

REPUBLIC OF THE PHILIPPINES
MINISTRY OF PUBLIC WORKS & HIGHWAYS

THE FEASIBILITY STUDY
OF
PHILIPPINE ROAD DISASTER PREVENTION PROJECT

FINAL REPORT

APPENDIX

(VOLUME III)

JUNE, 1984

JAPAN INTERNATIONAL COOPERATION AGENCY

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PHILIPPINE ROAD DISASTER PREVENTION PROJECT**

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APPENDIX

(VOLUME III)

JUNE, 1984

JAPAN INTERNATIONAL COOPERATION AGENCY

国際協力事業団	
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LOCATION MAP

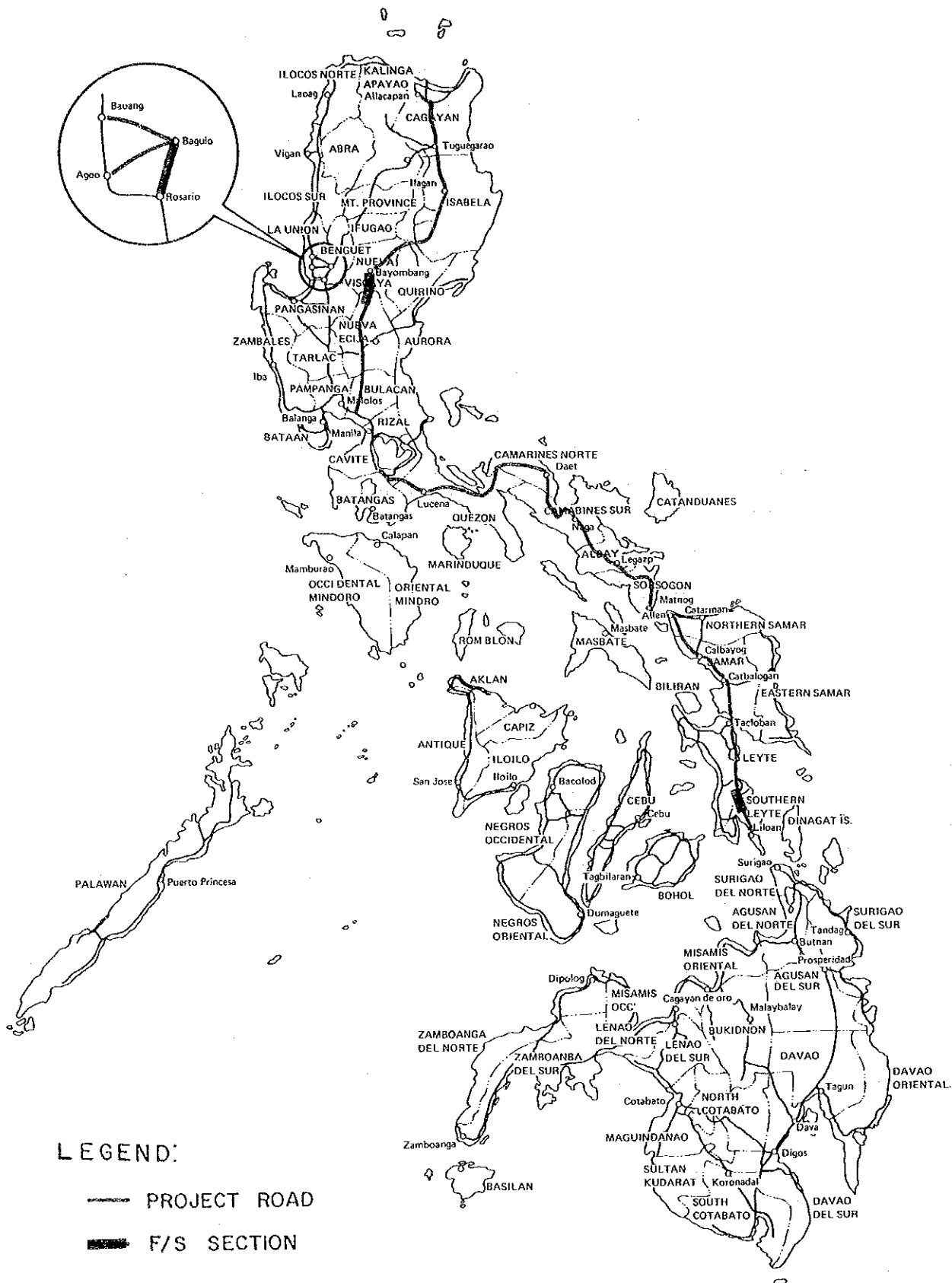


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APPENDIX 4.1-2
PHILIPPINE ROAD DISASTER PREVENTION PROJECT
OD INTERVIEW FIELD SHEET, 1983

STA. NO. _____ DATE _____ INTERVIEWER _____
LOCATION Km. _____ NAME OF ROAD _____

1 STATION CODE : _____	2 HOUR : _____	1 3																
3 DIRECTION : FROM _____ TO : _____		5																
4 VEHICLE TYPE : <input type="checkbox"/> 1. CAR <input type="checkbox"/> 5. JEEPNEY <input type="checkbox"/> 9. TRUCK = 2 AXLE <input type="checkbox"/> 2. JEEP <input type="checkbox"/> 6. PU BUS (MINI) < 30 seats <input type="checkbox"/> 10. TRUCK = 3 AXLE <input type="checkbox"/> 3. TAXI <input type="checkbox"/> 7. PU BUS (BIG) ≥ 30 seats <input type="checkbox"/> 11. TRK-TRL, SEMI-TRL <input type="checkbox"/> 4. PICK UP, VAN <input type="checkbox"/> 8. TOURIST BUS <input type="checkbox"/> 12. TRICYCLE		7																
5 ORIGIN : <div style="display: flex; justify-content: space-between;"> _____ CITY / MUNICIPALITY _____ PROVINCE </div>		9																
6 DESTINATION : <div style="display: flex; justify-content: space-between;"> _____ CITY / MUNICIPALITY _____ PROVINCE </div>		13																
7 TRIP PURPOSE : <input type="checkbox"/> 1. TO/FROM WORK <input type="checkbox"/> 7. VISIT RELATIVES <input type="checkbox"/> 2. TO/FROM SCHOOL <input type="checkbox"/> 8. TOURISM <input type="checkbox"/> 3. AT WORK/BUSINESS <input type="checkbox"/> 9. OTHERS <input type="checkbox"/> 4. SHOPPING <input type="checkbox"/> 5. MEDICAL/DENTAL <input type="checkbox"/> 6. SOCIAL/RECREATION	8 TRIP FREQUENCY : <input type="checkbox"/> 1. DAILY <input type="checkbox"/> 2. 1 a WEEK <input type="checkbox"/> 3. 1 a MONTH <input type="checkbox"/> 4. 1 in 6 MONTH <input type="checkbox"/> 5. 1 a YEAR	17 18																
9 NO. OF PASSENGERS : (INCLUDING DRIVER (S) & CONDUCTOR)	10 SEAT CAPACITY : (BUS, JEEPNEY ONLY)	19 21																
11 COMMODITY TYPE : <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">NAME</th> <th style="width: 10%; text-align: center;">QUANTITY</th> <th style="width: 10%; text-align: center;">UNIT</th> </tr> </thead> <tbody> <tr> <td>TYPE - 1</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>TYPE - 2</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>TYPE - 3</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>			NAME	QUANTITY	UNIT	TYPE - 1	_____	_____	_____	TYPE - 2	_____	_____	_____	TYPE - 3	_____	_____	_____	23 25 27
	NAME	QUANTITY	UNIT															
TYPE - 1	_____	_____	_____															
TYPE - 2	_____	_____	_____															
TYPE - 3	_____	_____	_____															
12 COMMODITY WEIGHT : TYPE - 1 _____ Kg. TYPE - 2 _____ Kg. TYPE - 3 _____ Kg.	13 TOTAL COMMODITY WEIGHT : _____ Kg.	29 34 39 44																
14 GROSS VEHICLE WEIGHT : _____ K	15 NET VEHICLE WEIGHT : _____ Kg.	49 54																
16 NET LOAD CAPACITY : _____ Kg.		59																

APPENDIX 4.2-1 PROVINCIAL CODES OF NATIONAL TRANSPORTATION
PLANNING PROJECT (NTPP)

Region	Provinces	Code	Region	Provinces	Code
I	Abra	01	VII	Capiz	40
	Benguet	02		Iloilo	41
	Ilocos Norte	03		Guimaras (Sub-Province)	42
	Ilocos Sur	04		Negros Occidental	43
	La Union	05		Bohol	44
	Mt. Province	06		Cebu	45
	Pangasinan	07		Negros Oriental	46
II	Batanes	08	Siquijor	47	
	Cagayan	09	VIII	Leyte	48
	Ifugao	10		Southern Leyte	49
	Isabela	11		Eastern Samar	50
	Kalinga-Apayao	12		Northern Samar	51
	Nueva Vizcaya	13		Western Samar	52
	Quirino	14		Biliran (Sub-Province)	53
III	Bataan	15		Sub-Region	
	Bulacan	16	IX-A	Basilan	54
	Nueva Ecija	17		Sulu	55
	Pampanga	18		Tawi-Tawi	56
	Tarlac	19	IX-B	Zamboanga del Norte	57
Zambales	20	Zamboanga del Sur		58	
IV	Metropolitan Manila	76	X	Agusan del Norte	59
IV-A	Aurora (Sub-Province)	21		Agusan del Sur	60
	Batangas	22	Bukidnon	61	
	Cavite	23	Camiguin	62	
	Laguna	24	Misamis Occidental	63	
	Marinduque	25	Misamis Oriental	64	
	Mindoro Occidental	26	Surigao del Norte	65	
	Mindoro Oriental	27	XI	Davao del Norte	66
	Palawan	28		Davao del Sur	67
	Quezon	29		Davao Oriental	68
	Rizal ^{1/}	30		South Cotabato	69
Romblon	31	Surigao del Sur	70		
V	Albay	32	XII	Lanao del Norte	71
	Camarines Norte	33		Lanao del Sur	72
	Camarines Sur	34		Maguindanao	73
	Catanduanes	35		North Cotabato	74
	Masbate	36		Sultan Kudarat	75
Sorsogon	37				
VI	Aklan	38			
	Antique	39			

^{1/}Less Metropolitan Manila

APPENDIX 4.2-2 MUNICIPALITY CODES OF NTPP

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>REGION I</u>				Pidding	17
<u>ABRA</u>		<u>01</u>		Pinili	18
	Bangued	00		San Nicolas	19
	Boliney	01		Sarrat	20
	Bucay	02		Solsona	21
	Bucloc	03		Vintar	22
	Daguioman	04	<u>ILOCOS SUR</u>		<u>04</u>
	Danglas	05		Vigan	00
	Dolores	06		Alilem	01
	La Paz	07		Banayoyo	02
	Lacub	08		Bantay	03
	Langanglang	09		Burgos	04
	Lagayan	10		Cabugao	05
	Langiden	11		Candon	06
	Licuan	12		Caoayan	07
	Luba	13		Cervantes	08
	Malibcong	14		Galimuyod	09
	Manabo	15		Gregorio del Pilar (Concepcion)	10
	Peñarrubia	16		Lidlidda	11
	Pidigan	17		Magsingal	12
	Pilar	18		Nagbukal	13
	Sal-Lapadan	19		Naryacan	14
	San Isidro	20		Quirino (Angaki)	15
	San Juan	21		Salcedo (Baugen)	16
	San Quintin	22		San Emilio	17
	Tayum	23		San Esteban	18
	Tineg	24		San Ildefonso	19
	Tubo	25		San Juan (Lapog)	20
	Villaviciosa	26		San Vicente	21
<u>BENGUET</u>		<u>02</u>		Santa	22
	La Trinidad	00		Santa Catalina	23
	Atok	01		Santa Cruz	24
	Baguio City	02		Santa Lucia	25
	Bauan (Bakun)	03		Santa Maria	26
	Bokod	04		Santiago	27
	Buguias	05		Santo Domingo	28
	Itogon	06		Sigay	29
	Kabayán	07		Sinait	30
	Kapangan	08		Sugpon	31
	Kibungan	09		Suyo	32
	Mankayan	10		Tagudin	33
	Sablan	11	<u>LA UNION</u>		<u>05</u>
	Tuba	12		San fernando	00
	Tublay	13		Agoo	01
<u>ILOCOS NORTE</u>		<u>03</u>		Aringay	02
	Laoag City	00		Bacnotan	03
	Adams	01		Bagulin	04
	Bacarra	02		Balaoran	05
	Badoc	03		Bangar	06
	Bangui	04		Bauang	07
	Batac	05		Burgos	08
	Burgos	06		Caba	09
	Carasi	07		Luna	10
	Currímao	08		Naguilian	11
	Dingras	09		Pugo	12
	Dumalneg	10		Rosario (Damaritiz)	13
	Espiritu (Banana)	11		San Gabriel	14
	Marcos	12		San Juan	15
	Nueva Era	13		Santo Tomas	16
	Pagudpud	14		Santol	17
	Paoay	15		Sudipen	18
	Pasuquin	16		Tubao	19

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>MT. PROVINCE</u>		<u>06</u>	<u>CAGAYAN</u>		<u>09</u>
	Bontoc	00		Tuguegarao	00
	Barlig	01		Abulug	01
	Bauko	02		Alcala	02
	Besao	03		Allacapan	03
	Natonin	04		Amulung	04
	Paracelis (Praelas)	05		Aparrí	05
	Sabangan	06		Baggao	06
	Sadanga	07		Ballesteros	07
	Sagada	08		Buguay	08
	Tadian	09		Calayan	09
				Camalangan	10
<u>PANGASINAN</u>		<u>07</u>		Claveria	11
	Lingayen	00		Enrile	12
	Agno	01		Cattaran	13
	Aguilar	02		Canzaga	14
	Alaminos	03		Iguig	15
	Alcala	04		Lal-lo	16
	Anda	05		Lasam	17
	Asingan	06		Pamplona	18
	Balungao	07		Penablanca	19
	Bani	08		Piat	20
	Basista	09		Rizal	21
	Bautista	10		Sanchez-Mira	22
	Bayambang	11		Santa Ana	23
	Binalonan	12		Santa Praxedes (Langangan)	24
	Binmaley	13		Santa Teresita	25
	Bolinao	14		Sto. Nino (Faire)	26
	Bugallon	15		Solana	27
	Burgos	16		Tuao	28
	Calasiao	17			
	Dagupan City	18	<u>IFUGAO</u>		<u>10</u>
	Dasol	19		Lagawe (Burnay)	00
	Infanta	20		Banaue	01
	Labrador	21		Hungduan	02
	Mabini	22		Kiangán	03
	Malasigui	23		Lamut	04
	Manaoag	24		Mayayao	05
	Mangaldan	25		Potia	06
	Mangatarem	26			
	Mapandan	27	<u>ISABELA</u>		<u>11</u>
	Natividad	28		Ilagan	00
	Pozorrubio	29		Alicia	01
	Rosales	30		Aguinaldo	02
	San Carlos City	31		Angadanan	03
	San Fabian	32		Aurora	04
	San Jacinto	33		Benito - Soliven	05
	San Manuel	34		Burgos	06
	San Nicolas	35		Cabagan	07
	San Quintin	36		Cabatuan	08
	Santa Barbara	37		Cauayan	09
	Santa Maria	38		Cordon	10
	Santo Tomas	39		Divilican	11
	Sison	40		Echague	12
	Sual	41		Gamu	13
	Tayug	42		Jones	14
	Umingan	43		Luna (Anatet)	15
	Urbiztondo	44		Macanacon	16
	Urdaneta	45		Magsaysay	17
	Villa	46		Mallig	18
<u>REGION 11</u>				Naquillian	19
<u>BATANES</u>		<u>08</u>		Palanan	20
	Basco	00		Quezon	21
	Itbayat	01		Quirino	22
	Ivana	02		Reina Mercedes	23
	Mahatao	03		Roxas	24
	Sabtang	04		San Agustin	25
	Uyugan	05		San Guillermo	26
				San Isidro	27
				San Manuel (Gallang)	28

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>ISABELA</u>		<u>11</u>	<u>BULACAN</u>		<u>16</u>
	San Mariano	29		Malolos	00
	San Mateo	30		Angat	01
	San Pablo	31		Balagtas (Bigaa)	02
	Santa Maria	32		Baliuag	03
	Santiago	33		Bocaue	04
	Santo Tomas	34		Bulacan	05
	Tumauini	35		Bustos	06
	Dinapigui	36		Calumpit	07
	Ramon	37		Guiguinto	08
<u>KALINGA-APAYAO</u>		<u>12</u>		Hagonoy	09
	Tabuk	00		Marilao	10
	Balbalan	01		Meycauayan	11
	Calanasan (Bayag)	02		Norzagaray	12
	Conner	03		Obando	13
	Flora	04		Pandi	14
	Kabugao	05		Paombong	15
	Lubuagan	06		Plaridel	16
	Luna	07		Pulilan	17
	Pasil	08		San Ildefonso	18
	Pinukpuk	09		San Jose del Monte	19
	Pudtol	10		San Miguel	20
	Quirino	11		San Rafael	21
	Rizal (Liwan)	12		Santa Maria	22
	Santa Marcela	13		Valenzuela	23
	Tanudan	14	<u>NUEVA ECIJA</u>		<u>17</u>
	Tinglayan	15		Palayan City	00
<u>NUEVA VIZCAYA</u>		<u>13</u>		Aliaga	01
	Bayombong	00		Bongabon	02
	Ambaguio	01		Cabanatuan City	03
	Aritao	02		Cabiao	04
	Bagabag	03		Carranglan	05
	Bambang	04		Cuyapo	06
	Diadi	05		Gabaldon (Bitulok & Sabani)	07
	Dupax del Norte	06		Gapan	08
	Dupax del Sur	07		Gen. Mamerto Natividad	09
	Kasibu	08		Gen. Tinio (Payapa)	10
	Kayaba	09		Guimba	11
	Quezon	10		Jaen	12
	Saguday	11		Laur	13
	Santa Fe	12		Licab	14
	Solano	13		Llanera	15
	Villa Verde (Ibang)	14		Lupao	16
<u>QUIRINO</u>		<u>14</u>		Muñoz	17
	Aglipay	01		Nampicuan	18
	Cabarroguis	02		Pantabangan	19
	Diffun	03		Peñaranda	20
	Maddela	04		Quezon	21
	Saguday	05		Rizal	22
<u>REGION III</u>				San Antonio	23
<u>BATAAN</u>		<u>15</u>		San Isidro	24
	Balanga	00		San Jose City	25
	Abucay	01		San Leonardo	26
	Bagac	02		Santa Rosa	27
	Dinalupihan	03		Santo Domingo	28
	Hermosa	04		Talavera	29
	Limay	05		Talugtug	30
	Mariveles	06		Zaragoza	31
	Morong	07	<u>PAMPANGA</u>		<u>18</u>
	Orani	08		San Fernando	00
	Orion	09		Angeles City	01
	Pilar	10		Apalit	02
	Samal	11		Arayat	03
				Bacolor	04
				Candaba	05
				Florida Blanca	06

