

AIB Loan Project

**Henan Flood Emergency Rehabilitation and
Recovery Project —Zhengzhou Component
—Integrated Jinshui River Management
Sub-project**

Resettlement Due Diligence Report

Zhengzhou Urban and Rural Construction Bureau (ZURCB)

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Abbreviations

AIIB	-	Asian Infrastructure Investment Bank
AH	-	Affected Household
AP	-	Affected Person
ESF	-	Environmental and Social Framework
ESMPF	-	Environmental and Social Management Plan Framework
ESS	-	Environmental and Social Standard
FGD	-	Focus Group Discussion
HD	-	House Demolition
LA	-	Land Acquisition
PMO	-	Project Management Office
ZHURDB	-	Zhengzhou Municipal Housing and Urban-Rural Development Bureau

Units

Currency unit	=	Yuan (CNY)
USD1.00	=	CNY6
1 hectare	=	15 mu

1. Project Overview

1.1 Project Background

In mid and late July 2021, Henan Province underwent historically rare prolonged, extensive, strong and intensive rainfalls, which exceeded many local documented limits. In this disaster, Zhengzhou, Xinxiang and Jiaozuo Cities were affected seriously, and all their districts and counties suffered heavy losses in traffic, municipal facilities and water resources facilities, so there is an urgent need to restore infrastructure. To help the people in the affected area with post-disaster recovery and reconstruction, the Chinese government has applied for an urgent concessional loan with the Asian Infrastructure Investment Bank (AIIB) to support the Henan Post-disaster Restoration Project, which will support the post-disaster recovery and reconstruction of the above three cities with focus on municipal facilities, water resources facilities, traffic facilities, flood early warning and emergency response systems, and institutional capacity building.

The river segment covered by the Zhengzhou Integrated Jinshui River Management Subproject (hereafter, the “Subproject”) is the Jinshui River segment from the Guojiazui Reservoir barrage (K0+000) to the Dongfeng Canal (K22+261), with a length of 22.26km (excluding the Yanzhuang and Dashiqiao nodes). It is designed to resist floods that recur every 100 years, with an estimated gross investment of 2.8221 billion yuan.

Since there is water stagnation at flood gates of the the Binhu North Road-Hanghai West Road Segment (Di Lake), Daxue North Road bridge, Water Restaurant, etc., **the Zhengzhou Municipal Emergency Management Bureau selected the Binhu North Road-Hanghai West Road Segment, Jinshui River Bridge Segment on Daxue North Road, and Water Restaurant (rubber barrage)-Erqi Road Segment (hereinafter, the “prior segments”) as emergency disaster relief works in December 2021. If the flood gates here could not be restored by the flood period of 2022, they would pose new flood risks. Therefore, the prior segments will be constructed first.**

1.2 Purpose of Due Diligence

In view of the special nature of the prior segments, in order to supervise the resettlement impacts of the prior segments, AIIB requires that resettlement due diligence be conducted to screen the prior segments’ resettlement impacts comprehensively, identify existing issues, and propose feasible suggestions to ensure that the APs’ lawful rights and interests are protected.

According to ESS2 “Involuntary Resettlement” in AIIB’s Environmental and Social Framework (ESF), and the Environmental and Social Management Plan Framework (ESMPF) approved and disclosed in October 2021, the task force conducted resettlement due diligence on the prior segments.

As entrusted by ZHURDB, the task force has prepared this report, which will be submitted by ZHURDB to AIIB for review.

The task force conducted fieldwork during February 8-18, 2022, and has found that the prior segments involve upgrading or reconstruction on or along the river, and the main resettlement impacts are the permanent occupation of 0.5 mu of riverside state-owned land for the reconstruction of the lakeside pedestrian bridge in the Binhu North Road-Hanghai West Road Segment, and the temporary occupation of 6.54 mu of riverside or roadside state-owned vacant land during construction (1.34 mu for the Binhu North Road-Hanghai West Road Segment, 1.2 mu for the Jinshui River Bridge Segment on Daxue North Road, and 4 mu for Water Restaurant-Erqi Road Segment), which does not belong to any enterprise, community or individual. The prior segments do not involve HD. **Therefore, the project activities for the reconstruction of the three prior segments will be implemented on the existing facilities and /or in the original river course;**

and there are no remaining issues of land acquisition (LA) or house demolition (HD) of the existing structure (e.g. the Water Gate Restaurant structure).

2. Methods of Due Diligence

This report has been prepared in accordance with the state, provincial and municipal laws and regulations, ESS2 “Involuntary Resettlement” in AIIB’s ESF, the ESMPF approved and disclosed in October 2021, and the task force’s fieldwork during February 8-18, 2022. The methods used mainly include literature review, primary stakeholder interview and field visit.

