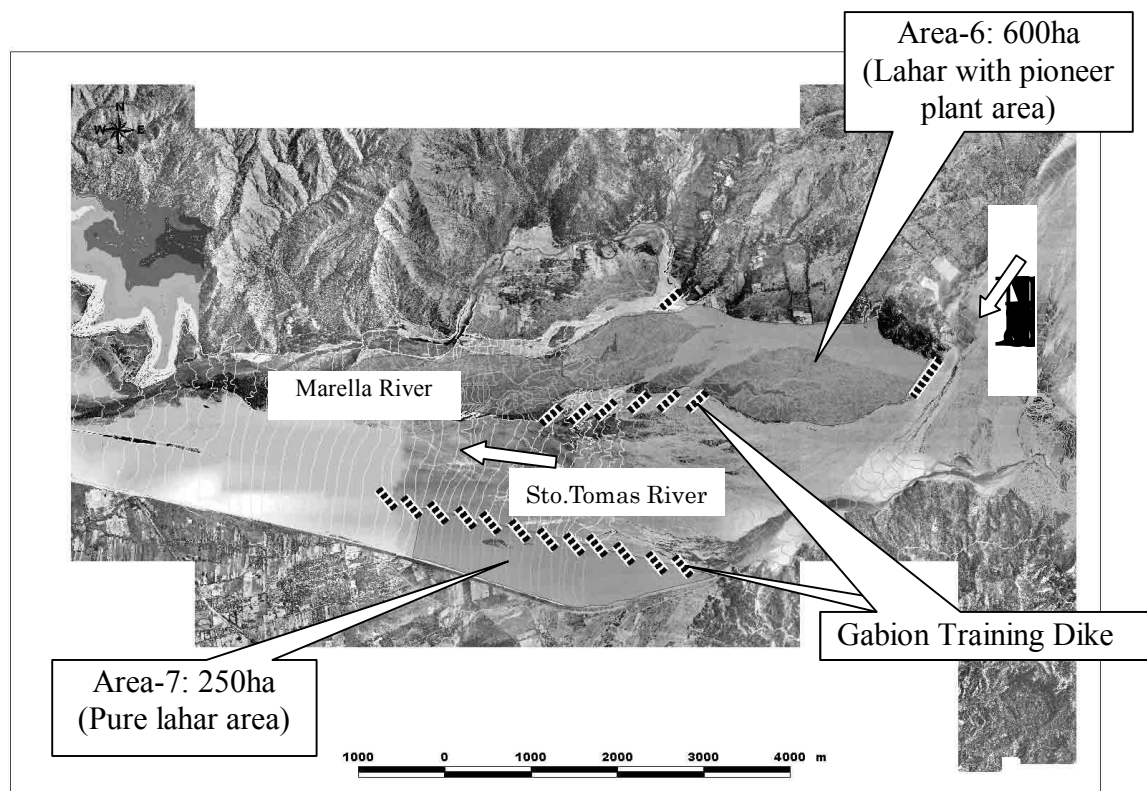


Downstream of Bucao River Lahar Area



Middle Reach of Sto. Tomas Lahar Area