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>PAMPANGA</u>		<u>18</u>		San Juan del Monte	14
	Guagua	07		Taguig	15
	Lubao	08		Valenzuela (Polo)	16
	Mabalacat	09	<u>REGION IV-A</u>		
	Macabebe	10	<u>AURORA</u>		<u>21</u>
	Magalang	11		Baler	01
	Masantol	12		Casiguran	02
	Mexico	13		Dilasag	03
	Minalin	14		Dinalongan	04
	Porac	15		Dingalan	05
	San Luis	16		Dipaculao	06
	San Simon	17		Maria Aurora	07
	Santa Ana	18		San Luis	08
	Santa Rita	19	<u>BATANGAS</u>		<u>22</u>
	Santo Tomas	20		Batangas City	00
	Sexmoan	21		Agoncillo	01
<u>TARLAC</u>		<u>19</u>		Alitagtag	02
	Tarlac	00		Balayan	03
	Anao	01		Balete	04
	Bamban	02		Bauan	05
	Camiling	03		Calaca	06
	Capas	04		Calatagan	07
	Concepcion	05		Cuenca	08
	Gerona	06		Ibaan	09
	La Paz	07		Laurel	10
	Mayantoc	08		Lemery	11
	Moncada	09		Lian	12
	Paniqui	10		Lipa City	13
	Pura	11		Lobo	14
	Ramos	12		Mabini	15
	San Clemente	13		Malvar	16
	San Manuel	14		Mataas na Kahoy	17
	Santa Ignacia	15		Nasugbu	18
	Victoria	16		Padre Garcia	19
<u>ZAMBALES</u>		<u>20</u>		Rosario	20
	Iba	00		San Jose	21
	Botolan	01		San Juan	22
	Cabangan	02		San Luis	23
	Candelaria	03		San Nicolas	24
	Castillejos	04		San Pascual	25
	Masinloc	05		Santa Teresita	26
	Olongapo City	06		Santo Tomas	27
	Palauig	07		Taal	28
	San Antonio	08		Talisay	29
	San Felipe	09		Tanauan	30
	San Marcelino	10		Taysan	31
	San Narciso	11		Tingloy	32
	Santa Cruz	12		Tuy	33
	Subic	13	<u>CAVITE</u>		<u>23</u>
<u>REGION IV</u>				Trece Martires City	00
<u>METROPOLITAN MANILA</u>		<u>76</u>		Alfonso	01
	Manila	00		Amadeo	02
	Caloocan	01		Bacoor	03
	Pasay	02		Carmona	04
	Quezon	03		Cavite City	05
	Las Pinas	04		Dasmarinas	06
	Makati	05		Gen. Emilio Aguinaldo	07
	Malabon	06		Gen. Trias	08
	Mandaluyong	07		Imus	09
	Marikina	08		Indang	10
	Muntinlupa	09		Kawit	11
	Navotas	10		Magallanes	12
	Parañaque	11		Maragondon	13
	Pasig	12		Mendez-Nunez	14
	Pateros	13		Naic	15
				Noveleta	16

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>CAVITE</u>		<u>23</u>			
	Rosario	17		Naujan	07
	Silang	18		Pinamalayan	08
	Tagaytay City	19		Pola	09
	Tanza	20		Puerto Galera	10
	Tarnate	21		Roxas	11
				San Teodoro	12
				Socorro	13
				Victoria	14
<u>LAGUNA</u>		<u>24</u>	<u>PALAWAN</u>		<u>28</u>
	Santa Cruz	00		Puerto Princesa City	00
	Alaminos	01		Aborlan	01
	Bay	02		Agutaya	02
	Biñan	03		Araceli	03
	Cabuyao	04		Balabac	04
	Calamba	05		Batarasa	05
	Calauan	06		Brooke's Point	06
	Cavinti	07		Busuanga	07
	Famy	08		Cagayancillo	08
	Kalayaan (Longos)	09		Coron	09
	Liliw (Lilio)	10		Cuyo	10
	Los Baños	11		Dumarán	11
	Luisiana	12		El Nido (Bacuit)	12
	Lumban	13		Linapacan	13
	Mabitac	14		Magsaysay	14
	Magdalena	15		Narra (Aborlan)	15
	Majayjay	16		Quezon	16
	Nagcarlan	17		Roxas	17
	Paete	18		San Vicente	18
	Pagsanjan	19		Taytay	19
	Pakil	20	<u>QUEZON</u>		<u>29</u>
	Pangil	21		Lucena City	00
	Pila	22		Agdangan	01
	Rizal	23		Alabat	02
	San Pablo City	24		Atimonan	03
	San Pedro	25		Baler	04
	Santa Maria	26		Buenavista	05
	Santa Rosa	27		Burdeos	06
	Siniloan	28		Calauag	07
	Victoria	29		Candelaria	08
<u>MARINDUQUE</u>		<u>25</u>		Casiguran	09
	Boac	00		Catanauan	10
	Buenavista	01		Dilasag	11
	Gasan	02		Dinalongan	12
	Mogpog	03		Dingalan	13
	Santa Cruz	04		Dipaculao	14
	Torrijos	05		Dolores	15
<u>MINDORO OCCIDENTAL</u>		<u>26</u>		General Luna	16
	Mamburao	00		General Nakar	17
	Abra de Ilog	01		Guinayangan	18
	Galintaán (San Miguel)	02		Gumaca	19
	Looc	03		Infanta	20
	Lubang	04		Jumalig	21
	Magsaysay	05		Lopez	22
	Paluan	06		Lucban	23
	Rizal	07		Macalelon	24
	Gablayan	08		Maria Aurora	25
	San Jose	09		Mauban	26
	Santa Cruz	10		Mulanay	27
<u>MINDORO ORIENTAL</u>		<u>27</u>		Padre Burgos	28
	Calapan	00		Pagbilao	29
	Baco	01		Panukulan	30
	Bansud	02		Patnanungan	31
	Bongabong	03		Perez	32
	Bulalakao (San Pedro)	04		Pitogo	33
	Gloria	05		Plaridel	34
	Mansalay	06		Polilio	35
				Quezon	36
				Real	37
				Sampaloc	38

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>QUEZON</u>		<u>29</u>	<u>CAMARINES NORTE</u>		<u>33</u>
	San Andres	39		Daet	00
	San Antonio	40		Basud	01
	San Francisco	41		Capalonga	02
	San Luis	42		Jose Panganiban	03
	San Narciso	43		Labo	04
	Serriaya	44		Mercedes	05
	Tagkawayan	45		Paracale	06
	Tayabas	46		San Vicente	07
	Tiaong	47		Santa Elena	08
	Unisan	48		Talisay	09
				Vinzons	10
				Imelda	11
<u>RIZAL</u>		<u>30</u>	<u>CAMARINES SUR</u>		<u>34</u>
	Angono	00		Pili	00
	Antipolo	01		Baao	01
	Baras	02		Balatan	02
	Binangonan	03		Bato	03
	Cainta	04		Bombon	04
	Cardona	05		Buhi	05
	Jalajala	06		Bula	06
	Montalban	07		Cabusao	07
	Morong	08		Calabanga	08
	Pililla	09		Camaligan	09
	San Mateo	10		Canaman	10
	Tanay	11		Caramoan	11
	Taytay	12		Del Gallego	12
	Teresa	13		Gainza	13
				Garchitorena	14
<u>ROMBLON</u>		<u>31</u>		Goa	15
	Romblon	00		Iriga City	16
	Alcantara	01		Lagonoy	17
	Banton (Jones)	02		Libmanan	18
	Cajidiocan	03		Lupi	19
	Calatrava	04		Magarao	20
	Concepcion	05		Milaor	21
	Corcuera	06		Minalabac	22
	Looc	07		Nabua	23
	Magdiwang	08		Naga City	24
	Odiangan	09		Ocampo	25
	San Agustin	10		Pamplona	26
	San Andres	11		Parubcan (Presentacion)	27
	San Fernando	12		Pasacao	28
	San Jose	13		Ragay	29
	Santa Fe	14		Sagnay	30
				San Fernando	31
<u>REGION V</u>				San Jose	32
<u>ALBAY</u>		<u>32</u>		Sipocot	33
	Legaspi City	00		Siruma	34
	Bacacay	01		Tigaon	35
	Camalig	02		Tinambac	36
	Daraga (Locsin)	03	<u>CATANDUANES</u>		<u>35</u>
	Guinobatan	04		Virac	00
	Jovellar	05		Bagamanoc	01
	Libon	06		Baras	02
	Ligao	07		Bato	03
	Malilipot	08		Caramoran	04
	Malinao	09		Gigmoto	05
	Manito	10		Pandan	06
	Oas	11		Panganiban (Payo)	07
	Pio Duran	12		San Andres (Cololbon)	08
	Polangui	13		San Miguel	09
	Rapu-Rapu	14		Viga	10
	Santo Domingo (Libog)	15			
	Tabaco	16			
	Tiwi	17			

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>MASBATE</u>		<u>36</u>			
	Masbate	00		Culasi	06
	Aroroy	01		Dao	07
	Baleno	02		Hamtic	08
	Balud	03		Laua-an	09
	Batuan	04		Libertad	10
	Cataingan	05		Pandan	11
	Cawayan	06		Patnongan	12
	Claveria	07		San Remigio	13
	Dimasalang	08		Sebaste	14
	Esperanza	09		Sibalom	15
	Mandaon	10		Tibiao	16
	Nilagros	11		Valderama	17
	Mobo	12			
	Monreal	13	<u>CAPIZ</u>		<u>40</u>
	Palanas	14		Roxas City	00
	Pio V. Corpuz (Limuhan)	15		Cuartero	01
	Placer	16		Dao	02
	San Fernando	17		Dumalag	03
	San Jacinto	18		Dumarao	04
	San Pascual	19		Ivisan	05
	Uson	20		Jamindan	06
				Ma-ayon	07
<u>SORSOGON</u>		<u>37</u>		Mambusao	08
	Sorsogon	00		Panay	09
	Bacon	01		Panitan	10
	Barcelona	02		Pilar	11
	Bulan	03		Pontevedra	12
	Bulusan	04		President Roxas	13
	Casiguran	05		Saptan	14
	Castilla	06		Sigma	15
	Donso	07		Tapaz	16
	Gubat	08			
	Irosin	09	<u>ILOILO</u>		<u>41</u>
	Juban	10		Iloilo City	00
	Magallanes	11		Ajuy	01
	Matnog	12		Alimodian	02
	Pilar	13		Anilao	03
	Prieto-Diaz	14		Badiangan	04
	Santa Magdalena	15		Balanan	05
				Banate	06
<u>REGION VI</u>				Barotac Nuevo	07
<u>AKLAN</u>		<u>38</u>		Barotac Viejo	08
	Kalibo	00		Batad	09
	Altavas	01		Bingawan	10
	Balete	02		Buenavista	11
	Banga	03		Cabatuan	12
	Batan	04		Calinog	13
	Buruanga	05		Carles	14
	Ibajay	06		Concepcion	15
	Lezo	07		Dingle	16
	Libacao	08		Duenas	17
	Madalag	09		Dumangas	18
	Makato	10		Estancia	19
	Malay	11		Guimbal	20
	Malinao	12		Igaras	21
	Nabas	13		Janiuay	22
	New Washington	14		Jordan	23
	Numancia	15		Lambunao	24
	Tangalan	16		Leganes	25
				Lenery	26
<u>ANTIQUE</u>		<u>39</u>		Leon	27
	San Jose	00		Naasin	28
	Anini-y	01		Miagao	29
	Barbaza	02		Mina	30
	Belison	03		New Lucena (Lucena)	31
	Bugasong	04		Nueva Valencia	32
	Caluya	05		Oton	33
				Passi	34
				Pavia	35
				Pototan	36
				San Dionisio	37

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>ILOILO</u>		<u>41</u>		Cortes	16
	San Enrique	38		Dagohoy	17
	San Joaquin	39		Danao	18
	San Miguel	40		Dauis	19
	San Rafael	41		Dimiao	20
	Santa Barbara	42		Duero	21
	Sara	43		Garcia-Hernandez	22
	Tigbawan	44		Guindulman	23
	Tubungan	45		Inabanga	24
	Zarraga	46		Jagna	25
				Jetafe	26
				Lila	27
<u>GUIMARAS SUB-PROVINCE</u>		<u>42</u>		Loay	28
	Buenavista	01		Loboc	29
	Jordan	02		Loon	30
	Nueva Valencia	03		Mabini	31
				Maribojoc	32
				Panglao	33
<u>NEGROS OCCIDENTAL</u>		<u>43</u>		Pilar	34
	Bacolod City	00		Pitogo	35
	Bago City	01		Sagbayan	36
	Binalbagan	02		San Isidro	37
	Cadiz City	03		San Miguel	38
	Calatrava	04		Sevilla	39
	Candoni	05		Sierra-Bullones	40
	Cauayan	06		Sikatuna	41
	Enrique Magalona	07		Talibon	42
	Escalante	08		Trinidad	43
	Himamaylan	09		Tubigon	44
	Hinigaran	10		Ubay	45
	Hinoba-an	11		Valencia	46
	Ilog	12	<u>CEBU</u>		<u>45</u>
	Isabela	13		Cebu City	00
	Kabankalan	14		Alcantara	01
	La Carlota City	15		Alcoy	02
	La Castellana	16		Alegria	03
	Manapla	17		Aloguinsan	04
	Moises Padilla	18		Argao	05
	Murcia	19		Asturias	06
	Pontevedra	20		Badian	07
	Pulupandan	21		Balamban	08
	Sagay	22		Bantayan	09
	San Carlos City	23		Barili	10
	San Enrique	24		Bago	11
	Silay City	25		Bejoc	12
	Sipalay	26		Borbon	13
	Talisay	27		Carcar	14
	Toboso	28		Carmen	15
	Valladolid	29		Catmon	16
	Victorias	30		Compostela	17
				Consolacion	18
<u>REGION VII</u>				Cordoba	19
<u>BOHOL</u>		<u>44</u>		Daanbantayan	20
	Tagbilaran City	00		Dalaguete	21
	Albuquerque	01		Danao City	22
	Alicia	02		Dumanjug	23
	Anda	03		Ginatilan	24
	Antequera	04		Lapu-Lapu City	25
	Baclayon	05		Liloan	26
	Balilihan	06		Madridejos	27
	Batuan	07		Mandaue City	28
	Bilar	08		Malabuyac	29
	Buenavista	09		Madellin	30
	Calape	10		Minglanilla	31
	Candijay	11		Noalboal	32
	Carmen	12		Naga	33
	Catigbian	13		Calob	34
	Clarin	14		Pilar	35
	Corella	15		Pinamungajan	36
				Poro	37

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>CEBU</u>		<u>45</u>			
	Ronda	38		Biliran	09
	Samboan	39		Burauen	10
	San Fernando	40		Cabuogayan	11
	San Francisco	41		Caibiran	12
	San Remigio	42		Calubian	13
	Santa Fe	43		Capoocan	14
	Santander	44		Carigara	15
	Sibonga	45		Culaba	16
	Sogod	46		Dagami	17
	Tabogon	47		Dulag	18
	Tabuelan	48		Hilongos	19
	Talisay	49		Hindang	20
	Toledo City	50		Inopacan	21
	Tuburan	51		Isabel	22
	Tudela	52		Jaro	23
				Javier (Bugho)	24
				Julita	25
				Kananga	26
<u>NEGROS ORIENTAL</u>		<u>46</u>		Kawayan	27
	Dumaguete City	00		La Paz	28
	Amlan (Ayuqitan)	01		Leyte	29
	Ayungon	02		MacArthur	30
	Bacong	03		Mahaplag	31
	Bais City	04		Maripipi	32
	Basay	05		Matag-ob	33
	Bayawan (Tolong)	06		Matalom	34
	Bindoy (Payabon)	07		Mayorga	35
	Canlaon City	08		Merida	36
	Dauin	09		Naval	37
	Enrique Villanueva	10		Ormoc City	38
	Guihulngan	11		Palo	39
	Jimalalud	12		Palompon	40
	La Libertad	13		Pastrana	41
	Larena	14		San Isidro	42
	Lazi	15		San Miguel	43
	Mabinay	16		Santa Fe	44
	Manjuyod	17		Tabango	45
	Maria	18		Tabontabon	46
	Pamplona	19		Tanauan	47
	San Jose	20		Tolosa	48
	San Juan	21		Tunga	49
	Santa Catalina	22		Villaba	50
	Siaton	23			
	Sibulan	24	<u>SOUTHERN LEYTE</u>		<u>49</u>
	Siquijor	25		Maasin	00
	Tanjay	26		Anahawan	01
	Tayasan	27		Bontoc	02
	Valencia (Luzurriaga)	28		Hinunangan	03
	Vallehermoso	29		Hinundayan	04
	Zamboanguita	30		Libagon	05
				Liloan	06
<u>SIQUIJOR</u>		<u>47</u>		Macrohon	07
	Siquijor	01		Malitbog	08
	Enrique Villanueva	02		Padre Burgos	09
	Larena	03		Pintuyan	10
	Lazi	04		Saint Bernard	11
	Maria	05		San Francisco	12
	San Juan	06		San Juan (Cabalian)	13
				San Ricardo	14
<u>REGION VIII</u>				Silago	15
				Sogod	16
<u>LEYTE</u>		<u>48</u>		Tomas Oppus	17
	Tacloban City	00	<u>EASTERN SAMAR</u>		<u>50</u>
	Abuyog	01		Borongan	00
	Alangalang	02		Arteche	01
	Albuera	03		Balangiga	02
	Almeria	04		Balangkayan	03
	Babatngon	05		Can-Avid	04
	Barogo	06		Dolores	05
	Bato	07		Gen. MacArthur	06
	Baybay	08		Giporlos	07

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>EASTERN SAMAR</u>		<u>50</u>	<u>BILIRAN (SUB-PROVINCE)</u>		<u>53</u>
	Gutuan	08		Almeria	01
	Hernani	09		Biliran	02
	Jipadpad	10		Cabukayan	03
	Lawa-an	11		Caibiran	04
	Llorente	12		Culaba	05
	Maslog	13		Kawayan	06
	Maydong	14		Maripipi	07
	Mercedes	15		Naval	08
	Oras	16			
	Quinapundan	17	<u>REGION IX</u>		
	Salcedo	18	<u>SUB-REGION IX-A</u>		
	San Julian	19	<u>BASILAN</u>		<u>54</u>
	San Policarpo	20		Basilan City	01
	Sulat	21		Isabela	02
	Taft	22		Lamitan	03
<u>NORTHERN SAMAR</u>		<u>51</u>		Maluso	04
	Catarman	00		Lantawan	05
	Allen	01		Malamawi	06
	Biri	02		Pilas	07
	Bobon	03		Sumisip	08
	Capul	04		Tapianta	09
	Catubig	05		Tipo-Tipo	10
	Gamay	06		Tuburan	11
	Laoang	07	<u>SULU</u>		<u>55</u>
	Lapinig	08		Jolo	00
	Las Navas	09		Indanan	01
	Lavezares	10		Luuk	02
	Mapanas	11		Maimbung	03
	Mondragon	12		Marungas	04
	Palapag	13		Pananaw	05
	Pambujan	14		Pangutaran	06
	Rosario	15		Parang	07
	San Antonio	16		Pata	08
	San Isidro	17		Patikul	09
	San Jose	18		Siasi	10
	San Roque	19		Talipaw	11
	San Vicente	20		Tapul	12
	Silvino Lobos	21		Tungkil	13
	Victoria	22		Tawi-Tawi	14
<u>WESTERN SAMAR</u>		<u>52</u>	<u>TAWI-TAWI</u>		<u>56</u>
	Catbalogan	00		Balimbing	01
	Almagro	01		Bongao	02
	Basey	02		Kagayan de Sulu	03
	Calbayog City	03		Simunul	04
	Calbiga	04		Sintangkay	05
	Daram	05		South Ubina	06
	Gandara	06		Tandubas	07
	Hinabangan	07		Turtle Island (Taganak)	08
	Jiabong	08	<u>SUB-REGION IX-B</u>		
	Marabut	09	<u>ZAMBOANGA DEL NORTE</u>		<u>57</u>
	Matuguinao	10		Dipolog City	00
	Motiong	11		Dapitan City	01
	Pinabacdao	12		Katipunan	02
	San Jose de Buan	13		Labason	03
	San Sebastian	14		La Libertad	04
	Santa Margarita	15		Liloy	05
	Santa Rita	16		Manukan	06
	Santo Nino	17			
	Talafora	18			
	Tarangan	19			
	Villareal	20			
	Wright	21			
	Zumarraga	22			

