

## **APPENDIX-6**

# **TOPOGRAPHIC AND BATHYMETRIC SURVEY RESULT**



**Notes**

THIS MAP WAS BASED ON THE FIELD SURVEY CONDUCTED ON DECEMBER 2009 FOR THE SURVEY REFERENCE, THE FOLLOWING PARAMETER ARE ADOPTED

1. HORIZONTAL CONTROL POINT  
FOR THE HORIZONTAL CONTROL POINT, UTM (WGS'84) ZONE - 48 COORDINATE SYSTEM WAS ADOPTED THE REFERENCE POINTS IS BPN 0905013 WITH COORDINATES AS FOLLOWS

NO	CODE	NORTHING (Y)	EASTING (X)	ELEV
1	0905013	9322731.885	698546.231	

2. VERTICAL CONTROL POINT  
ALL ELEVATION WAS STARTED FROM TTG PDK DAYUNG WITH ELEVATION = 0.826M (MSL)

**Legend**

- = BENCH MARK
- = ROAD
- = DRAINAGE / POND
- = TELEPHONE POLE
- = ELECTRICAL POLE
- = CONTOUR LINE
- = SPOT HEIGHT
- = BOREHOLE
- = BUILDING
- = HOUSE
- = COCONUT TREE

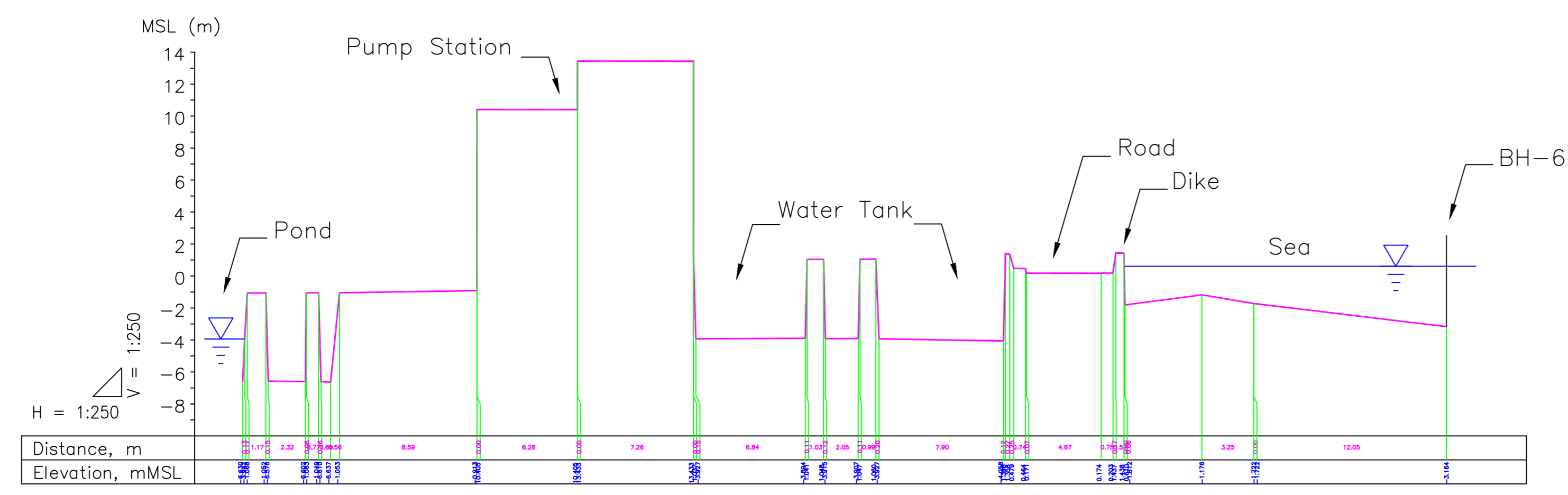
**Client**  
YACHIYO ENGINEERING CO., LTD.

**Surveyed by**  
 **PT. PONDASI KISOCON RAYA**  
14th Floor, Graha Sucofindo, Jl. Raya Ps. Minggu, Kav. 34  
Jakarta 12780, INDONESIA  
Tel: +62-21-798-6663, 798-6670 Fax: +62-21-798-7024  
Email: kisocon@rad.net.id

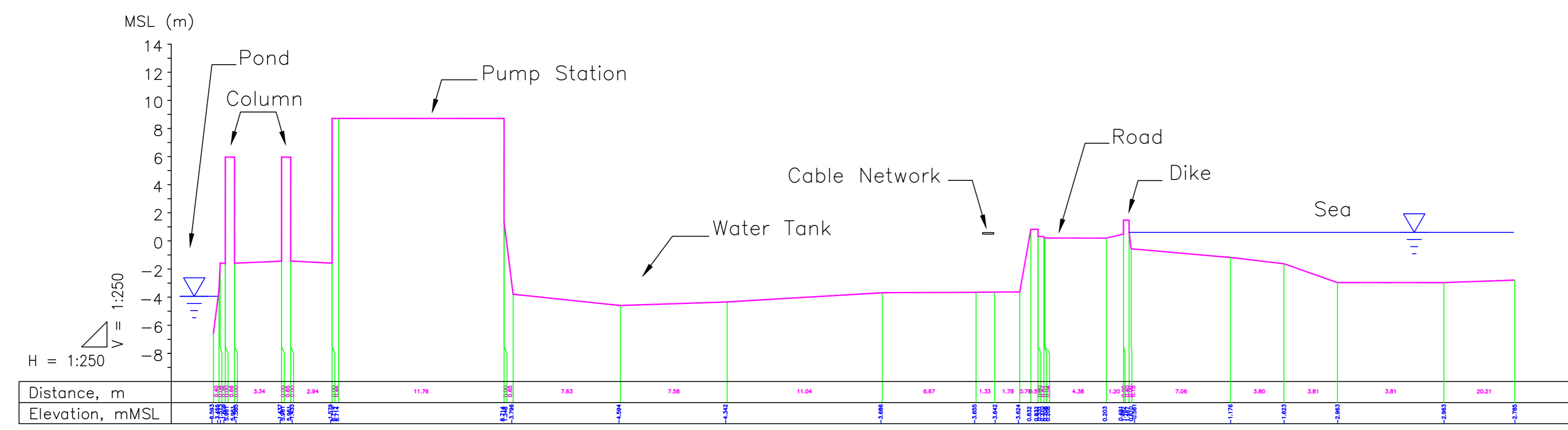
**Project Name**  
THE PREPARATORY SURVEY ON THE PROJECT FOR THE URGENT RECONSTRUCTION OF EAST PUMP HOUSE STATION OF PLUIT IN JAKARTA IN THE REPUBLIC OF INDONESIA

**Drawing Title**  
TOPOGRAPHIC MAP OF PLUIT PUMP HOUSE IN JAKARTA, INDONESIA

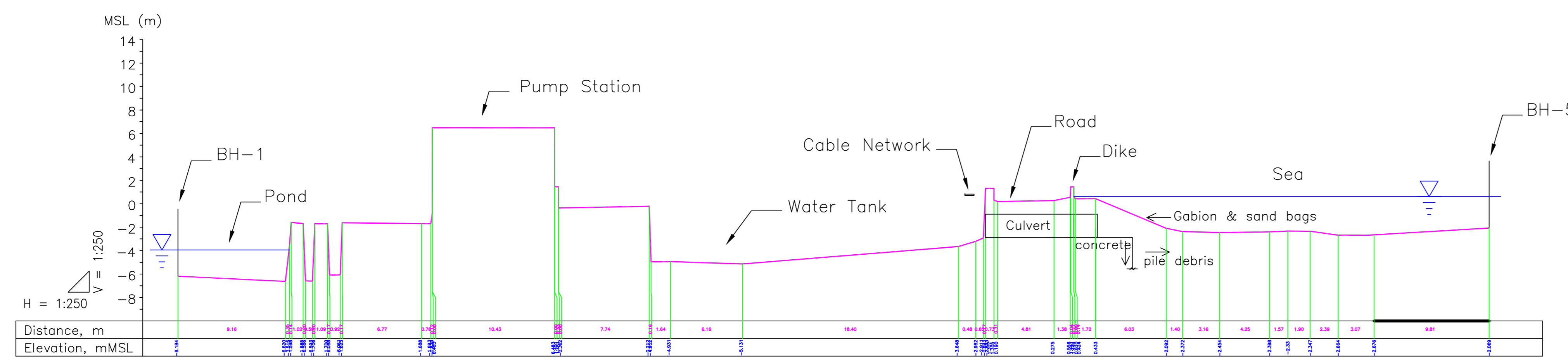
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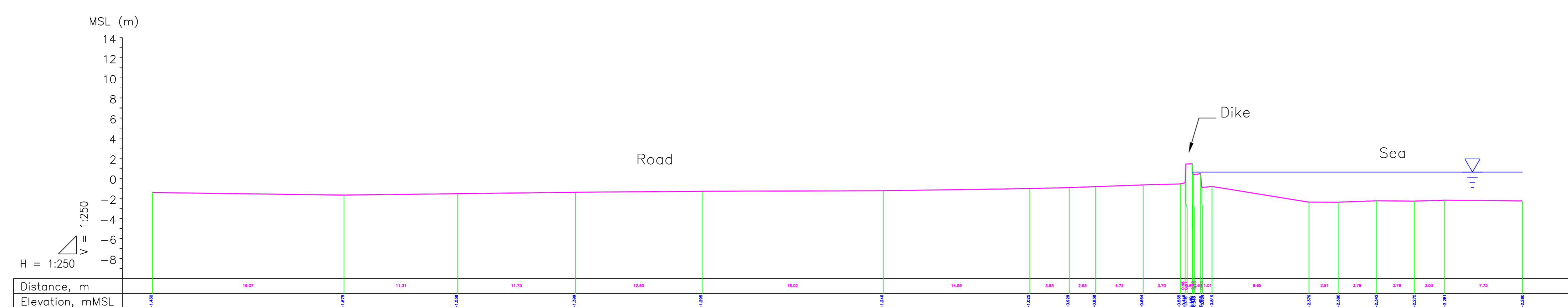
Section A-A