1) Literature review: Documents on the prior segments’ resettlement impacts were reviewed, including without limitation to the Feasibility Study Report prepared by the Zhengzhou PMO, the Integrated Jinshui River Management Subproject Headquarters of ZHURDB, and PowerChina Huadong Engineering Corporation Limited, and approved by the Henan Provincial Development and Reform Commission (February 2022), and the detailed measurement survey results from the Zhengzhou House Expropriation Office.

2) Primary stakeholder interview: Primary stakeholder interviews were conducted with leaders of the PMO, implementing agency, ZHURDB, natural resources bureau, LA and HD office, sub-district offices and community committees, affected persons, etc. Extensive consultation was also conducted with them. The task force also conducted interviews with and data collection from ZHURDB, LA and HD office, and other agencies concerned to collect statistics on the prior segments’ resettlement impacts.

3) Field visit: The task force also paid a field visit to see the construction area and actual affected area of the prior segments.

3. Resettlement Due Diligence Results

3.1 Scope of Construction and Resettlement Impacts

1) Scope of construction of the prior segments

The prior segments are the Binhu North Road-Hanghai West Road Segment, Jinshui River Bridge Segment on Daxue North Road and Water Restaurant-Erqi Road Segment. The scope of construction is as follows:

a) Binhu North Road-Hanghai West Road Segment: demolition and reconstruction of the Binhu North Road bridge and pedestrian bridge north of Di Lake; construction of a hydraulic barrage next above the Binhu North Road bridge to regulate the water level of Di Lake; riverbed reconstruction to reduce the riverbed level by barrage segmentation; construction of slow footpaths and steps on both sides of the river for greenway connection; further stabilization of slopes for water and soil retention, construction of vegetation revetments in conjunction with riverbed and cross section reconstruction; reconstruction of 3 discharge ports and the relocation of two cross-river pipelines.

b) Jinshui River Bridge Segment on Daxue North Road: demolition and reconstruction of the Daxue North Road bridge, where 3x10m precast pre-stressed concrete hollow slabs are used in the superstructure, rectangular post and beam piers are used in the lower part, pile column and thin-wall abutments, and spread and bored cast-in-place foundations are used; the demolition and reconstruction of 3 rainwater outlets, including a DN300 round outlet, a DN1000 round outlet and a 4.6m×1.7m box culvert outlet; the relocation of heating (DN600×2), power (0.38kV and 1kV), water supply (DN500), sewerage (DN300), optical fiber, China Unicom, China Mobile, streetlamp, monitoring (including cables and cameras) and communication pipelines (24-hole), and the protection of gas pipelines.

c) Water Restaurant-Erqi Road Segment: upper segment (existing rubber barrage-Water Restaurant): slope support with H-shaped pre-stressed revetment piles to create a vertical cross section; Water Restaurant lower segment (Water Restaurant-Erqi Road): slope protection from the bank top in an enclosing pile structure, slope excavation into a high vertical cross section, construction of wave walls on the bank top; further stabilization of slopes for water and soil retention, construction of vegetation revetments in conjunction with riverbed and cross section reconstruction; reconstruction of 3 rainwater outlets; protection of heating (DN150×2 and DN100×2), gas (D200 and D457), power (0.38kV), water supply (4 in DN100~DN500), China Telecom, streetlamp, monitoring (including cables and cameras) and communication pipelines (21-hole) pipelines during construction, and relocation of water supply and monitoring pipelines.

2) Resettlement impacts of the prior segments¹

The task force conducted fieldwork during February 8-18, 2022, and has found that the prior segments involve upgrading or reconstruction on or along the river, and the main resettlement impacts are the permanent occupation of 0.5 mu of riverside state-owned land for the reconstruction of the lakeside pedestrian bridge in the Binhu North Road-Hanghai West Road Segment, and the temporary occupation of 6.54 mu of riverside or roadside state-owned land during construction (1.34 mu for the Binhu North Road-Hanghai West Road Segment, 1.2 mu for the Jinshui River Bridge Segment on Daxue North Road, and 4 mu for Water Restaurant-Erqi Road Segment), which does not belong to any enterprise, community or individual. The prior segments do not involve HD.

¹It is learned from the natural resources bureau that it issued an opinion on land use pre-examination and site selection for the Project on January 29, 2022; since the prior segments do not involve resettlement, no separate opinion has been given on them.

Therefore, the project activities for the reconstruction of the three prior segments will be implemented on the existing facilities and /or in the original river course; and there are no remaining issues of land acquisition (LA) or house demolition (HD) of the existing structure (e.g. the Water Gate Restaurant structure). See Tables 3-1 and 3-2.

