



environmental and social impact assessment

South Caucasus Gas Pipeline: **Azerbaijan**
Volume 2 Environmental and Social Route Maps
May 2002



ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

South Caucasus Gas Pipeline Azerbaijan

VOLUME 2: Environmental and Social Route Maps

Prepared for BP

By AETC Ltd / ERM

May 2002

GENERAL NOTES

Project No: P8078

Title: Environmental and Social Impact Assessment
South Caucasus Gas Pipeline Azerbaijan

VOLUME 2: Environmental and Social Route Maps

Client: BP

Issue Date: May 2002

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Authorised by: _____ **Project Manager** **Date:** _____

Authorised by: _____ **Project QA Rep** **Date:** _____

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Where field investigations have been carried out these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the Quality Management System of AETC.

Some of the reports in this appendix have been prepared by independent consultants on behalf of AETC for use during the ESIA process. Information available at the time of survey and report production may have changed subsequently. Any recommendations contained in the baseline reports do not necessarily constitute requirements or mitigations under the ESIA; only those reflected in the main volume are to be implemented as part of the project.

Acknowledgements

This Environmental and Socio-economic Impact Assessment (ESIA) for the South Caucasus Gas Pipeline, Azerbaijan was carried out by RSK and ERM on behalf of the BTC Owners (operated by BP).

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M & M Impact
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UTT
WSP

Academic and scientific experts and their organisations

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Institute of Archaeology and Ethnography
Institute of Botany
Institute of Erosion and Irrigation
Institute of Geography
Institute of Zoology
Ministry of Environment and Natural Resources
Ministry of Culture
BP Research and Monitoring Group

EXPLANATION TO ROUTE MAPS

ECOLOGY

The conservation status of species has been assessed by reference to the Red Data Book for Azerbaijan (1989), information from local scientists on proposed additions to the Red Book, European Bird Populations: Estimates and Trends (Birdlife International/European Bird Census Council, 2000) and the 2000 IUCN Red List of Threatened Species. The status categories used in this volume are described in the Table 1, below.

Table 1 Threatened species status categories

STATUS CATEGORY	DESCRIPTION
le	Species of International Conservation Concern – endangered
lv	Species of International Conservation Concern – vulnerable
llr	Species of International Conservation Concern – low risk
Ee	Bird of European Conservation Concern - endangered
Ev	Bird of European Conservation Concern - vulnerable
Er	Bird of European Conservation Concern – rare
Ed	Bird of European Conservation Concern - declining
RDB	Listed in Red Data Book of Azerbaijan Republic
PRDB	Proposed for inclusion in Red Data Book of Azerbaijan Republic

Where vegetation data has been collected during field surveys, community types for each broad habitat type have been identified. Their structure and species composition are described below in Table 2.

Table 2 Vegetation communities with broad habitat categories

DESERT	
D1	<i>Artemisia fragrans</i>
D2	<i>Artemisia fragrans</i> + <i>Salsola nodulosa</i>
D3	<i>Artemisia fragrans</i> + <i>Salsola dendroides</i>
D4	<i>Artemisia fragrans</i> + <i>Suaeda dendroides</i>
D5	<i>Salsola nodulosa</i>
D6	<i>Salsola dendroides</i>
D7	<i>Suaeda dendroides</i>
D8	<i>Kalidium caspicum</i>
D9	<i>Halocnemum strobilaceum</i>
D10	<i>Capparis spinosa</i>
D11	Ephemeral desert
D12	Interzone
D13	<i>Salsola nodulosa</i> + <i>Artemisia fragrans</i>
D14	<i>Salsola ericoides</i>
SEMI-DESERT	
SD1	<i>Artemisia fragrans</i>
SD2	<i>Artemisia fragrans</i> + <i>Salsola nodulosa</i>
SD3	<i>Artemisia fragrans</i> + <i>Salsola dendroides</i>
SD4	<i>Salsola dendroides</i>

