



***Metro Manila Flood Management Project***

**Resettlement Action Plan**

**Vitas Pumping Station Rehabilitation Sub-Project**

**Prepared by:**

**Department of Public Highways**

**And**

**Metro Manila Development Authority**

**November 1, 2016**

## PREFACE

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*Some five sub-projects to rehabilitate and modernize Metro Manila's pumping stations are programmed for implementation in the first year of the 6-year Metro Manila Flood Management Project (MMFMP). The Vitas Pumping Station, located in the jurisdiction of the Manila City Local Government Unit, is the only first year sub-project in the priority list of 10 sub-projects to necessitate involuntary resettlement. This Resettlement Action Plan (RAP) has been prepared pro-actively to demonstrate how the MMFMP Resettlement Policy Framework (RPF) will be applied for the resettlement and rehabilitation of people to be physically and economically displaced by this sub-project. This RAP is governed by the provisions of the RPF of this Project and part of the covenants under the Loan Agreement. All the terms of conditions and agreements under this document supersede local or national policies of the Philippine government.*

*There are two groups of issues of which the reader should be aware at this stage of project preparation: the first is substantive; the second is organizational. Significant substantive issues are: First, the identification of specific resettlement sites cannot be determined until after the project is made effective with personnel in place. Second, the fluid status of project-affected people, some of whom have already opted for a community-driven voluntary resettlement of their own volition; indicate that resettlement of some of the Vitas Pumping Station PAPs is very likely to take place during project preparation, before the MMFMP is made effective. Third, as a result, there are related limitations to the degree and extent of the RAP's consultative process before MMFMP is made effective, especially with regard to the management of expectations.*

*Organizational arrangements, which are set out in the RPF, are at this point tentative because the specifics of implementation arrangements have yet to be finally agreed between the Government of the Philippines (GoP) and the World Bank. This first RAP for MMFMP is thus prepared on the basis of implementation arrangements as set out in the RPF, which may be subject to modifications as preparations and interactions between the GoP and the World Bank move ahead.*

*Implementation of the Vitas sub-project will be initiated approximately one year or possibly more after the baseline census survey (undertaken in November 2015). Consequently it will be necessary to update the census survey at the time the MMFMP is made effective. Furthermore, during this interval, it is almost certain that some people will have already relocated on their own initiative by means of a "peoples plan" under the aegis of civil society organizations (AGOM and SHARE Foundation), which is supported by the Social Housing Finance Corporation. If, at the time of project implementation, people have been relocated with AGOM, further retrospective due diligence will be needed. Another group on non-AGOM members are very likely to be resettled by the government (PRRC, NHA and/or DPWH) in the interval. Measures are given in this RAP to ensure that their resettlement is fully in accord with the requirements of OP 4.12 and relevant government policies. Furthermore, in spite of measures to be put in place to preclude re-encroachment, it is possible that new people may take up residence in technical footprint areas previously occupied by those who have relocated with AGOM.*

*In light of this fluid situation, which is likely to characterize the relatively long interval between the baseline census survey of November 2015 and the actual initiation of project activities, consultations with project-affected people must be managed carefully to preclude false expectations.*

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## **Acronyms**

AGOM – Ang Grupo ng Organisadong Mamamayan

DENR –Department of Environment and Natural Resources

DDR – Due Diligence Report

DPWH – Department of Public Works and Highways

GOP – Government of the Philippines

HDH – High Density Housing

HH - Household Head

HUDCC- Housing and Urban Development Coordinating Council

ISF – Informal Settler Family

LGU – Local Government Unit

M&E – Monitoring and Evaluation

MMDA – Metro Manila Development Authority

MMFMP - Metro Manila Flood Management Project

NHA – National Housing Authority

PAP – Project-Affected Person

PCUP – Presidential Commission for the Urban Poor

PMO – Project Management Office

PRRC – Pasig River Rehabilitation Commission

PS – Pumping Station

RAP – Resettlement Action Plan

RPF – Resettlement Policy Framework

SHFC – Social Housing Finance Corporation

TESDA – Technical Education and Skills Development Authority

## A. PROJECT DESCRIPTION

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Rehabilitation and modernization of the Vitas Pumping Station is one of five sub-projects programmed for implementation in MMFMP's the first year. This sub-project will replace pumps and related equipment with new, more efficient, and higher capacity units. The sub-project will also finance cleaning and improvements to key sections of waterways and drainage channels serving the pumping stations to ensure unobstructed flow into the facility and enable unencumbered access for waterway maintenance.

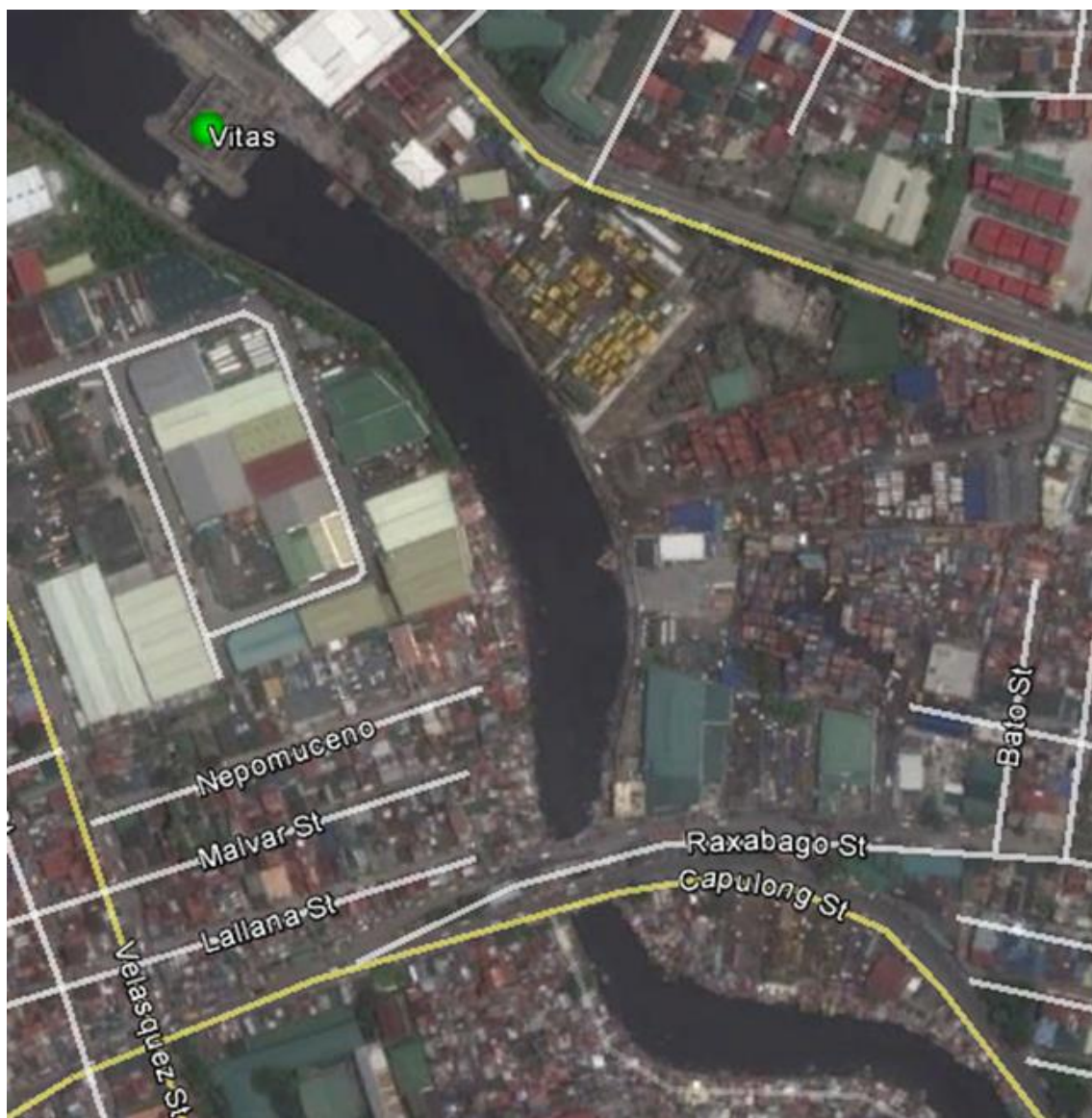
Rehabilitation of the Vitas PS will necessitate resettlement of 165 informal settler families who currently reside in structures located inside the watercourse serving the pumping station.

More specifically, the proposed scope of works in Vitas PS will be:

1. Replacement of prime movers from diesel engine to electric motor
2. Modernization of pumps with optimum pump capacity
3. Supply and installation of two (2) generator sets as standby power
4. Connection to Meralco power supply as primary power
5. Rehabilitation/replacement of auxiliary equipment
6. Rehabilitation/replacement of horizontal and inclined conveyor system
7. Rehabilitation/replacement of one (1) unit trash racks assembly
8. Rehabilitation of one (1) unit garbage hopper
9. Replacement of five (5) units secondary screens
10. Replacement of all LCP, MCC, and electrical wirings
11. Rehabilitation of building and lightings
12. Rehabilitation of three (3) units floodgates
13. Installation of additional storage tank
14. Rehabilitation of additional crane
15. Rehabilitation and upgrading of Vitas Warehouse

As seen in figure 1, (below) the area of impact is limited to obstructions under the Raxabago / Capulong Street Bridge and further downstream along the right bank of the waterway immediately below the bridge where structures have been sited on accumulations of silt and debris along the inner wall of the waterway.

**Figure 1: Vitas Pumping Station and Waterway**



As evident in the above image, the Vitas PS is located in a congested area of the Manila LGU in the general vicinity of the seaport. The environs are characterised by warehouses and similar facilities related to the seaport and the transit of goods; adjacent residential and commercial areas are generally low-rise but are densely occupied; informal settlements are commonplace along roads and public rights-of-way in the area. MMFMP has established criteria for the delimitation of waterway sections within the technical footprints of sub-projects which must be cleared of encroachments to ensure unobstructed flow and maintenance access. (The specific technical criteria used to delimit the waterway sections of technical footprints are given in annex A to this document and the RPF.)

The most significant social impact of the sub-project is resettlement of the 165 informal settler families (ISFs) now residing in places which inhibit waterway maintenance and the flow into the Vitas PS. The zone of impact is limited and has been minimized to those areas which must be kept clear of encroachments to ensure unimpeded flow and maintenance access, which are essential for optimal and sustainable operation of the rehabilitated pumping station.

## B. RAP OBJECTIVES

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This RAP is an operational plan based on the MMFMP RPF which has the following main objectives:

- (1) to physically resettle project-affected people in a safe location(s) away from Vitas pumping station's technical footprint;
- (2) to resettle project-affected people in a locality which is in reasonable proximity to their sources of income and employment or in a location where employment opportunities are determined to be adequate to restore or improve income levels and employment; and,
- (3) where current income streams and living conditions are characterised as very poor and precarious, to provide assistance for improvement of skills and income-earning opportunities.

## C. BASELINE CENSUS AND SOCIO-ECONOMIC SURVEY

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The current situation of project-affected people at the Vitas PS presents a complex and fluid situation. It is known, from discussion with community leaders and the baseline census and socio-economic survey of the 165 ISFs now residing in the waterway footprint, (undertaken in November 2015), that some 88 ISF households are listed as participants in a community organization known as *Ang Grupo ng Organisadong Mamamayan*<sup>1</sup> (AGOM), which is supported by the SHARE Foundation. AGOM has prepared a "people's plan" to relocate its members to a peri-urban area located at Barangay Muzon, in San Jose del Monte City, Bulacan Province. The resettlement site is located about 40 km from the Vitas PS area. AGOM has secured land for the resettlement community and financing for the project from the Social Housing Finance Corporation (SHFC). This group is officially known as Benjamin Village 8 Home Owners Association (BV8), of which some 80 per cent are AGOM members.

The resettlement site is somewhat distant from the Vitas PS area; however this locale is being quickly urbanized and is characterised by growth in employment opportunities. Retrospective due diligence carried out for people previously resettled by *Oplan Likas* from the Paco PS to Towerville, an area in the vicinity of the BV8 resettlement site, showed a significant increase in employment for skilled workers; however this was moderated by a significant increase in unemployment for unskilled workers.

The BV8 people's plan started as early as 2013 (before the Bank engagement date of December 8, 2014). However, implementation encountered several challenges, the main one being the failure of negotiation with the first landowner. Negotiation with a new landowner started in February 2014 and finalized two months after.

AGOM members' plan is to start preparation of the resettlement site in late January 2016. Members will construct a work camp and build temporary lodgings for couples (husband and wife only) who, together with workers from other ISF communities, will construct 1,648 units in the resettlement site. An agreement with the contractor – developer makes provision for employment of skilled and semi-skilled AGOM members. The men will be engaged in site preparation and construction work; the women will earn from food preparation and provision. Those families which do not participate in site development and construction will remain in the Vitas area in rental housing supported by a PhP 18,000 transition allowance

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<sup>1</sup> In English means "The Group of Organized Citizenry."

from the government. The plan is to complete the project in one year, with some people moving into the new area as early as 6 months after start of works when basic structures are in place and water and power connections have been started. The resettlement community will operate as a cooperative which will provide estate and financial management. The plan includes construction of a marketplace to add to the economic viability of the new community. The cooperative will also provide a transportation service for members to San Jose del Monte city center.

The AGOM undertaking is a voluntary initiative of the ISF families themselves. While it is clear that AGOM participants are not currently living in a sustainable situation; which is to say there is a risk of involuntary resettlement at some future date, possibly by *Oplan Likas* or other GoP resettlement programs, it is fair to characterize the AGOM resettlement as a voluntary community-driven initiative. The AGOM resettlement will almost certainly take place during the interval between the baseline survey of November 2015 and the date of project effectiveness, which is currently anticipated to be sometime in late 2016. As of August 1 2016, AGOM's project in Muzon San Jose Bulucan has started with activities such as site clearing, land development and staking for the construction of the first building for their members that will need relocation soonest. There has been no movement from HHs members that were recorded in the validation census that were conducted in November 2015. Reports from the leadership of AGOM indicated that the first delivery date of units is expected in May 2017 assuming that the contractor will not have any delays in its construction schedule. If completed on time, there is a big possibility that families will begin to transfer by June of 2017 which is still prior Bank's commencing the project. It is standard practice in World Bank-assisted projects to carry out due diligence on past resettlement, which in the case is taking place during the MMFMP preparation phase, to assess the process and outcome of such resettlement with respect to compliance with OP 4.12. It is important therefore for MMFMP to carry out a due diligence on the process, progress, and outcome of the BV8 and determine if additional financial or technical assistance should be provided to ensure a successful and sustainable outcome for the community.