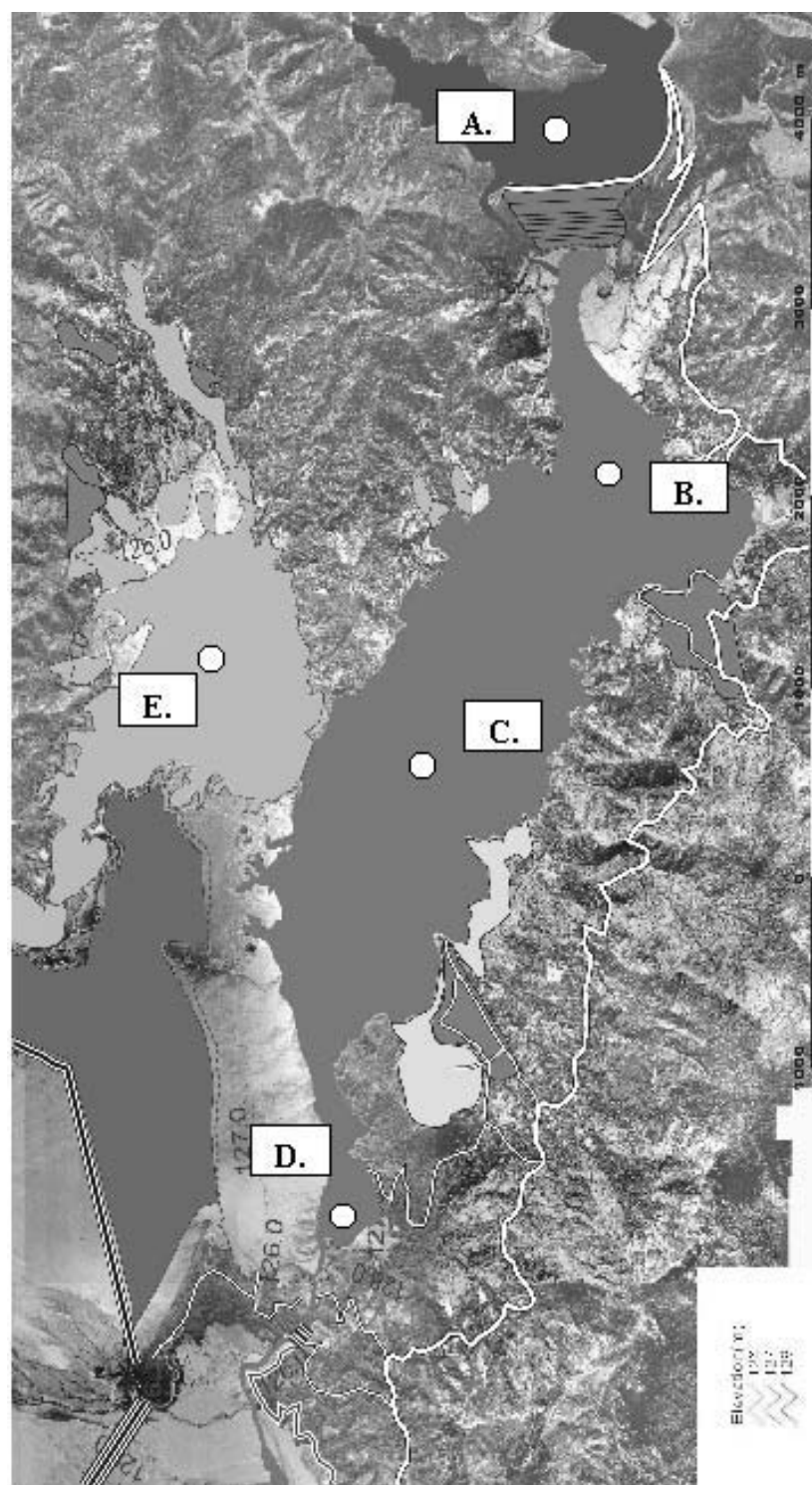
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**Figure 15.7.2**

