

SUMMARY OF PCG STATION					SITE	CGD ORMOC	
					CLASS		NO.
<b>1. LOCATION</b>							
Station	Address	Tel.	Fax	Longitude	Latitude		
CGS-Ormoc	Ebony St., Port Area, Ormoc City	053-5614213	None	° ' " E	° ' " N		
<b>2. GENERAL CONDITIONS</b>							
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population		
By Plane	to Tacloban [Taking time: 1.0 hr.]	<input checked="" type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel			
By Car	to Station [Taking time: 2.0 hrs.]	<input checked="" type="checkbox"/> Paved	<input checked="" type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel			
By	to [Taking time: hr.]	<input type="checkbox"/> Unpaved road	<input type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension			
Airport Name : Tacloban Airport		Seaport Name: Ormoc Port		<input type="checkbox"/> None			
<b>3. CONDITIONS OF STATION</b>					Refer to attached drawing		
<b>3.1 Site Conditions</b>							
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data			
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input checked="" type="checkbox"/> Flood	Yes No			
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input checked="" type="checkbox"/> Gravel	<input checked="" type="checkbox"/> Typhoon	<input type="checkbox"/>	<input checked="" type="checkbox"/> Boring Log Data		
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/> Soil Test Report		
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/>	<input checked="" type="checkbox"/> Geological Map		
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Calculation		
Ground Water Table: m (Well / Rain- / Dry- Season)			Others ( )	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Drawing		
Altitude		M		Telephone Lines		Max. Size of Passable Vehicle	
Land area		447 m <sup>2</sup>		One Line		2t / 4t / 6t / 10t / more	
<b>3.2 Building Conditions</b>				<b>3.3 Power Source</b>			
Constructions		Supplier	LEYECO II	E/G	Existing Power Conditions		
Num. of story	One Storey	Voltage	220 V	N/A	Good Bad		
Structure	Concrete	Phase	3 Phase		<input checked="" type="checkbox"/>	<input type="checkbox"/> Power Supply System	
Roof Material	G.I. Sheets	Wire	3 Wire		<input type="checkbox"/>	<input type="checkbox"/> Operations of E/G	
Ceiling Mat.	Plywood	kVA			<input type="checkbox"/>	<input type="checkbox"/> Operations of AVR	
Wall Material	CHB	Quality of Commercial Source			Capacity of fuel for engine		
Wall finish	Plaster/Paint	Fluctuations	3-5 V	± %	Day tank	N/A Liter	
Flooring Mat.	Vinyl/Plain Cement	Availability of power per day		24 Hours	Main tank	N/A k Liter	
Water Leakage	Yes (some portions)	Power interruption /month		1 Times			
Room Area (m <sup>2</sup> )		Total interpt. hours /month		2 Hours	E/G Stand-by System		
Operation room	3.35 x 2.0 = 6.7sq.m	Max. interpt. hours at once		2 Hours	<input type="checkbox"/>	Single System	
E / G room	None				<input type="checkbox"/>	Dual System	
<b>3.4 Air Condition / Ventilation of Equipment Room</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Air Condition	Unit:	Type:	Capacity:		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Exhaust Fan	Unit:	Type:	Capacity:		
<b>3.5 Confirmation of Existing System</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Towers (Masts)	Type:	Stance:	Height (m):		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Antenna	Type: HF dipole	Size:	Height (m):	10.0	Direction: W - E
			Type:	Size:	Height (m):		Direction:
			Type:	Size:	Height (m):		Direction:
			Type:	Size:	Height (m):		Direction:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Grounding system		<input checked="" type="checkbox"/>	Lightning system		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Feeder Cable Way		<input checked="" type="checkbox"/>	City water supply		

<b>SUMMARY OF PCG STATION</b>	SITE	CGD ORMOC		
	CLASS		NO.	

<b>3.6 Security of Site and Equipment Room</b>				
Yes	No		Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lock at Entrance Door	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Latticed Window	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Fence	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Remark</b>	<p>The area of responsibility of CGS-Ormoc covers the municipalities of Palompon, Merida, Isabel, Albuera, Baybay and Ormoc City itself.</p> <p>The provision of the following needs are deemed important/urgent by CGS-Ormoc to enable them to properly and efficiently do their functions:</p> <ol style="list-style-type: none"> <li>1. Floating Assets</li> <li>2. Mobility Vehicle</li> <li>3. Generator Set/Back-up Power Supply</li> <li>4. Communication Equipment including hand held radio</li> <li>5. Fax machine, computers and other office equipment</li> <li>6. Complement personnel</li> </ol>			

<b>4. OPERATION AND MAINTENANCE</b>				<b>5. PERSONNEL FORMATIONS</b>								
<b>Actions taken in equipment failure</b>												
Restoration flow	Repair by local technician otherwise equipment is send to HCGD- Cebu for repair			Chief		I						
Examples of major failure	Equipment cannot transmit/ receive messages; No signal			Operator (skilled)		1	( )					
Sufficiency of spares	None			Technician (skilled)			( )					
<b>Records of damages</b>				<b>Environmental Conditions</b>								
<input type="checkbox"/>	Heavy rainfall			Good	Bad							
<input type="checkbox"/>	Storm			<input type="checkbox"/>	<input type="checkbox"/>	External noises						
<input type="checkbox"/>	Lightning			<input type="checkbox"/>	<input type="checkbox"/>	Air pollution						
<input type="checkbox"/>	Other calamity											
<b>Institutional and Human Statuses</b>				<b>Training Record</b>								
1	Budget	<input type="checkbox"/>	Sufficient	<input type="checkbox"/>	Reasonable	<input checked="" type="checkbox"/>	Insufficient	Course	Class	Location	Period	Trainee
2	Spares	<input type="checkbox"/>	Enough	<input type="checkbox"/>	Reasonable	<input checked="" type="checkbox"/>	Not enough					
3	Measuring eqpt./tools	<input type="checkbox"/>	Enough	<input type="checkbox"/>	Reasonable	<input checked="" type="checkbox"/>	Not enough					
4	Number of Operator	<input type="checkbox"/>	Enough	<input type="checkbox"/>	Reasonable	<input checked="" type="checkbox"/>	Not enough					
5	Number of Technician	<input type="checkbox"/>	Enough	<input type="checkbox"/>	Reasonable	<input checked="" type="checkbox"/>	Not enough					
6	Capability of Operator	<input type="checkbox"/>	Skilled	<input checked="" type="checkbox"/>	Not so bad	<input type="checkbox"/>	Not capable					
7	Capability of Technician	<input type="checkbox"/>	Skilled	<input type="checkbox"/>	Not so bad	<input checked="" type="checkbox"/>	Not capable					

<b>6. COMMENTS</b>	
<b>Suggestion</b>	
<b>Remarks</b>	<p><u>Comments/Recommendations</u></p> <ol style="list-style-type: none"> <li>1. Provision of HF (to replace existing which is outmoded) and VHF equipment in order to attain direct station to Cebu district headquarter contact (HF equipment) as well as for direct contact from station to coast guard detachments and station to vessel contact under its area of responsibility (VHF equipment).</li> <li>2. Installation of appropriate antennae mounted on self – supporting type structure/ pole.</li> <li>3. Increase size of operations room; provide operation room with air-conditioning unit and computer for the typing of messages.</li> <li>4. Increase the number of skilled operator and provide training to personnel ( especially the non-rated personnel) for an efficient 24hrs communications equipment operation service.</li> <li>5. Provision of fast moving spare parts (fuses, diods, transistors, I.C.s, etc.).</li> <li>6. Creation of a communications maintenance repair group at the Cebu district headquarter with rated electronic technician.</li> <li>7. Provision of standby generator set to ensure uninterrupted power supply twenty four hours (24 hrs.) a day.</li> <li>8. Provide telefax machine as a fast and alternative means of transmitting communications.</li> <li>9. Repair of dilapidated portion of the ceiling to prevent leakages.</li> </ol>

SUMMARY OF PCG STATION					SITE	CGS MASSIN	
					CLASS		NO.
<b>1. LOCATION</b>							
Station	Address	Tel.	Fax	Longitude	Latitude		
CGS-Maasin	Brgy. Abgao, Port Area, Maasin City	053-3814501	None	° ' " E	° ' " N		
<b>2. GENERAL CONDITIONS</b>							
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population		
By Plane	to Tacloban [Taking time: 1.0 hr.]	<input checked="" type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel			
By Car	to Station [Taking time: 4.0 hr.]	<input checked="" type="checkbox"/> Paved	<input checked="" type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel			
By	to [Taking time: hr.]	<input type="checkbox"/> Unpaved road	<input type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension			
Airport Name : Tacloban Airport		Seaport Name: Maasin Port		<input type="checkbox"/> None			
<b>3. CONDITIONS OF STATION</b>					Refer to attached drawing		
<b>3.1 Site Conditions</b>							
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data			
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes	No		
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input checked="" type="checkbox"/> Gravel	<input checked="" type="checkbox"/> Typhoon	<input type="checkbox"/>	<input checked="" type="checkbox"/> Boring Log Data		
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/> Soil Test Report		
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/>	<input checked="" type="checkbox"/> Geological Map		
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Calculation		
Ground Water Table: m (Well / Rain- / Dry- Season)		Others ( )		<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Drawing		
Altitude	M		Telephone Lines	Max. Size of Passable Vehicle			
Land area	544 m <sup>2</sup>		Lines	2t / 4t / 6t / 10t / more			
<b>3.2 Building Conditions</b>				<b>3.3 Power Source</b>			
Constructions		Supplier	SOLECO	E/G	Existing Power Conditions		
Num. of story	One Storey	Voltage	220 V	N/A V	Good	Bad	
Structure	Concrete	Phase	3 Phase		<input checked="" type="checkbox"/>	<input type="checkbox"/> Power Supply System	
Roof Material	G.I. Sheets	Wire	3 Wire		<input type="checkbox"/>	<input type="checkbox"/> Operations of E/G	
Ceiling Mat.	Plywood	kVA			<input type="checkbox"/>	<input type="checkbox"/> Operations of AVR	
Wall Material	CHB	Quality of Commercial Source			Capacity of fuel for engine		
Wall finish	Plaster/Paint	Fluctuations	5 V	± %	Day tank	N/A Liter	
Flooring Mat.	Vinyl/Plain Cement	Availability of power per day		24 Hours	Main tank	N/A k Liter	
Water Leakage	Yes (some portions)	Power interruption /month		3 Times			
Room Area (m <sup>2</sup> )		Total interpt. hours /month		12 Hours	E/G Stand-by System		
Operation room	1.9 x 2.5 = 4.75sq.m.	Max. interpt. hours at once		8 Hours	<input type="checkbox"/> Single System		
E / G room	None				<input type="checkbox"/> Dual System		
<b>3.4 Air Condition / Ventilation of Equipment Room</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/> Air Condition	Unit:	Type:	Capacity:			
<input type="checkbox"/>	<input checked="" type="checkbox"/> Exhaust Fan	Unit:	Type:	Capacity:			
<b>3.5 Confirmation of Existing System</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/> Towers (Masts)	Type:	Stance:	Height (m):			
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type: VHF	Size:	Height (m): 15.0	Direction: (antennae unserviceable)		
		Type:	Size:	Height (m):	Direction:		
		Type:	Size:	Height (m):	Direction:		
		Type:	Size:	Height (m):	Direction:		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Grounding system	<input checked="" type="checkbox"/>	<input type="checkbox"/> Lightning system				
<input checked="" type="checkbox"/>	<input type="checkbox"/> Feeder Cable Way	<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply				

SUMMARY OF PCG STATION				SITE	CGS MASSIN				
				CLASS		NO.			
<b>3.6 Security of Site and Equipment Room</b>									
Yes	No	Yes	No						
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lock at Entrance Door	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lock at Window				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Latticed Window	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Site				
<input type="checkbox"/>	<input type="checkbox"/>	Security Fence	<input type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Equipment Room				
<b>Remarks</b>									
<p>The area of responsibility of CGS-Maasin entirely covers the portion of Southern Leyte extending from the town of Inopacan to the municipality of Silago.</p> <p>The coast guard station is located inside the port area of the PPA. The coast guard building however, is inside a small compound that is also occupied by the one storey building of PPA at the back portion.</p> <p>The provision of the following items were aired by CGS-Maasin in order or them to perform their duties and responsibilities properly and efficiently:</p> <ol style="list-style-type: none"> <li>1. Provision of Communication Equipment</li> <li>2. Provision of Generator Set</li> <li>3. Pprovision of additional Computer Units</li> <li>4. Provision of floating assets and additional mobility vehicle</li> <li>5. Provision of additional/complement personnel</li> </ol>									
<b>4. OPERATION AND MAINTENANCE</b>				<b>5. PERSONNEL FORMATIONS</b>					
<b>Actions taken in equipment failure</b>									
Restoration flow	Repair by local technician otherwise equipment is send to HCGD-Cebu for repair.			Chief	1				
Examples of major failure	Equipment cannot transmit/ receive messages; No signal			Operator (skilled)	1	( )			
Sufficiency of spares	None			Technician (skilled)	None	( )			
<b>Records of damages</b>			<b>Environmental Conditions</b>		Administrator				
<input type="checkbox"/>	Heavy rainfall		Good	Bad					
<input type="checkbox"/>	Storm		<input type="checkbox"/>	<input type="checkbox"/>	External noises				
<input type="checkbox"/>	Lightning		<input type="checkbox"/>	<input type="checkbox"/>	Air pollution				
<input type="checkbox"/>	Other calamity								
<b>Institutional and Human Statuses</b>				<b>Training Record</b>					
1	Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class	Location	Period	Trainee
2	Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
3	Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
4	Number of Operator	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
5	Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> None					
6	Capability of Operator	<input type="checkbox"/> Skilled	<input checked="" type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable					
7	Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> None					
<b>6. COMMENTS</b>									
<b>Suggestion</b>									
<b>Remarks</b>		<p><u>Comments/Recommendations</u></p> <ol style="list-style-type: none"> <li>1. Provision of HF and VHF equipment to attain direct station to Cebu district headquarter contact (HF equipment) as well as for direct contact from station to coast guard detachments and station to vessel contact under its area of responsibility (VHF equipment).</li> <li>2. Installation of appropriate antennae mounted on self – supporting type structure/ pole.</li> <li>3. Increase size of operations room; provide operation room with air-conditioning unit and computer for the typing of messages.</li> <li>4. Increase the number of skilled operator and provide training to personnel ( especially the non-rated personnel) for an efficient 24hrs communications equipment operation service.</li> <li>5. Provision of fast moving spare parts (fuses, diods, transistors, I.C.s, etc.).</li> <li>6. Creation of a communications maintenance repair group at the Cebu district headquarter with rated electronic technician.</li> <li>7. Provision of standby generator set to ensure uninterrupted power supply twenty four hours (24 hrs.) a day.</li> <li>8. Provide telefax machine as a fast and alternative means of transmitting communications.</li> <li>9. Repair of dilapidated portion of the ceiling to prevent leakages.</li> </ol>							

SUMMARY OF PCG STATION					SITE	CGS TACLOBAN	
					CLASS		NO.
<b>1. LOCATION</b>							
Station	Address	Tel.	Fax	Longitude	Latitude		
CGS-Tacloban	Brgy. San Jose, Tacloban City	None	None	° ' " E	° ' " N		
<b>2. GENERAL CONDITIONS</b>							
Moving from Manila	Site Access from Port	Road Traffic	Accommodation	Population			
By Plane to Tacloban [Taking time: 1.0 hr.]	<input checked="" type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel				
By Car to Station [Taking time: 3.0 min.]	<input checked="" type="checkbox"/> Paved	<input checked="" type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel				
By to [Taking time: hr.]	<input type="checkbox"/> Unpaved road	<input type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension				
Airport Name : Tacloban Airport		Seaport Name: Tacloban Port		<input type="checkbox"/> None			
<b>3. CONDITIONS OF STATION</b>						Refer to attached drawing	
<b>3.1 Site Conditions</b>							
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data			
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes No			
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input checked="" type="checkbox"/> Gravel	<input checked="" type="checkbox"/> Typhoon	<input type="checkbox"/> <input checked="" type="checkbox"/> Boring Log Data			
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/> <input checked="" type="checkbox"/> Soil Test Report			
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/> <input checked="" type="checkbox"/> Geological Map			
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Calculation			
Ground Water Table: m (Well / Rain- / Dry- Season)			Others ( )	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Drawing			
Altitude		M		Telephone Lines		Max. Size of Passable Vehicle	
Land area		522 m <sup>2</sup>		Lines		2t / 4t / 6t / 10t / more	
<b>3.2 Building Conditions</b>				<b>3.3 Power Source</b>			
Constructions		Supplier	LEYECO II	E/G	Existing Power Conditions		
Num. of story	One Storey	Voltage	220 V	N/A V	Good Bad		
Structure	Concrete	Phase	3 Phase		<input checked="" type="checkbox"/> <input type="checkbox"/> Power Supply System		
Roof Material	G.I. Sheets	Wire	3 Wire		<input type="checkbox"/> <input type="checkbox"/> Operations of E/G		
Ceiling Mat.	Plywood	kVA			<input type="checkbox"/> <input type="checkbox"/> Operations of AVR		
Wall Material	CHB	Quality of Commercial Source			Capacity of fuel for engine		
Wall finish	Plaster/Adobe	Fluctuations	3-5 V	± %	Day tank	N/A Liter	
Flooring Mat.	Vinyl/Plain Cement	Availability of power per day		24 Hours	Main tank	N/A k Liter	
Water Leakage	Yes (some portions)	Power interruption /month		3 Times			
Room Area (m <sup>2</sup> )		Total interpt. hours /month		3 Hours	E/G Stand-by System		
Operation room	3.5 x 4.8 = 16.8sq.m.	Max. interpt. hours at once		12 Hours	<input type="checkbox"/> Single System		
E / G room	None				<input type="checkbox"/> Dual System		
<b>3.4 Air Condition / Ventilation of Equipment Room</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/> Air Condition	Unit:	Type:	Capacity:			
<input type="checkbox"/>	<input checked="" type="checkbox"/> Exhaust Fan	Unit:	Type:	Capacity:			
<b>3.5 Confirmation of Existing System</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/> Towers (Masts)	Type:	Stance:	Height (m):			
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type:HF Dipole	Size:	Height (m): 10.0	Direction: SE - NW		
		Type:VHF Whip	Size:	Height (m): 10.0	Direction: All direction		
		Type:	Size:	Height (m):	Direction:		
		Type:	Size:	Height (m):	Direction:		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Grounding system			<input checked="" type="checkbox"/>	<input type="checkbox"/> Lightning system		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Feeder Cable Way			<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply		
<b>3.6 Security of Site and Equipment Room</b>							
Yes No							
<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Entrance Door			<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Window		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Latticed Window			<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Patrol on Site		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Fence			<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Patrol on Equipment Room		

# SUMMARY OF PCG STATION

SITE	CGS TACLOBAN	
CLASS		NO.

**Remark**

The area of responsibility of CGS-Tacloban covers the whole of Biliran Sub-Province, the southern portion of Eastern Samar (from Basey to Llorente), Tacloban City to the town of Abuyog going south of Northern Leyte and from Tacloban City to the municipality of Calubian of Northwest Leyte.

Among the urgent needs voiced out by CGS-Tacloban to enable them to properly and efficiently perform their functions are the following:

1. Communication Equipment
2. Airconditioning Units
3. Permanent Coast Guard Station Building
4. Generator Set
5. Floating assets and mobility equipment
6. Computer Units

It is to be noted that the location of the present coast guard station is inside a military compound in Brgy. San Jose of Tacloban City which is a stones throw away from the Tacloban Airport. It is about 10.0 kilometers away from the Port of Tacloban. The building occupied by CGS-Tacloban belongs to the Philippine Navy, the same being previously under its command prior to being transferred under the administrative jurisdiction of the DOTC. The CGS-Tacloban has an outpost at the Port of Tacloban being manned on a 24 hour basis for clearing of cargo vessels.

4. OPERATION AND MAINTENANCE				5. PERSONNEL FORMATIONS				
<b>Actions taken in equipment failure</b>								
Restoration flow	Repair by local technician otherwise equipment is send to HCGD-Cebu for repair			Chief		1		
Examples of major failure	Equipment cannot transmit/ receive messages; No signal			Operator (skilled)		1	( )	
Sufficiency of spares	None			Technician (skilled)			( )	
<b>Records of damages</b>				<b>Environmental Conditions</b>				
<input type="checkbox"/> Heavy rainfall		Good	Bad					
<input type="checkbox"/> Storm		<input type="checkbox"/>	<input type="checkbox"/>	External noises	Total		2	
<input type="checkbox"/> Lightning		<input type="checkbox"/>	<input type="checkbox"/>	Air pollution				
<input type="checkbox"/> Other calamity								
<b>Institutional and Human Statuses</b>				<b>Training Record</b>				
1 Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class	Location	Period	Trainee
2 Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
3 Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
4 Number of Operator	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
5 Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
6 Capability of Operator	<input type="checkbox"/> Skilled	<input checked="" type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable					
7 Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> Not capable					

6. COMMENTS	
<b>Suggestion</b>	
<b>Remarks</b>	<p><u>Comments/Recommendations</u></p> <ol style="list-style-type: none"> <li>1. Replacement of outmoded HF and VHF equipment in order to attain direct station to Cebu district headquarter contact (HF equipment) as well as for direct contact from station to coast guard detachments and station to vessel contact under its area of responsibility (VHF equipment).</li> <li>2. Installation of appropriate antennae mounted on self – supporting type structure/ pole.</li> <li>3. Provide operation room with air-conditioning unit and computer for the typing of messages.</li> <li>4. Increase the number of skilled operator and provide training to personnel ( especially the non-rated personnel) for an efficient 24hrs communications equipment operation service.</li> <li>5. Provision of fast moving spare parts (fuses, diods, transistors, I.C.s, etc.).</li> <li>6. Creation of a communications maintenance repair group at the Cebu district headquarter with rated electronic technician.</li> <li>7. Provision of standby generator set to ensure uninterrupted power supply twenty four hours (24 hrs.) a day.</li> <li>8. Provide telefax machine as a fast and alternative means of transmitting communications.</li> <li>9. Repair of dilapidated portion of the ceiling to prevent leakages.</li> </ol>

SUMMARY OF PCG STATION				SITE	CGS CATBALOGAN	
				CLASS		NO.
<b>1. LOCATION</b>						
Station	Address	Tel.	Fax	Longitude	Latitude	
CGS-Catbalogan	Pier 2, Allen Ave. Catbalogan	None	None	124° 52' 24" E	11° 46' 48" N	
<b>2. GENERAL CONDITIONS</b>						
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population	
By Plane	to Tacloban [Taking time: 1.0 hr.]	<input checked="" type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel		
By Car	to Catbalogan [Taking time: 2.5 hr.]	<input checked="" type="checkbox"/> Paved	<input type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel		
By	to [Taking time: hr.]	<input type="checkbox"/> Unpaved road	<input checked="" type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension		
Airport Name : Catbalogan Airport		Seaport Name: Catbalogan Port		<input type="checkbox"/> None		
<b>3. CONDITIONS OF STATION</b>				Refer to attached drawing		
<b>3.1 Site Conditions</b>						
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data		
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes	No	
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input checked="" type="checkbox"/> Gravel	<input checked="" type="checkbox"/> Typhoon	<input type="checkbox"/>	<input checked="" type="checkbox"/> Boring Log Data	
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/> Soil Test Report	
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/>	<input checked="" type="checkbox"/> Geological Map	
<input type="checkbox"/> Valley	<input type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Calculation	
Ground Water Table: m (Well / Rain- / Dry- Season)			Others ( )	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Drawing	
Altitude	M		Telephone Lines	Max. Size of Passable Vehicle		
Land area	738.00 m <sup>2</sup>		None Lines	2t / 4t / 6t / 10t / more		
<b>3.2 Building Conditions</b>			<b>3.3 Power Source</b>			
Constructions		Supplier	SAMELCO	E/G	Existing Power Conditions	
Num. of story	One Storey	Voltage	220 V	None V	Good Bad	
Structure	Concrete	Phase	3 Phase		<input checked="" type="checkbox"/> Power Supply System	
Roof Material	G.I. Sheets	Wire	3 Wire		<input type="checkbox"/> Operations of E/G	
Ceiling Mat.	Plywood	kVA	-		<input type="checkbox"/> Operations of AVR	
Wall Material	CHB	Quality of Commercial Source		Capacity of fuel for engine		
Wall finish	Plaster/Paint	Fluctuations	5 V ± %	Day tank	N/A Liter	
Flooring Mat.	Vinyl/Plain Cement	Availability of power per day		24 Hours	Main tank	N/A k Liter
Water Leakage	Yes	Power interruption /month		3 Times		
Room Area (m <sup>2</sup> )		Total interpt. hours /month		15 Hours	E/G Stand-by System	
Operation room	1.4m x 3.0m = 4.2sq.m.	Max. interpt. hours at once		5 Hours	<input type="checkbox"/> Single System	
E / G room	None				<input type="checkbox"/> Dual System	
<b>3.4 Air Condition / Ventilation of Equipment Room</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Air Condition	Unit:	Type:	Capacity:		
<input type="checkbox"/>	<input checked="" type="checkbox"/> Exhaust Fan	Unit:	Type:	Capacity:		
<b>3.5 Confirmation of Existing System</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Towers (Masts)	Type:	Stance:	Height (m):		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type:	Size:	Height (m): 10.0	Direction: E - W	
		Type:	Size:	Height (m):	Direction:	
		Type:	Size:	Height (m):	Direction:	
		Type:	Size:	Height (m):	Direction:	
<input checked="" type="checkbox"/>	<input type="checkbox"/> Grounding system	<input checked="" type="checkbox"/>	<input type="checkbox"/> Lightning system			
<input type="checkbox"/>	<input checked="" type="checkbox"/> Feeder Cable Way	<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply			

<b>SUMMARY OF PCG STATION</b>	SITE	CGS CATBALOGAN	
	CLASS		NO.