This RAP covers all the 165 project-affected households in Vitas, including the 77 ISFs who are not AGOM members and will all be moved and provided assistance under a "preventive relocation" by the Pasig River Rehabilitation Commission (PRRC), National Housing Authority (NHA) or by the Department of Public Works and Highways (DPWH) to make way for drainage improvements during this same interval before the MMFMP is effective. Under the MMFMP, all affected households will be provided with project assistance as agreed with the Implementing Agency. Discussions at a public consultation conducted by PRRC in November 2015 (which MMDA and World Bank attended) indicated that their relocation was to take place in the next months in coordination with PRRC and NHA. Exact details are not known at this point. However, it is reasonable to assume that off-city relocation to areas developed under *Oplan Likas* in Cavite or Bulacan will be used. In-city choices for resettlement discussed with the ISFs were said to be unsafe as they are proposed at sites characterized by criminality and related social problems. Off-city choices were thus seen as preferable. However as noted, off-city relocation to areas, many of which are sited far from economic activity and employment, poses a serious problem with income restoration and retention of resettlement assets. As of August 1, 2016, relocation of HHs under *Oplan Likas* has been deferred and that negotiations between implementing agencies and the affected households to move the relocation date at a later time have been going on.



DPWH, with the support of MMDA will work with concerned agencies to ensure that the resettlement of these 165 ISFs is compliant with OP 4.12. To this end, the ISFs will be provided with a PhP 18,000<sup>2</sup> transition allowance to be paid from GoP resources to enable them to move away from the hazardous locations in the waterway to transitional rental accommodations in the Vitas area. The 77 non-AGOM members will be consulted to determine if they wish to be included in the BV8 resettlement project. AGOM leadership is open to accommodate them given that many of them are part of the social network (relatives or friends) of AGOM members. Where people do not opt to join the BV8 group, the transitional allowance will serve to support them in safer living conditions until project effectiveness, at which point MMFMP will have an available staff and budget to provide skills training and other entitlements provided for in the RPF and RAP.

## **BASELINE SOCIO-ECONOMIC SURVEY**

The survey of the 165 ISFs residing in the technical footprint of the Vitas PS gives good insights into the social and economic conditions of ISFs, which are presented in the following section.

The survey was carried out by a team of qualified personnel who undertook face-to-face interviews with the use of structured questionnaires. Quality control measures were performed by field supervisors observing the work of interviewers and randomly checking the work done during the data gathering stage. The project was provided with a master list of informal settler families and their household heads by the PRRC. Enumerators were instructed to locate and map the houses and interview the household head (or a legal age household member) for the survey. The enumerators also did an inventory of structures and other assets for each ISF. One hundred and sixty-five (165) ISF households were identified and interviewed in the project footprint.

Given previous censuses, tagging and surveys conducted by various agencies, including AGOM itself for its people's plan, MMDA and the survey team deemed it appropriate to take a low profile survey instead. Coordination was done with city and barangay officials in October-November 2015. A cut-off-date was not announced for two reasons: (1) It was done already by PRRC/NHA and (2) There will be a need for another survey later if the ISFs are not relocated by project effectiveness. (See additional discussion on census under Section "E".)

## **KEY FINDINGS**

The findings of the census/socio-economic survey are organized into six parts: (1) household demographic profile, (2) household expenditures, (3) occupation, employment and income sources, (4) household assets, (5) access to services and (6) inventory of fixed assets.

## **DEMOGRAPHIC PROFILE**

The majority (**79%**) household heads male; **21%** (16) are females. Average household size is **3.7**, which is below the 4.6 average for household members in the country, (Philippine Statistics Authority, 2012). This suggests younger families; the average age of household heads is **39.6** years.

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<sup>2</sup> Estimated to be enough for 12-18 months rental. Average rental fee for small space in the vicinity of the bridge is around PhP1,000. With the provision of housing units to the affected ISFs, this transition allowance is an important element of this RAP to ensure compliance to OP 4.12.

**Table 1: Age of Household Head (HH)**

Age of Household head	Number
Mean	39.6
Minimum	18.0
Maximum	76.0

Based on a 2-week recall, household members appear to be generally healthy with **97%** (160) citing no ailments within the household.<sup>3</sup> Only **2%** (4) mentioned that they recently had a fever. In terms of disabilities, only 1 of the 165 Households mentioned a disability and the inability to work.

**Table 2: Health Status**

Health Status 2-week recall	Number	%
Skin ailment	0.0	0%
Stomach/Diarrhea	1.0	1%
Fever	4.0	2%
No ailment	160.0	97%
<b>Total</b>	<b>165.0</b>	<b>100%</b>

The highest educational attainment of most HHs is high school graduates, for both males and females. Three (3) indicated that they had completed college.

**Table 3. HHs Educational Attainment by Gender**

Educational Attainment	Female	Male	Total
Some Elementary School	6	35	41
Elementary Graduate	4	12	16
Some High School	10	40	50
High School Graduate	7	25	32
Some Vocational Training	0	10	10
Vocational Course Graduate	1	1	2
Some College	1	1	2
College Graduate	1	2	3
No Education	0	1	1
<b>Total</b>	<b>30</b>	<b>127</b>	<b>157</b>

<sup>3</sup> It is important to note however that ISFs tend to report only their major illnesses.

**Table 4. Education Level and Employment**

Level	Gov't employee	Office worker/ Company employee	Shop-keeper/ shop-owner	Skilled work	Unemployed	Unskilled/ semi-skilled	Vendors / Street hawker	No answer	Total
Some Elementary	1	1	1	5	0	29	4	0	41
Elementary Graduate	0	0	0	0	1	13	1	1	16
Some High School	0	2	2	6	0	35	4	1	50
High School Graduate	0	4	1	10	0	14	3	0	32
Some Vocational	1	0	0	5	0	4	0	0	10
Vocational Course Graduate	2	0	0	0	0	0	0	0	2
Some College	0	2	0	0	0	0	0	0	2
College Graduate	0	1	0	1	0	1	0	0	3
Others	0	0	0	0	0	1	0	0	1
<b>Total</b>	<b>4</b>	<b>10</b>	<b>4</b>	<b>27</b>	<b>1</b>	<b>97</b>	<b>12</b>	<b>2</b>	<b>157</b>

Tables 5 and 6 show the distribution of males and females by educational level with respect to the weekly hours of work. Half (50%) of the HHs work less than 40 hours a week followed by 44% who work at least 40 hours per week. Some 95% or 157 of 165 household heads interviewed indicated that they had income streams provided on a weekly basis. The bulk of employment for those with some high school education and high school graduates is in unskilled or semi-skilled occupations; (such as labourer, helper, street sweeper, janitorial work, pedicab driver, messengers, and other similar occupations.) Women have bigger proportion of less than 40 hours of work per week.

**Table 5. Female HH's Education Level and Hours of Work / Week**

Educational Attainment	< 40 hrs/wk	>+ 40 hrs/wk	Unemployed	Total
Some Elementary	6	0	0	6
Elementary Graduate	3	1	0	4
Some High School	7	2	1	10
High School Graduate	3	4	0	7
Vocational Course Graduate	0	1	0	1
College Undergraduate	0	1	0	1
College Graduate	0	1	0	1
<b>Total</b>	<b>19</b>	<b>10</b>	<b>1</b>	<b>30</b>

**Table 6. Male HH's Education Level and Hours of Work / Week**

<b>Educational Attainment</b>	<b>&lt; 40 hrs/wk</b>	<b>&gt;+ 40 hrs/wk</b>	<b>Unemployed</b>	<b>Total</b>
Some Elementary	23	12	0	35
Elementary Graduate	7	3	2	12
Some High School	15	24	1	40
High School Graduate	10	15	0	25
Some Vocational	6	4	0	10
Vocational Course Graduate	0	1	0	1
Some College	0	1	0	1
College Graduate	1	1	0	2
Others	1	0	0	1
<b>Total</b>	<b>63</b>	<b>61</b>	<b>3</b>	<b>127</b>

When asked about their work location, **78%** (68) indicated that they work within the City LGU, while only 15% work outside their home city / LGU. The remaining 7% are unemployed.

**Table 7. Distribution of Household's Work Location by Gender**

<b>Work Location</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
Within LGU	27	101	128
Outside LGU	2	23	25
No answer	1	3	4
<b>Total</b>	<b>30</b>	<b>127</b>	<b>157</b>

**Table 8. Distribution of Household's Religious Affiliation**

Religious Affiliation	Number	%
Catholic	162	98.18%
Christian	1	0.61%
Iglesia Ni Cristo	1	0.61%
Islam	0	0.00%
Others	1	0.61%
Mormons	1	0.61%
<b>Total</b>	<b>165</b>	<b>100.00%</b>

Almost all of the households (98%) said they are Catholic.

In terms of ethnicity, majority of the households (**79%**) identify themselves as Tagalog. Ten percent (**10%**) said that they are Bisaya; some **4%** mentioned that they are Ilocano.

**Table 9. Distribution of Household's Ethnicity**

Ethnicity	Number	%
Tagalog	131	79%
Bisaya	16	10%
Kapangpangan	3	2%
Ilocano	6	4%
Ilonggo	2	1%
Others	7	4%
Bicolano	2	1%
Pangalatok/ Bicolano	1	1%
Waray	1	1%
Not Specified	3	2%
<b>Total</b>	<b>165</b>	<b>100%</b>

When asked about their membership to any social organization, majority (**94%**) mentioned that they are not a member of any organization while **5%** said they are members of AGOM. Responses on membership in social organizations appear to be under-reported. Given the various resettlement programs being discussed in the area, many ISFs may not want to reveal their affiliation to keep their options open. Subsequent discussions with AGOM indicated that 88 or the 165 households were officially registered as members of the AGOM / SHARE Foundation resettlement project (BV8), which is scheduled to start work in January 2016.

**Table 10. Membership in Social Organizations**

Membership in Social Organizations	Total	%
AGOM	8	5%
Senior Citizen Association	2	1%
No Membership	155	94%
<b>Total</b>	<b>165</b>	<b>100%</b>

### Household Expenditures

When asked to estimate basic monthly household expenditures, the average monthly amounts reported are:

**Table 11: Average Household Monthly Expenditures**

Expenditure	PhP
Rent	861
Electricity	774
Water	594
Transportation	865
Education	1,634
Food	5,025
Clothing	137
Medicine	294
Total	9,084

### OCCUPATIONS, EMPLOYMENT AND INCOME SOURCES

When asked about their primary occupation, more than half of the households mentioned that they are unskilled or semi-skilled workers. Some **17%** (27) said that they are skilled workers. Eight percent (**8%**) of the households reported that they are either street vendors or street hawkers closely followed by the 6% who work for companies.

**Table 12: Primary Occupations by Gender**

Type of Employment (Primary)	Female	Male	Total
Government employee	1	3	4
Office worker/ Company employee	4	6	10
Skilled worker	2	25	27
Unskilled/semi-skilled	14	83	97
Shopkeeper/shop-owner	2	2	4
Vendors/Street hawker	7	5	12

Unemployed	0	1	1
No answer	0	2	2
<b>Total</b>	<b>30</b>	<b>127</b>	<b>157</b>

In terms of income from their primary occupations, the average monthly income is **Php 7,123**. It must be noted that the range of income is wide: the minimum income was documented at Php 500 for a household with 3 members composed of a grandmother working as a shopkeeper and her two grandchildren. In contrast, the maximum income was reported at Php 20,000 for a respondent who is a government employee.

**Table 13: Monthly Income from Primary Occupation**

Income	PhP
Mean	7,123
Median	7,200
Mode	9,000
Standard Deviation	3,782
Minimum	500
Maximum	20,000

With regard to a secondary occupations, only **4%** of households mentioned that they have another line of work as an unskilled/semi-skilled worker while the remaining **96%** do not have a second job. For those who do have a secondary occupation, the average income is **PhP 1,786**.

**Table 14: Monthly Income from Secondary Occupation**

Income	PhP
Mean	1,786
Median	1,500
Mode	1,500
Standard Deviation	1,321
Minimum	800
Maximum	4,500

The great majority of households (97%) do not receive remittances or have other external sources of income. Only 5 households mentioned receiving income from other sources: **1%** of that they receive remittances, **1%** receive a government subsidy, **1%** earns from business and another **1%** has income from rent.

**Table 15: Income from Other Sources**

Other Sources of Income	Female	Male	Total
Business	0	1	1
Government subsidy/pension	0	1	1
Remittance from relative	0	1	1
Rental Income	0	2	2
<b>Total</b>	<b>0</b>	<b>5</b>	<b>5</b>

The average income of those who receive remittances is **PhP 2,000**.

The total monthly household income of Households from the Vitas Pumping Station is **PhP 10, 852.56**.

**Table 16: Total Household Income**

TOTAL HOUSEHOLD INCOME	
Mean	10,852.56
Median	9,600.00
Minimum	500.00
Maximum	45,400.00

### HOUSEHOLD DEBT

Just over one-quarter (26%) of the households reported having debts at the time of the survey. The average amount of household debt for this group is PhP 6,474.

More than half of these household (60%), identified borrowing from moneylenders, with interest rates on the order of 20 % per month. Other sources are shown in the table below. It is likely that debts are under-reported and that larger amounts may be sourced from money lenders and smaller amounts from relatives, friends and neighbors.



**Table 17: Sources of Loans**

Source	Number	%
5/6 lending (moneylenders)	26	60%
Store	5	12%
Employer	4	9%
Friend or relative	3	7%
Eatery	1	2%
Food	1	2%
Neighbor	1	2%
Paluwagan	1	2%
TSPI- (microfinance)	1	2%
Total	43	100%

## HOUSEHOLD ASSETS

Respondents were asked about ownership of basic household assets.

**Table 18: Household Assets**

Item	Number / $\Sigma$	%
Radio	39 / 165	24%
TV	53 / 165	32%
Refrigerator	2 / 84	2%
Washing Machine	15 / 165	9%
Gas Stove	15 / 165	9%
Electric Fan(s)	128 / 165	78%

Only **3%** of households reported owning a sofa; 3% reported having a dining table and chairs. None of the Households own a motor vehicle (car or a jeep); only a few (**4%**) owns a tricycle. Some **31%** of the households said they own 1 telephone or mobile phone, **16%** own at least two phones, but the majority (**53%**) of have no mobile phone. Only **3%** said they own a computer.

## ACCESS TO SERVICES

When asked about their access to electricity, majority (**79%**) mentioned of being connected to the power grid through a sub-meter; a significant number of the Households (**13%**) do not have access to electricity.

**Table 19: Access to Electricity**

Source of Electricity	Number	%
Gen set private	1	1%
Gen set from developer	0	0%
Power Utility / Grid	131	79%
Jumper from neighbor	3	2%
Other sources	9	5%
None	21	13%
<b>Total</b>	<b>165</b>	<b>100%</b>

Most of the Households (**85%**) visit the barangay health center for their health service needs while only **9%** mentioned of going to the nearby village center or hospital.

