

4.2 2nd Site Survey (Explanation of DOD) (02/Nov/2011)

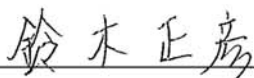
**MINUTES OF DISCUSSIONS
ON THE PREPARATORY SURVEY ON THE PROJECT
FOR CONSTRUCTION OF BRIDGES ON THE ROAD BETWEEN ILE AND CUAMBA
IN THE REPUBLIC OF MOZAMBIQUE
(Explanation on Draft Final Report)**

In March 2011, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Preparatory Survey Teams on the Project for Construction of Bridges on the Road between Ile and Cuamba in the Republic of Mozambique (hereinafter referred to as "Mozambique"), and through discussions, field surveys and technical examination of the results in Japan, JICA prepared a Draft Final Report of the study.

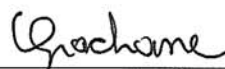
In order to explain and to consult with the concerned officials of the Government of Mozambique on the contents of the Draft Final Report, JICA sent to Mozambique the Preparatory Survey Team (hereinafter referred to as "the Team"), for explaining the Draft Final Report. The team is headed by Mr. Masahiko Suzuki, Senior Transport Sector Advisor, JICA and is scheduled to stay from October 27 to November 3, 2011.

As a result of the discussions, both sides confirmed the main items described in the attached sheets.

Maputo, November 2, 2011



Mr. Masahiko Suzuki
Leader
Preparatory Survey Team
Japan International Cooperation Agency



Mr. Cecilio Grachane
Director General
National Road Administration

Witnessed by



Mr. Elias Paulo
Chairman
Road Fund Board

ATTACHMENT

1. Project Component

After the explanation of the contents of the Draft Final Report by the Team, the Mozambican side agreed in principle to the project contents, while live load of the bridge design will be updated at the detailed design stage based on the updated standard of National Road Administration (ANE).

2. Cost Estimation

Both sides agreed that the Project Cost Estimation as attached in Annex-1 should never be duplicated or disclosed to any third parties before the signing of all the contract(s) with contractor(s) for the Project.

3. Japan's Grant Aid Scheme

The Mozambican side understood the Japan's Grant Aid scheme and the necessary measures to be taken by the recipient country as explained by the Team and described in Annex-5, Annex-6 and Annex-7 of the Minutes of Discussions signed on March 23, 2011.

4. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the Mozambican side around February, 2012.

5. Environmental and Social Considerations

5-1 The Mozambican side agreed to complete the EIA certification process and inform the result to JICA Mozambique office by the end of November, 2011.

5-2 Both sides agreed the contents of the Environmental Checklist as shown in Annex-2.

5-3 The Mozambican side agreed that monitoring for Environmental and Social considerations should be conducted by ANE in accordance with the Monitoring Plan for the Project described in the Preparatory Survey Report and EIA report.

The results of monitoring will be provided to JICA by filling in the Monitoring Form attached as Annex-3, at the pre- construction phase and monthly in the construction phase.

5-4 The Mozambican side agreed that JICA will disclose the results of the monitoring conducted by ANE on JICA's website and report the results to the Advisory Committee for Environmental and Social Considerations established by JICA on a periodic basis.

6. Other Relevant Issues

6-1 Both sides confirmed that the following undertakings should be carried out by the Mozambican side at the Mozambican expenses for the Project.

(1) To acquire the land necessary for the Project, compensate for the crops affected by the Project and relocate all utilities from the Project site by the end of July, 2012.

(2) To clear the landmines and unexploded ordnance in the area shown in Annex-4 and send the result to JICA Mozambique office by the end of July, 2012.

(3) To clear the landmines and unexploded ordnance in the Project area requested by the consultant(s) or contractor(s) during the detailed design stage and the construction stage.

(4) To demolish existing Mutabasse, Lurio, Muassi and Namutinbua Bridges after the completion of the

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- new bridges.
- (5) Necessary arrangement for traffic control at necessary sections.
 - (6) To provide construction yards for the Project.
 - (7) To provide borrowing pits, quarry and disposal areas.
 - (8) Necessary arrangement for tax exemption and custom clearance for project related equipments, materials and facilities.
- 6-2. Mozambican side agreed that the clearance of the landmines and unexploded ordnance within the Project area and the relocation of all utilities which interrupt the Project are the pre-requisite of pre-qualification of contractors.
- 6-3. Both sides confirmed that in case of an accident by landmines or unexploded ordnance, the Mozambican side takes full responsibility to address it.
- 6-4. The road between Ile/Nampevo to Cuamba is currently or planned to be rehabilitated by other development partners. The Mozambican side confirmed that the rehabilitation will be completed with two lane paved road.
- 6-5. The Mozambican side shall bear the following costs as a condition for the Japan's Grant Aid to be implemented.
- (1) The commissions for the banking services based upon Banking Arrangement (B/A)
 - (2) The advising commission of the Authorization to Pay (A/P)
- 6-6. The Mozambican side shall secure enough budget and personnel necessary for the operation and maintenance of the facilities constructed by the Project.

Annex-1 Project Cost Estimation

Annex-2 Environmental Checklist

Annex-3 Monitoring Form

Annex-4 Required demining area for the construction of bridges

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(This Page is closed due to the confidentiality.)

