

REPUBLIC OF THE PHILIPPINES  
**DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS**  
REGIONAL OFFICE X  
MISAMIS OCCIDENTAL 1st DISTRICT ENGINEERING OFFICE  
OROQUIETA CITY, MISAMIS OCCIDENTAL


C.Y. 2025 PROJECT  
DETAILED ENGINEERING DESIGN PLAN FOR  
**CONSTRUCTION (COMPLETION) OF MULTI-PURPOSE BUILDING,  
ALTRADE, ALORAN, MISAMIS OCCIDENTAL**

GPS LOCATION: 8.412892° N  
123.823° E


SUBMITTED:

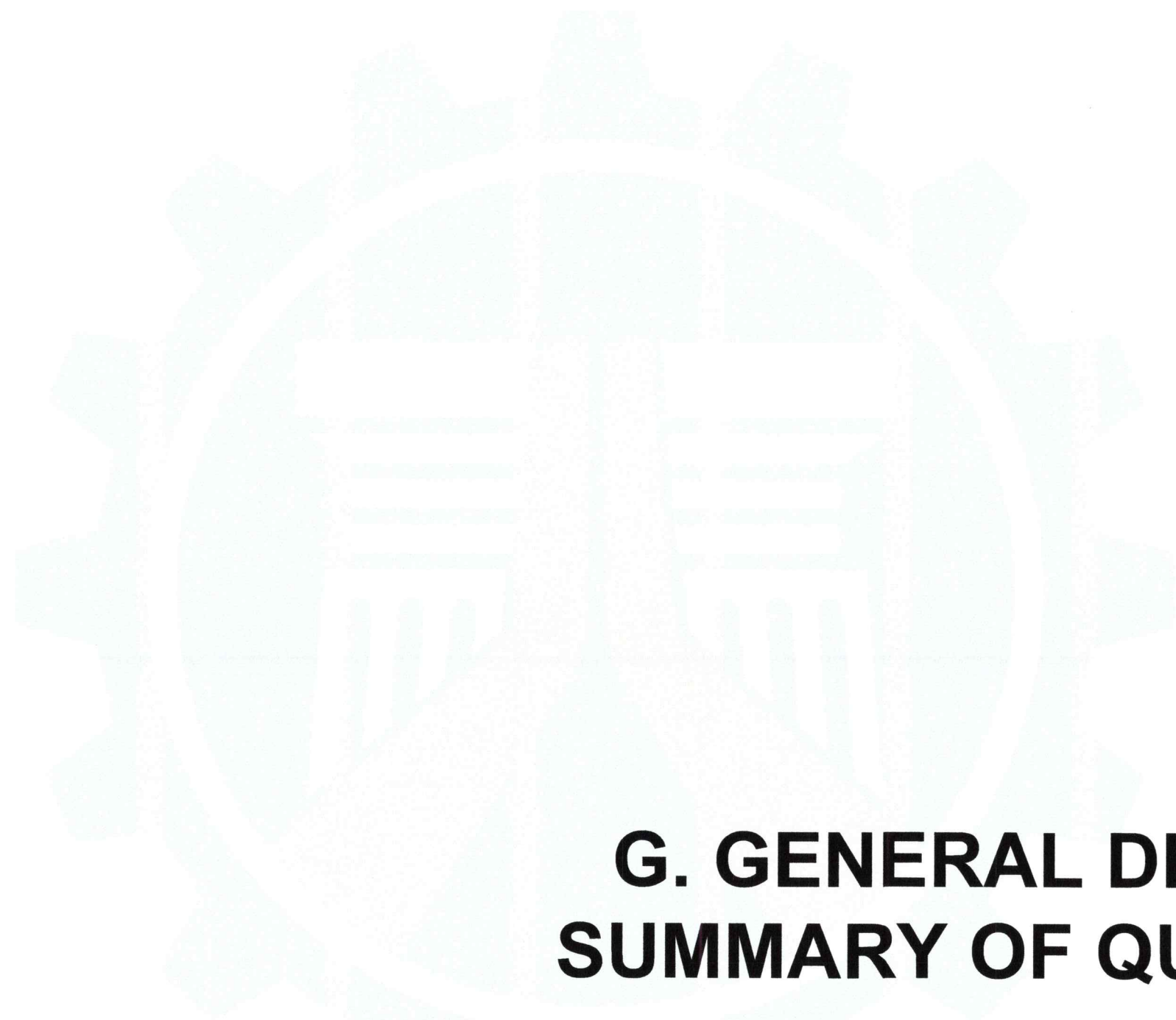
  
**NOLLY S. BOLANDO**  
CHIEF, PLANNING AND DESIGN SECTION  
DATE:

RECOMMENDED:

  
**REY M. ROA**  
OIC-ASSISTANT DISTRICT ENGINEER  
DATE:

APPROVED:

  
**CHARITO B. MADULA**  
DISTRICT ENGINEER  
DATE:



# **G. GENERAL DRAWING & SUMMARY OF QUANTITIES**

CONSTRUCTION (COMPLETION) OF MULTI-PURPOSE BUILDING,  
ALTRADE, ALORAN, MISAMIS OCCIDENTAL




SUMMARY OF QUANTITIES				
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	REMARKS
PART A FACILITIES FOR THE ENGINEER				
A.1.1(8)	PROVISION OF FIELD OFFICES FOR THE ENGINEER (RENTAL BASIS)	4.00	Month	
PART B OTHER GENERAL REQUIREMENTS				
B.3 (1)	PERMITS AND CLEARANCE	1.00	Lump Sum	
B.5 (1)	PROJECT BILLBOARD/SIGNBOARD	1.00	Each	
B.7 (1)	OCCUPATIONAL SAFETY AND HEALTH	1.00	Lump Sum	
DIVISION I CIVIL WORKS				
PART C EARTHWORKS				
801(1)	REMOVAL OF STRUCTURES AND OBSTRUCTION	1.00	Lump Sum	
803(1)a	STRUCTURE EXCAVATION, COMMON SOIL	43.95	Cu.m.	
804(7)	EMBANKMENT FROM ROADWAY/ STRUCTURE EXCAVATION, COMMON SOIL	32.83	Cu.m.	
804(7)	GRAVEL FILL	5.98	Cu.m.	
PART D REINFORCED CONCRETE				
900(1)c	STRUCTURAL CONCRETE, 3000 psi, CLASS A, 28 DAYS	2.29	Cu.m.	
902(1)d	STRUCTURAL CONCRETE, 4000 psi, CLASS A, 28 DAYS	23.99	Cu.m.	
902(1)a1	REINFORCING STEEL (DEFORMED), GRADE 40	5088.82	Kg.	
903(2)a1	FORMWORKS AND FALSEWORKS	132.82	Sq.m.	
PART E FINISHING AND OTHER CIVIL WORKS				
1001(8)	SEWER LINE WORKS	1.00	Lump Sum	
1001(9)	STORM DRAINAGE AND DOWNSPOUT	1.00	Lump Sum	
1001(11)	SEPTIC VAULT/TANK, CONCRETE/CHB	1.00	Lump Sum	
1002(4)	PLUMBING FIXTURES	1.00	Lump Sum	
1003(1)e2	CEILING, METAL FRAME, PREPAINTED METAL	59.16	Sq.m.	
1004(2)	FINISHING HARDWARE	1.00	Lump Sum	
1007(1)b	ALUMINUM FRAMED GLASS DOOR, SWING TYPE	9.56	Sq.m.	
1008(1)c	ALUMINUM GLASS WINDOW, AWNING TYPE	1.38	Sq.m.	
1008(1)d	ALUMINUM GLASS WINDOW, FIXED TYPE	13.80	Sq.m.	
