

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS

Feasibility Study
on
The Rural Road Network Development Project

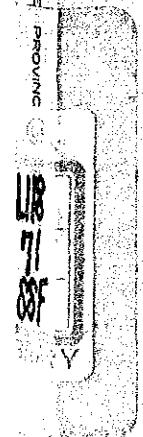
FINAL REPORT (Volume 23)
DRAWINGS FOR ROAD PROJECTS
IN
THE PROVINCE OF LEYTE

OCTOBER, 1990

JAPAN INTERNATIONAL COOPERATION AGENCY

SSF
90-112(23/30)

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Feasibility Study on the Rural Road Network Development Project
FINAL REPORT (Volume 23)
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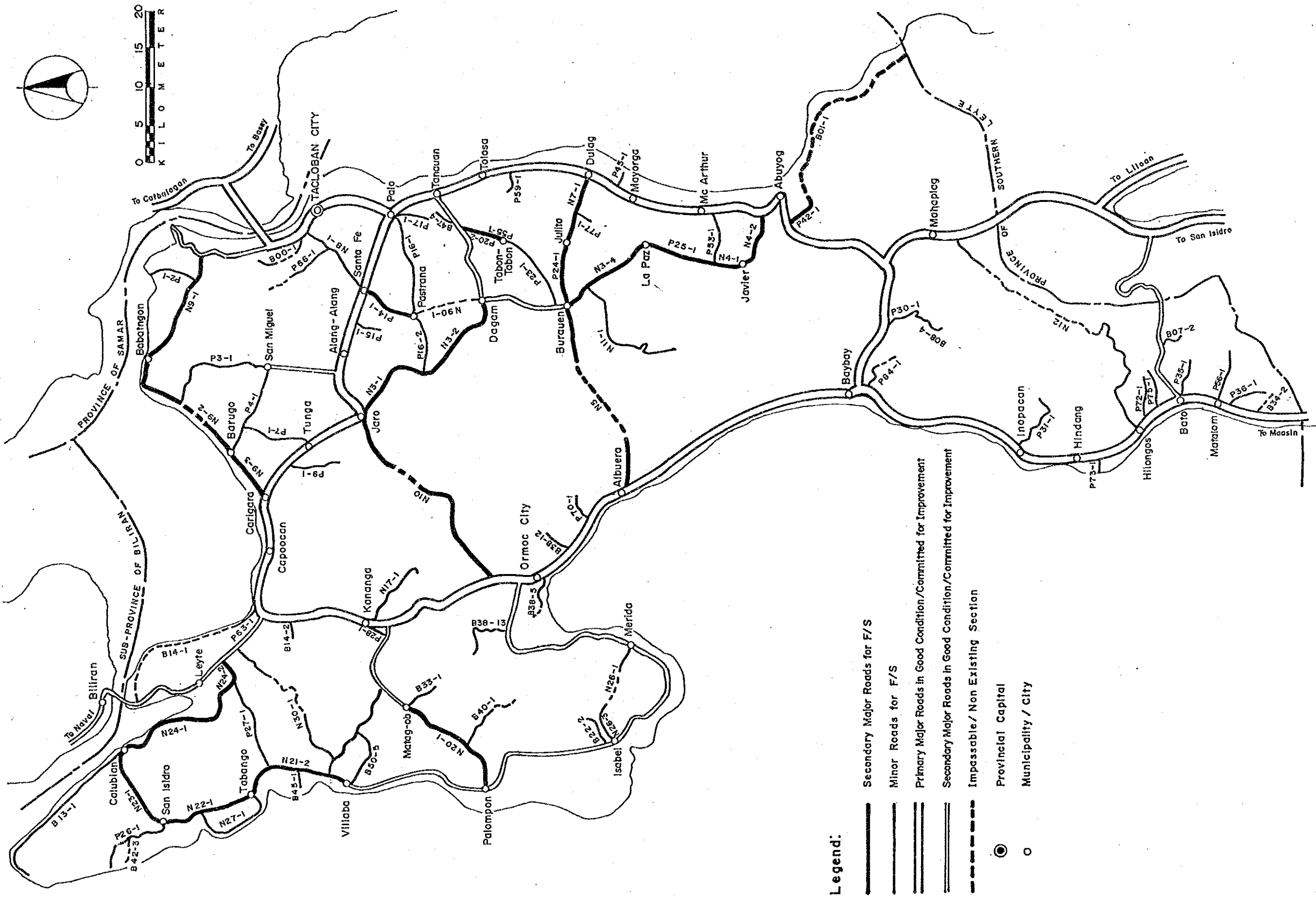


CONTENTS

Drawing No.	Title
1	LOCATION MAP
2 to 9	TYPICAL ROAD SECTIONS
10 to 87	PRESENT CONDITION AND PROPOSED IMPROVEMENT

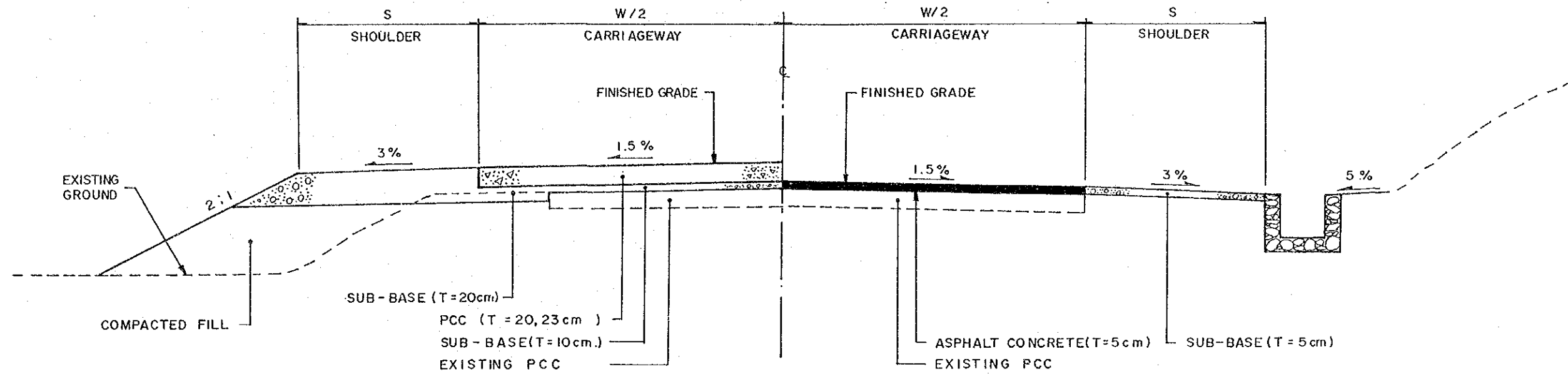
LIST OF ROADS

Road Class	Road No.	Drawing No.	Road Class	Road No.	Drawing No.	Road Class	Road No.	Drawing No.
Secondary Major Road	N 3 -1	10	Minor Road	N 17 -1	40	Minor Road	P 63 -1	66
	N 3 -2	11		N 26 -1	41		P 66 -1	67
	N 3 -4	12		N 26 -3	42		P 70 -1	68
	N 4 -1	13		N 27 -1	43		P 72 -1	69
	N 4 -2	14		N 30 -1	44		P 73 -1	70
	N 5	15 & 16		N 90 -1	45		P 75 -1	70
	N 7 -1	17		P 2 -1	46		P 77 -1	71
	N 9 -1	18		P 3 -1	47		P 84 -1	72
	N 9 -2	19		P 4 -1	48		B 00 -1	73
	N 9 -3	20		P 7 -1	49		B 07 -2	74
	N 10	21 & 22		P 9 -1	50		B 08 -4	75
	N 20 -1	23		P 15 -1	51		B 13 -1	76
	N 21 -2	24		P 16 -1	52		B 14 -1	77 & 78
	N 22 -1	25		P 16 -2	53		B 14 -2	79
	N 23 -1	26		P 17 -1	54		B 22 -2	80
	N 24 -1	27		P 23 -1	55		B 33 -1	80
	N 24 -2	28		P 26 -1	56		B 34 -2	81
	P 14 -1	29		P 27 -1	57		B 38 -5	82
	P 20 -2	29		P 28 -1	58		B 38 -12	83
	P 24 -1	30		P 30 -1	59		B 38 -13	83
P 25 -1	31	P 31 -1	60	B 40 -1	84			
P 42 -1	32	P 35 -1	61	B 42 -3	85			
P 55 -1	33	P 36 -1	62	B 45 -1	85			
B 01 -1	34	P 45 -1	63	B 47 -4	86			
Minor Road	N 8 -1	35	P 53 -1	63	B 50 -5	87		
	N 11 -1	36	P 56 -1	64				
	N 12	37, 38 & 39	P 59 -1	65				



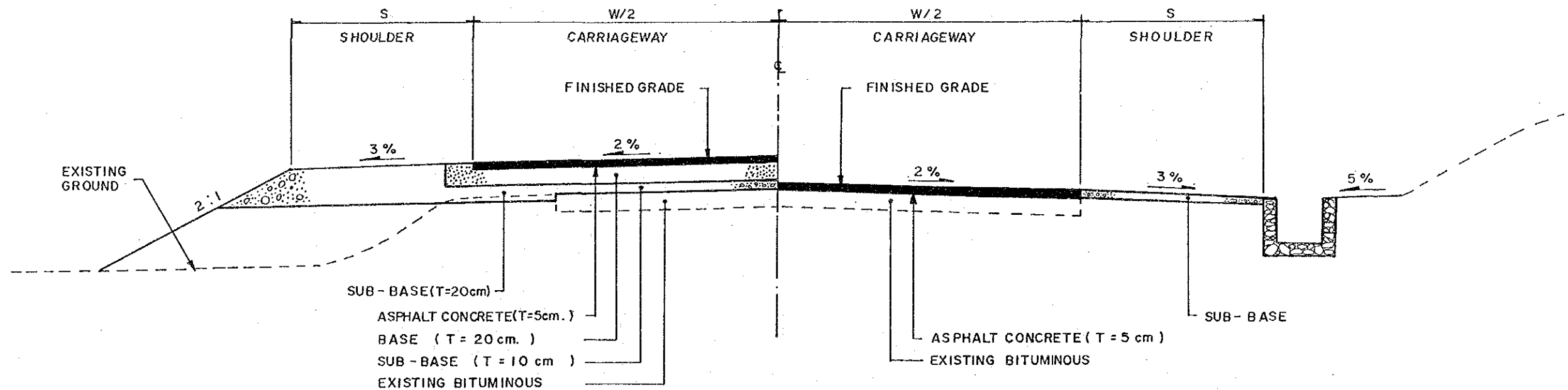
- Legend:**
- Secondary Major Roads for F/S
 - Minor Roads for F/S
 - == Primary Major Roads in Good Condition/Committed for Improvement
 - - - Secondary Major Roads in Good Condition/Committed for Improvement
 - - - Impassable / Non Existing Section
 - Provincial Capital
 - Municipality / City

LOCATION OF F/S ROADS



TYPE 1-1
PROPOSED PAVEMENT : PCC
EXISTING PAVEMENT : PCC (BAD / VERY BAD)