**Priority Development Area for Agriculture  
Development in Lahar Area**



○ sampling point

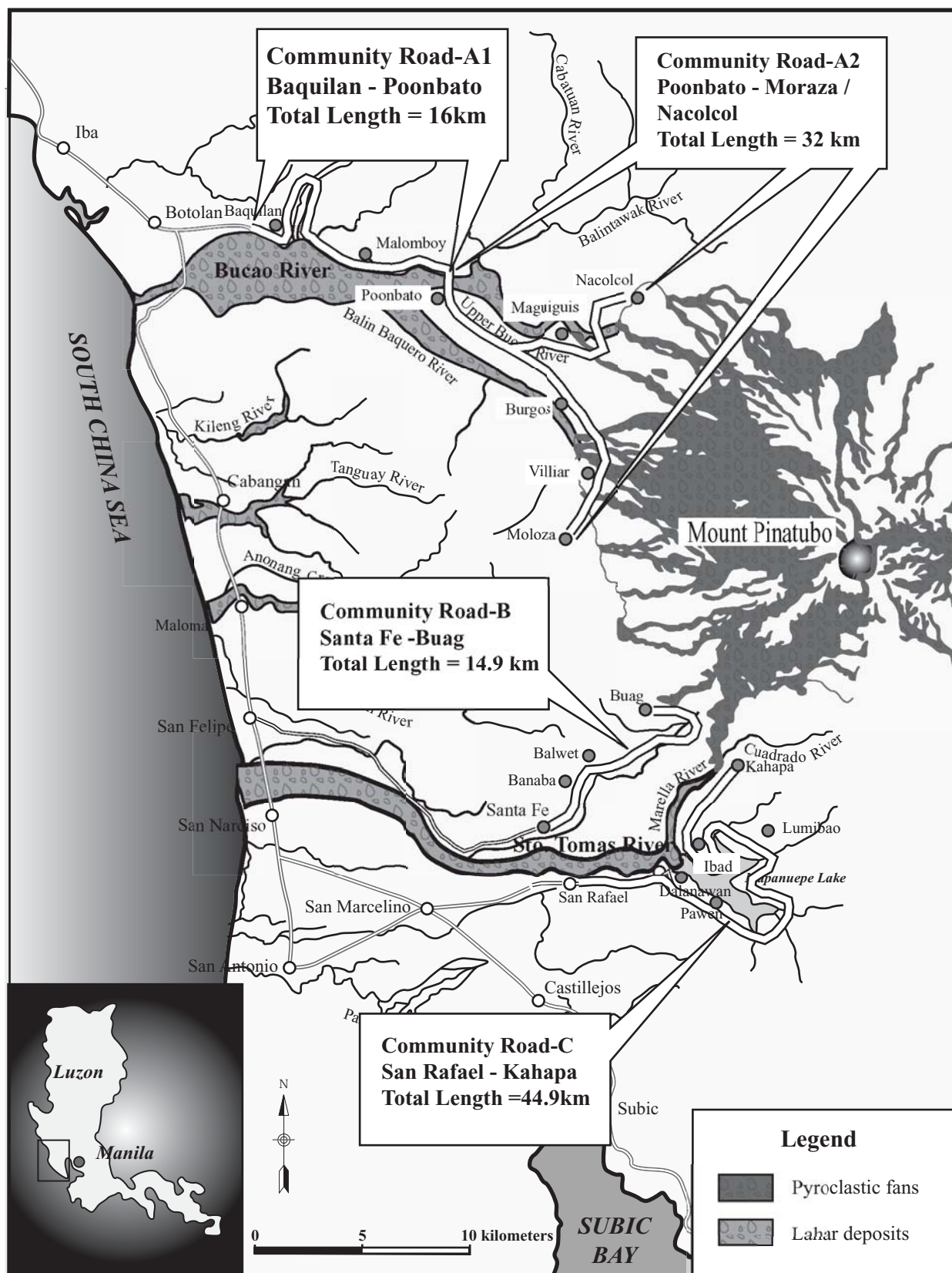
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**Figure 15.8.1**