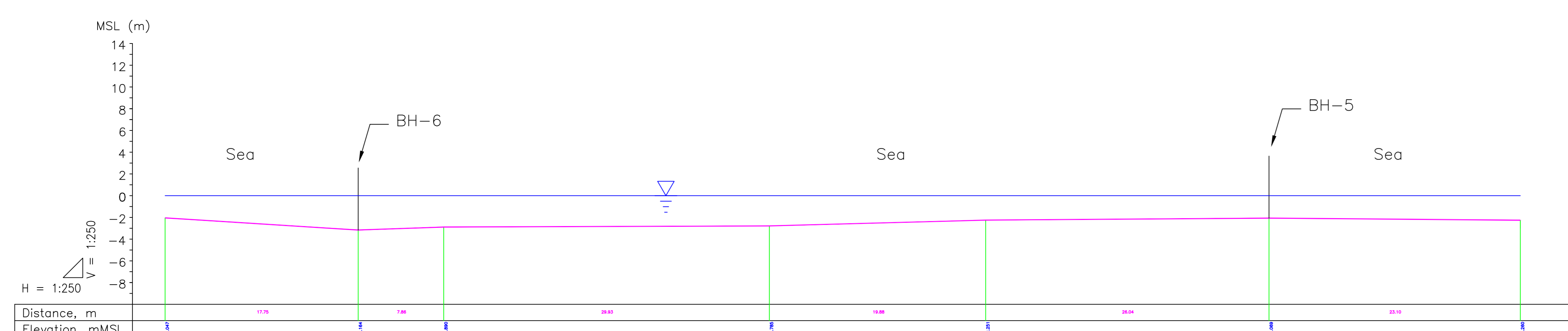
Section B-B



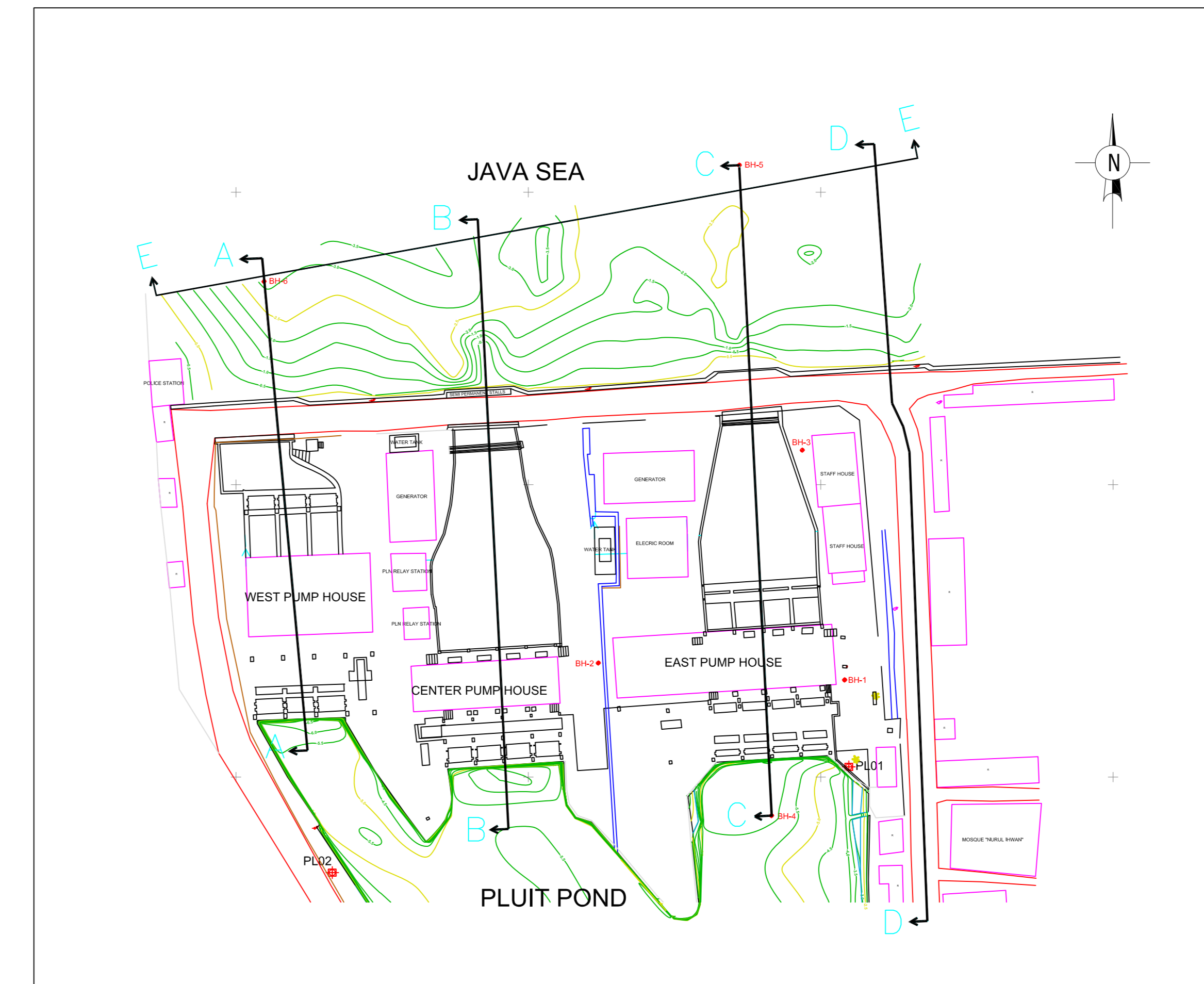
Section C-C



Section D-D



Section E-E



**Notes**

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**Legend**

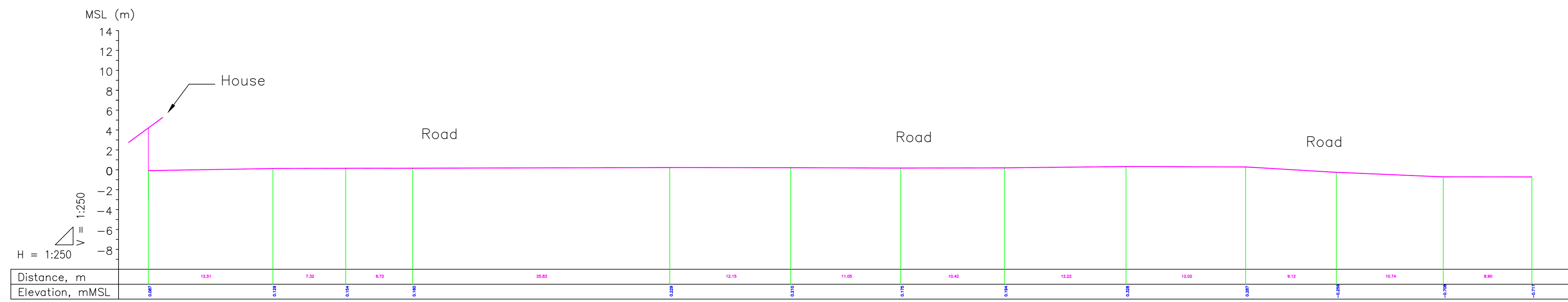
**Client**  
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Tel: +62-21-798-6663, 798-6670 Fax: +62-21-798-7024  
Email: kisocon@rad.net.id

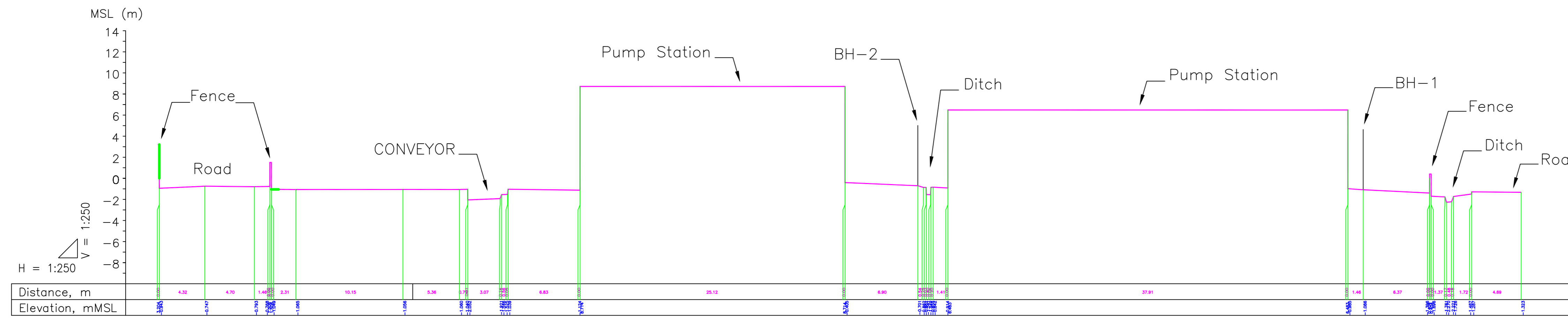
**Project Name**  
THE PREPARATORY SURVEY ON THE PROJECT FOR THE URGENT RECONSTRUCTION OF EAST PUMP HOUSE STATION OF PLUIT IN JAKARTA IN THE REPUBLIC OF INDONESIA

**Drawing Title**  
CROSS SECTION OF PLUIT PUMP HOUSE (SECTIONS A-A to E-E)

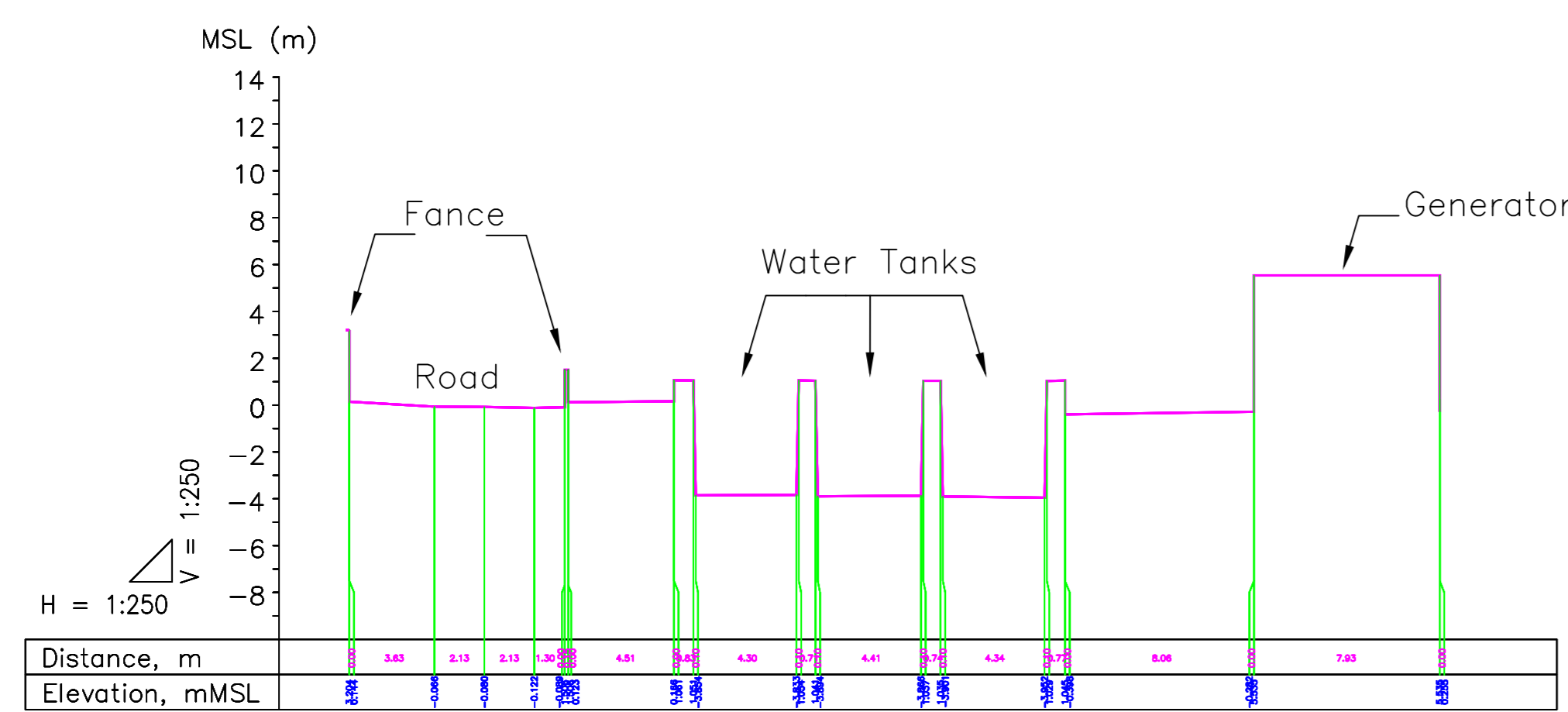
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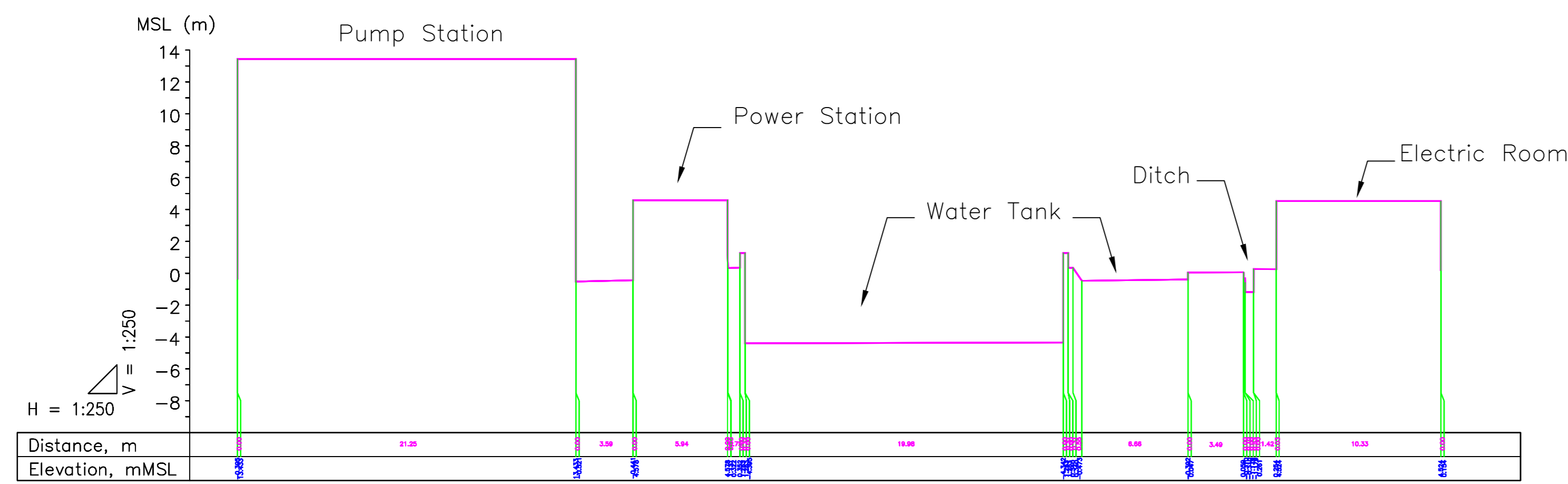
Section F-F