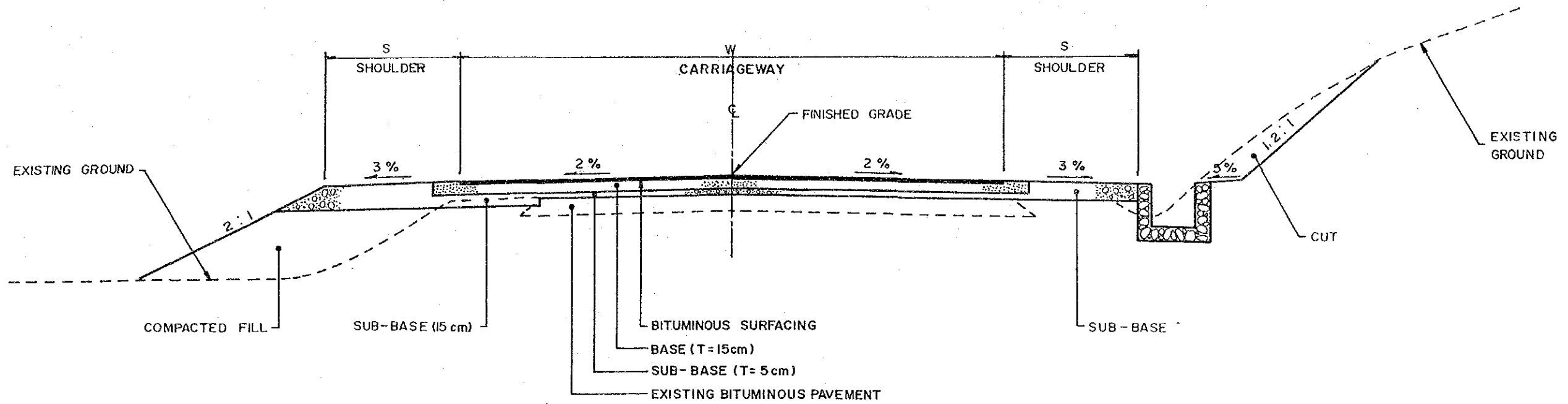
TYPE 1-2
PROPOSED PAVEMENT : ASPHALT CONCRETE OVERLAY
EXISTING PAVEMENT : PCC (BAD / VERY BAD)



TYPE 1-3
PROPOSED PAVEMENT : ASPHALT CONCRETE
EXISTING PAVEMENT : BITUMINOUS (BAD / VERY BAD)

TYPE 1-4
PROPOSED PAVEMENT : ASPHALT CONCRETE OVERLAY
EXISTING PAVEMENT : BITUMINOUS (BAD / VERY BAD)

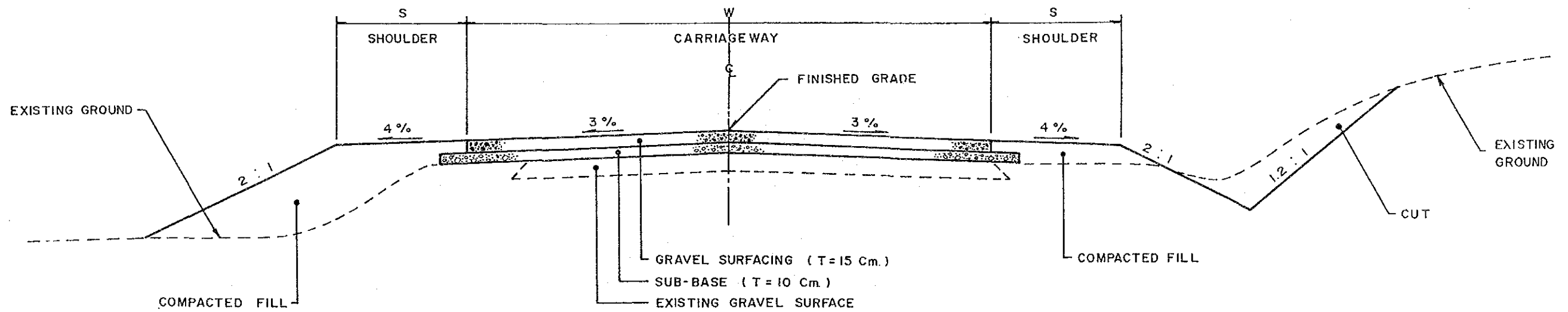
REHABILITATION (1)



TYPE 1-5

PROPOSED PAVEMENT : BITUMINOUS MACADAM/DOUBLE BITUMINOUS SURFACE TREATMENT

EXISTING PAVEMENT : BITUMINOUS (BAD /VERY BAD)

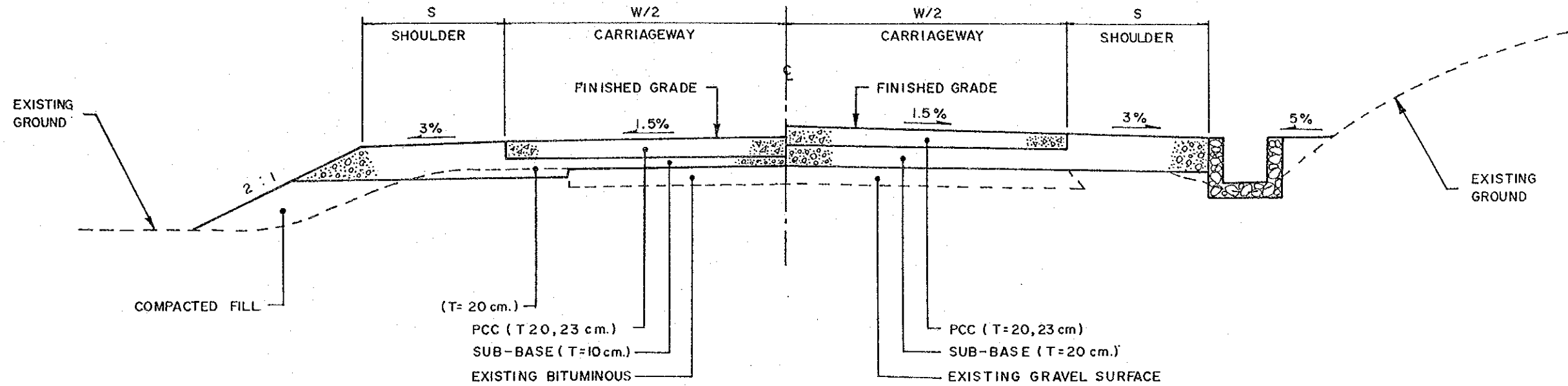


TYPE 1-6

PROPOSED PAVEMENT : GRAVEL SURFACING

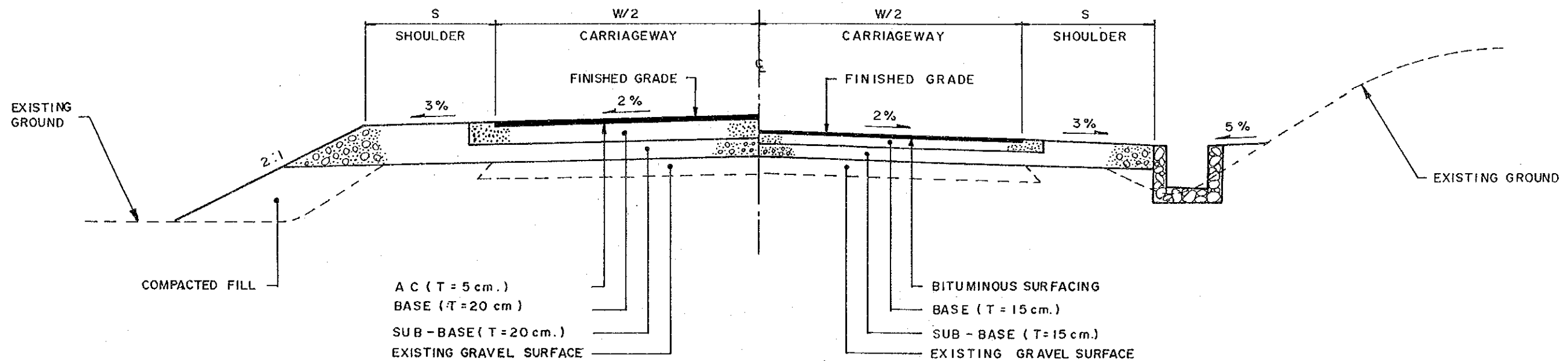
EXISTING PAVEMENT : GRAVEL SURFACING (BAD /VERY BAD)

REHABILITATION (2)



TYPE 2-1
PROPOSED PAVEMENT : PCC
EXISTING PAVEMENT : BITUMINOUS (BAD/VERY BAD)

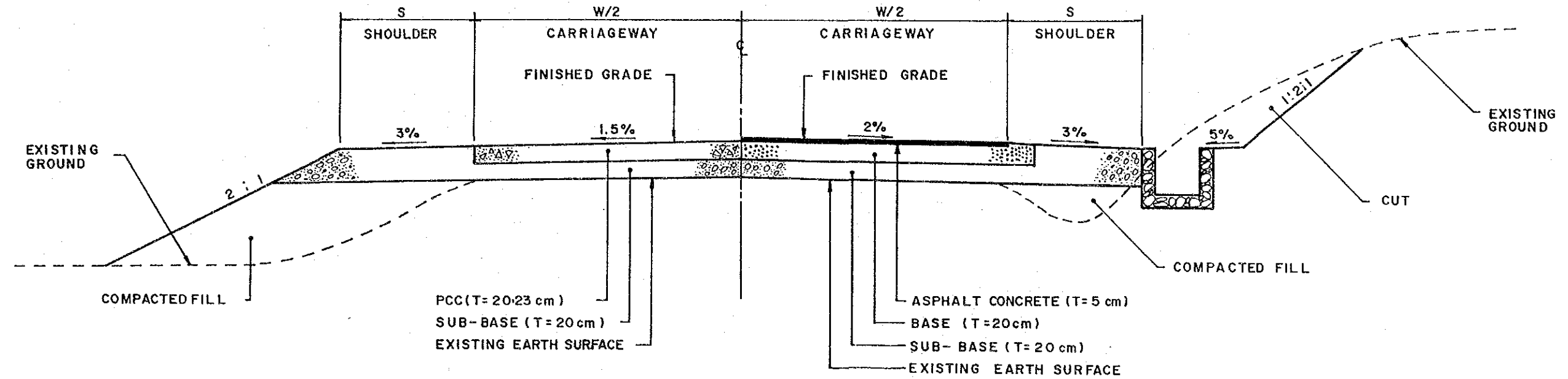
TYPE 2-2
PROPOSED PAVEMENT : PCC
EXISTING PAVEMENT : GRAVEL SURFACING (BAD/VERY BAD)



TYPE 2-3
PROPOSED PAVEMENT : ASPHALT CONCRETE
EXISTING PAVEMENT : GRAVEL SURFACING
(BAD/VERY BAD)

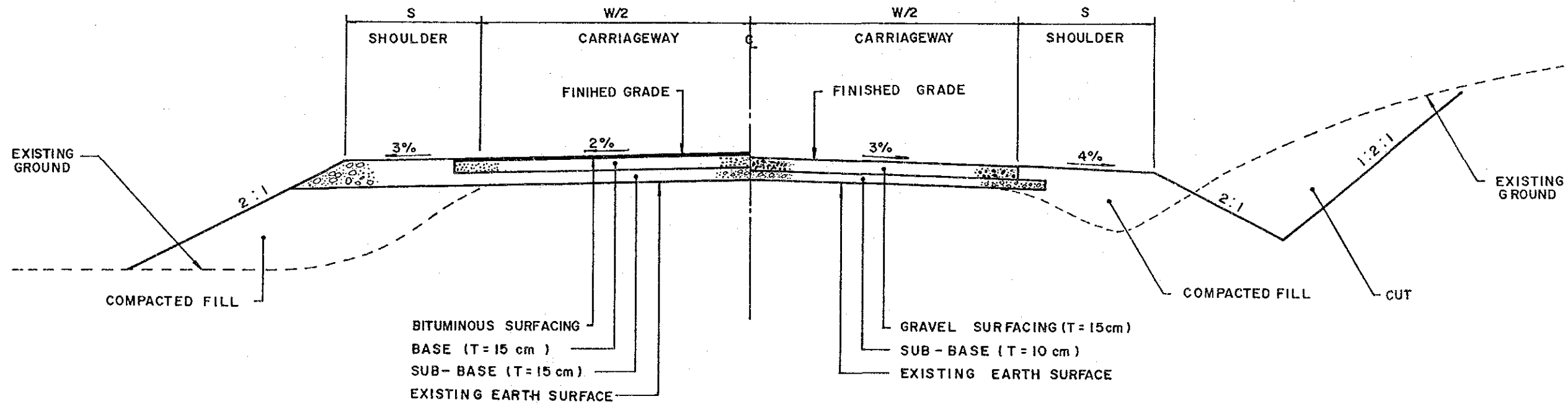
TYPE 2-4
PROPOSED PAVEMENT : BITUMINOUS MACADAM / DOUBLE BITUMINOUS
SURFACE TREATMENT
EXISTING PAVEMENT : GRAVEL SURFACING (BAD/VERY BAD)