Preparatory Survey Report (Outline Design Study)
on the Project for Construction of Bridges on the Road
between Ile and Cuamba in the Republic of Mozambique

Environmental Checklist			Annex-2	
Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(a) N (b) N (c) - (d) N	(a) Based on the categorization decided by DPCA, Environmental Study is being conducted at the moment. ANE applied DPCA for the categorization of the project for EIA process and DPCA made categorization of impact based on the field survey. In Zambezia province, all 11 bridges were categorized as category C. In Niassa province, 2 bridges were categorized as category C and 1 bridge; Br-Lurio was categorized as category B. The project of category E requires EAS for obtaining Environmental license. For the other 12 bridges, further studies are not required. (b) The study for EAS is in progress. Simplified Environmental Report(EAS) for the Lurio bridge will be submitted to the MICOA for the approval. Environmental license will be issued by MICOA by the end of November, 2011. (c) After submitting the report, it will be clarified whether some conditions are imposed on the approval or not. (d) As mentioned above, further studies on the other 11 bridges are not required for obtaining the environmental license issued by the MICOA.
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a) Y (b) N	(a) The local residents are generally explained about the project, because the road implementation project has been already started in the area. After finalizing the project affected area, the baseline survey for the land(for peoples, if necessary) will be conducted. Before the commencement of the land survey, the project activity (including cut-off date) was informed to the local residents. Resettlement was avoided at the basic design. (b) As to the compensation, the discussion between ANE and local residents has been done. ANE will establish the system for compensation. In case the local residents have any grievance, the issue will be solved based on the regulations stipulated by the MICOA.
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a) Y	(a) To minimize the environmental impact, each bridge location was considered at preparatory survey(phase-1).
	(1) Air Quality	(a) Is there a possibility that air pollutants emitted from the project related sources, such as vehicles traffic will affect ambient air quality? Does ambient air quality comply with the country's air quality standards? Are any mitigating measures taken? (b) If air quality already exceed country's standards near the route, is there a possibility that the project will make air pollution worse?	(a) N (b) N	(a) No particular impact is anticipated. (b) No particular impact is anticipated.
2 Pollution Control	(2) Water Quality	(a) Is there a possibility that soil runoff from the bare lands resulting from earthmoving activities, such as cutting and filling will cause water quality degradation in downstream water areas? (b) Is there a possibility that the project will contaminate water sources, such as well water?	(a) N (b) N	(a) The project mainly contains the replacement of existing old bridges and no particular impact is anticipated. (b) No particular impact is anticipated.
	(3) Noise and Vibration	(a) Do noise and vibrations from the vehicle and train traffic comply with the country's standards? (b) Do low frequency sound from the vehicle and train traffic comply with the country's standards?	(a) - (b) -	(a) There is no particular standard for noise and vibration for vehicle and train traffic. (b) There is no particular standard for low frequency sound from the vehicle and train traffic.

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Annex-2

Environmental Checklist

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
3 Natural Environment	(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	(a) N	(a) There is no protected area at the surrounding area of the bridges.
		(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock? (e) Is there a possibility that installation of bridges and access roads will cause impacts, such as destruction of forest, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered?	(a) N (b) N (c) - (d) - (e) -	(a) There is no particular important ecosystem which is categorized as an ecologically valuable habitats near the bridges. (b) There is no particular important ecosystem which is categorized as an endangered species. (c) No serious impact to the ecosystem is anticipated. (d) No serious impact to the ecosystem is anticipated. (e) Basic concept of the project is to replace old small and middle scale bridges and there is no serious impact anticipated. There is no significant forest area near the bridges.
	(2) Ecosystem			
	(3) Hydrology	(a) Is there a possibility that hydrologic changes due to the installation of structures will adversely affect surface water and groundwater flows? (a) Is there any soft ground on the route that may cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides, where needed? (b) Is there a possibility that civil works, such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides? (c) Is there a possibility that soil runoff will result from cut and fill areas, waste soil disposal sites, and borrow sites? Are adequate measures taken to prevent soil runoff?	(a) N (a) N (b) N (c) N	(a) No serious impact to hydrology is anticipated. (a) No serious impact is anticipated because the project mainly contains the replacement of the old bridges. (b) No serious impact is anticipated. (c) No serious impact to the soil erosion is anticipated. Yet, embankment and cutting slope will be protected adequately such as by vegetation.
	(4) Topography and Geology			

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Preparatory Survey Report (Outline Design Study)
on the Project for Construction of Bridges on the Road
between Ile and Cuamba in the Republic of Mozambique