**3.6 Security of Site and Equipment Room**

Yes	No	Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lock at Entrance Door		Lock at Window	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Latticed Window		Security Patrol on Site	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Security Fence		Security Patrol on Equipment Room	

**Remark**

The area of responsibility of CGS-Catbalogan extends throughout the whole island of Samar covering the provinces of Northern Samar, Western Samar and Eastern Samar. The southern portion however, of Eastern Samar from the municipality of Llorente to the municipality of Basey is under the jurisdiction of CGS-Tacloban.

The CGS-Catbalogan strongly recommends for the provision of the following items to ensure the efficient and proper performance of their functions and responsibilities:

1. Communication Equipment
2. Generator Set
3. Computer Units
4. Floating Assets
5. Mobility Vehicle
6. Training of existing personnel
7. Additional/complement personnel in particular maintenance technicians

<b>4. OPERATION AND MAINTENANCE</b>	<b>5. PERSONNEL FORMATIONS</b>
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<b>Actions taken in equipment failure</b>				
Restoration flow	Repair by local technician otherwise equipment is send to HCGD- Cebu for repair	Chief	1	
Examples of major failure	Equipment cannot transmit/ receive messages; No signal	Operator (skilled)		( )
Sufficiency of spares	None	Technician (skilled)		( )
<b>Records of damages</b>		<b>Environmental Conditions</b>	Administrator	1
<input type="checkbox"/> Heavy rainfall		Good	Bad	
<input type="checkbox"/> Storm		<input type="checkbox"/>	<input type="checkbox"/>	External noises
<input type="checkbox"/> Lightning		<input type="checkbox"/>	<input type="checkbox"/>	Air pollution
<input type="checkbox"/> Other calamity				
		<b>Total</b>		2

<b>Institutional and Human Statuses</b>				<b>Training Record</b>				
1 Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class	Location	Period	Trainee
2 Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
3 Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
4 Number of Operator	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
5 Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
6 Capability of Operator	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> Not capable					
7 Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> Not capable					

**6. COMMENTS**

<b>Suggestion</b>	
<b>Remarks</b>	<p><b>Comments/Recommendations</b></p> <ol style="list-style-type: none"> <li>1. Provision of HF (to replace existing which is outmoded) and VHF equipment in order to attain direct station to Cebu district headquarter contact (HF equipment) as well as for direct contact from station to coast guard detachments and station to vessel contact under its area of responsibility (VHF equipment).</li> <li>2. Installation of appropriate antennae mounted on self – supporting type structure/ pole.</li> <li>3. Increase size of operations room; provide operation room with air-conditioning unit and computer for the typing of messages.</li> <li>4. Provide skilled operator and provide training to personnel ( especially the non-rated personnel) for an efficient 24hrs communications equipment operation service.</li> <li>5. Provision of fast moving spare parts (fuses, diods, transistors, I.C.s, etc.).</li> <li>6. Creation of a communications maintenance repair group at the Cebu district headquarter with rated electronic technician.</li> <li>7. Provision of standby generator set to ensure uninterrupted power supply twenty four hours (24 hrs.) a day.</li> <li>8. Provide telefax machine as a fast and alternative means of transmitting communications.</li> <li>9. Repair of dilapidated portion of the ceiling to prevent leakages.</li> </ol>



SUMMARY OF PCG STATION				SITE	CGS ZAMBOANGA	
				CLASS		NO.
<b>1. LOCATION</b>						
Station	Address	Tel.	Fax	Longitude	Latitude	
CGS-Zamboanga	Corquera Street, Port Area, Zamboanga City	(062) 9918293	(062) 9926644	122° 04' 32" E	06° 54' 14" N	
<b>2. GENERAL CONDITIONS</b>						
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population	
By Plane	to Zamboanga A/P [Taking time: 1hr. & 30 min.]	<input type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel		
By Car	to CGS-Zamboanga [Taking time: 30 min.]	<input checked="" type="checkbox"/> Paved	<input checked="" type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel		
By	to [Taking time:]	<input type="checkbox"/> Unpaved road	<input type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension		
Airport Name : Zamboanga Int'l Airport		Seaport Name: Zamboanga Port		<input type="checkbox"/> None		
<b>3. CONDITIONS OF STATION</b>				Refer to attached drawing		
<b>3.1 Site Conditions</b>						
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data		
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes	No	
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input type="checkbox"/> Gravel	<input type="checkbox"/> Typhoon	<input type="checkbox"/>	<input checked="" type="checkbox"/> Boring Log Data	
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input checked="" type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/> Soil Test Report	
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/>	<input checked="" type="checkbox"/> Geological Map	
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Calculation	
Ground Water Table:		m (Well / Rain- / Dry- Season)	Others ( )	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Drawing	
Altitude	19 M		Telephone Lines	Max. Size of Passable Vehicle		
Land area	1,123 m <sup>2</sup>		2 Lines	2t / 4t / 6t / 10t / <u>more</u>		
<b>3.2 Building Conditions</b>			<b>3.3 Power Source</b>			
Constructions		Supplier	Zamboanga City Electric Cooperative	E/G (Gen. Set)	Existing Power Conditions	
Num. of story	One	Voltage	220 V	NA	Good Bad	
Structure	Concrete	Phase	2	NA	<input checked="" type="checkbox"/>	<input type="checkbox"/> Power Supply System
Roof Material	G.I. Sheet	Wire	2	NA	<input type="checkbox"/>	<input type="checkbox"/> Operations of E/G
Ceiling Mat.	Plywood	kVA		NA	<input type="checkbox"/>	<input type="checkbox"/> Operations of AVR
Wall Material	Conc.Hollow Blocks	Quality of Commercial Source		Capacity of fuel for engine		
Wall finish	Cement/Painted	Fluctuations	V ± 5 %		Day tank	NA Liter
Flooring Mat.	Cement/Wood	Availability of power per day		24 Hours	Main tank	NA Liters
Water Leakage	None	Power interruption /month		2 Times		
Room Area (m <sup>2</sup> )		Total interpt. hours /month		1 Hours	E/G Stand-by System	
Operation room	(4.7 <sup>m</sup> x3.7 <sup>m</sup> )17.3m <sup>2</sup>	Max. interpt. hours at once		24 Hours	<input type="checkbox"/>	Single System
E / G room	None				<input type="checkbox"/>	Dual System
<b>3.4 Air Condition / Ventilation of Equipment Room</b>						
Yes No						
<input checked="" type="checkbox"/>	<input type="checkbox"/> Air Condition	Unit: 1	Type: Window Type	Capacity: N/A		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Exhaust Fan	Unit: None	Type: N/A	Capacity: N/A		
<b>3.5 Confirmation of Existing System</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Towers (Masts)	Type:	Stance:	Height (m):		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type:	Size:	Height (m):	Direction:	
	VHF	Type: Whip	Size:	Height (m): 15.0 m.	Direction: All Direction	
	HF	Type: Dipole	Size:	Height (m): 10.0 m.	Direction: North-South Direction	
		Type:	Size:	Height (m):	Direction:	
<input checked="" type="checkbox"/>	<input type="checkbox"/> Grounding system (for radio only)	<input type="checkbox"/>	<input checked="" type="checkbox"/> Lightning system			
<input type="checkbox"/>	<input checked="" type="checkbox"/> Feeder Cable Way	<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply (Zamboanga Water District)			

SUMMARY OF PCG STATION				SITE		CGS ZAMBOANGA			
				CLASS		NO.			
<b>3.6 Security of Site and Equipment Room</b>									
Yes		No		Yes		No			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lock at Entrance Door		<input type="checkbox"/>	<input type="checkbox"/>	Lock at Window			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Latticed Window (see remarks)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Site			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Fence (see remarks)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Equipment Room			
<b>Remarks / Observations</b>		<ol style="list-style-type: none"> <li>CGS- Zamboanga is located inside the Zamboanga Commercial Port Area besides the passenger terminal building . There is an existing NAMRIA Bench Mark No.2 located at the right post of the main gate entrance of CGS- Zamboanga. The bench mark was established by NAMRIA in 1990 and is undisturbed. The bench mark showed the coordinates and elevation of the station.</li> <li>The size of the operation/radio room is adequate. It is located in the main building which is made of concret materials.</li> <li>PCG Zamboanga station does not have standby generator set to ensure continuous twenty four hours communications operation daily.</li> <li>The water supply provided by the Zamboanga City Water District is potable for drinking.</li> <li>Per interview conducted, radio communications interruptions/ interferences from other nearby radio users such as the Zamboanga Post Office, National Bureau of Investigation (NBI), National Telecommunication Commission (NTC), Bureau of Customs (BOC) and the Philippine Port Authority (PPA), is frequent. HF equipment has clear signal only from 6am to 10am. The signal is weak for the rest of the day. Other causes of interruption are: (1) poor quality equipment, (2) heavy rains, (3) low clouds, (4) strong winds, and, (5) possible damage to the equipment due to the absence of lightning arrester.</li> <li>The VHF whip antennae is connected at the tip of the 15 m. high 3" diameter G.I. pole which is mounted on top of the roof of the main building. The HF dipole antennae is also connected to the VHF antennae pole at 7m. height.</li> <li>VHF operation is limited. The present condition of the VHF equipment and height of VHF antennae could allow only three (3) kilometers radius clear reception.</li> </ol>							
<b>4. OPERATION AND MAINTENANCE</b>				<b>5. PERSONNEL FORMATIONS</b>					
<b>Actions taken in equipment failure</b>									
Restoration flow		Seek assistance of private technician in the locality Otherwise equipment is send to Zamboanga headquarters for repair. HCGD Zbga would seek assistance of naval technician otherwise equipment is send to Manila Headquarters.		Chief		1			
Examples of major failure		Equipment cannot transmit/ receive messages; No signal		Operator (skilled)		1 ( )			
Sufficiency of spares		No spares		Technician (skilled)		None ( )			
<b>Records of damages</b>		<b>Environmental Conditions</b>		Administrator		None			
<input type="checkbox"/> Heavy rainfall		Good		Bad					
<input type="checkbox"/> Storm		<input type="checkbox"/>		<input type="checkbox"/> External noises		Total 2			
<input type="checkbox"/> Lightning		<input type="checkbox"/>		<input type="checkbox"/> Air pollution					
<input type="checkbox"/> Other calamity									
<b>Institutional and Human Statuses</b>				<b>Training Record</b>					
1	Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class	Location	Period	Trainee
2	Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	No specialization training for the rating of radio officers. No routine training of personnel.				
3	Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
4	Number of Operator	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
5	Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
6	Capability of Operator	<input type="checkbox"/> Skilled	<input checked="" type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable					
7	Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> None					
<b>6. COMMENTS</b>									
<b>Suggestion</b>									
<b>Remarks / Recommend Actions</b>		<ol style="list-style-type: none"> <li>Replacement of existing outmoded HF and VHF with good quality equipment. In the case of HF equipment, to allow 24 hrs contact from station to headquarters as well as from Zamboanga station to other coast guard stations. In the case of VHF equipment, to allow direct contact from Zamboanga station to its various detachments and auxiliary volunteers within the area of responsibility as well as direct contact from the station (shore) to vessels (both foreign and local) transiting the area of responsibility.</li> <li>Installation of appropriate antennae mounted on self- supporting pole to increase present height of antennae.</li> <li>Provision of standby power generator to ensure uninterrupted power supply 24 hrs. a day.</li> <li>Increase the number of skilled operator and provide training to personnel ( especially the non-rated personnel) for an efficient 24hrs communications equipment operation service.</li> <li>Provision of fast moving spare parts (microphones,fuses, batteries, diods, transistors, I.C.s, etc.).</li> <li>Creation of a communications maintenance repair group at the Zamboanga district headquarter with rated electronic technician.</li> <li>Provide lightning arrester to prevent damage to the communications equipment.</li> <li>Provide telefax machine as a fast and alternative means of transmitting communications. Existing facsimile machine is outmoded.</li> </ol>							

SUMMARY OF PCG STATION				SITE	CGS DAPITAN	
				CLASS		NO.
<b>1. LOCATION</b>						
Station	Address	Tel.	Fax	Longitude	Latitude	
CGS Dapitan	Pulauan , Port Area, Dapitan	None	None	123° 22' 50" E	08° 38' 11" N	
<b>2. GENERAL CONDITIONS</b>						
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population	
By Air to Dipolog	[Taking time: 1hr, 20mins]	<input checked="" type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel	X	
By Seato Dipolog	[Taking time: 36 hrs]	<input checked="" type="checkbox"/> Paved	<input type="checkbox"/> Medium	<input type="checkbox"/> Motel		
By SRNH to Dapitan	[Taking time: 22 hrs]	<input type="checkbox"/> Unpaved road	<input checked="" type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension		
<b>Airport Name :</b> Dipolog Airport		<b>Seaport Name:</b> Dapitan (Pulauan) Port		<input type="checkbox"/> None		
<b>3. CONDITIONS OF STATION</b>				Refer to attached drawing		
<b>3.1 Site Conditions</b>						
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data		
<input type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes No		
<input checked="" type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input type="checkbox"/> Gravel	<input type="checkbox"/> Typhoon	<input type="checkbox"/> <input checked="" type="checkbox"/> Boring Log Data		
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input checked="" type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/> <input checked="" type="checkbox"/> Soil Test Report		
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input checked="" type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/> <input checked="" type="checkbox"/> Geological Map		
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Calculation		
<b>Ground Water Table:</b> 1 m (MLL) (Well / Rain- / Dry- Season)			<input checked="" type="checkbox"/> Others Low Pressure	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Drawing		
<b>Altitude</b>	2 m from MSL		<b>Telephone Lines</b>	<b>Max. Size of Passable Vehicle</b>		
<b>Land area</b>	Floor Area = 130 m <sup>2</sup> (Bldg rests @ sea)		None Line	2t / 4t / 6t / 10t / more		
<b>3.2 Building Conditions</b>			<b>3.3 Power Source</b>			
Constructions		Supplier	ZANECO	E/G	Existing Power Conditions	
Num. of storey	One storey	Voltage	220 V	None	Good Bad	
Structure	Wood	Phase	3-Phase- Main 2Phase-Station	None	<input checked="" type="checkbox"/> <input type="checkbox"/> Power Supply System	
Roof Material	G. I. sheets	Wire		None	<input type="checkbox"/> <input type="checkbox"/> Operations of E/G	
Ceiling Mat.	Plywood	kVA		None	<input checked="" type="checkbox"/> <input type="checkbox"/> Operations of AVR	
Wall Material	Plywood/Wood	Quality of Commercial Source		Capacity of fuel for engine		
Wall finish	Plywood/Painted	Fluctuations	± 5 %		Day tank	N/A Liter
Flooring Mat.	Plywood & Coconu Lumber	Availability of power per day		24 Hours	Main tank	N/A k Liter
Water Leakage	@ Quarters Area	Power interruption /month		2 Times		
<b>Room Area (m<sup>2</sup>)</b>		Total interpt. hours /month		2 Hours	<b>E/G Stand-by System</b>	
Operation room	3.0 x 2.0 = 6.00sq.m.	Max. interpt. hours at once		8 Hours	<input type="checkbox"/> Single System	
E / G room	1.8 x 1.6 = 2.88sq.m.	(during maint. period)			<input type="checkbox"/> Dual System	
<b>3.4 Air Condition / Ventilation of Equipment Room</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Air Condition	Unit:	Type:	Capacity:		
<input type="checkbox"/>	<input checked="" type="checkbox"/> Exhaust Fan	Unit:	Type:	Capacity:		
<b>3.5 Confirmation of Existing System</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Towers (Masts)	Type:	Distance:	Height (m):		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type: Wood Pole	Size:	Height (m): 13.2 m	Direction:	
		Type:	Size:	Height (m):	Direction:	
		Type:	Size:	Height (m):	Direction:	
		Type:	Size:	Height (m):	Direction:	
<input type="checkbox"/>	<input checked="" type="checkbox"/> Grounding system	thru Radio	<input type="checkbox"/>	<input checked="" type="checkbox"/> Lightning system: None		
<input type="checkbox"/>	<input checked="" type="checkbox"/> Feeder Cable Way		<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply: Dapitan Water District		
<b>3.6 Security of Site and Equipment Room</b>						
Yes No		Yes No				
<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Entrance Door	<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Window			
<input checked="" type="checkbox"/>	<input type="checkbox"/> Latticed Window	<input type="checkbox"/>	<input checked="" type="checkbox"/> Security Patrol on Site			
<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Fence	<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Patrol on Equipment Room			

SUMMARY OF PCG STATION		SITE	CGS DAPITAN	
		CLASS	NO.	
Remark	1.	CGS- Dapitan is located inside the Dapitan (Puluan) Port.		
	2.	Areas of responsibility of CGS- Dapitan are: Dapitan City, Dipolog City, Katipunan, Roxas, Manukan, Jose Dalman, indangan, Leon Postigo, Salug, Liloy, Labason, Gutalac.		
	3.	Building is not safe and secured because it is made of light wood materials (coco lumber, plywood and bamboo) which can easily be damaged. Building rests at sea which can be subject to damages during typhoons and low pressure weather conditions.		
	4.	A temporary antenna with bamboo pole is located at center top of building capable of transmitting and receiving only up to 1 km. distance only due to defective antenna; antenna needs to be upgraded.		
	5.	Future development plans of the Philippine Port Authority (PPA) to expand the Port of Dapitan (Puluan Port), will involve the demolition of CGS- Dapitan Building. The same will be reconstructed near the port area at a location designated by PPA.		