IMPROVEMENT - I (I)



TYPE 2-5
 PROPOSED PAVEMENT : PCC
 EXISTING PAVEMENT : EARTH SURFACE

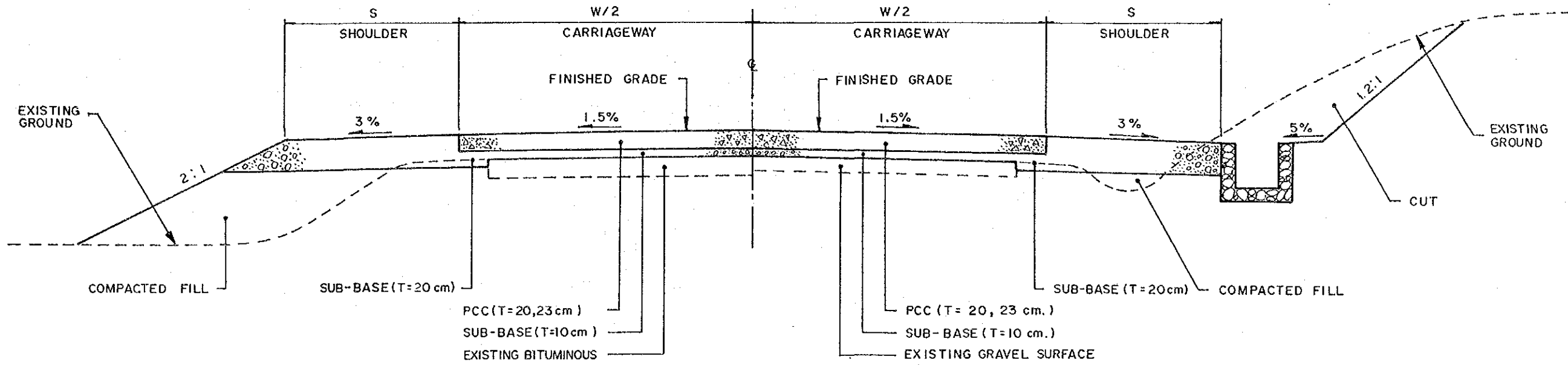
TYPE 2-6
 PROPOSED PAVEMENT : ASPHALT CONCRETE
 EXISTING PAVEMENT : EARTH SURFACE



TYPE 2-7
 PROPOSED PAVEMENT : BITUMINOUS MACADAM/
 DOUBLE BITUMINOUS
 SURFACE TREATMENT
 EXISTING PAVEMENT : EARTH SURFACE

TYPE 2-8
 PROPOSED PAVEMENT : GRAVEL SURFACING
 EXISTING PAVEMENT : EARTH SURFACING

IMPROVEMENT - I (2)

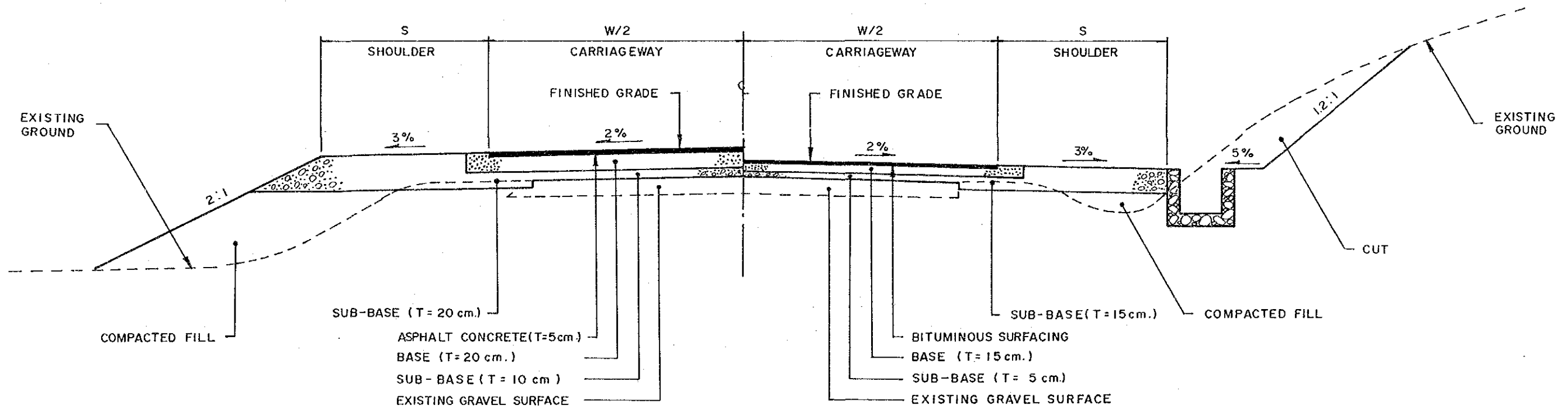


TYPE 3-1

PROPOSED PAVEMENT : PCC
EXISTING PAVEMENT : BITUMINOUS (Good/Fair)

TYPE 3-2

PROPOSED PAVEMENT : PCC
EXISTING PAVEMENT : GRAVEL SURFACING (Good/Fair)



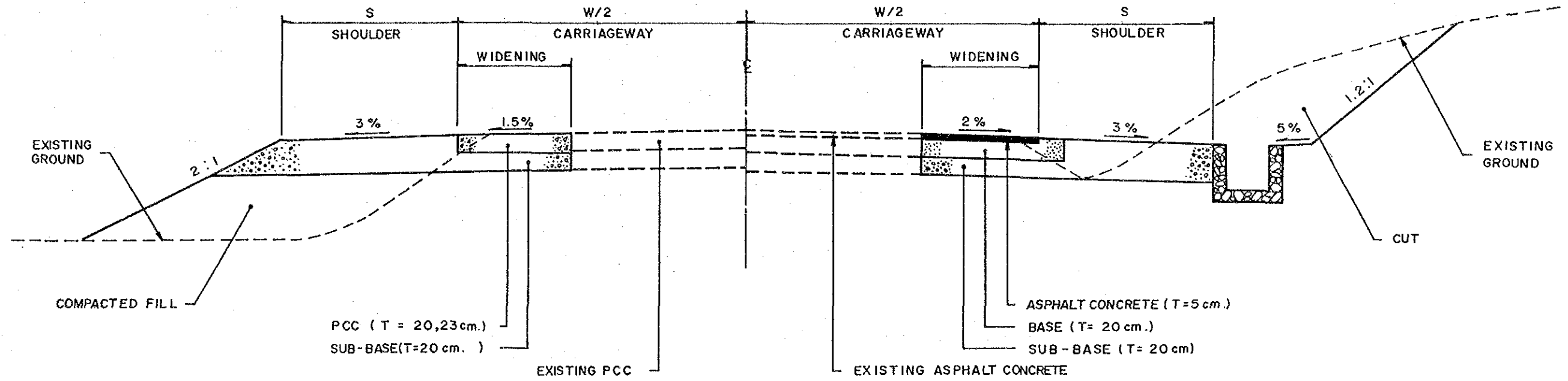
TYPE 3-3

PROPOSED PAVEMENT : ASPHALT CONCRETE
EXISTING PAVEMENT : GRAVEL SURFACING (Good/Fair)

TYPE 3-4

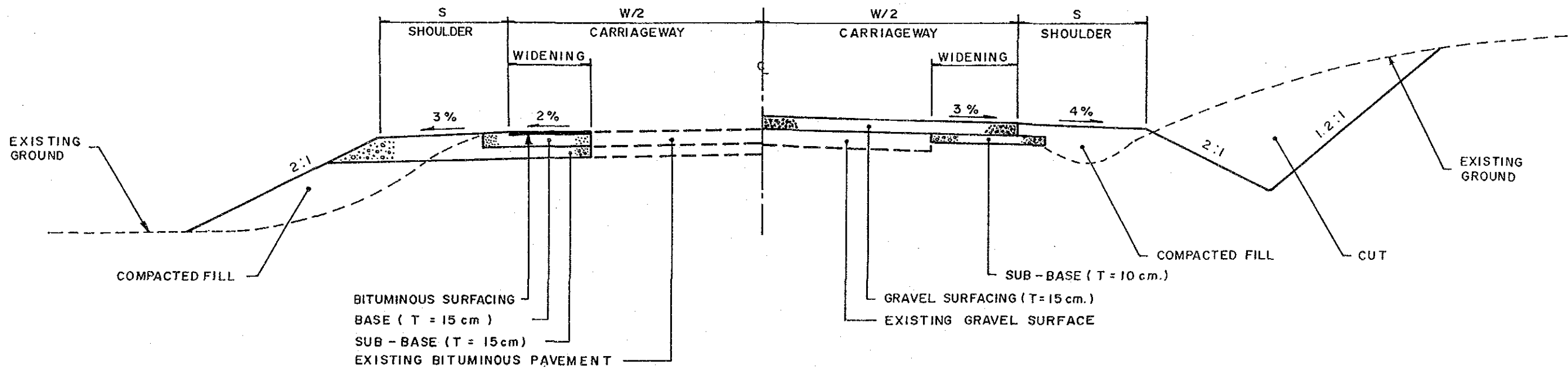
PROPOSED PAVEMENT : BITUMINOUS MACADAM/DOUBLE BITUMINOUS SURFACE TREATMENT
EXISTING PAVEMENT : GRAVEL SURFACING (Good/Fair)

IMPROVEMENT-2



TYPE 4-1
PROPOSED PAVEMENT : PCC
EXISTING PAVEMENT : PCC

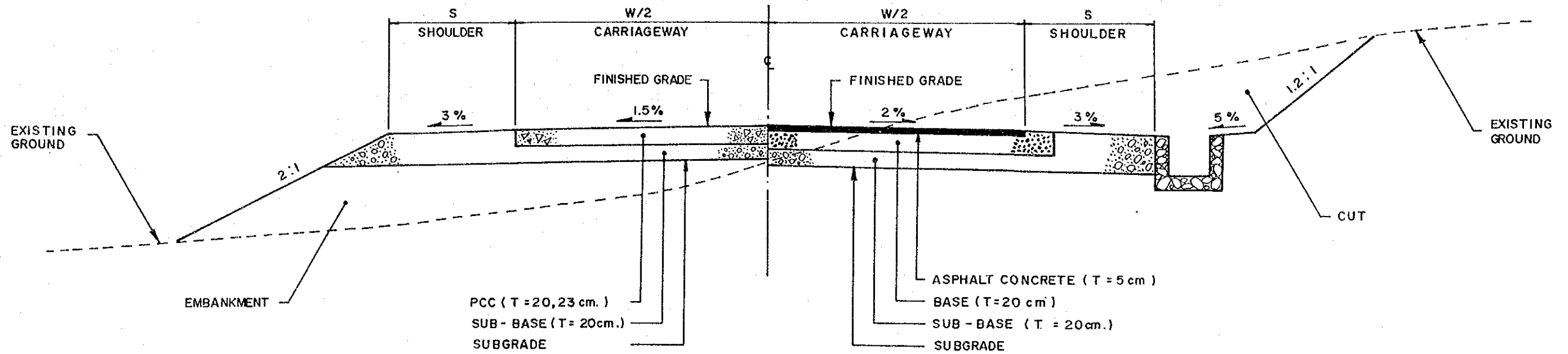
TYPE 4-2
PROPOSED PAVEMENT : ASPHALT CONCRETE
EXISTING PAVEMENT : ASPHALT CONCRETE