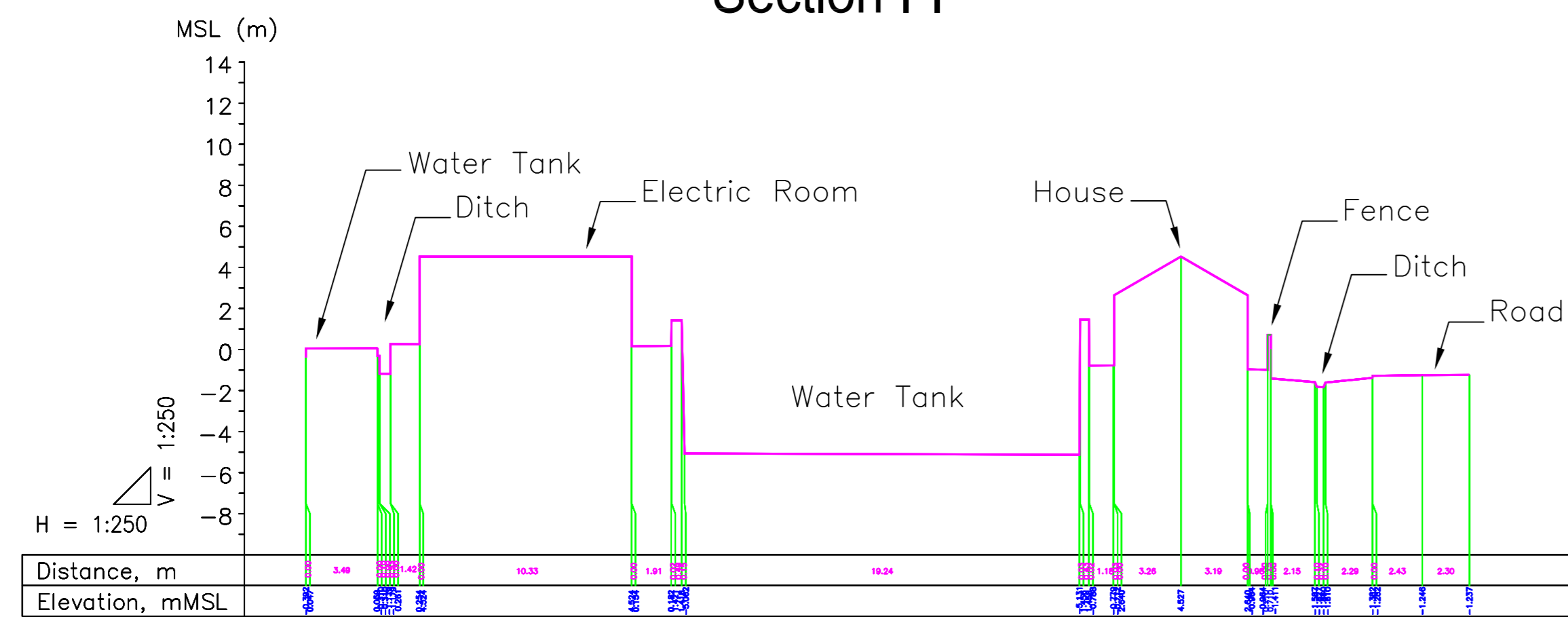
Section G-G



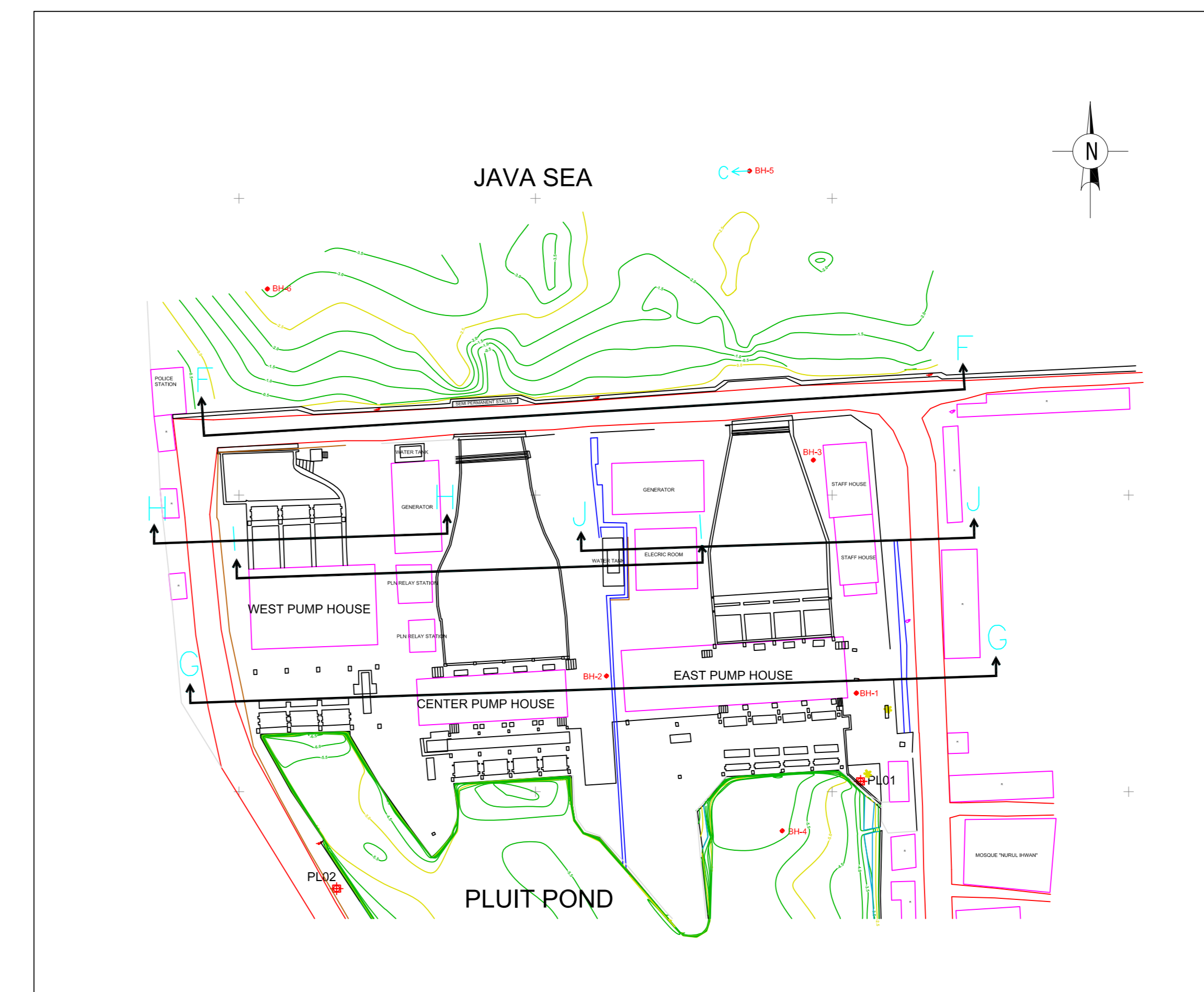
Section H-H



Section I-I



Section J-J



**Notes**

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**Legend**

Client  
**YACHIYO ENGINEERING CO., LTD.**

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**PT. PONDASI KISOCON RAYA**  
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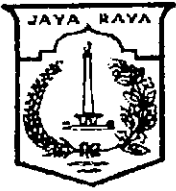
Project Name  
THE PREPARATORY SURVEY ON THE PROJECT FOR THE URGENT RECONSTRUCTION OF EAST PUMP HOUSE STATION OF PLUIT IN JAKARTA IN THE REPUBLIC OF INDONESIA

Drawing Title  
CROSS SECTION OF PLUIT PUMP HOUSE (SECTIONS F-F to J-J)

Drafter		
Checked		
Approved		
Drawing No.	Drawing Sheet No.	Scale
02	02	1:250

## **APPENDIX-7**

# **RELATED DOCUMENTS ON ENVIRONMENTAL AND SOCIAL CONSIDERATION**



PEMERINTAH PROPINSI DAERAH KHUSUS IBUKOTA JAKARTA

**DINAS PEKERJAAN UMUM**

JL. Taman Jatibaru No. 1 Telp. 3803302 – 3865546 - 3845266

JAKARTA

Kode Pos 10150

16<sup>th</sup> December 2009

Number : 11357/1-1.774.137  
Characteristic :  
Attachment :  
Subject : UKL and UPL for the reconstruction of East Pump Station of Pluit in Jakarta

To  
Mr. Kenichi TSUKAHARA  
Leader of Preparatory Survey Team  
Japan International Cooperation Agency (JICA)

**Project : The Project for Urgent Reconstruction of East Pump Station of Pluit in Jakarta, Republic Indonesia**

Dear Mr. Kenichi TSUKAHARA,

Based on the discussion with BPLHD on 10<sup>th</sup> December 2009, we, Public Works in the City of Jakarta (DINAS PU DKI Jakarta), would like to notice that AMDAL is not necessary because this Project is reconstruction of the existing facility, referring to Decision of Jakarta City Governor No. 99 Year 2002 on Execution Mechanism of Environmental Impact Assessment (AMDAL) and Environmental Management Plan (UKL) and Environmental Monitoring Plan (UPL) and Decision of Jakarta City Governor No. 190 Year 2002 on Provision of Types of Business and/or Activity Plans for UKL and UPL. However, Environmental Management Plan (Upaya Pengelolaan Lingkungan, hereinafter referred as "UKL) and Environmental Monitoring Plan (Upaya Pemantauan Lingkungan, hereinafter referred as "UPL") need to be prepared and implemented for implementation of this Project.