4. OPERATION AND MAINTENANCE				5. PERSONNEL FORMATIONS				
<b>Actions taken in equipment failure</b>								
Restoration flow	Tech. from CGDist Cag de Oro come to Dapitan to repair upon request through telephone call			Chief	(1)			
Examples of major failure	Antenna, power supply			Operator (skilled)	(2)		( )	
Sufficiency of spares	None			Technician (skilled)	-		( )	
<b>Records of damages</b>		<b>Environmental Conditions</b>		Administrator	(2)			
<input type="checkbox"/> Heavy rainfall	None	Good	Bad	Total ( Station ) = 5 personnel				
<input type="checkbox"/> Storm	Low pressure in 2004	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
<input type="checkbox"/> Lightning	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
<input checked="" type="checkbox"/> Other calamity	Fluctuations / Power Inter			Total		3 (Operation only)		
<b>Institutional and Human Statuses</b>				<b>Training Record</b>				
1 Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class	Location	Period	Trainee
2 Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	1. Basic Trng		HDC/NSS Cavite	6 mos	
3 Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	2. Engine Man Spl		NTC, Naval Base, Cavite	6 mos	
4 Number of Operator	<input type="checkbox"/> Enough	<input checked="" type="checkbox"/> Reasonable	<input type="checkbox"/> Not enough	3. Quarter Master		NSC,NTC	5 mos	
5 Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> None	4.Coast Guard an		CGTC Farola	5 mos	
6 Capability of Operator	<input checked="" type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable	5. Electrician's Mate		-do-	6 mos	
7 Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> None	6. Quarter Master		-do-	6 mos	
				7. Commissary Steward		-do-	6 mos	
				8. Gunner's Mate		-do-	6 mos	
				9. Electronic Tech		-do-	6 mos	
				10. Data Processing		-do-	6 mos	

6. COMMENTS	
Suggestions/Remarks	<ol style="list-style-type: none"> <li>1. Replacement of outmoded communication equipment with latest model and provision of Icom Radio including antenna. The replacement of existing outmoded HF and VHF with good quality equipment is recommended. In the case of HF equipment, to allow 24 hrs contact from station to headquarters as well as from Dapitan station to other coast guard stations. In the case of VHF equipment, to allow direct contact from Dapitan station to its various detachments and auxiliary volunteers within the area of responsibility as well as direct contact from the station (shore) to vessels (both foreign and local) transiting the area of responsibility.</li> <li>2. Provision of air conditioning and ventilation system.</li> <li>3. Provision of telephone line and facsimile machine.</li> <li>4. Expansion of operations room in order to accommodate all equipment including computer.</li> <li>5. Provision of fast moving spare parts (fuses, diods, transistors, I.C.s, etc.).</li> <li>6. Provision of standby generator set to ensure uninterrupted power supply twenty four hours (24 hrs.) a day.</li> <li>7. Provision of lightning arrester to prevent damage to the communications equipment.</li> <li>8. Provide telefax machine as a fast and alternative means of transmitting communications.</li> <li>9. Installation of appropriate antennae mounted on self-supporting type pole to increase present height of antennae which is mounted on a bamboo pole.</li> <li>10. Rehabilitation of dilapidated ceiling of the existing CGS-Dapitan Building to arrest water leakages.</li> <li>11. Training of personnel was given only once before they were enlisted except for the operations chief. Provide training to personnel (especially the non-rated enlisted personnel) for an efficient 24hrs communications equipment operation service.</li> </ol>

SUMMARY OF PCG STATION				SITE	CGS PAGADIAN	
				CLASS		NO.
<b>1. LOCATION</b>						
Station	Address	Tel.	Fax	Longitude	Latitude	
CGS Pagadian	Port Area, Pagadian City	(062) 214-1510	none	123° 26' 37" E	07° 49' 08" N	
<b>2. GENERAL CONDITIONS</b>						
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population	
By Air to Pagadian	[Taking time: 1hr, 20mins]	<input checked="" type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel	X	
By Seato Ozamis City	[Taking time: 36 hrs]	<input checked="" type="checkbox"/> Paved	<input type="checkbox"/> Medium	<input type="checkbox"/> Motel		
By Lancto Pagadian City	[Taking time: 2 hrs]	<input type="checkbox"/> Unpaved road	<input checked="" type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension		
Airport Name : Pagadian Airport		Seaport Name: Pagadian Port		<input type="checkbox"/> None		
<b>3. CONDITIONS OF STATION</b>				Refer to attached drawing		
<b>3.1 Site Conditions</b>						
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data		
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes No		
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input type="checkbox"/> Gravel	<input type="checkbox"/> Typhoon	<input type="checkbox"/> <input checked="" type="checkbox"/> Boring Log Data		
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/> <input checked="" type="checkbox"/> Soil Test Report		
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/> <input checked="" type="checkbox"/> Geological Map		
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input checked="" type="checkbox"/> Earthquake 1976	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Calculation		
Ground Water Table: 1 m (MLL) (Well / Rain- / Dry- Season)			Others (Tsunami 1976)	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Drawing		
Altitude	1 m from MLL M		Telephone Lines	Max. Size of Passable Vehicle		
Land area	Land = 818 m <sup>2</sup> Reclaimed = 202m <sup>2</sup>		1 Line	2t / 4t / 6t / 10t / more		
<b>3.2 Building Conditions</b>			<b>3.3 Power Source</b>			
Constructions		Supplier	ZAMSURECOI	E/G	Existing Power Conditions	
Num. of storey	One storey	Voltage	220 V	220 V	Good Bad	
Structure	Concrete & Wood	Phase	2 & 3Phase	18 Hp	<input checked="" type="checkbox"/> <input type="checkbox"/> Power Supply System	
Roof Material	G. I. sheets	Wire	Single Solid	Single Solid	<input checked="" type="checkbox"/> <input type="checkbox"/> Operations of E/G	
Ceiling Mat.	Office: Plywood, Quarters: Sawali	kVA		5 kVA	<input checked="" type="checkbox"/> <input type="checkbox"/> Operations of AVR	
Wall Material	Office: CHB Quarters: Plywood/Wood	Quality of Commercial Source		Capacity of fuel for engine		
Wall finish	Office: Cement Quarters: Plywood	Fluctuations	± 5 %		Day tank	5 Liter
Flooring Mat.	Office: Vinyl / Cement Quarters: Coco Lumber	Availability of power per day		24 Hours	Main tank	5 k Liter
Water Leakage	@ Quarters ward room & store room	Power interruption /month		2 Times		
Room Area (m <sup>2</sup> )		Total interpt. hours /month		8 Hours	E/G Stand-by System	
Operation room	3.0 x 1.7 = 5.10sq.m.	Max. interpt. hours at once		4 Hours	<input checked="" type="checkbox"/> Single System	
E / G room	1.8 x 1.6 = 2.88sq.m.	(heavy rainfall or strong winds)			<input type="checkbox"/> Dual System	
<b>3.4 Air Condition / Ventilation of Equipment Room</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Air Condition	Unit:	Type:	Capacity:	(Note: only at computer room)	
<input type="checkbox"/>	<input checked="" type="checkbox"/> Exhaust Fan	Unit:	Type:	Capacity:		
<b>3.5 Confirmation of Existing System</b>						
Yes No						
<input type="checkbox"/>	<input type="checkbox"/> Towers (Masts)	Type:	Distance:	Height (m):		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type: VHF	Size: 2" dia	Height (m): 13.7 m	Direction: All direction	
		Type: HF	Size:	Height (m): 9.7 m	Direction: N-S	
<input checked="" type="checkbox"/>	<input type="checkbox"/> Grounding system	thru Radio	<input type="checkbox"/>	<input checked="" type="checkbox"/> Lightning system: None		
<input type="checkbox"/>	<input checked="" type="checkbox"/> Feeder Cable Way		<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply (Pagadian Water District)		
<b>3.6 Security of Site and Equipment Room</b>						
Yes No						
<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Entrance Door		<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Window		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Latticed Window		<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Patrol on Site		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Fence		<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Patrol on Equipment Room		

SUMMARY OF PCG STATION		SITE	CGS PAGADIAN	
		CLASS		NO.
<b>Remarks</b>	1. CGS- Pagadian is located inside the Pagadian Port. 2. Areas of responsibility of CGS- Pagadian are: <ul style="list-style-type: none"> <li>• Zamboanga Sibugay – Tungawan, RT Lim, Ipil, Naga, Kabasalan, Siay, Talusan, Mabuhay, Olutanga, Alicia, Malangas</li> <li>• Zamboanga del Sur – Kumalarang, Lapuyan, Magosatubug, Vcenzo Sagun, Pitogo, Tabina, Dimataling, Dinas, San Pablo, Dumalinao, Pagadian City, Labangan, Tukuran, Molave, Tambulig</li> <li>• Lanao del Norte – Sultan Naga Dimaporo, Sultan Kumander, Malabang</li> </ul> 3. Antenna is located at center top of building including light station of Pagadian; wooden base/foundation is deteriorated, needs replacement of base. Antenna has been out of order for one month. 4. Possible location for the installation of antenna pole is at the vacant lot in front of the Administration Bldg.			
<b>4. OPERATION AND MAINTENANCE</b>		<b>5. PERSONNEL FORMATIONS</b>		
<b>Actions taken in equipment failure</b>				
Restoration flow	Repair at COMEL 1 <sup>st</sup> Inf. Tabak Div. at Pagadian	Chief	(1)	
Examples of major failure	Fuse (URC 187), Transmitter Indicator	Operator (skilled)	(2)	( )
Sufficiency of spares	None	Technician (skilled)	none	( )
<b>Records of damages</b>		Administrator	(-)	
<b>Environmental Conditions</b>		3 - Logistics ( Chief and Radiomen) 3 - Admin. Personnel ( Clerk) 3 - Operation (POIC) Total for CGS-Pagadian = 9 personnel		
<input type="checkbox"/> Heavy rainfall		<b>T o t a l</b>		
<input type="checkbox"/> Storm		<b>3 (Operation only)</b>		
<input type="checkbox"/> Lightning				
<input checked="" type="checkbox"/> Other calamity	Fluctuations / Power Inter			
<b>Institutional and Human Statures</b>		<b>Training Record</b>		
1 Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	<b>Course</b>
2 Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	<b>Class</b>
3 Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	<b>Location</b>
4 Number of Operator	<input type="checkbox"/> Enough	<input checked="" type="checkbox"/> Reasonable	<input type="checkbox"/> Not enough	<b>Period</b>
5 Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> None	<b>Trainee</b>
6 Capability of Operator	<input checked="" type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable	1. Radioman Special. Course
7 Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> None	2. Human
				3. Storekeeper
				4. Engineman
				5. Electrician's Mate
				6. Quarter Master
				7. Commissary Steward
				8. Gunner's Mate
				9. Electronic Tech
				10. Data Processing
<b>6. COMMENTS</b>				
<b>Suggestions / Remarks</b>	1. Replacement of existing antennae for the communications equipment and its dilapidated support/ foundation. Installation of appropriate antennae mounted on self-supporting type pole to increase present height of antennae which is mounted on a bamboo pole. 2. Replacement of communication equipment with latest model and provision of Icom Radio. The replacement of existing outmoded HF and VHF with good quality equipment is recommended. In the case of HF equipment, to allow 24 hrs contact from station to headquarters as well as from Pagadian station to other coast guard stations. In the case of VHF equipment, to allow direct contact from Pagadian station to its various detachments and auxiliary volunteers within the area of responsibility as well as direct contact from the station (shore) to vessels (both foreign and local) transiting the area of responsibility. 3. Provision of air conditioning and ventilation system. 4. Upgrade / provide additional height of perimeter fence. 5. Provision of facsimile machine. 6. Increase the size of the operations room in order to accommodate the computer is needed for the preparation /encoding of communications and radio messages. 7. Provision of lightning arrester to prevent damaging the communications equipment. 8. Provision of fast moving spare parts (fuses, diodes, transistors, I.C.s, etc.). 9. Training of personnel was given only once before they were enlisted except for the operations chief. 10. Provide training to personnel (especially the non-rated enlisted personnel) for an efficient 24hrs communications equipment operation service.			

SUMMARY OF PCG STATION					SITE	CGS MAPUN	
					CLASS		NO.
<b>1. LOCATION</b>							
Station	Address	Tel.	Fax	Longitude	Latitude		
CGS-Mapun	Lupa Pula, Port Area Mapun, Tawi-Tawi	None	None	06° 58' 35" E	118° 30' 30" N		
<b>2. GENERAL CONDITIONS</b>							
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population		
By Plane	to Zamboanga A/P [Taking time: 1hr. & 30 min.]	<input type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input type="checkbox"/> Hotel			
By Boat	to Mapun Port [Taking time: 26hrs.to 36 hrs. ]	26 hrs good weather; 36 hrs.big waves	<input type="checkbox"/> Medium	<input type="checkbox"/> Motel			
By Walk	to CGS-Mapun [Taking time:]	<input checked="" type="checkbox"/> Paved road (port access road)	<input checked="" type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension			
Airport Name : Cagayan de Tawi-Tawi Airstrip		Seaport Name: Mapun Port		<input type="checkbox"/> None			
<b>3. CONDITIONS OF STATION</b>					Refer to attached drawing		
<b>3.1 Site Conditions</b>							
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data			
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes No			
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input type="checkbox"/> Gravel	<input type="checkbox"/> Typhoon	<input type="checkbox"/> <input checked="" type="checkbox"/> Boring Log Data			
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input checked="" type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/> <input checked="" type="checkbox"/> Soil Test Report			
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/> <input checked="" type="checkbox"/> Geological Map			
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Calculation			
Ground Water Table: m (Well / Rain- / Dry- Season)			Others ( )	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Drawing			
Altitude		M		Telephone Lines		Max. Size of Passable Vehicle	
Land area		594 m <sup>2</sup>		None Lines		2t / 4t / 6t / 10t / more	
<b>3.2 Building Conditions</b>				<b>3.3 Power Source</b>			
Constructions		Supplier	Cagayan de Tawi-Tawi Electric Cooperative	E/G (Gen. Set)	Existing Power Conditions		
Num. of story	One	Voltage	220 V	220 V	Good Bad		
Structure	Light materials	Phase	3	2	<input type="checkbox"/> <input checked="" type="checkbox"/> Power Supply System		
Roof Material	G.I. Sheet/nipa	Wire	3	2	<input type="checkbox"/> <input checked="" type="checkbox"/> Operations of E/G		
Ceiling Mat.	Plywood/painted	kVA		12 KVA	<input type="checkbox"/> <input checked="" type="checkbox"/> Operations of AVR		
Wall Material	Bamboo/CHB	Quality of Commercial Source		Capacity of fuel for engine			
Wall finish	CHB/Bamboo	Fluctuations	V ± 10 %		Day tank	Liter	
Flooring Mat.	Cement	Availability of power per day		8 Hours	Main tank	40 Liters	
Water Leakage	None	Power interruption /month		30 Times			
Room Area (m <sup>2</sup> )		Total interpt. hours /month		480 Hours	E/G Stand-by System		
Operation room	2.0x2.0= 4.0m <sup>2</sup>	Max. interpt. hours at once		24 Hours	<input checked="" type="checkbox"/> Single System		
E / G room (made of light materials)	4.0x 5.0 = 20 sq.m.				<input type="checkbox"/> Dual System		
<b>3.4 Air Condition / Ventilation of Equipment Room</b>							
Yes No							
<input type="checkbox"/> <input checked="" type="checkbox"/> Air Condition		Unit: None	Type:N/A	Capacity: N/A			
<input type="checkbox"/> <input checked="" type="checkbox"/> Exhaust Fan		Unit: None	Type:N/A	Capacity: N/A			
<b>3.5 Confirmation of Existing System</b>							
Yes No							
<input type="checkbox"/> <input checked="" type="checkbox"/> Towers (Masts)		Type:	Stance:	Height (m):			
<input checked="" type="checkbox"/> <input type="checkbox"/> Antenna		Type:	Size:	Height (m):	Direction:		
VHF		Type: Whip	Size:	Height (m): 10.0 m.	Direction: All Direction		
HF		Type:Dipole	Size:	Height (m): 6 to 10 m.	Direction: NEast-SWest Direction		
		Type:	Size:	Height (m):	Direction:		
<input checked="" type="checkbox"/> <input type="checkbox"/> Grounding system (for radio only)		<input type="checkbox"/> <input checked="" type="checkbox"/> Lightning system					
<input type="checkbox"/> <input checked="" type="checkbox"/> Feeder Cable Way		<input checked="" type="checkbox"/> <input type="checkbox"/> City water supply (Artesian Well )					





SUMMARY OF PCG STATION				SITE	CGS JOLO	
				CLASS		NO.
<b>1. LOCATION</b>						
Station	Address	Tel.	Fax	Longitude	Latitude	
CGS- Jolo	Port Area, Jolo, Sulu Province	(085)3418911 Local 2225	None	120° 59' 56" E	06° 03' 23" N	
<b>2. GENERAL CONDITIONS</b>						
Moving from Manila	Site Access from Port	Road Traffic	Accommodation	Population		
By Air to Zamboanga A/P [Taking time: 1.5 hr.]	<input type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input type="checkbox"/> Hotel			
By Air to Jolo Airport [Taking time: 40 min. ]	<input checked="" type="checkbox"/> Paved	<input checked="" type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel			
By Car to CGS- Jolo [Taking time: 15 min. ]	<input type="checkbox"/> Unpaved road	<input type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension			
Airport Name : Jolo Airport		Seaport Name: Jolo Port				
<input type="checkbox"/> None						
<b>3. CONDITIONS OF STATION</b>				Refer to attached drawing		
<b>3.1 Site Conditions</b>						
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data		
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes No		
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input type="checkbox"/> Gravel	<input type="checkbox"/> Typhoon	<input type="checkbox"/> <input checked="" type="checkbox"/> Boring Log Data		
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input checked="" type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/> <input checked="" type="checkbox"/> Soil Test Report		
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/> <input checked="" type="checkbox"/> Geological Map		
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Calculation		
Ground Water Table: m (Well / Rain- / Dry- Season)		Others ( )		<input type="checkbox"/> <input checked="" type="checkbox"/> Structural Drawing		
Altitude	M		Telephone Lines	Max. Size of Passable Vehicle		
Land area	660 m <sup>2</sup>		1 Lines	2t / 4t / 6t / 10t / <u>more</u>		
<b>3.2 Building Conditions</b>			<b>3.3 Power Source</b>			
Constructions		Supplier	Sulu Electric Cooperative	E/G	Existing Power Conditions	
Num. of story	One	Voltage	220 V	220 V	Good Bad	
Structure	Concrete	Phase	2	2	<input type="checkbox"/> <input checked="" type="checkbox"/> Power Supply System	
Roof Material	G.I. Sheet	Wire	2	2	<input type="checkbox"/> <input checked="" type="checkbox"/> Operations of E/G	
Ceiling Mat.	Plywood	kVA		15 KVA	<input type="checkbox"/> <input checked="" type="checkbox"/> Operations of AVR	
Wall Material	Conc.Hollow Blocks	Quality of Commercial Source		Capacity of fuel for engine		
Wall finish	Cement/Painted	Fluctuations	V ± 10 %		Day tank	Liter
Flooring Mat.	Cement	Availability of power per day		18 Hours	Main tank	40 Liters
Water Leakage	Yes	Power interruption /month		30 Times		
Room Area (m <sup>2</sup> )		Total interpt. hours /month		180 Hours	E/G Stand-by System	
Operation room	(1.9 <sup>m</sup> x3.0 <sup>m</sup> ) 5.7m <sup>2</sup>	Max. interpt. hours at once		24 Hours	<input checked="" type="checkbox"/> Single System	
E / G room	(2 <sup>m</sup> x 1.5 <sup>m</sup> ) 3 sq.m.				<input type="checkbox"/> Dual System	
<b>3.4 Air Condition / Ventilation of Equipment Room</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Air Condition	Unit: None	Type:N/A	Capacity: N/A		
<input type="checkbox"/>	<input checked="" type="checkbox"/> Exhaust Fan	Unit: None	Type:N/A	Capacity: N/A		
<b>3.5 Confirmation of Existing System</b>						
Yes No						
<input type="checkbox"/>	<input checked="" type="checkbox"/> Towers (Masts)	Type:	Stance:	Height (m):		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type:	Size:	Height (m):	Direction:	
	VHF	Type: Whip	Size: 1.20m.	Height (m): 9 m.	Direction: All Direction	
	HF	Type:Dipole	Size: 8.00m.	Height (m): 6m.	Direction: East-West Direction	
		Type:	Size:	Height (m):	Direction:	
<input checked="" type="checkbox"/>	<input type="checkbox"/> Grounding system (for radio only)			<input type="checkbox"/>	<input checked="" type="checkbox"/> Lightning system	
<input type="checkbox"/>	<input checked="" type="checkbox"/> Feeder Cable Way			<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply (Jolo Mainland Water District)	
<b>3.6 Security of Site and Equipment Room</b>						
Yes No						
<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Entrance Door			<input type="checkbox"/>	<input checked="" type="checkbox"/> Lock at Window	
<input type="checkbox"/>	<input checked="" type="checkbox"/> Latticed Window (see remarks)			<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Patrol on Site	
<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Fence (see remarks)			<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Patrol on Equipment Room	

SUMMARY OF PCG STATION		SITE	CGS JOLO					
		CLASS	NO.					
<b>Remarks / Observations</b>	1.	CGS- Jolo is located inside the Jolo Port near the RoRo ramp, Lighthouse and mosque.						
	2.	The size of the operation/radio room (5.7 sq.m.) is inadequate and congested. It is located adjacent the administrative and receiving room. Presently, only the HF equipment is kept in this room. The VHF equipment is placed in one corner of the administrative/receiving room.						
	3.	The Generator room is located in a makeshift room adjacent the eastside fence and east exit door of the CGS-Jolo station compound.						
	4.	The 15 KVA generator set frequently bogs down. It is approximately twenty years old.						
	5.	Although water supply is provided by the Jolo Mainland Water District, potable drinking water is purchased (mineral water).						
	6.	There is a proposed port expansion project by DOTC/RPMA under the ADB Intermodal Transport Development Project which is prioritized for implementation by DOTC in accordance to its Medium Term Public Investment Plan. The proposed port expansion project will include the widening of seven meters (7.00 m.) width earth road, located on the east side of the PCG-Jolo station, to ten meters width in order to accommodate a two-lane new access road to the port with sidewalks on both sides. Per survey conducted, the road widening will affect the eastside perimeter fence, generator room and about 3.00 m. width of the eastside compound.						
	7.	The VHF whip antennae is connected to the nine meter ( 9 m.) high, two inch diameter ( 2"Ø ) G.I. pole. One end of the HF dipole antennae is connected to a bamboo pole mounted on top of the roof of the main building on the west end side while the other end is connected to a bamboo pole installed on top of the perimeter fence on the east side of the compound.						
	8.	The present condition of VHF equipment and height of VHF antennae could allow only three (3) nautical mile radius clear reception in all direction.						
	9.	The VHF equipment currently used by CGS-Jolo is not an organic property of the station. It is only borrowed from the spare of M/L Katrina vessel. This communication equipment can be pulled-out anytime when needed by the vessel.						
<b>4. OPERATION AND MAINTENANCE</b>		<b>5. PERSONNEL FORMATIONS</b>						
<b>Actions taken in equipment failure</b>								
Restoration flow	Seek assistance of private technician in the locality Otherwise equipment is send to Zamboanga headquarters for repair. HCGD Zbga would seek assistance from naval technician otherwise equipment is send to PCG Manila Headquarters.	Chief	1					
Examples of major failure	Equipment cannot transmit/ receive messages; No signal	Operator (skilled)	2	( )				
Sufficiency of spares	No spares	Technician (skilled)	None	( )				
<b>Records of damages</b>		Administrator	2 clerks					
<input type="checkbox"/> Heavy rainfall		Good	Bad					
<input type="checkbox"/> Storm		<input type="checkbox"/>	<input type="checkbox"/>	External noises				
<input type="checkbox"/> Lightning		<input type="checkbox"/>	<input type="checkbox"/>	Air pollution				
<input type="checkbox"/> Other calamity								
<b>Institutional and Human Statuses</b>		<b>Training Record</b>						
1 Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class	Location	Period	Trainee
2 Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	No specialization training for the rating of radio officers. No routine training of personnel.				
3 Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough					
4 Number of Operator	<input type="checkbox"/> Enough	<input checked="" type="checkbox"/> Reasonable	<input type="checkbox"/> Not enough					
5 Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> None					
6 Capability of Operator	<input type="checkbox"/> Skilled	<input checked="" type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable					
7 Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> None					
<b>6. COMMENTS</b>								
<b>Remarks / Recommendations</b>	1.	Replacement of unserviceable/outmoded HF and VHF equipment to attain clear signal 24 hrs a day. The replacement of existing outmoded HF and VHF with good quality equipment is recommended. In the case of HF equipment, to allow 24 hrs contact from station to headquarters as well as from Jolo station to other coast guard stations. In the case of VHF equipment, to allow direct contact from Jolo station to its various detachments and auxiliary volunteers within the area of responsibility as well as direct contact from the station (shore) to vessels (both foreign and local) transiting the area of responsibility.						
	2.	Installation of appropriate antennae mounted on self-supporting type structure/ pole to increase present height of antennae which is mounted on a bamboo pole.						
	3.	Rehabilitation of dilapidated roof and ceiling of the existing CGS-Jolo Building to arrest water leakages (especially at the quarters and administrative/receiving area). Also, replacement of the electrical wiring system affected by the leak. Subsequently, the conversion of the existing 44.5 sq.m. quarters (located in the main building adjacent the admin room and presently not utilized due to leakages at the ceiling) to operations room; provision of an air-conditioning unit in said room and replacement of the 15 year old typewriter with computer for the typing of messages.						
	4.	Increase the number of skilled operators and provide training to personnel (especially the non-rated personnel) for an efficient 24hrs communications equipment operation service.						
	5.	Provision of fast moving spare parts (fuses, diodes, transistors, I.C.s, etc.).						
	6.	Creation of a maintenance repair group at Zamboanga Headquarter with rated electronic technician.						
	7.	Replacement of the existing twenty (20) years old and unreliable 15 KVA generator set to ensure uninterrupted power supply twenty four hours (24 hrs.) a day.						
	8.	Due to frequent and considerable voltage fluctuation, the provision of a step-up transformer and AVS has been requested.						
	9.	Provision of lightning arrester to prevent damage to the communications equipment.						
	10.	Provide telefax machine as a fast and alternative means of transmitting communications.						