TYPE 4-3
PROPOSED PAVEMENT : BITUMINOUS MACADAM/
DOUBLE BITUMINOUS
SURFACE TREATMENT
EXISTING PAVEMENT : BITUMINOUS

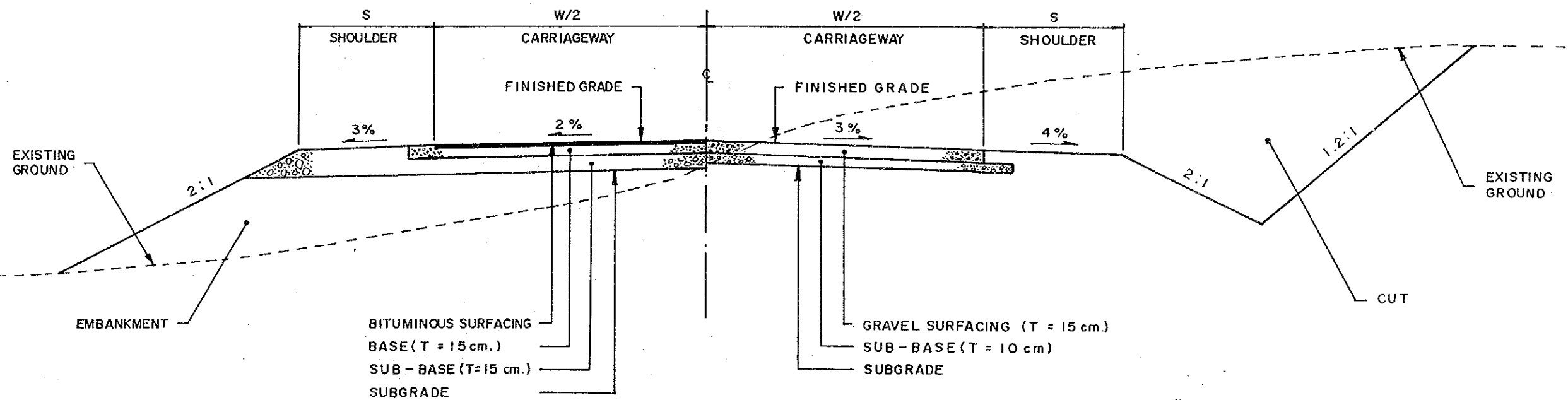
TYPE 4-4
PROPOSED PAVEMENT : GRAVEL SURFACING
EXISTING PAVEMENT : GRAVEL SURFACING

WIDENING



TYPE 5-1
PROPOSED PAVEMENT : PCC

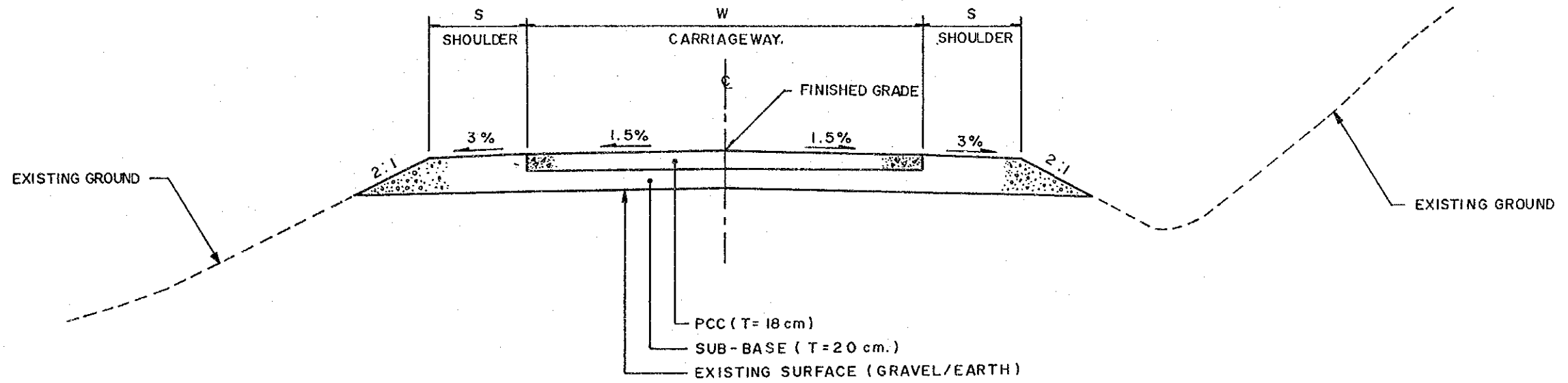
TYPE 5-2
PROPOSED PAVEMENT : ASPHALT CONCRETE



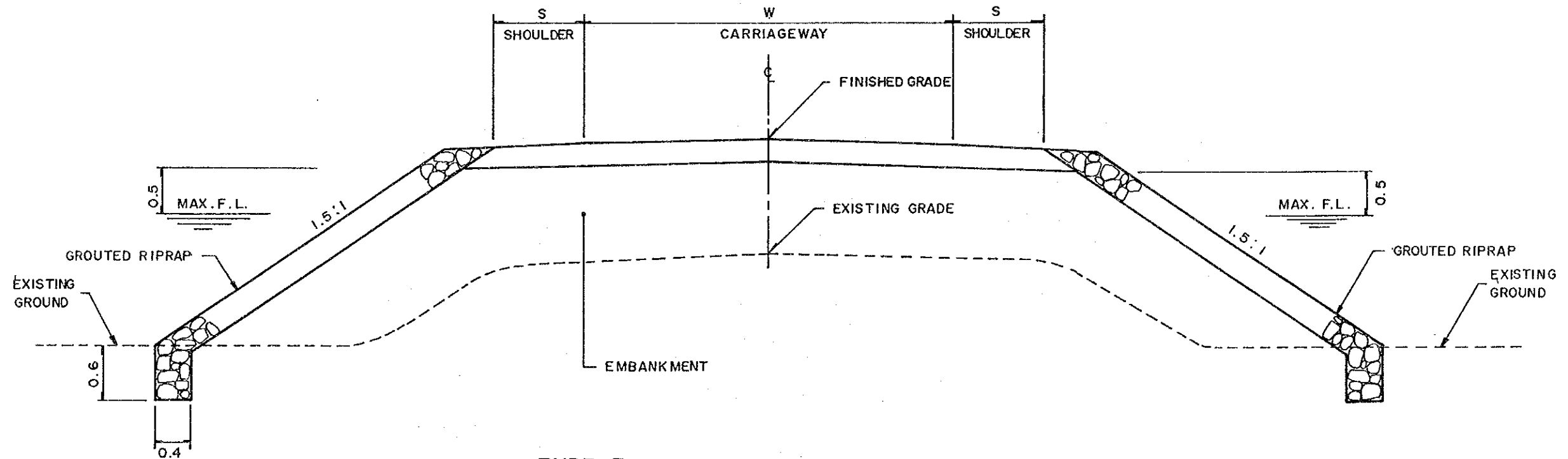
TYPE 5-3
PROPOSED PAVEMENT : BITUMINOUS MACADAM/
DOUBLE BITUMINOUS
SURFACE TREATMENT

TYPE 5-4
PROPOSED PAVEMENT : GRAVEL SURFACING

NEW CONSTRUCTION



TYPE 6
PCC PAVEMENT FOR STEEP GRADIENT SECTIONS



TYPE 7
GRADE RAISING SECTIONS IN FLOOD AREA

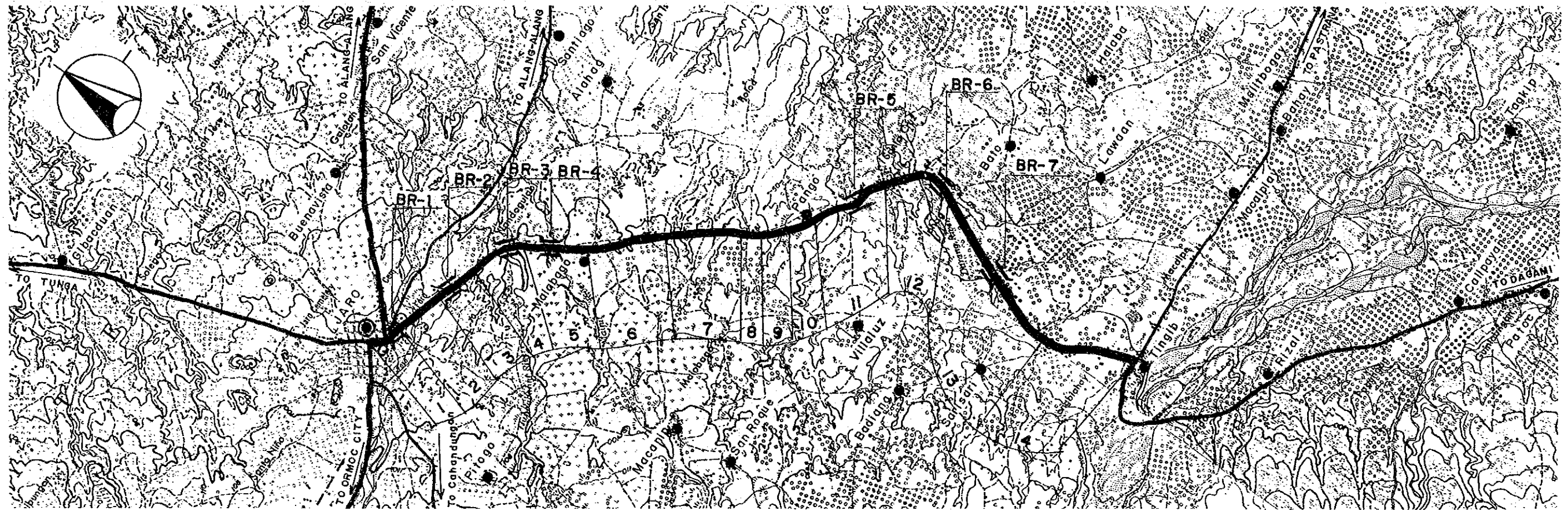
**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
10

Road No: N3-1 Road Name: JARO - DAGAMI ROAD
Location : JARO & DAGAMI, LEYTE



Road Classification	Secondary Major (National Road)													
Total Length	10.7 km													
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Length (km)	.2	.6	.6	.5	.7	.9	.9	.2	.3	.3	.9	.9	2.4	1.3
Terrain	Flat	Flat	Flat	Rolling	Flat	Rolling	Rolling	Rolling	Flat	Rolling	Flat	Rolling	Flat	Flat
Existing Road Surface	6.0-GRV (V.Bad)	5.5-GRV (V.Bad)	6.0-GRV (V.Bad)	4.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	4.5-GRV (Bad)	4.5-GRV (Bad)	5.0-GRV (Bad)	5.0-GRV (Bad)	5.0-GRV (Bad)	6.0-GRV (Fair)	5.5-GRV (Bad)
Proposed Improvement	Rehabil.													
Improvement Type	Rehabil.													
Surface Type	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel
Carriageway Width(m)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Shoulder Width (m)	1.0	1.0	1.0	.5	1.0	.5	.5	.5	1.0	.5	1.0	.5	1.0	1.0
Ref. Typical Section	TYPE 1-6													
Special Treatment														
Flood Section Length	100	-	-	-	-	-	-	-	-	-	100	100	-	-
Height	3.0	-	-	-	-	-	-	-	-	-	3.0	3.0	-	-
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7							
Existing Type	Ford-Cr.	RCBC	Concrete	Concrete	Ford-Cr.	Ford-Cr.	Timber							
Length (m)	-	7	42	30	-	-	10							
Proposed Type	2Lane-Br	-	-	-	2Lane-Br	2Lane-Br	2Lane-Br							
Length (m)	200	-	-	-	40	70	10							
No. of Spans	8	-	-	-	2	3	1							

