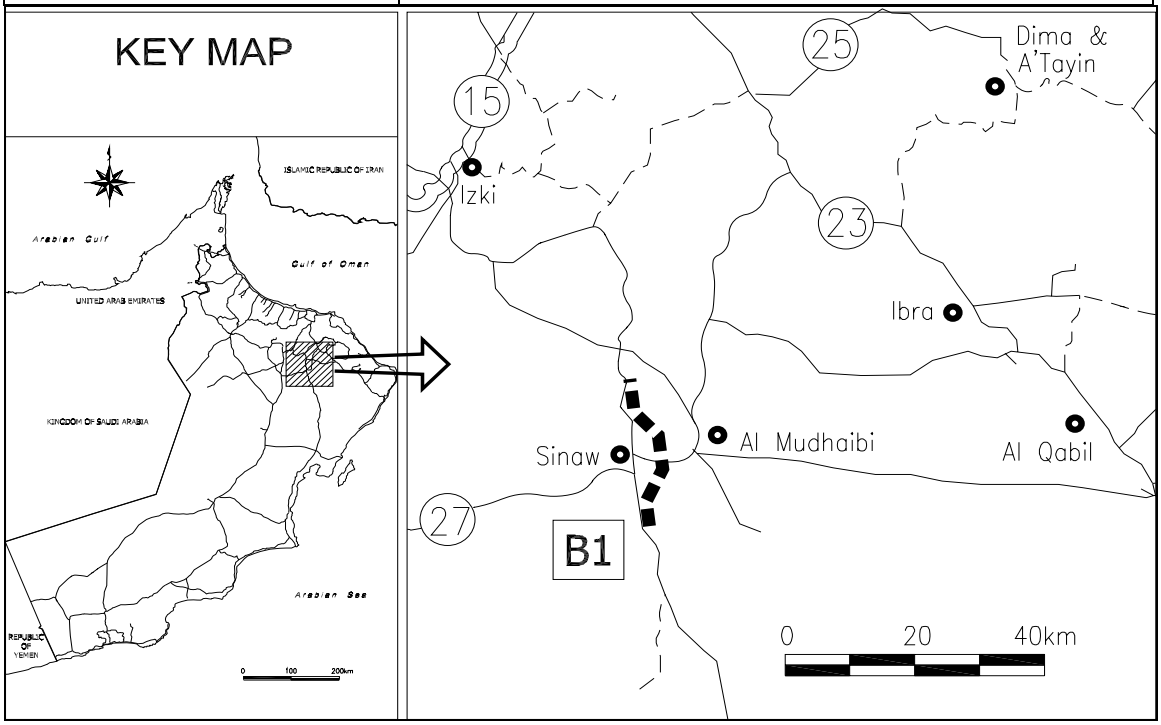
Project Profile **Project Number:** N50

Name		Film – Mahot (Box Culvert based on EIA)			**Region:** Al Wasta
Existing Road Condition		There is no Road.			
Objective		Connect of Mahawt island to the mainland. Promote tourist activities on the island. Checking EIA since this project is highly environment sensitive			
Segment					**Total (km)**
Location	**From**	Film			
	To	Mahot			
Length (km)		6.00			6.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day				
Work Item		Construct Box Culvert / elevated bridge / Viaduct			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 8,460 540 9,000			
Implementation Plan		12 5-Year Development Plan			
Implementation Schedule	**From**	2031			
	To				
Environmental Impact		(Slight) Insignificant impact.			



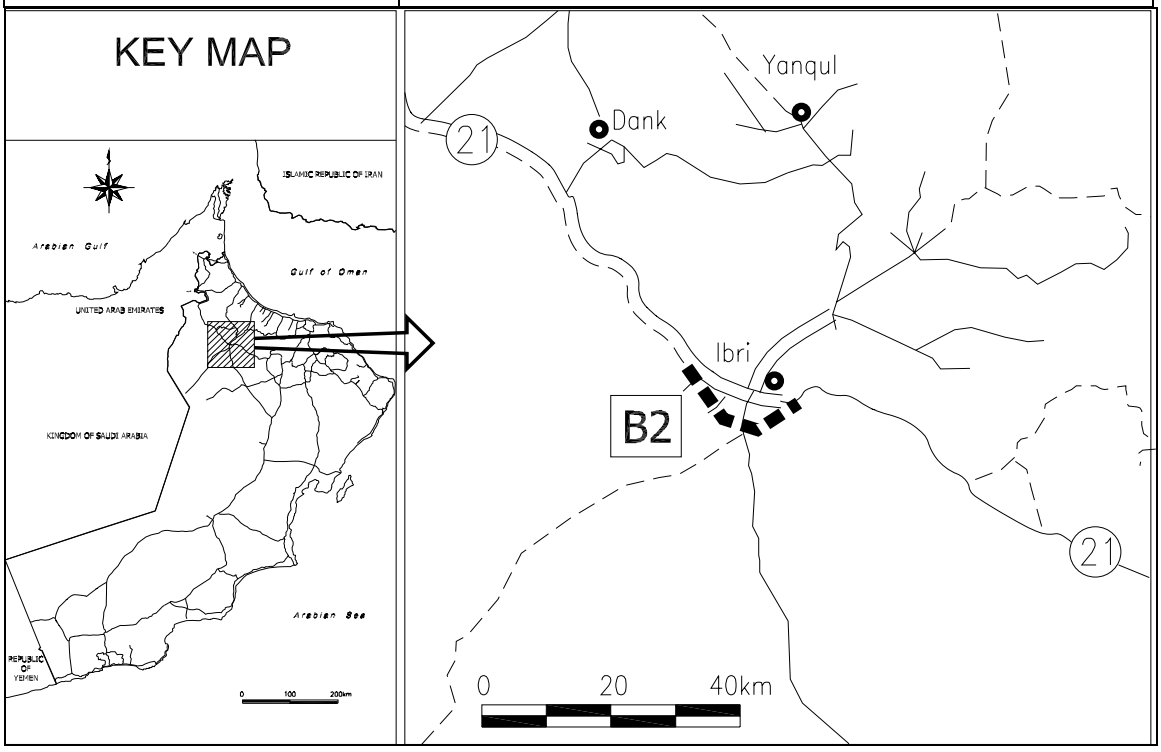
Project Profile **Project Number:** B1

Name		Sinaw Bypass			**Region:** A'Sharqiyah	
Existing Road Condition		Sinwa is located at the Intersection of NR 32 and NR 27.				
Objective		Divert through traffic outside the urbanized area of Sinaw. Reduce travel time. Increase traffic safety.				
Segment						**Total (km)**
Location	**From**					
	To					
Length (km)		6.00				6.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**		**2030**
	PCU/day	700	1,800	2,300		3,500
Work Item		Construct 4-lane Bypass parallel to NR 32.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 869 55 924				
Implementation Plan		9th 5-Year Development Plan				
Implementation Schedule	**From**	2014				
	To	2015				
Environmental Impact		(Moderate) Relocation of some houses and farms.				