In order to receive the approval of UKL and UPL by the end of June 2010, we will prepare UKL and UPL from January 2010, and submit them by April 2010 after consultation with North Jakarta office of BPLHD.

Thank you for your kind cooperation and attention.

Head of Public Works Jakarta City  
Province of DKI JAKARTA  
(Dinas PU DKI Jakarta)



c.c. :

1. Deputy of Public Works Jakarta City Province of DKI Jakarta
2. Head of Secretariat of Public Works Jakarta City Province of DKI Jakarta
3. Head of Maintenance Water Resources of Public Works Jakarta City Province of DKI Jakarta
4. Head of Management Water Resources of Public Works Jakarta City Province of DKI Jakarta



PEMERINTAH PROPINSI DAERAH KHUSUS IBUKOTA JAKARTA

**DINAS PEKERJAAN UMUM**

JL. Taman Jatibaru No. 1 Telp. 3803302 – 3865546 - 3845266

JAKARTA

Kode Pos 10150

16<sup>th</sup> December 2009

Number : 11350 / - 1795.2  
Characteristic :  
Attachment : 4 Pages  
Subject : Submission of  
Environmental Checklist

To  
Mr. Kenichi TSUKAHARA  
Leader of Preparatory Survey Team  
Japan International Cooperation Agency (JICA)

**Project : The Project for Urgent Reconstruction of East Pump Station of Pluit in Jakarta,  
Republic Indonesia**

Dear Mr. Kenichi TSUKAHARA,

In response to a request from Japan International Cooperation Agency (JICA) through the Preparatory Survey Team, we, Public Works in the City of Jakarta (DINAS PU DKI Jakarta), would like to submit the Environmental Checklist as attached for the Project for Urgent Reconstruction of East Pump Station of Pluit in Jakarta in the Republic of Indonesia under the Japan's grant aid.

Thank you for your kind cooperation and attention.

Head of Public Works Jakarta City  
Province of DKI JAKARTA  
( Dinas PU DKI Jakarta)



c.c. :

1. Deputy of Public Works Jakarta City Province of DKI Jakarta
2. Head of Secretariat of Public Works Jakarta City Province of DKI Jakarta
3. Head of Maintenance Water Resources of Public Works Jakarta City Province of DKI Jakarta
4. Head of Management Water Resources of Public Works Jakarta City Province of DKI Jakarta

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
1 Permits and Explanation	(1) EIA and Environmental Permits	<input type="checkbox"/> Have EIA reports been approved by authorities of the host country's government? <input type="checkbox"/> Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?	Based on the discussion with Environment Agency of City of Jakarta (BPLHD) on December 10th, 2009, it was found that the Project needed to submit Environmental Management Plan (UKL) and Environmental Monitoring Plan (UPL) instead of EIA (AMDAL) report. It is expected that and Public Works of City of Jakarta (DINAS PU DKI Jakarta) will prepare UKL/UPL from January 2010 and submit to North Jakarta office of BPLHD by April 2010.  North Jakarta office of BPLHD will examine UKL/UPL and notice the result to DINAS PU DKI Jakarta. Notice will be issued by June, 2010.
	(2) Explanation to the Public	<input type="checkbox"/> In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government? <input type="checkbox"/> Are contents of the project and the potential impacts adequately explained to the public based on appropriate procedures, including information disclosure? Is understanding obtained from the public? <input type="checkbox"/> Are proper responses made to comments from the public and regulatory authorities?	Based on the discussion with BPLHD, UKL/UPL will be approved unconditionally.  Since the Project is to reconstruct the existing East Pump Station, there are not any other required environmental permits for the Project.  Since this Project is not subject for AMDAL, execution of public consultation meeting is not required. However, DINAS PU DKI Jakarta will arrange and conduct the explanation to the residents about the Project, construction schedule and method before the commencement of the Project for the smooth implementation of the Project.  In case that DINAS PU DKI Jakarta receives any comments from the public and regulatory authorities, DINAS PU DKI Jakarta is willing to discuss and arrange any necessary procedure to implement the Project appropriately.
	(1) Water Quality	<input type="checkbox"/> Is there a possibility that changes in river flow <del>downstream</del> (mainly water level drawdown) due to the project will cause areas that do not comply with the country's ambient water quality standards?	Since the Project is to reconstruct the existing East Pump Station, there is no possibility that changes in river flow and water level drawdown due to the Project.
	(2) Wastes	<input type="checkbox"/> In the case of that large volumes of excavated/dredged materials are generated, are the excavated/dredged materials properly treated and disposed of in accordance with the country's standards?	Solid wastes from the reconstruction will be disposed in the final disposal site complying with the waste management law of Indonesia and regulation of Jakarta City.
2 Mitigation Measures	(3) Subsidence	<input type="checkbox"/> Is there a possibility that the excavation of waterways will cause groundwater level drawdown or subsidence? Are adequate measures taken, if necessary?	There is no possibility to cause groundwater level drawdown or subsidence by the Project.



Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
3 Natural Environment	(1) Protected Areas	<input type="checkbox"/> 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?  <input type="checkbox"/> Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)?	The planned project site is the same as the existing site of East Pump Station, and the existing site is not located in protected area in the site designated by the Indonesian laws and international treaties and conventions.  The planned project site does not encompass primeval forests, tropical rain forests, ecologically valuable habitats.
	(2) Ecosystem	<input type="checkbox"/> Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?  <input type="checkbox"/> If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?  <input type="checkbox"/> Is there a possibility that hydrologic changes, such as reduction of the river flow, and seawater intrusion up the river will adversely affect downstream aquatic organisms, animals, vegetation, and ecosystems?	The planned project site does not encompass the protected habitats of endangered species designated by the Indonesian law and international treaties and conventions  Any significant ecological impacts are not anticipated by the Project.  Since the Project is to reconstruct the existing East Pump Station, there is no possibility to affect downstream aquatic organisms, animals, vegetation, and ecosystems.
	(3) Hydrology	<input type="checkbox"/> Is there a possibility that the changes in water flows due to the project will adversely affect aquatic environments in the river? Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?	Since the Project is to reconstruct the existing East Pump Station, there is no possibility of the changes in water flows.
	(4) Topography and Geology	<input type="checkbox"/> Is there a possibility that hydrologic changes due to the project will adversely affect surface water and groundwater flows?  <input type="checkbox"/> Is there a possibility that excavation of rivers and channels will cause a large-scale alteration of the topographic features and geologic structures in the surrounding areas?	Since the Project is to reconstruct the existing East Pump Station, there is no possibility of hydrologic changes due to the Project.  Since the Project is to reconstruct the existing East Pump Station, there is no possibility of a large-scale alteration of the topographic features and geologic structures in the surrounding areas.

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
		<input type="checkbox"/> Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? <input type="checkbox"/> Is adequate explanation on relocation and compensation given to affected persons prior to resettlement? <input type="checkbox"/> Is the resettlement plan, including proper compensation, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? <input type="checkbox"/> Does the resettlement plan pay particular attention to vulnerable groups or persons, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples? <input type="checkbox"/> Are agreements with the affected persons obtained prior to resettlement? <input type="checkbox"/> Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?	<p>The planned project site is the same as the existing site of East Pump Station, and the existing site is owned by DINAS PU DKI Jakarta. Since there is no dwellings in the site including illegal habitants, any resettlements will not be caused by the Project.</p> <p>Since resettlement will not be caused by the Project, any explanation on relocation to the affected people is not required.</p> <p>Since resettlement will not be caused by the Project, the resettlement plan is not required.</p> <p>Since resettlement will not be caused by the Project, the resettlement plan is not required.</p> <p>Since resettlement will not be caused by the Project, the agreement with the affected persons is not required.</p> <p>Since resettlement will not be caused by the Project, the organization framework is not established to properly implement resettlement.</p>
4 Social Environment	(1) Resettlement	<input type="checkbox"/> Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary? <input type="checkbox"/> Is there a possibility that the amount of water (e.g., surface water, groundwater) used by the project will adversely affect the downstream fisheries and other water uses? <input type="checkbox"/> Is there a possibility that water-borne or water-related diseases (e.g., schistosomiasis, malaria, filariasis) will be introduced? <input type="checkbox"/> Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?	<p>Since the Project is to reconstruct the existing East Pump Station, there is no possibility to adversely affect the living conditions of inhabitants.</p> <p>It is necessary to relocate the anchored ships in front of East Pump Station. DINAS PU DKI Jakarta will be in charge of this relocation before commencement of the construction work by Japanese side (refer to M/D dated on November 18th, 2009). And it is expected that DINAS PU DKI Jakarta will announce and explain for residents and ship owners from January 2011 and complete the relocation by April 2011.</p> <p>Since the Project is to reconstruct the existing East Pump Station, there is no possibility that water-borne or water-related diseases will be introduced.</p> <p>There is no possibility that the Project will damage the local archeological, historical, cultural, and religious heritage sites since there is no such site in and around the planned project site.</p> <p>Since the Project is to reconstruct the existing East Pump Station, there is no possibility that the Project will adversely affect the local landscape.</p> <p>Since the Project is to reconstruct the existing East Pump Station, there is no residence of ethnic minorities and indigenous peoples in and near the planned project site.</p> <p>Since the Project is to reconstruct the existing East Pump Station, there is no residence of ethnic minorities and indigenous peoples in and near the planned project site.</p>
	(2) Living and Livelihood		
	(3) Heritage		
	(4) Landscape		
	(5) Ethnic Minorities and Indigenous Peoples	<input type="checkbox"/> Does the project comply with the country's laws for rights of ethnic minorities and indigenous peoples? <input type="checkbox"/> Are considerations given to reduce the impacts on culture and lifestyle of ethnic minorities and indigenous peoples?	