SUMMARY OF PCG STATION					SITE	CGS BONGAO	
					CLASS		NO.
<b>1. LOCATION</b>							
Station	Address	Tel.	Fax	Longitude	Latitude		
CGS-Bongao	Port Area, Parola Site Bongao, Tawi-Tawi	None	None	119° 46' 27" E	05° 02' 09" N		
<b>2. GENERAL CONDITIONS</b>							
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population		
By Air to Zamboanga A/P [Taking time: 1.5 hr.]		<input type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel			
By Air to Bongao Airport [Taking time: 1.16 hr.]		<input checked="" type="checkbox"/> Paved	<input checked="" type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel			
By Car to CGS-Bongao [Taking time:] 30 min.		<input type="checkbox"/> Unpaved road	<input type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension			
Airport Name: Cagayan de Tawi-Tawi Airstrip		<input type="checkbox"/> None					
Seaport Name: Mapun Port							
<b>3. CONDITIONS OF STATION</b>					Refer to attached drawing		
<b>3.1 Site Conditions</b>							
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data			
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes No			
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input type="checkbox"/> Gravel	<input type="checkbox"/> Typhoon	<input checked="" type="checkbox"/>	<input type="checkbox"/> Boring Log Data		
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input checked="" type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/> Soil Test Report		
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/>	<input checked="" type="checkbox"/> Geological Map		
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Calculation		
Ground Water Table: m (Well / Rain- / Dry- Season)		Others ( )		<input type="checkbox"/>	<input checked="" type="checkbox"/> Structural Drawing		
Altitude	M		Telephone Lines	Max. Size of Passable Vehicle			
Land area	563 m <sup>2</sup>		None Lines	2t / 4t / 6t / 10t / more			
<b>3.2 Building Conditions</b>			<b>3.3 Power Source</b>				
Constructions		Supplier	Tawi-Tawi Electric Cooperative	E/G (Gen. Set)	Existing Power Conditions		
Num. of story	One	Voltage	220 V	220 V	Good Bad		
Structure	Concrete	Phase	2	2	<input type="checkbox"/>	<input checked="" type="checkbox"/> Power Supply System	
Roof Material	G.I. Sheet	Wire	2	2	<input type="checkbox"/>	<input checked="" type="checkbox"/> Operations of E/G	
Ceiling Mat.	Plywood/painted	kVA		5 KVA	<input type="checkbox"/>	<input checked="" type="checkbox"/> Operations of AVR	
Wall Material	Conc.Hollow Blocks	Quality of Commercial Source			Capacity of fuel for engine		
Wall finish	Cement/painted	Fluctuations	V ± 10 %		Day tank	Liter	
Flooring Mat.	Cement	Availability of power per day	18 Hours		Main tank	40 Liters	
Water Leakage	None	Power interruption /month	30 Times				
Room Area (m <sup>2</sup> )		Total interpt. hours /month	180 Hours		E/G Stand-by System		
Operation room	(2.3 <sup>m</sup> x3.1 <sup>m</sup> ) 7.13m <sup>2</sup>	Max. interpt. hours at once	12 Hours		<input checked="" type="checkbox"/> Single System		
E / G room	(1.5 x 2.5 <sup>m</sup> ) 3.75 sq.m.			<input type="checkbox"/> Dual System			
<b>3.4 Air Condition / Ventilation of Equipment Room</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/> Air Condition	Unit: None	Type:N/A	Capacity: N/A			
<input type="checkbox"/>	<input checked="" type="checkbox"/> Exhaust Fan	Unit: None	Type:N/A	Capacity: N/A			
<b>3.5 Confirmation of Existing System</b>							
Yes No							
<input type="checkbox"/>	<input checked="" type="checkbox"/> Towers (Masts)	Type:	Stance:	Height (m):			
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antenna	Type:	Size:	Height (m):	Direction:		
	VHF	Type: Whip	Size:	Height (m): 16.5 m.	Direction: All Direction		
	HF	Type:Dipole	Size:	Height (m): 15.0 m.	Direction: East-West Direction		
		Type:	Size:	Height (m):	Direction:		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Grounding system (for radio only)	<input type="checkbox"/>		<input checked="" type="checkbox"/> Lightning system			
<input type="checkbox"/>	<input checked="" type="checkbox"/> Feeder Cable Way	<input checked="" type="checkbox"/>		<input type="checkbox"/> City water supply (Bongao Water District)			
<b>3.6 Security of Site and Equipment Room</b>							
Yes No		Yes No					
<input checked="" type="checkbox"/>	<input type="checkbox"/> Lock at Entrance Door	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lock at Window			
<input checked="" type="checkbox"/>	<input type="checkbox"/> Latticed Window (see remarks)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Site			
<input checked="" type="checkbox"/>	<input type="checkbox"/> Security Fence (see remarks)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Equipment Room			

SUMMARY OF PCG STATION		SITE		CGS BONGAO		
		CLASS		NO.		
<b>Remarks / Observations</b>	1. CGS- Bongao is located near the newly constructed fast-craft berth and lighthouse of Bongao Port. 2. The size of the operation/radio room is inadequate. It is located in a separate building which is made of light materials located at the back of the main building (wooden floors, walls & windows with dilapidated G.I. roofing). 3. The Generator room is located in a makeshift room at the base of the existing lighthouse which is about 50 meters away from the CGS-Bongao station building. 4. The generator set frequently bogged down. It is approximately twenty years old. 5. Although water supply is provided by the Bongao Electric Cooperative, potable drinking water is purchased (mineral water). Per interview conducted, there is a proposed water system project by U.S. Aid Growth with Equity in Mindanao (GEM) which is now in the bidding phase. 6. There is a proposed port expansion project by DOTC/RPMA under the ADB Intermodal Transport Development Project which is prioritized for implementation by DOTC according to its Medium Term Public Investment Plan. The proposed port expansion project will include the widening of a four meter (4.00 m.) width access road in front of the PCG-Bongao station. Per survey conducted, the road widening will affect the front perimeter fence, flagpole and about 3.00 m. width of the compound frontage. 7. The VHF whip antennas is connected to the 16 m. high 3" diameter G.I. pole. One end of the HF dipole antennae is connected to the VHF antennae pole while the other end is connected to a bamboo pole installed on the roof of the separate building which house the radio room. 8. The present condition and height of VHF antennae could allow only three (3) nautical mile radius clear reception. However, it only has a coverage of 180 degrees, because the other half (180 degrees) is covered or obstructed by the Bongao Peak. 9. The VHF equipment currently used by CGS-Bongao is not organic property of the station. It is only borrowed from the coast guard intelligence office. This equipment can be pulled-out anytime when needed by said office.					
	<b>4. OPERATION AND MAINTENANCE</b>			<b>5. PERSONNEL FORMATIONS</b>		
	<b>Actions taken in equipment failure</b>					
	Restoration flow	Seek assistance of private technician in the locality Otherwise equipment is send to Zamboanga headquarters for repair. HCGD Zbga would seek assistance of naval technician otherwise equipment is send to Manila Headquarters.			Chief	1
	Examples of major failure	Equipment cannot transmit/ receive messages; No signal			Operator (skilled)	1 ( )
	Sufficiency of spares	No spares			Technician (skilled)	None ( )
	<b>Records of damages</b>		<b>Environmental Conditions</b>		Administrator	None
	<input type="checkbox"/> Heavy rainfall		Good	Bad		
	<input type="checkbox"/> Storm		<input type="checkbox"/>	<input type="checkbox"/>	External noises	Total 2
<input type="checkbox"/> Lightning		<input type="checkbox"/>	<input type="checkbox"/>	Air pollution		
<input type="checkbox"/> Other calamity						
<b>Institutional and Human Statuses</b>				<b>Training Record</b>		
1 Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class	
2 Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	No specialization training for the rating of radio officers. No routine training of personnel.		
3 Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough			
4 Number of Operator	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough			
5 Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough			
6 Capability of Operator	<input type="checkbox"/> Skilled	<input checked="" type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable			
7 Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> None			
<b>6. COMMENTS</b>						
<b>Remarks / Recommendations</b>	1. Replacement of outmoded HF and VHF equipment to attain clear signal 24 hrs a day. The replacement of existing outmoded HF and VHF with good quality equipment is recommended. In the case of HF equipment, to allow 24 hrs contact from station to headquarters as well as from Bongao station to other coast guard stations. In the case of VHF equipment, to allow direct contact from Bongao station to its various detachments and auxiliary volunteers within the area of responsibility as well as direct contact from the station (shore) to vessels (both foreign and local) transiting the area of responsibility. 2. Installation of a tower type antennae or equivalent to increase present height of antennae. Change location of present antennae to allow 360 degrees area of coverage. Possible location is beside the existing lighthouse. 3. Conversion of the existing quarters located in the main building to operations room; provide operation room with air-conditioning unit and replacement of the 15 years old typewriter with computer for the typing of messages. 4. Increase the number of skilled operator and provide training to personnel ( especially the non-rated personnel) for an efficient 24hrs communications equipment operation service. 5. Provision of fast moving spare parts (fuses, diods, transistors, I.C.s, etc.). 6. Creation of a communications maintenance repair group at the Zamboanga district headquarter with rated electronic technician. 7. Replacement of the twenty (20) years old and unreliable 5 KVA generator set to ensure uninterrupted power supply twenty four hours (24 hrs.) a day. 8. Replacement of unserviceable HF equipment (URC-187) at CGDet.-Sitangkai in view of its strategic importance in monitoring international trade activities passing the territorial boundaries ( Malaysia in the west and Indonesia in the south). Result of the survey reveals that DOTC has included the port expansion of Sitangkai in its priority project for implementation under the ADB- Intermodal Transport Development Project. The proposed scope of work of the port expansion project includes the construction of a two-storey building for port related offices that will be affected by the expansion of the port and this includes the PCG- CGDetachment of Sitangkai. 9. Provide lightning arrester to prevent damage to the communications equipment. 10. Provide telefax machine as a fast and alternative means of transmitting communications					

SUMMARY OF PCG STATION					SITE	CGS COTABATO	
					CLASS		NO.
<b>1. LOCATION</b>							
Station	Address	Tel.	Fax	Longitude	Latitude		
CGS-Cotabato	Port Area, Cotabato City			124° 14' 32" E	07° 13' 44" N		
<b>2. GENERAL CONDITIONS</b>							
Moving from Manila		Site Access from Port	Road Traffic	Accommodation	Population		
By Airto Cotabato A/P [Taking time: 1.33 hr.]		<input type="checkbox"/> Highway	<input type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Hotel			
By Car to CGS-Cotabato [Taking time: 30 min.]		<input checked="" type="checkbox"/> Paved	<input checked="" type="checkbox"/> Medium	<input checked="" type="checkbox"/> Motel			
By to [Taking time:]		<input type="checkbox"/> Unpaved road	<input type="checkbox"/> Light	<input checked="" type="checkbox"/> Pension			
Airport Name : Cotabato Airport		Seaport Name: Cotabato Port		<input type="checkbox"/> None			
<b>3. CONDITIONS OF STATION</b>					Refer to attached drawing		
<b>3.1 Site Conditions</b>							
Topography	Nature of Soil		Past disaster of site	Existing Building/Tower Data			
<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Dry soil	<input type="checkbox"/> Limestone	<input type="checkbox"/> Flood	Yes	No		
<input type="checkbox"/> Slope	<input type="checkbox"/> Ordinary	<input type="checkbox"/> Gravel	<input type="checkbox"/> Typhoon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Boring Log Data	
<input type="checkbox"/> Hill-top	<input type="checkbox"/> Swampy	<input checked="" type="checkbox"/> Rocky (hard)	<input type="checkbox"/> Settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soil Test Report	
<input type="checkbox"/> Basin	<input type="checkbox"/> Clay	<input type="checkbox"/> Rocky (soft)	<input type="checkbox"/> Landslide	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Geological Map	
<input type="checkbox"/> Valley	<input checked="" type="checkbox"/> Sandy		<input type="checkbox"/> Earthquake	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Structural Calculation	
Ground Water Table: m (Well / Rain- / Dry- Season)		Others ( )		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Structural Drawing	
Altitude	M		Telephone Lines	Max. Size of Passable Vehicle			
Land area	360.00 m <sup>2</sup>		Lines	2t / 4t / 6t / 10t / <u>more</u>			
<b>3.2 Building Conditions</b>				<b>3.3 Power Source</b>			
Constructions		Supplier	Zamboanga City Electric Cooperative	E/G (Gen. Set)	Existing Power Conditions		
Num. of story	One	Voltage	220 V	Unserviceable	Good	Bad	
Structure	Concrete	Phase	2	NA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Power Supply System
Roof Material	G.I. Sheet	Wire	2	NA	<input type="checkbox"/>	<input type="checkbox"/>	Operations of E/G
Ceiling Mat.	Plywood	kVA		NA	<input type="checkbox"/>	<input type="checkbox"/>	Operations of AVR
Wall Material	Conc.Hollow Blocks	Quality of Commercial Source			Capacity of fuel for engine		
Wall finish	Cement/Painted	Fluctuations	V ± 5 %		Day tank	NA Liter	
Flooring Mat.	Cement	Availability of power per day		24 Hours	Main tank	NA Liters	
Water Leakage	None	Power interruption /month		2 Times			
Room Area (m <sup>2</sup> )		Total interpt. hours /month		2 Hours	E/G Stand-by System		
Operation room	(3.0 <sup>m</sup> x4.0 <sup>m</sup> ) 12.0m <sup>2</sup>	Max. interpt. hours at once		24 Hours	<input type="checkbox"/>	Single System	
E / G room					<input type="checkbox"/>	Dual System	
<b>3.4 Air Condition / Ventilation of Equipment Room</b>							
Yes No							
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Air Condition	Unit: 1	Type: Window Type	Capacity: 1 hp		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Exhaust Fan	Unit: 2	Type:	Capacity: N/A		
<b>3.5 Confirmation of Existing System</b>							
Yes No							
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Towers	Type:	Stance:	Height (m): 6.00m mounted on top of the Roof		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Antenna	Type:	Size:	Height (m):	Direction:	
			Type:	Size:	Height (m):	Direction:	
		HF	Type: Dipole	Size:	Height (m): 20.0 m.	Direction: Broad Band	
			Type:	Size:	Height (m):	Direction:	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Grounding system (for radio only)		<input checked="" type="checkbox"/>	<input type="checkbox"/> Lightning system		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Feeder Cable Way		<input checked="" type="checkbox"/>	<input type="checkbox"/> City water supply (Cotabato Water District)		
<b>3.6 Security of Site and Equipment Room</b>							
Yes No				Yes No			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lock at Entrance Door		<input type="checkbox"/>	<input type="checkbox"/>	Lock at Window	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Latticed Window (see remarks)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Site	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Fence (see remarks)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Security Patrol on Equipment Room	

SUMMARY OF PCG STATION		SITE	CGS COTABATO		
		CLASS		NO.	
Remarks / Observations	1.	CGS- Cotabato is located near the entrance of Cotabato Port. The areas of responsibility of CGS-Cotabato include the following: (1) Province of Lanao del Sur, (2) Province of Maguindanao, and, (3) Province of Sultan Kudarat .			
	2.	The size of the operation/radio room is 12 sq.m. It is located in the main building which is made of concrete materials.			
	3.	PCG Cotabato station existing generator set is unserviceable. It needs a standby generator set to ensure continuous twenty four hours communications operation daily.			
	4.	The water supply provided by the Cotabato City Water District is potable for drinking. The power supply to CGS- Cotabato is available 24 hrs. and provided by the Cotabato City Electric Cooperative.			
	5.	Presently the existing VHF and HF communications equipment of GGS-Cotabato are all unserviceable. Messages are sent by telephone, through mobile phone by text messaging and through courier.			
	6.	The existing installed dipole antennae is connected to the 20 Ft. high tower which is mounted on top of the roof of the main building.			
<b>4. OPERATION AND MAINTENANCE</b>		<b>5. PERSONNEL FORMATIONS</b>			
<b>Actions taken in equipment failure</b>					
Restoration flow	Seek assistance of private technician in the locality Otherwise equipment is send to Zamboanga headquarters for repair. HCGD Zbga would seek assistance of naval technician otherwise equipment is send to Manila Headquarters.		Chief	1	
Examples of major failure	Equipment cannot transmit/ receive messages; No signal		Operator (skilled)	1	( )
Sufficiency of spares	No spares		Technician (skilled)	None	( )
<b>Records of damages</b>		<b>Environmental Conditions</b>		Administrator	
<input type="checkbox"/> Heavy rainfall		Good	Bad		
<input type="checkbox"/> Storm		√	<input type="checkbox"/>	External noises	Total
<input checked="" type="checkbox"/> Lightning	Damaged the Antennae	√	<input type="checkbox"/>	Air pollution	2
<input type="checkbox"/> Other calamity					
<b>Institutional and Human Statuses</b>			<b>Training Record</b>		
1 Budget	<input type="checkbox"/> Sufficient	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Insufficient	Course	Class
2 Spares	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	Location	Period
3 Measuring eqpt./tools	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	Trainee	
4 Number of Operator	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough	No specialization training for the rating of radio officers. No routine training of personnel.	
5 Number of Technician	<input type="checkbox"/> Enough	<input type="checkbox"/> Reasonable	<input checked="" type="checkbox"/> Not enough		
6 Capability of Operator	<input type="checkbox"/> Skilled	<input checked="" type="checkbox"/> Not so bad	<input type="checkbox"/> Not capable		
7 Capability of Technician	<input type="checkbox"/> Skilled	<input type="checkbox"/> Not so bad	<input checked="" type="checkbox"/> None		
<b>6. COMMENTS</b>					
Remarks / Recommend-Actions	1.	Replacement of existing unserviceable HF and VHF with good quality equipment. In the case of HF equipment, to allow 24 hrs contact from station to headquarters as well as from Cotabato station to other coast guard stations. In the case of VHF equipment, to allow direct contact from Cotabato station to its various detachments and auxiliary volunteers within the area of responsibility as well as direct contact from the station (shore) to vessels (both foreign and local) transiting the area of responsibility. The replacement of unserviceable equipment at CGS-Cotabato is recommended in view of its strategic importance in monitoring international trade activities passing the territorial boundaries in the light of the implementation of the Brunei, Indonesia, Malaysia, Philippines- East Asian Growth Area (BIMP-EAGA) trade agreement. Among the ports of entry in the southern part of the Philippines identified for declaration as free ports under the 1997 BIMP-EAGA trade agreement are the Cotabato Port (with previous trade linkages to Singapore and Malaysia), Bongao Port (with existing trade linkages to Sandakan and Labuan, Malaysia), Jolo Port (with existing trade linkages to Sandakan and Labuan, Malaysia), Zamboanga Port (with existing trade linkages to Sandakan and Labuan, Malaysia), and Brooke's Point Port in the Southernmost tip of Palawan ( with existing trade linkages to Kudat, Sabah and Labuan, Malaysia). The result of survey/coordination meetings conducted reveals that DOTC has included the airport expansion of Cotabato in its priority project for implementation under the ADB- Intermodal Transport Development Project in preparation for the implementation of the free trade agreement. The upgrading/development of Polloc Port in Cotabato is proposed for inclusion under Phase II of the ADB-Intermodal Transport Development Project. In view thereof, Zamboanga Coast Guard District Commander Danilo M. Vilda strongly recommends the provision of a VHF equipment at CG Detachment- Polloc for ship to shore communication system in the area.			
	2.	Installation of appropriate antennae mounted on self- supporting pole.			
	3.	Provision of standby power generator to ensure uninterrupted power supply 24 hrs. a day.			
	4.	Increase the number of skilled operator and provide training to personnel ( especially the non-rated personnel) for an efficient 24hrs communications equipment operation service.			
	5.	Provision of fast moving spare parts (microphones,fuses, batteries, diods, transistors, I.C.s, etc.).			
	6.	Creation of a communications maintenance repair group at the Zamboanga district headquarter with rated electronic technician.			
	7.	Provide lightning arrester to prevent damage to the communications equipment.			
	8.	Provide telefax machine as a fast and alternative means of transmitting communications. Existing facsimile machine is outmoded.			