Environmental Checklist

Environmental Checklist		Annex-2	
Category	Environmental Item	Main Check Items	Yes: Y No: N
4 Social Environment		(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? (b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement? (c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? (d) Is the compensation going to be paid prior to the resettlement? (e) Is the compensation policies prepared in document? (f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples? (g) Are agreements with the affected people obtained prior to resettlement? (h) Is the organizational framework established to properly implement resettlement? (i) Are the capacity and budget secured to implement the plan? (j) Are any plans developed to monitor the impacts of resettlement? (k) Is the grievance redress mechanism established?	(a) N (b) Y (c) Y (d) Y (e) Y (f) Y (g) Y (h) Y (i) Y (j) Y (k) Y
	(1) Resettlement		
	(2) Living and Livelihood	(a) Where bridges and access roads are newly installed, is there a possibility that the project will affect the existing means of transportation and the associated workers? Is there a possibility that the project will cause significant impacts, such as extensive alteration of existing land uses, changes in sources of livelihood, or unemployment? Are adequate measures considered for preventing these impacts? (b) Is there any possibility that the project will adversely affect the living conditions of the inhabitants other than the target population? Are adequate measures considered to reduce the impacts, if necessary? (c) Is there any possibility that diseases, including infectious diseases, such as HIV will be brought due to immigration of workers associated with the project? Are adequate considerations given to public health, if necessary? (d) Is there any possibility that the project will adversely affect road traffic in the surrounding areas (e.g., increase of traffic congestion and traffic accidents)? (e) Is there any possibility that project will impede the movement of inhabitants? (f) Is there any possibility that bridges will cause a sun shading and radio interference?	(a) N (b) N (c) Y (d) N (e) N (f) N
	(3) Heritage	(a) Is there a possibility that the project will damage the local archaeological, historical, cultural, and religious heritage? Are adequate measures considered to protect these sites in accordance with the country's laws?	(a) N
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	(a) -
	(5) Ethnic Minorities and Indigenous Peoples	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples? (b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources respected?	(a) N (b) -
		Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	(a) No resettlement is associated to the project. The resettlement was avoided at the basic design. (b) The resettlement was avoided at the basic design. (c) No resettlement is associated to the project. For the land acquisition, the baseline survey will be conducted by ANE based on the result of the basic design study. (d) Compensation for crops is expected to be done before implementation. (e) There is no document prepared for this project. The document is expected to be made based on the result of the basic design study. (f) No resettlement is associated to the project. (g) No resettlement is associated to the project. (h) No resettlement is associated to the project. (i) No resettlement is associated to the project. (j) No resettlement is associated to the project.
		(a) During the construction stage, temporary detours will be provided to avoid traffic problems. Improvement of road condition is expected to contribute economical development in the area. (b) No particular negative impact is anticipated. (c) Increased number of labour/traffics for construction activities/transportation may increase risk of the disease including HIV/AIDS infection in the rural areas. Adequate education to the labours will be provided by ANE signboard will be installed. (d) No serious negative impact is anticipated. Collaboration with the local government (Police station) and adequate signboard will be installed. (e) No serious negative impact is anticipated. (f) No serious negative impact is anticipated.	(a) N (b) N (c) N (d) N (e) N (f) N
		(a) The project of Bridge No.2 will not affect the grave yard near the bridges.	(a) N
		No serious negative impact is anticipated.	(a) -
		No particular ethnic group/indigenous people are affected by the project.	(a) N (b) -

Annex-2

Environmental Checklist

Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
4 Social Environment	<p>(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project?</p> <p>(b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials?</p> <p>(c) Are tripartite measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public health) for workers etc.?</p> <p>(d) Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?</p>	<p>(a) N</p> <p>(b) Y</p> <p>(c) Y</p> <p>(d) Y</p>	<p>(a) The project will be conducted following to the legislation in the country.</p> <p>(b) Industrial accidents will be prevented and hazardous materials will be managed properly following to the relevant legislation in the country.</p> <p>(c) Following to the relevant legislation, adequate safety training will be provided for the project implementation.</p> <p>(d) Adequate education to the labours will be provided such as no dumping waste to the rivers.</p>
(1) Impacts during Construction	<p>(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?</p> <p>(b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts?</p> <p>(c) If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?</p>	<p>(a) Y</p> <p>(b) -</p> <p>(c) -</p>	<p>(a) No serious negative impact is anticipated. Minimization of the impact will always be considered such as watering for dust prevention and maintenance of machinery for preventing noise and education for preventing waste dumping by the labours.</p> <p>(b) No serious negative impact is anticipated.</p> <p>(c) No serious negative impact is anticipated.</p>
5 Others	<p>(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?</p> <p>(b) What are the items, methods and frequencies of the monitoring program?</p> <p>(c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?</p> <p>(d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?</p>	<p>(a) Y</p> <p>(b) -</p> <p>(c) -</p> <p>(d) -</p>	<p>(a) Monitoring will be conducted based on the result of the currently conducted Simplified Environmental Report(ESA) if required.</p> <p>(b) MCOA will be issued the license after reviewing the Simplified Environmental Report(ESA) and monitoring program is still not fixed. The land acquisition will be conducted based on the result of basic design study. Those details will be finalised before the project implementation.</p> <p>(c) Same as above.</p> <p>(d) Same as above.</p>
6 Note	<p>(a) Where necessary, pertinent items described in the Roads, Railways and Forestry Projects checklist should also be checked (e.g., projects including large areas of deforestation).</p> <p>(b) Where necessary, pertinent items described in the Power Transmission and Distribution Lines checklist should also be checked (e.g., projects including installation of power transmission lines and/or electric distribution facilities).</p> <p>(a) If necessary, the impacts to transboundary or global issues should be confirmed (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).</p>	<p>(a) -</p> <p>(b) -</p> <p>(a) -</p>	<p>(a) No particular matter related to others.</p> <p>(b) No particular matter related to others.</p> <p>(a) No particular matter related to others.</p>

1) Regarding the term "Country's Standards" mentioned in the above table, in the event that environmental standards in the country where the project is located diverge significantly from international standards, appropriate environmental considerations are required to be made. In cases where local environmental regulations are yet to be established in some areas, considerations should be made based on comparisons with appropriate standards of other countries (including Japan's experience).

2) Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking into account the characteristics of the project and the particular circumstances of the country and locality in which the project is located.