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>ZAMBOANGA DEL NORTE</u>		<u>57</u>			
	Mutia	07		Esperanza	03
	Piñan (New Piñan)	08		La Paz	04
	Polanco	09		Loreto	05
	Pres. Manuel Roxas	10		Rosario	06
	Rizal	11		San Francisco	07
	Salug	12		San Luis	08
	Sergio Osmeña	13		Santa Josefa	09
	Siayan	14		Talacogon	10
	Sibuco	15		Trento (Maraquin)	11
	Sibutad	16		Veruela	12
	Sindangan	17	<u>BUKIDNON</u>		<u>61</u>
	Siocon	18		Malaybalay	00
	Siraway	19		Baungon	01
<u>ZAMBOANGA DEL SUR</u>		<u>58</u>		Dangcagan	02
	Pagadian City	00		Don Carlos	03
	Alicia	01		Impasugong	04
	Aurora	02		Kalilangan	05
	Basilan City	03		Kibawe	06
	Bayog	04		Kitatog	07
	Buug	05		Lantapan	08
	Dimataling	06		Libona	09
	Dinas	07		Malitbog	10
	Dumalinao	08		Manolo Fortich (Maluko)	11
	Dumingag	09		Maramag	12
	Ipil	10		Pangantocan	13
	Kabasalan	11		Quezon (Pulangi)	14
	Kumalarang	12		San Fernando	15
	Labangan	13		Sumilao	16
	Lapuyan	14		Talakag	17
	Mabuhay	15		Valencia	18
	Mahayag	16		Damulog	19
	Malangas	17		Kadingilan	20
	Margosatubig	18	<u>CAMIGUIN</u>		<u>62</u>
	Midsalip	19		Catarman	01
	Molave	20		Guinsiliban	02
	Naga	21		Mahinog	03
	Olutanga	22		Mambajao	04
	R. Magsaysay	23		Sagay	05
	San Miguel	24	<u>MISAMIS OCCIDENTAL</u>		<u>63</u>
	San Pablo	25		Oroquieta City	00
	Siay	26		Aloran	01
	Tabina	27		Baliangao	02
	Tambulig	28		Bonifacio	03
	Titay	29		Calamba	04
	Tukuran	30		Clarin	05
	Tungawan	31		Concepcion	06
	Zamboanga City	32		Jimenez	07
<u>REGION X</u>				Lopez-Jaena	08
<u>AGUSAN DEL NORTE</u>		<u>59</u>		Ozamis City	09
	Butuan City	00		Panaon	10
	Buenavista	01		Plaridel	11
	Cabadbaran	02		Sapang-Dalaga	12
	Carmen	03		Sinacaban	13
	Jabonga	04		Tangub City	14
	Kitcharao	05		Tudela	15
	Las Nieves	06	<u>MISAMIS ORIENTAL</u>		<u>64</u>
	Magallanes	07		Cagayan de Oro City	00
	Nasipit	08		Alubijid	01
	Santiago	09		Balingasag	02
	Tubay	10		Balingoan	03
<u>AGUSAN DEL SUR</u>		<u>60</u>		Binuangan	04
	Prosperidad	00		Claveria	05
	Bayugan	01		El Salvador	06
	Bunawan	02		Gingoog City	07
				Gitagum	08

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>MISAMIS ORIENTAL</u>		<u>64</u>		Pantukan	16
	Initao	09		Samal	17
	Jasaan	10		Santo Tomas	18
	Kinogitan	11		San Mariano	19
	Lagonggong	12		San Vicente	20
	Laguindingan	13	<u>DAVAO DEL SUR</u>		<u>67</u>
	Libertad	14		Digos	00
	Lugait	15		Bansalan	01
	Magsaysay (Linugos)	16		Davao City	02
	Monticao	17		Hagonoy	03
	Medina	18		Jose Abad Santos (Trinidad)	04
	Naawan	19		Kiblawan	05
	Opol	20		Magsaysay	06
	Salay	21		Malalag	07
	Subongcogon	22		Malita	08
	Tagoloan	23		Matanao	09
	Talisayan	24		Padada	10
	Villanueva	25		Santa Cruz	11
				Santa Maria	12
				Sulop	13
<u>SURIGAO DEL NORTE</u>		<u>65</u>	<u>DAVAO ORIENTAL</u>		<u>68</u>
	Surigao City	00		Mati	00
	Alegria	01		Banganga	01
	Anao-aon	02		Banay-banay	02
	Bacuag	03		Boston	03
	Basilisa (Rizal)	04		Caraga	04
	Burgos	05		Cateel	05
	Cagdianao	06		Gov. Generoso	06
	Claver	07		Lupon	07
	Dapa	08		Manay	08
	Del Carmen (Numancia)	09		San Isidro	09
	Dinagat	10		Tarragona	10
	General Luna	11	<u>SOUTH COTABATO</u>		<u>69</u>
	Gigaquit	12		Koronadal (Marbel)	00
	Libjo (Albor)	13		Banga	01
	Loreto	14		Gen. Santos City (Rajah Buayan)	02
	Mainit	15		Glan	03
	Malimono	16		Kiamba	04
	Pilar	17		Maasin	05
	Placer	18		Maitum	06
	San Benito	19		Malapatan	07
	San Francisco (Anao-aon)	20		Malungon	08
	San Isidro	21		Norala	09
	Sta. Monica (Sapao)	22		Polomolok	10
	Sison	23		Surallah	11
	Socorro	24		Tampacan	12
	Tagana-an	25		Tantangan	13
	Tubajon	26		Tupi	14
	Tubod	27		T'buli	15
				Alabel	16
<u>REGION XI</u>			<u>SURIGAO DEL SUR</u>		<u>70</u>
<u>DAVAO DEL NORTE</u>		<u>66</u>		Tandag	00
	Tagum	00		Barobo	01
	Asuncion (Saug)	01		Bayabas	02
	Babak	02		Bislig (Mangayoy)	03
	Carmen	03		Cagwait	04
	Compostela	04		Cantilan	05
	Kapalong	05		Carrascal	06
	Kaputian	06		Cortes	07
	Mabini (Doña Alicia)	07		Hinatuan	08
	Maco (Amacan)	08		Lanusa	09
	Mawab	09		Lianza	10
	Monkayo	10			
	Montevista	11			
	Nabunturan	12			
	New Bataan	13			
	New Corella	14			
	Panaho	15			

PROVINCE	MUNICIPALITY	CODE	PROVINCE	MUNICIPALITY	CODE
<u>SURIGAO DEL SUR</u>		<u>70</u>	<u>MAGUINDANAO</u>		<u>73</u>
	Lingig	11		Maganoy	00
	Madrid	12		Ampatuan	01
	Marihatag	13		Buldon	02
	San Agustin (Oteiza)	14		Buluan	03
	San Miguel	15		Datu Paglas	04
	Tagbina	16		Datu Piang	05
	Tago	17		(Dulawan)	
	Carmen	18		Dinaig (Dalican)	06
<u>REGION XII</u>				Pagalungan	07
<u>LANAO DEL NORTE</u>		<u>71</u>		Parang (Landaran)	08
	Iligan City	00		Sultan Kudarat (Nuling)	09
	Bacolod	01		Sultanhasa Barongis	10
	Balo-I	02		(Lambayog)	
	Baroy	03		Tumbao	11
	Kapatagan	04		Upi	12
	Karomatan	05		Cotabato	13
	Kauswagan	06	<u>NORTHERN COTABATO</u>		<u>74</u>
	Kolambugan	07		Kidapawan	00
	Lala	08		Alamada	01
	Linamon	09		Carmen	02
	Magsaysay	10		Kabacan	03
	Maigo	11		Libungan	04
	Matungao	12		Magpet	05
	Munai	13		Makilala	06
	Nununigan	14		Matalam	07
	Pantao-Ragat	15		Midsayao	08
	Salvador	16		Milang-Milang	09
	Sapad	17		Pigkawayan	10
	Tubod	18		Pikit	11
	Tagoloan	19		Pres. Roxas	12
	Tangcal	20		Tulunan	13
<u>LANAO DEL SUR</u>		<u>72</u>	<u>SULTAN KUDARAT</u>		<u>75</u>
	Marawi City	00		Isulan	00
	(Dansalan)			Bagumbayan	01
	Bacolod Grande	01		Columbio	02
	Balabagan	02		Esperanza	03
	Balindong (Watu)	03		Kalamansig	04
	Bayang	04		Lebak	05
	Binidayan	05		Lutayan	06
	Bubong	06		Mariano Marcos	07
	Buting	07		Palimbang	08
	Ganassi	08		Pres. Quirino	09
	Kapai	09		Tacurong	10
	Lumba-a-Bayabao	10			
	(Maguing)				
	Dianaton	11			
	Lumbatan	12			
	Madalum	13			
	Madamba	14			
	Malabang	15			
	Maratao	16			
	Masiu	17			
	Molundo	18			
	Pagayawan	19			
	Piagapo	20			
	Poon-aBayabao	21			
	Pualas	22			
	Raman	23			
	Saguiaran	24			
	Tamparan	25			
	Taraka	26			
	Tubaran	27			
	Tugaya	28			
	Wao	29			

APPENDIX 4.2-3 INTEGRATION OF TRAFFIC ZONES FOR SURVEY STATION 1 AND 2

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
1	I	Abra	01 xx	All
		Ilocos Norte	03 xx	
		Ilocos Sur	04 xx	
2		Mt. Province	06 xx	All
3		Benguet	02 xx	All
		La Union	05 xx	
4		Pangasinan	07 xx	All
5	II	Batanes	08 xx	All
		Cagayan	09 xx	
6		Cagayan	09 xx	01, 03, 05, 07, 08, 10, 11, 13, 14, 16 - 18, 22 - 25
				00, 02, 04, 06, 09, 12, 15, 19 - 21, 26 - 28
7		Kalinga-Apayao	12 xx	02 - 05, 07, 10, 13
8		Kalinga-Apayao	12 xx	00, 01, 06, 08, 09, 11, 12, 14, 15
9		Isabela	11 xx	02, 07, 11, 16, 17, 21, 31, 32, 34, 35
10		Isabela	11 xx	00, 04 - 06, 08, 09, 13, 15, 18, 19, 22 - 24, 28
11		Isabela	11 xx	20, 29, 36
12		Isabela	11 xx	01, 03, 10, 12, 14, 25 - 27, 30, 33, 37
13		Ifugao	10 xx	All
14		Quirino	14 xx	All
15		Nueva Vizcaya	13 xx	00, 01, 03 - 05, 08, 10, 11, 13, 14
		Nueva Vizcaya	13 xx	02, 06, 07, 09, 12
17	III	Nueva Ecija	17 xx	05, 16, 19, 22, 25
18		Nueva Ecija	17 xx	00 - 04, 06 - 15, 17, 18, 20, 21, 23, 24, 26 - 31
19		Tarlac	19 xx	All
20		Bataan	15 xx	All
		Zambales	20 xx	
21		Bulacan	16 xx	All
		Pampanga	18 xx	
22	IV	Metropolitan Manila	76 xx	All

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
23	IV-A	Aurora	21 xx	A11
24		Rest of IV-A	22 xx	A11
			31 xx	
25	V	All	32 xx	A11
			37 xx	
26	VIII	Eastern Samar Northern Samar Western Samar	50 xx	A11
			51 xx	
			52 xx	
27		Leyte Southern Leyte Biliran	48 xx	A11
			49 xx	
			53 xx	
28	VI	All	38 xx	A11
	VII			
	IX		47 xx	
	X		54 xx	
	XI		75 xx	
	XII			

APPENDIX 4.2-4 INTEGRATION OF TRAFFIC ZONES FOR SURVEY STATION 3, 4, and 5

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
1	I	Ilocos Norte	03 xx	All
2		Abra	01 xx	All
3		Ilocos Sur	04 xx	All
4		Benguet	02 xx	02
5		Benguet	02 xx	00
6		Benguet	02 xx	12
7		Benguet	02 xx	11
8		Benguet	02 xx	06
9		Benguet	02 xx	01, 03 - 05, 07 - 10, 13
10		La Union	05 xx	03 - 06, 10, 14, 15, 17, 18
11		La Union	05 xx	00
12		La Union	05 xx	07, 08, 11
13		La Union	05 xx	01, 02, 09, 12, 16, 19
14		La Union	05 xx	13
15		Mt. Province	06 xx	All
16		Pangasinan	07 xx	04, 06, 07, 10 - 12, 23 - 25, 27 - 30, 32 - 40, 42, 43, 45, 46
17		Pangasinan	07 xx	00 - 03, 05, 08, 09, 13 - 22, 26, 31, 41, 44
18	II	Batanes	08 xx	All
19		Cagayan	09 xx	All
20		Isabela	11 xx	All
21		Kalinga-Apayao	12 xx	All
22		Ifugao	10 xx	All
23		Quirino	14 xx	All
24		Nueva Vizcaya	13 xx	All
25	III	Bataan	15 xx	All
26		Bulacan	16 xx	All
27		Nueva Ecija	17 xx	All
28		Pampanga	18 xx	All
29		Tarlac	19 xx	All
30		Zambales	20 xx	All
31	IV	Metropolitan Manila	76 xx	All

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
32	IV-A	Aurora	21 xx	A11
		Batangas	22 xx	
		Cavite	23 xx	
		Laguna	24 xx	
		Quezon	29 xx	
		Rizal	30 xx	
33	V	Albay	32 xx	A11
		Camarines Norte	33 xx	
		Camarines Sur	34 xx	
		Sorsogon	37 xx	
34	VIII	Eastern Samar	50 xx	A11
		Northern Samar	51 xx	
		Western Samar	52 xx	
35		Leyte	48 xx	A11
		Southern Leyte	49 xx	
		Biliran	53 xx	
36	Rest of the Philippines (IV-A V VI VII IX X XI XII)		25 xx	A11
			28 xx	
			31 xx	
			35 xx	
			36 xx	
			38 xx	
			47 xx	
			54 xx	
			75 xx	

APPENDIX 4.2-5 INTEGRATION OF TRAFFIC ZONES FOR SURVEY STATION 6

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
1	I	All	01 xx	All
			07 xx	
2	II	All	08 xx	All
			14 xx	
3	III	All	15 xx	All
			20 xx	
4	IV	Metropolitan Manila	76 xx	All
5	IV-A	Cavite	23 xx	All
		Laguna	24 xx	
		Rizal	30 xx	
6		Batangas	22 xx	All
7		Aurora	21 xx	All
	Quezon	29 xx	04, 06, 09, 11 - 14, 17, 20, 21, 25, 30, 31, 35, 37, 42	
8		Quezon	29 xx	00, 08, 15, 23, 26, 28, 29, 38, 40, 44, 46, 47
9		Quezon	29 xx	01 - 03, 05, 07, 10, 16, 18, 19, 22, 24, 27, 32 - 34, 36, 39, 41, 43, 45, 48
10		Marinduque	25 xx	All
	Mindoro Occidental	26 xx		
	Mindoro Oriental	27 xx		
	Palawan	28 xx		
	Rombion	31 xx		
11	V	Camarines Norte	33 xx	All
12		Camarines Sur	34 xx	00, 04, 07 - 10, 12, 13, 18 - 22, 24, 26, 28, 29, 31, 33
13		Camarines Sur	34 xx	01 - 03, 05, 06, 11, 14 - 17, 23, 25, 27, 30, 32, 34 - 36
14		Albay	32 xx	All
15		Sorsogon	37 xx	All
16		Catanduanes	35 xx	All
17		Masbate	36 xx	All
18	VIII	Northern Samar	51 xx	All
19		Western Samar	52 xx	All
20		Eastern Samar	50 xx	All
21		Leyte	48 xx	All
	Southern Leyte	49 xx		
	Billiran	53 xx		

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
22	VI	A11	38 xx	A11
			43 xx	
23	VII	A11	44 xx	A11
			47 xx	
24	IX	A11	54 xx	A11
	X		75 xx	
	XI			
	XII			

APPENDIX 4.2-G INTEGRATION OF TRAFFIC ZONES FOR SURVEY STATION 7 AND 8

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
1	I	All	01 xx	All
			07 xx	
2	II	All	08 xx	All
			14 xx	
3	III	All	15 xx	All
			20 xx	
4	IV	Metropolitan Manila	76 xx	All
5	IV-A	Cavite Laguna Rizal	23 xx	All
			24 xx	
			30 xx	
6		Aurora Batangas Quezon	21 xx	All
			22 xx	
			29 xx	
7		Marinduque Mindoro Occidental Mindoro Oriental Palawan Romblon	25 xx	All
			26 xx	
			27 xx	
			28 xx	
			31 xx	
8	V	Camarines Norte Camarines Sur	33 xx	All
			34 xx	
9		Albay Catanduanes	32 xx	All
			35 xx	
10		Sorsogon	37 xx	All
11		Masbate	36 xx	All
12	VI	All	38 xx	All
			43 xx	
13	VII	All	44 xx	All
			47 xx	
14	VIII	Northern Samar	51 xx	All
15		Western Samar	52 xx	00, 01, 03, 06 - 08, 10, 11, 13 - 15, 17, 19, 21
16		Western Samar	52 xx	02, 04, 05, 09, 12, 16, 18, 20, 22
17		Eastern Samar	50 xx	All
18		Leyte	48 xx	00 - 02, 05, 06, 10, 15, 17, 18, 23 - 25, 28, 30, 31, 35, 39, 41, 43, 44, 46 - 49

Integrated Zone No.	Region	Province		Municipality Code
		Name	Code	
19	VIII	Leyte	48 xx	03, 04, 09, 11 - 14, 16, 22, 26, 27, 29, 32, 33, 36 - 38, 40, 42, 45, 50
		Biliran	53 xx	A11
20		Leyte	48 xx	07, 08, 19 - 21, 34
21		Southern Leyte	49 xx	A11
22	X	Agusan del Norte	59 xx	A11
		Agusan del Sur	60 xx	
		Surigao del Norte	65 xx	
23		Bukidnon	61 xx	A11
		Camiguin	62 xx	
		Misamis Occidental	63 xx	
		Misamis Oriental	64 xx	
24	XI	A11	66 xx	A11
			70 xx	
25	IX	A11	54 xx	A11
			58 xx	
	XII	A11	71 xx	A11
			75 xx	

APPENDIX 4.2 -7 NUMBER OF SAMPLES OF ROADSIDE VEHICLE OD SURVEY

Survey Station	Station 1 (Isabela)	Station 2 (Dalton)	Station 3 (Magullian)	Station 4 (Marcos)	Station 5 (Kennon)	Station 6 (Bicol)	Station 7 (Samar)	Station 8 (Leyte)	Total
Type 1 (Car)	170	138	174	58	369	230	17	9	1215
Type 2 (Jeep)	163	46	32	6	40	100	43	14	444
Type 3 (Taxi)	0	0	9	7	9	0	0	1	26
Type 4 (Pick-up, Van)	197	158	107	41	237	268	22	39	1069
Type 5 (Jeepney)	425	81	308	71	64	391	153	39	1532
Type 6 (Mini Bus)	27	8	0	1	2	1	3	0	42
Type 7 (Big Bus)	83	152	61	0	316	320	27	42	1001
Type 8 (Tourist Bus)	0	2	0	0	15	7	0	0	24
Type 9 (Truck 2 Axle)	178	155	118	17	174	151	60	25	878
Type 10 (Truck 3 Axle)	77	200	79	0	11	18	0	5	390
Type 11 (Trailer)	20	49	0	0	0	11	0	1	81
Type 12 (Motorcycle Tricycle)	0	0	0	0	0	0	0	118	118
TOTAL	1340	989	888	201	1237	1547	325	293	6820

Note: Motorcycles and tricycles were counted only at station 8

Source: The Study Team

APPENDIX 4.3 - I

TRAFFIC COUNT SUMMARY

STATION NO. 01 LOCATION Brgy. MALALAN, ILAGAN, ISABELA (MAHARLIKA HIGHWAY)

DATE 6-21-83 Tuesday

HOUR	DIRECTION		ILAGAN					TUMAUINI					FROM					TO					Total
	FROM	TO	1	2	3	4	5	Total	1	2	3	4	5	Total	1	2	3	4	5	Total			
00 - 01	3		3			8		14	6					14	6					11			
01 - 02	11		2		2	22		37	11					37	11					25			
02 - 03	10		1		8	22		41	6					41	6					36			
03 - 04	17		8		8	31		64	11					64	11					41			
04 - 05	10		2		5	16		33	10					33	10					18			
05 - 06	4		7		2	9		22	1					22	1					9			
06 - 07	21		28		1	6		57	14					57	14					59			
07 - 08	31		28		4	18		82	14					82	14					64			
08 - 09	34		21		3	12		72	28					72	28					79			
09 - 10	42		19		3	16		82	30					82	30					66			
10 - 11	39		18		4	11		77	30					77	30					70			
11 - 12	19		20		2	16		57	19					57	19					49			
12 - 13	22		14		6	10		53	17					53	17					50			
13 - 14	21		9		5	21		56	34					56	34					69			
14 - 15	13		14		4	16		47	18					47	18					51			
15 - 16	30		17		6	13		66	19					66	19					53			
16 - 17	26		17		2	14		59	24					59	24					67			
17 - 18	13		25		5	7		50	20					50	20					57			
18 - 19	12		10		3	9		36	24					36	24					44			
19 - 20	7		3		4	5		22	14					22	14					34			
20 - 21	3		7		2	6		19	2					19	2					30			
21 - 22	9		2		3	6		20	8					20	8					25			
22 - 23	3		1		4			8	1					8	1					11			
23 - 24	12		3		6	7		29	3					29	3					33			
TOTAL	412		279		92	301		1103	364					1103	364					1051			

Source : The Team

Note : Car, Jeep, Pick-up, Van

2 : Jeepney

3 : Bus

4 : Truck, Trailer

5 : Motorcycle, Tricycle

APPENDIX 4.3-2

TRAFFIC COUNT SUMMARY

STATION NO. 02 LOCATION STA. FE, NUEVA VIZCAYA (MAHARLIKA HIGHWAY)