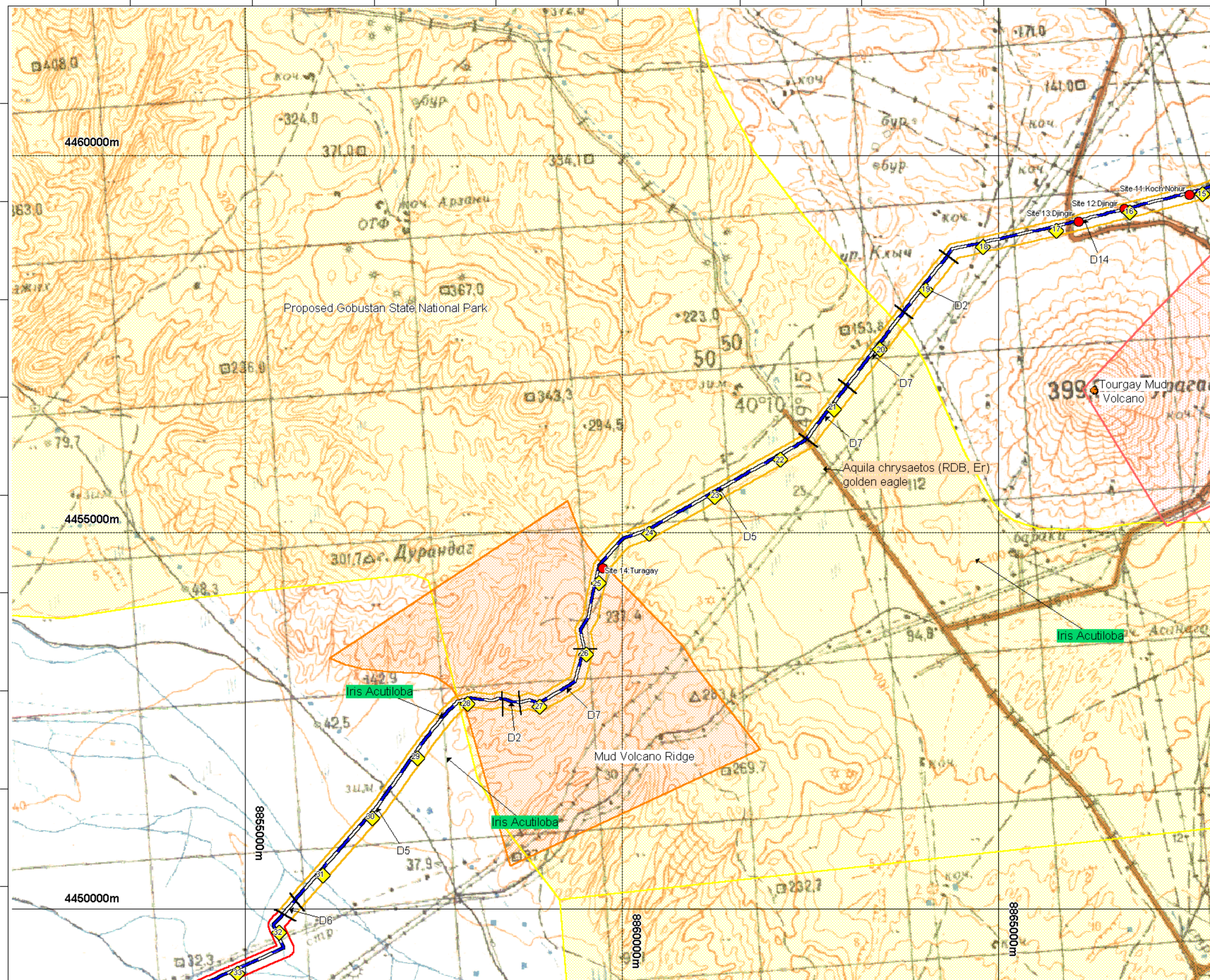
Table 2 Vegetation communities with broad habitat categories

SD5	Interzone
AGRICULTURAL	
A1	Fields
A2	Old Fields
WOODLAND AND SCRUB	
WS1	Plantations
WS2	Scrub
WETLAND	
W1	River
W2	Lake
W3	Canals (Major)
W4	Marsh
W5	Seasonal marsh / Chal meadow
OTHER	
Individually Named	

ARCHAEOLOGY

The following archaeological sites will be subject to trial trenching investigation prior to construction:

Gobustan (KP9-11) Sites 4, 5, 6
Kazi-Magomed (KP54) Sites 21, 22
Yevlakh (KP221) Sites 52, 53, 54
Neymatabad (KP236) Site 56
Mingechaur (KP248) Site 57
Nadirkand (KP276) Site 59
Dalimamedli (KP280) Site 60
Zayamchai (KP355) Sites 111, 112, 113
Girag Salakhli (KP 05) Site 138



- Kilometre Point
- Proposed SCP
- Protected Area
- Gobustan Cultural Reserve
- Military Area
- Mud Volcano (Ridge)
- (AB02) Azerbaijan Block Valves
- Potential Archaeological Site
- Contaminated Land
- Sangachal Terminal
- Habitat Classification**
 - Desert (D)
 - Semi Desert (SD)
 - Agricultural (A)
 - Woodland and Scrub (WS)
 - Wetland (W)
 - Other
- Protected Flora**
- Protected Fauna**
- River Name**



REV	DATE	DESCRIPTION	DRN	CHK	APP
04	12.03.02	Updated Route & Constraints	MS	FW	CY
03	10.01.02	Updated Route & Constraints	MS	FW	CY
02	14.09.01	Updated Route	DL	FW	CY
01	20.06.01	Updated Constraints	DL	FW	CY
00	25.05.01	Environmental Constraints	DL	FW	CY