Environmental Monitoring Plan (Tentative draft)

Environmental item	Contents for monitoring	Method	Result	Implemented by	Frequency and expected time
Planning phase					
Environmental License	1. Situation of obtaining the license 2. Conditions for obtaining the license	Handing in relevant documents (copy of license, application documents)		ANE	Once after completion of process (by the end of Nov, 2011)
Results of the basic design	Involuntary resettlement	Joint survey with land owner/ user, community representative. Handing in relevant documents to JICA		ANE	Once after Basic Design
Adequate compensation	Local residents for land acquisition	Joint survey with land owner/ user, community representative. Handing in relevant documents to JICA		ANE	Once after Basic Design and completion of process
Information to the local residents	Information about the results of basic design.	Results of activities		ANE	Once after Basic Design
Construction phase					
Adequate project implementation following legislation / instruction of MICOA	Conditions in the environmental license or others instruction from MICOA	Relevant documents		Consultant/ Contractor	During construction as it be requested by MICOA
Compensation or replacement of public facilities such as washing place	Alternative facilities whether those are compensated adequately.	Alternative facilities		Consultant / Contractor	Once during construction
Grievance from the local residents	Grievance process whether it meet to ANE's framework	Record of grievance		Villages/ Districts/ ANE/ Consultant	Monthly Meeting
Operation phase					
Grievance from the local residents	Grievance process whether it meet to ANE's framework	Record of grievance		Villages/ Districts/ ANE/ Consultant	Once after completion of bridge

Source: JICA Study Team

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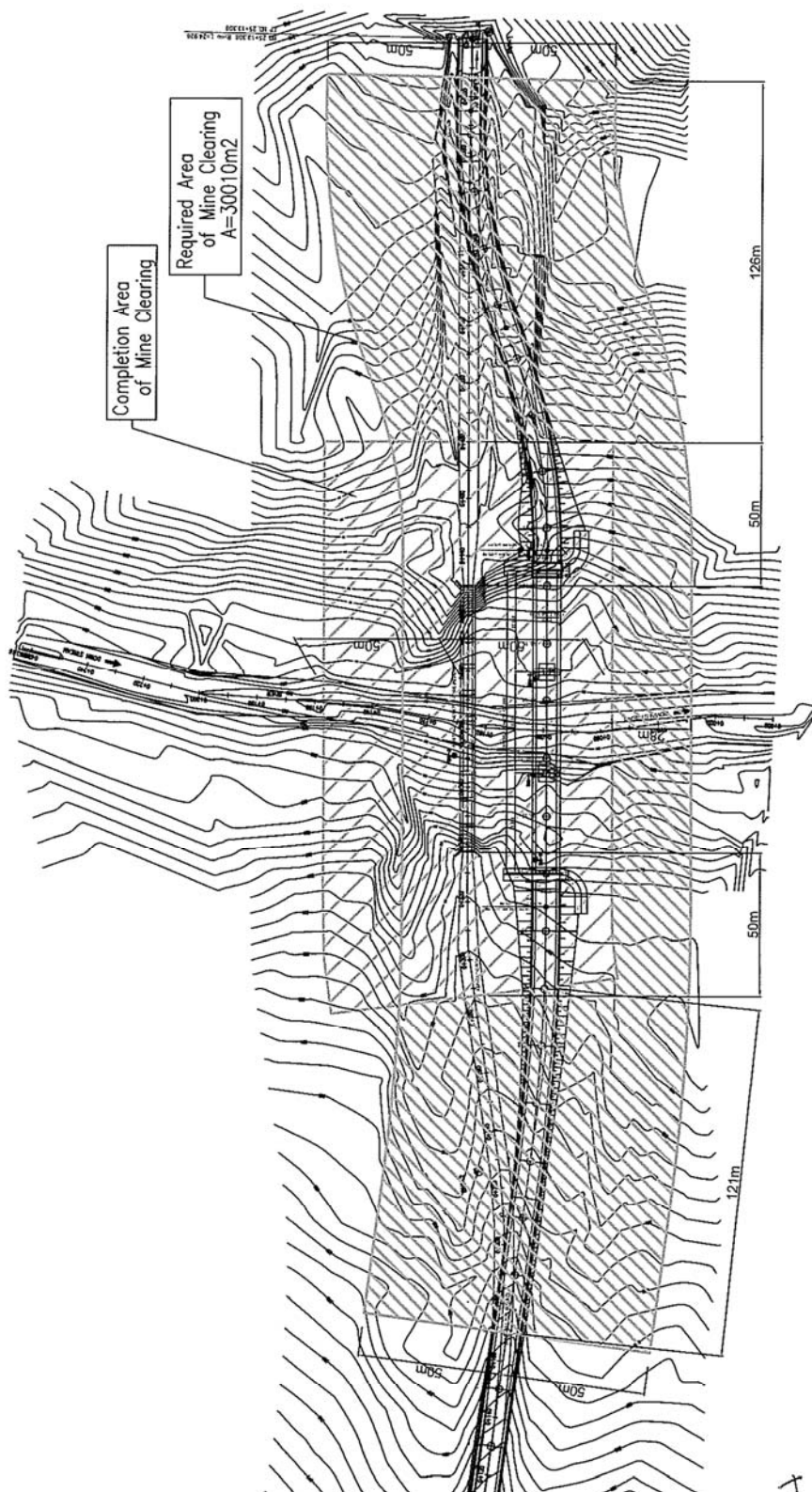
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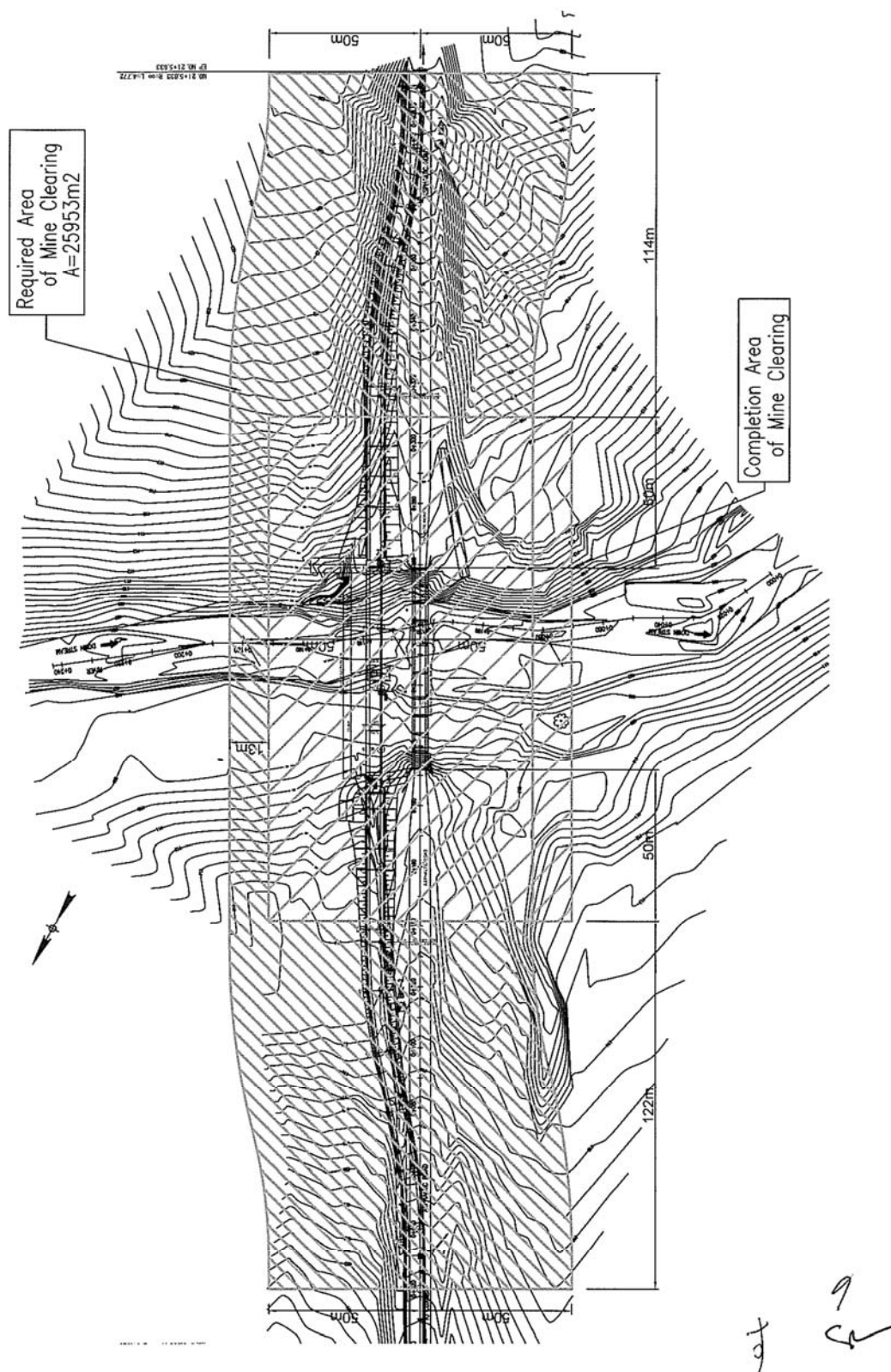
Survey & Removal of Land Mines