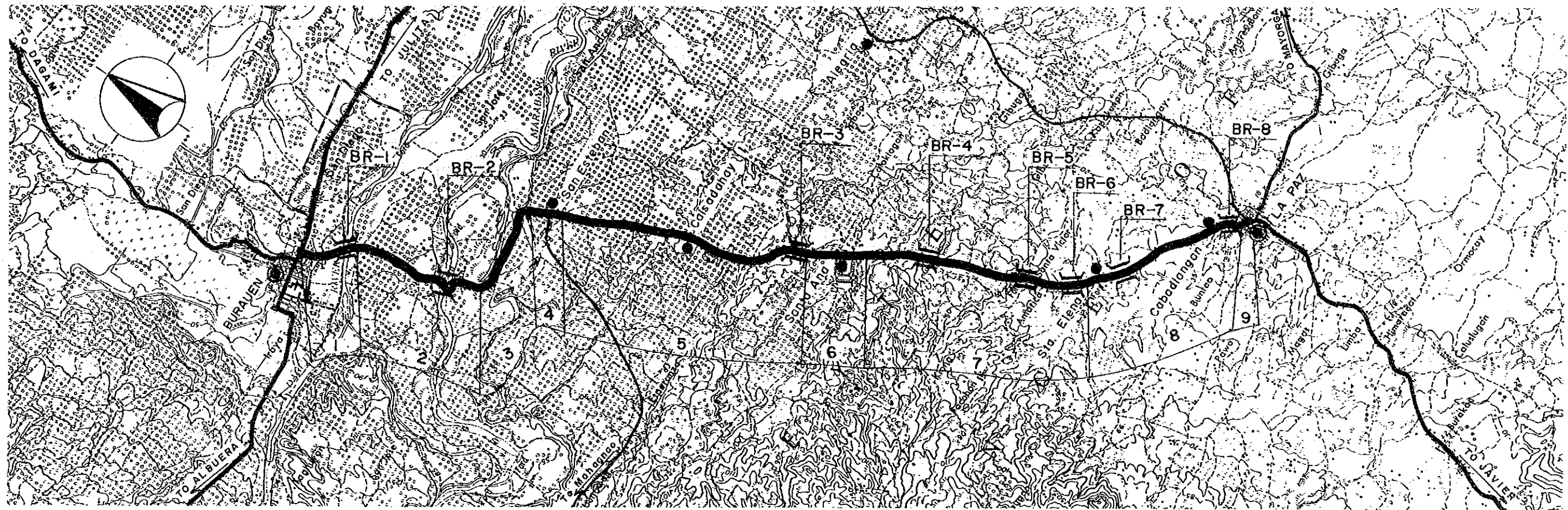
**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
12

Road No: N3-4 Road Name: BURAUEN - LA PAZ ROAD
Location : BURAUEN & LA PAZ, LEYTE



Road Classification	Secondary Major (National Road)								
Total Length	12.4 km								
Sub-section No.	1	2	3	4	5	6	7	8	9
Length (km)	.6	1.6	1.1	.4	3.2	.7	2.7	2.0	.1
Terrain	Flat	Flat	Flat	Rolling	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Fair)	5.5-GRV (Bad)	5.5-GRV (Fair)	6.0-GRV (Fair)	5.5-GRV (Fair)	6.0-GRV (Fair)	6.1-PCC (Fair)
Proposed Improvement	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Widening	Rehabil.	Widening	Rehabil.	-
Improvement Type	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	-
Surface Type	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	-
Carriageway Width(m)	1.0	1.0	1.0	.5	1.0	1.0	1.0	1.0	-
Shoulder Width (m)	TYPE 1-6 TYPE 1-6 TYPE 1-6 TYPE 1-6 TYPE 4-4 TYPE 1-6 TYPE 4-4 TYPE 1-6								
Ref. Typical Section	-								
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7	BR-8	
Existing Type	Concrete	Concrete	Concrete	Concrete	RCBC	RCBC	RCBC	RCBC	
Length (m)	120	60	24	16	9	6	9	9	
Proposed Type	-	2Lane-Br	-	-	-	-	-	-	
Length (m)	-	30	-	-	-	-	-	-	
No. of Spans	-	2	-	-	-	-	-	-	

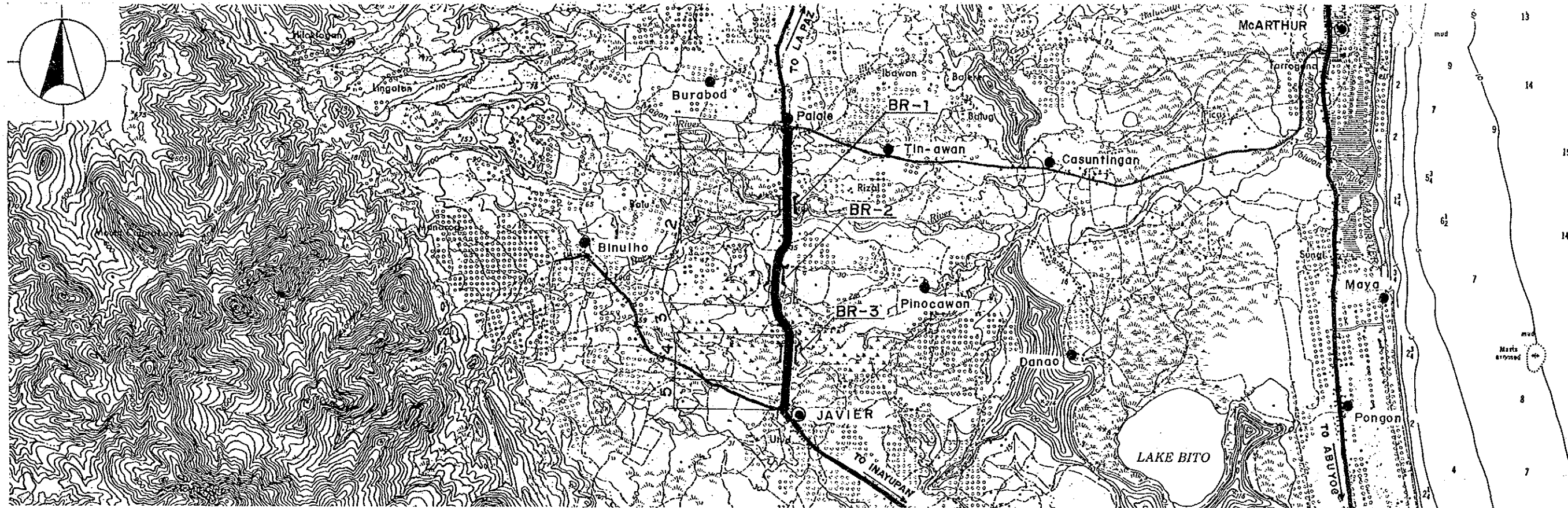
**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1: 50,000

Drawing No.
13

Road No: N4-1 Road Name: PALALE - JAVIER ROAD
Location : JAVIER, LEYTE



Road Classification	Secondary Major (National Road)				
Total Length	3.6 km				
Sub-section No.	1	2	3	4	5
Length (km)	.3	2.1	.4	.4	.4
Terrain	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	5.5-GRV (Fair)	5.0-GRV (Fair)	5.5-GRV (Fair)	6.7-PCC (Good)	5.5-GRV (Fair)
Proposed Improvement	Widening				
Improvement Type	Widening	Widening	Widening	-	Widening
Surface Type	Gravel	Gravel	Gravel	-	Gravel
Carriageway Width(m)	6.0	6.0	6.0	-	6.0
Shoulder Width (m)	1.0	1.0	1.0	-	1.0
Ref. Typical Section	TYPE 4-4	TYPE 4-4	TYPE 4-4	-	TYPE 4-4
Bridge No.	BR-1	BR-2	BR-3		
Existing Type	Steel	Timber	Steel		
Length (m)	170	8	17		
Proposed Type	-	2Lane-Br	-		
Length (m)	-	8	-		
No. of Spans	-	1	-		

**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
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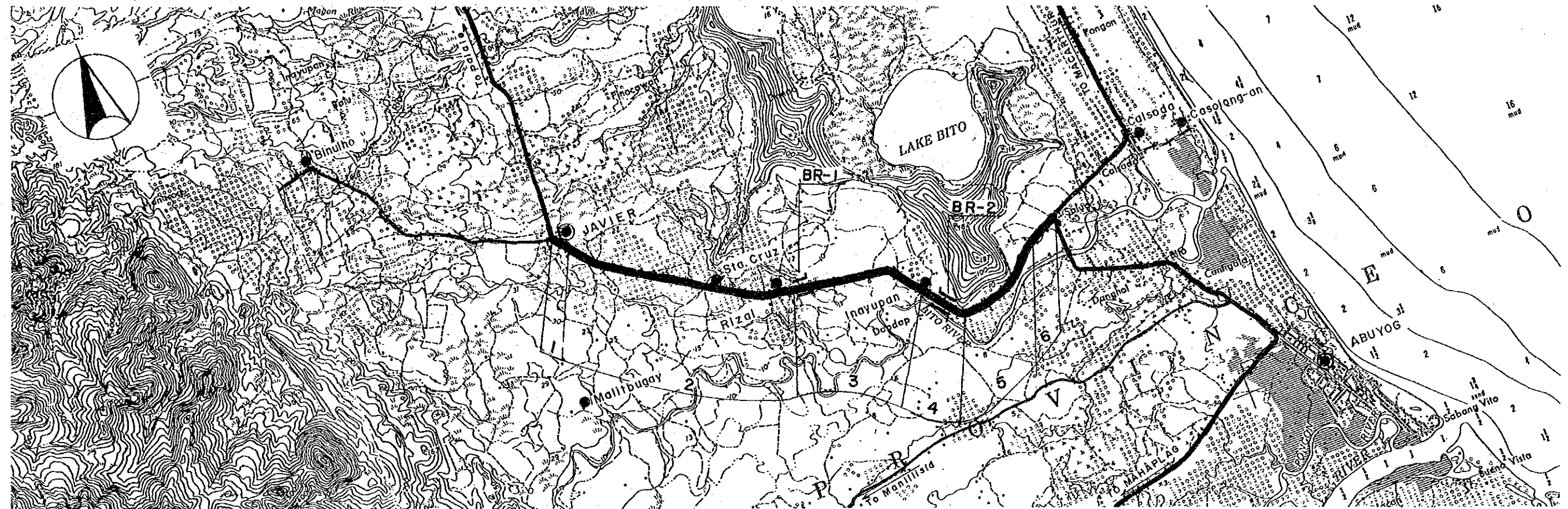
PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
14

Road No: N4-2

Road Name: JAVIER - ABUYOG ROAD
Location: JAVIER, LEYTE



Road Classification	Secondary Major (National Road)					
Total Length	6.8 km					
Sub-section No.	1	2	3	4	5	6
Length (km)	.2	2.8	1.6	.6	1.2	.4
Terrain	Flat	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	6.1-PCC (Good)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Bad)	6.0-GRV (Fair)	6.0-GRV (Fair)
Proposed Improvement Type	- Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.
Surface Type	- Gravel	Gravel	Gravel	Gravel	Gravel	Gravel
Carriageway Width(m)	-	6.0	6.0	6.0	6.0	6.0
Shoulder Width (m)	-	1.0	1.0	1.0	1.0	1.0
Ref. Typical Section	-	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6
Bridge No.	BR-1	BR-2				
Existing Type	Bailey	Bailey				
Length (m)	15	6				
Proposed Type	2Lane-Br	2Lane-Br				
Length (m)	15	6				
No. of Spans	1	1				