SCP PROJECT

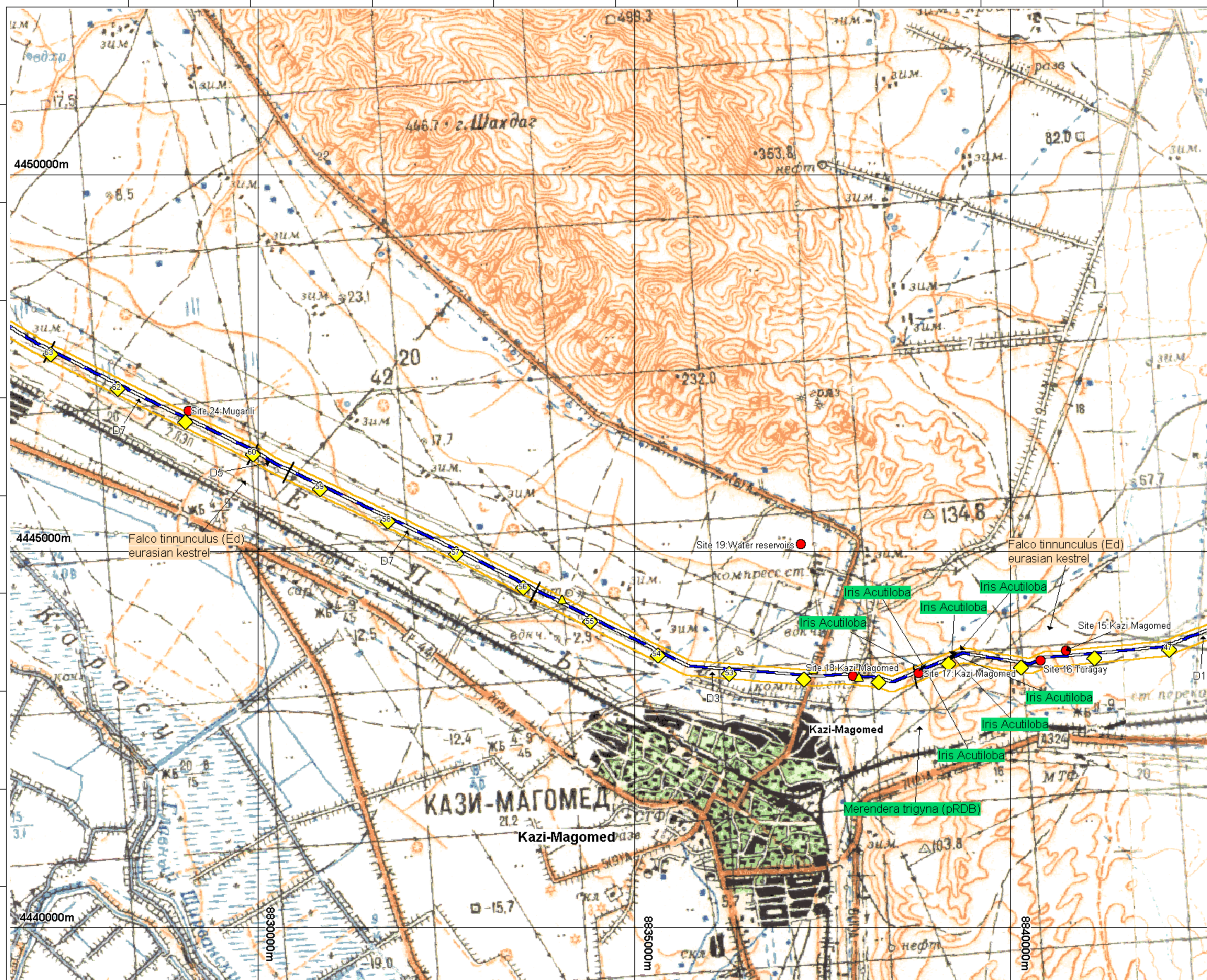


TITLE: FIGURE 21: SOUTH CAUCASUS
GAS PIPELINE ENVIRONMENTAL
ROUTE MAP (Map 2 of 27)

SCALE: 1:50,000

REV 04

FILE NAME: P8078ECO_CONSTRAINTS2.WOR



- Kilometre Point
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01	20.06.01	Updated Constraints	DL	FW	CY
00	25.05.01	Environmental Constraints	DL	FW	CY