No.	Bridge Name	Required area (m ²)
Br.1	Mutabasse	30,010
Br.2	Muliquela	25,953
Br.3	Matacasse	23,600
Br.4	Lua	46,660
Br.5	Ualasse	9,795
Br.6	Licungo	34,000
Br.7	Nivaco	23,553
Br.8	Matsitse	23,500
Br.9	Namisagua	18,090
Br.10	Nuhusse	31,980
Br.11	Lurio	37,866
Br.12	Muassi	18,021
Br.13	Namutimbua	36,070
	Total	359,098

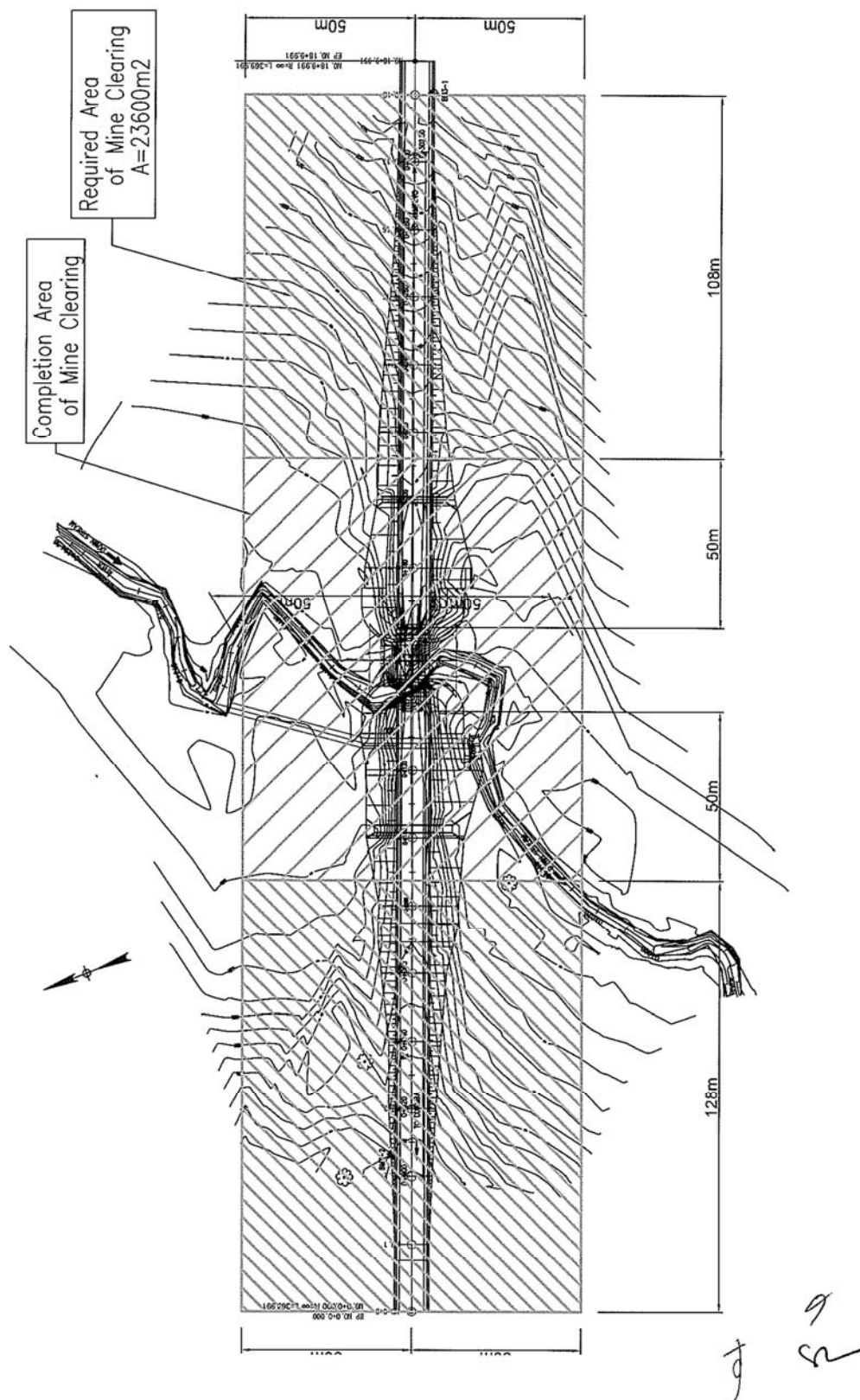
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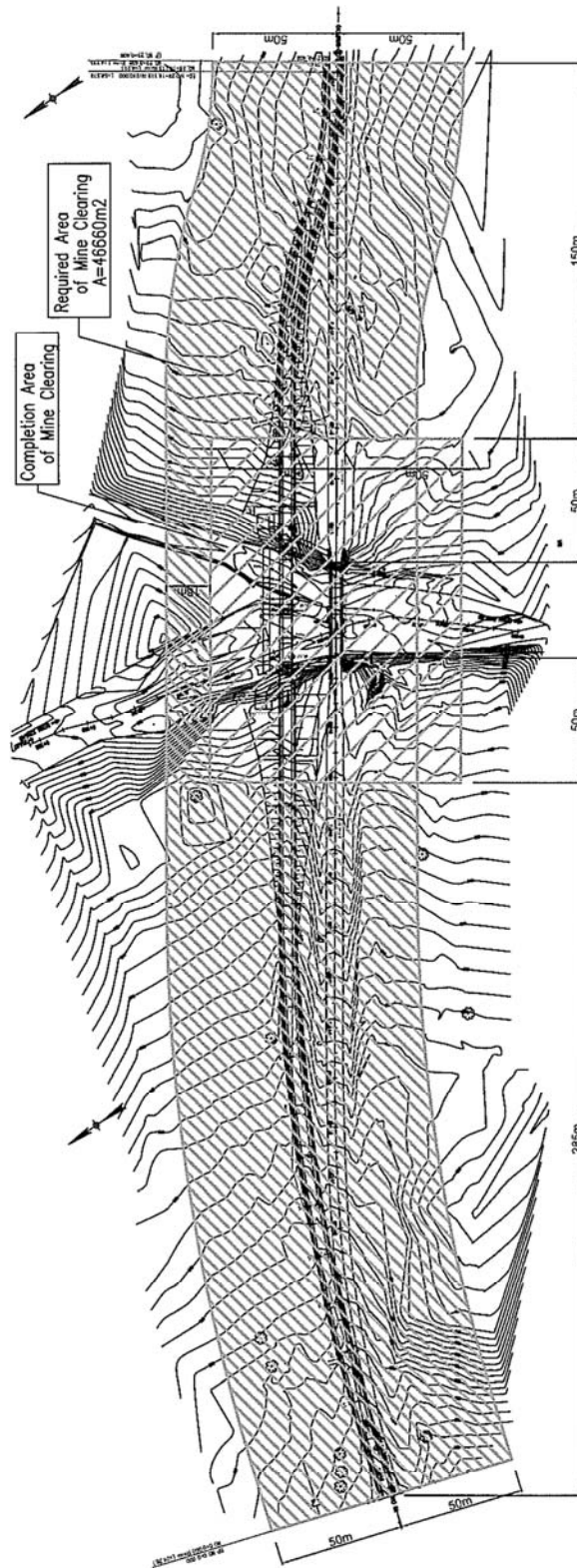