DATE 6-22-83 Wednesday

HOUR	DIRECTION		MANILA					BAYOMBONG					MANILA				
	FROM	TO	1	2	3	4	5	Total	FROM	TO	1	2	3	4	5	Total	
00 - 01	5				5	16		26	5		2	2	1	16		24	
01 - 02	11			7	5	29		52	13		5	5	6	41		65	
02 - 03	8			7	5	33		53	7		10	2	34		53		
03 - 04	6			10	7	35		58	5		5	5	5	42		57	
04 - 05	7			3	1	10		21	1		7	1	25		33		
05 - 06	6			5	2	27		40	7		1	1	19	1	28		
06 - 07	10			7	3	24	1	45	7		2	2	25	1	35		
07 - 08	13			8	2	16	2	41	15		6	1	14	2	38		
08 - 09	20			4	2	20		46	13		5	5	6	18	1	43	
09 - 10	16			3	4	15		38	22		2	2	13	17	2	56	
10 - 11	29			4	13	34		80	21		5	17	20		63		
11 - 12	15			5	11	10		41	15		4	4	14	18	3	54	
12 - 13	20			5	12	11		48	12		5	5	15	14	46		
13 - 14	14			2	10	12		38	18		4	4	13	12	47		
14 - 15	22			3	6	21	1	53	16		1	4	18	1	40		
15 - 16	17			2	6	18		43	26		3	5	37		71		
16 - 17	12			3	4	24		43	18		3	3	11		35		
17 - 18	10			1	8	19		38	19		3	3	18		43		
18 - 19	7			7	5	26	2	47	13		5	2	18	2	40		
19 - 20	11			3	1	25		40	7		5	2	13		27		
20 - 21	7			5	5	18		30	5		4	2	25		36		
21 - 22	11			3	6	27		47	5		4	3	37		49		
22 - 23	10			7		20		37	7		6	4	35		52		
23 - 24	14			10	7	24		55	10		6	10	27		53		
TOTAL	301			109	130	514	6	1060	287		103	131	554	13	1088		

Source : The Team
 Note : Car, Jeep, Pick-up, Van 4 : Truck, Trailer
 2 : Jeepney 5 : Motorcycle, Tricycle
 3 : Bus

APPENDIX 4.3-3

TRAFFIC COUNT SUMMARY

STATION NO. 03 LOCATION NEIGH BRIDGE (NAGUILIAN ROAD)

DATE 6-26-83 Sunday

HOUR	DIRECTION		LA UNION			BAGUIO			FROM			BAGUIO			TO			Total	
	FROM	TO	1	2	3	4	5	Total	1	2	3	4	5	1	2	3	4		5
00 - 01	6					3		9	1			4					4		5
01 - 02	1							1	2										2
02 - 03	1	1				2		4				2					2		2
03 - 04	1		1			2		4	2			1					1		3
04 - 05		4				4		8	3	2		2					2		8
05 - 06	3	12				3		18	4	1		6					6		12
06 - 07	17	37	1			10	2	67	10	7	3	3					3		23
07 - 08	9	25	2			5	1	42	17	8	2	3					1		31
08 - 09	14	21	3			5	1	44	31	15	2	7					7		55
09 - 10	18	17	3			5	1	44	21	16	3	14					3		57
10 - 11	11	15	4			5		35	24	14	4	12					12		54
11 - 12	15	13	3			5	1	37	15	13	3	7					7	1	39
12 - 13	10	8	2			13		33	16	11	2	7					7		36
13 - 14	10	9	3			16		38	15	15	6	12					12		48
14 - 15	17	8	5			13		43	14	11	2	10					10		37
15 - 16	15	5				6		26	5	12	2	12					12	1	32
16 - 17	15	5	2			6		28	13	15	2	10					10		40
17 - 18	21	3	2			11		37	11	16	4	14					14	1	46
18 - 19	13	7	2			1		23	8	21	1	2					2	1	33
19 - 20	10	6				1	6	23	6	22		1					1		29
20 - 21	12		1			2		15											
21 - 22	4	3				1		8	3			2					2		5
22 - 23	5	2				3		10		2		5					5		7
23 - 24	6		1					7		1		7					7		8
TOTAL	234	201	35	122	12	604	221	38	143	8	612								

Source : The Team

Note : Car, Jeep, Pick-up, Van 4 : Truck, Trailer

2 : Jeepney 5 : Motorcycle, Tricycle

3 : Bus

APPENDIX 4.3-4

TRAFFIC COUNT SUMMARY

STATION NO. 04 LOCATION RABBIT STATION (TUBA, AGOO-BAGUIO ROAD)
 DATE 6-27-83 Monday

HOUR	DIRECTION		AGOO			BAGUIO			BAGUIO			AGOO				
	FROM	TO	1	2	3	4	5	Total	FROM	TO	1	2	3	4	5	Total
00 - 01																
01 - 02																
02 - 03	1							1								
03 - 04		1				1		1							1	2
04 - 05	1			2				3								
05 - 06				4				4								
06 - 07	2			4				6								9
07 - 08	3			6				9					1			7
08 - 09	5			7		1		13								8
09 - 10	4			4				8						1		16
10 - 11	3			4	1			8								10
11 - 12				4		2		6								16
12 - 13	4			2				6								7
13 - 14	6			1				7								9
14 - 15	2			4		2		8								15
15 - 16	3			3		1		7								10
16 - 17	4			3		2		9								4
17 - 18	2			1				3								5
18 - 19	2			2				4								10
19 - 20	1							1								6
20 - 21	6							6								3
21 - 22	1				1			2								2
22 - 23	1			1				2								2
23 - 24																2
TOTAL	51		52	2	10			115	84		39	4	16	1		144

Source : The Team
 Note : Car, Jeep, Pick-up, Van 4 : Truck, Trailer
 2 : Jeepney 5 : Motorcycle, Tricycle
 3 : Bus

TRAFFIC COUNT SUMMARY

APPENDIX 4.3-5

STATION NO. 05 LOCATION CHECK POINT (KENNON ROAD)

DATE 6-28-83 Tuesday

HOUR	DIRECTION		MANILA					BAGUIO					TO					Total
	FROM	TO	1	2	3	4	5	Total	FROM	TO	1	2	3	4	5	Total		
00 - 01	6	3				4		13	2	2				6		10		
01 - 02	3	1				7		11	5			1	2		8			
02 - 03	5	2			4	5		16	4			2			6			
03 - 04	2	5		1	2	2		10	4			2			6			
04 - 05		7		5	5			17	9			2	8		19			
05 - 06	4	6		8	10			28	21			2	12	2	38			
06 - 07	11	3		4	14			32	11			2	12	2	28			
07 - 08	20	3		9	6			38	15				15	8	38			
08 - 09	29	6		7	12			54	29			4	19	5	57			
09 - 10	30	3		13	7			53	32			4	17	10	63			
10 - 11	29	1		8	9			47	31			4	15	18	68			
11 - 12	30	3		13	7			53	43			2	14	12	71			
12 - 13	24	3		22	9			58	27			3	13	9	52			
13 - 14	21			17	3			41	36			4	19	12	71			
14 - 15	31			19	7			57	35			2	24	14	75			
15 - 16	27			15	7			49	36			3	17	7	63			
16 - 17	32	3		12	8			55	40			8	16	4	68			
17 - 18	33	1		12	4			50	17			6	12	9	44			
18 - 19	28	19		11	9			67	19			12	15	14	60			
19 - 20	19	7		8	7			41	7			3	2	7	21			
20 - 21	22	4		8	2			38	8			7	3	8	26			
21 - 22	15	5		9	6			35	4			6	2	1	13			
22 - 23	5			6	3			14	4			3	4	2	13			
23 - 24	5	2		5	4			16	4			3	4		11			
TOTAL	431	87		216	157			893	443			82	248	151	929			

Source : The Team

Note : Car, Jeep, Pick-up, Van

4 : Truck, Trailer

2 : Jeepney

5 : Motorcycle, Tricycle

3 : Bus

TRAFFIC COUNT SUMMARY

APPENDIX 4.3 - 6

STATION NO: 06 LOCATION LIGAO, ALBAY (MAHARLIKA HIGHWAY)

DATE 7-4-83 Monday

HOUR	DIRECTION		LIGAO					GUINOBATAN					LIGAO							
	FROM	TO	1	2	3	4	5	Total	1	2	3	4	5	Total	1	2	3	4	5	Total
00 - 01	6	8	12	9	8	43	5	20												
01 - 02	5	8	10	12	35	4	26													
02 - 03	6	2	13	6	10	37	3	29												
03 - 04	3	2	4	5	3	17	8	38												
04 - 05	3	8	4	2	19	5	58													
05 - 06	10	9	7	14	4	44	4	27												
06 - 07	14	9	16	2	12	53	37	84												
07 - 08	21	13	18	7	10	69	32	90												
08 - 09	41	17	17	11	12	98	32	85												
09 - 10	32	26	13	11	16	98	39	94												
10 - 11	34	18	14	11	14	91	28	90												
11 - 12	29	17	11	4	13	74	30	81												
12 - 13	21	16	13	10	3	63	15	67												
13 - 14	18	14	10	5	7	54	43	95												
14 - 15	29	18	10	7	11	75	46	97												
15 - 16	26	16	10	9	11	72	34	79												
16 - 17	34	23	13	8	11	89	25	76												
17 - 18	28	13	9	6	8	64	32	86												
18 - 19	12	8	5	2	22	49	16	60												
19 - 20	10	9	9	2	56	86	25	102												
20 - 21	23	1	1	2	42	69	16	72												
21 - 22	7	5	1	7	17	37	13	53												
22 - 23	10	1	8	8	9	36	8	53												
23 - 24	7		10	7		24	5	23												
TOTAL	429	253	236	165	313	1396	505	15459												

Source : The Team

Note : Car, Jeep, Pick-up, Van

2 : Jeepney

3 : Bus

4 : Truck, Trailer

5 : Motorcycle, Tricycle

APPENDIX 4.3-7

TRAFFIC COUNT SUMMARY

STATION NO. 07 LOCATION BRGY. TRINIDAD, WESTERN SAMAR (MAHARLIKA HIGHWAY)

DATE 7-6-83 Wednesday

DIRECTION TYPE	FROM CALBAYOG			TO ALLEN			FROM ALLEN			TO CALBAYOG		
	1	2	3	4	5	Total	1	2	3	4	5	Total
01-01			2		1	3						1
01-02	1	1	1			3	1					1
02-03		3		1		4	1					1
03-04		1		2		3	1				3	4
04-05	1		1			2					4	4
05-06	6				14	20	1				8	9
06-07	3	5		1	22	31	2	8		2	30	42
07-08	5	6	1	5	34	51	6	9	2	3	30	50
08-09	6	6	1	11	27	51	9	9	5	10	24	57
09-10	6	5	1	12	17	41	8	11	5	8	14	46
10-11	12	3	6	6	24	51	4	7	1	4	23	39
11-12	4	10	1	3	29	47	16	8	3	10	22	59
12-13	7	8		5	16	36	8	9		3	17	37
13-14	5	6	1	5	14	31	2	2	1	4	15	24
14-15	13	6		5	16	40	10	7	3	5	19	44
15-16	4	5		6	31	46	9	6	1	10	18	44
16-17	12	9		4	20	45	9	7		7	27	50
17-18	7	7	1	1	25	41	6	7		5	24	42
18-19	7			1	16	24	6	3		3	12	24
19-20	5				7	12	4	3	5	1	5	18
20-21	2	3			7	12	3		1	1	7	12
21-22	2				5	8	2	1	2		1	6
22-23		1		1		2				1	1	2
23-24			1	3	2	6	1				1	2
TOTAL	108	85	17	72	328	610	109	97	29	77	307	619

Source : The Team

Note : Car, Jeep, Pick-up, Van

2 : Jeepney

3 : Bus

4 : Truck, Trailer

5 : Motorcycle, Tricycle

APPENDIX 4.3 - 8

TRAFFIC COUNT SUMMARY

STATION NO. 08 LOCATION MAHAPLAG JUNCTION BRGY. CUATRO DE AGOSTO, LEYTE (MAHARLIKA HIGHWAY)
 DATE 7-11-83 Monday

DIRECTION TYPE	FROM MAHAPLAG			TO SOGOD			FROM	SOGOD			TO MAHAPLAG	Total
	1	2	3	4	5	6		7	8	9		
00 - 01							1					
01 - 02												
02 - 03												
03 - 04												
04 - 05							1	1				8
05 - 06				1				6				7
06 - 07			1				1	5				6
07 - 08	3				10		5	1				13
08 - 09	1			1			2	8				10
09 - 10	4	1	2				1	9				16
10 - 11	2	1					1	9			2	12
11 - 12		1		2			1	8				11
12 - 13	1			1			1	6				8
13 - 14	1						2	2				3
14 - 15	1	1		2			2	5				9
15 - 16			1				2	5				7
16 - 17	2			2			1	2			1	6
17 - 18	1	1	1				2	5				9
18 - 19	1	1					2	5				7
19 - 20		1						3				4
20 - 21								1				1
21 - 22								1				1
22 - 23												
23 - 24												
TOTAL	17	7	5	10	87	126	20	10	6	5	148	189

Source : The Team
 Note : 1 : Car, Jeep, Pick-up, Van 4 : Truck, Trailer
 2 : Jeepney 5 : Motorcycle, Tricycle
 3 : Bus

APPENDIX 4.4 - I SURPLUS/DEFICIT ANALYSIS OF SUGAR
by REGION, 1981

Region	Population	Production	Industrial Use ^{1/}	Direct Use	Total	Export	Supply	Surplus (Deficit)
LUZON	26861	548	440	295	735	42	506	(229)
Ilocos	3608	-	22	36	58	-	-	(58)
Cagayan Valley	2281	25	14	23	37	-	25	(12)
Central Luzon	4939	202	30	49	79	-	202	123
Southern Luzon	12480	321	374	187	561	42	279	(282)
M. M.	6139	-	173	74	247	13	(13)	(260)
IV - A	4888	292	138	58	196	29	263	67
IV - B	1453	-	41	17	58	-	-	(58)
Bicol Region	3553	29	22	38	60	-	29	(31)
VISAYAS	1640	1640	70	98	168	942	698	530
Western Visayas	4626	1380	28	42	70	800	580	510
Central Visayas	3869	197	24	31	55	110	87	32
Eastern Visayas	2861	63	18	25	43	32	31	(12)
MINDANAO	129	129	69	112	181	100	29	(152)
Western Mindanao	2587	-	16	30	46	-	-	(46)
Northern Mindanao	2845	84	18	25	43	100	(16)	(59)
Eastern Mindanao	3462	21	21	32	53	-	21	(32)
Central Mindanao	2314	24	14	25	39	-	24	(15)
PHILIPPINES	50635	2317	579	505	1084	1084	1233	149

^{1/}Based on the assumption that 75% of total consumption goes for Luzon, 24% for Visayas and Mindanao.

Source: Philippine Sugar Commission
National Sugar Trading Corporation

APPENDIX 4.4 -2 RICE SURPLUS/DEFICIT ANALYSIS
BY REGION

	Per Capita Consumption	Total Population (Thousand) 1980	Total Consumption (M. T.) 1980	Total Rice Supply (M. T.) 1980	Surplus/Deficit (M. T.) 1980
I Ilocos	119.3	3551	423634	370301	(53333)
II Cagayan Valley	86.4	2226	192326	447465	255139
III Central Luzon	102.5	4818	493845	658696	164851
IV-A Metro Manila	88.2	5949	524702	-	(524702)
IV-B Southern Luzon	100.7	6159	620211	475917	(144294)
V Bicol	97.3	3485	339091	362111	23020
VI Western Visayas	103.0	4526	466178	616450	150272
VII Central Visayas	38.9	3787	147314	95702	(51612)
VIII Eastern Visayas	89.4	2806	250856	159502	(91354)
IX Western Mindanao	70.0	2528	176960	202609	25649
X Northern Mindanao	66.0	2759	152724	152603	(121)
XI Eastern Mindanao	86.5	3947	299515	325468	35953
XII Central Mindanao	96.8	2271	219833	444017	224184
P h i l i p p i n e s	90.3	48213	4353634	4310841	(42793)

APPENDIX 4.4-3 SURPLUS/DEFICIT ANALYSIS OF MEAT BY REGION, 1980

	Total Supply ^{1/} (M.T.)	Total Consumption ^{2/}	Surplus/ Deficit
Ilocos	33,440	61,148	12,292
Cagayan Valley	75,990	38,332	37,658
Central Luzon	100,400	82,966	16,434
Metro Manila	-	102,442	(102,442)
Southern Luzon	116,325	106,058	10,267
Bicol	60,385	60,012	373
Western Visayas	67,675	77,938	(10,263)
Central Visayas	75,645	65,212	10,433
Eastern Visayas	60,702	48,319	12,401
Western Mindanao	42,025	43,532	(1,507)
Northern Mindanao	65,920	47,510	18,410
Southern Mindanao	69,125	57,635	11,490
Central Mindanao	32,850	49,107	(6,257)
Philippines	837,600	830,228	7,372

^{1/}Regional breakdown were interpolated based on the available 1980 national meat production figure and available regional livestock and poultry inventory as of 1980. Including 20,000 M.T. import.

^{2/}Consumption was based on per capita consumption by region excluding canned and processed meat. Surplus may be assumed to go for meat processing.

Source: 5-Year Agricultural Plan Projection
Ministry of Agriculture

Livestock Inventory, 1980
Bureau of Agricultural Economics

APPENDIX 4.4 - 4 SURPLUS/DEFICIT ANALYSIS OF VEGETABLES BY REGION

	Production Vegetables ('000 M.T.)	Total ^{1/} Consumption ('000 M.T.)	Surplus (Deficit)	Export	Seed	Feed and Waste
Ilocos	119	106	13			
Cagayan	29	66	(37)			
Central Luzon	62	144	(82)			
Metro Manila	-	178	(178)			
Southern Luzon	68	184	(116)			
Bicol	254	104	150			
Western Visayas	83	135	(52)			
Central Visayas	70	113	(43)			
Eastern Visayas	146	84	62			
Western Mindanao	120	75	45			
Northern Mindanao	120	82	38			
Southern Mindanao	66	100	(34)			
Central Mindanao	416	68	348			
P h i l i p p i n e s	1553	1446	107	3	2	120

^{1/}Per capita consumption estimated at 30 kgm.

APPENDIX 4.4.-5 SURPLUS/DEFICIT ANALYSIS OF FISH BY REGION, 1980
(In Thousand Metric Tons)

Region	Total Supply	Total ^{1/} Consumption	Surplus (Deficit)
Philippines	1642	1639	3
Ilocos	26	121	(95)
Cagayan Valley	6	76	(70)
Central Luzon	56	164	(108)
Southern Luzon	204	209	(5)
Bicol	208	118	90
Western Visayas	317	154	163
Central Visayas	78	129	(51)
Eastern Visayas	64	95	(31)
Western Mindanao	353	86	267
Northern Mindanao	77	94	(17)
Southern Mindanao	70	114	(44)
Central Mindanao	26	77	(51)
Metro Manila	157	202	(45)

^{1/} Based on the national per capita consumption of 34 kg.

Source: 5-Year Agricultural Plan Projection

APPENDIX 4.4 -6

Surplus/Deficit Analysis of Domestic Cement Consumption, 1980
(In Metric Tons)

REGION	Total No. of Construction	Percent (%) Distribution	D O M E S T I C		Surplus/Deficit
			Sales ^{1/}	Consumption ^{2/}	
NCR	8,902	26.0	-	1,073,322	(1,073,322)
I	1,762	5.2	559,117	169,281	389,836
II	2,139	6.3	-	175,011	(175,011)
III	2,829	8.3	843,054	300,761	542,293
IV	4,539	13.3	1,356,691	477,070	879,621
V	1,212	3.5	-	122,573	(122,573)
VI	2,274	6.6	-	219,551	(219,551)
VII	1,848	5.4	236,757	178,648	58,109
VIII	1,183	3.5	-	134,798	(134,798)
IX	1,206	3.5	-	130,446	(130,446)
X	2,030	5.9	238,696	209,503	29,193
XI	2,715	7.9	112,666	293,626	(180,960)
XII	1,526	4.5	299,492	161,883	137,609
PHILIPPINES	34,165	100.0	3,646,473	3,646,473	0

SOURCES: 1. National Census and Statistics Office (NCSO) for data on Construction
2. Philippine Cement Corp. (PHILCEM CORP) on Domestic Sales, 1980.