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
	(1) Impacts during Construction	<input type="checkbox"/> Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)? <input type="checkbox"/> If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts? <input type="checkbox"/> If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?	DINAS PU DKI Jakarta will examine the proper monitoring plan with the Consultant, and supervise the Contractor to conduct the environmental monitoring to reduce and mitigate the environmental impacts during the construction. There is no possibility that the construction activities will adversely affect the natural environment.
5 Others		<input type="checkbox"/> If necessary, is health and safety education (e.g., traffic safety, public health) provided for project personnel, including workers? <input type="checkbox"/> Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts? <input type="checkbox"/> Are the items, methods and frequencies included in the monitoring program judged to be appropriate? <input type="checkbox"/> Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)? <input type="checkbox"/> 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?	DINAS PU DKI Jakarta will examine the proper monitoring plan with the Consultant, and supervise the Contractor to conduct the environmental monitoring to reduce and mitigate the social impacts during the construction. DINAS PU DKI Jakarta will examine the proper safety education program with the Consultant, and supervise the Contractor to conduct it during the construction. DINAS PU DKI Jakarta will examine and prepare the monitoring plan for the environmental items, that are considered to have potential impacts with related authorities and Consultant. After that, DINAS PU DKI Jakarta will supervise the Contractor to conduct the monitoring plan appropriately. DINAS PU DKI Jakarta will examine the necessary items, methods and frequencies included in the monitoring program and prepare the appropriate monitoring plan with the Consultant. DINAS PU DKI Jakarta will be responsible to conduct the monitoring in cooperation with Ministry of Public Works (PU). DINAS PU DKI Jakarta plans to submit the monthly report as a report to PU and other regulatory authorities.
6 Note	Note on Using Environmental Checklist	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).	Any transboundary or global issues are not assumed during the construction of the Project.

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 made, if necessary.

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 it is located.

**APPENDIX-7-3 Scoping Table**

**Table 1 Estimated Adverse Environmental and Social Impacts (as of before the preparatory survey)**

<b>1. Preparation and Construction Period</b>				
	Item	Rating	Reasons	
Social Environment: *Impacts on "Gender" and "Children's Right" may be related to all social environment criteria.	1	Involuntary Resettlement	D	There is no possibility of involuntary resettlement since there are not any residences including illegal residences in the site area.
	2	Local Economy such as Employment and Livelihood, etc.	C	There is a possibility to make some arrangements regarding the utilization rights and relocating illegal anchorage ships and boats since the anchorage area is in front of the sea tide dike. And it might be necessary to make some arrangements for illegal habitants in case that the Project might have an adverse impact to them.
	3	Land Use and Utilization of Local Resources	C	There is a possibility to affect on the living environment since a partial private road is planned to be used as a part of access road.
	4	Social Institutions such as Social Infrastructure and Local Decision - making Institutions	D	There is no possibility since the site is the same place as existing East Pump Station.
	5	Existing Social Infrastructures and Services	D	There is no possibility to affect the passage of local residents since a detour will be provided constructed even though a part of this passage is planned to be used as a part of access road.
	6	The Poor, Indigenous and Ethnic people	D	There is no possibility since the site is the same place as existing East Pump Station.
	7	Misdistribution of Benefit and Damage	D	There is no possibility of misdistribution of benefit and damage since the site is a place of existing East Pump Station and there are no production and commercial activities in the site.
	8	Cultural heritage	D	There are not any cultural heritages in the site.
	9	Local Conflicts of Interest	D	There is no possibility of local conflicts of interest as rehabilitation of East Pump Station.
	10	Water Usage or Water Rights and Communal Rights	D	Ministry of Public Works has a right of ownership for rehabilitation of East Pump Station. There is no possibility of water rights and communal rights.

	11	Sanitation	D	Since the Project will provide a temporal toilet and manage wastes appropriately for the increase of workers, there is no possibility to affect on sanitation.
	12	Hazards (risk) Infectious Diseases such as HIV/AIDS	D	Since the Project is to reconstruct the existing East Pump Station, there is no possibility of hazards and infectious diseases.
Natural Environment	13	Topography and Geographical Features	C	It is necessary to confirm topography and geographical features by topographical and geographical surveys because there is a limited available topography and geographical data about the existing East Pump Station.
	14	Soil Erosion	D	There is no possibility of soil erosion because of rehabilitation of East Pump Station.
	15	Groundwater	D	There is no possibility of impact on groundwater because of rehabilitation of East Pump Station.
	16	Hydrological Situation	D	There is no possibility of impact on hydrological situation because of rehabilitation of East Pump Station.
	17	Coastal zone	D	There is no possibility of impact on coastal zone because of rehabilitation of existing East Pump Station.
	18	Flora, Fauna and Biodiversity	D	There is no possibility of impact on biodiversity because of rehabilitation of East Pump Station.
	19	Meteorology	D	There is no possibility of impact on meteorology because of rehabilitation of East Pump Station.
	20	Landscape	D	There is no possibility of impact on landscape because of rehabilitation of existing East Pump Station.
	21	Global Warming	D	The Project will not affect adversely since the green house gas will be reduced by improving the pump performance and so on.
Pollution	22	Air Pollution	B	Air pollutants can be discharged by vehicles during construction.
	23	Water Pollution	B	The Project will have a possibility of water pollution by construction of sea tide dike and removal of cofferdam.
	24	Soil Contamination	D	Since the Project will not use materials which have any contaminants for soil, there is no possibility of soil contamination.

	25	Waste	B	It is necessary to examine the appropriate treatment method and to investigate the present situation and related regulation for wastes to be generated as a result of demolition of existing facilities.
	26	Noise and Vibration	B	Since the Project will have a possibility of noise and vibration, it is necessary to provide countermeasure against insulation of noise and vibration, to arrange the working hours of heavy equipment and so on.
	27	Ground Subsidence	D	There is no possibility of ground subsidence by the construction,
	28	Offensive Odor	D	There is no possibility of offensive odor because of rehabilitation of East Pump Station.
	29	Bottom Sediment	D	There is no possibility of impact on bottom sediment because of rehabilitation of East Pump Station.
	30	Accidents	B	There is a possibility of traffic accidents by vehicles for construction.
<b>2. Operation Period</b>				
		Item	Rating	Reasons
Social Environment: *Impacts on "Gender" and "Children's Right" may be related to all social environment criteria.	1	Involuntary Resettlement	D	Involuntary resettlement is inconceivable for the use of East Pump Station.
	2	Local Economy such as Employment and Livelihood, etc.	D	Adverse impact is inconceivable since the risk will be reduced by the improvement of the drainage function.
	3	Land Use and Utilization of Local Resources	D	Safety for land use will be increased by improvement of the drainage function.
	4	Social Institutions such as Social Infrastructure and Local Decision - making Institutions	D	There is no possibility of impact on social institutions by the use of East Pump Station.
	5	Existing Social Infrastructures and Services	D	Safety for existing social infrastructures and services will be increased by improvement of the drainage function.
	6	The Poor, Indigenous and Ethnic people	D	There is no possibility of impact on the poor, indigenous and ethnic people by the use of East Pump Station.
	7	Misdistribution of Benefit and Damage	D	There is no possibility of misdistribution of benefit and damage since there are no production and commercial activities in the site.
	8	Cultural heritage	D	There are not any cultural heritages in the site.

	9	Local Conflicts of Interest	D	There is no possibility of local conflicts of interests for the use of East Pump Station.
	10	Water Usage or Water Rights and Communal Rights	D	Since the right of ownership will be transferred from Ministry of Public Works to DKI, there is no possibility of impact on water rights and communal rights
	11	Sanitation	D	Sanitation will be improved by the improvement of the drainage function.
	12	Hazards (risk) Infectious Diseases such as HIV/AIDS	D	There is no possibility of hazards and infectious diseases for the use of East Pump Station.
Natural Environment	13	Topography and Geographical Features	D	There is no possibility of impact on topography and geographical features by the use of East Pump Station.
	14	Soil Erosion	D	There is no possibility of soil erosion by the use of East Pump Station.
	15	Groundwater	D	There is no possibility to affect groundwater by the use of East Pump Station.
	16	Hydrological Situation	D	There is no possibility to affect hydrological situation by the use of East Pump Station.
	17	Coastal zone	D	There is no possibility to affect coastal zone by the use of East Pump Station.
	18	Flora, Fauna and Biodiversity	D	There is no possibility to affect biodiversity for the use of East Pump Station.
	19	Meteorology	D	There is no possibility to affect meteorology by the use of East Pump Station.
	20	Landscape	D	There is no possibility to affect landscape by the use of East Pump Station.
	21	Global Warming	D	Use of East Pump Station will not affect adversely to global warming since the green house gas will be reduced by improving the pump performance and so on.
Pollution	22	Air Pollution	D	There is no possibility of air pollution by the use of East Pump Station.
	23	Water Pollution	D	There is no possibility of water pollution by the use of East Pump Station.
	24	Soil Contamination	D	There is no possibility of soil contamination by the use of East Pump Station.
	25	Waste	D	There is no possibility to generate wastes by the use of East Pump Station.

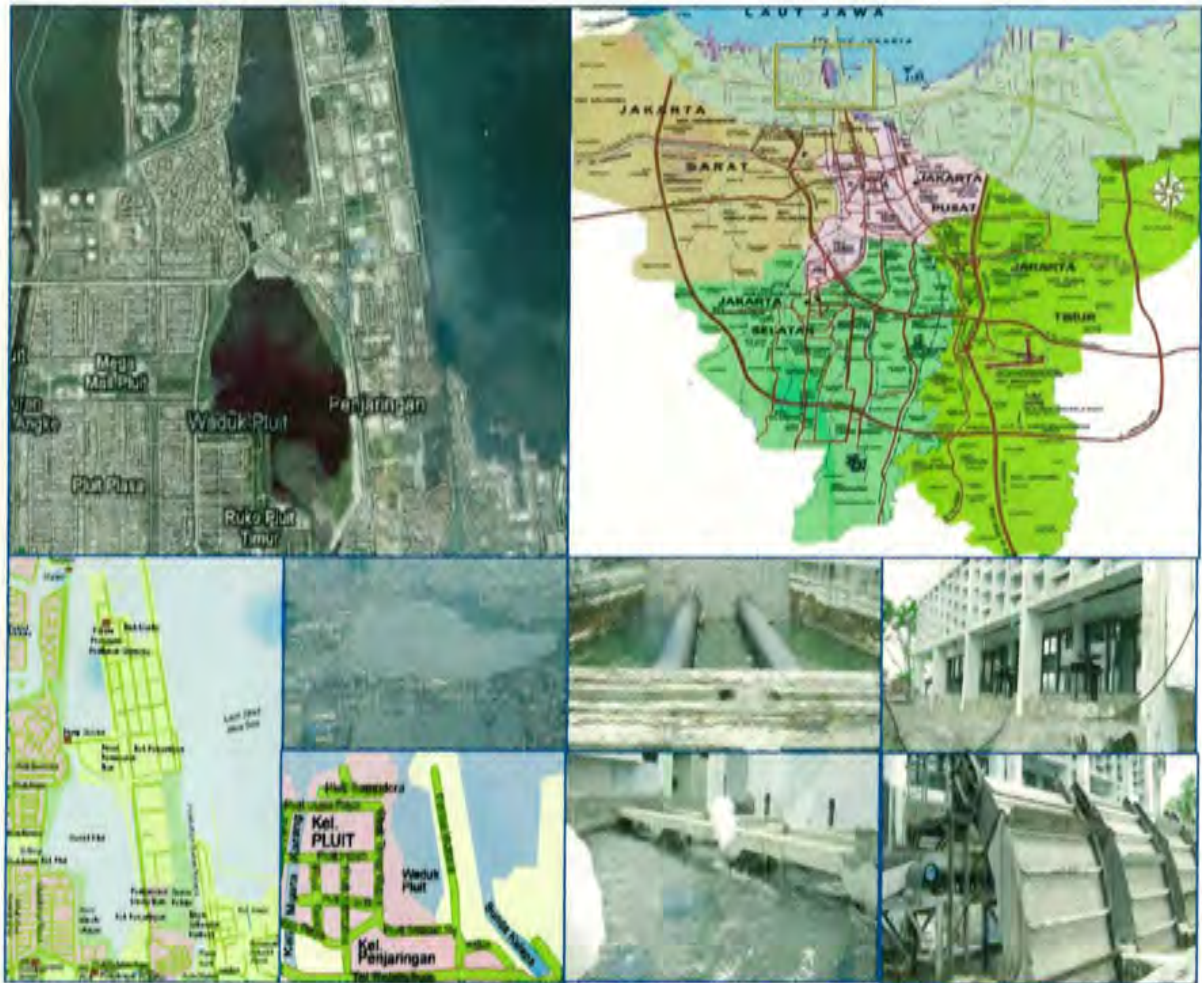
	26	Noise and Vibration	D	There is no possibility of noise and vibration by the use of East Pump Station.
	27	Ground Subsidence	D	There is no possibility of ground subsidence by the use of East Pump Station.
	28	Offensive Odor	D	There is no possibility to generate offensive odor by the use of East Pump Station.
	29	Bottom Sediment	D	There is no possibility to generate bottom sediment by the use of East Pump Station.
	30	Accidents	D	There is no possibility of accidents by the use of East Pump Station.