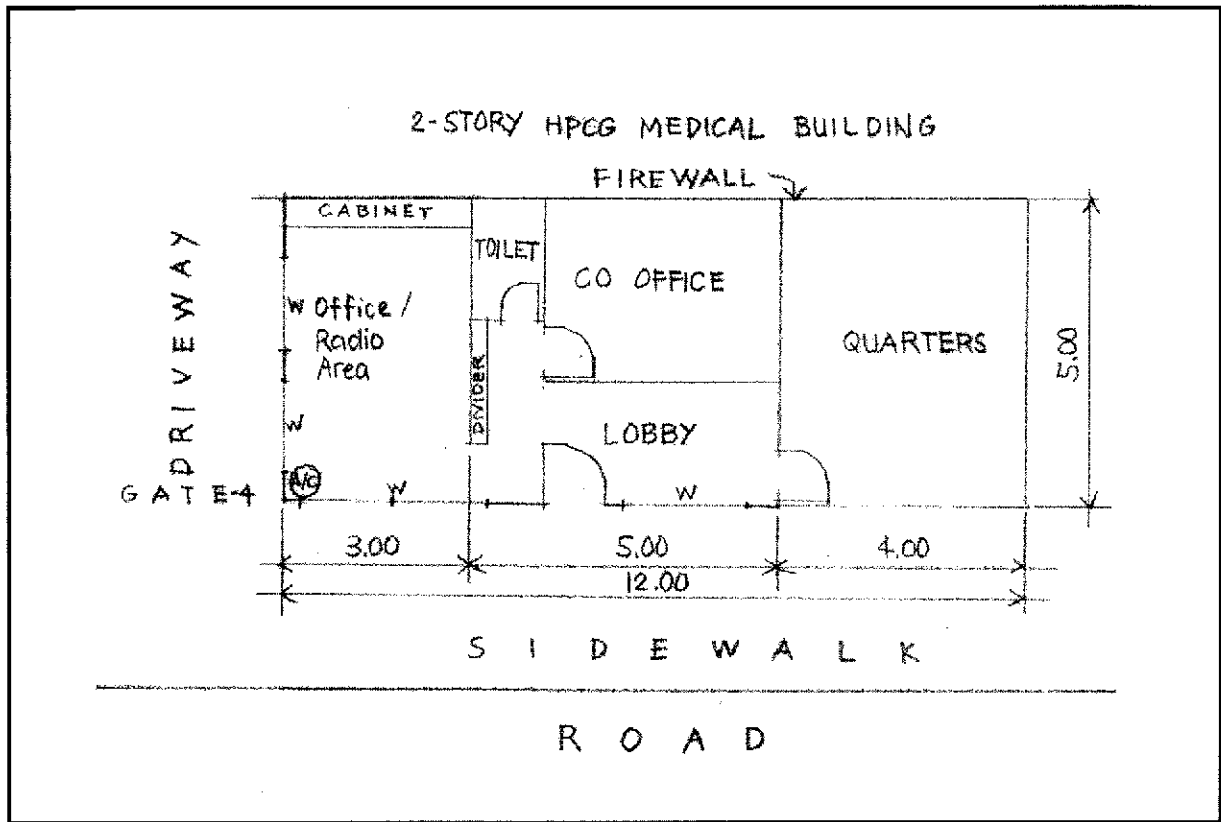


FIGURE 5-1-5 BUILDING LAYOUT FOR PSSC MANILA

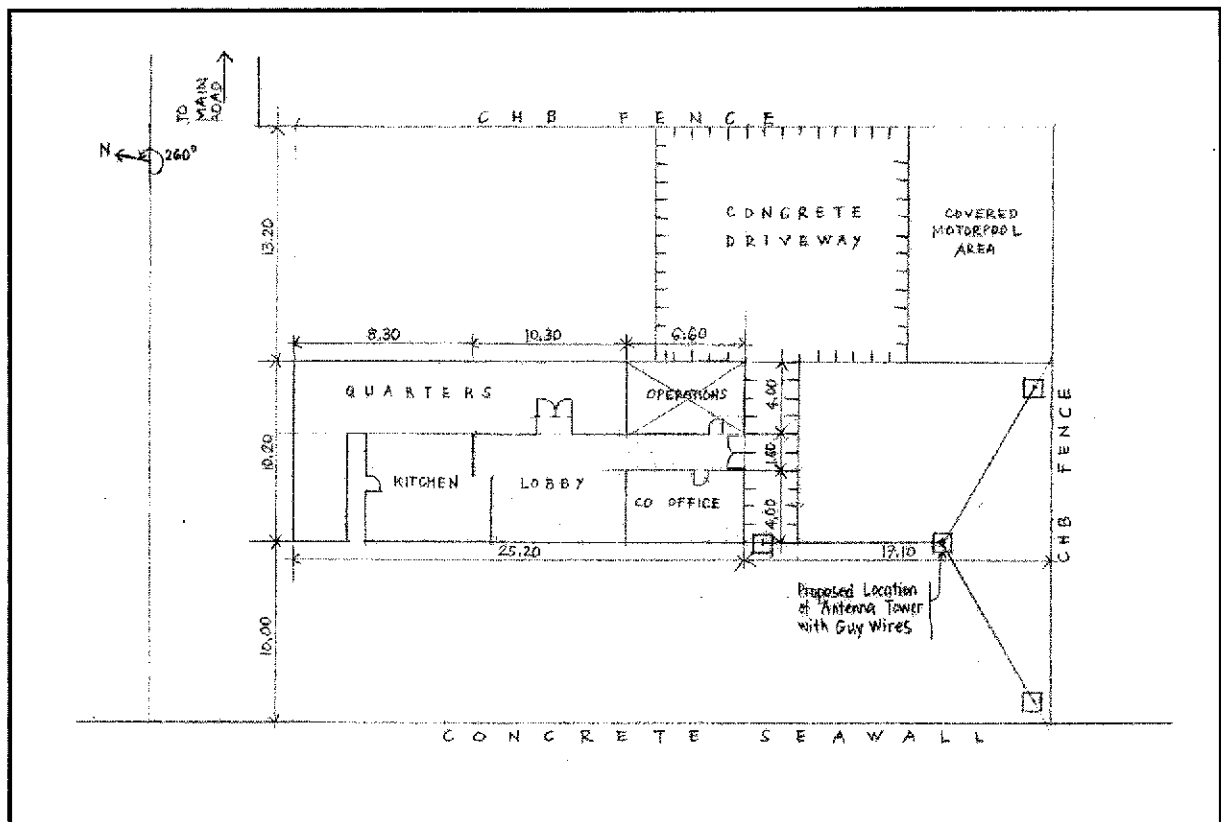


FIGURE 5-1-6 SITE LAYOUT FOR CGS SUBIC





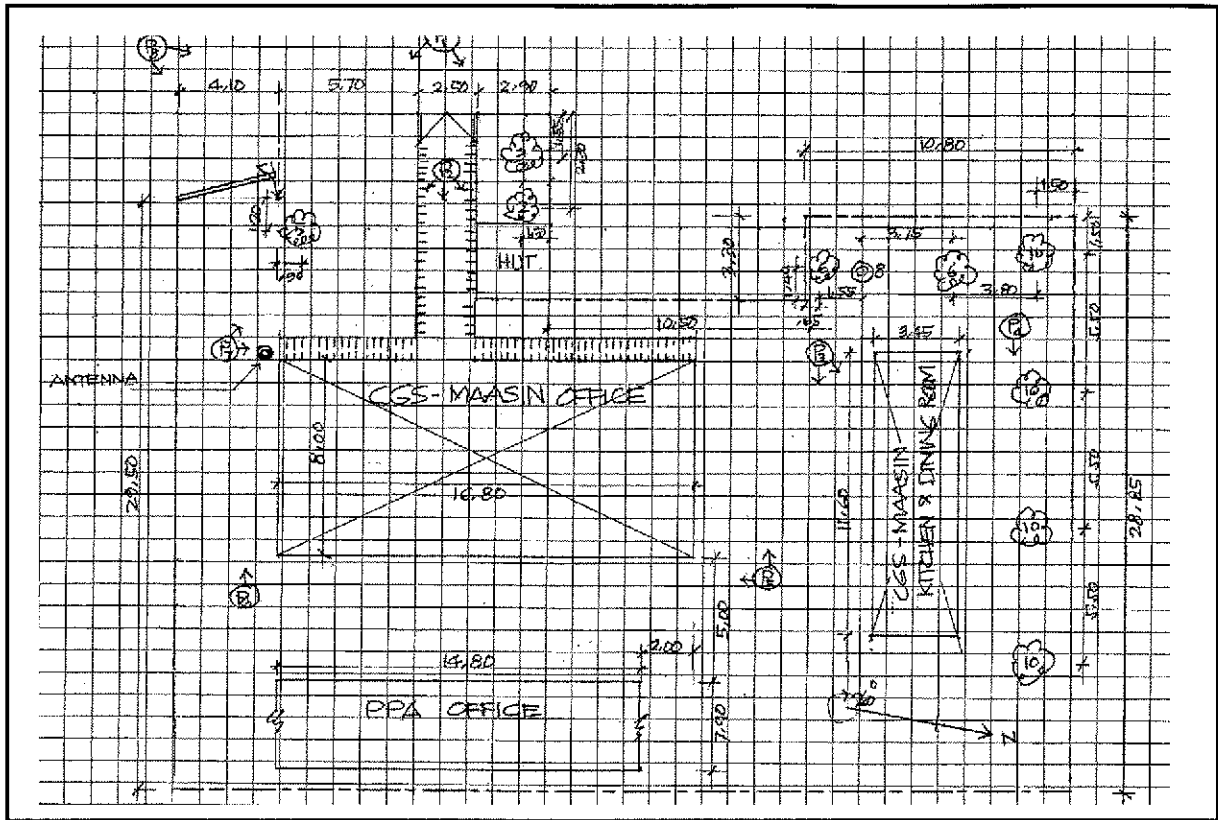


FIGURE 5-1-11 SITE LAYOUT FOR CGS MAASIN

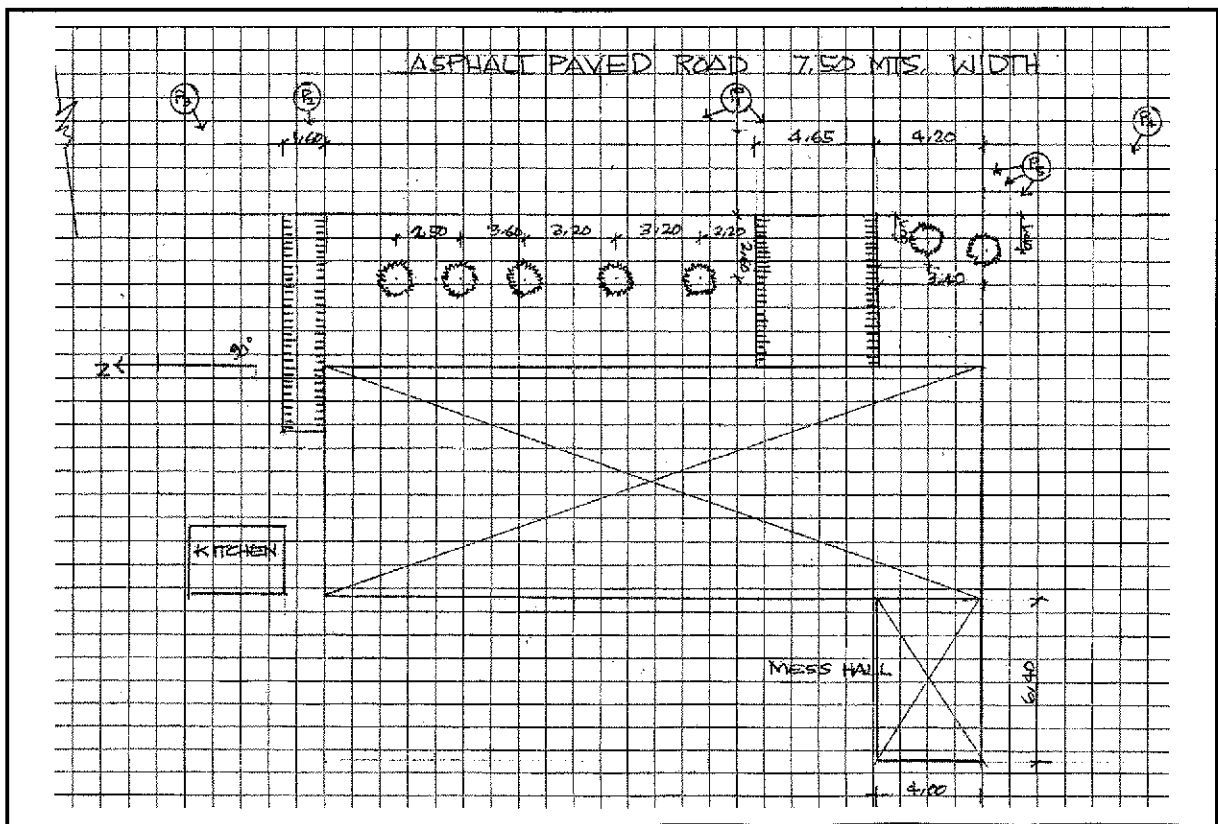


FIGURE 5-1-12 SITE LAYOUT FOR CGS TACLOBAN

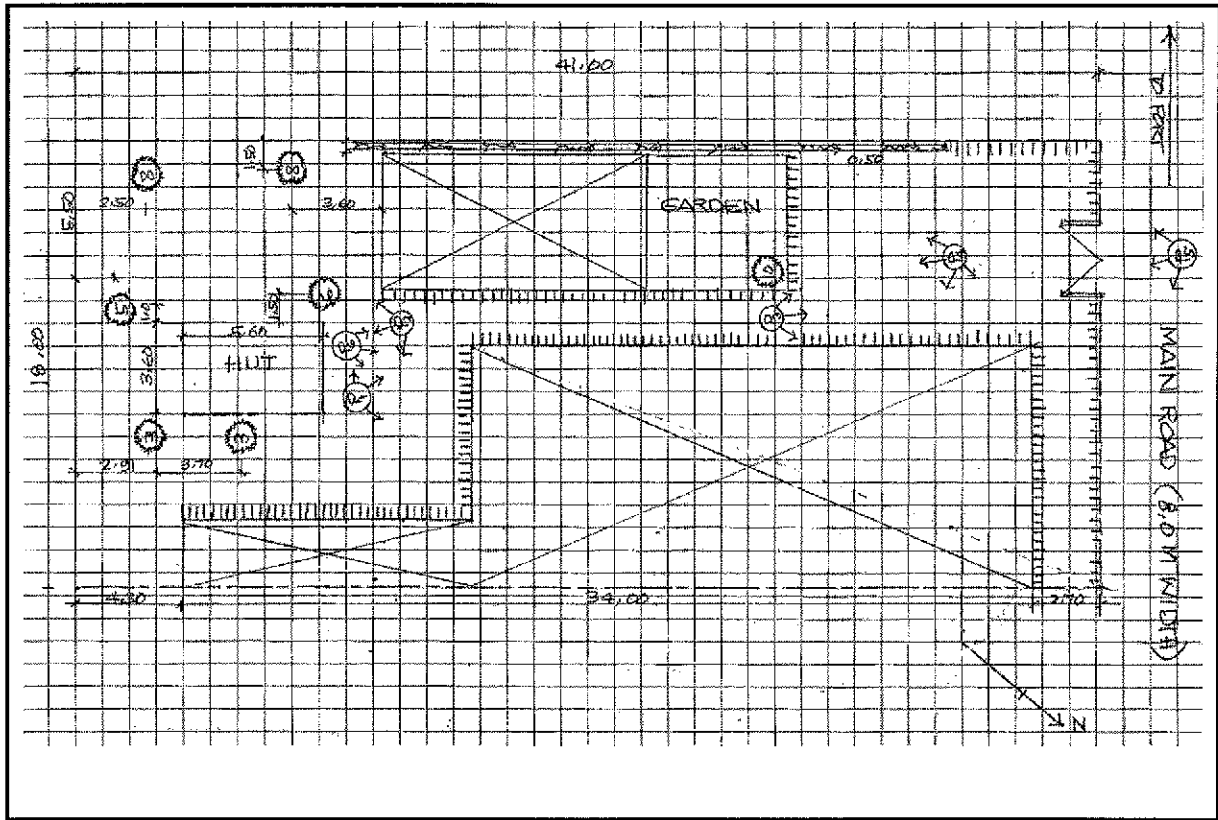


FIGURE 5-1-13 SITE LAYOUT FOR CGS CATBALONGAN

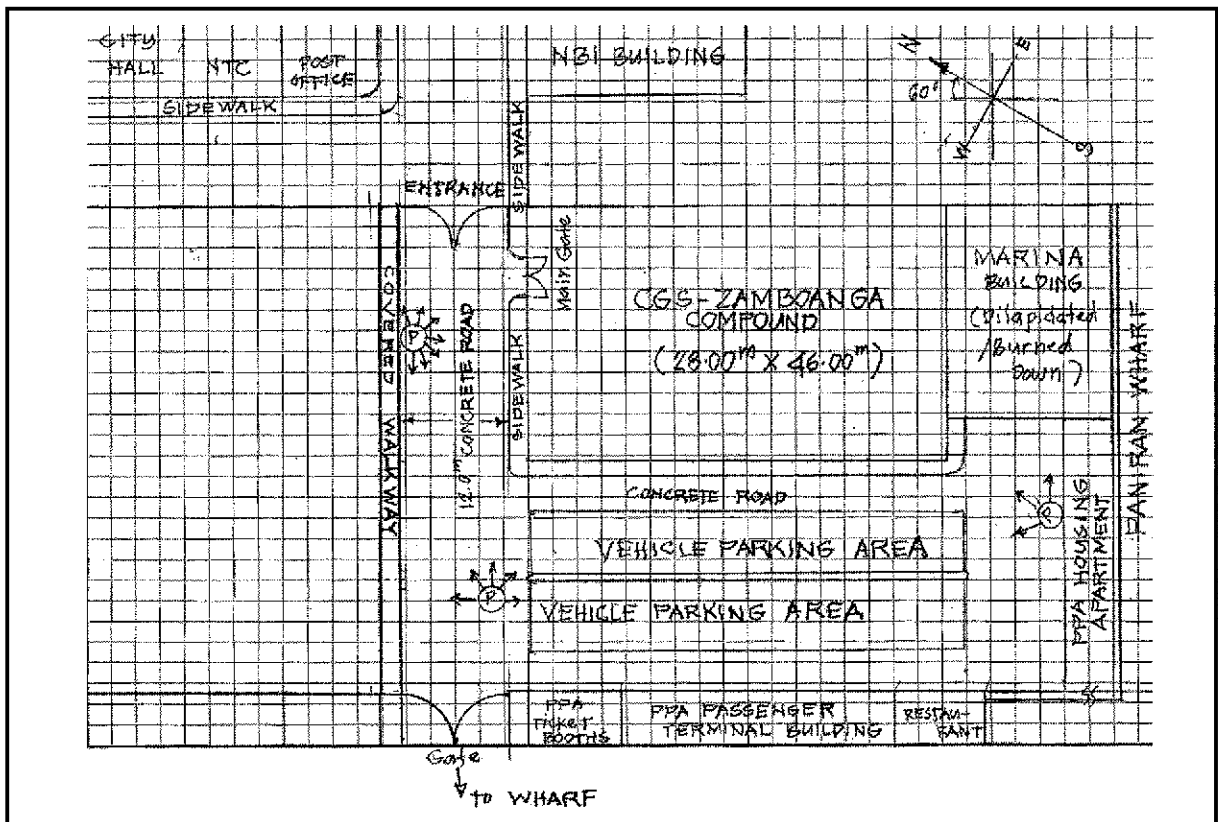


FIGURE 5-1-14 SITE LAYOUT FOR CGS ZAMBOANGA

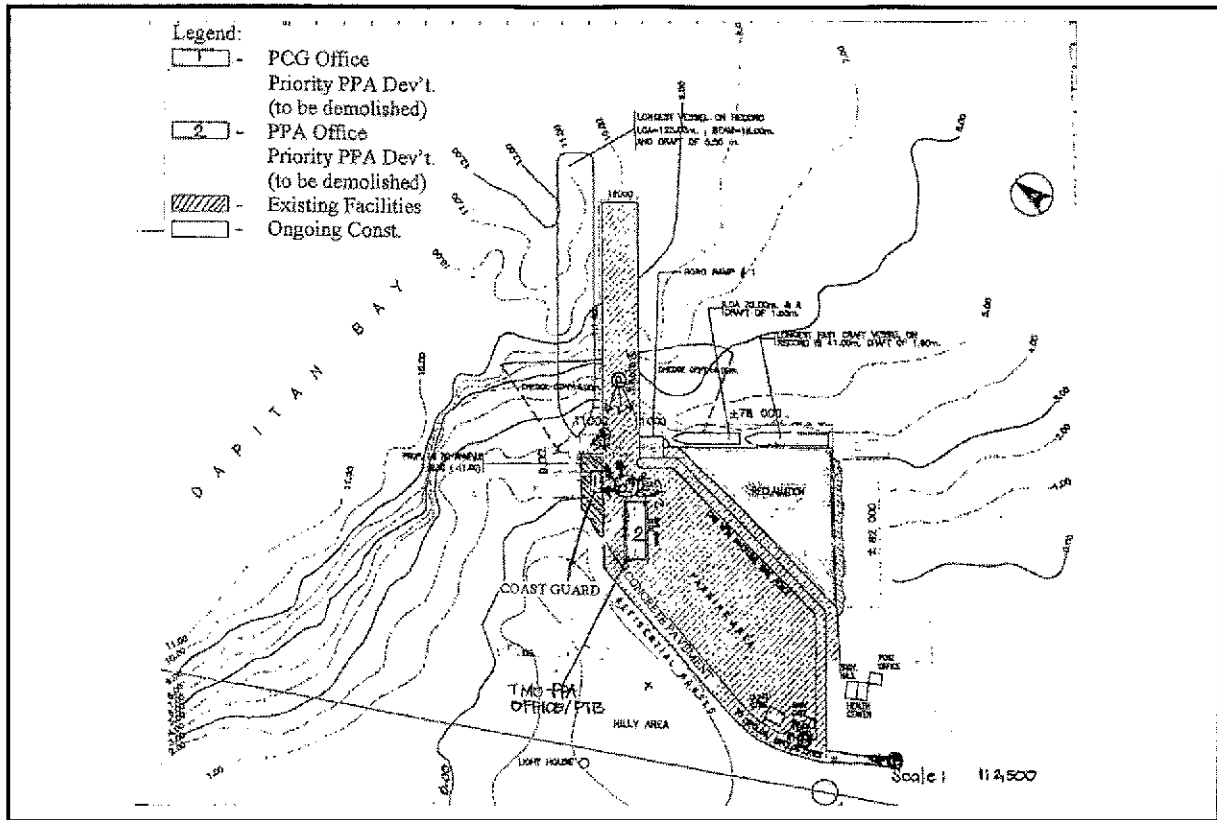


FIGURE 5-1-15 SITE LAYOUT FOR CGS DAPUTAN

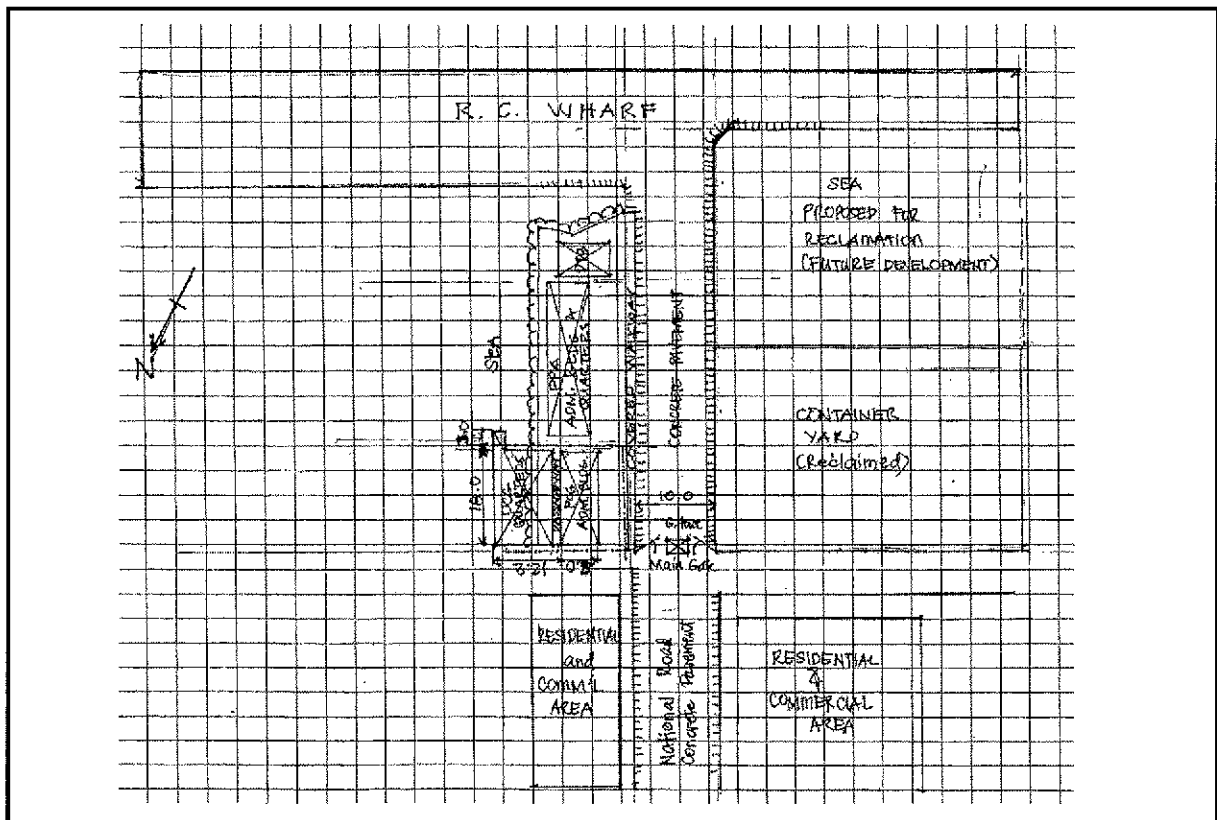


FIGURE 5-1-16 SITE LAYOUT FOR CGS PAGADIAN

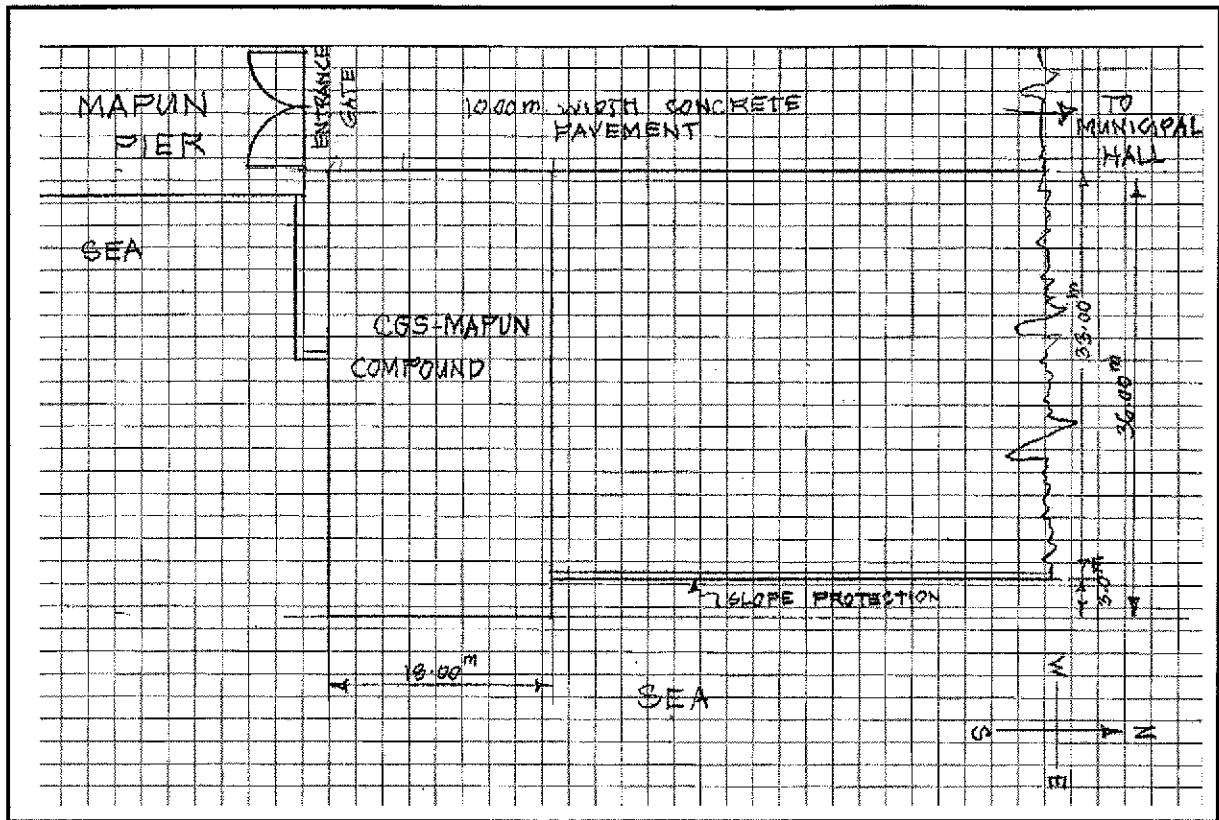


FIGURE 5-1-17 SITE LAYOUT FOR CGS MAPUN

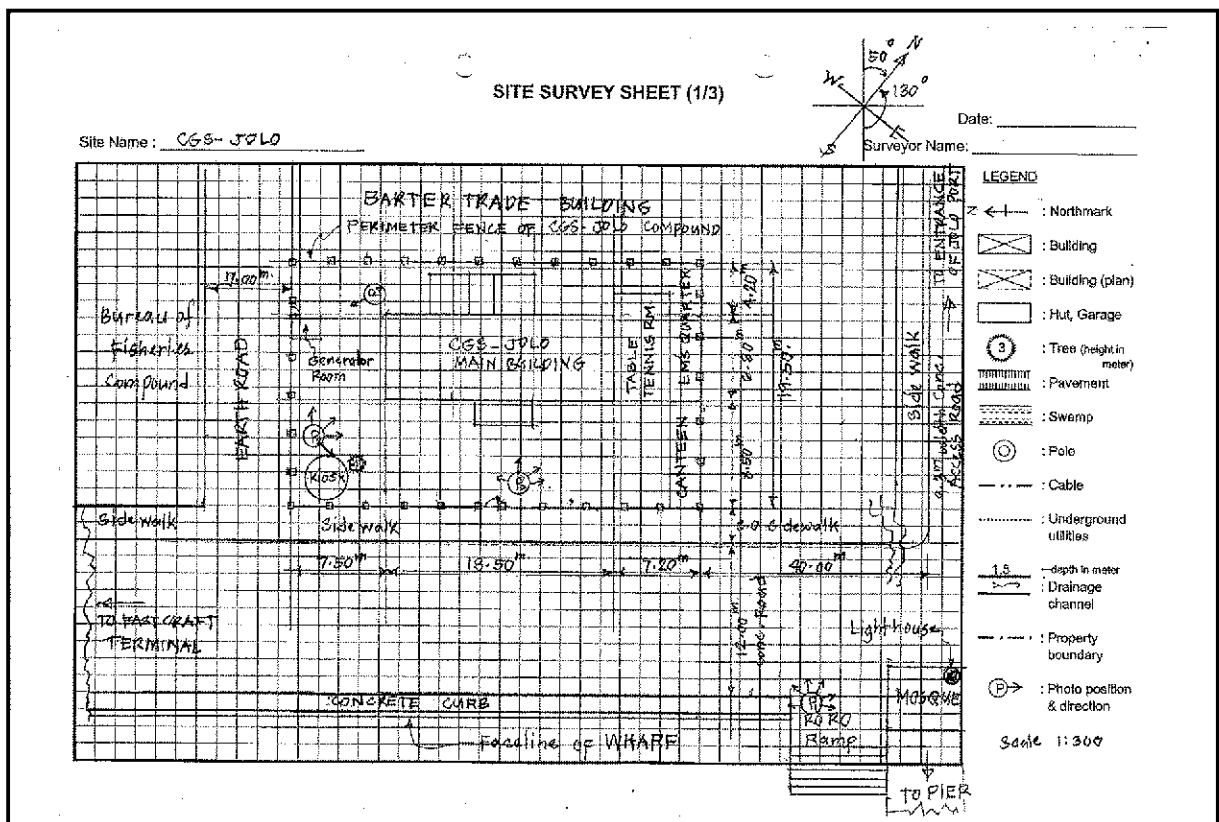


FIGURE 5-1-18 SITE LAYOUT FOR CGS JOLO

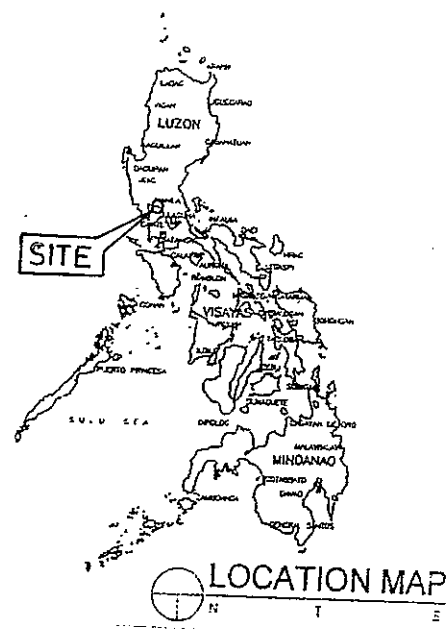
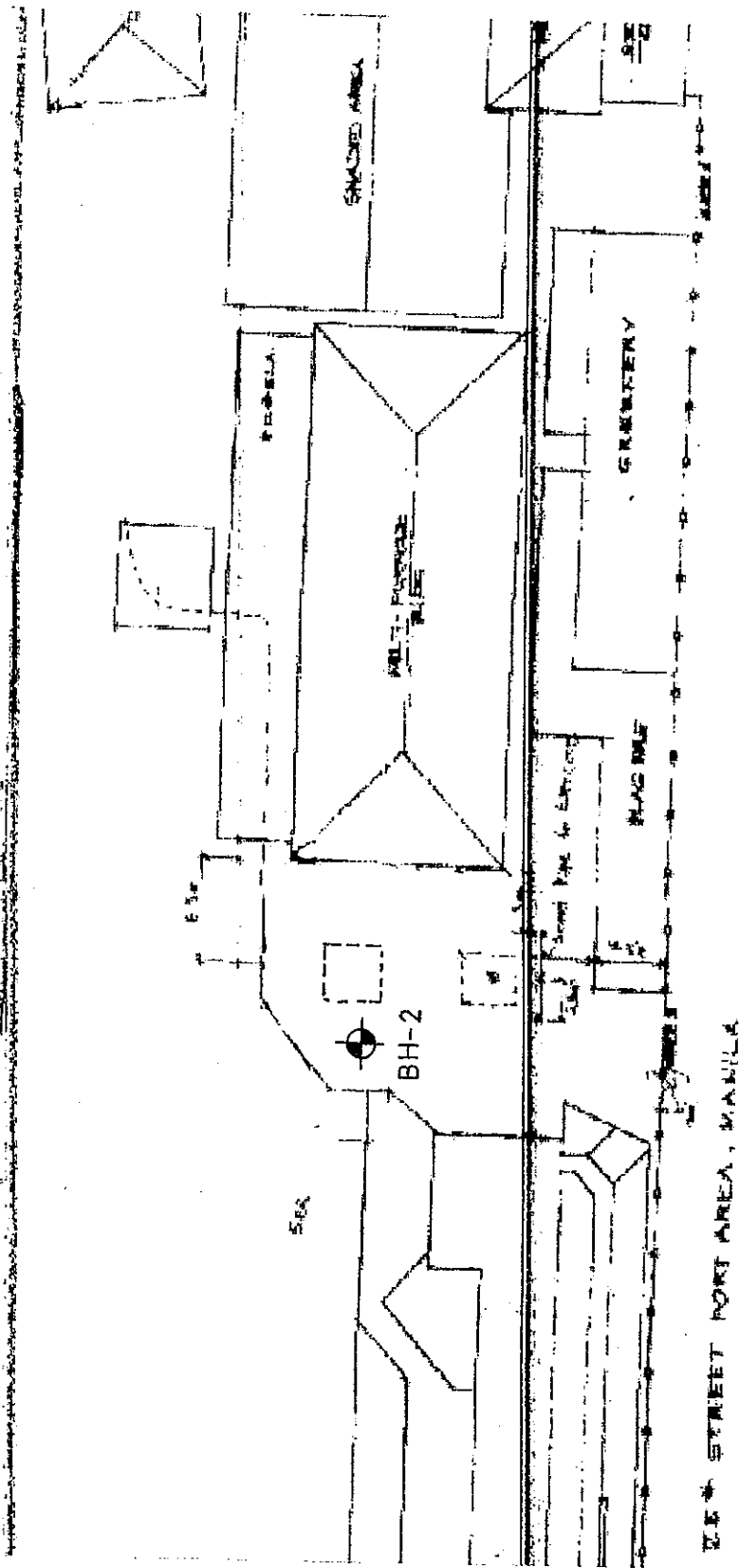








EXISTING BPACE PLAN



25th STREET PORT AREA, MANILA

**BOREHOLE LOCATION PLAN  
HEADQUARTERS PCG, 25th St. PORT AREA, MANILA**

**PLATE NO. 2**

Figure 5-2-2 Borehole Location at PCG Headquarters



<b>GEOTECHNICAL DATA</b>																			
<b>PROJECT:</b> Basic Design Study on the Project for PCG Communications System Capability Enhancement on Marine Safety & Security In The Philippines			CGDNCR-CL Meulle dela Industria, Parola Compound, Binondo Manila				<b>Date Started:</b> November 11, 2006		BH 1										
			<b>Elevation:</b> 2.00 M Above Mean Sea Level		<b>Coordinates:</b> 51280426E 1614581N		<b>Date Finished:</b> November 18, 2006												
Description And Classification of Materials	Log	Depth M	SPT	Water Content & Atterberg Limits, %				- a.	"N"	Number of Blows Per Foot / 30 cm.									
				20	40	60	80			20	40	60	80						
5 cm Concrete Slab				Compressive Strength = 1,373 Psi															
9 cm Fill Materials																			
1.21 Meters Concrete Fragments																			
<b>SILTY SAND;</b> Gray to dark gray, wet, non-plastic, loose to medium dense, little broken shells. (SM) - trace organic materials, trace rock fragments  - trace gravel, trace broken shells			SPT-1						9										
			UDS-1						NP										
			SPT-2							12									
			UDS-2																
			SPT-3							13									
			UDS-3																
			SPT-4							14									
			UDS-4																
			SPT-5							20									
			UDS-5																
<b>SILTY CLAY;</b> Gray, wet, low plasticity, very soft to medium stiff, trace to little sand, trace broken shells. (CL)  - little broken shells  - trace broken shells  - some broken shells  - soft to hard			SPT-6						11										
			UDS-6																
			SPT-7							21									
			UDS-7																
			SPT-8							17									
			UDS-8																
			SPT-9							2									
			UDS-9																
			SPT-10							2									
			UDS-10																
	SPT-11							2											
	UDS-11							45cm											
	SPT-12							2											
	UDS-12							45cm											
	SPT-13							3											
	UDS-13																		
	SPT-14							5											
	UDS-14																		
	SPT-15							5											
	UDS-15																		
	SPT-16							4											
	UDS-16																		
	SPT-17							17											
	UDS-17							4											
Hole Logged by: Ferdie A. Llanillo		DATE: November 20, 2006		Remarks: Watertable = 1.00 meter BGL															
Noted by: Pepito G. Tampengco, Jr.		DATE: November 24, 2006																	
o - Water Content -/- - Liquid Limit /-/- - Plastic Limit		PI - Plasticity Index SPT - Standard Penetration Test (s) UDS - Undisturbed Sample		HW - Hammer Weight CS - Core Sample ▼ - Water Table BGL - Below Ground Level		PLATE NO. 4													

Figure 5-2-3 Boring Log at HPCG (1 of 3)



<b>GEOTECHNICAL DATA</b>																					
<b>PROJECT:</b> Basic Design Study on the Project for PCG Communications System Capability Enhancement on Marine Safety & Security In The Philippines			CGDNCR-CL Meulle dela Industria, Parola Compound, Binondo Manila				Date Started: November 11, 2006		BH 1												
			Elevation: 2.00 M Above Mean Sea Level		Coordinates: 51280426E 1614581N		Date Finished: November 18, 2006														
Description And Classification of Materials	Log	Depth M	SPT	Water Content & Atterberg Limits, %				PI a. %	Number of Blows Per Foot / 30 cm.												
				20	40	60	80		20	40	60	80									
- little broken shells			⊗	UDS-17																	
			■	SPT-18																	
			⊗	UDS-18																	
			■	SPT-19																	
			⊗	UDS-19																	
			■	SPT-20																	
			⊗	UDS-20																	
			■	SPT-21																	
			⊗	UDS-21																	
			■	SPT-22																	
SILTY CLAY; Dark gray, wet, high plasticity, stiff to hard, trace broken shells. (CH)			⊗	UDS-22																	
			■	SPT-23																	
			⊗	UDS-23																	
			■	SPT-24																	
			⊗	UDS-24																	
			■	SPT-25																	
			⊗	UDS-25																	
			■	SPT-26																	
			⊗	UDS-26																	
			■	SPT-27																	
- some gravel  - little broken shells			⊗	UDS-27																	
			■	SPT-28																	
			⊗	UDS-28																	
			■	SPT-29																	
			⊗	UDS-29																	
			■	SPT-30																	
			⊗	UDS-30																	
			■	SPT-31																	
			⊗	UDS-31																	
			■	SPT-32																	
- very stiff to hard			⊗	UDS-32																	
			■	SPT-33																	
			⊗	UDS-33																	
			■	SPT-34																	
		⊗	UDS-34																		
		■	SPT-35																		

Hole Logged by: Ferdie A. Llanillo  
 Noted by: Pepito G. Tampengco, Jr.

DATE: November 20, 2006  
 DATE: November 24, 2006

Remarks: Watertable = 1.00 meter BGL

- o - Water Content
- / - Liquid Limit
- / - Plastic Limit
- PI - Plasticity Index
- SPT - Standard Penetration Test (s)
- UDS - Undisturbed Sample
- HW - Hammer Weight
- CS - Core Sample
- ▽ - Water Table
- BGL - Below Ground Level

PLATE NO. 4

Figure 5-2-4 Boring Log at HPCG (2 of 3)



<b>GEOTECHNICAL DATA</b>														
<b>PROJECT:</b> Basic Design Study on the Project for PCG Communications System Capability Enhancement on Marine Safety & Security In The Philippines			CGDNCR-CL Meulle dela Industria, Parola Compound, Binondo Manila				Date Started: November 11, 2006		BH 1					
			Elevation: 2.00 M Above Mean Sea Level		Coordinates: 51280426E 1614581N		Date Finished: November 18, 2006							
Description And Classification of Materials	Log	Depth M	SPT	Water Content & Atterberg Limits, %				- p. "	"N"	Number of Blows Per Foot / 30 cm.				
				20	40	60	80			20	40	60	80	
End of Boring		40	X	UDS-35					44					
			■	SPT-36										
			X	UDS-36										
			■	SPT-37										
			X	UDS-37										
			■	SPT-38										
		X	UDS-38											
		■	SPT-39											
		45												
		50												
Hole Logged by: Ferdie A. Llanillo			DATE: November 20, 2006		Remarks: Watertable = 1.00 meter BGL									
Noted by: Pepito G. Tampengco, Jr.			DATE: November 24, 2006											