No.3 Matacasse

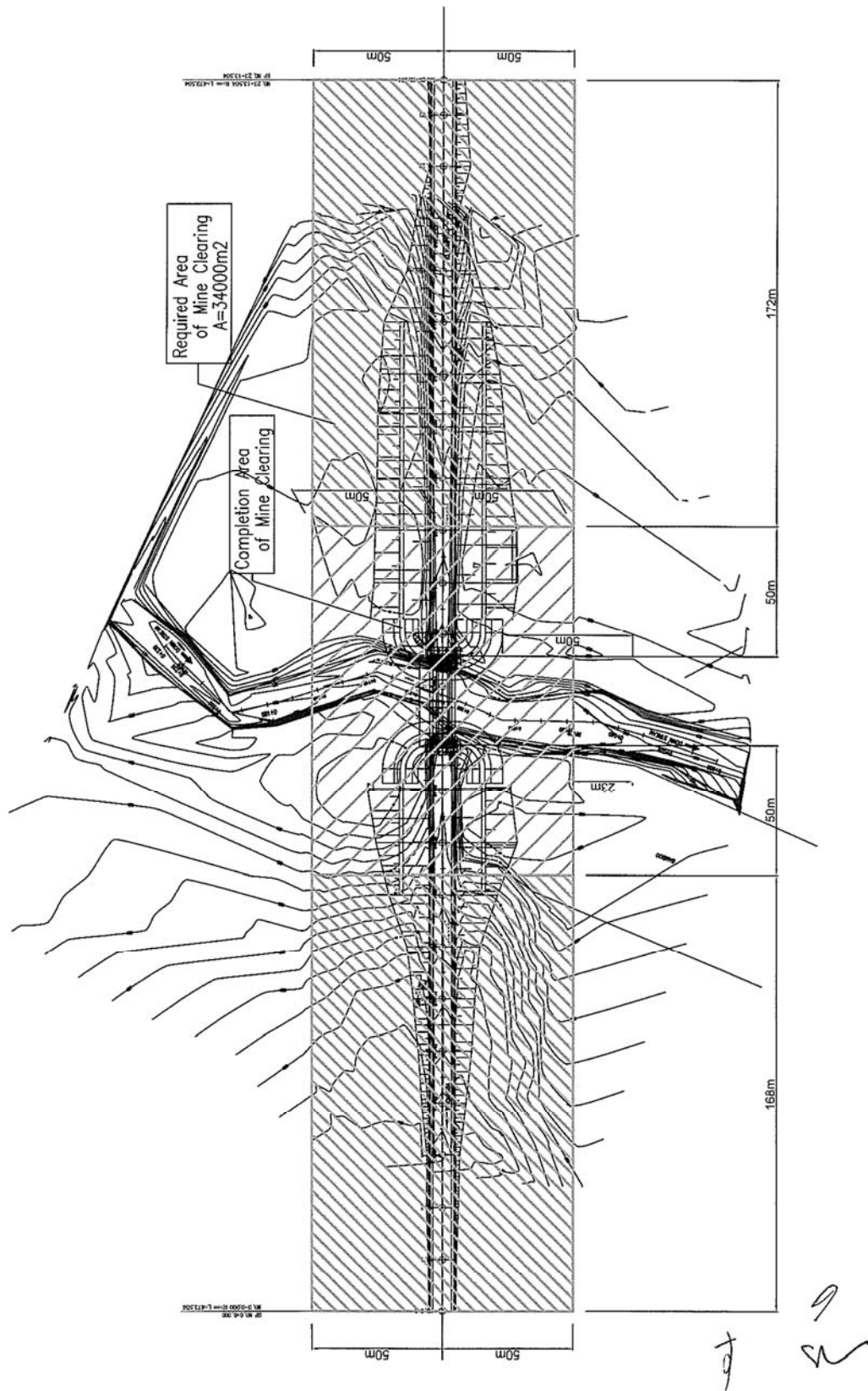


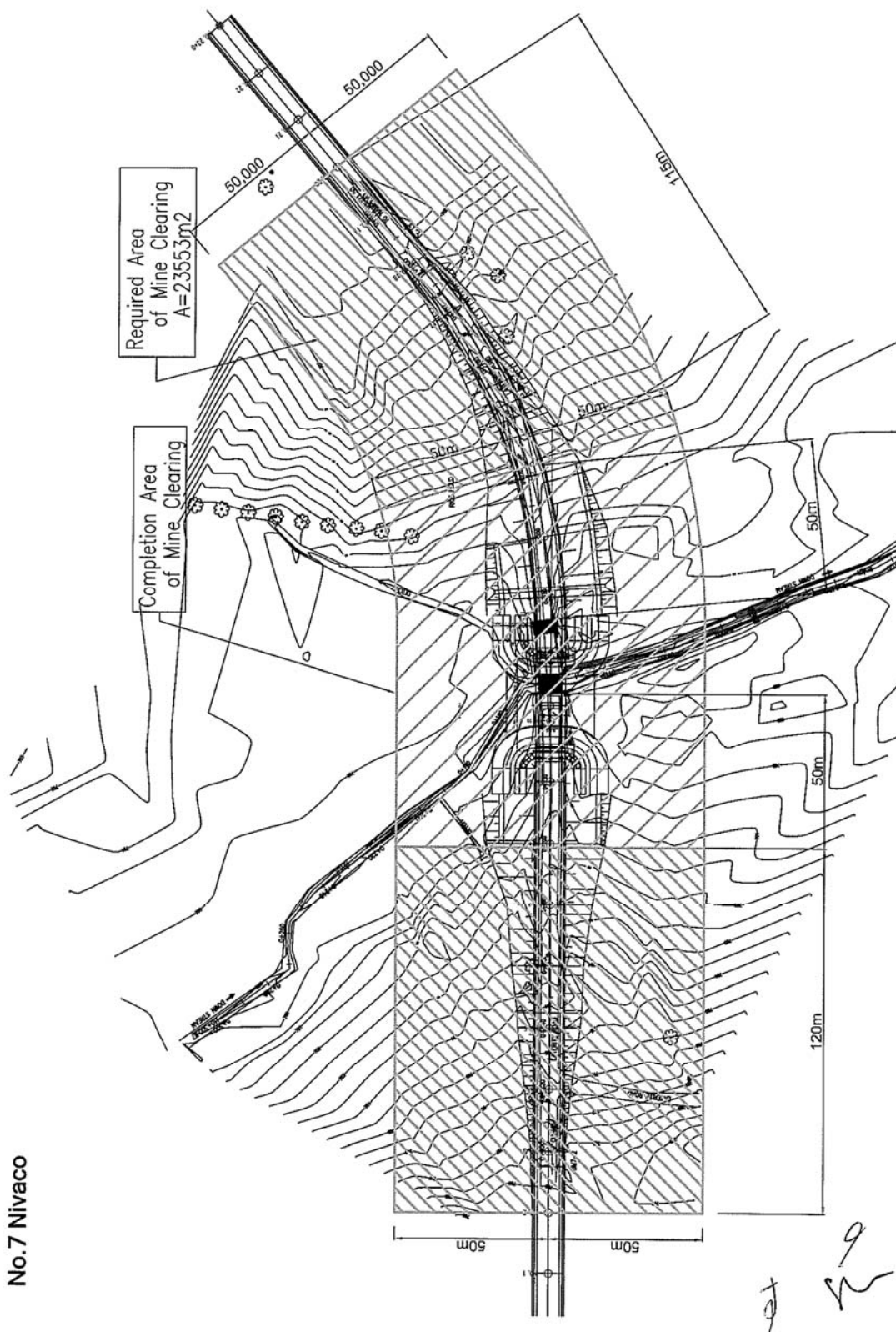
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