1010(1)	FRAMES ( JAMBS, SILLS, HEAD, TRANSOMS AND MULLION )	7.00	Set	
1010(2)b	DOORS, WOOD PANEL	10.50	Sq.m.	
1013(2)b	FABRICATED METAL ROOFING ACCESSORY, GAUGE 26 (0.551 mm), FLASHING	32.80	L.m.	
1013(2)c	FABRICATED METAL ROOFING ACCESSORY, GAUGE 24 (0.701 mm), GUTTERS	16.80	L.m.	
1014(1)a2	PRE-PAINTED METAL SHEETS, ABOVE 0.427mm, CORRUGATED, LONG SPAN	214.00	Sq.m.	
1018(4)	SYNTHETIC GRANITE TILES	395.68	Sq.m.	
1019(2)c	WOOD TILE, WALLS, OTHER	21.60	Sq.m.	
1019(3)c	WOOD TILE, CEILING, OTHER	116.78	Sq.m.	
1027(1)	CEMENT PLASTER FINISH	314.48	Sq.m.	
1032(1)a	PAINTING WORKS, MASONRY/CONCRETE	718.67	Sq.m.	
1032(1)c	PAINTING WORKS, STEEL	718.67	Sq.m.	
1033(1)	METAL DECK PANEL	31.38	Sq.m.	
PART F ELECTRICAL				
1100(10)	CONDUIT, BOXES & FITTINGS (CONDUIT WORKS/CONDUIT ROUGH-IN )	1.00	Lump Sum	
1101(33)	WIRES AND WIRING DEVICES	1.00	Lump Sum	
1102(1)	PANELBOARD WITH MAIN & BRANCH BREAKERS	1.00	Lump Sum	
1103(1)	LIGHTING FIXTURES	1.00	Lump Sum	
PART G MECHANICAL				
1200(13)a	AIR CONDITIONING SYSTEM	1.00	Lump Sum	
1039(1) ALUMINUM CLADDING 73.95 Sq.m.				
1046(2)a1 CHB NON-LOAD BEARING (INCLUDING REINFORCING STEEL), 100mm THICK 66.94 Sq.m.				
1046(2)a2 CHB NON-LOAD BEARING (INCLUDING REINFORCING STEEL), 150mm THICK 90.30 Sq.m.				
1047(1) METAL STRUCTURES 3146.04 Kg.				
1047(4)a METAL STRUCTURAL ACCESSORIES, BOLTS AND RODS 40.00 Each				
1047(4)b METAL STRUCTURAL ACCESSORIES, TURNBUCKLE 20.00 Each				
1047(5)b METAL STRUCTURAL ACCESSORIES, SAGRODS 71.64 Kg.				
1047(5)c METAL STRUCTURAL ACCESSORIES, CROSS BRACING 160.99 Kg.				
1047(5)d METAL STRUCTURAL ACCESSORIES, STEEL PLATES 280.64 Kg.				
1047(8)a STRUCTURAL STEEL, TRUSSES 1820.52 Kg.				
1047(8)b STRUCTURAL STEEL, PURLINS 705.60 Kg.				
1051(1)a RAILING 1.00 Lump Sum				