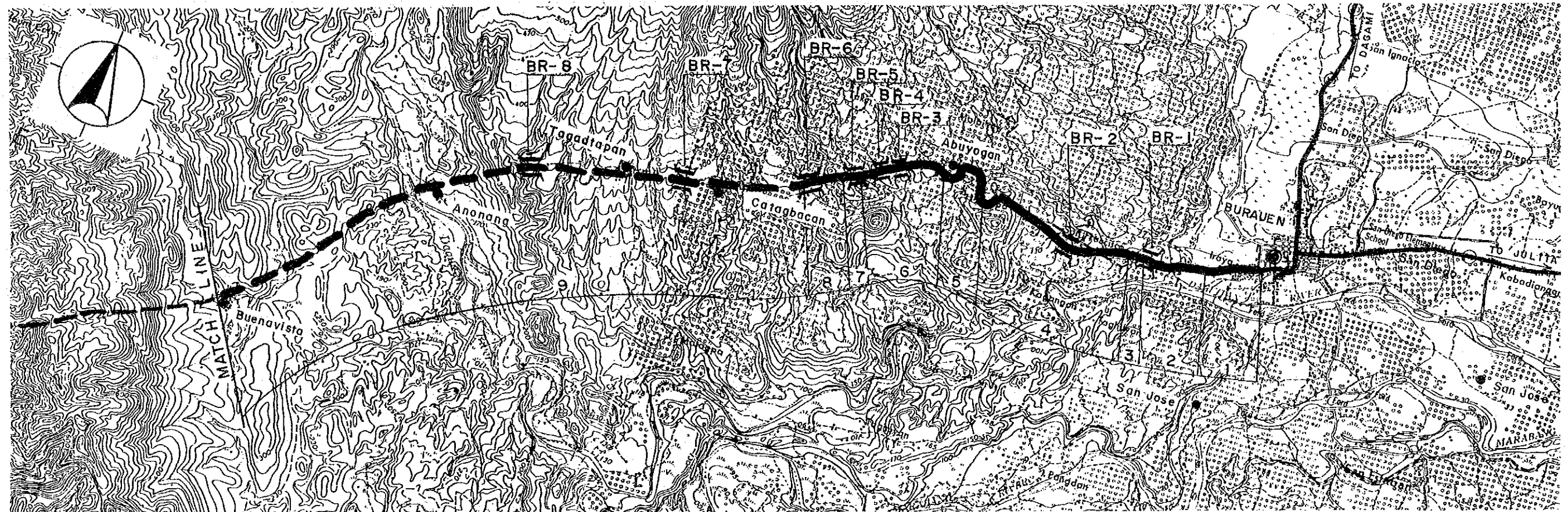
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
15

Road No: N5 Road Name: BURAUEN - ALBUERA ROAD
Location: BURAUEN & ALBUERA, LEYTE



Road Classification	Secondary Major (National Road)								
Total Length	28.4 km								
Sub-section No.	1	2	3	4	5	6	7	8	9
Length (km)	.7	.8	.1	2.0	.9	1.1	.2	.5	9.5
Terrain	Flat	Flat	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling
Existing Road Surface	6.1-PCC (Good)	6.0-GRV (Bad)	4.5-GRV (V.Bad)	6.0-GRV (V.Bad)	6.0-GRV (V.Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (V.Bad)	Non Ex-isting
Proposed Improvement	-	Impr.-1	Impr.-1	Impr.-1	Impr.-1	Impr.-1	Impr.-1	Impr.-1	New Con.
Improvement Type	-	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP
Surface Type	-	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Carriageway Width(m)	-	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Shoulder Width (m)	-	-	-	-	-	-	-	-	-
Ref. Typical Section	-	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 5-3
Special Treatment	-	-	-	-	-	-	-	-	-
Flood Section Length	-	-	-	-	-	-	-	100	-
Height	-	-	-	-	-	-	-	3.0	-
Steep Section Length	-	-	-	-	-	-	-	-	-
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7	BR-8	
Existing Type	Ford-Cr.	RCBC	RCBC	RCBC	Concrete	Ford-Cr.	Ford-Cr.	Ford-Cr.	
Length (m)	-	4	4	7	20	-	-	-	
Proposed Type	2Lane-Br	-	-	-	-	2Lane-Br	2Lane-Br	2Lane-Br	
Length (m)	18	-	-	-	-	50	12	30	
No. of Spans	1	-	-	-	-	2	1	2	

* DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

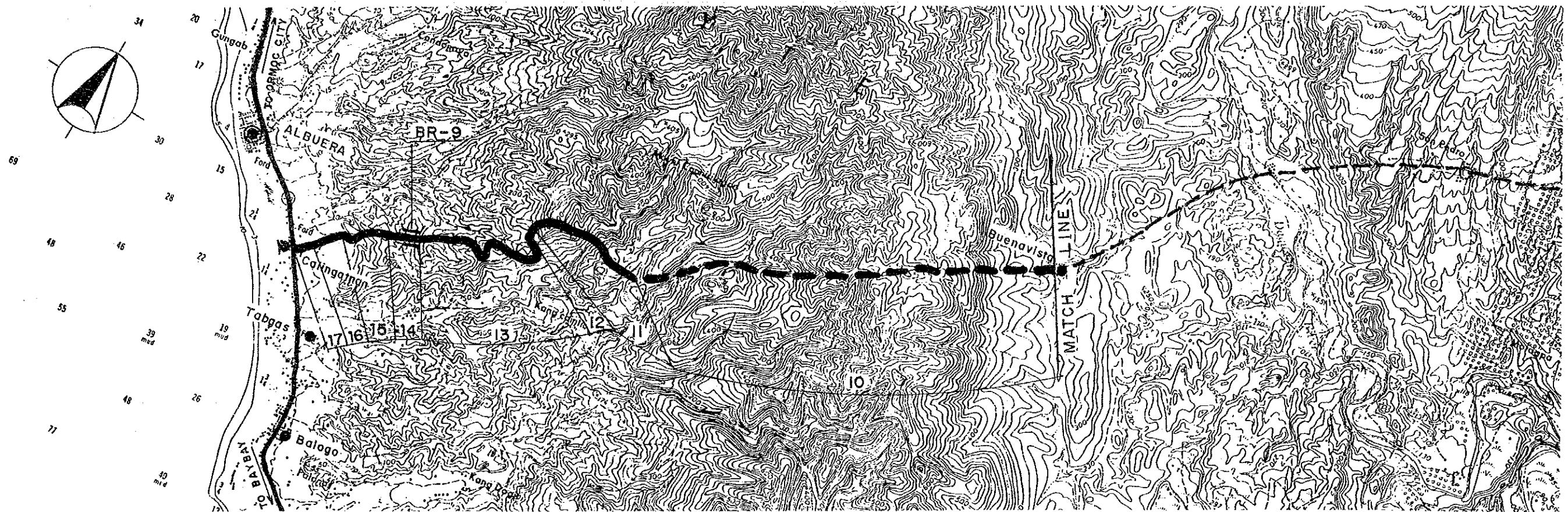
THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
16

Road NO: N5 Road Name: BURAUEN - ALBUERA ROAD
Location : BURAUEN & ALBUERA, LEYTE



Road Classification									
Total Length									
Sub-section No.	10	11	12	13	14	15	16	17	
Length (km)	7.6	1.4	.1	2.0	.3	.6	.4	.2	
Terrain	Mt'nous	Mt'nous	Mt'nous	Mt'nous	Flat	Rolling	Flat	Flat	
Existing Road Surface	Non Existing	4.5-EAR (V.Bad)	4.5-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	4.5-GRV (Bad)	6.0-GRV (Bad)	6.1-PCC (Good)	
Proposed Improvement									
Improvement Type	New Con.	Impr.-1	Impr.-1	Impr.-1	Impr.-1	Impr.-1	Impr.-1	Impr.-1	-
Surface Type	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	-
Carriageway Width(m)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	-
Shoulder Width (m)	1.0	1.0	1.0	1.0	1.5	1.0	1.0	1.5	-
Ref. Typical Section	TYPE 5-3	TYPE 2-7	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 2-4	TYPE 2-4	-
Special Treatment									
Flood Section Length	-	-	-	-	-	-	-	-	-
Height	-	-	-	-	-	-	-	-	-
Steep Section Length	-	100	30	300	-	-	-	-	-
Bridge No.	BR-9								
Existing Type	Spillway								
Length (m)	14								
Proposed Type	2Lane-Br								
Length (m)	14								
No. of Spans	1								

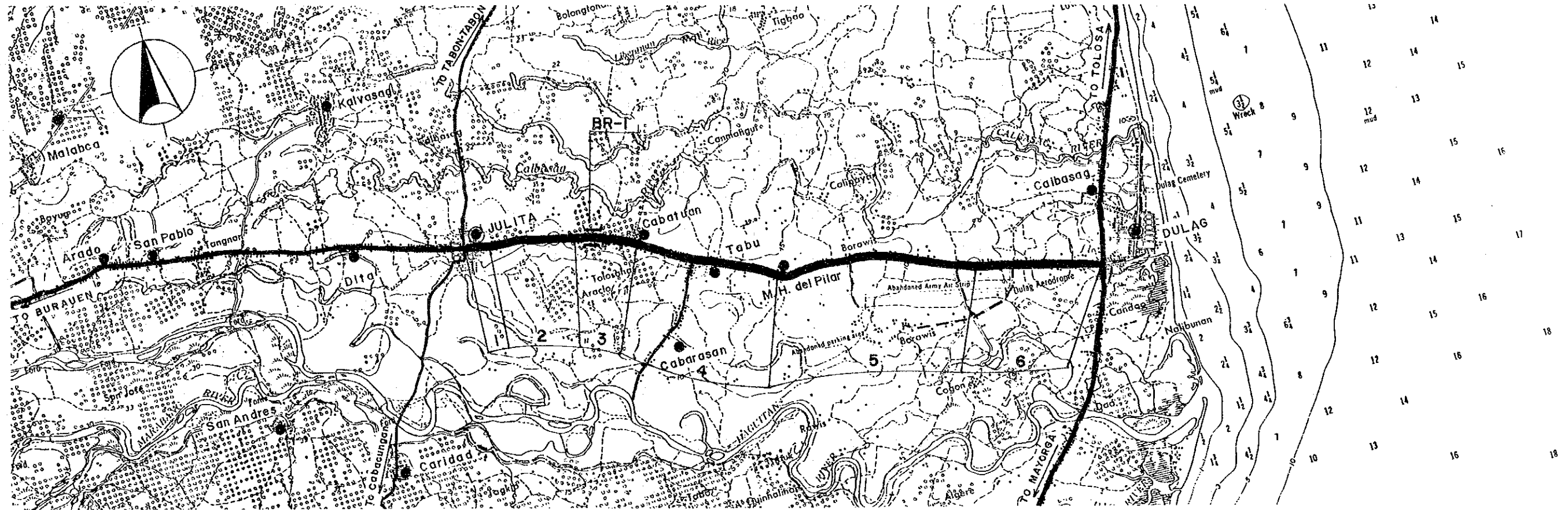
**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
17

Road No: N7-1 Road Name: JULITA - DULAG ROAD
Location : JULITA & DULAG, LEYTE



Road Classification	Secondary Major (National Road)					
Total Length	7.6 km					
Sub-section No.	1	2	3	4	5	6
Length (km)	.3	1.0	.8	1.8	2.3	1.4
Terrain	Flat	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Bad)	6.0-GRV (Fair)	6.1-PCC (Good)
Proposed Improvement						
Improvement Type	Impr.-2	Impr.-2	Impr.-2	Impr.-1	Impr.-2	-
Surface Type	AC	AC	AC	AC	AC	-
Carriageway Width(m)	6.0	6.0	6.0	6.0	6.0	-
Shoulder Width (m)	2.0	2.0	2.0	2.0	2.0	-
Ref. Typical Section	TYPE 3-3	TYPE 3-3	TYPE 3-3	TYPE 2-3	TYPE 3-3	-
Bridge No.	BR-1					
Existing Type	RCBC					
Length (m)	4					
Proposed Type	-					
Length (m)	-					
No. of Spans	-					