Rating;

A: Serious impact is expected, B: Some impact is expected, C: Extent of impact is unknown, D (or No Mark): No impact is expected. IEE/EIA is not necessary.



# UKL- UPL POMPA PLUIT



**DINAS PEKERJAAN UMUM PROVINSI DKI JAKARTA**  
Jl. Taman Jati Baru No. 1 Jakarta Pusat Telp. (021) 3848510, Faks 3848510

**2010**

**Environmental Management Plan (UKL)**

**Table 7-4-1. Matrix of Environmental Management Efforts (UKL)**

Impact Source	Kind of Impact	Parameter	Purpose/Aim	Environmental Management Efforts			Implementing Environmental Management		
				Management Method	Location	Period	Implementer	Supervisor	Reporting
Pre construction									
<ul style="list-style-type: none"> <li>Socialization</li> </ul>	Public fretfulness	<ul style="list-style-type: none"> <li>Number of complaint reports from surrounding communities</li> <li>Issue and perception non society</li> </ul>	To prevent the public fretfulness	<ul style="list-style-type: none"> <li>Explain the plan of activity in carefully and taking care the norms on communities</li> <li>Always put forward the discussion and community sidedness with best solution</li> </ul>	Penjaringan District	Before construction activity	Initiator	<ul style="list-style-type: none"> <li>Environment agency of North Jakarta</li> <li>Social Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>Environment agency of North Jakarta</li> <li>Social Agency of North Jakarta</li> </ul>
Construction									
<ul style="list-style-type: none"> <li>Acceptance of Labor</li> </ul>	Employment and business opportunity	<ul style="list-style-type: none"> <li>Numbers of workers from surrounding community</li> <li>Suitability of level income to minimum wage in city</li> </ul>	To have a role in creating job opportunity for surrounding communities	<ul style="list-style-type: none"> <li>Giving priority to the surrounding residents to be construction worker as qualification needed</li> <li>Giving priority to the material supplier on surrounding location as qualification needed</li> </ul>	Penjaringan district	Prior construction activity	Contractor	<ul style="list-style-type: none"> <li>Environment agency of North Jakarta</li> <li>Labor and transmigration agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>Environment agency of North Jakarta</li> <li>Labor and transmigration agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>Mobilization of construction material and equipment</li> </ul>	Traffic disruption	<ul style="list-style-type: none"> <li>Road jammed which passed by material construction vehicle</li> </ul>	To prevent the traffic jammed and disturbing due to increase of the traffic	<ul style="list-style-type: none"> <li>Fix the damaged road as the impact of material transportation activity or heavy equipment</li> <li>The material transport vehicle must be completed with good tarpaulin for cover</li> <li>Arrange the schedule of material transport, not on rush hour</li> </ul>	Roads which is passed by material construction activity	Prior construction activity	Contractor	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Transportation Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Transportation Agency of North Jakarta</li> </ul>

Impact Source	Kind of Impact	Parameter	Purpose/Aim	Environmental Management Efforts			Implementing Environmental Management		
				Management Method	Location	Period	Implementer	Supervisor	Reporting
<ul style="list-style-type: none"> <li>• Mobilization of construction equipment and material</li> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump house building</li> <li>• Construction of pump and electrical facilities</li> <li>• Demobilization of equipment</li> </ul>	Air quality degradation	CO, H2S, SO2, NO2 Dust and Pb based on Decree Letter of DKI Jakarta Governor No. 551/2001	To prevent the air quality degradation	<ul style="list-style-type: none"> <li>• Bounding project area with covered fence made from iron (iron sheeting)</li> <li>• Using vehicle for material transportation in good condition</li> <li>• Watering the activity area in routine, especially the road which pass by construction/material vehicle</li> <li>• The transport vehicle must be completed with good tarpaulin for cover</li> <li>• Slowed down the speed of vehicle on the road near settlement</li> </ul>	Project place	prior construction activities	Constructor	- Environment Agency of North Jakarta	- Environment Agency of North Jakarta
<ul style="list-style-type: none"> <li>• Mobilization of construction equipment and material</li> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump and electrical facilities</li> <li>• Demobilization of equipment</li> </ul>	Increasing of noise	Noise level based on decree letter of DKI Jakarta governor, No. 551/2001	To prevent and minimized the noise level on project location and surrounding, so it will not disturb the comfort and hearing the labor and surrounding communities	<ul style="list-style-type: none"> <li>• Limitation the speed of vehicle</li> <li>• Construct the fence bounding project area</li> <li>• The vehicle must be in good condition</li> </ul>	Project place	Prior Construction activity	Contractor	•Environment Agency of North Jakarta	•Environment Agency of North Jakarta

Impact Source	Kind of Impact	Parameter	Purpose/Aim	Environmental Management Efforts			Implementing Environmental Management		
				Management Method	Location	Period	Implementer	Supervisor	Reporting
<ul style="list-style-type: none"> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump and electrical facilities</li> </ul>	Increasing of waste	Whether there is a waste that accumulating and scattered on project area	To prevent the increase of waste which can caused the degradation of sea water quality	<ul style="list-style-type: none"> <li>• Install the security net to prevent the falling of material to the reservoir and sea</li> <li>• Provide the temporary facility for waste</li> <li>• Use tarpaulin to cover the opened container of the material transportation vehicle, so the sand will not scattered on the road</li> <li>• Prepare the dumping site</li> </ul>	Project Are and around	Every day prior construction activity	Contractor	<ul style="list-style-type: none"> <li>•Environment Agency of North Jakarta</li> <li>•Cleaning Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>•Environment Agency of North Jakarta</li> <li>•Cleaning Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Construction of retaining building tide</li> <li>• Construction of pump house building</li> <li>• Construction of pump and electrical facilities</li> </ul>	Degradation of sea water quality	BOD, COD, TSS, pH, etc, based on Decree Letter of DKI Jakarta Governor No. 582, 1995	To prevent the degradation of sea water quality	<ul style="list-style-type: none"> <li>• Provide the toilet facilities (public bathing and washing) for construction labor</li> <li>• Prevent the scattered of the material to the sea</li> <li>• Install the security net to prevent the falling material to the sea</li> </ul>	Project place	Prior construction activity	Contractor	<ul style="list-style-type: none"> <li>•Environment Agency of North Jakarta</li> <li>•Public Works Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>•Environment Agency of North Jakarta</li> <li>•Public Works Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump and electrical facilities</li> </ul>	Working accident	Numbers of work accident	To avoid the accident and keep safety of the labor	<ul style="list-style-type: none"> <li>• Giving advise to use the safety facilities such as project helmet</li> </ul>	Project place	Prior construction activity	Contractor	<ul style="list-style-type: none"> <li>•Environment Agency of North Jakarta</li> <li>•Labor and Transmigration Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>•Environment Agency of North Jakarta</li> <li>•Labor and Transmigration Agency of North Jakarta</li> </ul>

Impact Source	Kind of Impact	Parameter	Purpose/Aim	Environmental Management Efforts			Implementing Environmental Management		
				Management Method	Location	Period	Implementer	Supervisor	Reporting
<b>Operation</b>									
<ul style="list-style-type: none"> <li>• Operation of East Pluit Pump Station</li> <li>• Waste handling</li> </ul>	Air quality degradation	CO, H2S, SO2, NO2, and Pb, based on Decree Letter of DKI Jakarta Governor No. 551/2001	To prevent the degradation of air quality	<ul style="list-style-type: none"> <li>• Make smokestack for electric generator</li> <li>• Maintain the pump and genset (backup electricity) equipment in periodically</li> </ul>	<ul style="list-style-type: none"> <li>• Pump room</li> <li>• Genset Room</li> </ul>	Prior operation activity	Initiator and contractor	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Operation of East Pluit Pump</li> </ul>	Sea water quality degradation	BOD, COD, TSS, pH, etc, based on Decree letter of DKI Jakarta Governor No. 582 year 1995	To prevent the degradation of sea water quality	<ul style="list-style-type: none"> <li>• Install the screen on inlet and outlet of the water pipe</li> <li>• Clean the pump area and water drainage system in periodically</li> <li>• Control the water temperature of Genset's chiller before its throw away</li> <li>• Install the aerator to increase the level of soluble oxygen</li> </ul>	<ul style="list-style-type: none"> <li>• Inlet and outlet of water drainage pipe</li> <li>• Area around East Pluit pump</li> <li>• Genset room</li> </ul>	Prior operation activity	Initiator and contractor	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> <li>• Public works Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Operation of East Pluit pump station</li> </ul>	Increasing of waste	Weather there is waste that accumulating and scattered at East Pluit Pump station and around Bar screen pump	To prevent the degradation of the estetic and sea water quality caused by waste	<ul style="list-style-type: none"> <li>• Provide temporary place for waste in the form of two containers</li> <li>• Daily cleaning on pump area and water drainage system</li> <li>• Transport the waste from temporary place to the final place of waste, regularly</li> <li>• Prohibit the waste burning activity</li> <li>• Transport the waste from surrounding Bar screen of east Pluit Pump, regularly</li> </ul>	<ul style="list-style-type: none"> <li>• Waste accumulating area</li> <li>• Area around barscreen of east Pluit pump</li> </ul>	Prior operation activity	Initiator and contractor	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> <li>• Cleaning Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> <li>• Cleaning Agency of North Jakarta</li> </ul>