**SCOPE OF WORKS:**

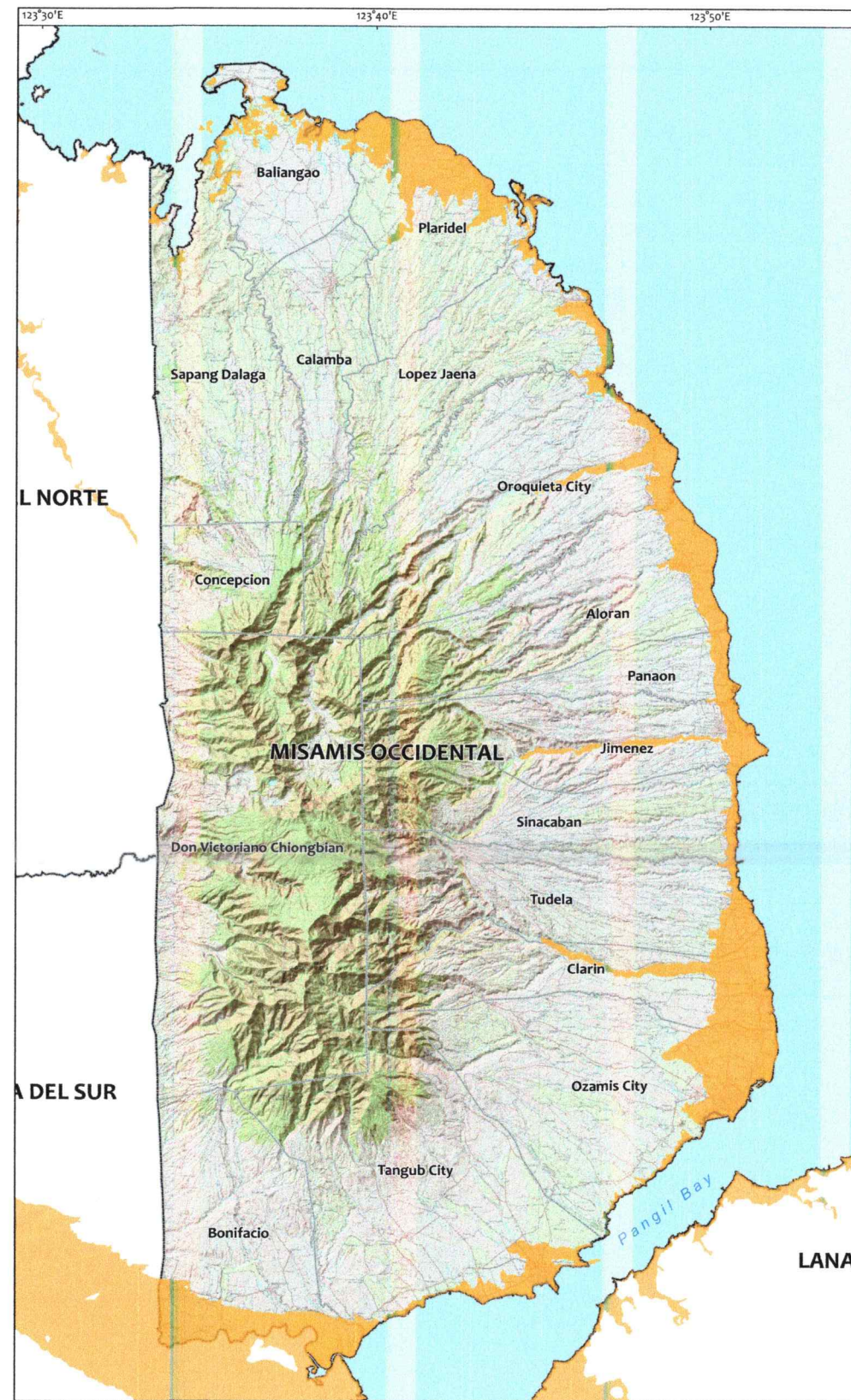
- REMOVAL OF STRUCTURES AND OBSTRUCTIONS
- EXCAVATION FOR FOUNDATION (11 UNITS)
- EMBANKMENT FROM ROADWAY
- CONSTRUCTION OF SEPTIC TANK
- INSTALLATION OF SEWER LINE AND COLD WATER LINE
- CONSTRUCTION OF REINFORCED CONCRETE FOOTINGS AND WALL FOOTING
- CONSTRUCTION OF REINFORCED CONCRETE 11-UNIT COLUMNS, BEAM AND CANTILEVER BEAM
- CONSTRUCTION OF FIREWALL
- INSTALLATION OF TILES
- REPLACEMENT AND CONSTRUCTION OF TRUSSES AND ROOFING WORKS
- INSTALLATION OF ALUMINUM METAL CLADDING WITH FRAME ON BUILDING FACADE
- FINISHING HARDWARE
- WINDOW ACCESSORY
- CEMENT PLASTER FINISH AND PAINTING WORKS
- ELECTRICAL WORKS

NOTES: QUANTITIES SHALL BE VERIFIED DURING ACTUAL CONSTRUCTION

 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE X MISAMIS OCCIDENTAL 1st DISTRICT ENGINEERING OFFICE OROQUIETA CITY, MISAMIS OCCIDENTAL	PROJECT NAME AND LOCATION:  CONSTRUCTION (COMPLETION) OF MULTI-PURPOSE BUILDING, ALTRADE, ALORAN, MISAMIS OCCIDENTAL  ALORAN, MISAMIS OCCIDENTAL	SHEET CONTENTS:  SUMMARY OF QUANTITIES SCOPE OF WORK	PREPARED:  DARY J. TOLEDO ARCHITECT II	REVIEWED:  JOHAN S. PUTIS ENGINEER II	SUBMITTED:  NOLLY S. BOLANDO CHIEF PLANNING AND DESIGN SECTION	RECOMMENDED:  REY M. ROA OIC-ASSISTANT DISTRICT ENGINEER	APPROVED:  CHARITO B. MADULA DISTRICT ENGINEER	SET NO.  G 01 03	SHEET NO.  01 55
---	--	---	---	--	---	---	---	---------------------------	---------------------------