**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
18

Road No: N9-1 Road Name: BAGAHUPI - BABATNGON ROAD
Location : BABATNGON, LEYTE



Road Classification	Secondary Major (National Road)															
Total Length	14.3 km															
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length (km)	3.4	.7	.9	.6	.8	1.1	.3	.1	.5	1.2	.3	1.1	.2	.5	1.6	1.0
Terrain	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling	Flat	Flat
Existing Road Surface	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Fair)	5.5-GRV (Bad)	6.0-GRV (Fair)	6.1-PCC (Good)	6.1-PCC (Good)	5.5-GRV (Fair)	5.5-GRV (Fair)	5.5-GRV (Fair)	5.5-GRV (Fair)	5.5-GRV (Fair)	5.5-GRV (Fair)	5.5-GRV (Fair)	5.5-GRV (Fair)	6.1-PCC (Good)
Proposed Improvement																
Improvement Type	Impr.-2	Impr.-2	Impr.-2	Impr.-1	Impr.-2	-	-	Impr.-2	Impr.-2	Impr.-2	Impr.-2	Impr.-2	Impr.-2	Impr.-2	Impr.-2	-
Surface Type	* BMP	* BMP	* BMP	* BMP	* BMP	-	-	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	* BMP	-
Carriageway Width(m)	6.0	6.0	6.0	6.0	6.0	-	-	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	-
Shoulder Width (m)	1.5	1.5	1.5	1.5	1.5	-	-	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.5	-
Ref. Typical Section	TYPE 3-4	TYPE 3-4	TYPE 3-4	TYPE 2-4	TYPE 3-4	-	-	TYPE 3-4	TYPE 3-4	TYPE 3-4	TYPE 3-4	TYPE 3-4	TYPE 3-4	TYPE 3-4	TYPE 3-4	-
Special Treatment																
Steep Section Length	-	-	-	-	-	-	-	-	-	-	90	-	-	100	100	300
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7									
Existing Type	Timber	Spillway	Spillway	Concrete	Timber	Spillway	Timber									
Length (m)	8	13	9	54	8	16	21									
Proposed Type	2Lane-Br	2Lane-Br	2Lane-Br	-	2Lane-Br	2Lane-Br	2Lane-Br									
Length (m)	8	13	9	-	8	16	21									
No. of Spans	1	1	1	-	1	1	1									

* DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

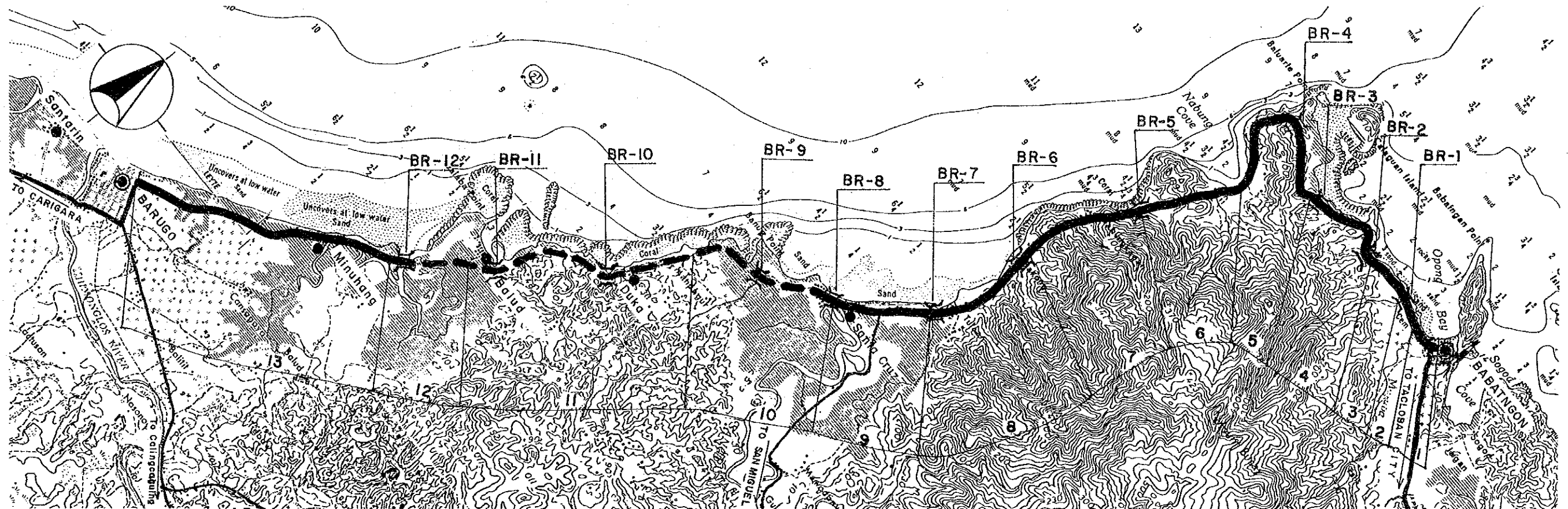
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IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

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Drawing No.
19

Road No: N9-2 Road Name: BABATNGON - BARUGO ROAD
Location : BABATNGON & BARUGO, LEYTE



Road Classification	Secondary Major (National Road)												
Total Length	19.9 km												
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Length (km)	.4	.3	.4	1.1	1.6	1.8	1.5	1.7	1.3	1.9	2.9	1.0	4.0
Terrain	Flat	Flat	Flat	Flat	Rolling	Flat	Rolling	Flat	Flat	Flat	Rolling	Flat	Flat
Existing Road Surface	7.4-PCC (Good)	6.0-GRV (Bad)	1.6-GRV (V.Bad)	1.6-GRV (Impass)	1.6-GRV (Impass)	1.6-GRV (Impass)	1.6-GRV (Impass)	1.6-GRV (Impass)	1.6-GRV (V.Bad)	Non Ex-isting	Non Ex-isting	Non Ex-isting	6.0-GRV (Fair)
Proposed Improvement	-	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	New Con.	New Con.	New Con.	Rehabil.
Improvement Type	-	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel
Surface Type	-	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Carriageway Width(m)	-	1.0	1.0	1.0	.5	1.0	.5	1.0	1.0	1.0	.5	1.0	1.0
Shoulder Width (m)	-	1.0	1.0	1.0	.5	1.0	.5	1.0	1.0	1.0	.5	1.0	1.0
Ref. Typical Section	-	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 5-4	TYPE 5-4	TYPE 5-4	TYPE 1-6
Special Treatment	-	300	-	-	-	-	-	-	-	-	-	-	-
Flood Section Length	-	300	-	-	-	-	-	-	-	-	-	-	-
Height	-	2.0	-	-	-	-	-	-	-	-	-	-	-
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7	BR-8	BR-9	BR-10	BR-11	BR-12	
Existing Type	Timber	Timber	Timber	Timber	Timber	Timber	Timber	Timber	Ford-Cr.	Ford-Cr.	Timber	Timber	
Length (m)	13	13	12	12	6	6	60	60	-	-	18	240	
Proposed Type	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br	2cell-BC	2cell-BC	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br	
Length (m)	13	13	12	12	6	6	60	60	40	24	18	240	
No. of Spans	1	1	1	1	2	2	3	3	2	1	1	10	

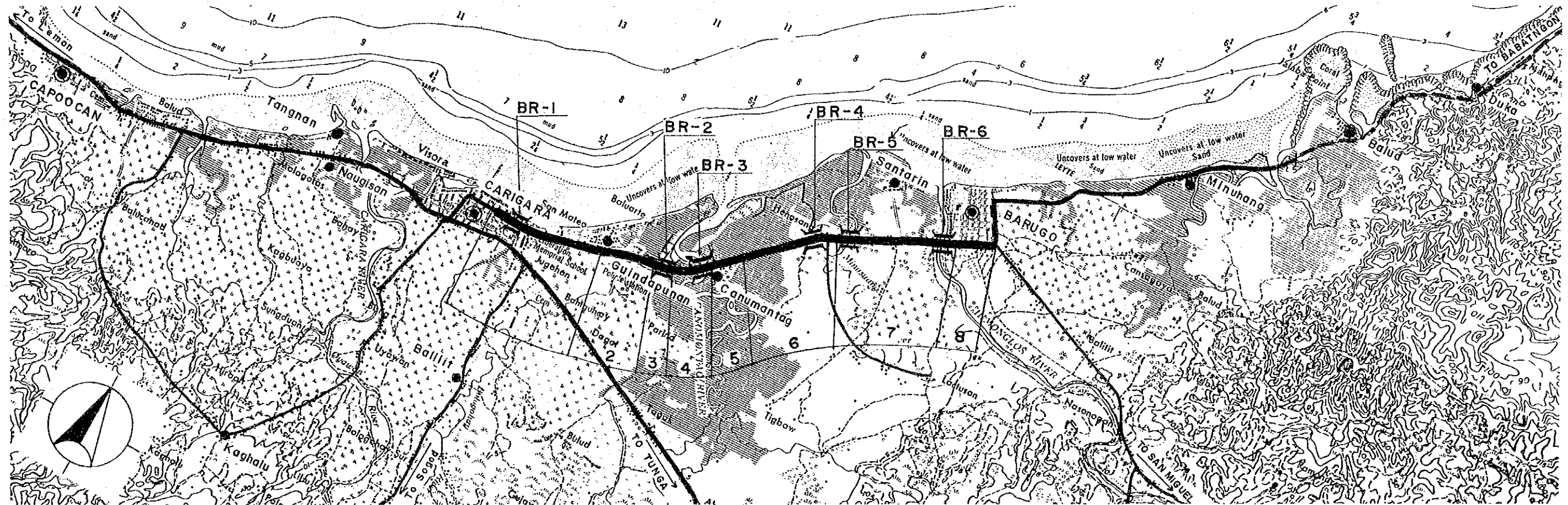
THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
20

Road No: N9-3 Road Name: CARIGARA - BARUGO ROAD
Location: CARIGARA & BARUGO, LEYTE



Road Classification	Secondary Major (National Road)							
Total Length	6.0 km							
Sub-section No.	1	2	3	4	5	6	7	8
Length (km)	1.3	.7	.2	.4	.3	1.4	1.3	.4
Terrain	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	6.1-PCC (Good)	6.1-PCC (Good)	6.1-PCC (Good)	6.0-GRV (Fair)	4.0-PCC (Good)	6.0-GRV (Fair)	4.0-PCC (Good)	6.1-PCC (Good)
Proposed Improvement	-	-	-	Impr.-2	Widening	Impr.-2	Widening	-
Improvement Type	-	-	-	Widening	Widening	Widening	Widening	-
Surface Type	-	-	-	PCC	PCC	PCC	PCC	-
Carriageway Width(m)	-	-	-	6.0	6.0	6.0	6.0	-
Shoulder Width (m)	-	-	-	2.5	2.5	2.5	2.5	-
Ref. Typical Section	-	-	-	TYPE 3-2	TYPE 4-1	TYPE 3-2	TYPE 4-1	-
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6		
Existing Type	Concrete	Concrete	Timber	RCBC	RCBC	Bailey		
Length (m)	15	12	60	13	14	132		
Proposed Type	-	-	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br		
Length (m)	-	-	60	15	16	126		
No. of Spans	-	-	3	1	1	6		