**Location of Water/ Bed Material Samples for  
Mapanuepe Lake / Dizon Dam**



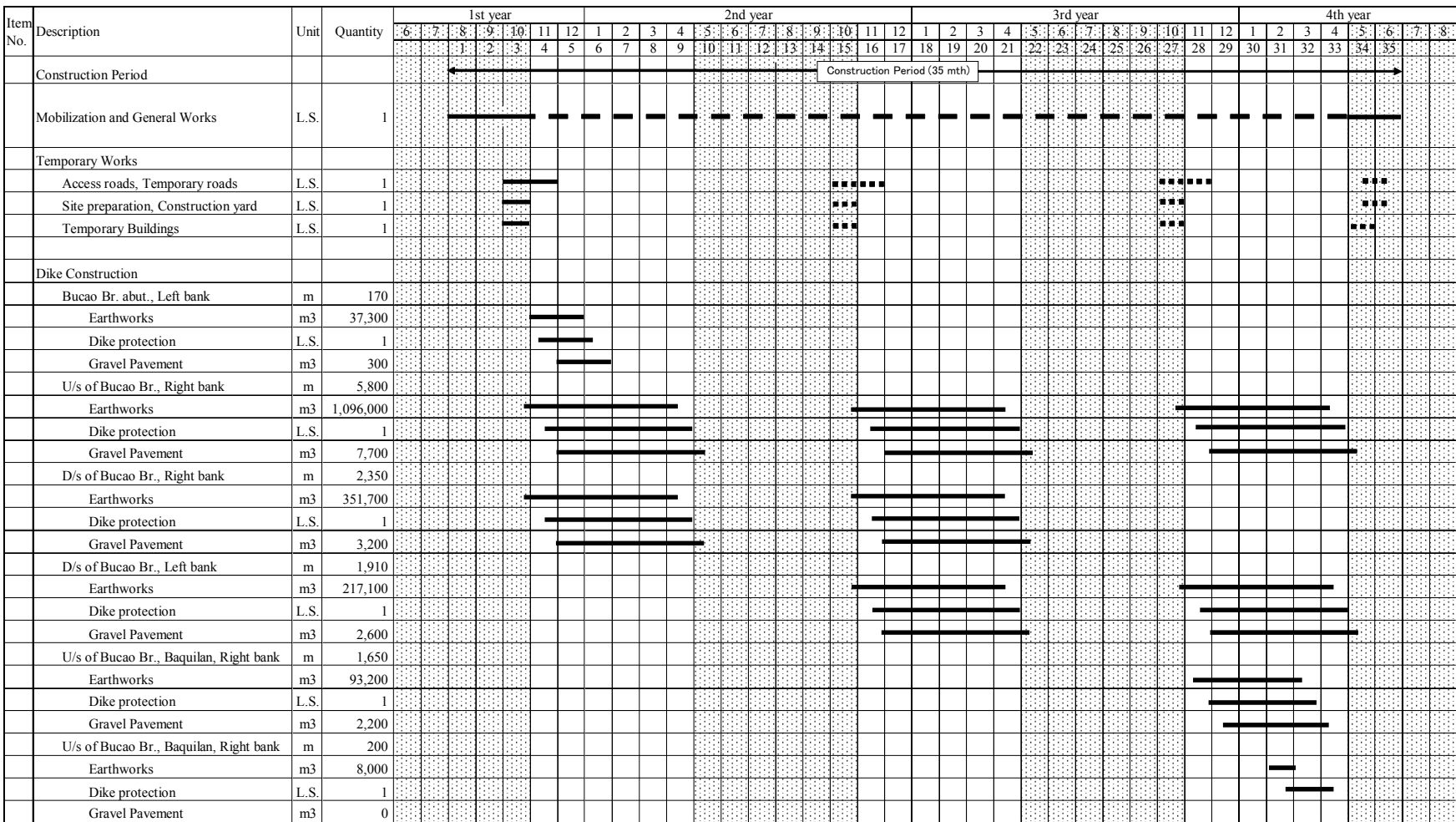
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**Figure 15.9.1**

**Proposed Community Road Network**



Note: Dry season is from November to April and rainy season is from May to October.  
Earthworks quantities show required embankment volume for constructing each section of dikes.