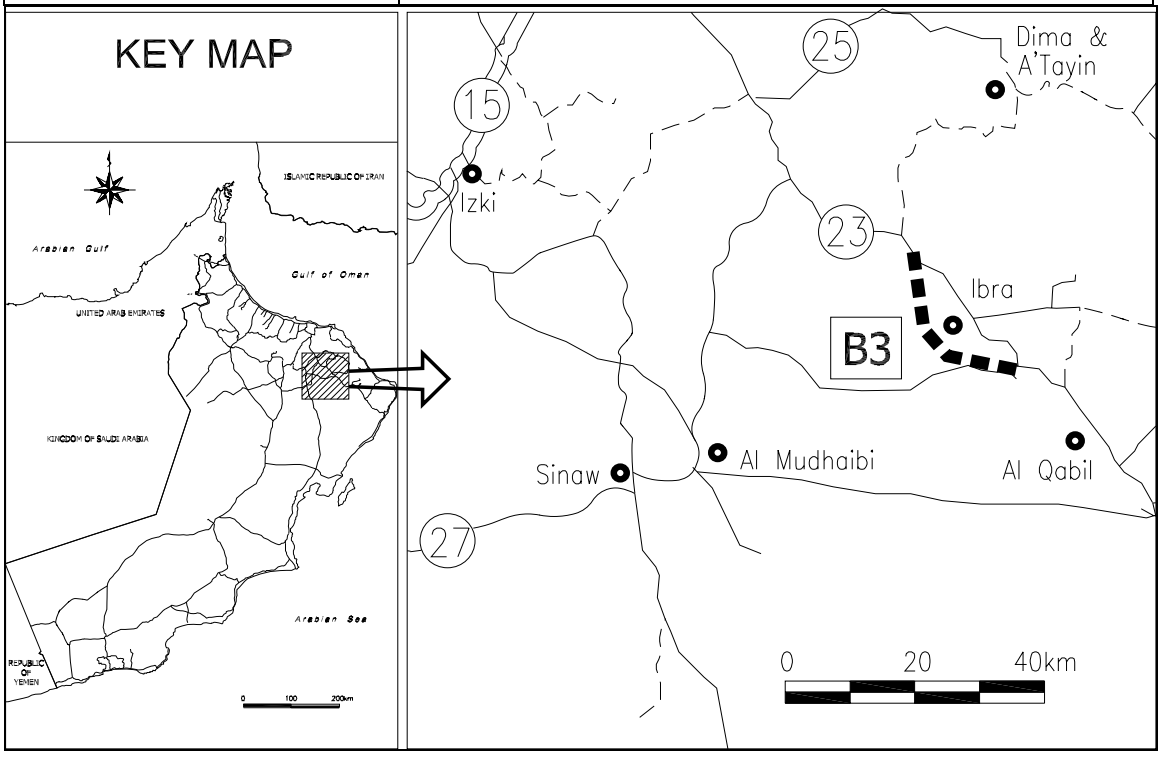
Project Profile **Project Number:** B2

Name		Ibri South Bypass			**Region:** A'Dhakhliyah
Existing Road Condition		Ibri is located along the NR 21.			
Objective		Divert through traffic of NR 21outside the urbanized area of Ibri.. Reduce travel time. Increase traffic safety.			
Segment					**Total (km)**
Location	**From**				
	To				
Length (km)		13.00 km including 300 m tunnel.			13.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	1,800	3,800	4,600	8,600
Work Item		Construct 4-lane Bypass parallel to NR 21.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,882 120 2,002			
Implementation Plan		9th\5-Year\Development\Plan			
Implementation Schedule	**From**	2017			
	To	2019			
Environmental Impact		(Slight/Moderate) Relocation of some houses and farms.			



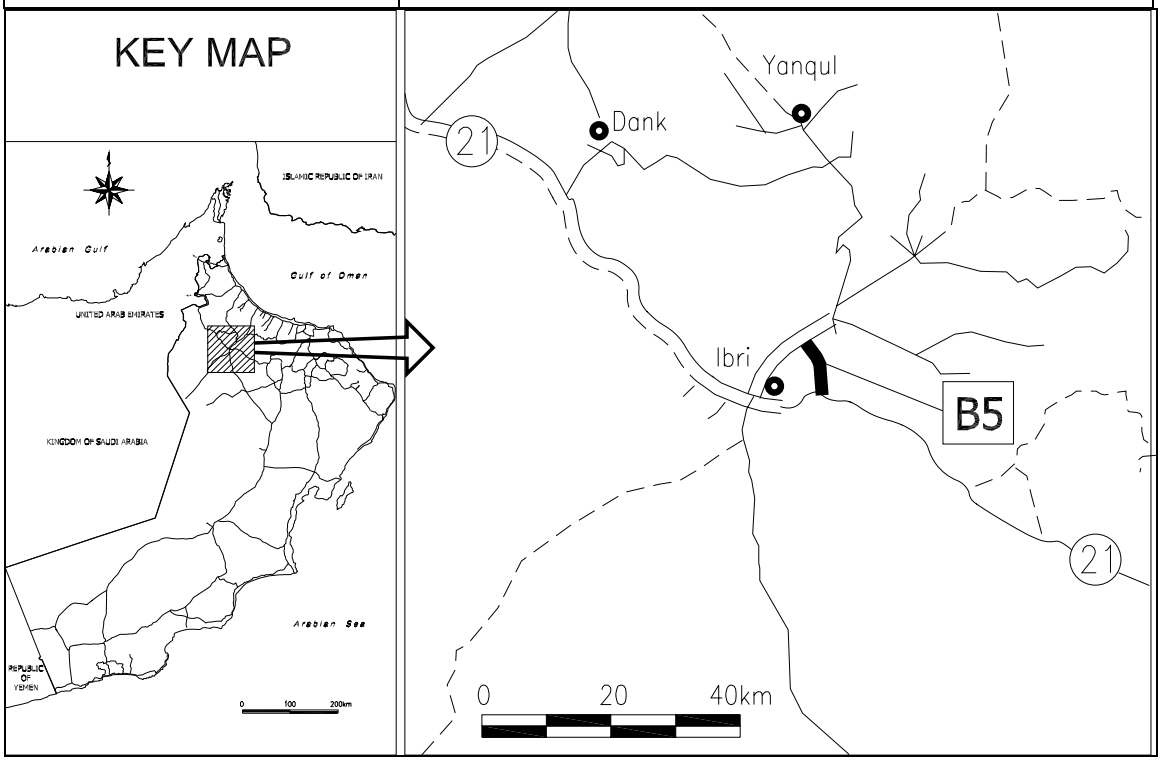
Project Profile **Project Number:** B3

Name		Ibra Bypass			**Region:** A'Sharqiyah
Existing Road Condition		Ibra is located along the NR 23			
Objective		Divert through traffic of NR 23outside the urbanized area of Ibra.. Reduce travel time. Increase traffic safety.			
Segment					**Total (km)**
Location	**From**				
	To				
Length (km)		11.00			11.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	900	900	900	3,000
Work Item		Construct 4-lane Bypass parallel to NR 23.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 2,792 178 2,970			
Implementation Plan		8th 5-Year Development Plan			
Implementation Schedule	**From**	2014			
	To	2015			
Environmental Impact		(Slight/Moderate) Relocation of some houses and farms.			