**Table 20: Access to Health Services**

Where do you go for health services needs?	Number	%
Barangay/village health center with medical staff and supplies	141	85%
Barangay/village health center without medical staff and supplies	5	3%
Nearby Barangay/town health center/hospital	15	9%
Others	1	1%
Jose Reyes	1	1%
None within thirty minutes of travel	3	2%
<b>Total</b>	<b>165</b>	<b>100%</b>

In terms of their household's main source of drinking water, majority of the households (**83%**) mentioned of fetching water, while **10%** buy their drinking water from resellers. Only **7%** said that they have access to piped water (i.e. Manila Water or Maynilad).

**Table 21. Access to Potable Water**

What is the family's main source of drinking water?	Number	%
Piped water (municipal system)	11	6%
Resellers/private sources	16	10%
Other sources / <i>Igib</i> system / shared	138	84%
<b>Total</b>	<b>165</b>	<b>100%</b>

More than half of the households (64%) reported that the LGU collects their garbage; some 18% said that their solid waste were collected by the Barangay garbage truck. Sixteen percent (16%) do not have access to a solid waste disposal service. All households dump their water wastes into the estero.

**Table 22: Solid Waste Disposal**

Where do you dispose your solid waste?	Number	%
Provided by LGU	106	64%
Provided by Barangay	30	18%
Private collection service	3	2%
None	26	16%
<b>Total</b>	<b>165</b>	<b>100%</b>

**Table 23: Disposal of Liquid Waste**

Where do you dispose of your liquid wastes?	Number	Percentage
Septic tank	0	0%
River/Estero	165	100%
<b>Total</b>	<b>165</b>	<b>100%</b>

Access to government programs is generally very low. The most accessed programs are the PhilHealth services (34%), closely followed by the Pantawid Pamilyang Pilipino Program (32%). Seventeen percent (17%) of the households access the government’s supplemental feeding and some 7% take advantage of the subsidized rice program.

**Table 24: Access to Government Programs**

Do you have Access to the following Government Programs? (multiple answers)	Access				Total
	Yes	Percentage	No	Percentage	
Scholarships	9	5.45%	156	94.55%	165
4Ps/CCT	52	31.52%	113	68.48%	165
Phil-Health	56	33.94%	109	66.06%	165
Supplemental Feeding	28	16.97%	137	83.03%	165
Subsidized Rice	12	7.27%	153	92.73%	165
<b>Housing Program</b>	<b>2</b>	<b>1.21%</b>	<b>163</b>	<b>98.79%</b>	<b>165</b>
<b>Others (1)</b>	<b>7</b>	<b>4.24%</b>	<b>158</b>	<b>95.76%</b>	<b>165</b>
<b>DSWD Homeless Program</b>	<b>1</b>	<b>0.61%</b>	<b>164</b>	<b>99.39%</b>	<b>165</b>
<b>Manila Health Care System</b>	<b>1</b>	<b>0.61%</b>	<b>164</b>	<b>99.39%</b>	<b>165</b>
<b>NHA Housing Program</b>	<b>1</b>	<b>0.61%</b>	<b>164</b>	<b>99.39%</b>	<b>165</b>
<b>Senior Citizens’ Program</b>	<b>1</b>	<b>0.61%</b>	<b>164</b>	<b>99.39%</b>	<b>165</b>
<b>SSS</b>	<b>3</b>	<b>1.82%</b>	<b>162</b>	<b>98.18%</b>	<b>165</b>
<b>Pag-Ibig Fund</b>	<b>1</b>	<b>0.61%</b>	<b>164</b>	<b>99.39%</b>	<b>165</b>

## INVENTORY AND OWNERSHIP OF FIXED ASSETS

The baseline survey also inventoried household structures and fixed assets. Of the 165 households, only **12%** mentioned that they rent while another **12%** share their house. Just over three-quarters (**76%**) of the households owned their structures.

More than half (**63%**) of the Households' roofing materials used galvanized iron, aluminum, tile, concrete, brick, stone, asbestos while **20%** mentioned of using light materials such as cogon, nipa or *anahaw*. The total average area for the roof was noted at **10.26 square meters**.

**Table 25: Distribution of Roofing Materials**

Roofing Material	Number	%
Strong materials (galvanized iron, aluminum, tile, concrete, brick, stone, asbestos)	104	63%
Light materials (cogon, nipa, anahaw)	33	20%
Mixed but predominantly strong materials	13	8%
Mixed but predominantly light materials	15	9%
<b>Total</b>	<b>165</b>	<b>100%</b>

The walls of the surveyed houses were predominantly (**68%**) made out of wood; **12%** were constructed using half concrete, brick, stone and wood and another **10%** used makeshift and salvaged materials. The total average area for the walls was reported at **20.68 square meters**.

**Table 26: Construction Materials Used for Walls**

Walls	Number	%
Wood construction	113	68%
Hollow brick construction	15	9%
Makeshift/salvaged/improvised	17	10%
Half concrete/brick/stone and half wood	19	12%
No wall	1	1%
<b>Total</b>	<b>165</b>	<b>100%</b>

The average floor area for the structures is **9.63 square meters**. Materials used for flooring are given below.

**Table 27: Flooring Materials**

Floors	Number	%
Wood	118	72%
Cement with tiles	6	4%
cement with wood	12	7%
cement only	27	16%
dearth flooring	2	1%
<b>Total</b>	<b>165</b>	<b>100%</b>

Columns for the majority of the households (**87%**) were made of wood. Six percent (**6%**) of the households stated their houses do not have columns.

**Table 28: Distribution of Construction Materials Used for Columns**

Columns	Number	%
Wood construction	144	87%
Hollow brick construction	6	4%
Makeshift/salvaged/improvised	0	0%
Half concrete/brick/stone and half wood	5	3%
No columns	10	6%
<b>Total</b>	<b>165</b>	<b>100%</b>

Of the 165 households, only six (**4%**) were seen to have a second floor<sup>4</sup> in their dwelling. Of the six, most (**67%**) used strong materials such as galvanized iron, aluminum, tile, concrete, brick, stone, or asbestos for the roofs. All used wood construction for the walls, floors and columns.

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<sup>4</sup> Second floor in this case is usually a very small space enough for some members of the household to crawl in to sleep.

## D. LEGAL FRAMEWORK.

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Land acquisition for the Vitas PS does not involve acquisition of private land or necessitate expropriation. The project-affected people are known in the Philippines as informal settler families (ISFs), who under the rubric of OP 4.12 would be considered as squatters encroaching on a public right-of-way. The RPF provides a detailed comparative analysis of Philippine laws and regulations with respect to World Bank policy on involuntary resettlement. In brief, the resettlement of Informal Settlers is set out in law (R.A. 7279) which states that eligible homeless and poor informal settlers in urban areas are entitled to resettlement if they are affected by development projects. However, this law is silent on compensation for informal structures, including those used for commercial purposes. Table below provides an analysis of gaps between national laws and OP 4.12 as they apply to Vitas PAPs and proposed measures to fill the gaps.

**Table 29. Analysis of Gaps between Philippine Laws and OP 4.12.**

KEY ISSUES	PHILIPPINE POLICY	WORLD BANK POLICY	MEASURES TO FILL GAPS
<b>Persons Considered as Project-Affected Persons (PAPs)</b>	PAPs consist of all members of a household who will be adversely affected by the project because their real property shall be acquired for government infrastructure projects	Persons/People impacted by Involuntary taking of land resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location.	<p>Everyone who occupies land or structure and those that conduct livelihood activities at cut-off date within the ROW limits shall be identified and properly recorded including their condition in life, and their personal circumstances.</p> <p>Each person so identified in the validated census list in November 2015 shall be considered PAP and shall be provided with assistance as provided for in this RAP and the RPF including compensation for their structures as well as rehabilitation measures to improve or at least restore livelihood and living standard</p>



KEY ISSUES	PHILIPPINE POLICY	WORLD BANK POLICY	MEASURES TO FILL GAPS
<b>Loss of Income or Sources of Livelihood</b>	<p>Major government policies (e.g. RA 7279, RA 10752) are silent regarding loss of income directly resulting from land acquisition.</p> <p>However, some agency-specific policies like the DPWH LARRIP Policy 2007 and DO 327 s. 2003 cover income loss:</p> <p>LARRIP on Income Loss. “For loss of business/ income, the PAF will be entitled to an income rehabilitation assistance not to exceed P 15,000 for severely affected structures, or to be based on the latest copy of the PAF’s Tax record for the period corresponding to the stoppage of business activities”</p> <p>DO 327 s. 2003 provides transitional allowance for severely affected shop owners for their computed income loss during demolition and reconstruction of their shops</p>	Displace persons should be assisted to improve their efforts to improve their livelihoods and living standards or at least to restore them	The project should compensate for lost income and provide rehabilitation measures to improve livelihoods and living conditions of PAPs or at least restore them to pre-project level.

KEY ISSUES	PHILIPPINE POLICY	WORLD BANK POLICY	MEASURES TO FILL GAPS
<b>Treatment of Informal Settlers</b>	<p>R.A. 7279 states that eligible homeless and poor informal settlers in urban areas are entitled to resettlement if they are affected by development projects. However, R.A. 7279 limits this to residential informal settlers and is silent on informal structures on public or private land used for commercial purposes.</p> <p>Government also exclude from the eligibility list people who were previously resettled.</p>	<p>Sections 15-16 stipulate that informal settlers should be provided resettlement assistance</p>	<p>The project will replace lost structures and other assets of informal settlers. Replacement options include rehousing, cash compensation, rental support while waiting for the housing units to become available, transportation costs, and rehabilitation costs to restore lost livelihood.</p> <p>PAPs found to be previously resettled are not automatically excluded especially if they returned due to lack of livelihood in the resettlement sites.</p> <p>For structures that encroach on public lands and used for purely commercial purposes, compensation will be equivalent to the loss of business income only.</p>

OP 4.12 entitlements for informal settlers are described in Section 15 and 16 and in Footnotes 11, 12 and 21. Operationally, these may include payment of replacement cost for affected structures, transfer costs, and costs of rehabilitation in the new site. OP 4.12 requires effective consultation and participation of project-affected people in planning and implementing resettlement as well as a clear and accessible grievance redress mechanism. A central feature of World Bank involuntary resettlement policy is to

approach resettlement as a development undertaking in which restoration of, or where needed, improvements to income streams is a central factor in achievement of a sustainable outcome.

As discussed in more detail in the RPF, much of the resettlement in Metro Manila in recent years has been undertaken by the National Housing Authority (NHA) program known as *Oplan Likas*, which has resettled large numbers of ISFs along waterways and other unsafe locations at both in-city and off-city locations. Constraints on the availability of (very valuable) urban land have led to the almost exclusive use of off-city locations for re-housing of ISFs. While in-city resettlement appears to be generally positive, as it does not result in a significant disconnection from people's sources of livelihoods; resettlement at off-city locations has been less successful because of the costs and related difficulties encountered by those resettled in retaining the link to former employment in Metro Manila. An evaluation by the Presidential Commission on the Urban Poor and other studies indicate that about 50 per cent of those resettled at off-city sites return to the Metro Manila area. Tracer studies undertaken during MMFMP preparation do show that where people have been resettled in off-city areas closer to Metro Manila, which are quickly urbanising and experiencing economic growth, such areas do offer new employment opportunities and an increase in employment for those with skills. However, retention of housing at the new sites remains low in such instances, at about 60 per cent, as unskilled people must return to former areas to sustain the connection with former sources of income.

In some cases, community-based civil society organizations have successfully and voluntarily organised to prepare "people's plans" to facilitate their own resettlement. People's plans are normally supported by SHFC, which plays a key role in financing arrangements. Typically these plans are based on concessionary financing in which participants enter into a long term mortgage arrangement leading to ownership of a home. While the modalities of planning and implementation may not correspond fully with the specifics of OP 4.12, support for such plans may be a viable option for resettlement where land has been secured under the people's plan and financing and technical support are in place.

In light of these realities, the RPF and entitlements to project-affected people of the ISF category will focus on in-city resettlement as a first priority. Entitlement for skills training is provided during transition to all ISF families, (2 trainings per family with a minimum of one training for female household members) to improve the employability of people, some of whom may opt for voluntarily resettlement in urbanising areas outside Metro Manila by means of a people's plan.

The RAP provides for the following four key entitlements:

- Compensation at replacement cost for lost structures and fixed or immovable assets (Note: this may be for ISFs who will opt for cash compensation and not for house and lot options in resettlement sites. Otherwise, it may be looked at as double compensation, and may potentially create tension between PAPs and host resettled ISFs (by *Oplan Likas*) or between ISFs and concerned government agencies.)
- Affordable in-city or near-city physical resettlement at locations in reasonable proximity to places of work and sources of income, which is essential to preclude any significant increase in travel costs and time to work places. As an option, in-city resettlement may take the form of redevelopment of the slum area or another area in its vicinity. Off-city locations experiencing growth and urbanization where employment opportunities are available are not precluded *a priori*,

however due diligence on job market opportunities and skills training will have to be undertaken and should form part of this RAP to support a sustainable outcome, especially for those who are unskilled.

- Transitional allowances and related support measures which are needed to assist PAPs with movement to the resettlement location and rental expenses as needed while resettlement accommodations are under construction.
- Investments in human development, such as skills training for family members which are needed to improved employability and income.

The entitlement matrix, as given in the RPF is shown below.