SCP PROJECT

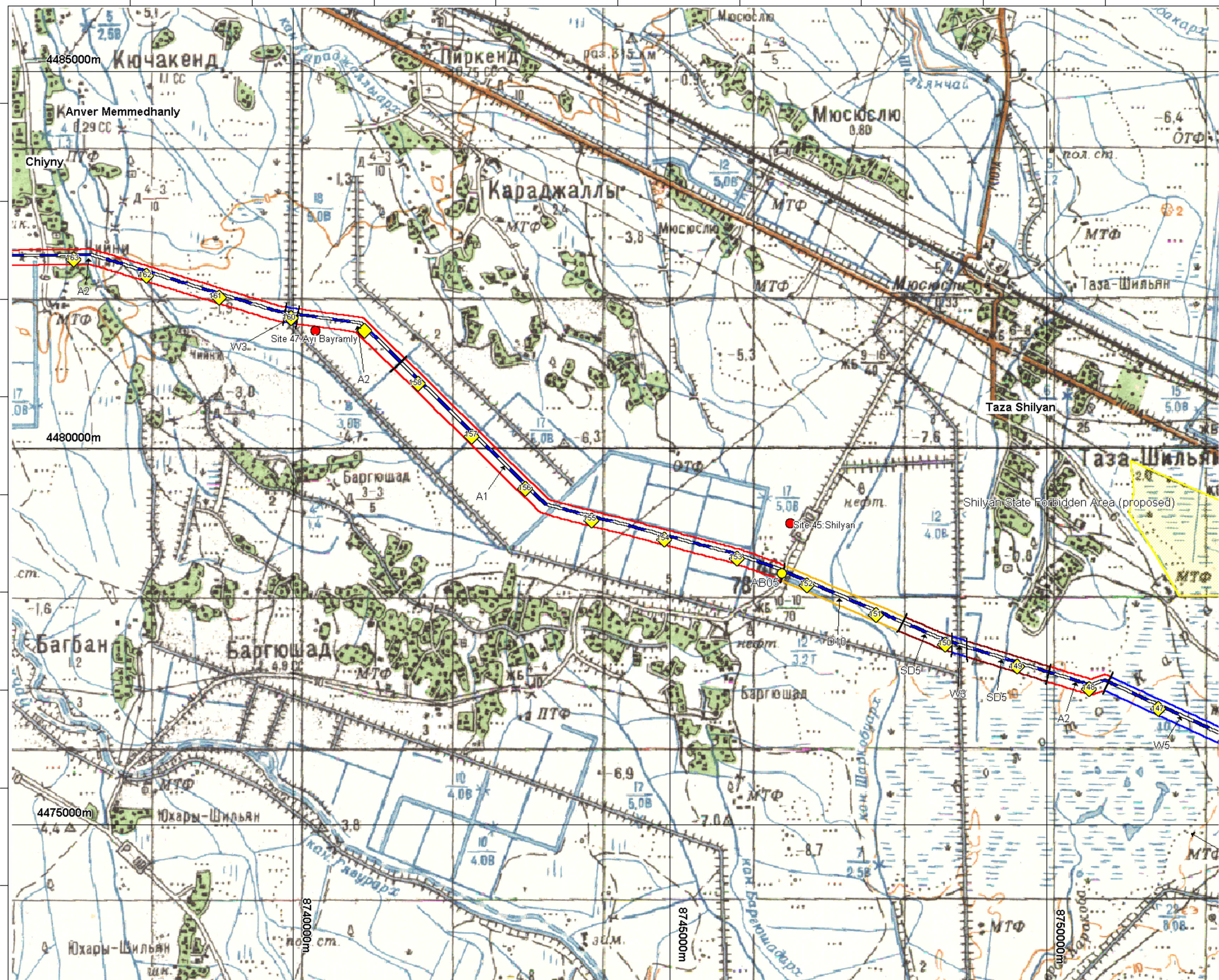


TITLE: FIGURE 21: SOUTH CAUCASUS
GAS PIPELINE ENVIRONMENTAL
ROUTE MAP (Map 4 of 27)

SCALE: 1:50,000

REV 04

FILE NAME: P8078ECO_CONSTRAINTS4.WOR



- Kilometre Point
- Proposed SCP
- Protected Area
- Gobustan Cultural Reserve
- Military Area
- Mud Volcano (Ridge)
- (AB02) Azerbaijan Block Valves
- Potential Archaeological Site
- Contaminated Land
- Sangachal Terminal
- Habitat Classification**
 - Desert (D)
 - Semi Desert (SD)
 - Agricultural (A)
 - Woodland and Scrub (WS)
 - Wetland (W)
 - Other
- Protected Flora
- Protected Fauna
- River Name



REV	DATE	DESCRIPTION	DRN	CHK	APP
04	12.03.02	Updated Route & Constraints	MS	FW	CY
03	10.01.02	Updated Route & Constraints	MS	FW	CY
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00	25.05.01	Environmental Constraints	DL	FW	CY