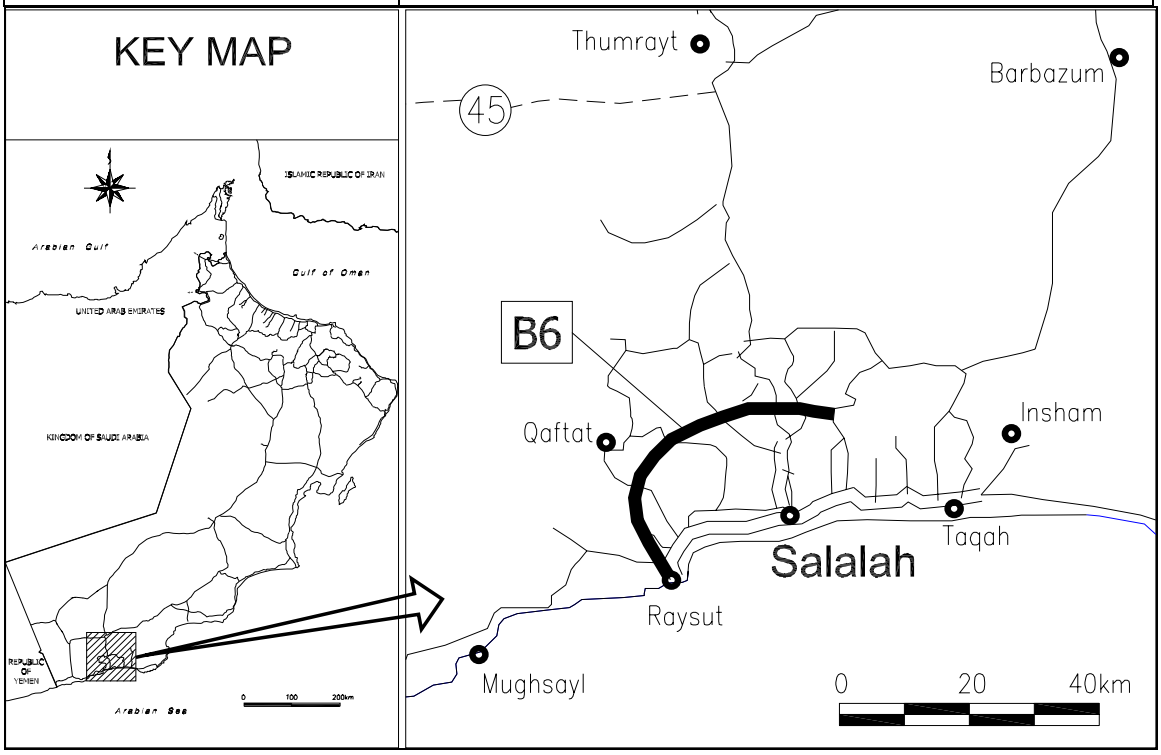
Project Profile **Project Number:** B5

Name		Ibri East Bypass			**Region:** A'Dhakhliyah	
Existing Road Condition		Ibri is located along the NR 21.				
Objective		Divert through traffic of NR 21outside the urbanized area of Ibri.. Connect NR 21 and NR 09. Reduce travel time. Increase traffic safety.				
Segment						**Total (km)**
Location	**From**					
	To					
Length (km)		10.00				10.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	1,800	3,800	4,600	8,600	
Work Item		Construct 4-lane Bypass connect NR 21 and NR 09..				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,448 92 1,540				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2023				
	To	2024				
Environmental Impact		(Moderate) Relocation of some houses and farms.				



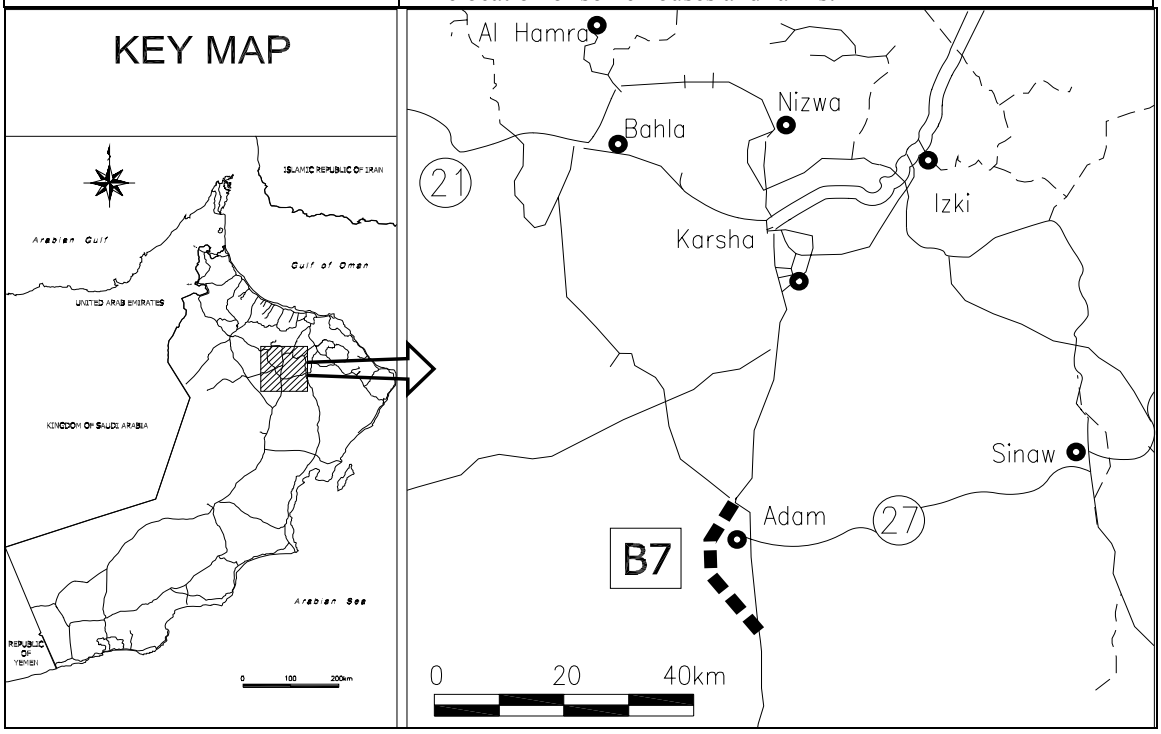
Project Profile **Project Number:** B6

Name		Salalah Outer Bypass			**Region:** Dhofar	
Existing Road Condition		There is no road.				
Objective		Divert through traffic outside urbanized area. Reduce travel time. Increase traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)		42.00			42.00	
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	1,400	3,300	4,600	8,600	
Work Item		Construct 4-lane bypass as semi-circle outside the expected future urbanized area.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 21,280 1,356 22,638				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2022				
	To	2026				
Environmental Impact		(Slight/Moderate) Increase traffic volumes.				