**Table 30: Entitlement Matrix**

<b>PAP Category</b>	<b>Impact</b>	<b>Entitlement</b>
Resident owner of informal structure (125 PAPs per November 2015 survey)	Loss of dwelling, potential loss of access to work place.	<p><b>For those that will not avail of housing assistance:</b></p> <ul style="list-style-type: none"> <li>• Compensation at full replacement cost for lost structures/assets based on market value of materials and labor. Government also provides free transportation assistance for those who will opt to go back to provinces.</li> </ul> <p><b>For those that will avail of housing assistance:</b></p> <ul style="list-style-type: none"> <li>• Inclusion in social (amortized) rehousing schemes; or provision of subsidized housing rental unit for those unable to afford a mortgage.</li> <li>• Rental subsidy / voucher for up to 24 months while waiting for the availability of the units in resettlement site; or staging area. (<i>This entitlement may be extended to meet the completion date of resettlement housing.</i>)</li> <li>• Transition allowance for moving costs to resettlement site.</li> <li>• Moving assistance – trucks for personal belongings; vans for women and children.</li> <li>• Free access to skills training and related livelihood restoration programs for male and female family members.</li> </ul>
Renter of informal structure (20 PAPs per November 2015 survey )	Loss of dwelling, potential loss of access to work place.	<ul style="list-style-type: none"> <li>• Inclusion in social (amortized) rehousing schemes; or provision of subsidized housing rental unit for those unable to afford a mortgage.</li> <li>• Rental subsidy / voucher for up to 24 months (extendible if needed) while waiting for the availability of the units in resettlement site</li> <li>• Transition allowance for moving costs to new</li> </ul>

		<p>rental unit.</p> <ul style="list-style-type: none"> <li>• Moving assistance – trucks for personal belongings; vans for women and children</li> <li>• Free access to skills training and related livelihood restoration programs for male and female family members.</li> </ul>
Sharer/Rent-Free Households (20 households per November 2015 survey)	Loss of dwelling, potential loss of access to work place.	<ul style="list-style-type: none"> <li>• Inclusion in social (amortized) rehousing schemes; or provision of subsidized housing rental unit for those unable to afford a mortgage.</li> <li>• Rental subsidy / voucher for up to 24 months (extendible if needed) while waiting for the availability of the units in resettlement site</li> <li>• Transition allowance for moving costs to new rental unit.</li> <li>• Moving assistance – trucks for personal belongings; vans for women and children</li> <li>• Free access to skills training and related livelihood restoration programs for male and female family members.</li> </ul>
Vulnerable People (All PAPs with children, 1 HH with PWD)	Resettlement could affect social support networks and physical conditions of vulnerable PAPs (children, pregnant women, persons with disabilities (PWD) and illnesses.	<ul style="list-style-type: none"> <li>• On top of assistance depending on which options they chose (housing or cash compensation), welfare agency additional support will be provided to ensure that vulnerable people are assisted as needed in resettlement transition. E.g. Vans provided for women and children; special assistance for pregnant women, PWDs, etc.</li> </ul>
Female-headed households (30 Households per November 2015 survey)	Resettlement may pose additional hardships for female household heads, especially those who are very poor or without sufficient social network support.	<ul style="list-style-type: none"> <li>• On top of assistance depending on which options they chose (housing or cash compensation), welfare agents will assist with any additional measures needed to ensure a smooth transition in resettlement for female household heads and children.</li> </ul>
HH Returnees from previous resettlement site		<ul style="list-style-type: none"> <li>• Under the terms of the RPF and this RAP, people who have previously been resettled but have returned to places of past pre-resettlement origin are not to be excluded if they have returned</li> </ul>

		because of loss of employment and are financially unable to sustain themselves at the previous resettlement site. Entitled to a thorough screening and if found eligible, entitled to options provided to PAPs.
Professional squatters (as determined by a thorough assessment by IA)		<ul style="list-style-type: none"> <li>Will go through a process of thorough screening. GoP Resettlement programs screen census lists to exclude those who have been previously resettled from being resettled once again. There are cases, both of individuals and more organized schemes, where people take up assets at resettlement sites, dispose or abandon the assets, and return to Metro Manila.</li> </ul>

General note: This RAP is governed by the provisions of the Resettlement Policy Framework of this Project and part of the covenants under the Loan Agreement. All the terms of conditions and agreements under this document supersede local or national policies of the Philippine government.

## E. RESETTLEMENT PROCESS, INSTITUTIONAL FRAMEWORK AND ORGANIZATIONAL RESPONSIBILITIES

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Organizational arrangements, which are set out in the RPF, are at this point tentative because the specifics of implementation arrangements have yet to be finally agreed between the Government of the Philippines (GoP) and the World Bank. This first RAP for MMFMP is thus prepared on the basis of implementation arrangements as set out in the RPF, which may be subject to modifications as preparations and interactions between the GoP and the World Bank move ahead. All resettlement activities will be carried out in close coordination with relevant LGUs, including the host LGU, and under the oversight of DPWH and HUDCC.

### **Institutional Preparation**

The Vitas PS rehabilitation sub-project will be implemented under the management of the DPWH Project Management Office (PMO) which will work in close coordination with MMDA, SHFC, NHA, PRRC and Manila City LGU Housing and Resettlement Team (HRT).<sup>5</sup>

Once MMFMP is effective, the PMO will engage experienced professionals to monitor and support implementation by the Manila City LGU's HRT to ensure consistency in resettlement implementation across sub-projects, provide guidance on inter-LGU arrangements where PAPs may move from one LGU's jurisdiction to another, and support capacity enhancement and specific training needs.

DPWH is responsible for implementing its sub-projects in accordance with the Resettlement Policy Framework (RPF) and Environmental Safeguards Management Framework (ESMF). The PMO is composed of a team leader, resettlement specialist, social development specialist, livelihoods specialist, a supervising

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<sup>5</sup> The MMFMP institutional and organizational arrangements are provided in full detail in the RPF.

engineer, procurement specialist, financial management specialist and monitoring and evaluation specialist.

The PMO is responsible for:

- Screening and detailed assessments of involuntary resettlement impacts for the rehabilitation of the Vitas PS.
- Preparation of this RAP.
- Coordination with SHFC, NHA, PRRC and the LGU to ensure that acceptable sites for re-housing and rental housing stock are made available to meet the resettlement needs of PAPs.
- Ensuring that resettlement activities, regardless of financing source, comply with the provisions of this RAP, the ESMF and RPF, and WB OP 4.12.
- Assisting the Manila LGU in setting up and capacitating its Housing and Resettlement Team to handle the day-to-day operation and implementation of housing and resettlement activities.
- With SHFC, ensuring that sufficient funds are made available for housing and resettlement activities under this RAP.
- Assisting SHFC, NHA, PRRC and the Manila LGU in establishing a grievance redress standardized mechanism, as described in this RAP and the RPF, to receive and facilitate tracking and resolution of affected peoples' concerns, complaints, and grievances.
- Establishing a Public Complaints Unit at the PMO level which includes a grievance committee or panel composed of respected independent individuals to assist with grievance redress in difficult instances.
- With SHFC, NHA, PRRC, conducting capacity-building activities for officials and staff of the LGU-HRT including but not limited to: (a) resettlement planning including identification of PAPs, mapping/survey and census tagging, (b) construction supervision/monitoring, (c) resettlement M&E and reporting, and (d) grievance handling, among others.
- Preparation of quarterly resettlement monitoring reports to be submitted to MMDA and DPWH management and the World Bank.
- Establishing and maintaining a standardized resettlement monitoring and evaluation (M&E) system under the project.
- Contracting services of external monitoring agents for independent monitoring and evaluation of RAPs.
- Ensuring that contracts for contractors and sub-contractors stipulate preclusion of access to project sites before the PMO has issued clearance. (i.e. resettlement has progressed to a point at which PAPs have vacated the site as per provisions of the RAP.)

The Social Housing and Finance Corporation, in the case of AGOM-led People's Plan, and NHA/PRRC in the case of remaining PAPs, as the direct implementing agency, will be responsible for:

- Presenting all available resettlement options to PAPs.
- Land acquisition.
- Housing and site development.
- Engagements with NGOs / CSOs or community groups to be involved in resettlement, undertaking social preparation, facilitating understanding and selection of resettlement options and

entitlements as appropriate, and arranging for capacity-building of community associations in coordination with the PMO.

- Conducting or facilitating technical studies including soil suitability tests, geo-technical surveys, subdivision plans, and housing and community infrastructure designs.
- Construction supervision and monitoring.
- Implementing rental support and transitional arrangements for PAPs as indicated in this RAP.
- Engaging service providers (CSOs and other support or resource agencies) to implement livelihood support activities for PAPs.

#### Composition and key Functions of LGU-Housing and Resettlement Team (HRT)

The Manila LGU will be required to establish a tripartite Housing and Resettlement Team (HRT) to oversee and support the day-to-day implementation of resettlement activities. The HRT will be composed of staff drawn from relevant LGU offices (Urban Poor Affairs Office/Urban Settlements Office, City Social Welfare and Development, City Planning Office, and City Engineering Office), designated personnel from NHA or SHFC, and representatives from the CSO that will be engaged to carry out social preparation activities. Staff from other city departments including Budget Office, City Planning and Development Office, and City Environment and Natural Resources Office may be engaged as project activities require.

With the assistance of the PMO and SHFC, the Manila LGU- HRT will be responsible for:

- Identification of sub-project PAPs; conducting mapping, surveys, and census tagging of PAPs.
- Organizing and conducting consultations, arrangements for community participation, and public disclosure.
- Assignment of a Community Contact person and inform PAPs and affected communities of their schedule of availability, their location / meeting place when in the affected area, and their contact information, such as cellular telephone number.
- Providing RAP-level grievance management for sub-projects in coordination with the PMO.
- Using criteria established by the PMO and with assistance from the PMO, monitor and track RAP implementation progress and flag key issues which may affect timely completion.
- Preparing and providing monthly RAP monitoring reports to the PMO.

#### **Census, Socio-Economic Survey, Asset Inventory and Community Consultation**

DPWH/MMDA PMO, SHFC and the LGU HRT will consult with the affected community prior to project appraisal. Another consultation will be conducted soon after the Vitas PS sub-project is made effective, as previously mentioned. The team will inform the affected people about the project, the necessity for resettlement, and salient features and the timing of the works to be carried out and the associated resettlement process. The 165 HHs will be provided with specific information such as compensation, amount of resettlement assistance, timing and process of claiming assistance. This process will accord them opportunity to choose from among the resettlement options available for the project. As a matter of GoP policy on relocation, all structure owners that will opt for relocation will be given a housing assistance of their choice from the available resettlement areas identified in this project. Non-structure owners as renters and sharers will be consulted and provided resettlement assistance in the same timing with the structure owners. This will mean that no one will be left unassisted. Compensation for affected HHs will be discussed through series of community meetings, individual and group discussions.



The cooperation of project-affected people is requested with the census, socio-economic, and assets survey. The RAP implementation team will carry out the census and related surveys with the shortest delay possible, establish a cut-off date to entitlements, and take measures to preclude re-encroachment of areas in the sub-project's technical footprint. A validation of affected HHs will be undertaken by the Project prior to project implementation stage.

### **Post-Survey Consultations on Options and Entitlements**

Continuing post-survey consultations, facilitated by the LGU's Community Contact, during implementation will cover issues related to resettlement site options, entitlements, timing and key steps to be taken in their resettlement. The RAP implementation team will introduce the community contact person and contact details; inform them of arrangements for the timely provision of relevant information and management of grievances or issues if and as they arise. The community will be encouraged to actively participate in resettlement activities and asked to designate individuals to represent them in the resettlement process.

### **RAP Updating**

The implementing agencies and LGU HRT teams analyze survey information and provide it to the PMO for review and feedback. Subsequently the RAP implementation team meets with project-affected people to discuss the specifics of entitlements and other options or measures to be provided for their resettlement and economic rehabilitation. Arrangements for continuance of consultations, updates, and community participation are established, aided by the Community Contact person. The end result of this process is an updated RAP.

Resettlement site(s) will be identified by the LGU at in-city locations, ideally within the LGU in proximity to current locations where project-affected people now reside. If availability of resettlement sites is constrained, the LGU may opt to undertake restructuring or redevelopment, preferably in the immediate vicinity, of slum areas. This option will necessarily involve host communities, for whom the same RAP procedures and entitlements will be provided. Where redevelopment is indicated as the best option under prevailing circumstances, a census, socio-economic survey, and assets inventories will be carried out for host areas in this initial phase. Priority in employment will be given to PAPs in reconstruction and redevelopment work of slum areas to the extent feasible. If it is arranged that communities from the LGU are to be resettled in a neighboring LGU, the PMO will facilitate a MoU between the two LGUs and ensure effective coordination and the provision of any budgetary or other resources and services are provided to ensure that RAPs are implemented in a timely manner.

Physical resettlement of PAPs residing in the technical footprint areas of the waterways is not a necessary pre-condition for contractors' access to the work site. Anticipated works will be undertaken within the confines of the facility itself, which is fenced, well delimited, and free of encroachments. The necessity for resettlement along the waterway is driven by the need for unhampered flow and maintenance access to the waterway to ensure optimal performance of the pumping station. It is essential nevertheless that resettlement and related waterway maintenance activities are completed in a timely way to ensure that the refurbished facility is free of waterway blockages and thus ready to be commissioned for operation.

## **F. VALUATION OF ASSETS AND COMPENSATION FOR LOSSES.**

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LGU experts have calculated the average value for the replacement cost of housing structures at Vitas at an average cost of PhP 3000 / m<sup>2</sup>. Based on an average floor space of 10.26 m<sup>2</sup>, the compensation value is estimated to be on the order of PhP 30,000-40,000 per structure, depending on floor space and construction materials. The MMDA census and socio-economic survey of the 165 ISFs has specific data on assets and structures affected. However, as mentioned earlier, a revalidation of this survey may be needed depending on the start of the project-initiated resettlement.

## **G. MEASURES TO PREVENT LAND SPECULATION OR INFLUX OF INELIGIBLE PERSONS AT THE SELECTED SITES.**

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The City LGU and the authorities at the Barangay level are the front line entities responsible for management of encroachments along waterways. It is known that heavy pressure is constantly exerted on public spaces for construction of dwellings. MMDA and DPWH will work with the City LGU and concerned Barangay LGUs to formalize arrangements needed to ensure that re-encroachment of key waterway areas is precluded during implementation and operation of the sub-project in Vitas. It is known that there are people who construct and rent structures built in contradiction of the law on public rights-of-way. The arrangements formalized between the project agencies responsible for the operation of pumping stations will preclude access for such purposes.

## **H. ENVIRONMENTAL PROTECTION AND MANAGEMENT.**

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All sites to be taken up for resettlement, including repurposing and renovation of existing structures or possible rehabilitation of existing slum areas will be screened for environmental effects. Appropriate environmental management measures will be put in place to address any adverse environmental impacts in line with the ESMF.

## **I. CONSULTATION AND COMMUNITY PARTICIPATION.**

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As set out in the RPF, LGU HRT will consult with project-affected people once a sub-project has been identified as a first step in the preparation of the RAP. Initial consultations will serve as a starting point to inform and include the participation of PAPs in resettlement. The HRT will designate a community contact individual who will ensure regular interaction with the PAPs to ensure timely and effective provision of information as the RAP is planned and implemented and to facilitate solution of issues or management of grievances. PAPs will be given priority in employment for structure demolitions, resettlement site preparation and construction.

## **J. GRIEVANCE PROCEDURES.**

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Affordable and accessible procedures for resolution of grievances and disputes arising from resettlement are provided in detail in the RPF. Grievances will be tracked to their resolution in the project management information system and supported by an independent third party grievance committee. The grievance

management mechanism provides easy, no-cost access and multiple levels of appeal before issues are brought to the level of the law courts.

MMDA and DPWH will establish a Public Complaints Unit to address and resolve any project-related grievances from project-affected people or other stakeholders and members of the public. It will be managed with the support of the social and environmental team in the PMO.

The project will engage the services of non-project related advisers to serve on a panel to help resolve difficult grievances. The panel members will be recognized by the public for their impartiality, community service, and good judgement. This group could include individuals from the Presidential Commission for the Urban Poor, retired jurists, clerics or religious officials, or people representing or doing community service in support of the urban poor. As a matter of policy, the project will not prevent any party from seeking legal remedies from any government judicial body.