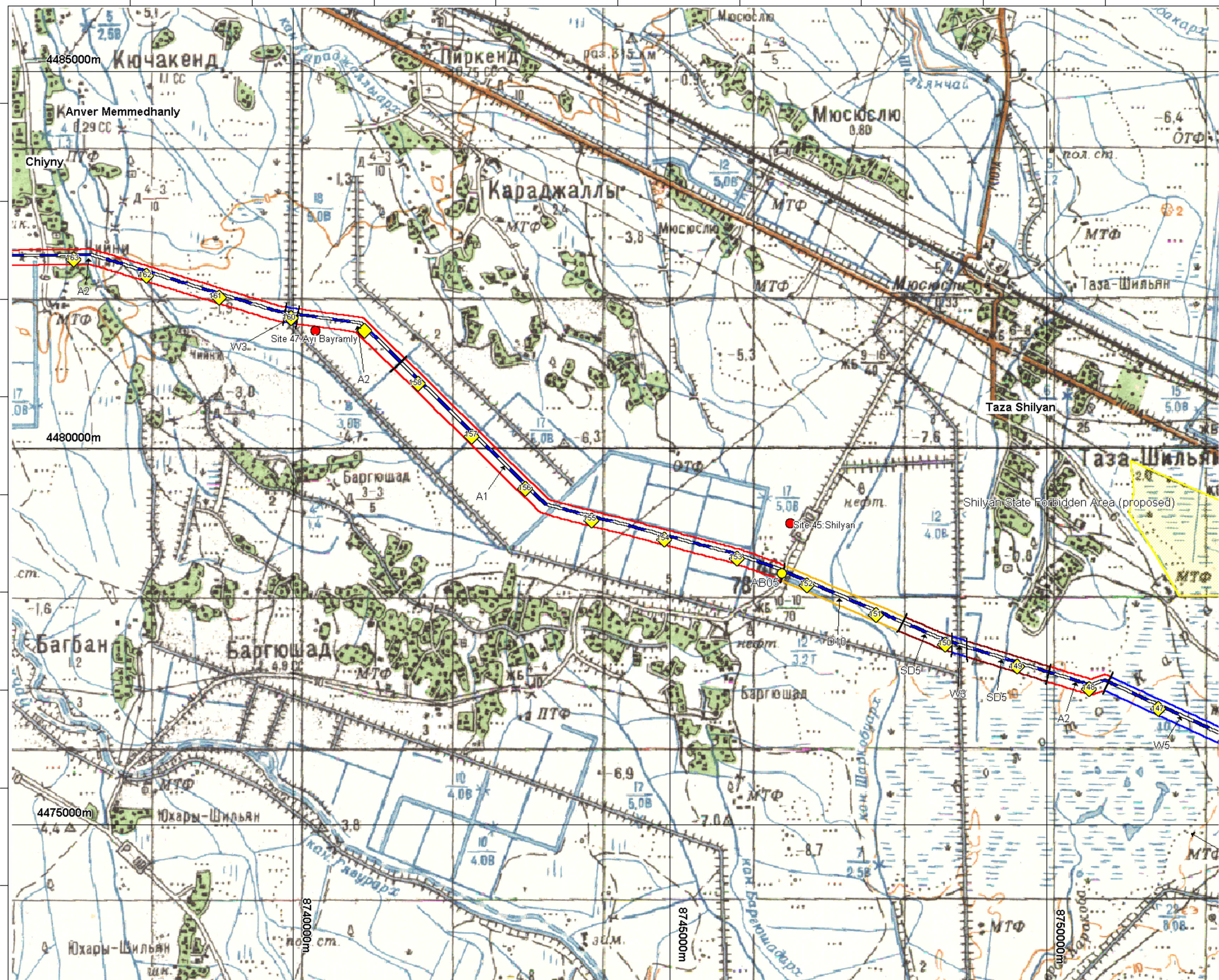
SCP PROJECT

Azerbaijan Environment
and Technology Centre

TITLE: FIGURE 21: SOUTH CAUCASUS
GAS PIPELINE ENVIRONMENTAL
ROUTE MAP (Map 10 of 27)

SCALE: 1:50,000

REV 04



- Kilometre Point
- Proposed SCP
- Protected Area
- Gobustan Cultural Reserve
- Military Area
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- Habitat Classification**
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SCP PROJECT

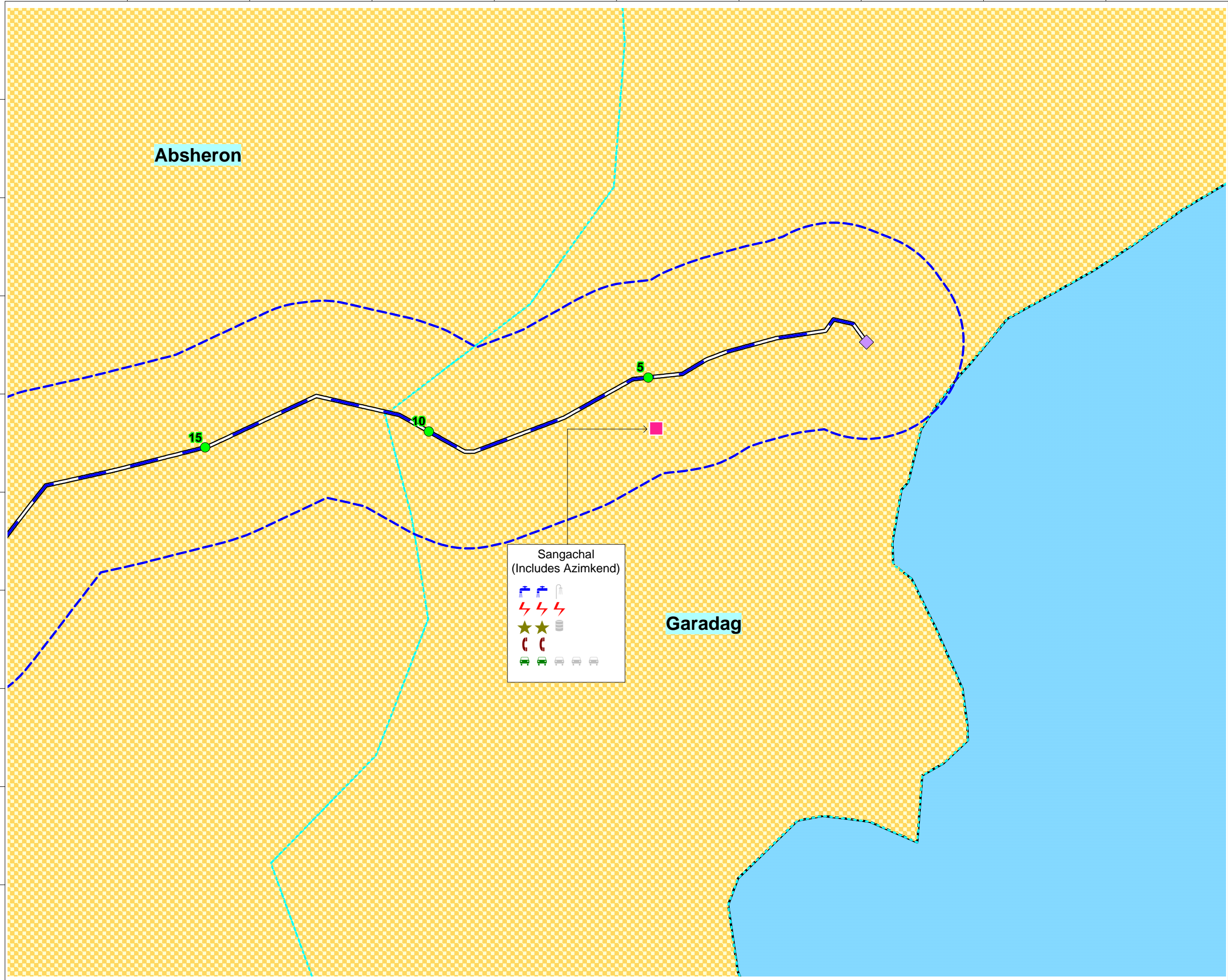
Azerbaijan Environment
and Technology Centre