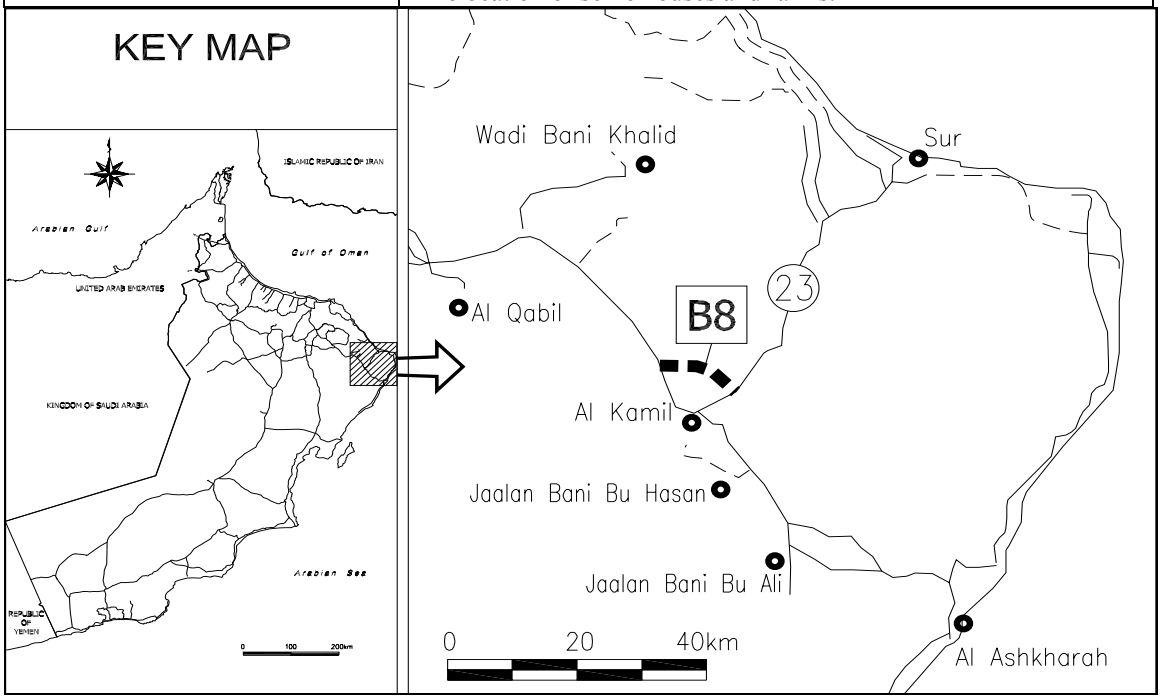
Project Profile **Project Number:** B7

Name		Adam Bypass			**Region:** A'Dhakhliyah
Existing Road Condition		Adam is located along the NR 31. NR 27 also passes by the city.			
Objective		Divert the through traffic along the NR 31 outside the urban area of Adam. Reduce travel time. Increase traffic safety.			
Segment					**Total (km)**
Location	**From**				
	To				
Length (km)		5.00			5.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	800	2,100	4,600	9,300
Work Item		Construct 4-lane bypass parallel to NR 31 outside the expected future urbanized area of Adam.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 724 46 770			
Implementation Plan		11 th 5-Year Development Plan			
Implementation Schedule	**From**	2029			
	To	2030			
Environmental Impact		(Moderate) - Influence to cultural heritage. - Relocation of some houses and farms.			



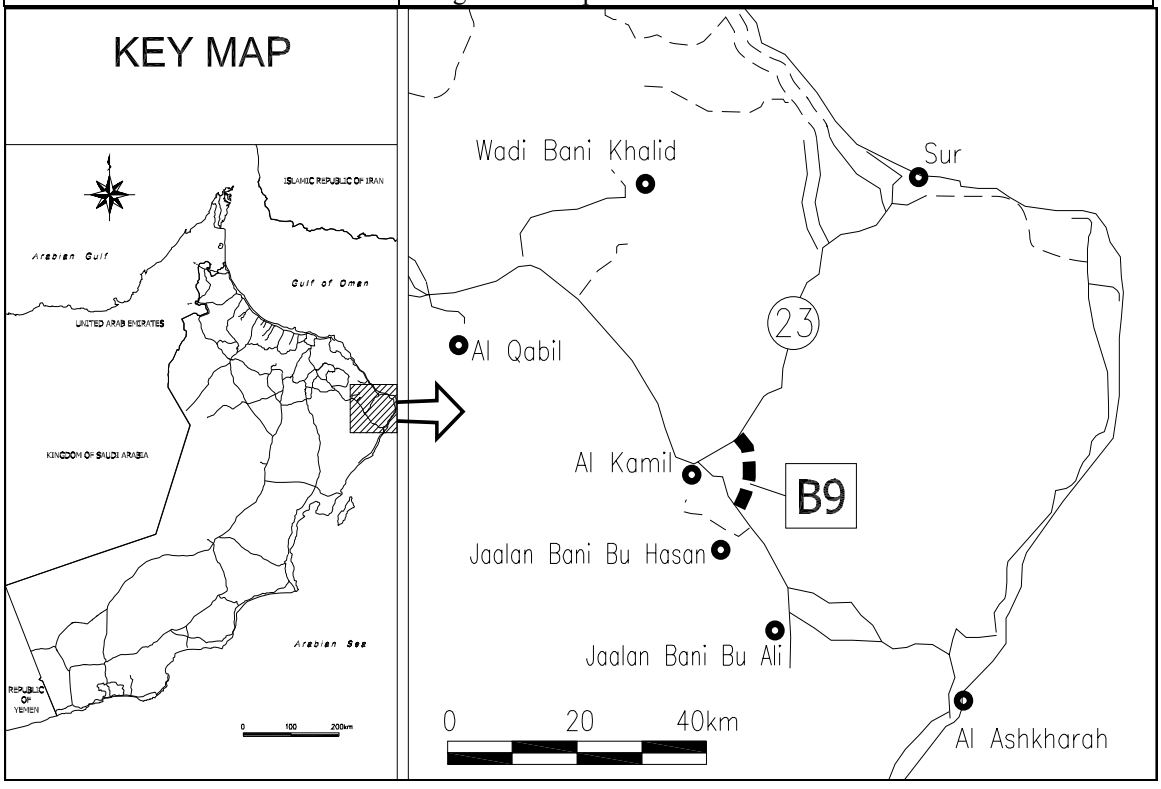
Project Profile **Project Number:** B8

Name		Al Kamil North Bypass			**Region:** A'Sharqiyah
Existing Road Condition		Al Kamil is located along NR 35 and too close to NR 23.			
Objective		Divert through traffic along NR 23 outside the urbanized area of Al Kamil. Reduce travel time. Increase traffic safety.			
Segment					**Total (km)**
Location	**From**				
	To				
Length (km)		9.00			9.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	3,900	1,400	1,900	8,200
Work Item		Construct 4-lane bypass parallel to NR 23 outside the expected future urbanized area of Al Kamil.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1,230 75 1,309			
Implementation Plan		9th 5-Year development Plan			
Implementation Schedule	**From**	2019			
	To	2020			
Environmental Impact		(Moderate) - Increased traffic volume. - Passing near the National Park. - Relocation of some houses and farms.			