PDS - MISOC1ST: 2025





**Legend**  
**Liquefaction Susceptibility**

Prone

Provincial boundary

Municipal boundary

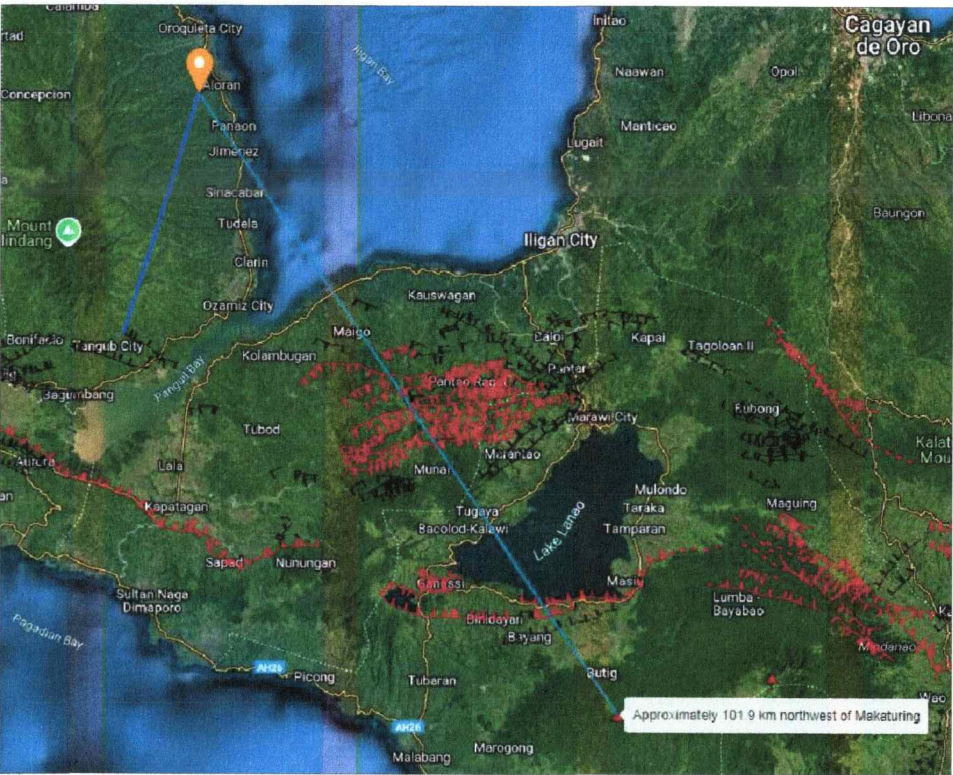
Road / Highway

Built-up area / settlement

River / Stream

LEGEND:

SEISMIC HAZARDS ASSESSMENT		
HAZARD	ASSESSMENT	EXPLANATION AND RECOMMENDATION
Ground Rupture	Safe; Approximately 34 km north of the Tangub Fault	Active faults are faults that have moved within the last 10,000 years. An active fault may show evidence or may have documented history of recent movements. Ground rupture is a displacement along an active fault trace that reaches the surface.  Ground rupture hazard assessment is the distance to the nearest known active fault. The recommended buffer zone, or Zone of Avoidance, against ground rupture hazard is at least 5 meters on both sides of the active fault or from its zone of deformation.
Ground Shaking	Prone	All sites may be affected by ground shaking in the event of an earthquake and can be mitigated by following the provisions of the National Building code and the Structural code of the Philippines.
Liquefaction	Safe	Liquefaction is a phenomenon wherein the ground, especially near the river, lake and coasts, behaves like liquid similar to quicksand due to very strong shaking.
Earthquake-Induced Landslide	Data are being updated	Earthquake-induced landslides are the downward slope movement of rocks, solid and other debris commonly triggered by strong shaking.
Tsunami	Safe	A tsunami is a series of sea waves commonly generated by under-the-sea earthquakes.