TITLE: FIGURE 21: SOUTH CAUCASUS
GAS PIPELINE ENVIRONMENTAL
ROUTE MAP (Map 10 of 27)

SCALE: 1:50,000

REV 04

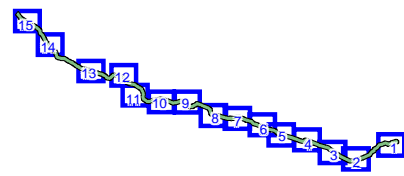
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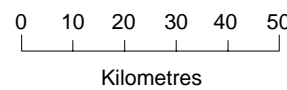
- Proposed Pipeline Route
- Settlements
- Proposed Pipeline 2km Corridor
- Administrative Boundaries
- Potential Pipe Yards
- Potential Construction Camps
- Pump Station
- Pigging Station
- Five Kilometre Marker

**Socio-Economic Survey Legend
Included as Separate Figure**

* Socio-Economic Data Not Available



NORTH



REV	07.03.02	FIRST DRAFT	CL	SR	MA
REV	DATE	DESCRIPTION	DRN	CHK	APP

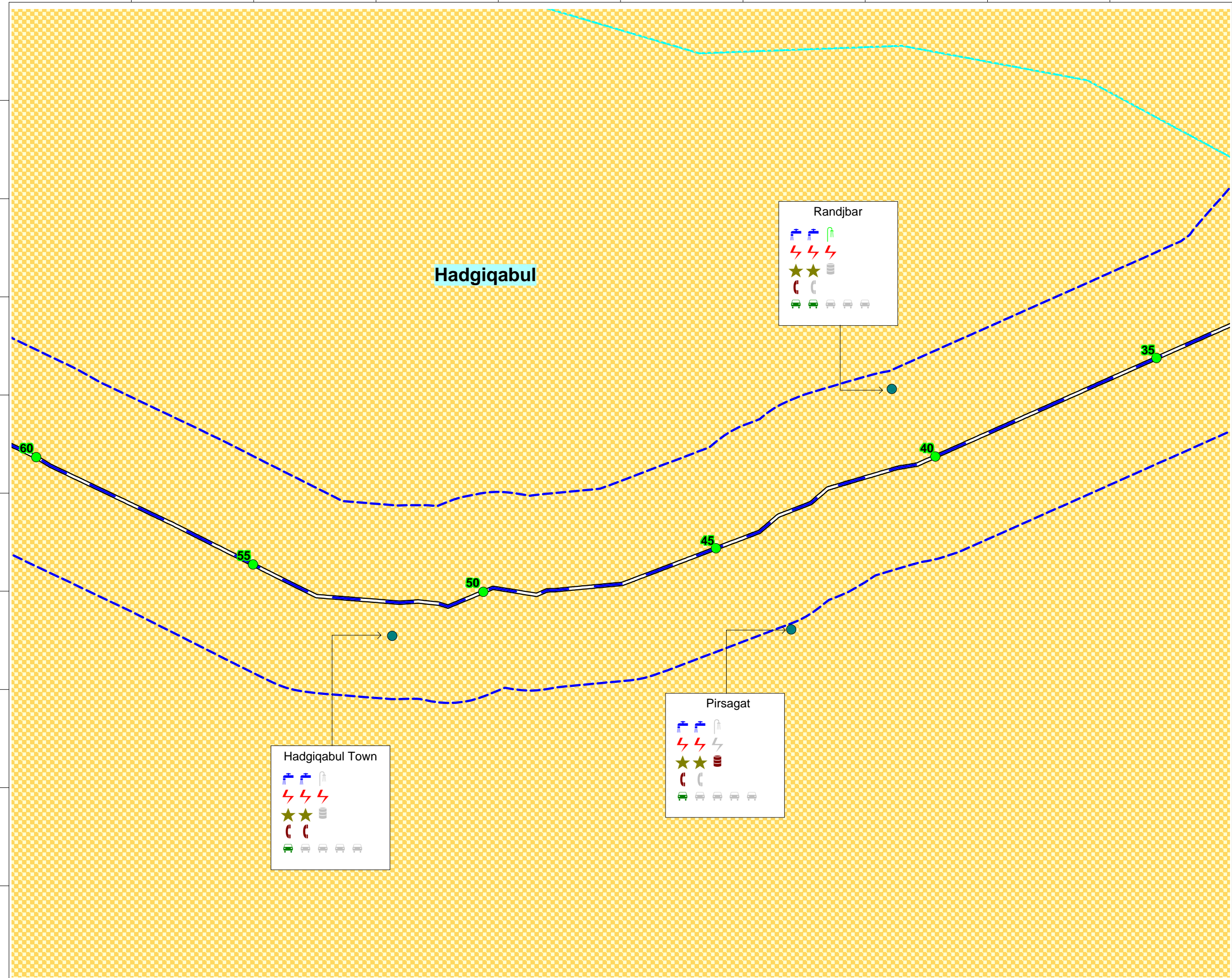


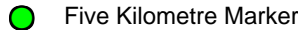

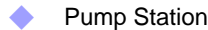



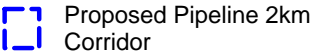


SCP PIPELINES PROJECT



**TITLE: Azerbaijan Map 01: Settlements
Along Pipeline Route Corridor
(SCP Pipelines Project)**

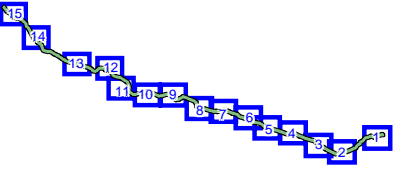
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**Socio-Economic Survey Legend
Included as Separate Figure**