Impact Source	Kind of Impact	Parameter	Purpose/Aim	Environmental Management Efforts			Implementing Environmental Management		
				Management Method	Location	Period	Implementer	Supervisor	Reporting
<ul style="list-style-type: none"> <li>• Operation of east Pluit pump station</li> <li>• Pump station maintenance</li> <li>• Electricity use</li> </ul>	Increasing of oil and lubricant waste	Weather there is oil and used lubricant	To prevent the pollution of sea water quality	<ul style="list-style-type: none"> <li>• Retain the residue oil of genset and pump machine on the covered drum, then put it in the special area/room for oil before giving to institution/third party which have license to transport and manage it furthermore</li> <li>• The channel on the genset completed with oiltrap</li> </ul>	<ul style="list-style-type: none"> <li>• Genset room and East Pluit pump room</li> </ul>	Prior operation activity	Initiator and contractor	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Operation of east Pluit pump station</li> <li>• East Pluit pump maintenance</li> </ul>	Working accident	Number of working accident	To avoid the working accident and keeping labor safe	<ul style="list-style-type: none"> <li>• Give advice to use safety facilities such as project helmet</li> <li>• Prohibit the person who has no importance to enter the working area</li> </ul>	<ul style="list-style-type: none"> <li>• East Pluit pump station</li> </ul>	Prior operation activity	Initiator and contractor	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> <li>• Labor and transmigran Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> <li>• Labor and transmigran Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Waste handling</li> </ul>	Public health	Number of disease incidence	To avoid the waste accumulating that can caused disease	<ul style="list-style-type: none"> <li>• Give advice for cleaning maintenance</li> <li>• Transport the waste from temporary place to the final place of waste</li> <li>• Prohibit the waste burning activity</li> <li>• Transport the waste from surrounding area of Bar screen of East Pluit pum, regularly</li> </ul>	<ul style="list-style-type: none"> <li>• Waste accumulati ng place</li> <li>• Around bar screen of East Pluit pump</li> </ul>	Prior operation activity	Initiator and contractor	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> <li>• Cleaning Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>• Environment Agency of North Jakarta</li> <li>• Cleaning Agency of North Jakarta</li> </ul>

**Environmental Monitoring Plan (UPL)**

**Table 7-4-2. Matrix of Environmental Monitoring Efforts (UPL)**

Impact Source	Kind of Impact	Parameter	Environmental Monitoring Efforts			Implementing Environmental Monitoring		
			Method	Location	Monitoring Period	Implementer	Supervisor	Reporting
<b>PRE CONSTRUCTION</b>								
<ul style="list-style-type: none"> <li>Socialization</li> </ul>	Public Fretfulness	<ul style="list-style-type: none"> <li>Number of Complaint reports from surrounding communities</li> <li>Issue and perception on society</li> </ul>	<ul style="list-style-type: none"> <li>Interview with residents, village party, and community leader</li> <li>Report to the central information and to village party and district</li> </ul>	Penjaringan District	Prior construction activity	Initiator	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Social Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Social Agency of North Jakarta</li> </ul>
<b>CONSTRUCTION</b>								
<ul style="list-style-type: none"> <li>Acceptance of labor</li> </ul>	Employment and business opportunity	<ul style="list-style-type: none"> <li>number of workers from the surrounding community</li> <li>suitability of lever income with minimum wage</li> </ul>	<ul style="list-style-type: none"> <li>Interview with residents, village party, and community leader</li> <li>Population age data and clarify the age of the population around that still productive</li> </ul>	Penjaringan District	Once in 6 months during construction activities	Initiator	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Labor Agency and Transmigration of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Social Agency and Transmigration of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>Mobilization of construction equipment and material</li> <li>Demobilization of equipment</li> </ul>	Traffic disruption	Road jammed which is passed by material construction vehicle	<ul style="list-style-type: none"> <li>Direct observation (LHR survey and community per- seption)</li> </ul>	Road which is passed by material construction vehicle	Once in 6 months during construction activities	Initiator	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Transportation Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>Environment Agency of North Jakarta</li> <li>Transportation Agency of North Jakarta</li> </ul>

App-7-18

Impact Source	Kind of Impact	Parameter	Environmental Monitoring Efforts			Implementing Environmental Monitoring		
			Method	Location	Monitoring Period	Implementer	Supervisor	Reporting
<ul style="list-style-type: none"> <li>• Mobilization of construction equipment and material</li> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump house building</li> <li>• Construction of pump and electrical facilities</li> <li>• Demobilization of equipment</li> </ul>	Air quality degradation	CO, H2S, SO2, NO2 Dust and Pb based on Decree Letter of DKI Jakarta Governoor No. 551/2001	- Sampling - Laboratory analysis	Project place	Once in 6 months during construction activities	Initiator	- Environment Agency of North Jakarta	- Environment Agency of North Jakarta
<ul style="list-style-type: none"> <li>• Mobilization of construction equipment and material</li> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump house building</li> <li>• Construction of pump and electrical facilities</li> <li>• Demobilization of equipment</li> </ul>	Increasing of noise	Noise level based on Decree Letter of DKI Jakarta Governoor No. 551/2001	Measurement with sound level meter	Project place	Once in 6 months during construction activities	Initiator	- Environment Agency of North Jakarta	- Environment Agency of North Jakarta



Impact Source	Kind of Impact	Parameter	Environmental Monitoring Efforts			Implementing Environmental Monitoring		
			Method	Location	Monitoring Period	Implementer	Supervisor	Reporting
<ul style="list-style-type: none"> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump and electrical facilities</li> </ul>	Increasing of waste	Whether there is a waste that is accumulating and scattered on project place	<ul style="list-style-type: none"> <li>- Self Monitoring</li> <li>- Direct visual observation</li> </ul>	Project place and around	Every 6 months during construction activities	Initiator	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Cleaning Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Cleaning Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Construction of retaining building tide</li> <li>• Construction of pump house building</li> <li>• Construction of pump and electrical facilities</li> </ul>	Sea water quality degradation	BOD, COD, TSS, pH etc based on Decree Letter of DKI Jakarta Governoor No. 582, 1995	<ul style="list-style-type: none"> <li>- Sampling</li> <li>- Laboratory analysis</li> </ul>	Project place	<ul style="list-style-type: none"> <li>Once in 3 months sampling</li> <li>Every 6 month during construction activities</li> </ul>	Initiator	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Public Work Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Public Work Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Base camp construction</li> <li>• Construction of retaining building tide</li> <li>• Construction of pump house building</li> <li>• Construction of pump and electrical facilities</li> </ul>	Working accident	Numbers of work accident	<ul style="list-style-type: none"> <li>- Interview with labor construction</li> <li>- Examination of accident data from construction contractor</li> </ul>	Project place	Once in 6 months during construction activities	Initiator	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Labor Agency and Transmigration of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Labor Agency and Transmigration of North Jakarta</li> </ul>

Impact Source	Kind of Impact	Parameter	Environmental Monitoring Efforts			Implementing Environmental Monitoring		
			Method	Location	Monitoring Period	Implementer	Supervisor	Reporting
<b>OPERATION</b>								
<ul style="list-style-type: none"> <li>• Operation of East Pluit pump station</li> <li>• Waste handling</li> </ul>	Air quality degradation	CO, H2S, SO2, NO2, and Pb based on Decree Letter of DKI Jakarta Governoor No. 551/2001	<ul style="list-style-type: none"> <li>- Sampling</li> <li>- Laboratory analysis</li> </ul>	- pump room and genset room of East Pluit pump	Once in 6 months during the operation	Initiator	- Environment Agency of North Jakarta	- Environment Agency of North Jakarta
<ul style="list-style-type: none"> <li>• Operation of East Pluit pump station</li> </ul>	Sea water quality degradation	BOD, COD, TSS, ph, etc based on Decree Letter of DKI Jakarta Governoor No. 582 Year 1995	<ul style="list-style-type: none"> <li>- Sampling once in 3 months</li> <li>- Laboratory Analysis once in 3 months</li> </ul>	<ol style="list-style-type: none"> <li>1. Inner and outer of water pipe</li> <li>2. Area around East Pluit Pump</li> </ol>	Once in 6 months during the operation	Initiator	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Public Work Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Public Work Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Operation of East Pluit pump station</li> </ul>	Increasing of waste	Whether there is a waste that is accumulating and scattered at East Pluit Pump station and around barscreen pump.	<ul style="list-style-type: none"> <li>- Self Monitoring</li> <li>- Direct visual observation</li> </ul>	<ul style="list-style-type: none"> <li>- Waste Accumulating Area</li> <li>- Area around barscreen of East Pluit pump.</li> </ul>	Once in 6 months during the operation	Initiator	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Cleaning Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Cleaning Agency of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Operation of East Pluit pump station</li> <li>• Pump Station Maintenance</li> <li>• Electricity Use</li> </ul>	Increasing of waste oil and lubricant	Whether there is oil and used lubricant	<ul style="list-style-type: none"> <li>- Direct visualization</li> <li>- Waste concrete shipping manifest examination</li> </ul>	- Genset room and East Pluit pump room	Once in 6 months during the operation	Initiator	- Environment Agency of North Jakarta	- Environment Agency of North Jakarta
<ul style="list-style-type: none"> <li>• Operation of East Pluit pump station</li> <li>• Pump Station Maintenance at East Pluit</li> </ul>	Working accident	Number of working accident	<ul style="list-style-type: none"> <li>- Interview with labor about operation or during construction</li> <li>- Examination of accident data from construction contractor</li> </ul>	East Pluit pump station	Once in 6 months during the operation	Initiator	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Labor Agency and Transmigration of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Labor Agency and Transmigration of North Jakarta</li> </ul>
<ul style="list-style-type: none"> <li>• Waste handling</li> <li>• Operation of East Pluit pump station</li> </ul>	Public Health	Disease incidence	List of patient and type of diseases at health center in at health center in	<ul style="list-style-type: none"> <li>- Health Centre in Penjaringan district</li> <li>- Area around East Pluit pump</li> </ul>	Once in 6 months during the operation	Initiator	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Health Agency of North Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>- Environment Agency of North Jakarta</li> <li>- Health Agency of North Jakarta</li> </ul>



**PEMERINTAH PROVINSI DAERAH KHUSUS IBUKOTA JAKARTA**  
**KANTOR LINGKUNGAN HIDUP (KLH)**  
**KOTA ADMINISTRASI JAKARTA UTARA**

JL. Laksda. Yos Sudarso No. 27-29 Blok P Lt. 8 Telepon/Fax : (021) 4358794

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Sifat : Penting  
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Hal : Rekomendasi Dokumen Upaya  
Pengelolaan Lingkungan dan  
Upaya Pemantauan Lingkungan  
Pompa Pluit

16 April 2010

Kepada  
Yth. Kepala Dinas Pekerjaan Umum  
Jalan Taman Jatibaru No. 1

di

Jakarta

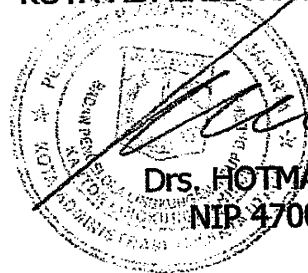
Sehubungan dengan surat Saudara tertanggal 30 Maret 2010 Nomor 2147/-1.774.151 perihal Surat Pengantar Permohonan Jadwal Sidang UKL/UPL Pompa Pluit serta hasil pembahasan Dokumen UKL-UPL yang telah dilaksanakan pada tanggal 8 April 2010, dapat disampaikan hal-hal sebagai berikut:

1. Bahwa sesuai Keputusan Menteri Negara Lingkungan Hidup Nomor 86 Tahun 2002 tentang Pedoman Pelaksanaan Upaya Pengelolaan Lingkungan dan Upaya Pemantauan Lingkungan dan Keputusan Gubernur Propinsi DKI Jakarta Nomor 189 Tahun 2002 tentang Jenis Usaha/Kegiatan yang wajib dilengkapi dengan Upaya Pengelolaan Lingkungan (UKL) dan Upaya pemantauan Lingkungan (UPL) di Propinsi DKI Jakarta, sebagaimana dinyatakan didalam dokumen dimaksud merupakan persyaratan bagi penerbitan perizinan Daerah, yang wajib disusun dan dilaksanakan sesuai ketentuan yang berlaku;
2. Bahwa rencana usaha atau kegiatan sebagaimana dipaparkan didalam dokumen UKL dan UPL tergolong kegiatan yang tidak berdampak penting dan atau secara teknologi sudah dapat dikelola dampak pentingnya;
3. Sebagaimana Berita Acara dan notulen hasil pembahasan Tim Penilaian Dokumen UKL- UPL Walikota Jakarta Utara Nomor 024/UKL-UPL/IV/2010 pada hari Kamis tanggal 8 April 2010 tentang penilaian dokumen Upaya Pengelolaan Lingkungan (UKL) dan Upaya Pemantauan Lingkungan (UKL) Perbaikan Pompa Pluit Sisi Timur cq. Dinas Pekerjaan Umum Provinsi DKI Jakarta lokasi kegiatan beralamat di Jalan Pluit Selatan Kelurahan Penjaringan Kecamatan Penjaringan Kota Administrasi Jakarta Utara maka dokumen UKL/UPL dapat disetujui;

4. Bahwa pemrakarsa usaha atau kegiatan terikat untuk melaksanakan seluruh materi kegiatan pengelolaan dan pemantauan lingkungan sebagaimana ketentuan peraturan perundangan yang berlaku, apabila dikemudian hari ternyata ditemukan kondisi atau hal-hal yang tidak sesuai dengan materi dokumen UKL- UPL dimaksud maka hasil penilaian dokumen UKL- UPL ini gugur dengan sendirinya, dan kepada pemrakarsa kegiatan dapat dikenakan sanksi sesuai dengan ketentuan hukum dan peraturan perundang-undangan yang berlaku;
5. Bahwa pemrakarsa usaha atau kegiatan wajib menyampaikan laporan implementasi UKL – UPL sesuai dengan jadwal pemantauan yang dinyatakan didalam dokumen UKL – UPL (setiap 6 bulan) kepada Badan Pengelola Lingkungan Hidup Daerah Provinsi Daerah Khusus Ibukota Jakarta cq. Kantor Lingkungan Hidup Jakarta Utara, instansi pemberi izin dan instansi pembina lainnya.

Demikian, atas perhatian dan kerjasamanya diucapkan terima kasih.

KEPALA KANTOR LINGKUNGAN HIDUP  
KOTA ADMINISTRASI JAKARTA UTARA



Drs. HOTMAN SILAEN  
NIP. 470032457

## Translation of UKL/UPL Approval Letter

No : 025/1.774.151 April, 16 2010  
Classified : Important  
Appendix : 1 (one) file  
Subject : Document To  
Recomendation UKL/ Head of Dinas Pekerjaan Umum  
UPL Pluit Pump Taman Jatibaru Street No. 1  
in Jakarta

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According to your letter dated March 30, 2010 No. 2147/-1.774.151 about request for meeting schedule of UKL/ UPL Pump Pluit and the results of the meeting that held on April 8, 2010, can be informed as follow :

1. According to Keputusan Menteri Negara Lingkungan Hidup No. 86 Year 2002 about Guidelines for the Implementation of Upaya Pengelolaan Lingkungan (UKL) & Upaya pemantauan Lingkungan (UPL) and Keputusan Gubernur Province DKI Jakarta No. 189 Year 2002 about Type of Activities shall be furnished with UKL/ UPL Document in Province DKI Jakarta. This UKL/ UPL Document is required to get Region Permit in accordance with applicable Regulation.
2. Activity Plan as described in the UKL/ UPL Document is classified as activity that does not have essential impact on environment and/ or the essential impact can be managed technically.
3. As the minutes of meeting of the Assessment Team UKL/ UPL Document Mayor of North Jakarta No. 024/UKL-UPL/IV/2010 on Thursday, April 8, 2010 about assessment of the UKL/ UPL Document of East Pluit Pump Reconstruction att. Dinas Pekerjaan Umum Province DKI Jakarta, project site located in Kelurahan Penjaringan Kecamatan Penjaringan, North Jakarta City Administration, the UKL/ UPL Document is approved.
4. Project proponent shall comply with UKL/ UPL Document, if in the implementation stage there are some conditions that do not comply with the UKL/ UPL Document, the assessment result

of UKL/ UPL Document is aborted, and the project proponent can be punished in accordance with applicable Regulations and Legislation.

5. Project proponent shall report the implementation of the UKL/ UPL Document based on the monitoring schedule as stated in the UKL/ UPL Document (in every six months) to the Badan Pengelola Lingkungan Hidup Daerah Province DKI Jakarta (BPLHD DKI Jakarta) att. Kantor Lingkungan Hidup Jakarta Utara (KLH Jakarta Utara).

Thank you for your attention and cooperation.

Sign

(Head of Kantor Lingkungan  
Hidup North Jakarta City  
Administration)

## **APPENDIX-8**

## **REFERENCES**

## APPENDIX-8

### References

#### References

Name of Survey: The Preparatory Survey on the Project for Urgent Reconstruction of East Pump Station of Pluit in Jakarta, the Republic of Indonesia

No.	Name of reference	Form book, video, map, photo, etc.	Original/ Copy	Name of government office to be approached or name of issuing government office	Year of publication
1	Mejor Drainage Works Component in JUDP II, Pekapuran Tidal Gate Contract Documents for Package 3, Vol.IV Drawings	Drawing	Copy	Ciliwung-Cisadane River Basin Development Project, and PT. Teguh Raksa Jaya	1994
2	Land subsidence characteristics of Jakarta between 1997 and 2005, as estimated using GPS surveys	Document	Copy	Springer-Verlag	2007
3	Land Subsidence of Jakarta (Indonesia) and its Geodetic Monitoring System	Document	Copy	Natural Hazards	2001
4	Land Subsidence Characteristics of the Jakarta Basin (Indonesia) and its Relation with Groundwater Extraction and Sea Level Rise	Document	Copy	Institute of Technology Bandung	
5	Stratigrafi dan Hidrostratigrafi Cekungan Airtanah Jakarta	Document	Copy		



No.	Name of reference	Form book, video, map, photo, etc.	Original/ Copy	Name of government office to be approached or name of issuing government office	Year of publication
6	Groundwater recharge and discharge processes in the Jakarta groundwater basin, Indonesia	Document	Copy	Springer-Verlag	Feb. 2008
7	Monitoring Land Subsidence of Jakarta (Indonesia) Using Leveling, GPS Survey and InSAR Techniques	Document	Copy	Institute of Technology Bandung	
8	Jakarta - STOTEN paper (The contribution of human activities to subsurface environment degradation in Greater Jakarta Area, Indonesia)	Document	Copy	Sci Total Environ	2008
9	Land Subsidence Characteristics of the Jakarta Basin (Indonesia) as estimated from Leveling, GPS and InSAR and its Environmental Impacts	Document	Copy	Institute of Technology Bandung	Dec. 2008
10	Existing Drawing Darurat Penanganan Kebocoran Pompa Pluit Timur	Drawing	Copy	Ministry of Public Works Directorate General of Water Resources Development	2009
11	Major Drainage Works Component in JUDP-II Design Drawings – Package 2 Rehabilitation of Pluit Pumps and Appurtenances	Drawing	Copy	Ministry of Public Works Directorate General of Water Resources Development	

No.	Name of reference	Form book, video, map, photo, etc.	Original/ Copy	Name of government office to be approached or name of issuing government office	Year of publication
12	Shop Drawing Perbaikan Pompa, Saringan Sampah Dan Pintu Air Di 5 Kotamadya Jakarta	Drawing	Copy	Ministry of Public Works Directorate General of Water Resources Development	2009
13	BUKU PETUNJUK OPERASI DAN PERAWATAN POMPA AXIAL	Document	Copy	DPU PROVINSI DKI JAKARTA	
14	Proyek Penyelesaian Sistem Pompa Air Cideng	Drawing	Copy	DPU PROVINSI DKI JAKARTA	2009
15	Diagram Satu Garis	Document	Copy	PT. PLN	Oct. 2009
16	Laporan Akhir Penyerapan DPA-SKPD 2008	Document	Copy	DPU PROVINSI DKI JAKARTA	2008
17	Laporan Akhir Penyerapan DPA-SKPD 2009	Document	Copy	DPU PROVINSI DKI JAKARTA	2009
18	Lampiran Data Penyerapan 2007	Document	Copy	DPU PROVINSI DKI JAKARTA	Dec. 2007
19	Lampiran Data Penyerapan 2008	Document	Copy	DPU PROVINSI DKI JAKARTA	Dec. 2008
20	Rekapitulasi Monitoring Pelaksanaan Kegiatan DPA-SKPD	Document	Copy	DPU PROVINSI DKI JAKARTA	Sep. 2009
21	Design Report Pump Station Pluit III Volume IIC Laporan Pendukung Mekanikal & Elektrikal 2002	Document	Copy	PT. Sugitek Patih Perkasa	2002
22	Volume IIIC Dokumen Tender Gambar Rencana Rumah Pompa Pluit III	Drawing	Copy	PT. Sugitek Patih Perkasa	2002
23	Flood Alert Guideline	Document	Copy	DPU PROVINSI DKI JAKARTA	2008

No.	Name of reference	Form book, video, map, photo, etc.	Original/ Copy	Name of government office to be approached or name of issuing government office	Year of publication
24	Keputusan Kepala Biro Prasarana Dan Sarana Kota Setda Provinsi Daerah Khusus Ibukota Jakarta	Document	Copy	Patokan Harga Satuan Bahan Dan Upah Pekerjaan Bidang / Jasa Pemborongan Provinsi DKI Jakarta	Jul. 2009
25	PERENCANAAN TEKNIS PENGENDALIAN AIR PENGGANTIAN POMPA PLUIT	Drawing	Copy	DPU PROPINSI DKI JAKARTA	2005
26	Laporan Hasil Penyelidikan Tanah Untuk Keperluan Perencanaan Pondasi Proyek Bangunan Penyaringan Sampah di Muara Baru	Document	Copy	Titik Utama Agung, Pt. Soil Mechanics Division Jakarta	Oct. 2009
27	Flood Control in DKI Jakarta	Document	Copy	DPU PROPINSI DKI JAKARTA	Dec. 2008
28	Laporan Ketinggian Air Waduk Pompa Pluit	Document	Copy	DPU PROPINSI DKI JAKARTA	Jul.2008- Dec.2009
29	Manual for seismic resistance designing for building construction	Document	Copy		2002
30	Katalog Standar Nasional Indonesia-SNI Konstruksi dan Bangunan 2009	Document	Copy	Badan Standardisasi Nasional	2009
31	Pedoman Persyaratan Teknis Bangunan Gedung	Document	Copy	Departemen Pekerjaan Umum Republik Indonesia	2006
32	Pedoman Teknis Fasilitas Dan Aksesibilitas Pada Bangunan Gedung Dan Lingkungan	Document	Copy	Departemen Pekerjaan Umum Republik Indonesia	2006
33	Daftar Pegawai DPU DAN SDPU	Document	Copy	DPU PROPINSI DKI JAKARTA	Apr. 2009