o - Water Content -/ - Liquid Limit /- - Plastic Limit			PI - Plasticity Index SPT - Standard Penetration Test (s) UDS - Undisturbed Sample			HW - Hammer Weight CS - Core Sample ▼ - Water Table BGL - Below Ground Level			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">PLATE NO.</td> <td style="text-align: left;">4</td> </tr> </table>			PLATE NO.	4	
PLATE NO.	4													

Figure 5-2-5 Boring Log at HPCG (3 of 3)



GEOTECHNICAL DATA																					
PROJECT: Basic Design Study on the Project for PCG Communications System Capability Enhancement on Marine Safety & Security In The Philippines			Headquarters Philippine Coast Guard # 139, 25th Street, Port Area Manila				Date Started: November 22, 2006		BH 2												
			Elevation: 2.00 M Above Mean Sea Level		Coordinates: 51281627E 1613041N		Date Finished: December 04, 2006														
Description And Classification of Materials	Log	Depth M	SPT	Water Content & Atterberg Limits, %				P.I.	"N"	Number of Blows Per Foot / 30 cm.											
				20	40	60	80			20	40	60	80								
5 cm Concrete Slab																					
FILL MATERIALS consisting of Rock Fragments with Soils; Brown moist to wet, non-plastic.			SPT-1						4												
			SPT-2						5												
			SPT-3							8											
			SPT-4							12											
SILTY CLAY; Gray, wet, high plasticity, soft to very soft, trace to little sand, little rock fragments. (CH)  - some broken shells		5	SPT-5						4												
			UDS-1						32												
			SPT-6							3											
			UDS-2																		
			SPT-7							3											
			UDS-3																		
			SPT-8							4											
			UDS-4																		
			SPT-9							4											
			UDS-5																		
			SPT-10							5											
			UDS-6																		
			SPT-11							4											
- little broken shells			UDS-7																		
			SPT-12						6												
			UDS-8																		
			SPT-13						6												
- trace broken shells			UDS-9																		
			SPT-14						3												
			UDS-10																		
			SPT-15						2												
-soft to very soft		15	UDS-11																		
			SPT-16						3												
			UDS-12																		
			SPT-17						4												
			UDS-13																		
			SPT-18						5												
Hole Logged by: Ferdie A. Llanillo		DATE: December 02, 2006		Remarks: Watertable = 1.90 meters BGL																	
Noted by: Pepito G. Tampengco, Jr.		DATE: December 06, 2006																			
o - Water Content -/- - Liquid Limit /- - Plastic Limit			Pi - Plasticity Index SPT - Standard Penetration Test (s) UDS - Undisturbed Sample			HW - Hammer Weight CS - Core Sample ▼ - Water Table BGL - Below Ground Level			PLATE NO. 5												

Figure 5-2-6 Boring Log at PCG Headquarters (1 of 3)



GEOTECHNICAL DATA																				
<b>PROJECT:</b> Basic Design Study on the Project for PCG Communications System Capability Enhancement on Marine Safety & Security In The Philippines			Headquarters Philippine Coast Guard # 139, 25th Street, Port Area Manila				Date Started: November 22, 2006		BH 2											
			Elevation: 2.00 M Above Mean Sea Level		Coordinates: 51281627E 1613041N		Date Finished: December 04, 2006													
Description And Classification of Materials	Log	Depth M	SPT	Water Content & Atterberg Limits, %				P.I.	Number of Blows Per Foot / 30 cm.											
				20	40	60	80		20	40	60	80								
- medium stiff to stiff  - little broken shells		20	X	UDS-14																
			█	SPT-19																
			X	UDS-15																
			█	SPT-20																
			X	UDS-16																
			█	SPT-21																
			X	UDS-17																
			█	SPT-22																
			X	UDS-18																
			█	SPT-23																
			X	UDS-19																
			█	SPT-24																
			X	UDS-20																
			█	SPT-25																
		25	X	UDS-21																
			█	SPT-26																
			X	UDS-22																
			█	SPT-27																
			X	UDS-23																
			█	SPT-28																
			X	UDS-24																
			█	SPT-29																
			X	UDS-25																
			█	SPT-30																
		30	X	UDS-26																
			█	SPT-31																
			X	UDS-27																
			█	SPT-32																
			X	UDS-28																
			█	SPT-33																
			X	UDS-29																
			█	SPT-34																
			X	UDS-30																
			█	SPT-35																
		35	X	UDS-31																
			█	SPT-36																
Hole Logged by: Ferdie A. Llanillo		DATE: December 02, 2006		Remarks: Watertable = 1.90 meters BGL																
Noted by: Pepito G. Tampengco, Jr.		DATE: December 06, 2006																		

o - Water Content  
- / - Liquid Limit  
/ - Plastic Limit

PI - Plasticity Index  
SPT - Standard Penetration Test (s)  
UDS - Undisturbed Sample

HW - Hammer Weight  
CS - Core Sample  
▽ - Water Table  
BGL - Below Ground Level

PLATE NO. 5

Figure 5-2-7 Boring Log at PCG Headquarters (2 of 3)



## GEOTECHNICAL DATA

<b>PROJECT:</b> Basic Design Study on the Project for PCG Communications System Capability Enhancement on Marine Safety & Security In The Philippines		Headquarters Philippine Coast Guard # 139, 25th Street, Port Area Manila				<b>Date Started:</b> November 22, 2006		BH 2					
		<b>Elevation:</b> 2.00 M Above Mean Sea Level		<b>Coordinates:</b> 51281627E 1613041N		<b>Date Finished:</b> December 04, 2006							
Description And Classification of Materials	Log	Depth M	SPT	Water Content & Atterberg Limits, %				- P "N"	Number of Blows Per Foot / 30 cm.				
				20	40	60	80		20	40	60	80	
- very stiff to hard	[Vertical Hatching]	40	☒	UDS-32					31	[Blow Count Graph]			
			■	SPT-37									
			☒	UDS-33									
			■	SPT-38									
			☒	UDS-34									
			■	SPT-39									
			☒	UDS-35									
■	SPT-40												
40	End of Boring												
		45											
		50											
Hole Logged by: Ferdie A. Llarillo		DATE: December 02, 2006		Remarks: Watertable = 1.90 meters BGL									
Noted by: Pepito G. Tampengco, Jr.		DATE: December 06, 2006											
o - Water Content -/- - Liquid Limit /- - Plastic Limit			PI - Plasticity Index SPT - Standard Penetration Test (s) UDS - Undisturbed Sample			HW - Hammer Weight CS - Core Sample ▼ - Water Table BGL - Below Ground Level			PLATE NO. 5				

Figure 5-2-8 Boring Log at PCG Headquarters (3 of 3)





Table 5-2-1 Summary of Laboratory Tests (HIPCCG)

**Project: Basis Design Study On The Project For PCG Communications System Capability Enhancement  
On Maritime Safety & Security In The Philippines**

**Location: CGDNCR-CL Muelle dela Industria, Farola Compound, Binondo, Manila**

**SUMMARY OF LABORATORY TEST RESULTS**

Sample	Depth (m)	Soil Classification	Moisture Content, (%)	Atterberg Limits			Gs @20 C	Unit Weight wet (g/cc)	qu (kg/sq.cm)
				LL	PL	PI			
UDS - 1	2.00-2.55	Silty Sand (SM)	28.29	NP	NP	0	2.839	1.85	-
UDS - 9	10.00-10.55	Silty Clay (CL)	67.77	30	18	12	2.373	1.84	0.24
UDS - 16	17.00-17.55	Silty Clay (CL)	64.24	31	14	17	2.332	1.78	0.49
UDS - 24	25.00-25.55	Silty Clay (CH)	65.15	77	30	47	2.294	1.89	1.10

Legend:

LL - Liquid Limit

NP - Non-Plastic

PL - Plastic Limit

qu - Unconfined Compression

PI - Plasticity Index

Gs - Specific Gravity

UDS - Undisturbed Sample

Note:

Sieve and hydrometer analysis are graphed on plate nos. 10 to 13.