Note: ^{1/} Domestic sales based on data presented in Table 2-4-21 on production and sales of cement companies in 1980 wherein supply is equal to demand.

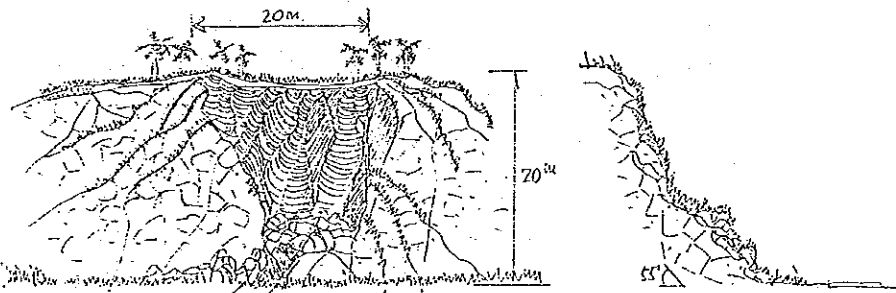
^{2/} Domestic consumption based on Regional share to total number of construction in the country, 1980.

APPENDICES FOR CHAPTER 5

5 - 1	Examples of Check Tables By Type of Disaster	-	41
5 - 2	Summary Table of Disaster	- - - - -	46
5 - 3	Road Disaster Diagram	- - - - -	83

APPENDIX 5.1-1 CHECK TABLE OF SLOPE FAILURE

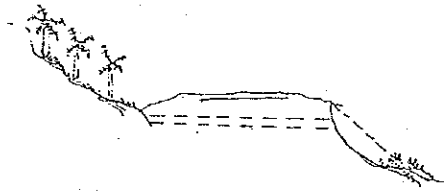
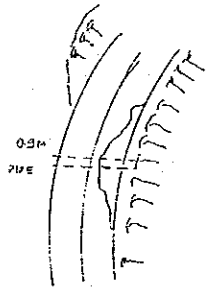
Route				Sheet No.	S-93	
M.H (711-72)		Km. Post	1005.850	Width	40 M	
		Region	VIII			
Evidence of Failure	1	Kind of Slope	<input checked="" type="checkbox"/> Cut Slope (2) Natural Slope			
	2	Kind of Failure	<input checked="" type="checkbox"/> (1) Nothing <input checked="" type="checkbox"/> (2) Surface Failure (3) Deep Failure			
	3	Size of Failure	<input checked="" type="checkbox"/> (1) 50^{m^3} > (2) $50^{m^3} \sim 500^{m^3}$ (3) $500^{m^3} \sim 2,000^{m^3}$ (4) $2,000^{m^3}$ <			
	4	Date Occured	Day Month Year			
	5	Traffic Interruption Period	<input checked="" type="checkbox"/> (1) 1 day > (2) 1 day ~ 7 days (3) 7 days <			
	6	Counter Measure Taken	<input checked="" type="checkbox"/> (1) Structure () <input checked="" type="checkbox"/> (2) Removal of Slide Materials (3) Others			
	7	Rainfall Intensity/Day	<input checked="" type="checkbox"/> (1) 100 mm > (2) $100^{mm} \sim 200^{mm}$ (3) $200^{mm} \sim 300^{mm}$ (4) 300^{mm} <			
Existing Slope Condition	8	Height	<input checked="" type="checkbox"/> (1) 10^m > <input checked="" type="checkbox"/> (2) $10^m \sim 30^m$ (3) $30^m \sim 50^m$ (4) 50^m <			
	9	Gradient	<input checked="" type="checkbox"/> (1) 45 > <input checked="" type="checkbox"/> (2) 45 ~ 60 (3) 60 < (4) Overhung			
	10	Berm	<input checked="" type="checkbox"/> (1) Existing Number () Width () <input checked="" type="checkbox"/> (2) Nothing			
Geological Condition	11	Slope Protection	<input checked="" type="checkbox"/> (1) Structure () <input checked="" type="checkbox"/> (2) Vegetation (3) Nothing			
	12	Hardness	<input checked="" type="checkbox"/> (1) Hard Rock <input checked="" type="checkbox"/> (2) Soft Rock			
	Rock	13	Name	(1) Granite (2) Diorite (3) Diabase (4) Andesite (5) Dacite (6) Schist (7) Slate <input checked="" type="checkbox"/> (8) Limestone (9) Schalstein (10) Tuff (11) Tuffbreccie (12) Sandstone (13) Shale (14) Mudstone (15) Conglomerate (16) Masa (17) Volcaniclastics		
		14	Weathering Condition	<input checked="" type="checkbox"/> (1) Fresh (2) Slightly Weathered (3) Highly Weathered <input checked="" type="checkbox"/> (4) Nearly Soil		
	Soil	15	Condition of Crack	<input checked="" type="checkbox"/> (1) Sparse (2) Regular <input checked="" type="checkbox"/> (3) Developed		
		16	Direction of Crack	<input checked="" type="checkbox"/> (1) Inclined to Mountain <input checked="" type="checkbox"/> (2) Irregular Inclination (3) Inclined to Slope		
		17	Thickness	<input checked="" type="checkbox"/> (1) 5^m > (2) $5^m \sim 10^m$ (3) $10^m \sim 20^m$ (4) 20^m <		
18		Compactness	<input checked="" type="checkbox"/> (1) Tight <input checked="" type="checkbox"/> (2) Slightly loose (3) Loose			
Water Condition	19	Degree of Saturation	<input checked="" type="checkbox"/> (1) Dry <input checked="" type="checkbox"/> (2) Wet (3) Seepage (4) Spring			
	20	Surface Water Concentration	<input checked="" type="checkbox"/> (1) None <input checked="" type="checkbox"/> (2) Low (3) High			
	21	Drainage Facilities	<input checked="" type="checkbox"/> (1) Existing () <input checked="" type="checkbox"/> (2) Nothing			
Engineering Judgment	22	Impact to Road	<input checked="" type="checkbox"/> (1) Low (2) Average (3) High			
	23	Cause of Disaster				
	24	Counter Measure				
Sketch, etc.				Photo No.		



Date of Survey	Day 11	Month June	Year 1983	Surveyor	E. IWATA
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APPENDIX 5.1-2 CHECK TABLE OF EMBANKMENT
SLOPE FAILURE

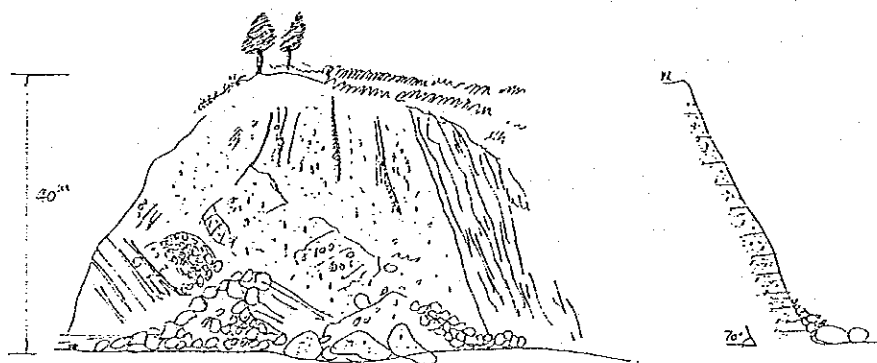
						Sheet No.	3-2A
Route	MH (VII - 51)	Km. Post	809.000	Width	25 M	Region	VII
Evidence of Failure	1	Kind of Slope	<input checked="" type="checkbox"/> Embankment Slope	(2) Natural Slope	(3) Overflow Section	(5) Others	
	2	Location	(1) Approach of Bridge	(2) Adjacent to River or Sea	<input checked="" type="checkbox"/> Inside of Curve	(4) Others	
	3	Size of Disaster	<input checked="" type="checkbox"/> 50 ^{m3} >	(2) 50 ^{m3} ~ 100 ^{m3}	(3) 100 ^{m3} <		
	4	Date Occured	Day	Month	Year		
	5	Traffic Interruption Period	(1) 1 day >	(2) 1 day ~ 7 days	(3) 7 days <		
	6	Counter Measure Taken	<input checked="" type="checkbox"/> Only Fill	(2) Riorao	(3) Other Structure ()		
	7	Rainfall Intensity/Day	(1) 100 ^{mm} >	(2) 100 ^{mm} ~ 200 ^{mm}	(3) 200 ^{mm} ~ 300 ^{mm}	(4) 300 ^{mm} <	
Existing Slope Condition	8	Slope Height	<input checked="" type="checkbox"/> 5 ^m >	(2) 5 ^m ~ 10 ^m	(3) 10 ^m <		
	9	Slope Gradient	(1) 45° >	<input checked="" type="checkbox"/> 45° ~ 60°	(3) 60° <		
	10	Surface Water Concentration	(1) None	(2) Low	<input checked="" type="checkbox"/> High		
	11	Slope Protection	(1) Nothing	<input checked="" type="checkbox"/> Vegetation	(3) Riorao	(4) Other Structure ()	
Engi- neering Judge- ment	12	Drainage Facilities	<input checked="" type="checkbox"/> Nothing	(2) Existing			
	13	Impact to Road	<input checked="" type="checkbox"/> Low	(2) Average	(3) High		
	14	Cause of Disaster	(1) Concentration of Surface Water	(2) River Stream	(3) Sea Wave	(4) Others	
	15	Counter Measure					
Sketch, etc.						Photo No.	



Date of Survey	Day 14	Month June	Year 1983	Surveyor	B./WATA
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APPENDIX 5.1-3 CHECK TABLE OF FALL

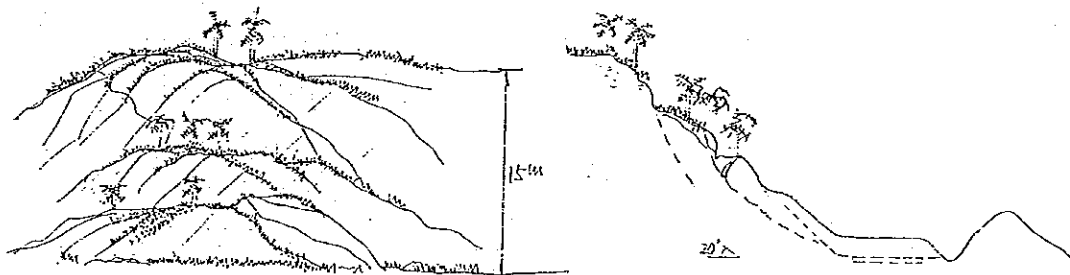
Route		Km. Post	Width	Sheet No.		
M (IM-39)		273.350	50 M	B-54		
Region		E				
Evidence of Falls	1 Kind of Slope	<input checked="" type="checkbox"/> Cut Slope	(2) Natural Slope			
	2 Type of Fall	(1) Debris Fall	<input checked="" type="checkbox"/> Rock Fall			
	3 Fallen Rock Size	(1) 20 ^m >	(2) 20 ^m ~ 50 ^m	<input checked="" type="checkbox"/> 50 ^m <		
	4 Date Occured	Day	Month	Year		
	5 Traffic Interruption Period	(1) 1 day >	(2) 1 day ~ 7 days	(3) 7 days <		
	6 Counter Measure Taken	(1) Structure ()	(2) <input checked="" type="checkbox"/> Removal of Fallen Rock	(3) Others		
	7 Rainfall Intensity/Day	(1) 100 ^{mm} >	(2) 100 ^{mm} ~ 200 ^{mm}	(3) 200 ^{mm} ~ 300 ^{mm}	(4) 300 ^{mm} <	
Existing Slope Condition	8 Slope Height	(1) 10 ^m >	(2) 10 ^m ~ 30 ^m	(3) <input checked="" type="checkbox"/> 30 ^m ~ 50 ^m	(4) 50 ^m <	
	9 Slope Gradient	(1) 45 >	(2) 45 ~ 60	(3) <input checked="" type="checkbox"/> 60 <	(4) Overhung	
	10 Degree of Saturation	<input checked="" type="checkbox"/> Dry	(2) Wet	(3) Seepage	(4) Spring	
	11 Surface Water Concentration	<input checked="" type="checkbox"/> None	(2) Low	(3) High		
	12 Berm	(1) Existing Number () With ()	<input checked="" type="checkbox"/> Nothing			
	13 Slope Protection	(1) Structure ()	(2) Vegetation	<input checked="" type="checkbox"/> Nothing		
	14 Drainage Facilities	(1) Existing ()	<input checked="" type="checkbox"/> Nothing			
Geological Condition	Debris Fall	15 Matrix Condition	(1) Hard	(2) Soft	(3) Loose (4) Loose with detached cabbles	
		16 Gully	(1) Rare	(2) Common	(3) Frequently	
		17 Detached Rock or cabbles	(1) Nothing	(2) Supported Stably	(3) Supported Unstably	
	Rock Fall	18 Rock Name	(1) Granite (2) Diorite (3) Diabase (4) Andesite (5) Dacite (6) Schist (7) Slate (8) Limestone (9) Schalstein (10) Tuff (11) Tuffbreccie (12) Sandstone (13) Shale (14) Mudstone (15) Conglomerate (16) Masa (17) Volcaniclastics			
		19 Weathering Condition	(1) Fresh	(2) <input checked="" type="checkbox"/> Slightly Weathered	(3) Highly Weathered	
		20 Condition of Crack	(1) Soarse	(2) <input checked="" type="checkbox"/> Regular	(3) Developed	
		21 Direction of Crack	<input checked="" type="checkbox"/> Inclined to Mountain	(2) Irregular Inclination	(3) Inclined to Slope	
Engi- neering Judge- ment	22 Impact to Road	(1) Low	(2) <input checked="" type="checkbox"/> Average	(3) High		
	23 Cause of Fall					
	24 Counter Measure					
Sketch, etc.			Photo No.			



Date of Survey	Day 5	Month July	Year 1983	Surveyor	B. MATA
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APPENDIX B.1-4 CHECK TABLE OF LANDSLIDE

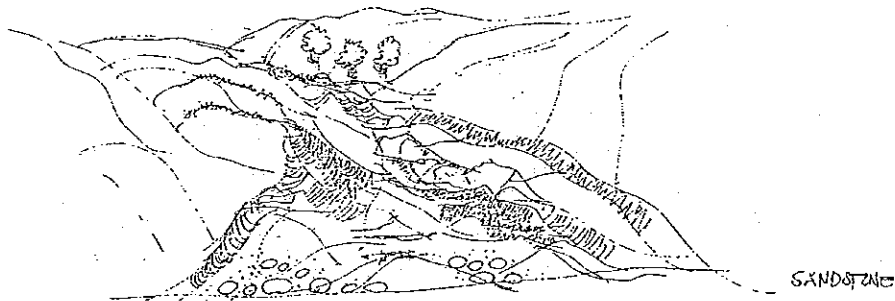
Route		Km. Post	Width	Sheet No.
M.H (VII-71)		1005, 100	50 M	S-92
				Region VII
Evidence of Landslide	1	Kind of Slope	(<input checked="" type="checkbox"/>) Cut Slope (<input checked="" type="checkbox"/>) Natural Slope	
	2	Kind of Landslide	(1) Rock (2) Talus (<input checked="" type="checkbox"/>) Soil	
	3	Size of Landslide	(1) 2,000 ^{m2} > (<input checked="" type="checkbox"/>) 2,000 ^{m2} ~ 5,000 ^{m2} (3) 5,000 ^{m2} <	
	4	Date Occured	Day Month Year 1981, begin landslide	
	5	Traffic Interruptions Period	(1) day > (2) 1 day ~ 7 days (3) 7 days < 82 (during) / week slope	
	6	Rainfall Intensity/Day	(1) 100 mm > (2) 100 ^{mm} ~ 200 ^{mm} (3) 200 ^{mm} ~ 300 ^{mm} (4) 300 ^{mm} <	
Topographic and Geological Condition	7	Existence of irregular surface with steps, sharp cliff and gullies	(1) Unnoticed (2) Medium (<input checked="" type="checkbox"/>) Remarkable	
	8	Geology	(1) Others (2) Sedimentary Rock (<input checked="" type="checkbox"/>) Highly Weathered Sedimentary Rock or Talus or Soil	
Others Condition	9	Degree of Saturation	(1) Dry (2) Wet (3) Seepage (<input checked="" type="checkbox"/>) Spring	
	10	Gradient of Slide Plane	(1) 10° > (<input checked="" type="checkbox"/>) 10° ~ 20° (3) 20° <	
	11	Continuity of Slide Movement	(1) Unnoticed (2) Medium (<input checked="" type="checkbox"/>) Remarkable	
Engineering Judgement	12	Impact to Road	(1) Low (2) Average (<input checked="" type="checkbox"/>) High	
	13	Cause of Landslide		
	14	Counter Measure		
Sketch, etc.			Photo No.	



Date of Survey	Day 11	Month June	Year 1983	Surveyor	B. WATA
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APPENDIX 6.1-5 CHECK TABLE OF DEBRIS FLOW

							Sheet No.	N-73
Route	M.H (II-11)	Km. Post	22/200	Width	/20 M	Region	II	
Evidence of Debris Flow	1	Existence of Depositional Toe	(1) Nothing	(2) Existing				
	2	Size of Disaster	(1) 50 ^{m3} >	(2) 50 ^{m3} ~ 500 ^{m3}	(3) 500 ^{m3} ~ 2,000 ^{m3}	(4) 2,000 ^{m3} <		
	3	Date Occured	Day	Month	Year 1980 (Arim)			
	4	Traffic interruption Period	(1) 1 day >	(2) 1 day ~ 7 days (3) 7 days <				
	5	Counter Measure Taken	(1) Structure ()	(2) Removal of Deposit Materials		(3) Others		
	7	Rainfall Intensity/ Day	(1) 100 mm >	(2) 100 ^{mm} ~ 200 ^{mm}	(3) 200 ^{mm} ~ 300 ^{mm}	(4) 300 ^{mm} <		
	Existing Stream Condition	8	Average Gradient	(1) 20° >	(2) 20° <			
9		Area of Basin	(1) 0.24 Km ² >	(2) 0.24 Km ² <				
10		Deposit on River Bed	(1) Nothing	(2) Rare	(3) Abundance			
Engineering Judgment	11	Plant Condition	(1) 50% > Occupancy Rate of Bare Land or Thin Forest			(2) 50% <		
	12	Impact to Road	(1) Low	(1) Average	(3) High			
	13	Cause of Disaster						
	14	Counter Measure						
Sketch, etc.						Photo No.		