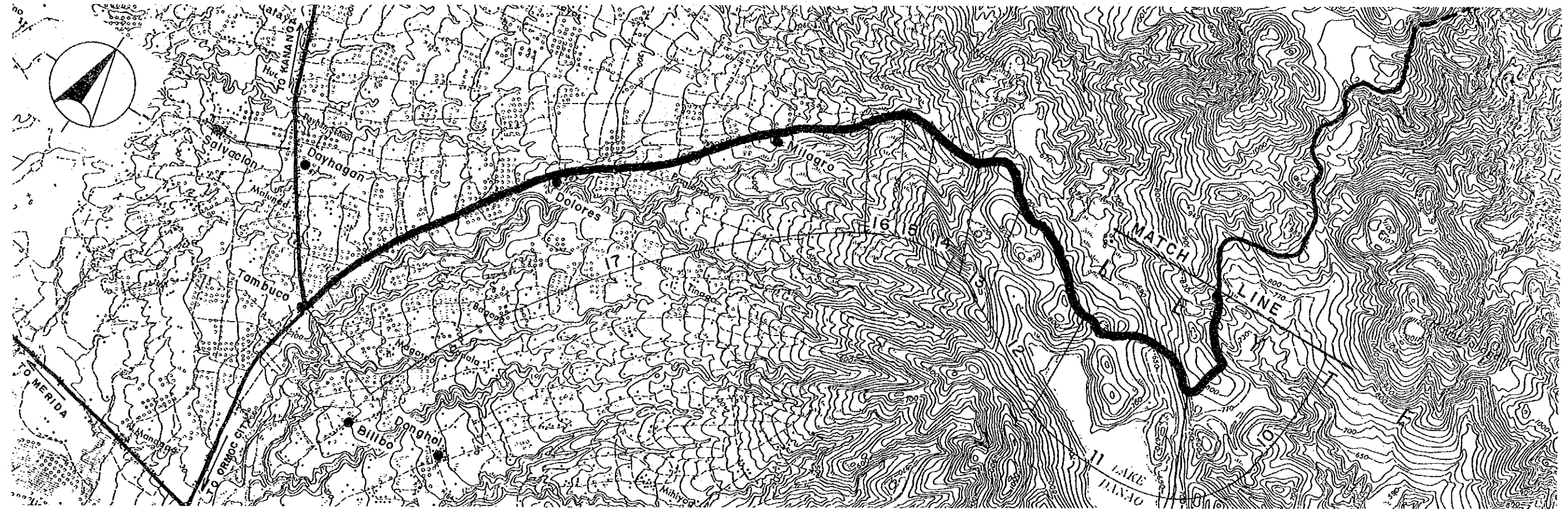
**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
22

Road No: N10 Road Name: JARO - DARO - ORMOC ROAD
Location : JARO & ORMOC, LEYTE



Road Classification									
Total Length									
Sub-section No.	10	11	12	13	14	15	16	17	
Length (km)	1.0	1.3	1.7	.7	.7	.4	.4	7.2	
Terrain	Mt'nous	Mt'nous	Mt'nous	Rolling	Mt'nous	Mt'nous	Rolling	Flat	
Existing Road Surface	6.0-GRV (V.Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.1-PCC (Good)	6.1-PCC (Good)	6.1-PCC (Good)	
Proposed Improvement									
Improvement Type	Impr.-1	Impr.-1	Impr.-1	Impr.-1	Impr.-1	-	-	-	
Surface Type	AC	AC	AC	AC	AC	-	-	-	
Carriageway Width(m)	6.0	6.0	6.0	6.0	6.0	-	-	-	
Shoulder Width (m)	1.0	1.0	1.0	1.5	1.0	-	-	-	
Ref. Typical Section	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	-	-	-	
Special Treatment									
Steep Section Length	300	-	510	200	-	-	-	-	

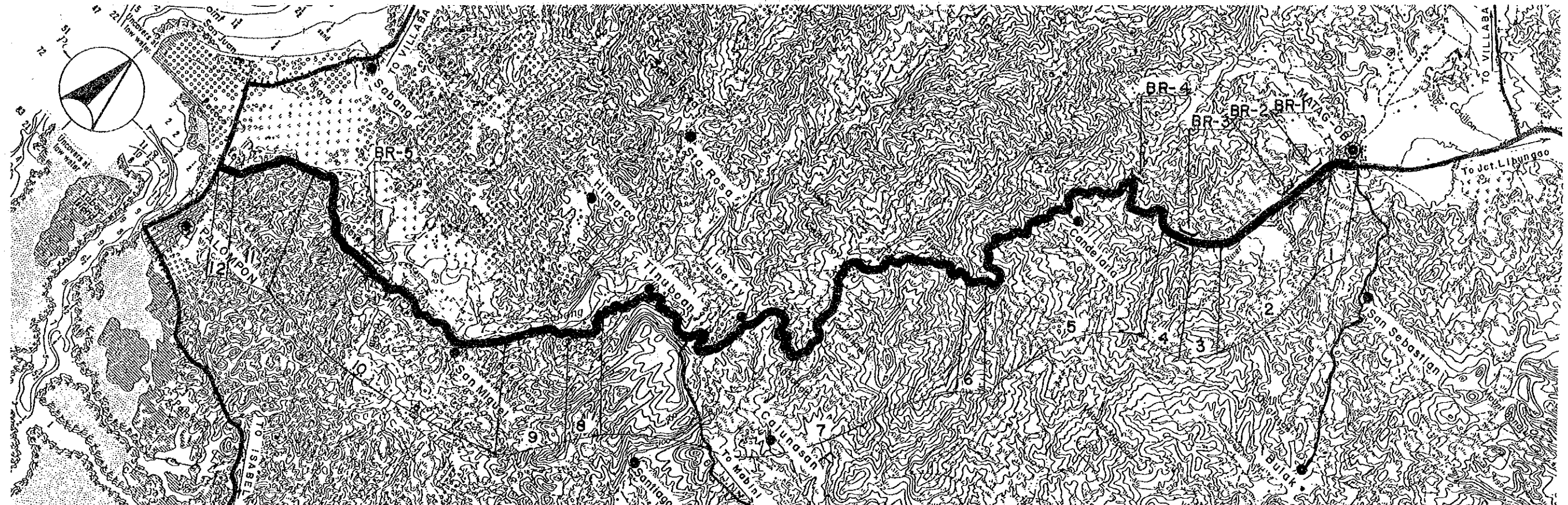
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IN THE REPUBLIC OF THE PHILIPPINES**

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
23

Road No: N20-1 Road Name: MATAG-OB - PALOMPON ROAD
Location : MATAG-OB & PALOMPON, LEYTE



Road Classification	Secondary Major (National Road)											
Total Length	21.5 km											
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (km)	.3	1.6	.3	.4	4.9	.2	7.4	.5	.8	3.9	1.0	.2
Terrain	Flat	Flat	Rolling	Flat	Mt'nous	Mt'nous	Mt'nous	Mt'nous	Mt'nous	Rolling	Flat	Flat
Existing Road Surface	6.1-PCC (Good)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Fair)	6.1-PCC (Fair)
Proposed Improvement	-	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	-
Improvement Type	-	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	-
Surface Type	-	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	-
Carriageway Width(m)	-	1.0	.5	1.0	.5	.5	.5	.5	.5	.5	1.0	-
Shoulder Width (m)	-	1.0	.5	1.0	.5	.5	.5	.5	.5	.5	1.0	-
Ref. Typical Section	-	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	-
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5							
Existing Type	Bailey	Timber	Timber	Timber	Concrete							
Length (m)	22	18	7	9	58							
Proposed Type	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br	-							
Length (m)	22	18	7	9	-							
No. of Spans	1	1	1	1	-							

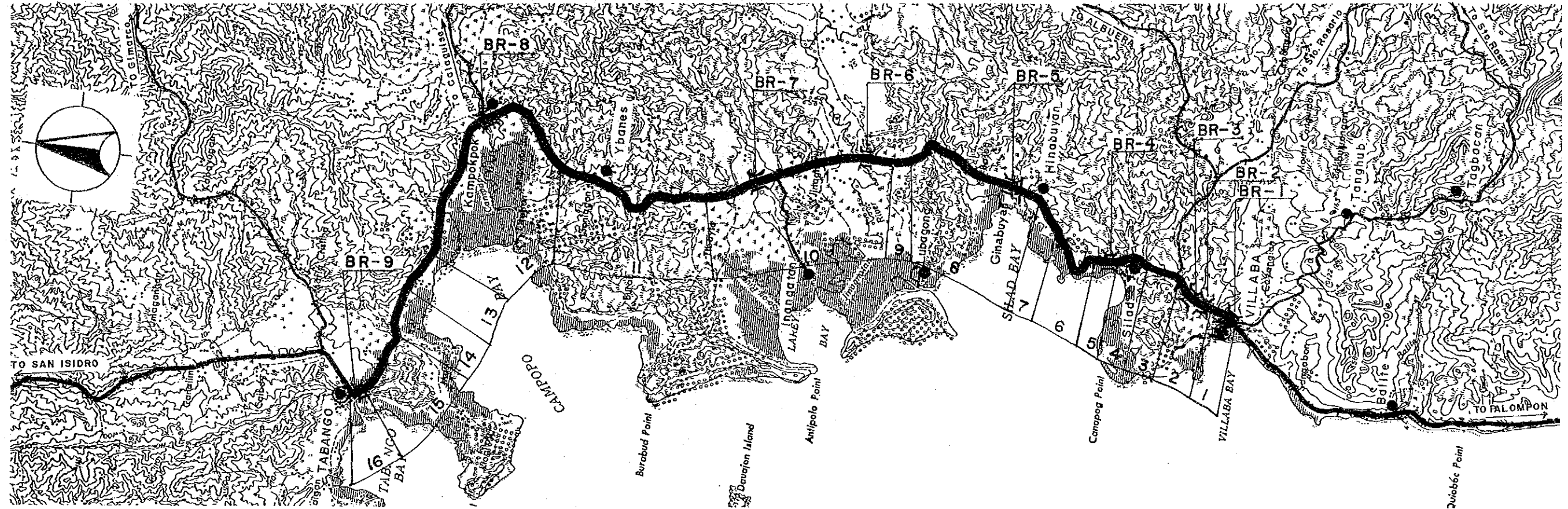
**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
24

Road No: N21-2 Road Name: VILLABA - TABANGO ROAD
Location : VILLABA & TABANGO, LEYTE



Road Classification	Secondary Major (National Road)															
Total Length	15.6 km															
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length (km)	.5	.6	.4	.4	.3	.9	.3	1.9	.2	2.3	2.0	3.4	.6	.7	.9	.2
Terrain	Rolling	Flat	Rolling	Rolling	Flat	Rolling	Rolling	Flat	Flat	Flat	Rolling	Flat	Rolling	Flat	Rolling	Flat
Existing Road Surface	6.0-GRV (Bad)	6.7-BTM (Bad)	6.7-BTM (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Fair)	6.0-GRV (Fair)
Proposed Improvement	Rehabil.															
Improvement Type	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.	Rehabil.
Surface Type	Gravel	Overlay	Overlay	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel
Carriageway Width(m)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Shoulder Width (m)	.5	2.0	1.5	.5	1.0	.5	.5	1.0	1.0	1.0	.5	1.0	.5	1.0	.5	1.0
Ref. Typical Section	TYPE 1-6	TYPE 1-4	TYPE 1-4	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6	TYPE 1-6
Special Treatment	-															
Flood Section Length	-	-	-	-	-	-	-	-	-	-	-	-	-	500	-	300
Height	-	-	-	-	-	-	-	-	-	-	-	-	1.7	-	1.5	1.5
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7	BR-8	BR-9							
Existing Type	Bailey	Concrete	Concrete	Concrete	Concrete	Bailey	Timber	Bailey	Bailey							
Length (m)	12	7	18	6	6	21	12	30	30							
Proposed Type	2Lane-Br	-	-	-	-	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br							
Length (m)	12	-	-	-	-	21	12	30	30							
No. of Spans	1	-	-	-	-	1	1	1	2							