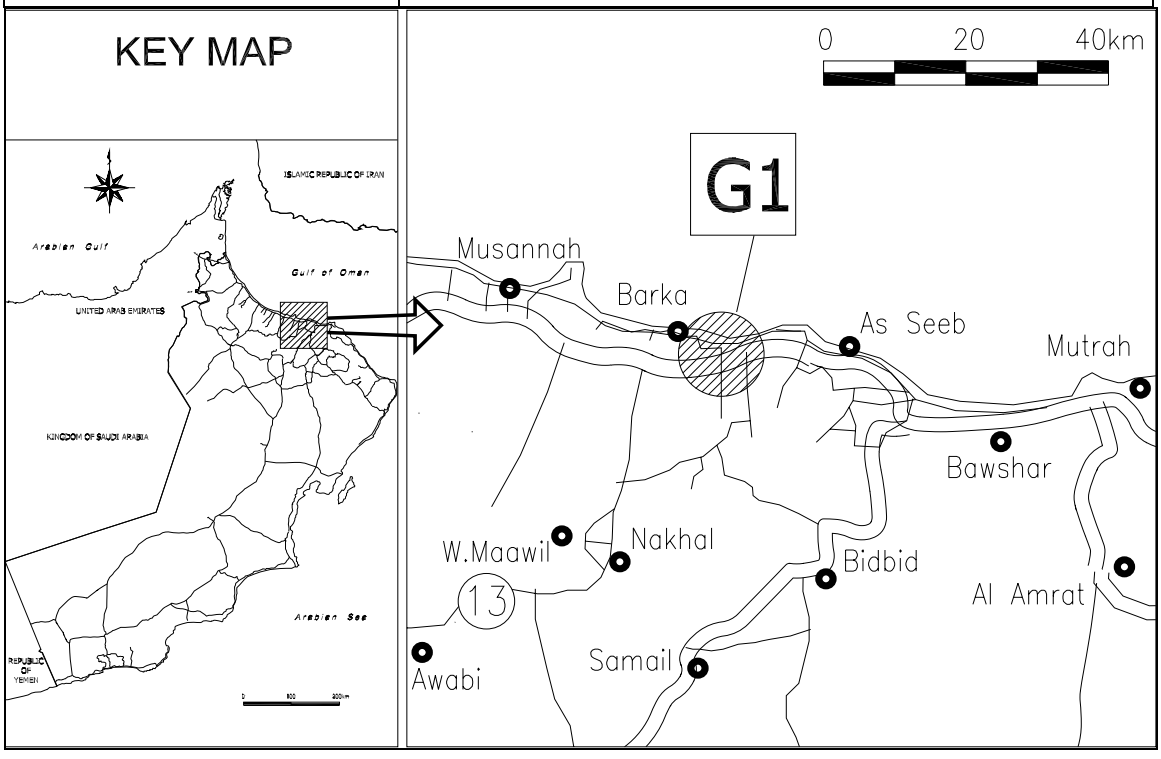
Project Profile **Project Number:** B9

Name		Al Wafi East Bypass			**Region:** A'Sharqiyah
Existing Road Condition		Al wafi is located along NR 35 close to NR 23 and too close to Al kamil.			
Objective		Divert through traffic along NR 23 outside the urbanized area of Al wafi and connect NR 23 with R 35. Reduce travel time. Increase traffic safety.			
Segment					**Total (km)**
Location	**From**				
	To				
Length (km)		11.00			11.00
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	3,900	1,400	1,900	8,200
Work Item		Construct 4-lane bypass connect NR 23 and NR 35 outside the expected future urbanized area ofAl Wafi.			
Cost (1,000 RO) **Construction** **Engineering** **Total**		 1592 102 1,694			
Implementation Plan		10^{th} 5-Year development Plan			
Implementation Schedule	**From**	2026			
	To	2027			
Environmental Impact		(Slight) Insignificant impact.			



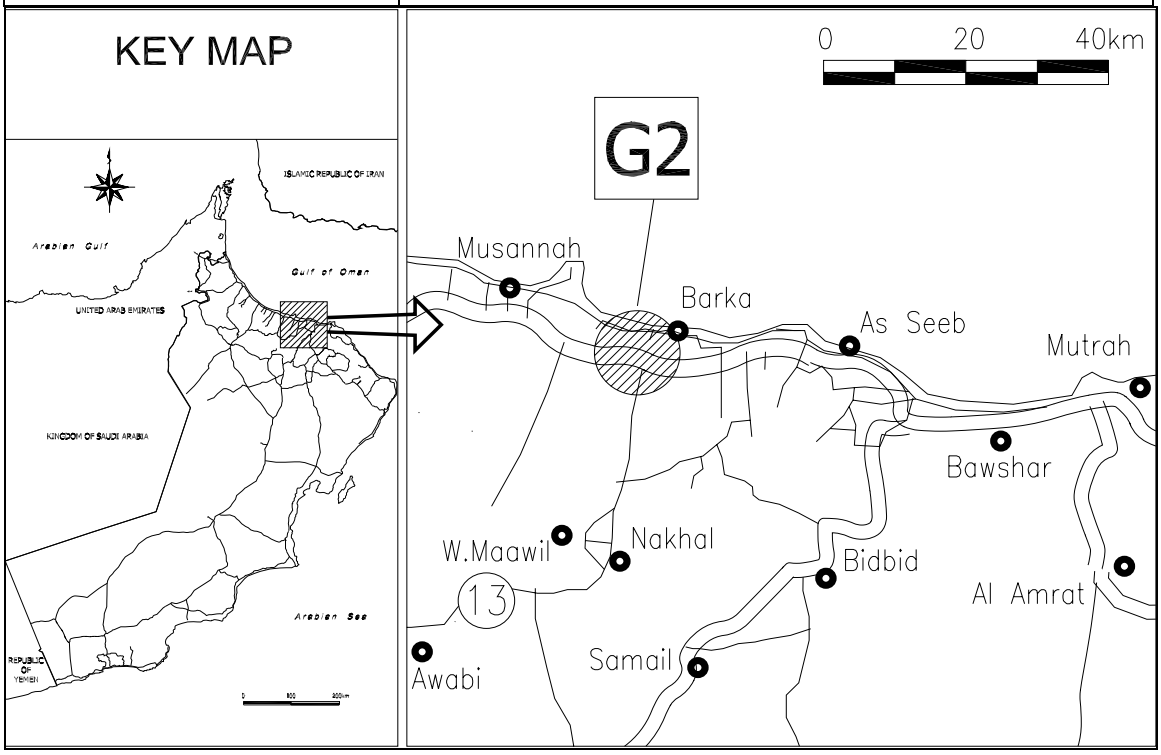
Project Profile **Project Number:** G1

Name		Naseem Garden			**Region:** Batinah
Existing Road Condition		4-lane Dual Carriageway, R/A intersection.			
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.			
Segment					**Total (km)**
Location	**From**				
	To				
Length (km)					
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**
	PCU/day	27,200	36,800	39,000	64,000
Work Item		Construct interchange.			
Cost (1,000 RO)					
Construction		3,406			
Engineering		217			
Total		3,623			
Implementation Plan		10th 5-Year Development Plan			
Implementation Schedule	**From**	2023			
	To	2025			
Environmental Impact		(Slight) Insignificant impact.			



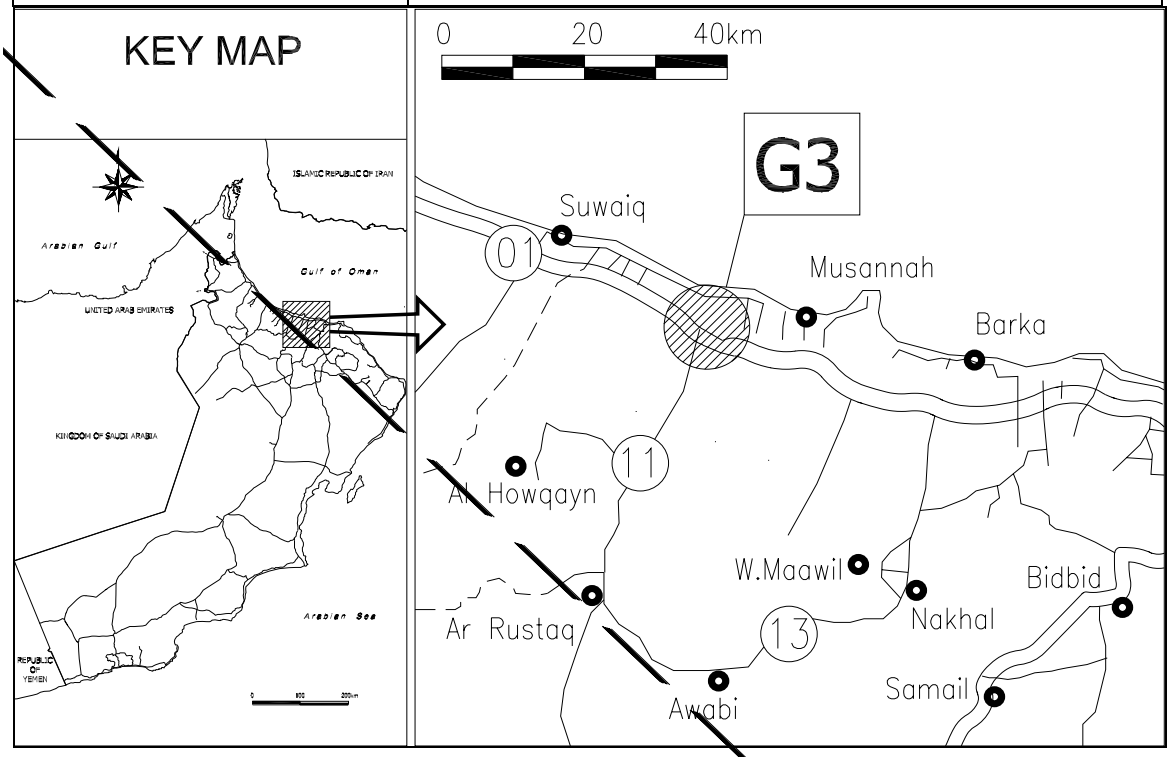
Project Profile **Project Number:** G2

Name		Baraka Roundabout			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway, R/A intersection.				
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	27,200	36,800	39,000	64,000	
Work Item		Construct interchange.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3,448 220 3,668				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2024				
	To	2026				
Environmental Impact		(Slight) Insignificant impact.				