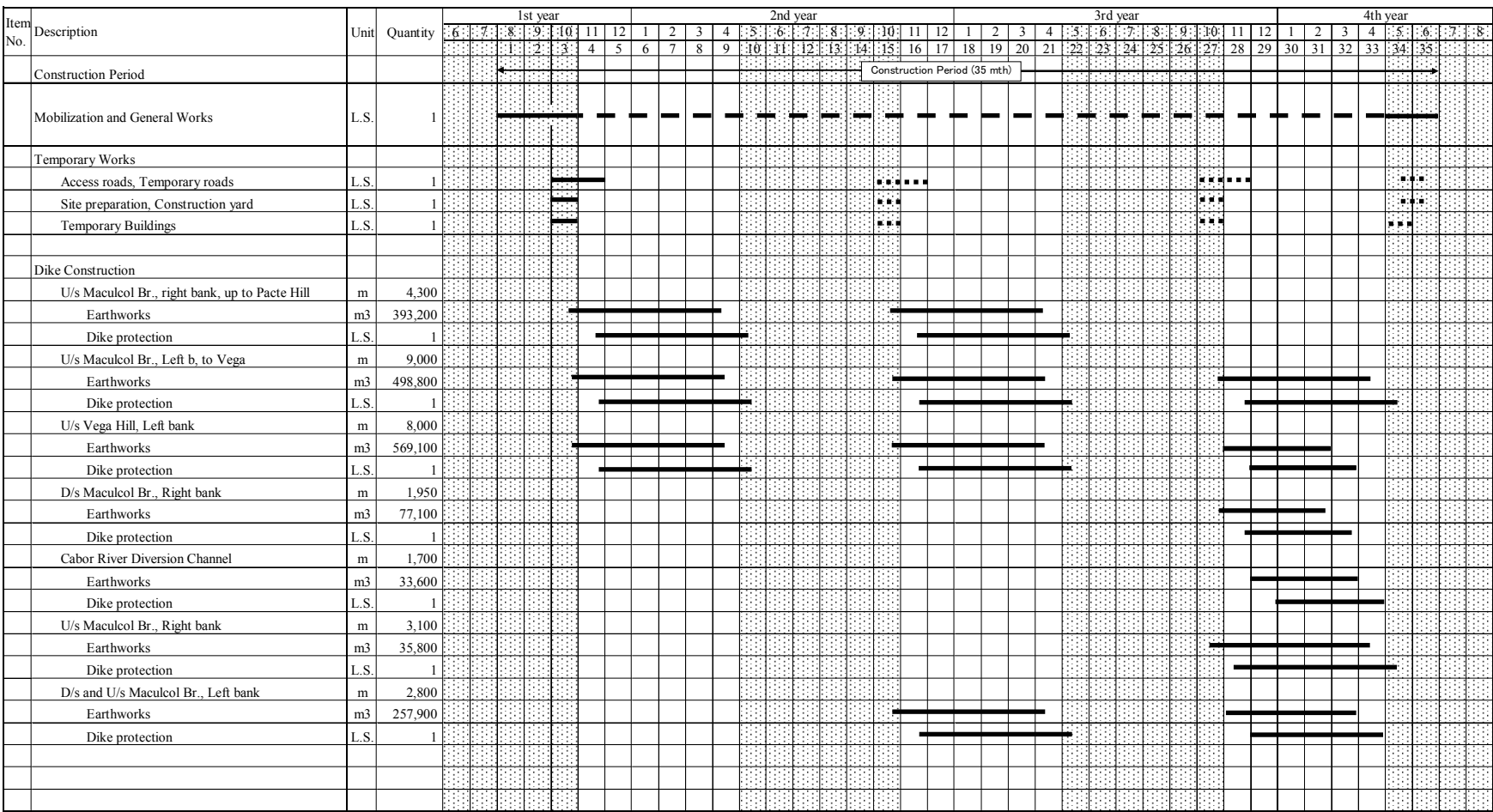
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**Figure 16.1.1**

**Construction Schedule of the Bucao River  
Dikes**



Note: Dry season is from November to April and rainy season is from May to October.  
Earthworks quantities show required embankment (or excavation at D/s and U/s Maculcol Br., Left bank) volume for constructing each section of dikes.