The GRS will be implemented based on the following principles:

- **Simplicity:** procedures in filing complaints is understandable to users and easy to recall.
- **Accessibility:** filing complaints is easy through means that are commonly used by stakeholders, especially by the project-affected people.
- **Transparency:** information about the system is made widely available to all stakeholders and the general public.
- **Timeliness:** grievances are attended to and resolved in a timely manner.
- **Fairness:** feedback or complaints are validated thoroughly and subjects of complaints are given due process and opportunities for appeal.
- **Confidentiality:** the identity of complainants remains confidential.

To achieve these principles, the GRS will be set up with the following features:

*Multiple Uptake Points:* In addition to access through the Community Contact, complainants will be provided with multiple channels to submit their complaints. These include: postal mail, electronic messages, telephone, SMS, personal delivery/walk-in. A project GRS hotline will be established to be managed by the GRS Focal Person at the PMO.

**Timely resolution at the lowest possible level:** The project will strive to attend to complaints in a timely manner. To do this, it will designate a Community Contact at the sub-project level. In addressing and resolving complaints, the project will build on existing mechanisms in the community (community leaders, barangay officials, barangay justice system, etc.). It is only when the complaint is not resolved at this level that the complaint goes to the PMO GRS for resolution.

*System for receiving, sorting, verifying, and tracking:* A simple system will be developed to facilitate effective management of complaints to guide the PMO, particularly the Public Complaints Unit, on the steps and arrangements from receiving, sorting, verifying, acting and tracking complaints. These will be detailed out in the operational manual. Complaints will be categorized and actions on the complaints will be implemented and documented. The project will maintain a database documenting the salient details of complaints, including the dates they were received and when and what actions were taken. These documents will be available to the external monitoring team and the World Bank. The project will monitor complaints and coordinate with the concerned LGUs and relevant government agencies as needed to

resolve them adequately and expeditiously. MMDA and DPWH will keep the World Bank Task Team informed about any significant complaints and the steps taken to resolve them.

*Disclosure and ease of access:* The salient features of the GRS will be publically disclosed so that people are aware of where and how complaints will be managed. The Community Contact person assigned to the sub-project will further ensure that people in the sub-project's area of influence are aware of grievance management arrangements. Ideally complaints should be written, but if received verbally, the Community Contact person will ensure written documentation is made and that the complaint is dated and recorded.

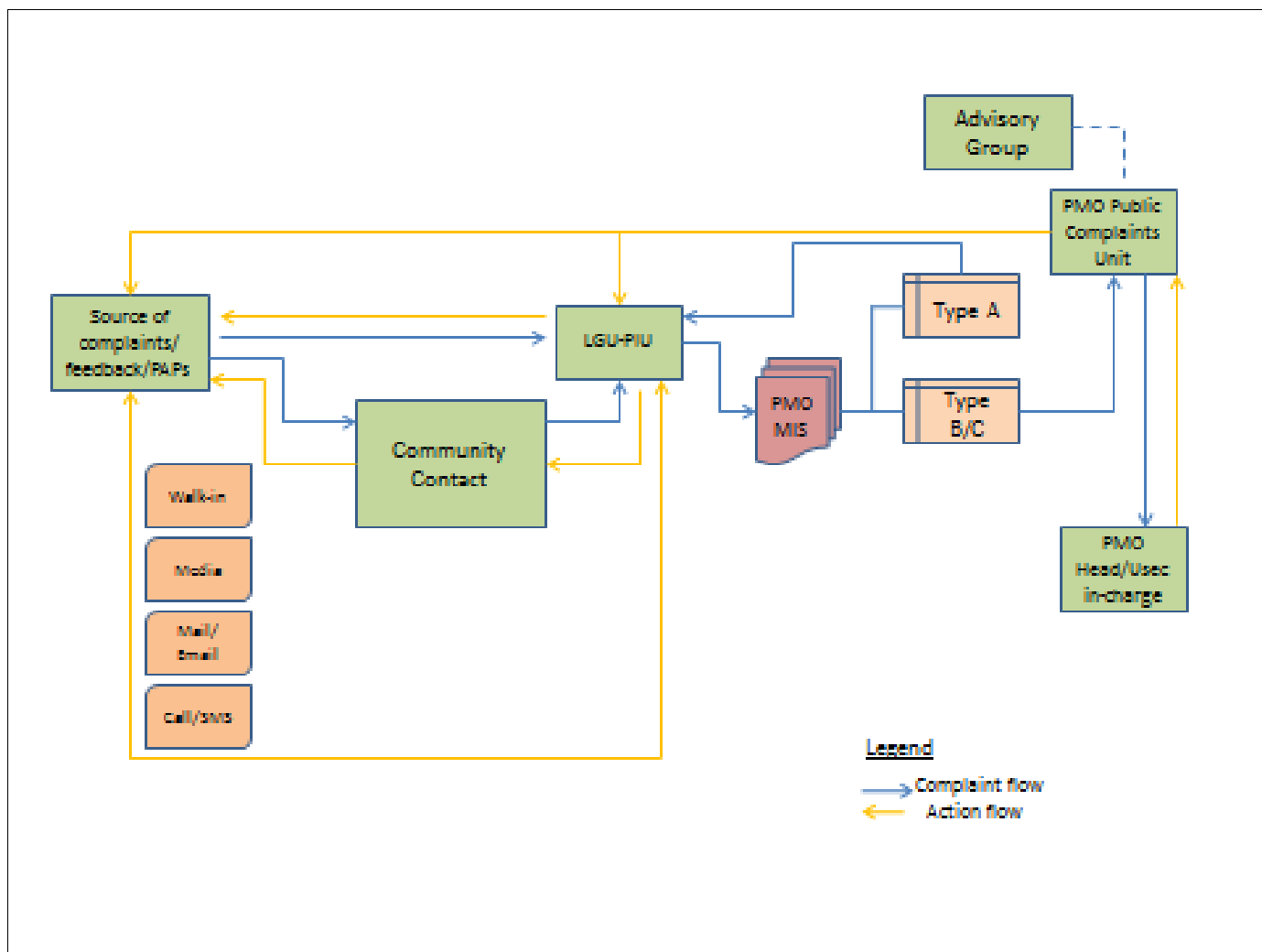
The following are the types of grievances that the Project foresees.

Table 31. Responsibility Matrix for Grievance Management

<b>Types of Grievance</b>	<b>Description</b>	<b>Resolved at Level of</b>	<b>Possible Range of Actions</b>	<b>Responsible</b>
Type A: Queries, Comments, Suggestions	Inquiries on any aspect or process of the Program; comments or suggestions, solicited or not.	Uptake Points (Community Contact or Project Staff)	Immediate feedback to provide clarification, provision of IEC materials, referral to appropriate individuals or bodies	Community Contact, Project Staff
Type B: Performance of Obligation	Complaints about non-performance of obligations or non-compliance to agreements such as those contained in the operations manuals, memorandum of agreements/ understanding (MOA/U), sub-project agreements, etc.  Examples: exclusion of some sectors in program activities, delayed release of transition allowance, etc	LGU-HRT, if not resolved, elevated to PMO Public Complaints Unit	Emphasize strict compliance with project policies and standards <ul style="list-style-type: none"> <li>• Persuasive dialogue</li> <li>• Issue warning</li> <li>• Suspend until Correct procedures are followed</li> </ul>	LGU-HRT, PMO Public Complaints Unit
Type C: Misconduct of Project Staff and Project Partners/	Any form of misconduct of program staff and program partners  Allegations about	PMO Head; Undersecretary in-charge if subject of complaint is the	Emphasize strict compliance with Project policies <ul style="list-style-type: none"> <li>• Warning</li> <li>• Reprimand</li> </ul>	PMO Head ; Usec in-charge

contractors Violation of Law	corruption, misuse of funds, falsification of public documents	PMO head	<ul style="list-style-type: none"> <li>• Suspension</li> <li>• Disqualification for the entire Project Implementation (for partners)</li> </ul> <p>Create Fact-Finding Committee to validate the complaint, Restitution of funds, Filing of appropriate charges if there is falsification of public documents, Recommend for conduct of Special Audit</p>	
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Figure 2. Grievance Flow Chart



It is also of note that, “Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns.

Project-affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of non-compliance with its policies and procedures. Complaints may be submitted at any time after these concerns have first been brought directly to the World Bank’s attention, and Bank Management has been given an opportunity to respond.

Information on how to submit complaints to the World Bank Inspection Panel is found at: [www.inspectionpanel.org](http://www.inspectionpanel.org).

## K. IMPLEMENTATION SCHEDULE (INDICATIVE)

As explained in the Preface section, implementation of the Vitas sub-project will be initiated approximately one year or possibly more after the baseline census survey (undertaken in November 2015) and possibly after some people will have already relocated on their own initiative by means of a “peoples plan.”

Vitas RAP implementation will start immediately as soon as MMFMP becomes effective. The first step will be for MMDA PMO to establish the Manila LGU PIU with a dedicated resettlement team. Orientation and capacity building of the PIU resettlement team follow thereafter. This set of activities will be undertaken on the first quarter of Vitas PS sub-project implementation.

As soon as the PIU resettlement team is established and its members trained by the PMO, the process of updating of the 2015 census and community consultation will be initiated. Table 30 provides the rest of the planned activities under this RAP.

Table 30. Implementation Schedule

Action	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018
Establish PIU Resettlement Team	XXX								
Appoint / deploy Community Contact person	XXX	XXX	XXX	XXX	XXX	XXX	XXX		
Update of Nov 2015 census socioeconomic survey	XXX								
Initiate consultation process	XXX	XXX	XXX	XXX	XXX	XXX	XXX		
Resettlement site identification and acquisition	XXX	XXX							
ESMP formulation for resettlement site		XXX							
Payment of transitional support		XXX							
Assess / program skills training needs for PAPs		XXX							
Physical relocation of PAPs to transitional sites			XXX						
Site preparation and construction			XXX						
Initiate training program for PAPs			XXX						
Physical relocation to resettlement site						XXX	XXX		
Monitoring & Evaluation (internal)		XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Monitoring & Evaluation (external)		XXX		XXX		XXX		XXX	
External Evaluation / Closure Report									XXX

## L. BUDGET (TENTATIVE / INDICATIVE)

Table 31 provides an estimated budget for the Vitas RAP implementation. Footnotes in this page explain the assumptions and computation of the budget items. The biggest expense will be on the housing cost which amounts to USD1.9 million. Under the MMFMP arrangement, this cost will be paid from the GoP counterpart.

Table 31. Estimated Budget<sup>6</sup>

Item / unit / number	PhP / unit	PhP	US\$ (@Php46)
Compensation for structures <sup>7</sup>	35,000		
Shifting allowance (temporary sites)	18,000	1,386,000	30,130

<sup>6</sup> For the 165 ISFs.

<sup>7</sup> Cost will only be computed if PAPs will opt for cash compensation in lieu of housing assistance.

Food assistance (500/day/HH x 5 days)	2,500	412,500	8,967
Skills training (165 x 2 PAPs)	5000	1,650,000	35,869
Housing unit price (in-city) <sup>8</sup>	519,060	85,644,900	1,861,845
Transport/shifting to resettlement site	5,000	825,000	17,934
Independent monitoring agent		500,000	10,869
Total		90,418,400	1,965,614

## M. MONITORING AND EVALUATION.

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The LGU-HRT will monitor and document progress to key implementation milestones in monthly reports, facilitated by the RAP's Community Contact person assigned to the sub-project. Issues and grievances must be documented and tracked to their resolution. PAPs will be informed of monitoring activities and encouraged to participate and facilitate in RAP monitoring.

SHFC and LGU-HRT will work within a standardized monitoring framework in which LGU-HRT will provide primary field-level information to the wider system. PMO will maintain a data base needed to document and track resettlement implementation needed for reporting at the project level. The PMO monitoring units will track substantive and budgetary aspects of the delivery of entitlements, grievances and significant implementation issues, progress with physical relocation, progress and issues with rehousing development schemes, grievance management and other salient features of the resettlement process.

Specific monitoring parameters include: routine provision of information on mobilization and progress for sub-project-linked community groups, consultations and community planning activities, progress with site development and housing development, and delivery of government-sponsored or other programs given as entitlements, such as those for skills training or other social or economic development activities. Monitoring data will be gender-differentiated where relevant. Attention will be given to the status of disabled people and vulnerable households.

The community contact will liaise with LGUs, CSOs, PCUP, and other institutions or organizations involved in social mobilization and development of in-city housing and maintain a monitoring database and provide feedback needed for change management and adaptive implementation.

An External Monitoring Agent (EMA)—provided by a professional agency or a technically qualified CSO to be engaged by the MMFMP— will use monthly reports and field visits to prepare semi-annual monitoring reports to the PMO and to the World Bank. Monitoring parameters will cover key stages in resettlement, including timely provision of entitlements, rental subsidies and transitional support measures, provision of skills training, identification of and measures taken to assist vulnerable PAPs, progress to completion of resettlement housing, etc. as per the entitlement matrix and implementation schedule. The EMA will also provide a final RAP completion and closure report for each sub-project.

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<sup>8</sup> AGOM computation per their People's Plan



## Annex A: Definition of the “Project Footprint” for PY1 Sites

### For Metro Manila Flood Management Project – Phase 1

#### Project Footprint.

The Metro Manila Flood Management Project–Phase 1, in particular Component 1 is anchored upon the rehabilitation of existing pump stations or construction of new ones to enable effective and efficient drainage of flood waters and thereby address urban flooding (this is more extensively described in the Project Appraisal Document).