Date of Survey	Day 26	Month June	Year 1983	Surveyor	B. IWATA
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APPENDIX 5.2 SUMMARY TABLE OF DISASTER (1)

Region III

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Bulacan 38.9~84.476 Nueva Ecija 84.476~109.186	III-1	77.000	O.F	Length: 1.0 km. Depth: 1.0m above road elevation. Improvement of Pampanga River is required.	S	-	M-8	July 16/82
	-2	113.000	O.F	Length: 6.0 km. Fully closed for 2 weeks. Improvement of Pampanga River is required.	S	-	M-7	Kading & Aring
	-3	122.300	O.F	Length: 100m. Additional Culverts are needed.	M	-	"	Kading
San Jose 152.502~171.077	-4	167.600	C-F	Height: 25m. Width: 500m. Fallen rock size: 20~50cm. Fully closed for 2 weeks.	M	N-1	M-6	Didang
	-5	167.850	E-D.F	Scouring of shoulder. Under repair.	S	-	"	-
	-6	167.900	C-S.F	Height: 30m. Width: 80m. Fully closed for 2 weeks.	H	-2	"	Didang
Nueva Ecija 171.077~208.934	-7	168.100	C-S.F	Height: 30m. Width: 50m. One lane closed.	M	-3	"	Didang
	-8	169.600	C-S.F	Height: 15m. Width: 20m.	S	-	"	-
	-9	169.700	C-S.F	Height: 15m. Width: 20m.	S	-	"	-
Nueva Ecija 171.077~208.934	-10	170.400	C(N)-D.F	Height: 50m. Width: 20m. One lane closed.	M	-4	"	Didang
	-11	170.700	E-D.F	Height: 30m. Width: 100m. Scouring of riprap.	M	-	"	-
	-12	170.800	C-S.F	Height: Cut-20m. Natural-30m. Fully closed for 1 month. Width: 140m.	H	-5	"	Didang
Nueva Ecija 171.077~208.934	-13	171.200	E-D.F	Height: 30m. Width: 80m. Scouring potential exists.	S	-	"	-
	-14	171.200	C-S.F	Height: 80m. Width: 150m. Fully closed for 1 month.	H	-6	"	Aring
	-15	172.500	C(N)-D.F	Height: 80m. Width: 40m. One lane closed.	M	-7	"	Didang
Nueva Ecija 171.077~208.934	-16	172.900	C-S.F	Height: 40m. Width: 80m. Surface erosion.	S	-8	"	-

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 O.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (2)

Region III

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	III-17	173.350	C-S.F	Height: 35m. Width: 60m. Fully closed for 1 day.	M	N-9	M-6	Didang
	-18	173.450	D.F	Width: 10m. One lane closed every year.	M	-10	"	Every Year
	-19	173.650	C-S.F	Height: 20m. Width: 40m. Covered at shoulder only.	S	-11	"	Didang
	-20	177.400	E-D.F	Approach of Pungkan Bridge Expansion of bridge has completed.	S	-	"	Aring
	-21	181.600	D.F	Width: 20m. Occur due to feeder road scouring every typhoon.	S	-12	"	Every Typhoon
	-22	185.500	C-S.F	Height: 30m. Width 100m. One lane closed.	M	-13	"	Every heavy rain
	-23	185.900	C-S.F	Height: 20m. Width 100m. Covered at shoulder only.	S	-14	"	-
	-24	186.400	E-D.F	Height: 10m. Width: 30m. scouring by river. Under repair with parap.	S	-	"	-
	-25	186.400	C-S.F	Height: 60m. Width: 130m. One lane closed.	M	-15	"	Didang
	-26	186.600	C-S.F	Height: 50m. Width: 80m. One lane closed.	M	-16	"	Didang
	-27	187.200	C-S.F	Height: 45m. Width: 120m. Small failures occur every heavy rain. One lane closed.	M	-17	"	Didang
	-28	187.300	C-S.F	Height: 40m. Width: 200m. Small failures occur every heavy rain. Closed for 2 weeks.	H	-18	"	Didang
	-29	187.600	C-D.F	Height: 7m.~20m. Width: 50m. Large scale of failure occurred on Didang, but stable now.	S	-19	"	Didang
	-30	187.800	C-S.F	Height: 30m. Width: 60m. only erosion.	S	-	"	-
	-31	188.000	C-S.F	Height: 40m. Width: 150m. One lane closed.	M	-20	"	Didang
	-32	188.100	E-D.F	Height: 20m. Width: 40m. Scouring potential by river exists.	M	-	"	Didang

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)

E - S.F = Surface Failure
 E - D.F = Deep Failure

Others

L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)

H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (3)

Region III

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	111-33	188.200	C-S.F	Height: 15m. Width: 40m. Failed mass covered at shoulder ONLY.	S	11-21	M-6	Didang
	-34	188.300	E-D.F	Height: 5m. Width: 20m. Shoulder scouring.	S	-	"	No picture
	-35	188.400	C-S.F	Height: 20m. Width: 50m. Only erosion.	S	-22	"	Didang
	-36	188.700	D.F	Width: 10m. Narrow stream. One lane closed.	M	-23	"	Didang Aring 1980
	-37	189.800	C-F	Height: 20m. Width: 50m. Small size of fallen rocks.	S	-24	"	Didang
	-38	189.900	C-S.F	Height: 25m. Width: 60m. Fully closed for 2 weeks.	H	-25	"	Didang 1980
	-39	190.200	C-S.F	Height: 20m. Width: 40m. Only erosion.	S	-26	"	Didang
	-40	190.500	D.F	Width: 10m. Steep stream.	S	-27	"	-
	-41	190.750	C-S.F	Height: 20m. Width: 80m. One lane closed.	M	-28	"	Didang
	-42	190.850	D.F	Width: 10m. Steep stream.	S	-29	"	Didang
	-43	190.900	C-S.F	Height: 30m. Width: 80m. One lane closed.	M	-30	"	Didang 1980
	-44	192.100	C(N)-S.F	Height: 30m. Width: 20m. Erosion.	S	-31	"	Didang
	-45	192.600	C-S.F	Height: 10m. ~ 15m. Width: 100m. erosion.	S	-	"	-
	-46	192.700	C-S.F	Height: 40m. Width: 120m. One lane closed.	M	-32	"	Didang
	-47	193.000	C-S.F	Height: 25m. Width: 60m. One lane closed.	M	-33	"	Didang
	-48	193.300	E(N)-D.F	Height: 15m. Width: 20m. Scouring potential is expected.	M	-34	"	-

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTERS (4)

Region III

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	III-49	194.000	E(N)-D.F	Height: 15m. Width: 20m. Scouring potential is expected, but existing shoulder is wide. Width: 100m.	S	N-35	M-6	-
	-50	194.400	D.F	Closed for 2 weeks on Didang. Fairly stable now.	M	-36	"	Didang
	-51	195.600	C-F	Height: 25m. Width: 50m. Narrow shoulder: 2.0m.	M	-37	"	-
	-52	195.750	C-S.F	Height: 15m. Width: 30m. Slow gradient: 450m.	S	-	"	Didang
	-53	195.850	D.F	Width: 20m. One lane closed.	M	-38	"	Every Year
	-54	195.900	C-S.F	Height: 15m. Width: 60m. Thick top soil layer exists.	M	-39	"	-
	-55	196.050	C-S.F	Height: 25m. Width: 60m. One lane closed.	M	-40	"	Every Year
	-56	196.100	C-D.F	Height: 25m. Width: 50m. Soil slope. One lane closed.	M	-41	"	-
	-57	196.600	C-F	Height: 30m. Width: 70m. Fallen rock size: 1.5m. Shoulder is wide.	S	-42	"	-
	-58	196.500	C-S.F	Height: 45m. Width: 60m. One lane closed on Didang. Fairly stable now.	S	-43	"	Didang
	-59	197.000	C-S.F	Height: 15m. Width: 30m. Fairly stable now.	S	-	"	-
	-60	197.100	C-S.F	Height: 35m. Width: 50m. Shoulder is wide.	S	-44	"	Didang
	-61	197.700	O.F	Length: 500m. Depth: 0.5m. above road elevation. Lacking of cross drainage.	M	-	"	2-3 hours. Unpassable every hour near rain
	-62	201.300	C-S.F	Height: 25m. Width: 50m. Slow gradient: 45°	S	-45	"	Didang
	-63	201.500	C-S.F	Height: 35m. Width: 50m. Slow gradient: 45°	S	-	"	Didang
	-64	203.000	C-S.F	Height: 35m. Width: 50m. Fairly stable now.	S	-46	"	Didang

Type of Disaster

Cut Slope (including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (including Natural Slope)

E - S.F = Surface Failure
 E - D.F = Deep Failure

Others

L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)

H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (5)

Region III

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	III-65	203.400	C-S.F	Height: 50m. Width: 70m. Closed for 2 weeks on Didang. Fairly stable now.	H	M-47	M-6	Didang
	-66	203.500	C-S.F	Height: 35m. Width: 60m. Closed for 2 weeks on Didang. Fairly stable now.	M	-48	"	Didang
	-67	203.900	E-O.F	Height: 20m. Width: 30m. Scouring of shoulder only.	S	-	"	-
	-68	204.100	C-D.F	Height: 30m. Width: 80m. Closed for 2 weeks on Didang. Fairly stable now.	M	-49	"	Didang
	-69	204.200	C-S.F	Height: 30m. Width: 30m. Slow slope with vegetation: 45°.	S	-50	"	-
	-70	204.400	C-S.F	Height: 80m. Width: 50m. Closed for 2 weeks on Didang. Unstable materials exist.	H	-51	"	Didang
	-71	204.700	C-S.F	Height: 15m. Width: 25m.	S	-52	"	-
	-72	204.800	C-S.F	Height: 40m. Width: 70m. Closed for 2 weeks on Didang. Fairly stable now.	M	-53	"	Didang
	-73	205.800	C-S.F	Height: 20m. Width: 50m. Highly weathered.	M	-54	"	-
	-74	205.900	C-S.F	Height: 50m. Width: 30m. Closed for 2 weeks on Didang. Fairly stable now.	M	-55	"	Didang
	-75	206.000	C-D.F	Height: 70m. Width: 80m. Closed for 2 weeks on Didang. Unstable materials exist.	H	-56	"	Didang
	-76	206.200	C-D.F	Height: 45m. Width: 70m. Closed for 2 weeks on Didang. Scouring potential exist.	H	-57	"	Didang
	-77	206.300	C-D.F	Height: 70m. Width: 140m. Unstable materials exist. Scouring potential exist.	H	-58	"	-
	-78	206.400	C-S.F	Height: 90m. Width: 70m. One lane closed on Didang. Scouring potential exists.	M	-59	"	Didang
	-79	206.700	E-D.F	Full shoulder scoured. Width: 50m.	M	-	"	Didang
	-80	206.650	C-S.F	Height: 35m. Width: 200m. Re-cutting was done after failure. Highly weathered.	M	-60	"	Didang

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (By Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (7)

Region II

District/City/Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Mueva Vizcaya 206.934 ~ 311.452	11-1	214.100	C-S-F	Height: 15m. Width: 40m. Wide shoulder: 4.3m.	S	N-66	M-6	-
	-2	215.600	C-S-F	Height: 25m. Width: 100m. Re-cutting has done. Wide shoulder: 6.0m.	S	-67	"	Didang
	-3	216.350	C-S-F	Height: 20m. Width: 30m. Fairly stable now.	S	-68	"	-
	-4	216.400	E-D-F	Height: 6.0m. Width 20m. Extension of riprap is required.	M	-	"	-
	-5	216.900	C-D-F	Height: 40m. Width: 90m. Closed for 1 week on Aring. Unstable materials exist.	M	-69	"	Aring
	-6	217.200	C-S-F	Height: 30m. Width: 90m. Wide shoulder: 4.0m.	S	-70	"	-
	-7	219.500	C-S-F	Height: 80m. Width: 80m. Unsuitable materials exist.	M	-71	"	Aring
	-8	219.600	C-S-F	Height: 25m. Width: 60m. Fairly stable now.	S	-	"	-
	-9	220.200	C-S-F	Height: 50m. Width: 300m. Wide slope with developed cracks.	M	-72	"	Aring
	-10	220.700	Rising up of river bed	Rising up of river bed by deposits.	S	-	"	-
	-11	221.200	D-F	Large scale of disaster occurred on Aring. Closed every year by mud flow. Width: 120m. Height: 30m. Width: 50m.	H	-73	"	Aring Every heavy rain
	-12	222.850	C(N)-D-F	Slope is located away from edge of road.	S	-74	"	-
	-13	223.200	C-S-F	Height: 40m. Width: 70m. Scouring potential exists.	H	-75	"	Aring
	-14	223.500	E-D-F	Height: 7m. Width: 100m. Almost full shoulder scoured.	M	-	"	Aring
	-15	223.600	C(N)-D-F	Height: 80m. Width: 100m. Closed for 2 weeks. Scouring potential exists.	H	-76	"	Aring
	-16	223.700	E-D-F	Height: 7m. Width: 30m. Part of shoulder scoured.	S	-	"	-

Type of Disaster:
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F. = Surface Failure
 C - D.F. = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F. = Surface Failure
 E - D.F. = Deep Failure

Others
 L.S. = Land Slide
 D.F. = Debris Flow
 O.F. = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (8)

Region II

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	II-17	223.900	C-D.F	3 spots. Height: 15m. Width: 3x20m. Scouring by concentration of surface water.	S	M-77	M-6	-
	-18	224.400	E-D.F	Height: 5.0m. Width: 100m. Pavement has washed out.	H	-	"	-
	-19	225.000	E-D.F	Height: 3.0m. Width: 200m. Pavement is washed out.	H	-78	"	-
	-20	247.800	E-D.F	Height: 10m. Width: 100m. Scouring of bridge approach. Repaired, but potential exists.	M	-	M-5	Weling
	-21	258.000	E-D.F	Height: 8m. Width: 200m. Under repairing.	S	-	"	"
	-22	258.000	C-S.F	4 spots. Height: 25.0m. Width: 20m x 4m. Fairly stable now.	S	-	"	"
	-23	258.300	C-S.F	Height: 15m. Width: 60m. Unstable materials exist.	M	-79	"	"
	-24	258.400	C-F	Height: 10m. Width: 20m. Low slope.	S	-	"	"
	-25	258.500	C-F	Height: 25m. Width: 80m. Fallen rock size: 1.5m.	M	-80	"	"
	-26	258.600	E-D.F	Height: 4m. Width: 600m. Scoured by river. Under improvement by sheet pile.	S	-81	"	"
	-27	285.300	C-F	Height: 35m. Width: 150m. Fallen rock size: 50m.	M	-82	M-4	"
	-28	292.000	C-D.F	2 spots. Height: 30m. Width: 50m x 2m. Unstable top soil exists.	M	-83	"	"
	-29	295.200	C-D.F	Height: 20m. Width: 40m. Slow gradient: 35°.	S	-84	"	"
	-30	295.700	C-D.F	Height: 20m. Width: 240m. Slow gradient: 45°.	S	-85	"	"
	-31	296.700	L.S	Height: 20m. Width: 150m. Typical land slide.	H	-86	"	Weling 1981
	-32	297.400	C(N)-S.F	Height: 12m. (50m.) width: 50m. Failure potential of natural slope is expected.	M	-87	"	Weling

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (9)

Region II

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	II-33	297.500	C(N)-D.F	Height: 15m. Width: 100m. Failure of natural slope is expected.	H	M-68	M-4	Welling
	-34	297.550	E(N)-D.F	Height: 10.0m. Width: 30m. Scouring of riprap.	S	-	"	"
	-35	297.600	C-S-F	Height: 15m. Width: 60m. Fairly stable now.	S	-89	"	"
	-36	297.800	C-S-F	Height: 15.0m. Width: 70m. Fairly stable now.	S	-90	"	"
	-37	297.900	C-S-F	Height: 25m. Width: 140m. Highly weathered.	M	-91	"	"
	-38	298.000	C-S-F	Height: 7.0m. Width: 30m.	S	-	"	"
	-39	298.500	C-S-F	Height: 20m. Width: 80m. Highly weathered.	M	-92	"	"
	-40	298.850	C-S-F	Height: 30m. Width: 40m. Stable now.	S	-93	"	"
	-41	299.100	E-D.F	Height: 6.0m. Width: 30m. Part of shoulder is scoured.	S	-	"	"
	-42	299.200	C-S-F	Height: 15m. Width: 70m. Stable now.	S	-94	"	"
	-43	301.300	E-D.F	Height: 15m. Width: 10m. Riprap is scoured.	S	-	"	"
	-44	301.400	C-S-F	Height: 8m. Width: 80m.	S	-95	"	"
	-45	305.500	C-S-F	Height: 5m. Width: 20m. Only erosion.	S	-	"	"
Isabela II 311.452 ~ 394.692	-46	393.000	L.S	Height: 8m. Width: 90m. Pavement has slid. New alignment is completed to avoid problem.	S	-96	M-2	"
Isabela I 384.692 ~ 464.701	-47	398.700	Embankment Sinking	Height: 7m. Width: 200m. Soft ground.	S	-	"	"
	-48	435.800	E-D.F	Approach of bridge is scoured. Repaired but potential still exists. Width: 50m.	M	-97	"	"

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (10)

Region II

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Cagayan South 464.857 ~ 555.386	11-49	441.700	E-D.F	Height: 7m. Width: 80m. Under repairing.	S	N-98	M-2	Aring
	-50	459.500	O.F	Length: 600m. Improvement work of river is required.	S	-	"	Aring
	-51	476.300	O.F	Length: 1,000m. do	S	-	"	Aring
	-52	485.100	O.F	Length: 2,000m. do	S	-	"	Aring
	-53	517.400	E-D.F	Approach of bridge. Width: 50m. Large scale of scouring by river.	H	-	M-1	"
	-54	531.900	C-S.F	Height: 20m. Width: 100m. Fairly stable now.	S	-99	"	Aring
	-55	532.900	C-S.F	Height: 8m. Width: 30m.	S	-	"	"
	-56	533.200	C-S.F	Height: 30m. Width: 140m. Stable.	S	-100	"	"
	-57	547.800	E-D.F	Height: 20m. Width: 10m. Side part of riprap is scoured.	S	-	"	"
	-58	552.900	O.F	Length: 1,000m. Depth: 1.0m above road elevation. Improvement work of river is required.	S	-	"	1974
	-59	554.100	O.F	Length: 1,000m. Depth: 1.0m. above road elevation. Improvement work of river is required.	S	-	"	1965 1980
	-60	556.200	C-S.F	Height: 10m. Width: 40m. Stable.	S	-	"	"
	(1) Km of Magapit Junction Along Maharlika Highway --- 557.200 Along Allecapan-Magapit Road --- 718.850	-61	717.500 (558.540)	C-S.F	Height: 10m. Width: 50m.	S	-101	"
-62		709.550 (566.550)	E-D.F	Height: 3m. Width: 20m.	S	-102	"	"
-63		708.800 (567.380)	E-D.F	Height: 3m. Width: 50m.	S	-103	"	"
(2) Km of Allecapan								

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (II)

Region IVA

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Quezon I 96.850~131.283	IVA-1	120.300	O-F	Length: 300m. Depth: 1.0m. above road elevation. Closed for 1 day.	S	S-1	M-9	Bebeng
	-2	122.300	E-D.F	Height: 4m. Approach of bridge. Traffic stopped 1 day. Width: 10m.	H	-2	"	Bebeng
	-3	122.600	O-F	Length: 600m.	S	-	"	Bebeng
	-4	153.100	C-F	Height: 15m. Width: 70m.	S	-3	M-10	-
	-5	153.400	C-F	Height: 12m. Width: 50m.	S	-4	"	Heavy rain 1982
	-6	153.900	C-F	Height: 20m. Width: 80m. Fallen rock size: 0.2~0.5m.	M	-5	"	-
	-7	154.100	C-F	Height: 20m. Width: 70m. Open crack.	M	-6	"	-
	-8	155.100	E-D.F	Height: 6m. Width: 20m. Shoulder scouring.	M	-7	"	Bebeng
	-9	155.400	C-S.F	Height: 15m. Width: 20m.	S	-	"	-
	-10	155.700	C-F	Height: 12m. Width: 70m. Fallen rock size: 0.3m.	S	-8	"	-
	-11	156.000	C-S.F	Height: 25m. Width: 50m.	S	-9	"	-
	-12	156.000	E-D.F	Width: 10m. Shoulder scouring inside curve.	S	-	"	Bebeng
	-13	156.600	C(N)-F	Height: 100m. Width: 50m.	S	-10	"	-
	-14	157.100	C-F	Height: 7m. Width: 40m.	S	-	"	-
	-15	157.600	C-F	Height: 20m. Width: 200m. Many rocks fall. Fallen rock size: 3m.	H	-11	"	-
	-16	158.000	C-F	Height: 7m. Width: 40m.	S	-	"	-
Quezon I 141.280~191.322								

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)

E - S.F. = Surface Failure
 E - D.F. = Deep Failure

Others

L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road
(by Observation)

H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (12)

Region IYA

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	IYA-17	158.500	C-D.F	Height: 50m. Width: 40m. Closed for a half day.	H	S-12	M-10	Seberg
	-18	158.900	C-F	Height: 40m. Width: 200m. Steep slopes exist on both side.	H	-	"	-
	-19	160.100	E-D.F	Width: 100m. Shoulder scouring.	S	-	"	Ruping
	-20	160.800	L.S	Height: 30m. Width: 50m. Toe of landslide reaches at shoulder part.	M	-13	"	"
	-21	161.000	C-S.F	Height: 15m. Width: 20m.	S	-	"	"
	-22	170.150	C-S.F	Height: 10m. Width: 40m.	S	-	"	"
	-23	170.600	C-F	Height: 15m. Width: 40m. Fallen rock size: 0.6m.	S	-14	"	"
	-24	170.600	C-S.F	Height: 10m. Width: 50m.	S	-	"	"
	-25	172.900	E-D.F	Height: 5m. Width: 50m. Approach of bridge. Break of riorap	S	-	"	"
	-26	173.200	C-S.F	Height: 15m. Width: 30m. Closed for 3 days. Fairly stable now.	S	-15	"	Ruping Didang
	-27	176.100	C-S.F	Height: 12m. Width: 150m.	S	-	"	Ruping
	-28	176.900	C-S.F	Height: 9m. Width: 60m.	S	-16	"	"
	-29	177.400	C-S.F	Height: 20m. Width: 70m.	S	-17	"	"
	-30	177.700	C-F	Height: 15m. Width: 50m.	S	-18	"	"
	-31	177.800	C-S.F	Height: 30m. Width: 40m.	S	-19	"	"
	-32	178.000	C(N)-S.F	Height: 20m. Width: 10m. Only erosion.	S	-	"	"