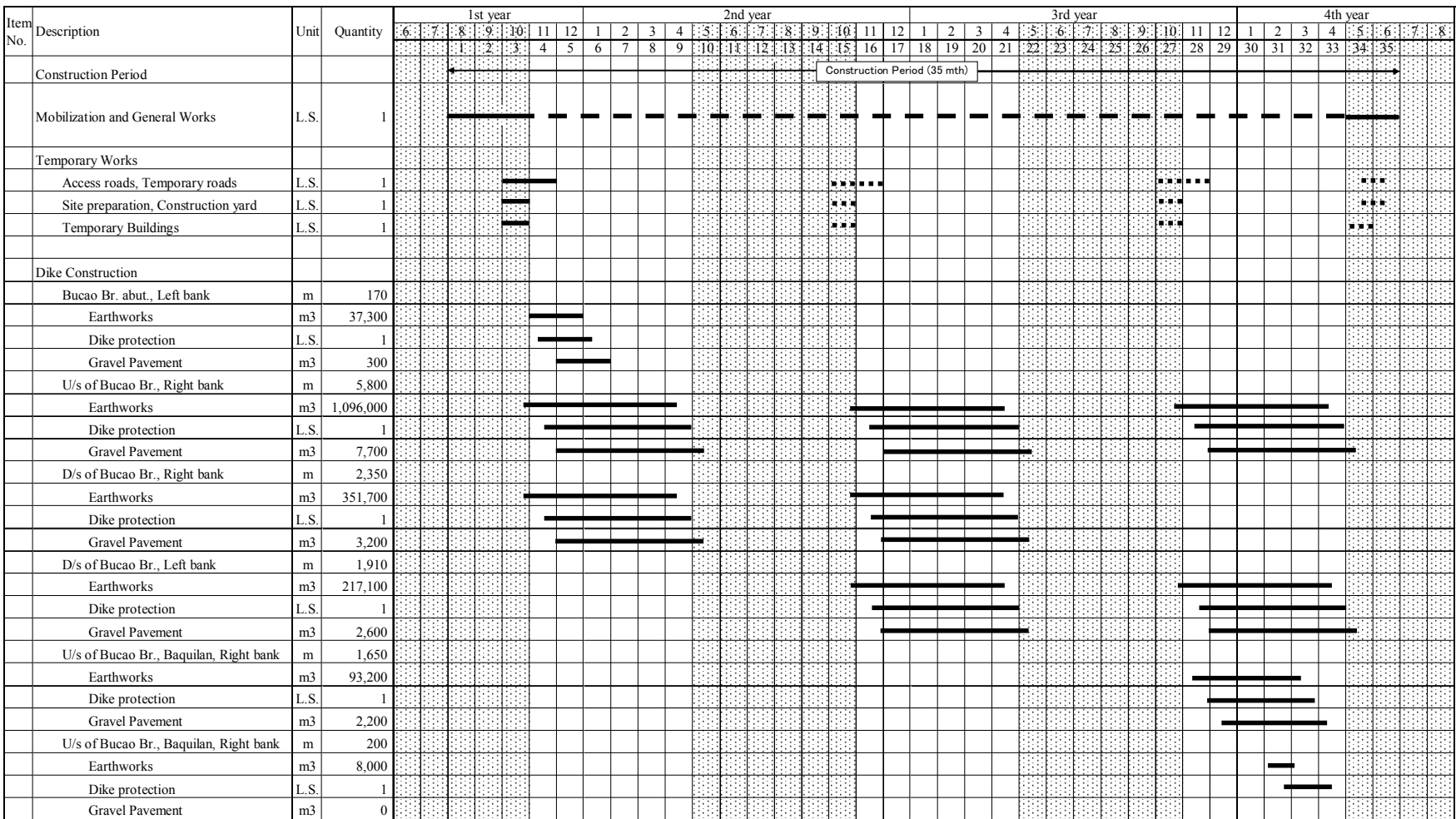
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Figure 16.2.1

Construction Schedule of the Sto. Tomas  
River Dikes

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Note: Dry season is from November to April and rainy season is from May to October.  
Earthworks quantities show required embankment volume for constructing each section of dikes.