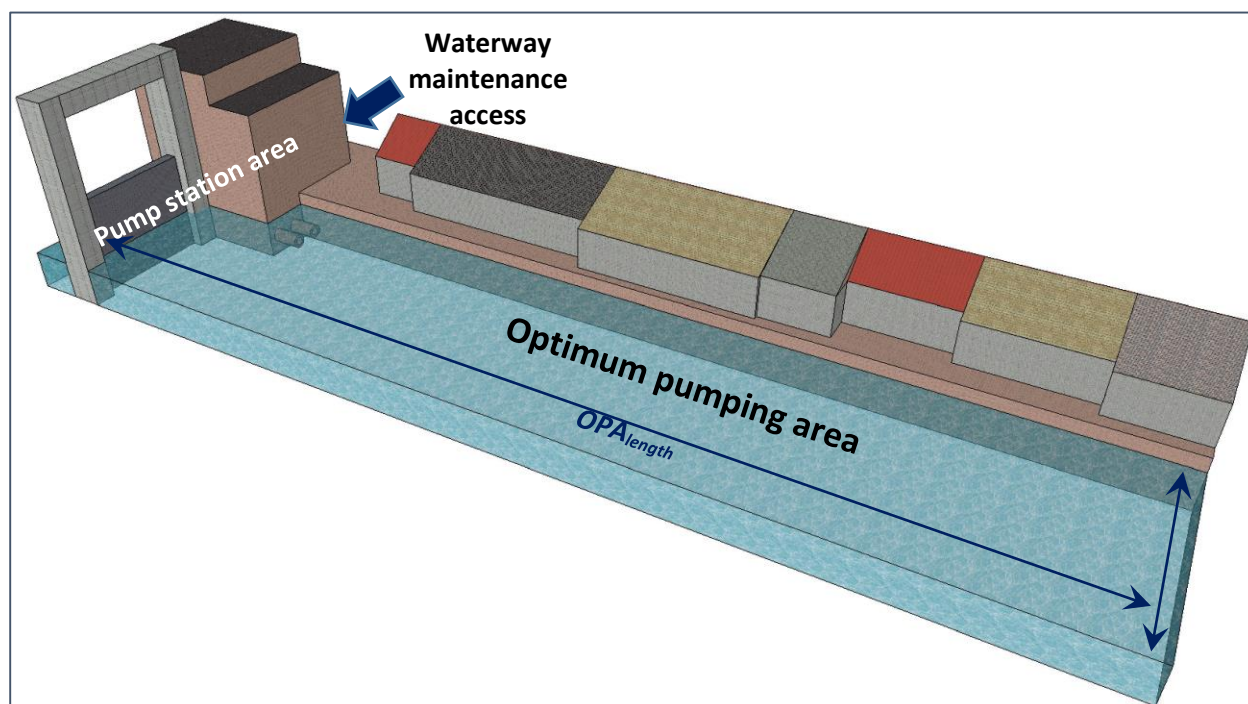
Typically, excess rainwater will runoff from roofs, roads, and other surfaces before entering drainage pipes. Runoff inside drainage pipes eventually discharge into the **waterways** such as creeks, esteros, or tributary rivers before finally discharging into **external water bodies** such as Manila Bay or main rivers like Pasig River.

Without pumping, runoff discharge from catchments by gravity as dictated by slope of the terrain and the elevation of external water bodies. Flooding occurs when water cannot be discharged fast enough (i.e. higher runoff generation due to urbanization of the catchment; due to intense rainfall; elevated levels of the external water body; or a combination of these and other factors). Pump stations address flooding by discharging rainwater of **a served waterway** faster than what gravity would allow.

The directly flooded area can be further analyzed hydraulically to determine the critical segments of pipes and/or open waterways to ensure the optimum drainage of the area in cases of high rainfall such as typhoon.

This critical portion of the directly flooded area is delimited as the “project footprint.” The project footprint is further composed of sub-areas as below. For purposes determining the project’s area of influence, the OPA that runs along open channels will be the target area for environmental and social impact assessment. Other components will also survey drainage areas to determine whether additional areas should be included for the assessments. Dredging requirements, if any, will be assessed by the end of October 2015.

1. Pump station area
2. Waterway maintenance access points.
3. Optimum pumping area (OPA)



**Figure 1: Project Footprint**

The **pump station area** is the boundary of the physical structures of the facility which should have sufficient space of the electro-mechanical equipment, floodgates, trash collection and management system, and other ancillary functions. Based on the survey of existing pumping stations, this area is already well established, fenced-off, and have no resettlement issues.

The **waterway maintenance access** includes access roads and staging areas for mobilizing equipment in or over the waterway. Access requirements will vary depending on the characteristics of the waterway including maintenance strategy. In some cases where the catchment is served entirely by a covered drainage system (ex. Balut PS), there is no open waterway to be maintained. Instead, maintenance can be jetting and vacuuming of drainage pipes which can be carried-out from street-side manholes. For open waterways different maintenance strategies will be assessed, with a main focus on floating maintenance equipment. As part of project preparation a specialist will come to Manila early November to advice on the most appropriate equipment.

The **optimum pumping area (OPA)** is defined as the area corresponding to the volume of water stored in the waterway such that the pump station can operate at maximum capacity unimpeded to lower water level from just below street level (revetment elevation) until the stopping elevation (dictated by pump suction elevation) within the **time of concentration ( $T_c$ )**.  $T_c$  is the time required for runoff to travel from the hydraulically farthest point of the catchment to reach the outlet (i.e. pump station). OPA is given by:

$$OPA = \frac{\alpha C \times \gamma T_c}{\beta D_{op}}$$

Where:

$C$  = maximum pump capacity,  $\alpha$ = pump efficiency factor

$T_c$  = Time of concentration, where:

$$T_c = 0.0078 \left( \frac{L^{0.77}}{S^{0.385}} \right), \text{ Kirpich equation; or}$$

design  $T_c$ , if available

$\gamma$  = peak flow factor

$L$  = length from farthest part of the basin

$S$  = channel slope

$D_{op}$  = operating depth,  $\beta$ = factor of safety

For the purpose of planning, OPA is converted to the more tangible parameter, the corresponding length of OPA or  $OPA_{length}$ . This is derived by dividing OPA by the waterway's operating flood depth (i.e. elevation of street level minus suction stopping elevation).

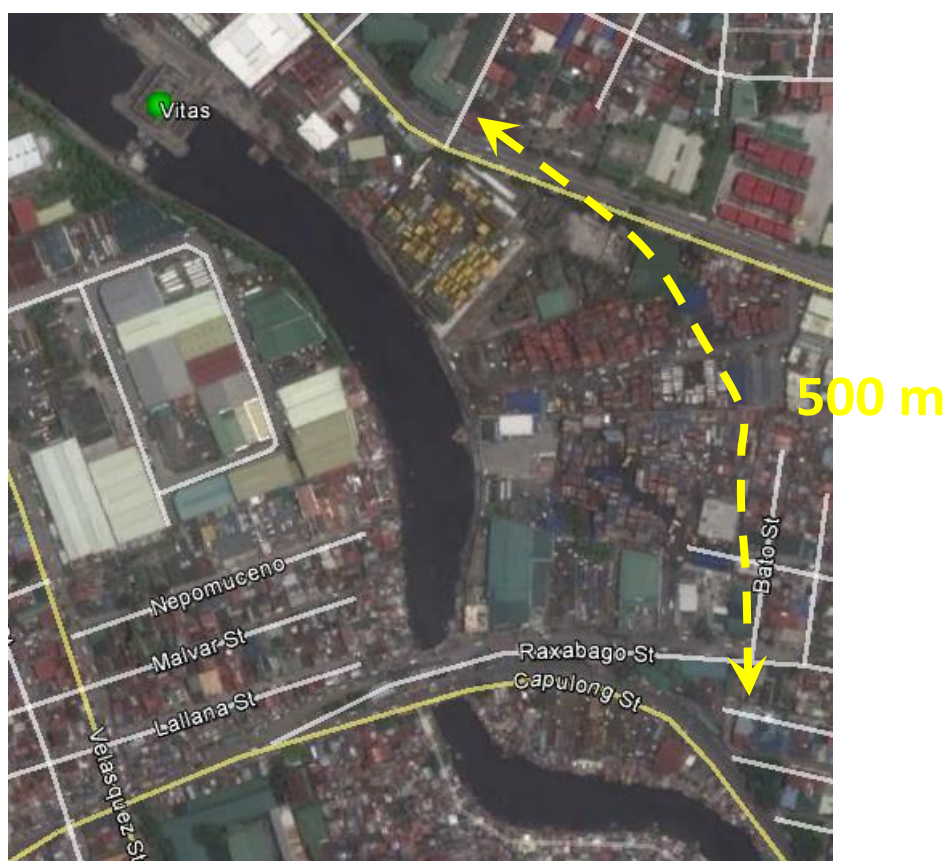
The OPA (i.e. waterway along  $OPA_{length}$ ) must be cleared of obstructions like sediments, solid waste, or informal structures to ensure unobstructed flow to the pump station and avoid pump problems such as vortices, uneven approach flow, uneven velocity profile in the pump, pre-rotation, vibrations, cavitation and increased energy consumption—among others. Note that optimum maintenance is most critical in, but is not limited to, the OPA.

$OPA_{length}$  is computed for identified priority pump stations as shown below. Unless stated otherwise, data are provided by MMDA.

**Table 1: OPA<sub>length</sub> Calculation**

Pump Station	Maximum Capacity (cms)	T <sub>c</sub> <sup>9</sup> (minutes)	T <sub>c</sub> (sec)	Optimum pumping volume (m <sup>3</sup> ) <sup>10</sup>	Depth operating <sup>11</sup> (m)	W <sub>ave</sub> (m)	OPA <sub>length</sub> (~m)
Paco	7.6	67	4,020	27,460	1.89	20	450
Vitas	32.0	45	2,700	77,760	2.16	43	500
Balut	2.0	45	2,700	4,860	2.34	NA	-- <sup>12</sup>
Tripa	58.0	101	6,060	178,898	5.40	50	420
Labasan	9.0	45	2,700	21,870	2.25	30	-- <sup>13</sup>

Mapping of OPA<sub>length</sub>:



**Figure 2: OPA length (~500m) for Vitas PS**

<sup>9</sup> Design T<sub>c</sub> provided from design specifications by MMDA

<sup>10</sup> Adjusted for pump efficiency and total additional catchment storage

<sup>11</sup> Adjusted with factor of safety  $\beta = 0.9$

<sup>12</sup> No open waterways, entire catchment served by covered drainage system

<sup>13</sup> Existing storm attenuation basin is 6.4 ha. OPA do not extend further into upstream waterway

## **Annex B: Census List (See Separate Excel Files)**

## Annex C: Baseline Survey Questionnaire

**Structure Number** \_\_\_\_\_

<b>HOUSING CENSUS AND INVENTORY OF FIXED ASSETS</b>  <b>“METRO MANILA FLOOD MANAGEMENT PROJECT PHASE 1”</b>	<p>Good morning/afternoon. I am _____ part of a team working for MMDA which is gathering information needed for planning for a proposed flood management project. For this purpose, we need your assistance in providing information about you and your household. Your truthful responses and cooperation will allow the project to obtain valuable information that will guide the study team to formulate project strategies. Do you have any question? Can we start?</p> <p style="text-align: center;"><b>1 ASSURANCE OF CONFIDENTIALITY</b></p> <p>All responses to the questionnaires will be treated with high degree of confidentiality.</p>
<b>2 IDENTIFICATION AND OTHER INFORMATION</b>	
<b>3 SITIO</b> _____	
<b>4</b> <b>5 BARANGAY</b> _____	
<b>6 CITY</b> _____  <b>LENGTH OF STAY AT CURRENT RESIDENCE:</b> <b>LOCATION OF PREVIOUS RESIDENCE:</b>	
<b>7 CALL RECORD</b>	
<b>8 DATE</b>	<b>9</b>
<b>10 TIME STARTED</b>	<b>11</b>
<b>12 TIME FINISHED</b>	<b>13</b>
<b>14 REMARKS</b>	<b>15</b>
<b>16 RESPONDENT</b>	
<b>17 Name of Respondent</b> _____ If not the Household Head, relationship with Household Head _____	
<b>18 CERTIFICATION</b>	
<p>I hereby certify that all data entered hereto are true and correct to the best of my knowledge</p> <p style="text-align: center;">_____ Signature over Printed Name of Interviewee – Date</p>	
<p>I hereby certify that the data set forth were obtained/reviewed by me personally in accordance with the instructions given</p> <p style="text-align: center;">_____ Signature over Printed name of Field interviewer – Date</p> <p style="text-align: center;">_____ Signature of Reviewer/Supervisor - Date</p>	

## SECTION I. HOUSEHOLD CENSUS

### A. Demographic Information

Household members	Relationship to HH head A1	Civil Status A2	Age A3	Gender A4	Educational Attainment A5	Employment Status A6	Work Location A7	Religious Affiliation A8	Ethnicity A9	Health Status A10	Disability A11	Membership in Social Organization A12
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												

Codes for A1	Codes for A2	Codes for A5	Codes for A6	Codes for A9
1-Head 2-Wife/Spouse 3-Son/Daughter 4-Son-in-Law/ Daughter in Law 5-Grandson/ Granddaughter 6-Father/ Mother 7-Other Relatives 8-Non- relative	1-Single 2-Married 3-Widowed 4-Divorced/ Separated 5-Common Law/Live-in 6-Others (specify) <b>Codes for A3</b> 00- less than 1 year 98 – unknown/cannot remember <b>Codes for A4</b> 1 Male 2 Female	1- Not of school age/No schooling 2- Elem Undergraduate 3- Elem Graduate 4- Hi-School Undergraduate 5- Hi School Graduate 6- College Undergrad 7- College Graduate 8- Post Graduate 9- Vocational /TVET 10- Others (Specify)	1-Working at least 40 hrs/wk 2-Working less than 40 hrs/wk 3-Unemployed 4- Too young/old to work <b>Codes for A7</b> 1-Within the Brgy. 2-Outside Brgy. but within City 3-Outside City but within Province 4- Outside Region, within Philippines 5- Overseas <b>Codes for A8</b> 1- Catholic 2-Christian (i.e. Protestant, Born Again Christians) 3-Iglesia Ni Cristo 4-Islam 5-Others (specify)	1-Tagalog 2-Bisaya 3-Kapangpangan 4-Ilocano 5-Ilonggo 6-Others <b>Codes for A10 (two-week recall, can be multiple)</b> 1-Skin Ailment 2-Stomach/Diarrhoea 3-Fever 4-Others <b>Codes for A11</b> Disability includes: Mobility impairment; Hearing impairment ;Visual impairment; Brain disability (disability in the brain due to brain injury Cognitive disability (impairment present in people who are suffering from difficulty in learning to read and accurate comprehension, this include speech disorder. 1-Disabled unable to work 2-Disabled but employable

B. Household Expenditure

	Unit of Measure (PhP) [place in appropriate column]			
Expenditure	Daily	Weekly	Monthly	Yearly
B1. Rent				
B2. Electricity				
B3. Water				
B4. Transportation				
B5. Food				
B6. Clothing				
B7. Medicine				
B8. Education (school daily allowance)				
B9. Other:				
B10. Totals				

### C. Occupation, Employment and Income Sources

Household Members (From Table A)	Primary Occupation C1	Income (Monthly) C2	Secondary Occupation C3	Income (Monthly) C4	Remittances and other sources (Monthly) C5	Income (Monthly) C6
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
<b>Codes for C1 and C3</b>				<b>Codes for C5</b>		
1- unskilled/semi-skilled (laborer, helper, street sweepers, janitorial work, pedicab driver, messengers, mason) 2- Skilled worker (driver, carpenter, welders, beautician, electrician, mechanics, plumbers), 3- Government employee 4- Office worker/ Company employee 5- Vendor/street hawker 6- Shopkeeper/shop-owner 7- Unemployed 8- Others				1-Government subsidy/pension 2-Remittance from relatives 3-Business income 4-Income from gambling 5-Rental income		