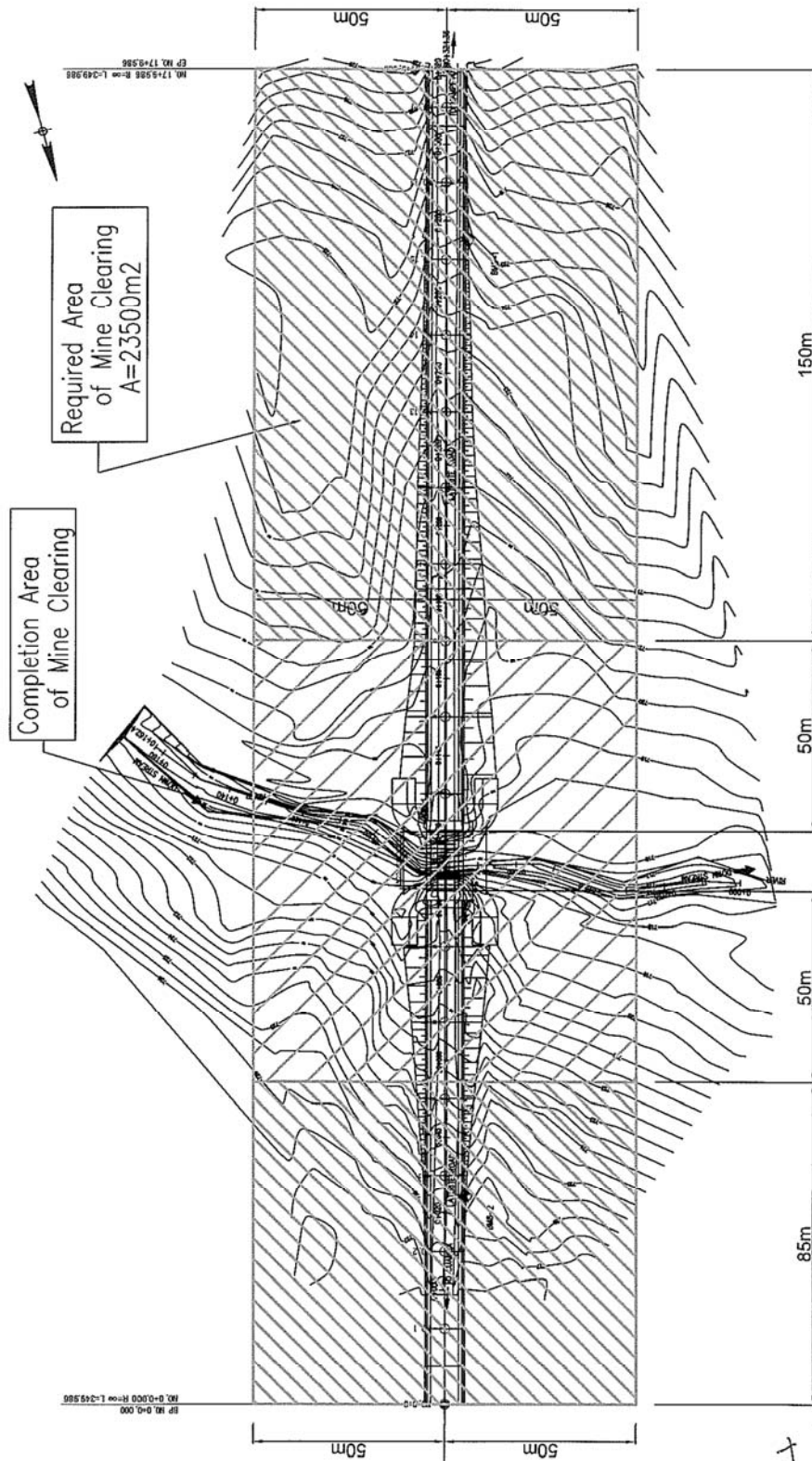
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No.6 Licungo





No.8 Matsitse



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