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (13)

Region IVA

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Quezon II 187.930~257.530	IVA-33	178.100	C(H)-S.F.	Height: 20m. Width: 10m. Only erosion.	S	-	H-10	Ruping
	-34	178.200	C-S.F.	Height: 15m. Width: 70m.	S	S-20	"	"
	-35	178.300	C-S.F.	Height: 20m. Width: 40m.	S	-21	"	"
	-36	178.500	C-F	Height: 20m. Width: 30m.	S	-22	"	"
	-37	188.900	C-S.F.	Height: 10m. Width: 40m.	S	-	"	"
	-38	190.600	C-S.F.	Height: 7m. Width: 30m.	S	-	"	-
	-39	205.460	E-D.F.	Width: 50m. Retaining wall base broken.	S	-	"	-
	-40	205.740	C-F	Height: 25m. Width: 40m. Fallen rock size: 0.5m. Wide shoulder.	S	-23	"	Sebeng
	-41	243.420	E-D.F.	Height: 7.0m. Width: 100m. Under construction of route striving to avoid problem.	S	-24	M-11	-
	-42	247.200	C-S.F.	Height: 30m. Width: 50m.	S	-	"	-
	-43	248.500	E-D.F.	Width: 20m. Shoulder scouring.	M	-	"	-
	-44	251.400	E-D.F.	Width: 20m. Shoulder scouring.	S	-	"	-
	-45	252.200	E-D.F.	Width: 20m. Shoulder scouring.	M	-	"	-
	-46	253.600	C-F	Height: 7m. Width: 40m.	S	-	"	-
	-47	257.100	C-F	Height: 25m. Width: 70m.	S	-25	"	-
	-48	257.200	C-F	Height: 12m. Width: 40m.	S	-	"	-

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)

E - S.F = Surface Failure
 E - D.F = Deep Failure

Others

L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road
(by Observation)

H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (14)

Region Y

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Camarines Norte 257.530~370.099	V-1	265.950	C-S.F	Height: 12m. Width: 150m.	S	S-26	M-11	Anding Elang
	-2	267.000	C-F	Height: 10m. Width: 120m. Fallen rock size: 9.0m.	S	-27	"	"
	-3	267.300	C-F	Height: 10m. Width: 30m.	S	-	"	"
	-4	267.350	C(N)-S.F.	Height: 70m. (10m.) Width: 30m.	S	-28	"	"
	-5	267.500	E-D.F	Height: 10m. Width: 20m. Shoulder scouring.	M	-	"	"
	-6	267.600	C-S.F.	Height: 20m. Width: 200m.	S	-29	"	"
	-7	267.800	C(N)-S.F.	Height: 100m. Width: 30m.	S	-30	"	"
	-8	268.400	E-D.F.	Height: 10m. Width: 15m.	S	-	"	"
	-9	269.300	C-S.F.	Height: 7m. Width: 15m.	S	-	"	"
	-10	269.400	C-S.F.	Height: 20m. Width: 50m.	S	-31	"	"
	-11	273.900	C-S.F.	Height: 20m. Width: 60m. Closed one lane 2 times.	M	-32	"	Anding Bebang Elang
	-12	275.500	C-S.F.	Height: 8m. Width: 20m.	S	-	"	Anding Elang
	-13	276.300	C-S.F.	Height: 8m. Width: 40m.	S	-33	"	"
	-14	277.400	E-D.F.	Height: 20m. Width: 30m. Narrow shoulder.	M	-	"	"
	-15	284.800	C-S.F.	Height: 15m. Width: 70m. Closed for 1 day.	M	-34	"	"
	-16	287.900	C-D.F.	Height: 15m. Width: 60m. Small scale of flows occur every year.	M	-35	"	"

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (15)

Region V

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Camarines Sur 373.502~437.860 445.510~484.058	V-17	288.500	E-D.F	Width: 15m. Scouring of riprap inside curve.	M	-	M-11	Anding Elang
	-18	290.200	C-S.F	Height: 8m. Width: 60m.	S	-	"	"
	-19	290.500	C-S.F	Height: 15m. Width: 30m. Small failures occur every year. Wide shoulder.	S	S-36	"	"
	-20	291.400	C-S.F	Height: 12m. Width: 30m.	S	-	"	"
	-21	291.700	C-S.F	Height: 20m. Width: 90m. Narrow shoulder.	M	-37	"	"
	-22	298.500	C-S.F	Height: 8m. Width: 100m.	S	-	"	"
	-23	299.000	C-S.F	Height: 7m. Width: 50m.	S	-	"	"
	-24	302.100	E-D.F	Height: 10m. Width: 30m. Scouring potential is expected.	M	-38	"	Anding
	-25	302.600	C(N)-F	Height: 70m. Width: 60m.	S	-	"	"
	-26	302.700	C-F	Height: 40m. Width: 100m. Closed for 2 days.	H	-39	"	"
	-27	302.800	C(N)-S.F	Height: 3m. Width: 10m.	S	-	"	"
	-28	303.000	C-F	Height: 12m. Width: 70m. Fallen rock size: 1.5~3.0m.	M	-40	"	"
	-29	314.300	C-S.F	Height: 7m. Width: 80m.	S	-	"	"
	-30	324.610	C-S.F	Height: 8m. Width: 40m.	S	-41	"	"
	-31	373.560	C-S.F	Height: 15m. Width: 100m.	S	-42	M-12	"
	-32	375.200	C-S.F	Height: 10m. Width: 20m.	S	-	"	"

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure
 Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure
 Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow
 Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (16)

Region V

District/City/Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Albay 484.058 ~ 544.850	V-33	376.400	E-D.F.	Height: 10m. Width: 150m. Route has shifted to avoid problem.	S	S-43	M-12	Anding Yeyeng
	-34	391.500	C-D.F.	Height: 30m. Width: 60m.	S	-44	"	Anding Yeyeng Daling
	-35	397.800	C(N)-S.F.	Height: 15m. Width: 30m.	S	-	"	"
	-36	399.490	E-D.F.	Width: 20m. Shoulder scouring.	M	-	"	"
	-37	401.490	E-D.F.	Height: 5m. Width: 30m. Shoulder scouring.	S	-	"	"
	-38	431.800	O-F	Length: 1.0km. Occurs every year but passable.	S	-	"	Anding Daling
	-39	474.000	O-F	Length: Baao to Bató.	S	-	M-13	Ruping
	-40	516.900	E-D.F.	Length: 10m. Shoulder scouring inside curve.	S	-	"	"
	-41	542.000	C-S.F.	Height: 10m. Width: 40m.	S	-45	M-14	"
	-42	563.900	C-S.F.	Height: 7m. Width: 20m.	S	-	"	"
Sorsogon 544.850 ~ 644.440	-43	564.300	C-S.F.	Height: 8m. Width: 50m. One lane closed every year.	M	-46	"	Ruping Beberg
	-44	564.600	C-S.F.	Height: 5m. Width: 100m.	S	-	"	Ruping
	-45	568.000	C-S.F.	Height: 8m. Width: 40m.	S	-47	"	"
	-46	568.100	E-D.F.	Width: 10m. Shoulder scouring.	S	-	"	"
	-47	568.800	D-F	Height: 35m. Width: 30m. Closed for 2 days.	M	-48	"	Ruping Beberg
	-48	569.300	E-D.F.	Width: 40m. Shoulder scouring by seawave.	M	-	"	"

Impact to Road
(by Observation)

Others
L.S = Land Slide
D.F = Debris Flow
O.F = Over Flow

Embankment Slope (Including Natural Slope)

E - S.F = Surface Failure
E - D.F = Deep Failure

Type of Disaster
Cut Slope (Including Natural Slope)

C - F = Rock or Debris Fall
C - S.F = Surface Failure
C - D.F = Deep Failure

SUMMARY TABLE OF DISASTER (17)

Region V

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	V-49	604.500	C-S.F.	Height: 15m. Width: 15m.	S	-	M-15	Ruping
	-50	610.600	D-F	Height: 20m. Width: 40m. Closed for 2 days.	M	S-49	"	Ruping Bebeng
	-51	625.300	C-S.F.	Height: 7m. Width: 40m.	S	-	"	Ruping
	-52	625.500	C-S.F.	3 spots. Height: 7.0m. Width: 10mx3	S	-50	"	"
	-53	626.820	C-S.F.	Height: 7m. 3 spots small failure.	S	-	"	"
	-54	627.620	E-D.F.	Width: 10m. Full shoulder scoured.	M	-	"	Ruping Bebeng
	-55	628.620	C(N)-S.F.	Height: 5m. Width: 50m.	S	-51	"	Ruping
	-56	633.900	C-S.F.	Height: 13m. Width: 40m.	S	-52	"	"
	-57	634.600	C-S.F.	Height: 8m. Width: 20m.	S	-53	"	"
	-58	635.700	C-S.F.	Height: 5m. Width: 10m.	S	-	"	"
	-59	637.200	E-D.F.	3 spots. Width: 10mx3 Overflow length: 100m. Additional cross pipes are required.	M	-	"	Ruping Bebeng

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (IS)

Region VIII

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Northern Samar 663.814 ~ 693.790	VIII-1	664.400	E-D.F	Height: 7m. Width: 300m. Riprap destroyed by big wave.	H	S-54	M-16	1974 1981
	-2	660.100	E-D.F	Height: 4m. Width: 600m. Wave runs over every typhoon.	H	-55	"	-
	-3	683.400	C-F	Height: 25m. Width: 100m.	S	-	"	-
	-4	685.200	C-F	Height: 7m. Width: 10m.	S	-	"	-
	-5	686.600	C-F	Height: 15m. Width: 300m.	S	-	"	-
	-6	686.900	C-F	Height: 30m. Width: 100m.	M	-56	"	-
	-7	687.200	C-F	Height: 25m. Width: 40m.	S	-	"	-
	-8	687.300	E-D.F	Width: 30m. Riprap was washed away 2 times.	M	-	"	-
	-9	689.200	C-F	Height: 10m. Width: 30m.	S	-	"	-
	-10	689.500	C-F	Height: 25m. Width: 50m.	S	-57	"	-
	-11	692.700	C-F	Height: 15 ~ 20m. Width: 100m.	M	-	"	-
	-12	693.000	E-D.F	Width: 20m. Approach of bridge scouring.	S	-	"	-
	-13	693.600	C-F	Height: 20m. Width: 30m.	S	-	"	-
	-14	694.900	C-F	Height: 30m. Width: 30m.	S	-	"	-
	-15	695.800	C-S.F	Height: 10m. Width: 20m.	S	-	"	-
	-16	697.300	D.F	Width: 60m. Small scale of debris flow occur every year.	M	-58	"	-
Calbayog City 693.790 ~ 742.238								

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F. = Surface Failure
 C - D.F. = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F. = Surface Failure
 E - D.F. = Deep Failure

Others
 L.S. = Land Slide
 D.F. = Debris Flow
 O.F. = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (19)

Region VIII

District/City/Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	VIII-17	699.200	C-F	Height: 25m. Width: 40m.	S	S-59	M-16	-
	-18	700.400	E(N)-D.F	Height: 15m. Width: 30m. Shoulder scouring by seawave.	M	-60	"	-
	-19	702.300	C-F	Height: 30m. Width: 150m.	S	-	"	-
	-20	702.400	C-F	Height: 30m. Width: 40m.	S	-	"	-
	-21	702.800	C-F	Height: 25m. Width: 50m. Highly weathered.	M	-	"	-
	-22	703.100	C-F	Height: 25m. Width: 70m.	S	-	"	-
	-23	703.500	C-F	Height: 25m. Width: 30m.	S	-	"	-
	-24	703.800	C-F	Height: 35m. Width: 100m.	S	-	"	-
	-25	704.000	C-F	Height: 25m. Width: 40m.	S	-	"	-
	-26	704.600	C-F	Height: 60m. Width: 240m. Wide shoulder.	S	-61	"	-
	-27	704.900	C-F	Height: 50m. Width: 240m. Narrow shoulder.	M	-62	"	-
	-28	706.500	C-F	Height: 15m. Width: 150m.	M	-	"	-
	-29	707.700	C-F	Height: 40m. Width: 100m. Overhung.	H	-63	"	-
	-30	708.100	C-F	Height: 35m. Width: 100m.	M	-	"	-
	-31	708.200	C-F	Height: 30m. Width: 50m.	M	-64	"	-
	-32	709.100	C-F	Height: 30m. Width: 90m. Bedding plane inclines to slope.	H	-65	"	-

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (20)

Region VIII

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Western Samar 742.238~898.909	VIII-33	717.400	C-S.F	Height: 20m. Width: 150m. Closed for 1 day.	M	S-66	M-16	1981
	-34	717.500	C(N)-S.F	Height: 30m. Width: 50m.	S	-	"	-
	-35	717.750	C-F	Height: 30m. Width: 50m.	S	-	"	-
	-36	718.000	D.F	Width: 20m. Small failures occur every year.	M	-67	"	-
	-37	718.300	C-F	Height: 50m. Width: 60m. Fallen rock size: 1.0m.	M	-68	"	-
	-38	718.800	C-S.F	Height: 30m. Width: 50m.	S	-	"	-
	-39	721.600	C-F	Height: 25m. Width: 40m.	S	-69	"	-
	-40	737.500	E-D.F	Width: 30m. Shoulder scouring due to seawave.	S	-	M-17	-
	-41	742.700	E(N)-D.F	Height: 2~5m. Width: 2km. Scoured section is about 200m. Seawave runs over every year.	H	-70	"	-
	-42	781.900	E-D.F	Height: 8m. Width: 40m. Shoulder scouring.	M	-71	"	-
	-43	782.300	C-S.F	Height: 10m. Width: 50m.	S	-	"	-
	-44	788.000	C-S.F	Height: 5m. Width: 20m.	S	-	"	-
	-45	795.100	E-D.F	Width: 50m. Destroyed one lane.	H	-72	"	-
	-46	795.200	C-D.F	Height: 40m. Width: 80m.	M	-73	"	-
	-47	797.000	C-S.F	Height: 30m. Width: 200m. Small failures occur every year.	M	-74	"	-
	-48	801.500	C-D.F	Height: 20m. Width: 180m.	S	-75	"	-

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L-S = Land Slide
 O.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (22)

Region VIII

District/City/Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Leyte I 914.488 ~ 1007.632	VIII-61	984.210	C(N)-S.F	Height: 50m. Width: 200m.	S	S-87	M-19	Bising
	-62	998.170	L.S	Height: 15m. Width: 50m. Small scale of landslide.	S	-88	M-20	Osang Bising
	-63	988.840	C(N)-S.F	Height: 7m. Width: 50m.	S	-	"	"
	-64	999.560	C-S.F	Height: 15m. Width: 50m.	S	-89	"	"
	-65	1,000.530	E-D.F	Height: 5m. Width: 10m. Shoulder scouring.	S	-	"	"
	-66	1,000.730	E-D.F	Height: 7m. Width: 10m. Scouring of approach of bridge. Temporary wooden bridge is constructed.	H	-90	"	"
	-67	1,002.350	E-D.F	Height: 5.0m. Width: 40m. One lane is washed out.	H	-91	"	Osang
	-68	1,003.060	E(N)-D.F	Height: 20m. Width: 30m. Shoulder scouring.	S	-	"	"
	-69	1,003.440	C-S.F	Height: 8m. Width: 60m.	S	-	"	Abiang
	-70	1,004.860	C(H)-S.F	Height: 15m. Width: 50m.	S	-	"	"
	-71	1,005.100	L.S	Height: 15m. Width: 50m. Closed for 1 week on Bising. Pavement was broken.	H	-92	"	Abiang Bising
	-72	1,005.850	C-S.F	Height: 20m. Width: 40m.	S	-93	"	"
	-73	1,006.710	C-S.F	Height: 15m. Width: 20m.	S	-	"	"
	-74	1,008.680	E(N)-D.F	Height: 15m. Width: 20m. Wide shoulder.	S	-	"	"
	-75	1,008.830	C-S.F	Height: 25m. Width: 50m. Closed for 4 days.	M	-94	"	Bising
	-76	1,009.480	E(N)-D.F	Height: 40m. Width: 30m. Wide shoulder.	S	-	"	"
Southern Leyte 1007.632 ~ 1059.877								

Impact to Road
(by Observation)

H = Heavy
M = Medium
S = Small

Others

L.S = Land Slide
D.F = Debris Flow
O.F = Over Flow

Embankment Slope (Including Natural Slope)

E - S.F = Surface Failure
E - D.F = Deep Failure

Type of Disaster

Cut Slope (Including Natural Slope)

C - F = Rock or Debris Fall
C - S.F = Surface Failure
C - D.F = Deep Failure

SUMMARY TABLE OF DISASTER (23)

Region VIII

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	VIII-77	1,009.480	C-S.F	Height: 50m. Width: 40m. Unstable rock masses exist.	M	S-95	M-20	Abiang
	-78	1,009.530	E(N)-D.F	Height: 40m. Width: 40m. Wide shoulder.	S	-	"	"
	-79	1,009.880	C-S.F	Height: 40m. Width: 50m. With developed cracks.	H	-96	"	"
	-80	1,010.300	E(N)-D.F	Height: 40m. Width: 60m. Big scale of scouring.	H	-97	"	"
	-81	1,010.450	C-D.F	Height: 70m. Width: 300m. Biggest slope failure in Layak section.	H	-98	"	Abiang Bising
	-82	1,011.050	C-S.F	Height: 15m. Width: 70m.	S	-99	"	"
	-83	1,011.650	C-D.F	Height: 10m. Width: 30m.	S	-	"	"
	-84	1,012.890	C-S.F	Height: 8m. Width: 40m.	S	-	"	"
	-85	1,013.730	E(N)-D.F	Height: 50m. Width: 40m. High potential exist.	M	-	"	"
	-86	1,013.730	C-S.F	Height: 18m. Width: 80m. Highly weathered.	M	-100	"	"
	-87	1,014.270	C-D.F	Height: 20m. Width: 60m. Concentration of surface water. Highly weathered.	H	-101	"	"
	-88	1,014.960	C-D.F	Height: 20m. Width: 40m. Thick top soil exists.	M	-102	"	Bising
	-89	1,015.360	E(N)-D.F	Height: 40m. Width: 20m. Scouring potential is high.	M	-	"	"
	-90	1,015.360	C-S.F	Height: 40m. Width: 100m. Unstable materials exist.	M	-103	"	"
	-91	1,016.440	E-D.F	Height: 10m. Width: 20m. Scouring of full shoulder.	M	-104	"	"
	-92	1,016.640	C(N)-S.F	Height: 50m. Width: 30m. Slow slope.	S	-	"	"

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (24)

Region VIII

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	VIII-93	1,016.760	E-D.F	Height: 15m. Width: 50m. Pavement of one lane has broken. Scouring in inside curve.	H	S-105	M-20	Bising
	-94	1,017.230	C-D.F	Height: 12m. Width: 50m. Closed for 1 month on Bising. Small failures occur every year.	M	-106	"	Bising
	-95	1,017.430	C-S.F	Height: 15m. Width: 100m.	S	-107	"	-
	-96	1,018.020	C-S.F	Height: 20m. Width: 50m.	S	-	"	-
	-97	1,018.960	C-S.F	Height: 20m. Width: 70m. One lane closed on Bising.	M	-108	"	Bising
	-98	1,019.250	C-S.F	Height: 25m. Width: 20m.	S	-	"	-
	-99	1,019.380	C-S.F	Height: 20m. Width: 30m. Concentration of surface water.	M	-109	"	-
	-100	1,019.690	C-D.F	Height: 30m. Width: 40m. Closed for 1 month in 1981.	H	-110	"	December 1981
	-101	1,019.890	C-S.F	Height: 20m. Width: 50m. Closed for 1 month on Bising.	M	-111	"	Bising
	-102	1,020.000	C-S.F	Height: 15m. Width: 30m. One lane is closed every year.	M	-112	"	Bising
	-103	1,020.610	C-F	Height: 25m. Width: 50m. Closed for 3 days.	M	-113	"	Bising
	-104	1,020.810	C-F	Height: 25m. Width: 50m. Closed for 2 weeks on Bising. Small rocks falls occur every year.	H	-114	"	Bising
	-105	1,021.100	L.S	Height: 30m. Width: 80m. One lane closed on Bising.	M	-115	"	Bising
	-106	1,022.260	C-F	Height: 8m. Width: 40m. Fallen rock size: 3m~5m.	M	-116	"	-
	-107	1,022.600	C(N)-S.F	Height: 50m. Width: 300m. One lane closed for 2 weeks on Bising.	M	-117	"	Bising
	-108	1,023.220	L.S	Height: 15m. Width: 50m. Closed for 1 week on Bising.	M	-118	"	Bising