**D. List of assets that your household owns**

D. How many of each of the following items does the family own?			
D1. Radio		D7. Tricycle	
D2. TV		D8. Washing Machine	
D3. Refrigerator		D9. Gas Stove/Range	
D4. Sala Set		D10. Telephone/Mobile	
D5. Dining Set		D11. Computer	
D6. Car/Jeep		D12. Others: _____	

**D13. Do you have any debt now? [1-Yes, 2-No]** \_\_\_\_\_

**D14. How much?** \_\_\_\_\_

**D15. Source?** \_\_\_\_\_

**E. Access to Services**

Access to Services	Answers and/or Observations
E1. Electricity Who supply your electricity	<input type="checkbox"/> (1) Gen set private <input type="checkbox"/> (5) Other source/s <input type="checkbox"/> (2) Gen set from developer <input type="checkbox"/> (6) None <input type="checkbox"/> (3) Power Utility/Grid <input type="checkbox"/> (4) Jumper from neighbor
E2. Health service/s Where do you go for your health services needs	<input type="checkbox"/> (1) Barangay/village health center with medical staff and supplies <input type="checkbox"/> (2) Barangay/village health center without medical staff and supplies <input type="checkbox"/> (3) Nearby Barangay/town health center/hospital <input type="checkbox"/> (4) Others _____ <input type="checkbox"/> (5) none within thirty minutes of travel
E3. Water	<input type="checkbox"/> (1) piped water (Manila Water/Maynilad) <input type="checkbox"/> (2) buying from resellers/private sources <input type="checkbox"/> (3) other sources _____
E4. Waste disposal / management	
E4a. Where do you dispose your solid waste	<input type="checkbox"/> (1) Provided by LGU <input type="checkbox"/> (3) Private collection service <input type="checkbox"/> (2) Provided by Barangay <input type="checkbox"/> (4) None
E4b. Do you have septic tank	<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No <input type="checkbox"/> (3) Don't know
E4c. Where do you dispose of your liquid wastes/ from laundry, kitchen and bathing)	<input type="checkbox"/> (1) Septic tank <input type="checkbox"/> (4) River <input type="checkbox"/> (2) Drainage canal <input type="checkbox"/> (5) Don't know <input type="checkbox"/> (3) Estero
E5. Basic Education What educational facilities do you have in your community? (multiple answers accepted)	<input type="checkbox"/> (1) Kinder/Elementary school in the barangay or nearby <input type="checkbox"/> (2) High school in the barangay or nearby <input type="checkbox"/> (3) Kinder/Elementary school inaccessible / very far (estimated kilometers) ____ <input type="checkbox"/> (4) High school inaccessible / very far ( estimated kilometers) ____
E6. Public Transportation	F6a. Availability [1-Yes, 2-No]
E6.1. To school/s	
E6.2 To market	
E6.3 To work / employment	
E6.4 To health center	
E6.5 To hospital	
E6.6 To bank	
E7. Do you have access to the following government programs?	[1-Yes, 2-No]
E7.1 Scholarship	
E7.2 4Ps/CCT	
E7.3 PhilHealth	
E7.4 Supplemental feeding	
E7.5 Subsidized rice	
E7.6 Housing program (specify)	
E7.7 Others (specify)	

F. INVENTORY OF FIXED ASSETS					
STRUCTURE					
____ (1) Owner      ____ (2) Renter  If you're not the Owner, name of Owner _____					
No	Type of Structure	Number of floors	Description of Construction Materials	Material	Total area of the structure, in m <sup>2</sup>
1.	Main House		<b>F1A.Roof</b> [1- Strong materials (galvanized iron, aluminum, tile, concrete, brick, stone, asbestos), 2- Light materials (cogon, nipa, anahaw), 3- Salvaged /makeshift materials, 4- Mixed but predominantly strong materials, 5- Mixed but predominantly light materials, 6- Mixed but predominantly salvaged materials]		
			<b>F1B.Walls</b> [1- Wood construction, 2- Hollow brick construction, 3- Makeshift/salvaged/improvised, 4- Half concrete/brick/stone and half wood]		
			<b>F1C.Floors</b> [1-wood, 2-cement with tiles, 3-cement with wood, 4-cement only 5-dearth-flooring]		
			<b>F1D.Columns</b> [1- Wood construction, 2- Hollow brick construction, 3- Makeshift/salvaged/improvised, 4- Half concrete/brick/stone and half wood]		
2.	Second Structure (if any)		<b>F2A.Roof</b> [1- Strong materials (galvanized iron, aluminum, tile, concrete, brick, stone, asbestos), 2- Light materials (cogon, nipa, anahaw), 3- Salvaged /makeshift materials, 4- Mixed but predominantly strong materials, 5- Mixed but predominantly light materials, 6- Mixed but predominantly salvaged materials]		
			<b>F2B.Walls</b> [1- Wood construction, 2- Hollow brick construction, 3- Makeshift/salvaged/improvised, 4- Half concrete/brick/stone and half wood]		
			<b>F2C.Floors</b> [1-wood, 2-cement with tiles, 3-cement with wood, 4-dearth-flooring]		
			<b>F2D.Columns</b> [1- Wood construction, 2- Hollow brick construction, 3- Makeshift/salvaged/improvised, 4- Half concrete/brick/stone and half wood]		

G. OTHER STRUCTURES		
No	TYPE OF STRUCTURES	UNIT
G1	Water Well	____ Yes ____ No
G2	Electric Connection (Metered)	____ Yes ____ No
G3	Water Connection (Metered)	____ Yes ____ No
G4	Pump Well	____ Yes ____ No
G5	Wood/Wire Fence	L ____ x H ____ = ____

G6	Concrete Fence	L ____ x H ____ = _____
G7	Others	

END OF INTERVIEW  
THANK YOU VERY MUCH!

ATTACH PICTURE OF AFFECTED ASSET WITH OWNER

DRAFT

## **ANNEX D: Minutes of Consultations – October 2016**

**Dd**

Metro Manila Flood Management Project  
Minutes of Public Consultation  
for the VITAS PUMPING STATION, TONDO, MANILA  
October 10, 2016 9:00 – 11:00AM  
Barangay Hall, Barangay 150, Raxabago St., Tondo, Manila



### **1 MEETING HIGHLIGHTS:**

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1. The meeting started with an Opening Prayer led by Ms. Lorna Cruz, resident of Barangay 150.
2. Chairman Eduardo de Guzman of Barangay 150 gave the Welcome Remarks and encouraged the residents to listen to the presentation of DPWH and to actively participate in the discussion. He also welcomed the residents from Barangays 93 and 147.
3. Engr. John Labilles, DPWH, presented the components of the proposed Metro Manila Flood Management Project. He asked if the participants were able to read the project information booklet and also asked who among the residents were present during the previous consultation meeting held last September 23, 2016 at Barangay 93. New attendees from Barangay 150 and 147 were acknowledged. Engr. Labilles gave the background and objectives of the proposed flood control project. He outlined the four major components, i.e. Component 1 – construction and rehabilitation of pumping stations; Component 2 – Clearing of waterways; Component 3 – Resettlement of ISFs on waterways; and Component 4 –

Project management and coordination. He said that Vitas pumping station will be rehabilitated as one of the subprojects under Component 1. Activities will include dredging of the waterways and the clearing of structures of informal settler families (ISFs).

4. Engr. Cherry Rivera presented the results of the environmental and social impact assessment that was conducted for the Vitas pumping station. She outlined the major impacts and mitigation measures that were identified in the study that includes: (i) generation of dredged materials, sampling/testing of the dredged materials and its appropriate disposal; (ii) odor from dredging activities; (iii) noise from operation of pumps and motors; (iv) accumulation of solid waste at the pumping station; (v) movement of large vehicles along the narrow road leading to the pumping station at Barangay 147 which may affect residents living along the road in terms of safety, dust, and noise; (vi) resettlement of ISFs who are living under the Raxabago bridge. She asked the participants about the concerns that they are currently experiencing with regards to the operation of the existing pumping station and with the implementation of the proposed project. The participants mentioned the following:
  - a. Resettlement of ISFs – The residents said that they are willing to be relocated and requested information of the schedule of project implementation and relocation.
  - b. Odor – The participants always experience odor from the river but they said that they are used to the bad odor from the river. The dredging of the river and resuspension of sediments and emission of odor will not be problem to them.
  - c. Noise – When asked if noise is a concern, they said that they do not experience excessive noise coming from the pumping station. This is also not a problem to the residents. Engr. Rivera said that based on the noise sampling conducted in the vicinity of the pumping station and inside the pumping station, the workers are more exposed to high levels of noise and would need appropriate ear muffers for protection.
5. Mr. Ershad Ibba, DPWH-Environmental and Social Safeguards Division, explained the resettlement policy framework and the resettlement action plan for the project-affected ISFs. He explained that based on the resettlement framework, the project would avoid resettlement as much as possible. If resettlement cannot be avoided, appropriate plans and budget will be prepared and allocated for the families to be resettled. For project-affected persons (PAPs) who own houses, the proposed options will be housing or cash compensation. For those who will chose the housing option, assistance that will provided by the project will be in the form of: (i) rental subsidy; (ii) transition allowance; (iii) transportation assistance during resettlement; and (iv) livelihood training and financial assistance. For PAPs who are renting, the project assistance will be in the form of: (i) housing; (ii) rental for temporary housing; (iii) transition allowance; (iv) transportation assistance; and (v) livelihood training and financial assistance. There will also be additional assistance for those who are pregnant, senior citizens, children, and disabled. For those who have been previously given housing assistance, the Government through NHA, SHFC, and DILG will evaluate if the PAP is qualified to receive assistance from the project.

6. The participants were also informed about the environment and social safeguards documents that were provided to them two weeks ago. The participants showed their project information booklets. They were informed on the contact persons and number of DPWH-PMO if there are any further questions about the project.

## 7. Open Forum and Discussion



- a. **Resettlement of all the ISFs at same time before project implementation.** Chairman Eduardo de Guzman said that a total of 85 families in his barangay are affected by Oplan Likas. However, when the Pasig River Rehabilitation Commission (PRRC) conducted the census, only 48 families were included in the list submitted by them to DILG for the Php18,000 financial assistance. There are 34 families who were not included. This would mean that they will not be included in those that will be resettled. Chairman de Guzman said that it is necessary for the project to first implement the resettlement of all the ISFs (including the 34 families) before it begins with the dredging and clearing of waterways. He suggested that it will be much better if all the 85 ISFs will be resettled at the same time. He also said that they have submitted a letter request to DILG and these ISFs were included in the DILG list for inclusion and approval by the implementing agency.

- b. **PRRC and DILG census of ISFs.** Jennifer Cabuhat, AGOM Secretary, said that in the master list of DILG, there are more than 200 ISFs from Barangays 150 and 93 that will be resettled under Oplan Likas. There are ISFs from Barangay 93 who opted to avail of the NHA assistance. In Barangay 150, all the 85 ISFs remained but 34 ISFs were not included in the PRRC census but are in the DILG listing. According to her, when PRRC conducted the census, some of the ISFs were at work while others were rebuilding their houses damaged by floods. She asked DPWH to coordinate with the NHA regarding this matter so that all the 85 ISFs can be relocated at the same time. All of the households already have census stabs from DILG. In addition, the 34 ISFs are all members of the People's Organization AGOM with their housing project in BV8 Muzon, San Jose del Monte, Bulacan under the People's Plan.

Mr. Ershad Ibba said that DPWH will evaluate this further and suggested the cross-matching of the list from DILG and PRRC and the validation census that was conducted by the MMDA in November 2015.

Jett Villegas explained that there is a need to submit a final list of 34 un-censused families as validated and certified by the PRRC, DILG and make these documentation available to DPWH and SHFC. This document will also indicate that concurrence of the agencies for the inclusion of the 34 families earlier requested from the DILG.

- c. **Willingness of the ISFs to be relocated.** Jett Villegas asked the participants to raise their hands if they approve of the relocation in Muzon, San Jose del Monte, Bulacan as proposed by AGOM under the People's Plan. The affected ISFs raised their hands and said that they are willing to be relocated to the BV8 housing project as proposed by the AGOM.
- d. **Financial assistance.** There were 48 ISFs that were approved to receive financial assistance of Php18,000. DSWD evaluated the ISFs to check if they are qualified to receive the financial assistance. However, for the 34 ISFs that are not in the PRRC list, they are not sure if the ISFs are also qualified to get the Php18,000.

Mr. Ibba explained that they need to submit the certification also that the 34 ISFs will need to receive the financial assistance. DPWH will coordinate and submit this to DSWD.

- e. **Six ISFs in Barangay 147 not included in the master list.** ISFs from Barangay 147 who are living along the road going to the pumping station and on the banks of the river are not included in the PRRC and DILG census. The ISFs from Barangay 147 said that they are hoping to be included in the ISFs to be resettled in Muzon, Bulacan.

Jennifer Cabuhat, AGOM, said that the People's Plan was prepared almost four years ago. Those that were not involved in the preparation of the People's Plan are new settlers and are not members of the People's Plan.



Engr. Lydia Aguilar said that they have a meeting with the housing agencies on the following day and they will take up the issues raised in today's meeting about resettlement.

- f. **Relocation site and schedule of relocation.** An ISF from Barangay 147 asked where the relocation site will be. She also asked when they will be resettled because their children are still studying in a nearby school. School year will end next summer.

Chairman de Guzman said that the relocation site will be in BV8 in Muzon, San Jose del Monte, Bulacan. The ISFs from Barangay 150 said that they are hoping to be resettled this December already so that they will be able to spend Christmas in their new house. Some residents said that they already saw the site in photos while others have visited the place. They like the place and are excited to be relocated soon. Those from Barangay 147 asked that they be also included in the site visit to the site and Barangay Chairman de Guzman said he will appeal in their behalf to appropriate agencies.

DPWH thanked the barangay chairman and participants for their comments and participation to the public consultation meeting.



PAPs attending the 2<sup>nd</sup> consultation on the proposed project. DPWH representatives, headed by Engr. Lydia Aguilar, Engr. John Labilles, and Mr. Ershad Ibba presented the ESMF and the Vitas RAP. Community queried about the start of the project and the relocation schedule.



PAPs expressed willingness to transfer as per government program, however, requested that they move out from their present location all together at the same time with other PAPS that were not listed in the PRRC masterlist of ISFs but were listed under DILG's OPLAN LIKAS. The Barangay leadership and the PO-AGOM want a resolution of the inclusion soonest possible time.