Table 5-2-2 Summary of Laboratory Tests (PCG Headquarters)

Project: **Basis Design Study On The Project For PCG Communications System Capability Enhancement  
On Maritime Safety & Security In The Philippines**  
Location: **Headquarters Philippine Coast Guard, #139 25th Street Port Area Manila**

**SUMMARY OF LABORATORY TEST RESULTS**

Sample	Depth (m)	Soil Classification	Moisture Content, (%)	Atterberg Limits			Gs @20 C	Unit Weight wet (g/cc)	qu (kg/sq.cm)
				LL	PL	PI			
UDS - 1	5.00-5.55	Silty Clay (CH)	43.96	58	26	32	2.521	1.85	0.48
UDS - 18	22.00-22.55	Clayey Silt (MH)	68.76	76	42	34	2.237	2.03	1.20
UDS - 21	25.00-25.55	Clayey Silt (MH)	39.23	65	35	30	2.460	1.78	2.42
UDS - 29	33.00-33.55	Clayey Silt (MH)	36.55	71	51	20	2.369	1.75	2.28

Legend:

- LL - Liquid Limit
- PL - Plastic Limit
- PI - Plasticity Index
- UDS - Undisturbed Sample
- NP - Non-Plastic
- qu - Unconfined Compression
- Gs - Specific Gravity

Note:

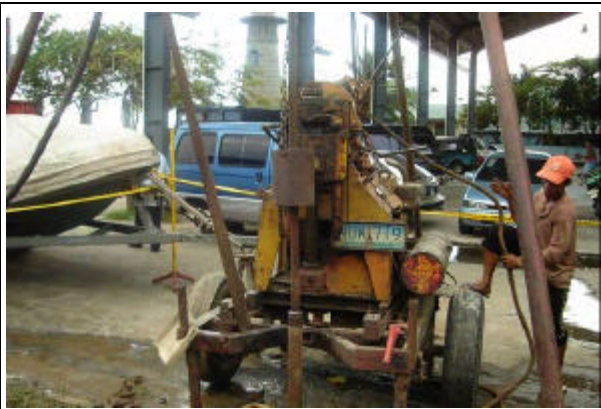
Sieve and hydrometer analysis are graphed on plate nos. 14 to 17.

PHOTOGRAPHS OF SOIL INVESTIGATION



Mechanical Boring at H1CGD

November, 2006



Mechanical Boring at PCG Headquarters

November, 2006



Obtained Undisturbed Sample from H1CGD Borehole

November, 2006



Obtained Core Samples and Tube Containers

November, 2006



Unconfined Compression Test

December, 2006



Apparatus for Plasticity Index and Testing Samples

December, 2006

Appendix 5-3 Circuit Design of VSAT and Microwave Communication System

**K=4/3**

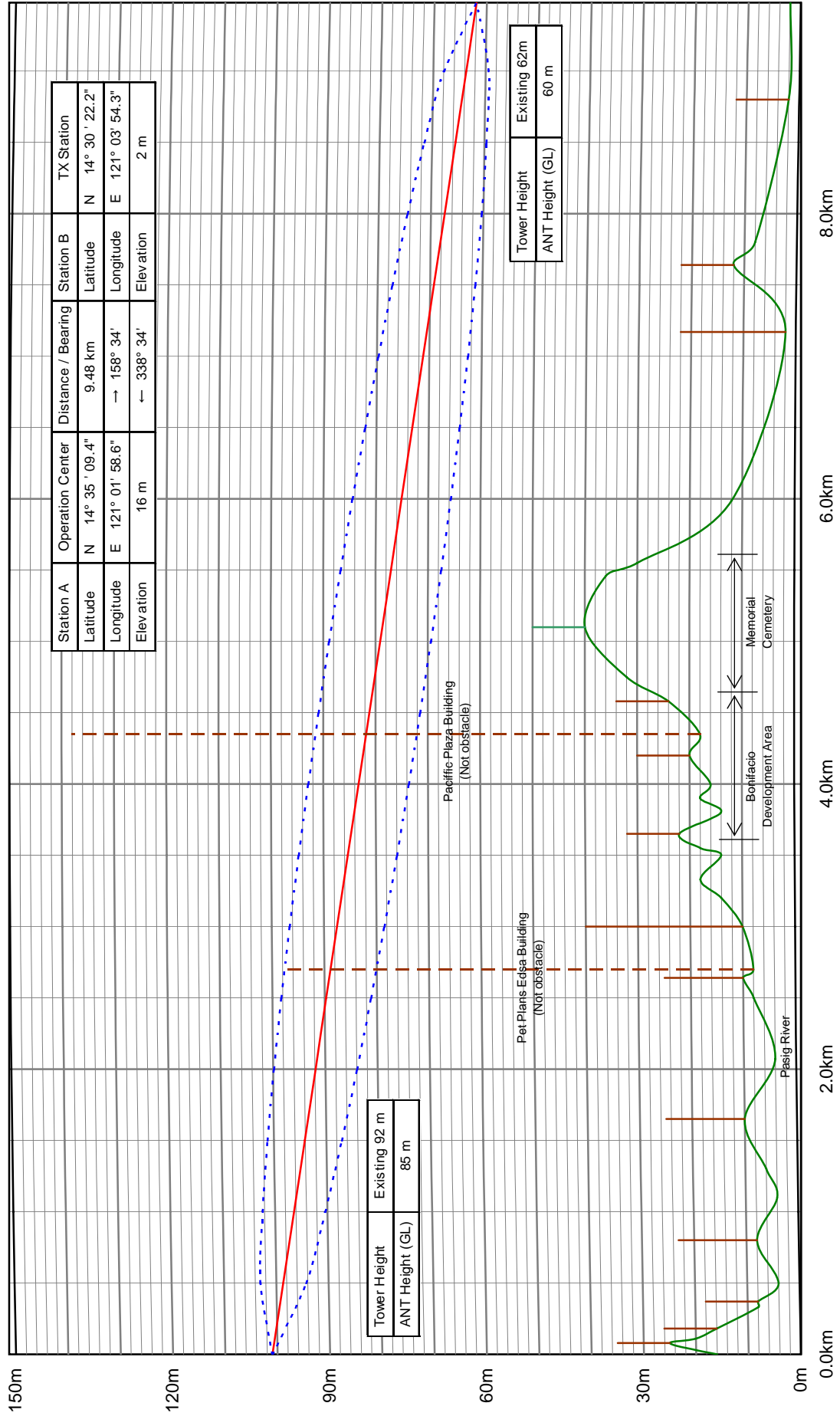


FIGURE 5-3-1 Microwave Path Profile (Operation Center - TX Station)

K=4/3

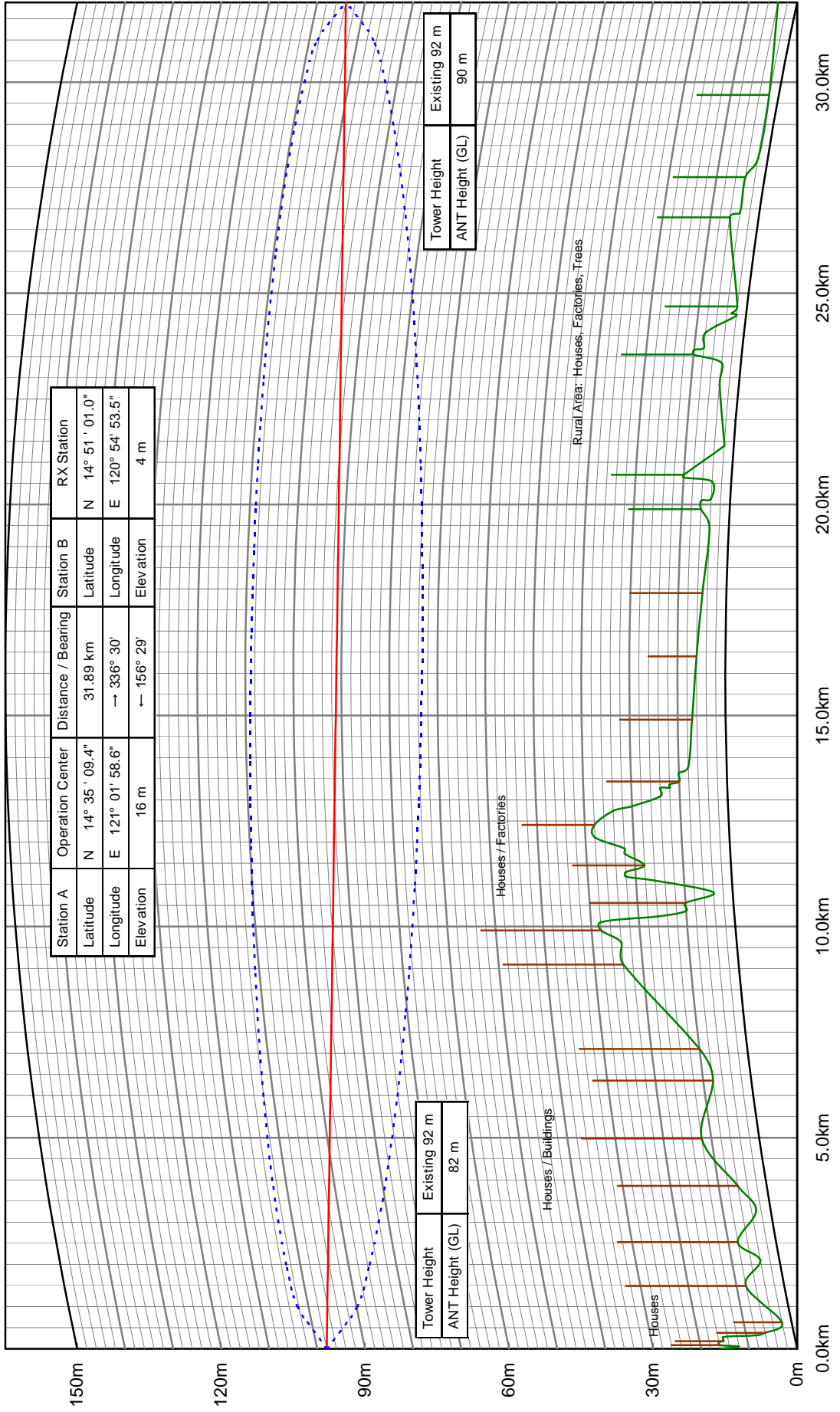


FIGURE 5-3-2 Microwave Path Profile (Operation Center - RX Station)

K=4/3

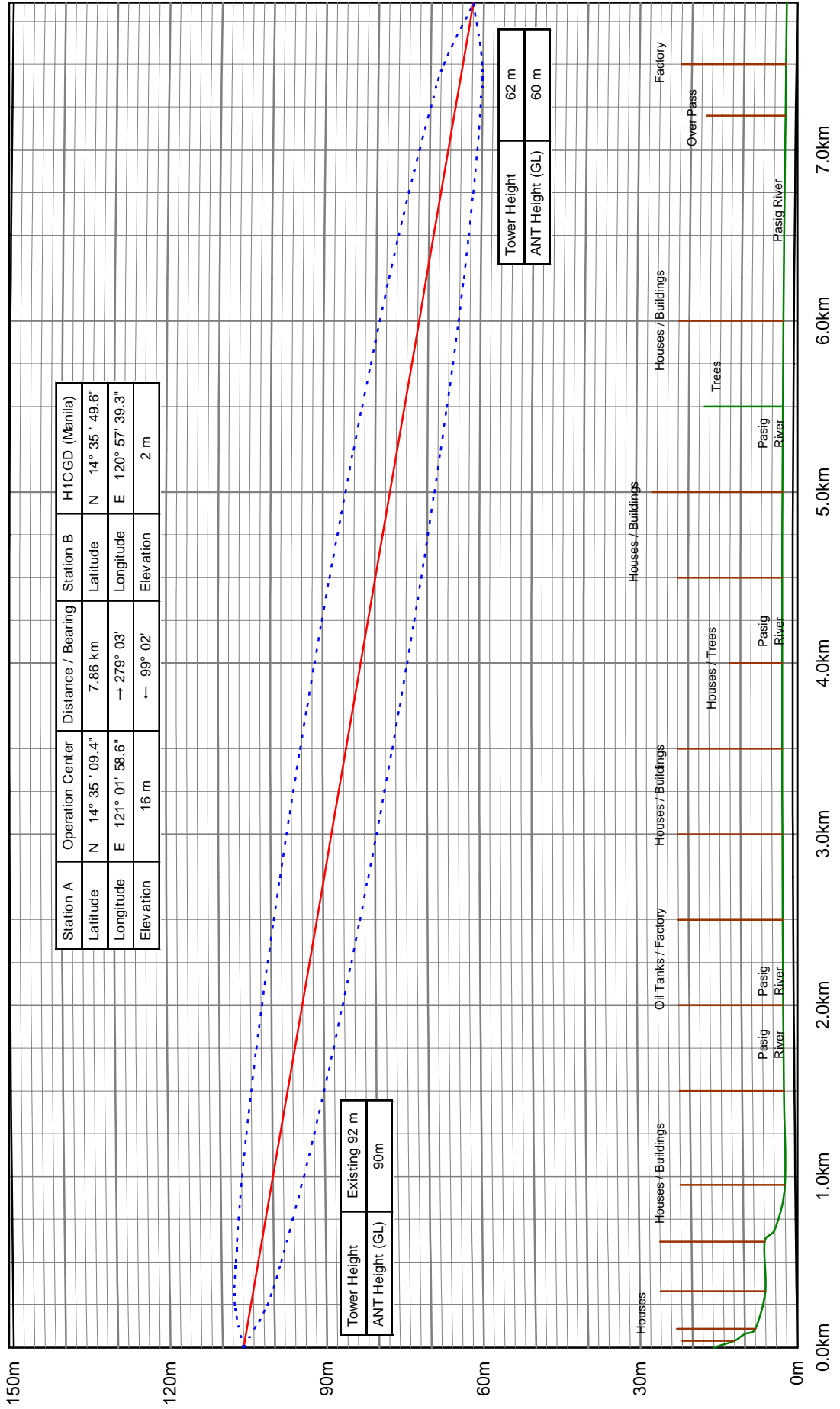


FIGURE 5-3-3 Microwave Path Profile (Operation Center - H1CGD)

K=4/3

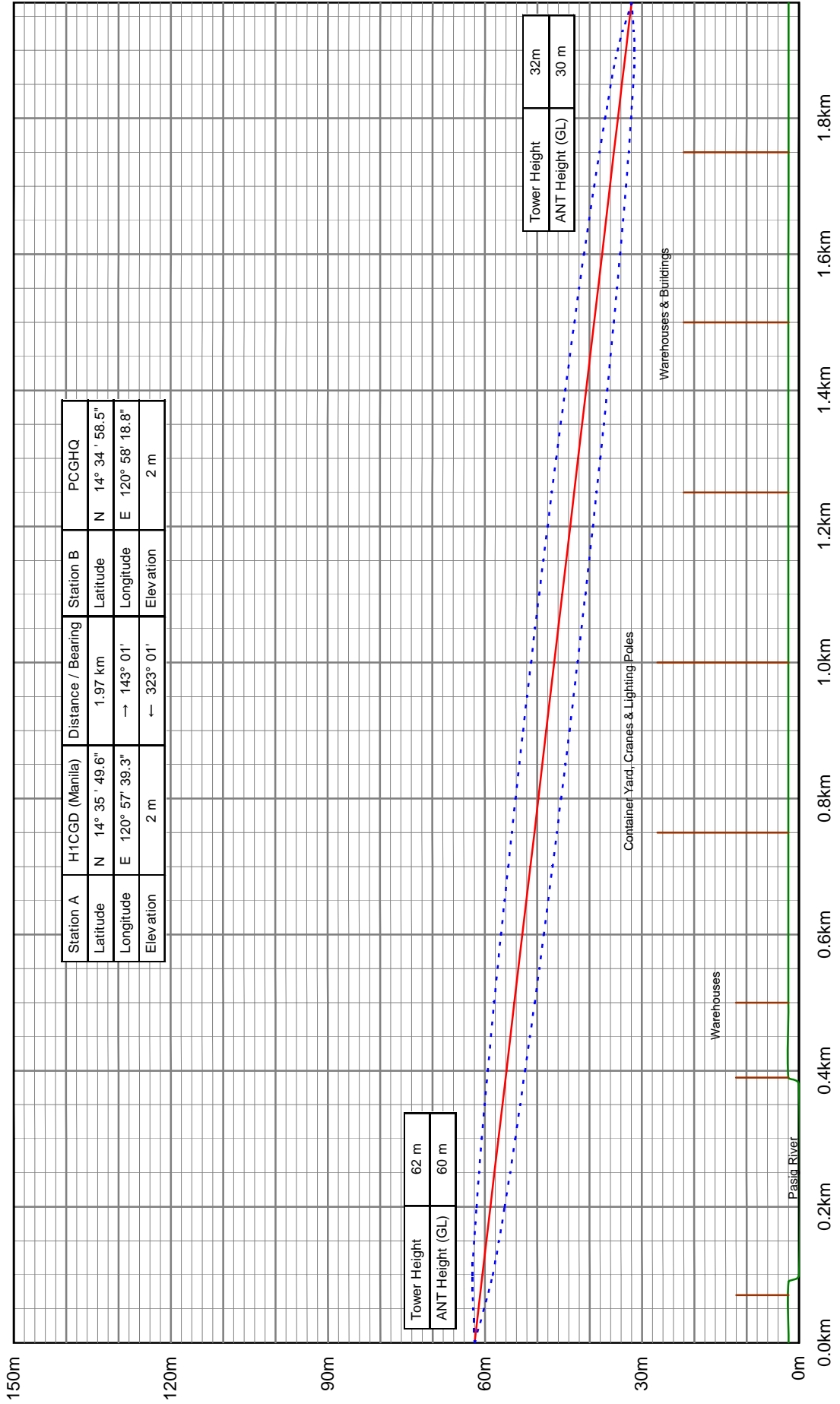


FIGURE 5-3-4 Microwave Path Profile (H1CGD - PCG Headquarters)

K=4/3

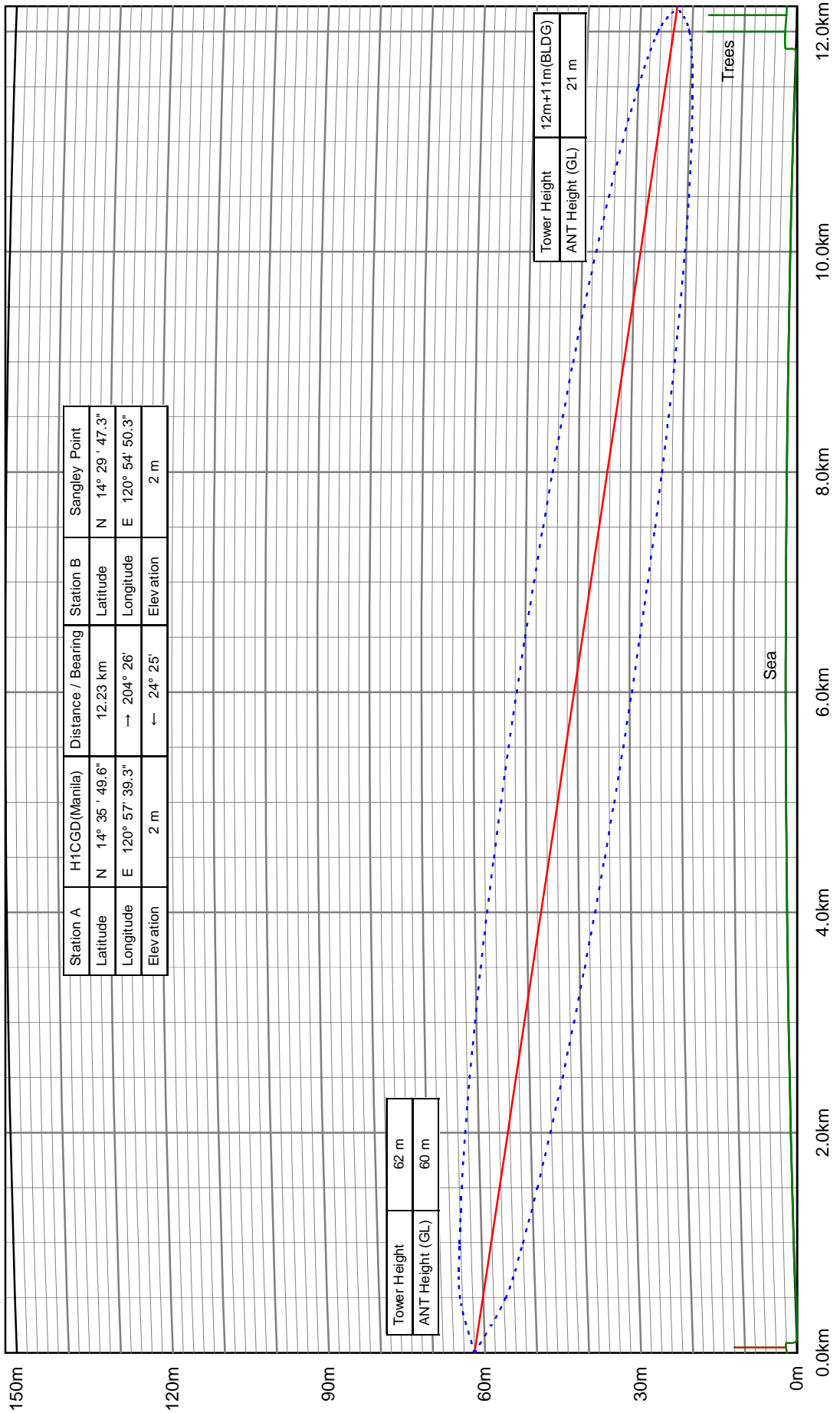


FIGURE 5-3-5 Microwave Path Profile (H1CGD - Sangley Point)