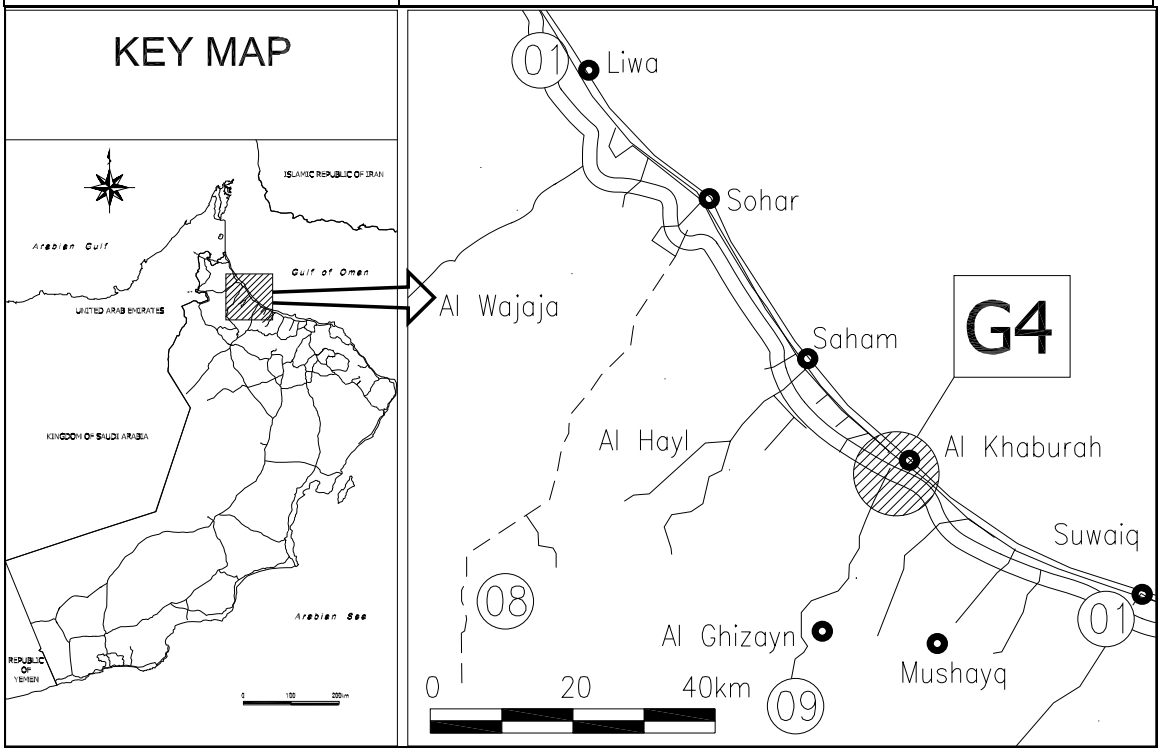
Project Profile **Project Number:** G3

Name		Al Muladdah Junction			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway, R/A intersection.				
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	27,200	36,800	39,000	64,000	
Work Item		Construct interchange.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3,392 217 3,609				
Implementation Plan		10th 5-Year Development Plan				
Implementation Schedule	**From**	2025				
	To	2027				
Environmental Impact		(Slight) Insignificant impact.				



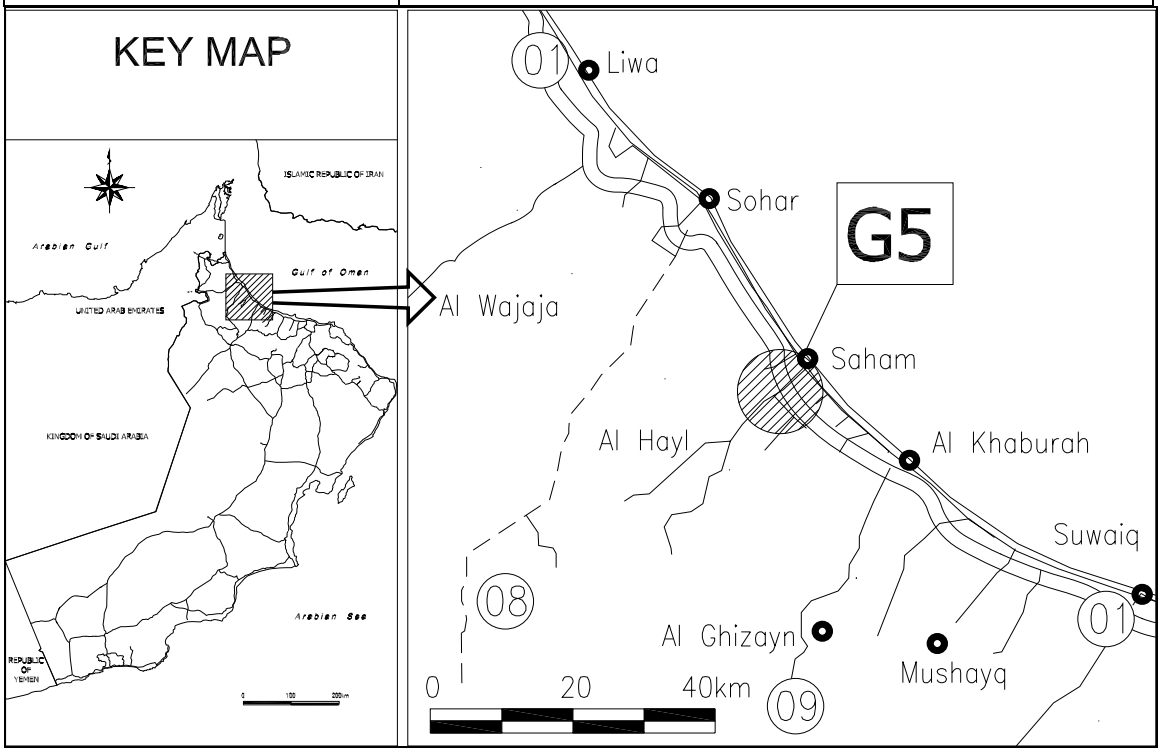
Project Profile **Project Number:** G4

Name		Khaburah Roundabout			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway, R/A intersection.				
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	22,800	29,500	30,700	48,300	
Work Item		Construct interchange.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3,583 229 3,812				
Implementation Plan		11th 5-Year Development Plan				
Implementation Schedule	**From**	2027				
	To	2029				
Environmental Impact		(Slight) Insignificant impact.				