DRAFT


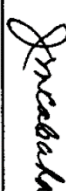

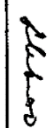

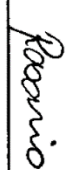

## Attendance List

# METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1

Barangay 150, Tondo Manila



October 10, 2016, Monday, 8:30-10:30 AM

## ATTENDANCE SHEET

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
1. <del>NO</del> EDUARDO DE GUZMAN	BRGY 150-2-13	Chairman	09777777 6108	
2. <del>JOSEPH</del> M. CARUTAT	2011 Raxabago St. Tado M/a.	Secretary		
3. MARY GRACE SAMSON				
4. JOHNE E. ESTRELLA				
5. ALVARO R. LIRAO	BRGY 150			
6. <del>JOSEPH M. MAGUIRE</del>				
7. ROBERTO C. CRUZ	BRGY-150-2-13		09235946885	
8. MICHAEL R. CIBRAO	BRGY-150-2-13			

**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
9. Rodrigo E. Pariz	2071 RAXXBAKO TDO. mlk		09461115232	
10. Tevesa Fortuno	2071 RAXXBAKO TDO. mlk			Fortuno
11. Regina I. Reyes	2071 RAXXBAKO st Tdbb Mla			Regina I. Reyes
12. Romeo G. Fortuno	2071 RAXXBAKO			Romeo
13. Pauli Ra Zar	2071 RAXXBAKO			Pauli Ra Zar
14. Silvestra Duran	2071 Royal apt		0946966822	Duran
15. Lilia B. Colina	2071 Roxbury (w/14)			Colina
16. JUDIOR P. VICE	2071 RAXXBAKO TDO. mlk		09334919977	

**PUBLIC CONSULTATION FOR THE  
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Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
17. Mr. Luna Montenegro	2071 Raxabago St			Mr. Luna
18. Consuelo B. Domanan	2071 Raxabago St			C.B.
19. David B. Domanan	2071 Raxabago St			D.B.
20. TERESITA FORTENO	2071 RAXABAGO			TERESITA
21. Mary Jane O. Estrella	2071 RAXABAGO			Mary Jane
22. WOLANDA C. Quilit	2071 Raxabago			W.C. Quilit
23. Jose A. Tigre	2071 RAXABAGO			José A. Tigre
24. Manny C. De Guzman	" "			Manny C. De Guzman

**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
25. <i>Lynedora</i>	2071 Raxabago			<i>Lynedora</i>
26. <i>Eden A Briel</i>	2071 Raxabago st			<i>E. Briel</i>
27. <i>Ramil G Fortuna</i>	2071 RAXABAGO ST			<i>RAMIL</i>
28. <i>Jennifer L. Mengano</i>	2071 Raxabago st.		09222583203	<i>JL Mengano</i>
29. <i>Jennifer F Garguao</i>	2071 Raxabago st			<i>Jennifer</i>
30. <i>Joyson Lumawa</i>	2071 Raxabago st.			<i>JLumawa</i>
31. <i>Jocelyn Perez</i>	" "			<i>J Perez</i>
32. <i>Wilmo R Villanueva</i>	2071 Raxabago st			<i>Wilmo</i>



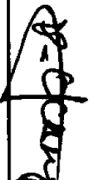

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Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
33. Jassien Quilit	2071 RA 111850			Jassien Quilit
34. Vanessa Cruz				Vanessa Cruz
35. Judith Cruz				J. Cruz
36. Lorna Cruz	2071 RA 111850		0917 444 5342	Lorna Cruz
37. Mary Grace Samson				
38. Jaime Stetia				
39. Rose Ann Villanueva	" " "			R. Villanueva
40. Mary Rose A. Fortuno	" " " "			M. Fortuno

**PUBLIC CONSULTATION FOR THE  
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Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
41. CHRISTOPHER CUNYANAN	685 VMA FOLKS ST CAG. 100. M.A.	Chief KAKKANO	09208246457	
42. Gonzalo Reyes	C-2 Capalong 1111 Brgy. 150	Driver	09090500656	
43. Ariston M. Cabuhat	2071 PAXA BAGO ST. TOLD M.A.	Member		A. Cabuhat
44. Rosalyn M. Cabuhat	" Same "	Member		R. Cabuhat
45. RODRIL B. DANIIN	" " "	MEMBER	09327028373	R. B. Daniin
46. FRANCIS CORAIL	" " "	MEMBER		F. Corail
47. DAVID BOCANPO	2071, PAXA BAGO	KAKKANO	09404757819	
48. Jose Maric M. Javier	2094 PAXA EXT.	TRSD		



**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
49. <del>ALFRED VILLANUEVA ESCOBAR</del>	<del>BRGY 150 Z13</del>	<del>TANOD</del>		<del>ALFRED</del>
50. <del>Agnes Romano Boes</del>	<del>BRGY 150 Z13</del>			<del>Agnes</del>
51. <del>Allo Romano Francisco</del>	<del>BRGY 150 Z13</del>			<del>Allo Francisco</del>
52. EDUARDO TRONCADO	BARANG-150	TANOD		Ed
53. Angelic Lumawan	BRGY 150 Z-13	TANOD		A. Lumawan
54. Sheryl P. Subaco	BRGY 150 Z-13			Sheryl
55. Rosa D. Tienda	150 - B			Rosa
56. PEMIDIOS OLUMAWAN				Lumawan

**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**

Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
57. Richard C - Cruz	9071 RANABAGO TND MIA 150 - 2 - 13			R. Cruz
58. Analysis R. Liberao	Reg. 150-2-13			Analysis
59. Josephine Sumaras	" " "			Sumaras
60. Rosemarie Santos	" " "			Santos
61. ISABEL G. BERNARDO	2115 RANABAGO BATO	KAGAWALD		Isabel
62. Mary Grace DS Manat	2071 Ranabago St			Manat
63. Minerva DS. Manat	2071 Ranabago St			Manat
64. Dovilyn B. Delos Santos	2071 Ranabago St			Delos Santos

**PUBLIC CONSULTATION FOR THE  
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Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
65. Francis Coral Francisco	Brgy. 150-Z-13			<i>Francis</i>
66. JOHN PAUL SORIANO	Brgy 147-13	KAGAWAD	09176096377	<i>John Paul</i>
67. JOHN LABLITES	PPWA UPND - FMC	PM I	09252999444	<i>John</i>
68. ERSATAD S. IBBA	DRAHT - ESSD, Planning Service	Sociologist II	09146813437	<i>Ersatad</i>
69. FLODY T. ISMUEL	Brgy. 147.		09082496949	<i>Ismael</i>
70. RONNIE J. PERIMERO	Brgy. 147		0909-8095247	<i>Ronnie</i>
71. Rhodeline Fernandez	Brgy 147		09383475401	<i>Rhodeline</i>
72. Mary Jane Ferrando	Brgy 147		09329280146	

**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
73. Jovelyn Sanson	Bayan 147	<del>147</del>	Jovelyn	
74. LINIE L. KARUM	147 H. Lopez Rd Tondo			
75. Elizabeth Sulest	147		Elizabeth Sulest	
76. Adela Pasana	147 # Upper Tondo		09334517149	Adela Pasana
77. Ben Santos	11 11 "			Ben
78. Emma B. Potalver	147 H. Lopez Tondo N.		none	Emma
79. Esie Gac-onig Calar	2071 Karabago St. Tondo N. 14.			Esie Gac-onig
80. CHRISTOPHER DALMIRA	2071 Raxg, Lugo St Tondo N. 14.			C. de Dura



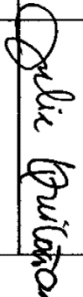





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Barangay 150, Tondo Manila  
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**ATTENDANCE SHEET**

Name	Address / Office	Position	Contact Number / E-mail Address	Signature
81. <i>Julif Maatig</i>	<i>2071 Roropaka St</i>			<i>[Signature]</i>
82. <i>Jec Jaring</i>	<i>DPS</i>		<i>09369840379</i>	<i>[Signature]</i>
83. <i>JAYSON UMAYAN</i>	<i>DPS - MALIBU</i>	<i>SNAPP</i>	<i>527-5027</i>	<i>[Signature]</i>
84. <i>BERNARD S. MENDOZA</i>	<i>DPS - MALIBU</i>	<i>STAFF</i>		<i>[Signature]</i>
85. <i>Era A. Abayon</i>	<i>93 Bgy</i>			<i>[Signature]</i>
86. <i>Roberto L. Scullia Jr.</i>	<i>2071 Roropaka St</i>			<i>[Signature]</i>
87. <i>Edgar T. Quinto</i>				<i>[Signature]</i>
88. <i>LIRIANO DE GUZMAN</i>	<i>670 H. LOPEZ TAMP</i>		<i>09085088864</i>	<i>[Signature]</i>

**PUBLIC CONSULTATION FOR THE  
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Barangay 150, Tondo Manila  
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**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
89. JAY-VIN E. GAUVANI	BRGY 147, 560 H. Lopez		09354530223	
90. JOSEPH T. AQUINO	BRGY 147, 560 H. Lopez			
91. JULIE QUILTERA	BRGY 93-P		09072141281	
92. Bea Ruyra	BRGY 93		09283027807	
93. MICHAEL T. PACANZA	BRGY 147		09327215474	
94. JENNIFER TUREO	BRGY 147		09436061429	
95. FREDERICK G. MORGA	BRGY 147		09327215474	
96. FELPE G. MORGA	BRGY 147		093519779834	

**PUBLIC CONSULTATION FOR THE  
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Barangay 150, Tondo Manila  
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**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
97. Mara Perez a	147 510 H. Lopez Tondo Manila		09423495530	<i>[Signature]</i>
98. Julia Tequila	560 H. Lopez Tondo		09327215474	<i>[Signature]</i>
99. Josephine B. Delos Santos	2071 Rara Bagast			<i>[Signature]</i>
100. NICOR PABLO	560 H. Lopez Tondo Manila		35319521	<i>[Signature]</i>
101. Judelyn Oporda	510 H. Lopez Tondo Manila		09120574080	<i>[Signature]</i>
102. Luyvininda Puyos	510 H. Lopez Tondo Manila			<i>[Signature]</i>
103. Nenita Balanza	510 H. Lopez Tondo Manila			<i>[Signature]</i>
104. Shoney Gavani	507 H. Lopez Tondo Manila		090847160267	<i>[Signature]</i>

**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
105. Raymond Tolao	Cub M. Saper		0977742644	R Tolao
106. Jonna Jay Santos	C-2 Road Capulong St. Tondo MIA			J. Santos
107. Ruben Aguilan	C-2 Road Capulong St. Tondo MIA		09104544074	R. Aguilan
108. Mercedes Andrad	2071 Riverbay			Mercedes Andrad
109. Jayson Tria	11 11			Jayson Tria
110. Edlene Tria	11 11			Edlene Tria
111. Jesselton A. Martinez	C-2 Capulong		09099769035	J. Martinez
112. Shyr H. Torreon	Baro St. Lopez Tondo MIA		0919254768	Shyr H. Torreon



**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 150, Tondo Manila  
October 10, 2016, Monday, 8:30-10:30 AM

**ATTENDANCE SHEET**

	<b>Name</b>	<b>Address/Office</b>	<b>Position</b>	<b>Contact Number/ E-mail Address</b>	<b>Signature</b>
113.	Margie C Villanueva	Gen Capalong			M Villanueva
114.	Lydia C. Aguilar	DPWH-VERRE-FAVRE	Engineer II	304-3813	Dr
115.					
116.					
117.					
118.					
119.					
120.					

# ANNEX E: STRUCTURAL MAP AND PHOTOS WITHIN PROJECT FOOTPRINT

Raxabago bridge



Houses along Estero de Vitas near Raxabago bridge



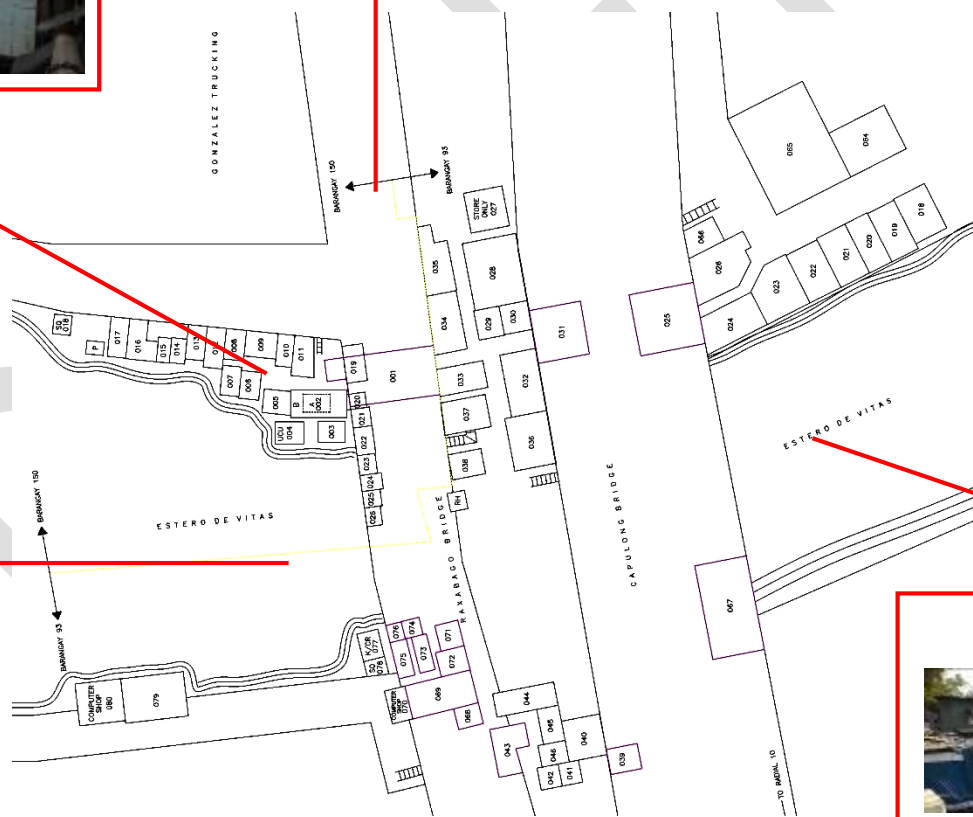
View of Estero de Vitas from Raxabago bridge



## LEGEND:

- RESIDENTIAL STRUCTURE
- UNDER THE BRIDGE STRUCTURE
- SERIES STRUCTURE
- KITCHEN/COMFORT ROOM
- PLATFORM
- REST HOUSE
- SLEEPING QUARTER
- UNDER CONSTRUCTION UNOCCUPIED
- ESTERO

Map: PRRC –Census Team



View of Estero de Vitas from Capulong bridge



VITAS PUMPING STATION: TONDO, MANILA  
STRUCTURAL MAP OF ISF HOUSEHOLDS

Typical exterior of house under bridge



Protruding roof of houses from under Raxabago bridge



Settlements under Raxabago and Capulong Bridge

Interior of houses



View from house under Raxabago bridge  
(man scavenging trash on a makeshift boat)



Below Raxabago bridge (sausage skins hung to dry)