Table 5-3-1 Circuit Design of Microwave Communication System (Operation Center - TX Station)

	Operation Center	TX Station
Elevation (m)	16.00	2.00
Latitude	14 35 09.40 N	14 30 22.20 N
Longitude	121 01 58.60 E	121 03 54.30 E
True azimuth (°)	158.57	338.58
Vertical angle (°)	-0.27	0.20
Antenna model	PCG-7G-PB0.6	PCG-7G-PB0.6
Antenna height (m)	85.00	60.00
Antenna gain (dBi)	30.00	30.00
TX line length (m)	1.00	1.00
RX hybrid loss (dB)	3.50	3.50
Frequency (MHz)	7575.00	
Polarization	Horizontal	
Path length (km)	9.48	
Free space loss (dB)	129.59	
Atmospheric absorption loss (dB)	0.10	
Net path loss (dB)	73.19	73.19
Radio model	PCG-7G-34MB	PCG-7G-34MB
TX power (watts)	0.50	0.50
TX power (dBm)	27.00	27.00
EIRP (dBm)	57.00	57.00
RX threshold criteria	BER 10-6	BER 10-6
RX threshold level (dBm)	-81.00	-81.00
Maximum receive signal (dBm)	-15.00	-15.00
RX signal (dBm)	-46.19	-46.19
Thermal fade margin (dB)	34.81	34.81
Geoclimatic factor	2.50E-06	
Path inclination (mr)	4.11	
Fade occurrence factor (Po)	5.07E-05	
Average annual temperature (°C)	25.00	
Worst month - multipath (%)	0.00000	0.00000
(sec)	0.05	0.05
Annual - multipath (%)	0.00000	0.00000
(sec)	0.22	0.22
(% - sec)	0.00000 - 0.44	
Rain region	ITU Region N	
0.01% rain rate (mm/hr)	95.00	
Flat fade margin - rain (dB)	34.81	
Rain rate (mm/hr)	313.57	
Rain attenuation (dB)	34.81	
Annual rain (%-sec)	0.00003 - 8.05	
Annual multipath + rain (%-sec)	0.00003 - 8.48	

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R-01 OPC-TX (BER 10-6).pl4  
Reliability Method - ITU-R P.530-7/8  
Rain - ITU-R P530-7

Table 5-3-2 Circuit Design of Microwave Communication System (Operation Center - RX Station)

	Operation Center	RX Station
Elevation (m)	16.00	4.00
Latitude	14 35 09.40 N	14 51 01.00 N
Longitude	121 01 58.60 E	120 54 53.50 E
True azimuth (°)	336.52	156.49
Vertical angle (°)	-0.11	-0.10
Antenna model	PCG-7G-PB12	PCG-7G-PB12
Antenna height (m)	82.00	90.00
Antenna gain (dBi)	36.00	36.00
TX line length (m)	1.00	1.00
RX hybrid loss (dB)	3.50	3.50
Frequency (MHz)	7575.00	
Polarization	Horizontal	
Path length (km)	31.89	
Free space loss (dB)	140.13	
Atmospheric absorption loss (dB)	0.32	
Net path loss (dB)	71.95	71.95
Radio model	PCG-7G-34MB	PCG-7G-34MB
TX power (watts)	0.50	0.50
TX power (dBm)	27.00	27.00
EIRP (dBm)	63.00	63.00
RX threshold criteria	BER 10-6	BER 10-6
RX threshold level (dBm)	-81.00	-81.00
Maximum receive signal (dBm)	-15.00	-15.00
RX signal (dBm)	-44.95	-44.95
Thermal fade margin (dB)	36.05	36.05
Geoclimatic factor	2.50E-06	
Path inclination (mr)	0.13	
Fade occurrence factor (Po)	3.32E-02	
Average annual temperature (°C)	25.00	
Worst month - multipath (%)	0.00136	0.00136
(sec)	35.79	35.79
Annual - multipath (%)	0.00051	0.00051
(sec)	161.05	161.05
(% - sec)	0.00102 - 322.11	
Rain region	ITU Region N	
0.01% rain rate (mm/hr)	95.00	
Flat fade margin - rain (dB)	36.05	
Rain rate (mm/hr)	242.45	
Rain attenuation (dB)	36.05	
Annual rain (%-sec)	0.00018 - 56.74	
Annual multipath + rain (%-sec)	0.00120 - 378.85	

OEŽ, 1 15 2007  
R-04 OPC-RX (BER 10-6).pl4  
Reliability Method - ITU-R P.530-7/8  
Rain - ITU-R P530-7

Table 5-3-3 Circuit Design of Microwave Communication System (Operation Center - H1CGD)

	Operation Center	H1CGD (Manila)
Elevation (m)	16.00	2.00
Latitude	14 35 09.40 N	14 35 49.60 N
Longitude	121 01 58.60 E	120 57 39.30 E
True azimuth (°)	279.05	99.04
Vertical angle (°)	-0.35	0.29
Antenna model	PCG-7G-PB06	PCG-7G-PB06
Antenna height (m)	90.00	60.00
Antenna gain (dBi)	30.00	30.00
TX line length (m)	1.00	1.00
RX hybrid loss (dB)	3.50	3.50
Frequency (MHz)	7575.00	
Polarization	Horizontal	
Path length (km)	7.86	
Free space loss (dB)	127.96	
Atmospheric absorption loss (dB)	0.08	
Net path loss (dB)	71.54	71.54
Radio model	PCG-7G-34MB	PCG-7G-34MB
TX power (watts)	0.50	0.50
TX power (dBm)	27.00	27.00
EIRP (dBm)	57.00	57.00
RX threshold criteria	BER 10-6	BER 10-6
RX threshold level (dBm)	-81.00	-81.00
Maximum receive signal (dBm)	-15.00	-15.00
RX signal (dBm)	-44.54	-44.54
Thermal fade margin (dB)	36.46	36.46
Geoclimatic factor	2.98E-05	
Path inclination (mr)	5.60	
Fade occurrence factor (Po)	2.15E-04	
Average annual temperature (°C)	25.00	
Worst month - multipath (%)	0.00001	0.00001
(sec)	0.14	0.14
Annual - multipath (%)	0.00000	0.00000
(sec)	0.61	0.61
(% - sec)	0.00000 - 1.23	
Rain region	ITU Region N	
0.01% rain rate (mm/hr)	95.00	
Flat fade margin - rain (dB)	36.46	
Rain rate (mm/hr)	352.12	
Rain attenuation (dB)	36.46	
Annual rain (%-sec)	0.00001 - 2.79	
Annual multipath + rain (%-sec)	0.00001 - 4.02	

OEŽ, 1 15 2007

R-06 OPC-H1CGD (BER 10-6).pl4

Reliability Method - ITU-R P.530-7/8

Rain - ITU-R P530-7

Table 5-3-4 Circuit Design of Microwave Communication System (PCG Headquarters - H1CGD)

	PCGHQ	H1CGD (Manila)
Elevation (m)	2.00	2.00
Latitude	14 34 58.50 N	14 35 49.60 N
Longitude	120 58 18.80 E	120 57 39.30 E
True azimuth (°)	323.03	143.03
Vertical angle (°)	0.87	-0.88
Antenna model	PCG-7G-PB06	PCG-7G-PB06
Antenna height (m)	30.00	60.00
Antenna gain (dBi)	30.00	30.00
TX line length (m)	1.00	1.00
RX hybrid loss (dB)	3.50	3.50
Frequency (MHz)	7575.00	
Polarization	Vertical	
Path length (km)	1.97	
Free space loss (dB)	115.93	
Atmospheric absorption loss (dB)	0.02	
Net path loss (dB)	59.45	59.45
Radio model	PCG-7G-34MB	PCG-7G-34MB
TX power (watts)	0.50	0.50
TX power (dBm)	27.00	27.00
EIRP (dBm)	57.00	57.00
RX threshold criteria	BER 10-6	BER 10-6
RX threshold level (dBm)	-81.00	-81.00
Maximum receive signal (dBm)	-15.00	-15.00
RX signal (dBm)	-32.45	-32.45
Thermal fade margin (dB)	48.55	48.55
Geoclimatic factor	5.59E-06	
Path inclination (mr)	15.26	
Fade occurrence factor (Po)	7.78E-08	
Average annual temperature (°C)	25.00	
Worst month - multipath (%)	0.00000	0.00000
(sec)	3.46e-06	3.46e-06
Annual - multipath (%)	0.00000	0.00000
(sec)	1.56e-05	1.56e-05
(% - sec)	0.00000 - 0.00	
Rain region	ITU Region N	
0.01% rain rate (mm/hr)	95.00	
Flat fade margin - rain (dB)	48.55	
Rain rate (mm/hr)	9012.63	
Rain attenuation (dB)	48.55	
Annual rain (%-sec)	0.00000 - 0.00	
Annual multipath + rain (%-sec)	0.00000 - 0.00	

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R-08 PCGHQ-H1CGD (BER 10-6).pl4  
Reliability Method - ITU-R P.530-7/8  
Rain - ITU-R P.530-8

Table 5-3-5 Circuit Design of Microwave Communication System (H1CGD - Sangley Point)

	H1CGD (Manila)	Sangley Point
Elevation (m)	2.00	2.00
Latitude	14 35 49.60 N	14 29 47.30 N
Longitude	120 57 39.30 E	120 54 50.30 E
True azimuth (°)	204.44	24.43
Vertical angle (°)	-0.22	0.14
Antenna model	PCG-7G-PB06	PCG-7G-PB06
Antenna height (m)	60.00	21.00
Antenna gain (dBi)	30.00	30.00
TX line length (m)	1.00	1.00
RX hybrid loss (dB)	3.50	3.50
Frequency (MHz)	7575.00	
Polarization	Horizontal	
Path length (km)	12.23	
Free space loss (dB)	131.80	
Atmospheric absorption loss (dB)	0.12	
Net path loss (dB)	75.43	75.43
Radio model	PCG-7G-34MB	PCG-7G-34MB
TX power (watts)	0.50	0.50
TX power (dBm)	27.00	27.00
EIRP (dBm)	57.00	57.00
RX threshold criteria	BER 10-6	BER 10-6
RX threshold level (dBm)	-81.00	-81.00
Maximum receive signal (dBm)	-15.00	-15.00
RX signal (dBm)	-48.43	-48.43
Thermal fade margin (dB)	32.57	32.57
Geoclimatic factor	1.59E-04	
Path inclination (mr)	3.19	
Fade occurrence factor (Po)	1.07E-02	
Average annual temperature (°C)	25.00	
Worst month - multipath (%)	0.00061	0.00061
(sec)	16.01	16.01
Annual - multipath (%)	0.00023	0.00023
(sec)	72.04	72.04
(% - sec)	0.00046 - 144.09	
Rain region	ITU Region N	
0.01% rain rate (mm/hr)	95.00	
Flat fade margin - rain (dB)	32.57	
Rain rate (mm/hr)	275.53	
Rain attenuation (dB)	32.57	
Annual rain (%-sec)	0.00007 - 22.88	
Annual multipath + rain (%-sec)	0.00053 - 166.96	

OEŽ, 1 15 2007

R-10 H1CGD-SGP (BER 10-6).pl4

Reliability Method - ITU-R P.530-7/8

Rain - ITU-R P530-7

Table 5-3-6 VSAT Link Calculation (Ku-Band 1 of 4)

Ku-Band	Manila (Antenna: 2.4mØ)   Cebu (Antenna: 1.8mØ)	Cebu (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.93	39.45
Up Link C/N (dB)	21.20	21.31
Down Link C/N (dB)	19.54	21.99
Clear Sky Link Margin (dB)	8.41	8.93
Up Link Rain Loss (dB)	8.69	8.88
Down Link Rain Loss (dB)	9.55	12.80
Up Link Availability (%)	99.92	99.91
Down Link Availability (%)	99.97	99.99
Overall Link Availability (%)	99.89	99.90

Ku-Band	Manila (Antenna: 2.4mØ)   Zamboanga (Antenna: 1.8mØ)	Zamboanga (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	37.62	37.65
Up Link C/N (dB)	19.90	21.01
Down Link C/N (dB)	19.74	21.74
Clear Sky Link Margin (dB)	8.21	8.83
Up Link Rain Loss (dB)	8.47	9.14
Down Link Rain Loss (dB)	9.93	10.82
Up Link Availability (%)	99.91	99.88
Down Link Availability (%)	99.96	99.98
Overall Link Availability (%)	99.87	99.86

Ku-Band	Manila (Antenna: 2.4mØ)   Palawan (Antenna: 1.8mØ)	Palawan (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.78	37.55
Up Link C/N (dB)	21.06	21.31
Down Link C/N (dB)	18.85	21.99
Clear Sky Link Margin (dB)	8.21	8.93
Up Link Rain Loss (dB)	8.47	8.91
Down Link Rain Loss (dB)	7.27	12.80
Up Link Availability (%)	99.91	99.90
Down Link Availability (%)	99.93	99.99
Overall Link Availability (%)	99.84	99.89

Table 5-3-7 VSAT Link Calculation (Ku-Band 2 of 4)

Ku-Band	Manila (Antenna: 2.4mØ)   Batangas (Antenna: 1.8mØ)	Batangas (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.98	39.05
Up Link C/N (dB)	21.25	21.31
Down Link C/N (dB)	19.50	21.99
Clear Sky Link Margin (dB)	8.41	8.93
Up Link Rain Loss (dB)	8.69	8.94
Down Link Rain Loss (dB)	9.31	12.80
Up Link Availability (%)	99.92	99.92
Down Link Availability (%)	99.97	99.99
Overall Link Availability (%)	99.89	99.91

Ku-Band	Manila (Antenna: 2.4mØ)   Iloilo (Antenna: 1.8mØ)	Iloilo (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.93	39.45
Up Link C/N (dB)	21.20	21.31
Down Link C/N (dB)	19.54	21.99
Clear Sky Link Margin (dB)	8.41	8.93
Up Link Rain Loss (dB)	8.69	8.88
Down Link Rain Loss (dB)	9.55	12.80
Up Link Availability (%)	99.92	99.91
Down Link Availability (%)	99.97	99.99
Overall Link Availability (%)	99.89	99.90

Ku-Band	Manila (Antenna: 2.4mØ)   San Feranand (Antenna: 1.8mØ)	San Feranand (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.98	39.05
Up Link C/N (dB)	21.25	21.31
Down Link C/N (dB)	19.50	21.99
Clear Sky Link Margin (dB)	8.41	8.93
Up Link Rain Loss (dB)	8.69	8.94
Down Link Rain Loss (dB)	9.31	12.80
Up Link Availability (%)	99.92	99.92
Down Link Availability (%)	99.97	99.99
Overall Link Availability (%)	99.89	99.91

Table 5-3-8 VSAT Link Calculation (Ku-Band 3 of 4)

Ku-Band	Manila (Ant. 2.4m)   Davao (Antenna: 1.8mØ)	Davao (Ant. 1.8m)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.93	41.39
Up Link C/N (dB)	21.22	21.30
Down Link C/N (dB)	16.67	22.00
Clear Sky Link Margin (dB)	7.50	8.93
Up Link Rain Loss (dB)	7.72	9.13
Down Link Rain Loss (dB)	7.26	12.80
Up Link Availability (%)	99.89	99.89
Down Link Availability (%)	99.92	99.99
Overall Link Availability (%)	99.81	99.88

Ku-Band	Manila (Antenna: 2.4mØ)   Legaspi (Antenna: 1.8mØ)	Legaspi (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.86	40.49
Up Link C/N (dB)	21.16	21.31
Down Link C/N (dB)	16.50	21.99
Clear Sky Link Margin (dB)	7.43	8.93
Up Link Rain Loss (dB)	7.40	8.97
Down Link Rain Loss (dB)	7.62	12.80
Up Link Availability (%)	99.88	99.92
Down Link Availability (%)	99.95	99.99
Overall Link Availability (%)	99.83	99.91

Ku-Band	Manila (Antenna: 2.4mØ)   Cagayan De Oro (Antenna: 1.8mØ)	Cagayan De Oro (Antenna: 1.8mØ)   Manila (Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.93	41.39
Up Link C/N (dB)	21.22	21.30
Down Link C/N (dB)	16.67	22.00
Clear Sky Link Margin (dB)	7.50	8.93
Up Link Rain Loss (dB)	7.72	9.13
Down Link Rain Loss (dB)	7.26	12.80
Up Link Availability (%)	99.89	99.89
Down Link Availability (%)	99.92	99.99
Overall Link Availability (%)	99.81	99.88



Table 5-3-9 VSAT Link Calculation (Ku-Band 4 of 4)

Ku-Band	Manila (Antenna: 2.4mØ)   Palawan Transportable (Antenna: 0.9mØ)	Palawan Transportable (Antenna: 0.9mØ)   Manila(Antenna: 2.4mØ)
Earth Station EIRP (dBW)	38.70	37.57
Up Link C/N (dB)	21.03	21.31
Down Link C/N (dB)	12.85	21.99
Clear Sky Link Margin (dB)	5.57	8.93
Up Link Rain Loss (dB)	5.69	8.91
Down Link Rain Loss (dB)	4.37	12.80
Up Link Availability (%)	99.80	99.90
Down Link Availability (%)	99.80	99.99
Overall Link Availability (%)	99.60	99.89

Table 5-3-10 VSAT Link Calculation (C-Band 1 of 4)

C-Band	Manila (Antenna: 3.8mØ)   Cebu (Antenna: 2.4mØ)	Cebu (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	32.79	28.36
Up Link C/N (dB)	16.13	11.77
Down Link C/N (dB)	6.92	7.97
Clear Sky Link Margin (dB)	0.86	0.88
Up Link Rain Loss (dB)	0.87	0.89
Down Link Rain Loss (dB)	0.14	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

C-Band	Manila (Antenna: 3.8mØ)   Zamboanga (Antenna: 2.4mØ)	Zamboanga (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	32.80	28.04
Up Link C/N (dB)	16.14	11.94
Down Link C/N (dB)	6.92	8.15
Clear Sky Link Margin (dB)	0.86	1.04
Up Link Rain Loss (dB)	0.87	1.05
Down Link Rain Loss (dB)	0.16	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

C-Band	Manila (Antenna: 3.8mØ)   Palawan (Antenna: 2.4mØ)	Palawan (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	32.42	28.03
Up Link C/N (dB)	15.77	11.85
Down Link C/N (dB)	6.97	8.06
Clear Sky Link Margin (dB)	0.86	0.96
Up Link Rain Loss (dB)	0.87	0.97
Down Link Rain Loss (dB)	0.15	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

Table 5-3-11 VSAT Link Calculation (C-Band 2 of 4)

C-Band	Manila (Antenna: 3.8mØ)   Batangas (Antenna: 2.4mØ)	Batangas (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	31.54	28.41
Up Link C/N (dB)	14.89	11.75
Down Link C/N (dB)	7.1	7.95
Clear Sky Link Margin (dB)	0.86	0.86
Up Link Rain Loss (dB)	0.87	0.87
Down Link Rain Loss (dB)	0.14	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

C-Band	Manila (Antenna: 3.8mØ)   Iloilo (Antenna: 2.4mØ)	Iloilo (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	32.37	28.42
Up Link C/N (dB)	15.71	11.81
Down Link C/N (dB)	6.97	8.01
Clear Sky Link Margin (dB)	0.86	0.92
Up Link Rain Loss (dB)	0.87	0.93
Down Link Rain Loss (dB)	0.14	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

C-Band	Manila (Antenna: 3.8mØ)   San Feranand (Antenna: 2.4mØ)	San Feranand (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	31.54	28.41
Up Link C/N (dB)	14.89	11.75
Down Link C/N (dB)	7.10	7.95
Clear Sky Link Margin (dB)	0.86	0.86
Up Link Rain Loss (dB)	0.87	0.87
Down Link Rain Loss (dB)	0.14	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

Table 5-3-12 VSAT Link Calculation (C-Band 3 of 4)

C-Band	Manila (Antenna: 3.8mØ)   Davao (Antenna: 2.4mØ)	Davao (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	33.65	28.92
Up Link C/N (dB)	17.00	11.87
Down Link C/N (dB)	6.83	8.07
Clear Sky Link Margin (dB)	0.86	0.97
Up Link Rain Loss (dB)	0.87	0.98
Down Link Rain Loss (dB)	0.15	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

C-Band	Manila (Antenna: 3.8mØ)   Legaspi (Antenna: 2.4mØ)	Legaspi (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	32.81	28.85
Up Link C/N (dB)	16.16	11.74
Down Link C/N (dB)	6.92	7.94
Clear Sky Link Margin (dB)	0.86	0.85
Up Link Rain Loss (dB)	0.87	0.86
Down Link Rain Loss (dB)	0.13	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

C-Band	Manila (Antenna: 3.8mØ)   Cagayan De Oro (Antenna: 2.4mØ)	Cagayan De Oro (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	33.22	28.36
Up Link C/N (dB)	16.57	11.79
Down Link C/N (dB)	6.87	7.99
Clear Sky Link Margin (dB)	0.86	0.9
Up Link Rain Loss (dB)	0.87	0.91
Down Link Rain Loss (dB)	0.14	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

Table 5-3-13 VSAT Link Calculation (C-Band 4 of 4)

C-Band	Manila (Antenna: 3.8mØ)   Palawan Transportable (Antenna: 2.4mØ)	Palawan Transportable (Antenna: 2.4mØ)   Manila (Antenna: 3.8mØ)
Earth Station EIRP (dBW)	32.42	28.03
Up Link C/N (dB)	15.77	11.85
Down Link C/N (dB)	6.97	8.06
Clear Sky Link Margin (dB)	0.86	0.96
Up Link Rain Loss (dB)	0.87	0.97
Down Link Rain Loss (dB)	0.15	0.13
Up Link Availability (%)	99.95	99.95
Down Link Availability (%)	99.95	99.95
Overall Link Availability (%)	99.90	99.90

*Note: Antenna size of Transportable VSAT station is limited due to adjacent satellites,  
the minimum size of c-band antenna is 2.4m*