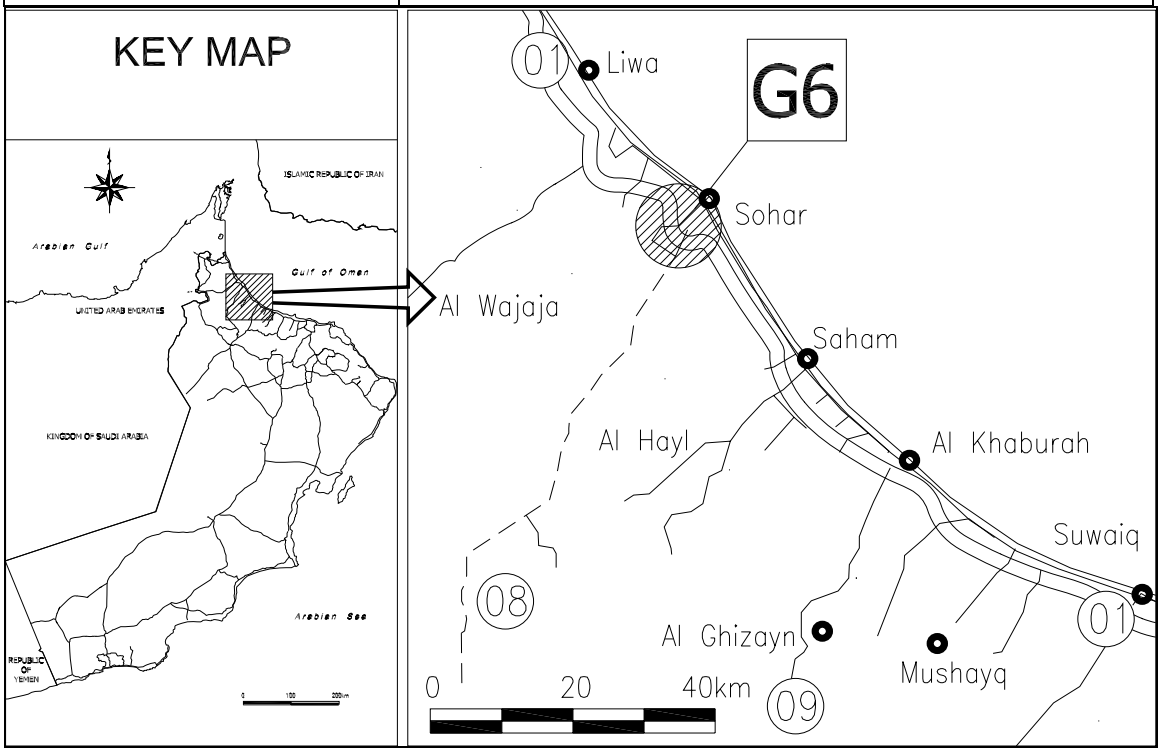
Project Profile **Project Number:** G5

Name		Shama Roundabout			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway, R/A intersection				
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	22,800	29,500	30,700	48,300	
Work Item		Construct interchange.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3,618 231 3,849				
Implementation Plan		11th 5-Year Development Plan				
Implementation Schedule	**From**	2028				
	To	2030				
Environmental Impact		(Slight) Insignificant impact.				



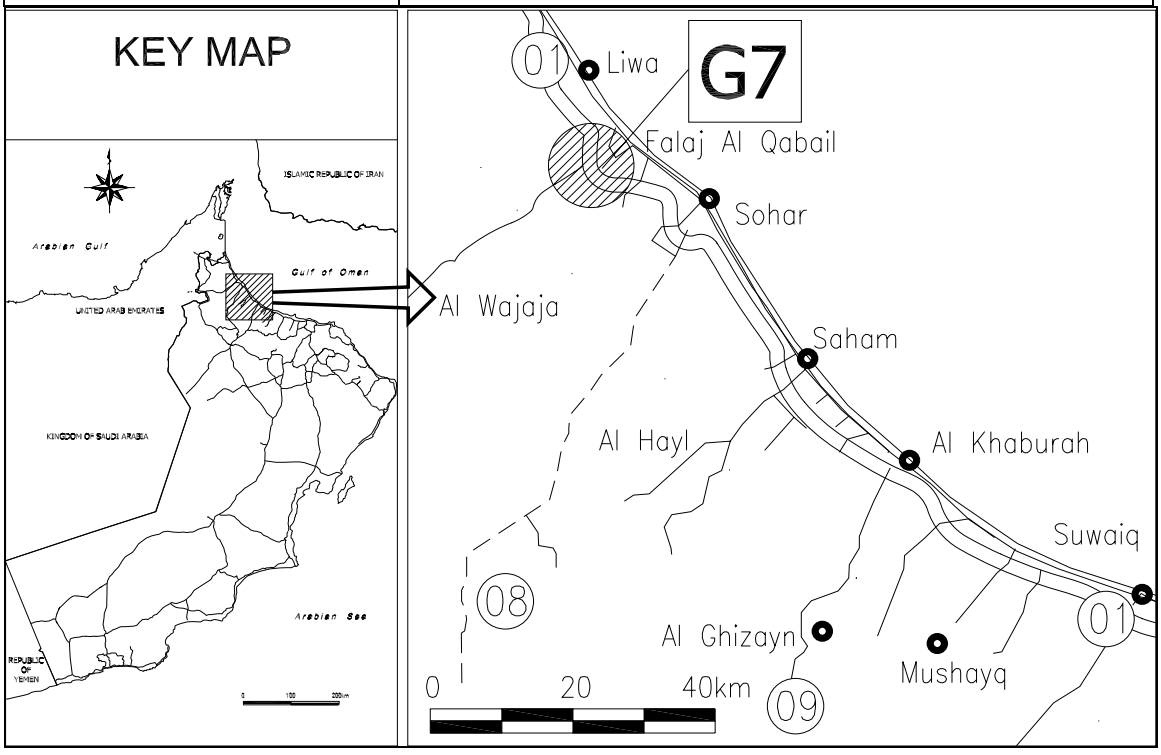
Project Profile **Project Number:** G6

Name		Sohar Rounabout			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway, R/A intersection				
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	18,200	25,500	26,200	39,600	
Work Item		Construct interchange.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3,911 250 4,161				
Implementation Plan		11th 5-Year Development Plan				
Implementation Schedule	**From**	2028				
	To	2030				
Environmental Impact		(Slight) Insignificant impact.				