* Socio-Economic Data Not Available





NORTH

0

10

20


30

40


50

Kilometres

REV	07.03.02	FIRST DRAFT	CL	SR	MA
REV	DATE	DESCRIPTION	DRN	CHK	APP



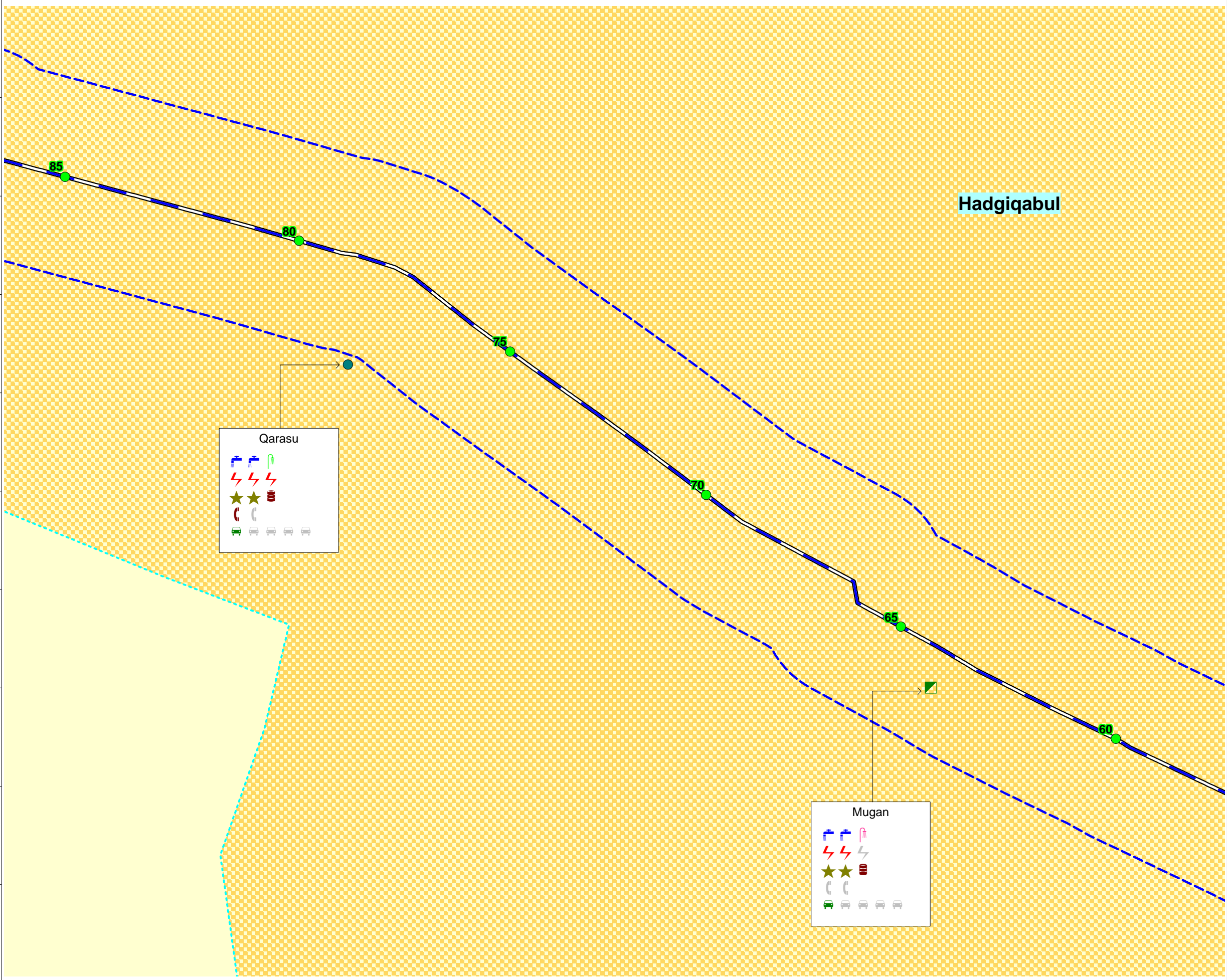
SCP PIPELINES PROJECT



TITLE: **Azerbaijan Map 02: Settlements
Along Pipeline Route Corridor
(SCP Pipelines Project)**

SCALE: 1:75,000

REV 00



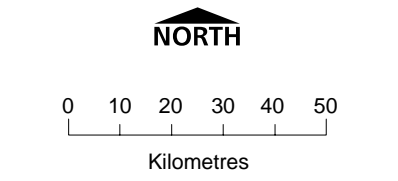
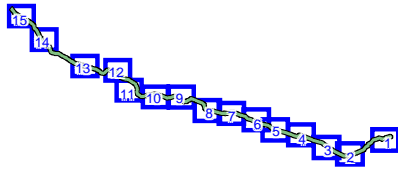
Qarasu

Mugan

- Proposed Pipeline Route
- Settlements
- Proposed Pipeline 2km Corridor
- Administrative Boundaries
- Potential Pipe Yards
- Potential Construction Camps
- Pump Station
- Pigging Station
- Five Kilometre Marker