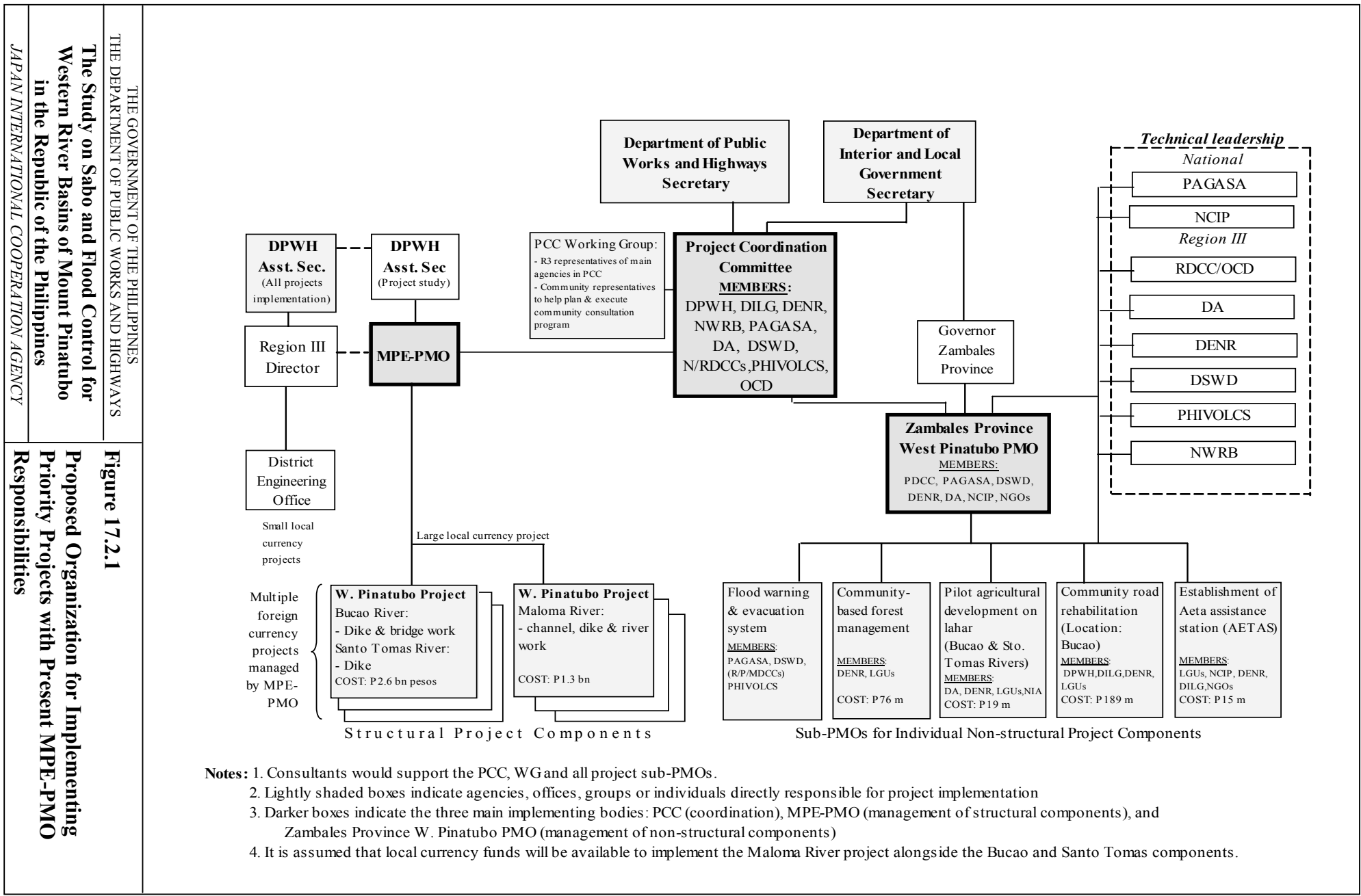
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**Figure 16.3.1**

**Construction Schedule of the Bucao Bridge**




No.	Project / Program		Project Cost (million Pesos)	1	2	3	4	5	6	7	8	9	10	Remarks
				Year										
				2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Monitoring Activities for Review of F/S														
1	Rainfall / Water Level / Discharge Measurement		8											
2	Sediment Balance Monitoring through River Cross-Sectional Survey		5											
Structural Measures														
3	Bucao River Dike Heightening / Strengthening including re-construction of Bucao Bridge		1,678											
4	Sto.Tomas River Dike Construction / Heightening and Strengthening		1,960											
Non-Structural Measures														
5	GSM Warning & Evacuation System													
5-1	Pilot Development	Upgrading existing warning system	30											
5-2		Assignment of 10 evacuation centers from existing buildings												
5-3		Public Dissemination of HazardMap												
5-4	Full Development	GSM Telemetry Warning System	82											
6	Monitoring of Rainfall/Lake Water Level and Ground Water level at Maraunot Notch		including in 5-3											
Community Based Disaster Prevention Measures														
7	Community Based Forest Management													
7-1	Pilot Development	Development for 2,200 ha	58											
8	Agriculture Development on Lahar Area													
8-1	Pilot Development	Development for 20 ha	19											
9	Community Road Rehabilitation Project													
9-1	Priority Scheme	Route-A1 along the Bucao River	189											
10	Establishment of Aeta Assistance Station (AETAS)													
10-1	Pilot Scheme	FOCUS Aeta Project with study on AETAS	15											
10-2	Full Development	Establishment on AETAS	depend on 10-1											
Total Investment Cost (including annual operation cost):			4,044											

Legend:  Funding Arrangement

 Detailed Design

 Tendering

 Construction / Implementation

 Operation

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**Figure 17.3.1**

**Implementation Schedule for Priority Projects**