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (25)

Region VIII

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	VIII-109	1,024.500	C-S.F	Height: 8m. Width: 150m.	S	S-119	M-20	
	-110	1,033.260	C-S.F	Height: 8m. Width: 80m.	S	-	M-21	
	-111	1,034.200	C-S.F	Height: 12m. Width: 40m.	S	-120	"	
	-112	1,042.660	C-F	Height: 8m. Width: 40m.	S	-	"	
	-113	1,045.360	C(N)-S.F	Height: 10m. Width: 50m.	S	-	"	
	-114	1,045.900	C(N)-S.F	Height: 35m. Width: 50m.	S	-	"	
	-115	1,046.500	C(N)-S.F	Height: 25m. Width: 100m. Highly weathered.	M	-121	"	
	-116	1,048.060	C-S.F	Height: 15m. Width: 30m.	S	-	"	
	-117	1,049.290	C-S.F	Height: 25m. Width: 70m.	S	-122	"	
	-118	1,050.290	C-S.F	Height: 7m. Width: 30m.	S	-	"	
	-119	1,050.830	C-S.F	Height: 30m. Width: 50m.	S	-123	"	
	-120	1,051.120	C(N)-S.F	Height: 15m. Width: 50m.	S	-	"	
	-121	1,051.640	C-S.F	Height: 20m. Width: 100m.	S	-	"	
	-122	1,051.880	C-S.F	Height: 15m. Width: 50m.	S	-	"	
	-123	1,052.030	C-S.F	Height: 25m. Width: 50m.	S	-124	"	
	-124	1,052.230	C-S.F	Height: 10m. Width: 50m.	S	-	"	

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)

E - S.F = Surface Failure
 E - D.F = Deep Failure

Others

L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)

H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (26)

Region I

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
La Union 216.000 ~ 217.600	IK-1	216.200	C-S.F	Height: 25m. Width: 40m.	S	B-1	B-1	-
	-2	216.300	C-S.F	Height: 15m. Width: 60m.	S	-2	"	Anding Aring
Benguet 217.600 ~ 240.610	-3	218.000	C-S.F	Height: 30m. Width: 100m.	S	-	"	"
	-4	219.300	C(N)-S.F	Height: 60m. Width: 220m.	S	-3	"	"
	-5	220.130	C-F	Height: 10m. Width: 30m.	S	-	"	"
	-6	223.400	C-F	Height: 35m. Width: 100m. Fallen rock size: 0.3m. Steep slope.	M	-4	"	"
	-7	224.800	C-F	Height: 50m. Width: 100m. Overhanging.	M	-5	"	"
	-8	225.600	C-F	Height: 40m. Width: 20m.	S	-	"	"
	-9	226.100	C(N)-F	Height: 100m. Width: 150m. Fallen rock size: 15m.	H	-6	"	"
	-10	226.600	C-F	Height: 25m. Width: 200m. Fallen rock size: 2.0m.	H	-7	"	"
	-11	229.000	C-F	Height: 45m. Width: 100m. Detached rock masses exist.	M	-8	"	"
	-12	229.200	C-F	Height: 40m. Width: 40m. Steep slope.	M	-	"	"
	-13	229.600	C-F	Height: 35m. Width: 50m. Steep slope.	M	-9	"	"
	-14	231.300	C-F	Height: 50m. Width: 200m.	S	-	"	"
	-15	231.600	C-F	Height: 40m. Width: 80m. A lot of volume of fallen rocks exist.	M	-10	"	"
	-16	232.500	C-F	Height: 10m. Width: 40m.	S	-	"	"

Type of Disaster:
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (27)

Region 1

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	1K-17	233.400	C-F	Height: 20m. Width: 20m.	S	-	B-1	Anding Ar-Ing
	-18	234.100	C-F	Height: 20m. Width: 30m.	S	-	"	"
	-19	234.480	C-F	Height: 40m. Width: 80m. Fallen rock size: 2.0m.	H	B-11	"	"
	-20	234.800	C-F	Height: 40m. Width: 50m. Fallen rock size: 1.0m.	H	-12	"	"
	-21	234.850	C-F	Height: 60m. Width: 60m. Fallen rock size: 1.0m.	M	-13	"	"
	-22	234.950	C-F	Height: 35m. Width: 70m. Fallen rock size: 1.0m.	M	-14	"	"
	-23	235.100	C-F	Height: 40m. Width: 100m. Fallen rock size: 1.0m.	H	-15	"	"
	-24	235.800	C-F	Height: 70m. Width: 60m. Fallen rock size: 1.0~1.5m.	H	-16	"	"
	-25	236.100	C-F	Height: 30m. Width: 60m. Fallen rock size: 0.5m.	M	-17	"	"
	-26	236.300	C-F	Height: 35m. Width: 50m. Fallen rock size: 0.5m.	M	-18	"	"
	-27	236.550	C-F	Height: 50m. Width: 50m. Fallen rock size: 1.0m.	M	-19	"	"
	-28	236.650	C-F	Height: 30m. Width: 80m. Fallen rock size: 1.5m.	M	-20	"	"
	-29	236.950	C-F	Height: 40m. Width: 70m. Fallen rock size: 1.0~3.0m.	H	-21	"	"
	-30	237.050	C-F	Height: 20m. Width: 20m.	S	-	"	"
	-31	237.100	C-F	Height: 25m. Width: 30m.	S	-	"	"
	-32	237.250	E-D-F	Height: 15m. Width: 30m. Riprap was broken by river.	M	-	"	"

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F. = Surface Failure
 C - D.F. = Deep Failure

Embankment Slope (Including Natural Slope)

E - S.F. = Surface Failure
 E - D.F. = Deep Failure

Others

L.S. = Land Slide
 D.F. = Debris Flow
 O.F. = Over Flow

Impact to Road
(by Observation)

H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (28)

Region _____

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Baguio City 299.129 ~	1K-33	237.300	C-S.F.	Height: 30m. Width: 50m. With developed cracks.	H	B-22	B-1	Anding Aring
	-34	237.450	C-F	Height: 40m. Width: 60m. Fallen rock size: 0.5~1.0m.	H	-23	"	"
	-35	237.700	C-S.F.	Height: 20m. Width: 20m. Talus exists at upper.	M	-24	"	"
	-36	237.800	C-S.F.	Height: 20m. Width: 80m. Surface water concentration.	M	-25	"	"
	-37	239.100	E-D.F.	Height: 10m. Width: 30m. Riprap has broken by river.	M	-26	"	"
	-38	239.700	C-F	Height: 70m. Width: 170m. Overhung.	H	-27	"	"
	-39	240.100	C-F	Height: 30m. Width: 40m. Fallen rock size: 1.0m.	N	-28	"	Anding Osang Mitsang
	-40	240.200	E-D.F.	Height: 10~15m. Width: 100m. Riprap partially scouring.	M	-	"	"
	-41	240.300	C(N)-F	Height: 100m. Width: 100m. Fallen rock size: 2.0m.	H	-29	"	"
	-42	240.450	C-F	Height: 30m. Width: 40m.	M	-	"	"
	-43	240.500	C-F	Height: 15m. Width: 20m.	S	-	"	"
	-44	240.550	C(N)-S.F.	Height: 60m. Width: 30m.	M	-30	"	"
	-45	240.600	C-F	Height: 15m. Width: 30m.	S	-	"	"
	-46	240.650	C-F	Height: 20m. Width: 40m. Open crack.	M	-31	"	"
	-47	241.600	C-F	Height: 25m. Width: 50m.	S	-32	"	Anding Osang Mitsang
	-48	247.700	L.S.	Width: 100m. Settling every year.	H	-33	"	"

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F. = Surface Failure
 C - D.F. = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F. = Surface Failure
 E - D.F. = Deep Failure

Others
 L.S. = Land Slide
 D.F. = Debris Flow
 O.F. = Over Flow

Impact to Road
 (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (29)

Region 1

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
La Union 236.700	IM-1	238.900	C-S.F	Height: 25m. Width: 50m.	S	B-34	B-2	
	-2	238.950	C-S.F	Height: 30m. Width: 30m.	S	-35	"	
	-3	239.000	C-F	Height: 30m. Width: 40m.	S	-	"	
	-4	241.000	C-S.F	Height: 40m. Width: 60m.	S	-	"	
	-5	242.400	C-S.F	Height: 7m. Width: 30m.	S	-	"	
	-6	248.400	C-F	Height: 8m. Width: 60m. Fallen rock size: 0.5m. Highly weathered.	M	-36	"	
	-7	248.600	C-F	Height: 8m. Width: 60m. Fallen rock size: 0.5m. Highly weathered.	M	-	"	
	-8	254.900	C-S.F	Height: 15m. Width: 100m.	S	-37	"	
	-9	260.600	C-S.F	Height: 5m. Width: 20m.	S	-	"	
	-10	262.000	C-F	Height: 25m. Width: 70m. Fallen rock size: 2.0~3.0m.	M	-38	"	
	-11	262.000	E-D.F	Width: 40m. Under construction.	S	-	"	
	-12	262.200	C-S.F	Height: 15m. Width: 90m. Surface water concentration.	M	-39	"	
	-13	262.300	C-S.F	Height: 10m. Width: 5m. Only erosion.	S	-	"	
	-14	262.400	C-S.F	Height: 10m. Width: 15m. Only erosion.	S	-	"	
	-15	263.600	C-S.F	Height: 30m. Width: 70m. One berm exists.	S	-40	"	
-15	263.700	E-D.F	Width: 15m. Shoulder scouring. Repaired by riprap.	S	-	"		

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (30)

Region I

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	1M-17	264.900	C-F	Height: 15m. Width: 10m.	S	-	B-2	
	-18	265.100	C-F	Height: 40m. Width: 70m. Fallen rock size: 2.0m.	H	B-41	"	
	-19	265.300	C-F	Height: 40m. Width: 120m. Fallen rock size: 2.0m.	H	-42	"	
	-20	265.400	C-D.F	Height: 45m. Width: 70m. Talus exists at upper part of slope.	H	-43	"	
	-21	265.500	C-S.F	Height: 20m. Width: 200m.	S	-44	"	
	-22	265.950	C-S.F	Height: 20m. Width: 50m.	S	-45	"	
	-23	266.100	C-S.F	Height: 20m. Width: 100m.	S	-46	"	
	-24	266.400	C-S.F	Height: 20m. Width: 30m.	S	-	"	
	-25	266.500	C-S.F	Height: 20m. Width: 90m.	S	-47	"	
	-26	267.400	C-S.F	Height: 15m. Width: 20m.	S	-	"	
	-27	268.400	C-F	Height: 6m. Width: 100m.	S	-	"	
	-28	268.800	E-D.F	Height: 10m. Width: 30m. Repair by riprap.	S	-	"	
	-29	268.900	C-S.F	Height: 15m. Width: 100m.	S	-	"	
	-30	269.200	E-D.F	Width: 30m. Shoulder scouring. Repair by riprap.	S	-	"	
	-31	269.200	C-F	Height: 40m. Width: 70m. Fallen rock size: 2.0m.	M	-48	"	
	-32	269.600	E-D.F	Width: 40m. Scouring. Repaired by riprap and retaining wall.	S	-	"	

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER

Region I

District/City/Office	Spot No.	Km. Post.	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	1M-33	270.800	E-D.F	Width: 20m. Shoulder scouring. Repair by riprap.	S	-	B-2	
	-34	271.500	C-S.F	Height: 30m. Width: 70m.	S	B-49	"	
	-35	272.400	C-S.F	Height: 30m. Width: 60m.	S	-50	"	
	-36	272.600	C-S.F	Height: 30m. Width: 30m.	S	-51	"	
	-37	272.700	C-F	Height: 60m. Width: 120m. Fallen rock size: 5.0m. Unsupported rocks exist.	H	-52	"	
	-38	273.100	C-F	Height: 40m. Width: 300m. Detached rock masses exist.	M	-53	"	
	-39	273.350	C-F	Height: 40m. Width: 50m. Fallen rock size: 3.0m.	M	-54	"	
	-40	273.500	C-F	Height: 60m. Width: 50m. Fallen rock size: 2.0m.	M	-55	"	
	-41	273.550	C-F	Height: 35m. Width: 50m. Narrow shoulder.	M	-56	"	
	-42	273.600	C-S.F	Height: 70m. Width: 100m.	M	-57	"	
	-43	273.700	C-S.F	Height: 50m. Width: 50m. Scouring potential is expected.	M	-58	"	
	-44	273.750	C-S.F	Height: 40m. Width: 40m. Surface water concentration.	M	-59	"	
	-45	273.950	C-S.F	Height: 25m. Width: 40m.	S	-	"	
	-46	274.100	C-F	Height: 30m. Width: 40m.	S	-60	"	
	-47	274.200	C-F	Height: 30m. Width: 30m. Bedding plane inclines to slope.	M	-61	"	
	-48	274.250	C-S.F	Height: 25m. Width: 50m.	S	-	"	

Type of Disaster
 Cut Slope (Including Natural Slope) C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope) E - S.F = Surface Failure
 E - D.F = Deep Failure

Others L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation) H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (31)

Region 1

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	IM-49	274.400	C-S.F	Height: 10m. Width: 50m.	S	-	B-2	
	-50	274.750	C-S.F	Height: 30m. Width: 100m. Developed cracks.	M	B-62	"	
	-51	274.850	C-S.F	Height: 20m. Width: 30m.	S	-63	"	
	-52	275.050	C-S.F	Height: 30m. Width: 70m.	S	-64	"	
	-53	275.100	C-S.F	Height: 30m. Width: 70m.	S	-	"	
	-54	275.150	C-S.F	Height: 10m. Width: 50m.	S	-65	"	
	-55	275.400	C-F	Height: 15m. Width: 80m. Fallen rock size: 0.15m.	S	-66	"	
	-56	275.500	C-F	Height: 30m. Width: 60m. Fallen rock size: 0.3m. A lot of volume of fallen rocks exist.	M	-67	"	
	-57	275.600	C-F	Height: 25m. Width: 30m.	S	-68	"	
	-58	275.700	C-F	Height: 25m. Width: 40m.	S	-	"	
	-59	275.850	C-F	Height: 20m. Width: 40m.	S	-69	"	
	-60	276.000	C-F	Height: 25m. Width: 60m.	S	-70	"	
	-61	276.300	C-S.F	Height: 20m. Width: 20m. Only erosion.	S	-	"	
	-62	276.500	C-F	Height: 70m. Width: 100m. Fallen rock size: 3.0m. Unsupported rocks exist.	H	-71	"	
	-63	276.700	C-F	Height: 60m. Width: 60m. Fallen rock size: 1.5m.	M	-72	"	
	-64	276.800	C-S.F	Height: 20m. Width: 40m. Bedding plane inclines to slope.	M	-73	"	

Type of Disaster

Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (32)

Region I

District/City/Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
	1M-65	276.950	C-F	Height: 40m. Width: 60m. Fallen rock size: 2.0m. Unsupported rocks exist.	H	B-74	B-2	
	-66	277.050	C-F	Height: 40m. Width: 70m. Fallen rock size: 3.0m. Unsupported rocks exist.	H	-75	"	
	-67	277.200	C-F	Height: 60m. Width: 100m. Fallen rock size: 2.0m. Open crack.	H	-76	"	
	-68	277.400	C-F	Height: 50m. Width: 200m. Fallen rock size: 2.0m. Unsupported rocks exist.	H	-77	"	
	-69	277.600	C-F	Height: 60m. Width: 50m. Fallen rock size: 4.0m. Unsupported rocks exist.	H	-78	"	
	-70	278.000	C-O.F	Height: 25m. Width: 100m. Unsupported rocks exist.	M	-	"	
	-71	278.100	C-D.F	Height: 25m. Width: 100m. Unsupported rocks exist.	M	-	"	
	-72	278.300	C(N)-F	Height: 100m. Width: 120m. Fallen rock size: 3.0m.	H	-79	"	
	-73	278.600	C-F	Height: 20m. Width: 70m.	S	-	"	
	-74	278.850	C-F	Height: 20m. Width: 100m.	S	-	"	
	-75	279.000	C-F	Height: 50m. Width: 70m.	S	-80	"	
	-76	279.300	C-F	Height: 8m. Width: 40m.	S	-	"	
	-77	279.600	C-F	Height: 7m. Width: 50m.	S	-	"	
	-78	280.300	C-S.F	Height: 20m. Width: 90m.	S	-81	"	
	-79	280.600	C-S.F	Height: 10m. Width: 200m.	S	-	"	
	-80	280.900	C-F	Height: 20m. Width: 60m.	S	-82	"	

Type of Disaster

Cut Slope (Including Natural Slope)
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Embankment Slope (Including Natural Slope)
 E - S.F. = Surface Failure
 E - D.F. = Deep Failure

Others
 L.S. = Land Slide
 D.F. = Debris Flow
 O.F. = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (33)

Region _____

District/City/Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
La Union 259.385 ~ 281.605	IN-1	264.400	C-S.F	Height: 30m. Width: 40m.	S	B-84	B-3	Normaling Aring
	-2	273.000	C-S.F	Height: 10 ~ 15m. Width: 60m.	S	-85	"	Normaling Anding Aring
	-3	273.900	C-F	Height: 10m. Width: 200m.	S	-86	"	Normaling
	-4	279.740	E-D.F	Width: 10m. Repaired by riprap.	S	-	"	Normaling Aring
Benguet 281.840 ~ 299.129	-5	288.300	C-F	Height: 30m. Width: 20m. Fallen rock size: 0.4m. With developed cracks.	M	-87	"	Aring Anding
	-6	288.500	C-F	Height: 50m. Width: 20m.	S	-	"	"
	-7	288.700	C-F	Height: 40m. Width: 70m. Fallen rock size: 0.5m. With developed cracks.	M	-88	"	"
	-8	288.800	C-F	Height: 5m. Width: 20m.	S	-	"	"
	-9	292.800	C-S.F	Height: 10m. Width: 30m.	S	-	"	"
	-10	293.500	C-F	Height: 10m. Width: 30m. Fallen rock size: 2.0m.	M	-89	"	"
	-11	293.900	E-D.F	Width: 30m.	S	-	"	"
	-12	293.900	C-F	Height: 20m. Width: 60m. Fallen rock size: 1.0m.	M	-90	"	"
	-13	294.300	C(N)-S.F	Height: 40m. Width: 50m. Bedding plane. Inclines to slope.	H	-91	"	"
	-14	294.600	E-D.F	Width: 200m. Narrow shoulder.	M	-	"	"
	-15	294.600	C(N)-F	Height: 60m. (20m.) Width: 200m. Fallen rock size: 1.5m.	H	-92	"	"
	-16	298.200	C-S.F	Height: 30m. Width: 20m. Talús exists at upper part of slope.	M	-93	"	"

Type of Disaster:
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others:
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small

SUMMARY TABLE OF DISASTER (34)

Region I

District/City Office	Spot No.	Km. Post	Type of Disaster	Description	Impact to Road	Check Table Number	Section	Remarks
Baguio City 299.129 ~	IN-17	299.100	C-F	Height: 30m. Width: 50m.	S	-	B-3	Osang Nizang Norming Aring
	-18	299.600	C-S.F	Height: 20m. Width: 70m.	S	B-94	"	Osang Nizang Norming
	-19	301.000	C-S.F	Height: 15m. Width: 70m.	S	-	"	"
	-20	302.200	C-F	Height: 10m. Width: 30m.	S	-	"	"
	-21	302.450	C-F	Height: 10m. Width: 30m.	S	-	"	"
	-22	302.500	C-F	Height: 25m. Width: 80m.	S	-95	"	"
	-23	304.000	C-F	Height: 7m. Width: 500m.	S	-	"	"

Type of Disaster
 Cut Slope (Including Natural Slope)
 C - F = Rock or Debris Fall
 C - S.F = Surface Failure
 C - D.F = Deep Failure

Embankment Slope (Including Natural Slope)
 E - S.F = Surface Failure
 E - D.F = Deep Failure

Others
 L.S = Land Slide
 D.F = Debris Flow
 O.F = Over Flow

Impact to Road (by Observation)
 H = Heavy
 M = Medium
 S = Small