Socio-Economic Survey Legend
Included as Separate Figure

* Socio-Economic Data Not Available



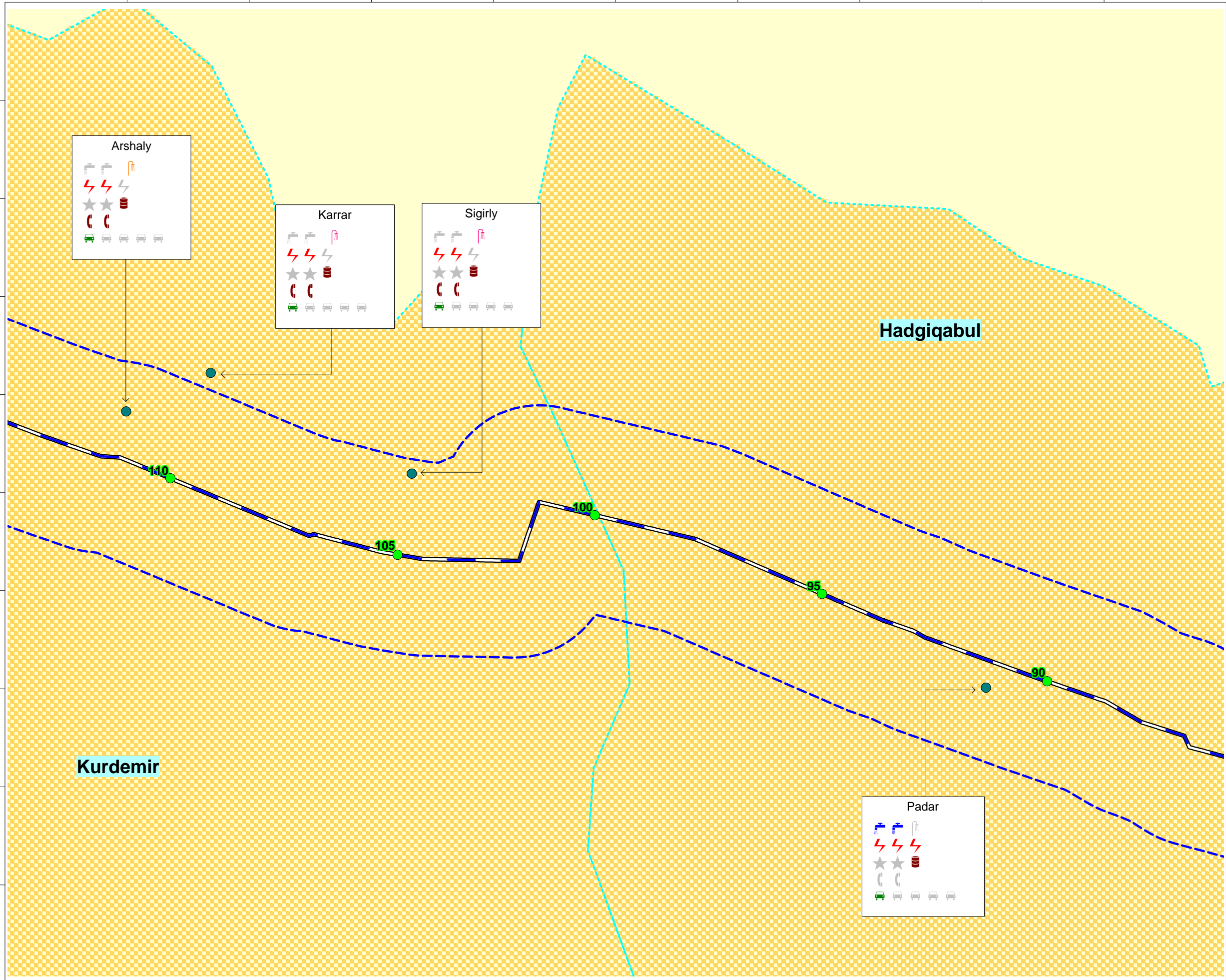
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REV	DATE	DESCRIPTION	DRN	CHK	APP

SCP PIPELINES PROJECT

TITLE: **Azerbaijan Map 03: Settlements Along Pipeline Route Corridor (SCP Pipelines Project)**

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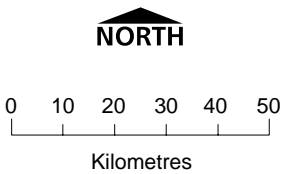
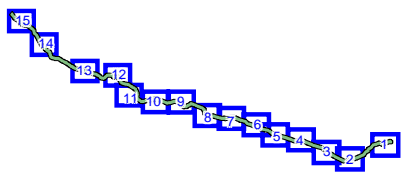
REV 00



- Proposed Pipeline Route
- Settlements
- Proposed Pipeline 2km Corridor
- Administrative Boundaries
- Potential Pipe Yards
- Potential Construction Camps
- Pump Station
- Pigging Station
- Five Kilometre Marker

Socio-Economic Survey Legend
Included as Separate Figure

* Socio-Economic Data Not Available



REV	07.03.02	FIRST DRAFT	CL	SR	MA
REV	DATE	DESCRIPTION	DRN	CHK	APP



SCP PIPELINES PROJECT



TITLE: Azerbaijan Map 04: Settlements
Along Pipeline Route Corridor
(SCP Pipelines Project)

SCALE: 1:75,000

REV 00