Table 3-1 Scope of Construction and Resettlement Impacts

No.	Segment	Scope of construction	Resettlement impacts
1	Binhu North Road-Hanghai West Road Segment	1) Increasing the span and raising the deck of the Binhu North Road bridge; demolishing the check barrage under the Binhu North Road bridge; building a new hydraulic barrage above the bridge; 2) Reconstructing the Binhu North Road bridge and Di Lake pedestrian bridge. 3) Relocating outlets and pipelines.	Temporarily occupying of 0.24 mu of state-owned land for the reconstruction of the Binhu North Road bridge, and 1.1 mu of state-owned road land for sediment storage and pipeline relocation; permanently occupying 0.5 mu of riverside state-owned land for the reconstruction of the lakeside pedestrian bridge; involving no resettlement impact
2	Jinshui River Bridge Segment on Daxue North Road	1) Demolishing and reconstructing the bridge; 2) Demolishing rainwater outlets on the Jinshui River, and protecting and relocating gas, heating, communication, power, streetlamp, water supply, sewerage and monitoring pipelines	Temporarily occupying 1 mu of roadside state-owned land for construction material storage, and 0.2 mu of state-owned land for pipeline relocation; involving no resettlement impact
3	Water Restaurant-Erqi Road Segment	1) Water Restaurant-Erqi Road Segment, 190m long; 2) Expanding the flood discharge cross section, adding wave walls, reconstructing 3 rainwater outlets, and relocating and protecting pipelines	Temporarily occupying 3 mu of state-owned land for construction fencing, and construction material and sediment storage, and 1 mu of riverside road land for pipeline relocation; involving no resettlement impact

The main resettlement impacts are the permanent occupation of 0.5 mu of riverside state-owned land for the reconstruction of the lakeside pedestrian bridge in the Binhu North Road-Hanghai West Road Segment, and the temporary occupation of 6.54 mu of riverside or roadside state-owned land during construction (1.34 mu for the Binhu North Road-Hanghai West Road Segment, 1.2 mu for the Jinshui River Bridge Segment on Daxue North Road, and 4 mu for Water Restaurant-Erqi Road Segment). The prior segments do not involve any additional resettlement impact arising from LA or HD. See Table 3-2.

Table 3-2 Summary of Resettlement Impacts

Segment	Resettlement impacts							
	State-owned land occupation				HD			
	Area (mu)	AHs	APs	Time of land acquisition	Size (m ²)	AHs	APs	Time of approval
Binhu North Road-Hanghai West Road Segment	1.84	0	0	1996.9.30	0	0	0	
Jinshui River Bridge Segment on Daxue North Road	1.2	0	0	1985.3.31	0	0	0	
Water Restaurant-Erqi Road Segment	4	0	0	1975.6.15	0	0	0	
Total	7.04	0	0		0	0	0	

Note: The prior segments involve upgrading or reconstruction on or along the river, and the main resettlement impacts are the permanent occupation of 0.5 mu of riverside state-owned land for the reconstruction of the lakeside pedestrian bridge in the Binhu North Road-Hanghai West Road Segment, and the temporary occupation of 6.54 mu of riverside or roadside state-owned land during construction.

3.2 Binhu North Road-Hanghai West Road Segment

This segment is located south of Di Lake, running from Binhu North Road to Hanghai Road (K7+519~K7+994.5), with a length of 475.5m. The scope of construction includes river engineering, landscaping, drainage, and bridge reconstruction. See Figure 3-1.



Figure 3-1 Location Map of the Binhu North Road-Hanghai West Road Segment

Bridge reconstruction involves the Binhu North Road bridge and Di Lake pedestrian bridge. For the Binhu North Road bridge, the existing bridge and barrage will be demolished, a new bridge constructed along with a flap gate and a bridge sluice after the cross section is enlarged, and the flood gate on Binhu North Road restored along. For the Di Lake pedestrian bridge, the existing bridge and barrage will be demolished, the cross section broadened to 28.8m, a new bridge constructed for traffic, and a hydraulic barrage constructed next above the Binhu North Road bridge, with a bottom level of 115.5m, used to adjust the water level of Di Lake.

The Binhu North Road bridge will be reconstructed at the original site, and 1.34 mu of state-owned land along Di Lake will be occupied temporarily during construction for the storage of building materials and sediments, and the relocation of pipelines; the reconstruction of the Di Lake pedestrian bridge involves the 0.5 mu of riverside state-owned land. This segment involves neither LA nor HD. See Figures 3-2, 3-3 and 3-4.