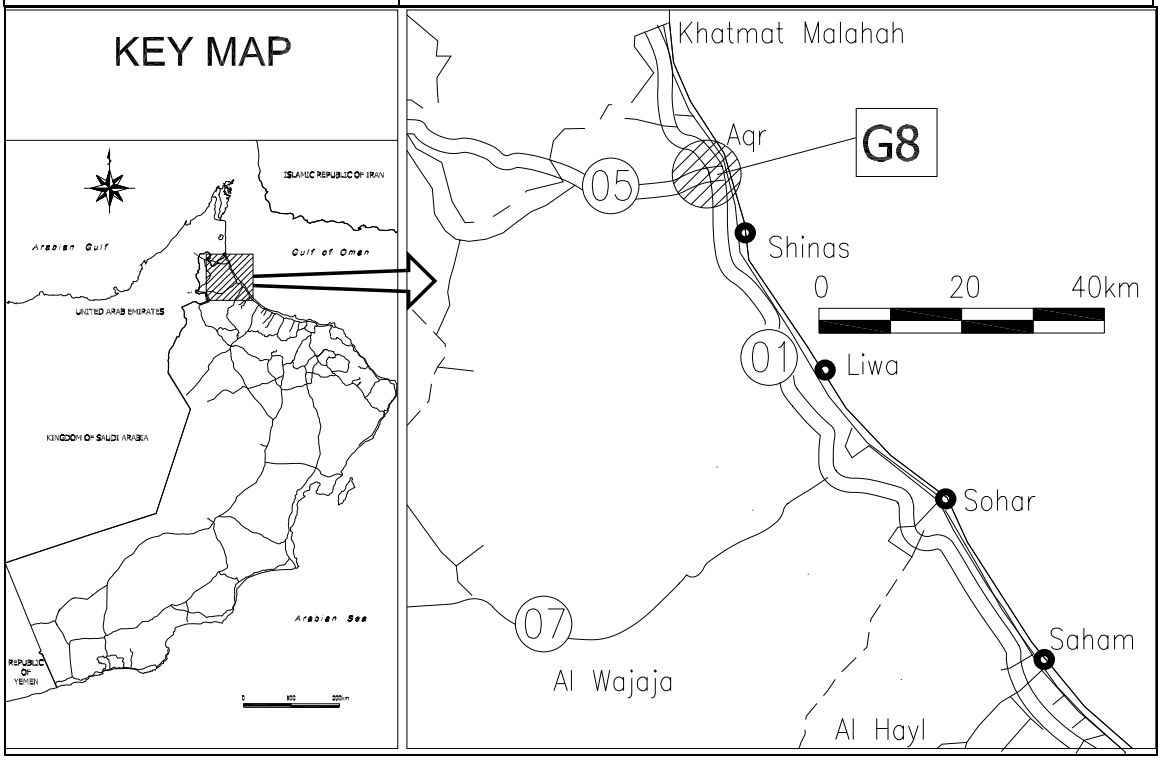
Project Profile **Project Number:** G7

Name		Falaj Al Qabail			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway, R/A intersection				
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	18,200	25,500	26,200	39,600	
Work Item		Construct interchange.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3,978 254 4,232				
Implementation Plan		11th 5-Year Development Plan				
Implementation Schedule	**From**	2028				
	To	2030				
Environmental Impact		(Slight) Insignificant impact.				



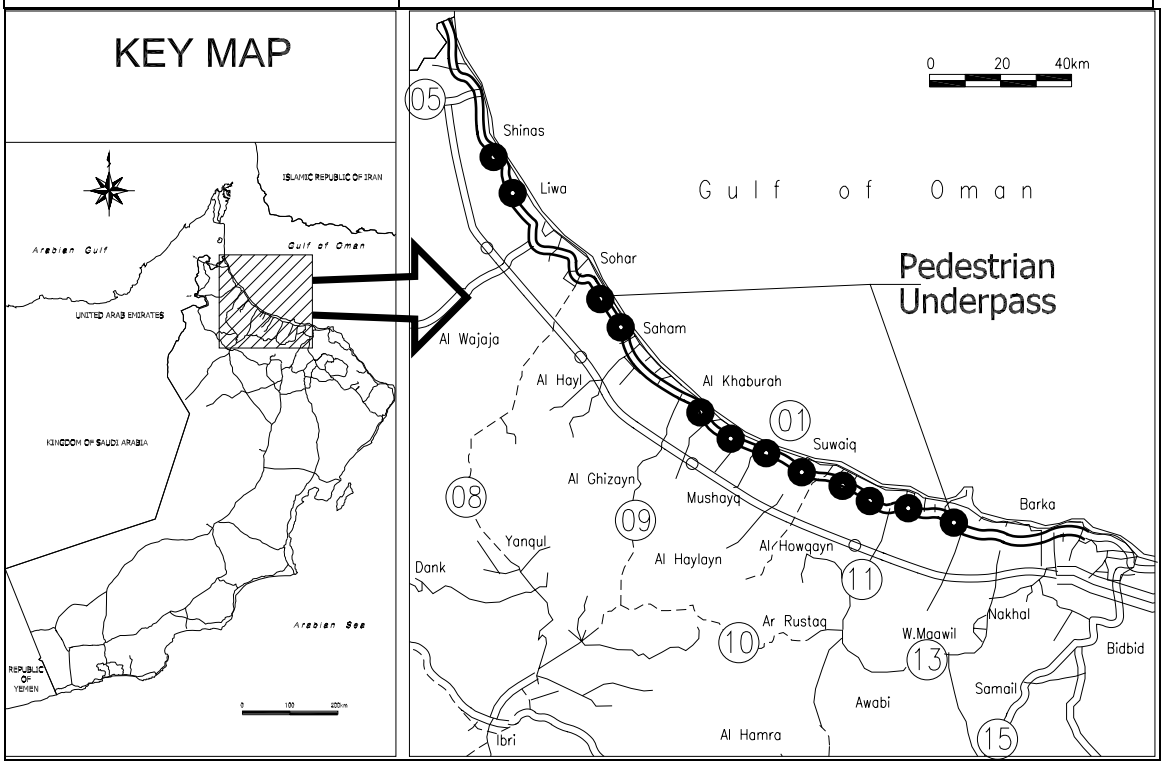
Project Profile **Project Number:** G8

Name		Aqr Rounabout			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway, R/A intersection				
Objective		Eliminate of any traffic conflict.. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment						**Total (km)**
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	12,600	15,800	19,300	18,000	
Work Item		Construct interchange.				
Cost (1,000 RO) **Construction** **Engineering** **Total**		 3,100 198 3,298				
Implementation Plan		11th 5-Year Development Plan				
Implementation Schedule	**From**	2028				
	To	2030				
Environmental Impact		(Slight) Insignificant impact.				



Project Profile **Project Number:** P1/12

Name		Pedestrian Crossing 1			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway				
Objective		Provide at the area characterized with heavy pedestrian volume. Increase traffic safety regarding pedestrian crossing. Eliminate of major traffic conflict with pedestrian. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment						**Total (km)**
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	27,200	36,800	39,000	64,000	
Work Item		Construct pedestrian overpasses at 12 major locations.				
Cost (1,000 RO)						
Construction		1,297				
Engineering		83				
Total		1,380				
Implementation Plan		7th 5-Year Development Plan				
Implementation Schedule	**From**	2006				
	To	2010				
Environmental Impact		(Slight) Insignificant impact.				



List of Pedestrian Underpasses

No.	Station	Name
1	35 + 400	Al Billah
2	49 + 200	Al Tarif
3	59 + 600	Al Qart
4	61 + 416	Al Tharmad
5	72 + 900	Bataha Hilal
6	82 + 350	Al Khadra
7	92 + 400	Dhyan
8	100 + 100	Al Bidayah
9	148 + 600	Hilat Al Rawashii
10	150 + 250	Mujaz As Sughra
11	195 + 766	Liwa
12	202 + 900	Liwa 3

Project Profile **Project Number:** P13/22

Name		Pedestrian Crossing 2			**Region:** Batinah	
Existing Road Condition		4-lane Dual Carriageway				
Objective		Provide at the area characterized with heavy pedestrian volume. Increase traffic safety regarding pedestrian crossing. Eliminate of major traffic conflict with pedestrian. The existing of the project can reduce the travel time and increase the traffic safety.				
Segment					**Total (km)**	
Location	**From**					
	To					
Length (km)						
Traffic Volume	**Year**	**2005**	**2010**	**2020**	**2030**	
	PCU/day	27,200	36,800	39,000	64,000	
Work Item		Construct pedestrian overpasses at 10 major locations.				
Cost (1,000 RO)						
Construction		1,081				
Engineering		69				
Total		1,150				
Implementation Plan		10h 5-Year Development Plan				
Implementation Schedule	**From**	2006				
	To	2010				
Environmental Impact		(Slight) Insignificant impact.				

List of Pedestrian Underpasses

No.	Station	Name
13	20 + 400	As Somhan
14	183 + 316	Falaj Al Qabali
15	139 + 516	Saham
16	110 + 016	Sur Al Duwahnah
17	166 + 968	Al Waqaybah
18	55 + 150	Al Muladdah
19	63 + 150	Al Manfash
20	79 + 200	Sur Al Hilal
21	81 + 000	Al Uriq
22	91 + 700	Dhyan-1