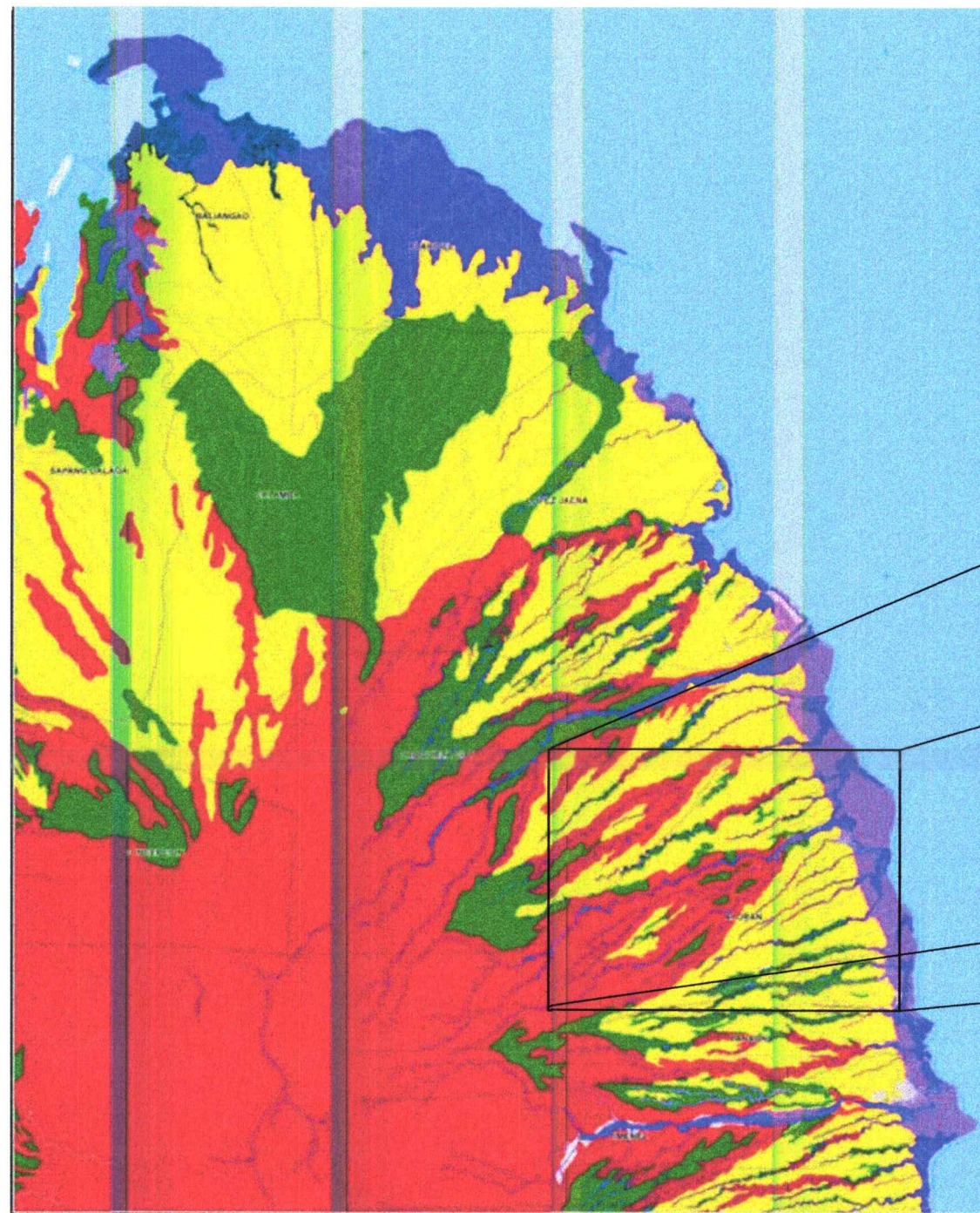


01 LIQUEFACTION MAP OF MISAMIS OCCIDENTAL  
G-02 NOT TO SCALE

02 ACTIVE FAULT MAP  
G-02 NOT TO SCALE

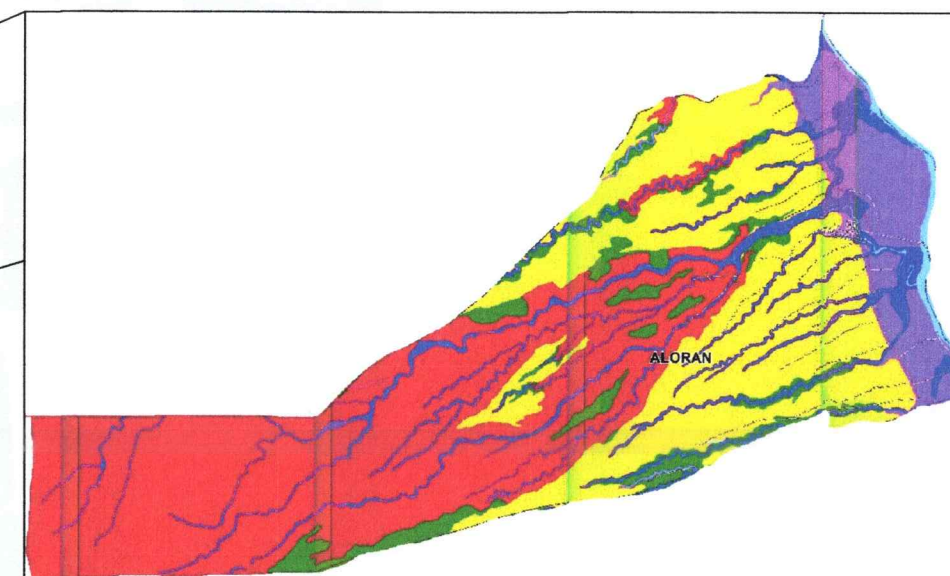
	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE X MISAMIS OCCIDENTAL 1st DISTRICT ENGINEERING OFFICE OROQUIETA CITY, MISAMIS OCCIDENTAL	PROJECT NAME AND LOCATION:  CONSTRUCTION (COMPLETION) OF MULTI-PURPOSE BUILDING, ALTRADE, ALORAN, MISAMIS OCCIDENTAL  ALORAN, MISAMIS OCCIDENTAL	SHEET CONTENTS:  LIQUEFACTION MAP OF MISAMIS OCCIDENTAL ACTIVE FAULT MAP	DRAFTED:  MAITA S. MAPARAN ARCHITECT I  PREPARED:  ALADIZA C. SAAVEDRA ARCHITECT I	REVIEWED:  DAISY A. TOLEDO ARCHITECT II  DATE:	SUBMITTED:  NOLLY S. BOLANDO CHIEF, PLANNING AND DESIGN SECTION  DATE:	RECOMMENDED:  REY M. ROA OIC-ASSISTANT DISTRICT ENGINEER  DATE:	APPROVED:  CHARITO B. MADULA DISTRICT ENGINEER  DATE:	SET NO.  G 02 03	SHEET NO.  02 55
--	--	--	---	--	---	---	--	--	---------------------------	---------------------------






LEGEND:

- HIGH SUSCEPTIBILITY TO LANDSLIDE
- MODERATE SUSCEPTIBILITY TO LANDSLIDE
- LOW SUSCEPTIBILITY TO LANDSLIDE
- HIGH SUSCEPTIBILITY TO FLOODING
- LOW TO MODERATE SUSCEPTIBILITY TO FLOODING



01 MISAMIS OCCIDENTAL 1ST DEO FLOOD AND LANDSLIDE HAZARD MAP  
G-03 NOT TO SCALE

02 MUNICIPALITY OF ALORAN FLOOD AND LANDSLIDE HAZARD MAP  
G-03 NOT TO SCALE

 <p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE X MISAMIS OCCIDENTAL 1st DISTRICT ENGINEERING OFFICE OROQUIETA CITY, MISAMIS OCCIDENTAL</p>	PROJECT NAME AND LOCATION:	SHEET CONTENTS:	DRAFTED:	REVIEWED:	SUBMITTED:	RECOMMENDED:	APPROVED:	SET NO.	SHEET NO.
	<p>CONSTRUCTION (COMPLETION) OF MULTI-PURPOSE BUILDING, ALTRADE, ALORAN, MISAMIS OCCIDENTAL</p> <p>ALORAN, MISAMIS OCCIDENTAL</p>	HAZARD MAP	<p>MAITA S. MAPARAN ARCHITECT I</p> <p>ALADIZA C. SAAVEDRA ARCHITECT I</p>	<p>DAISY J. TOLEDO ARCHITECT II</p>	<p>NOLLY S. BOLANDO CHIEF PLANNING AND DESIGN SECTION</p>	<p>REYM. ROA OIC-ASSISTANT DISTRICT ENGINEER</p>	<p>CHARITO B. MADULA DISTRICT ENGINEER</p>	G 03 03	03 55