Figure 3-2 Damaged and to-be-restored Part of Di Lake



Figure 3-3 Existing Pedestrian Bridge and Proposed Site for New Bridge on Binhu North Road



Figure 3-4 FGD on Resettlement Impact Identification

3.3 Jinshui River Bridge Segment on Daxue North Road

This segment mainly involves the reconstruction of the Daxue North Road bridge and rainwater outlets, and the relocation and protection of pipelines. The Daxue North Road bridge will be reconstructed at the original site, and involve the demolition and reconstruction of 3 rainwater outlets. Pipeline relocation and protection will be conducted after the completion of bridge reconstruction.

1.2 mu of roadside state-owned land will be occupied temporarily for building material storage, and pipeline relocation and protection. This segment involves neither LA nor HD. See Figure 3-5.



Figure 3-5 Post-disaster Daxue North Road

3.4 Water Restaurant-Erqi Road Segment

This segment (K15+080~K15+284) is 204m long. During the July 20 flood in Zhengzhou, both banks in this segment were immersed, nearby residents suffered heavy losses, and the revetments and riverbed were damaged extensively. This segment mainly involves river engineering, drainage, and pipeline relocation.



Figure 3-6 Location Map of the Water Restaurant Segment

River engineering includes riverbed dredging, slope support, connection to bank top via gentle slopes, and slope landscaping. Drainage includes the reconstruction of box culverts, and construction of intercepting wells and pipes. Monitoring cables and water supply pipes will be relocated from the river channel to the banks.

Therefore, this segment involves operation on the existing river channel and banks. 4 mu of riverside or roadside state-owned land will be occupied temporarily for construction fencing, the relocation of pipelines, and the storage of building materials and sediments. This segment involves neither LA nor HD. See Figures 3-7 and 3-8.



Figure 3-7 Water Restaurant and Project Information Bulletin Board



Figure 3-8 Fieldwork at Water Restaurant

4. Conclusions and Suggestions

4.1 Conclusions

In view of the special nature of the prior segments (Binhu North Road-Hanghai West Road Segment, Jinshui River Bridge Segment on Daxue North Road and Water Restaurant-Erqi Road Segment), their resettlement impacts have been identified and screened comprehensively.

The resettlement due diligence findings are as follows:

1) For the Water Restaurant-Erqi Road Segment, the preferred option has been optimized to reduce LA and HD, avoiding the demolition of Water Restaurant (nonresidential building with an area of 914.02 m²), and affecting one less enterprise with 33 persons.

2) Resettlement impacts: The prior segments involve upgrading or reconstruction on or along the river. The reconstruction of the lakeside pedestrian bridge in the Binhu North Road-Hanghai West Road Segment involves the permanent occupation of 0.5 mu of riverside state-owned land, but involves neither LA nor HD

3) Temporary land occupation: 6.54 mu of riverside or roadside state-owned land will be occupied temporarily during construction for the storage of building materials and sediments, and the relocation of pipelines (1.34 mu for the Binhu North Road-Hanghai West Road Segment, 1.2 mu for the Jinshui River Bridge Segment on Daxue North Road, and 4 mu for Water Restaurant-Erqi Road Segment), which does not belong to any enterprise, community or individual. The prior segments do not involve HD. **Therefore, the project activities for the reconstruction of the three prior segments will be implemented on the existing facilities and /or in the original river course; and there are no remaining issues of land acquisition (LA) or house demolition (HD) of the existing structure (e.g. the Water Gate Restaurant structure).**

According to the survey, all tasks are being performed orderly according to the applicable policies and procedures. No grievance or lawsuit arising from LA compensation or resettlement has been received date, and there is no outstanding issue.

4) AIIB's Project-Affected People's Mechanism (PPM). The Project-affected People's Mechanism (PPM) was established by AIIB to provide an opportunity for an independent and impartial review of submissions from Project-affected people who believe they have been or are likely to be adversely affected by AIIB's failure to implement its Environmental and Social Policy (ESP) when their concerns cannot be addressed satisfactorily through the Project-level GRMs or the processes of the Bank's Management. Information on the PPM is available at: <https://www.aiib.org/en/policies-strategies/operational-policies/policy-on-the-project-affected-mechanism.html>

4.2 Suggestions

Since the prior segments do not involve any additional resettlement impact, the following should still be done well:

1) Further implement the grievance redress mechanism for AIIB-financed projects to respond to nearby residents' needs for traffic, environmental protection, etc. arising from temporary land occupation during construction.

2) In order to make the prior segments' public participation and consultation well grounded, and reduce grievances and disputes, further attention should be paid to public participation and consultation. It is also very necessary to conduct public participation and consultation according to the Social Action Management Plan and the Public Participation Plan at the preparation and implementation stages.