

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

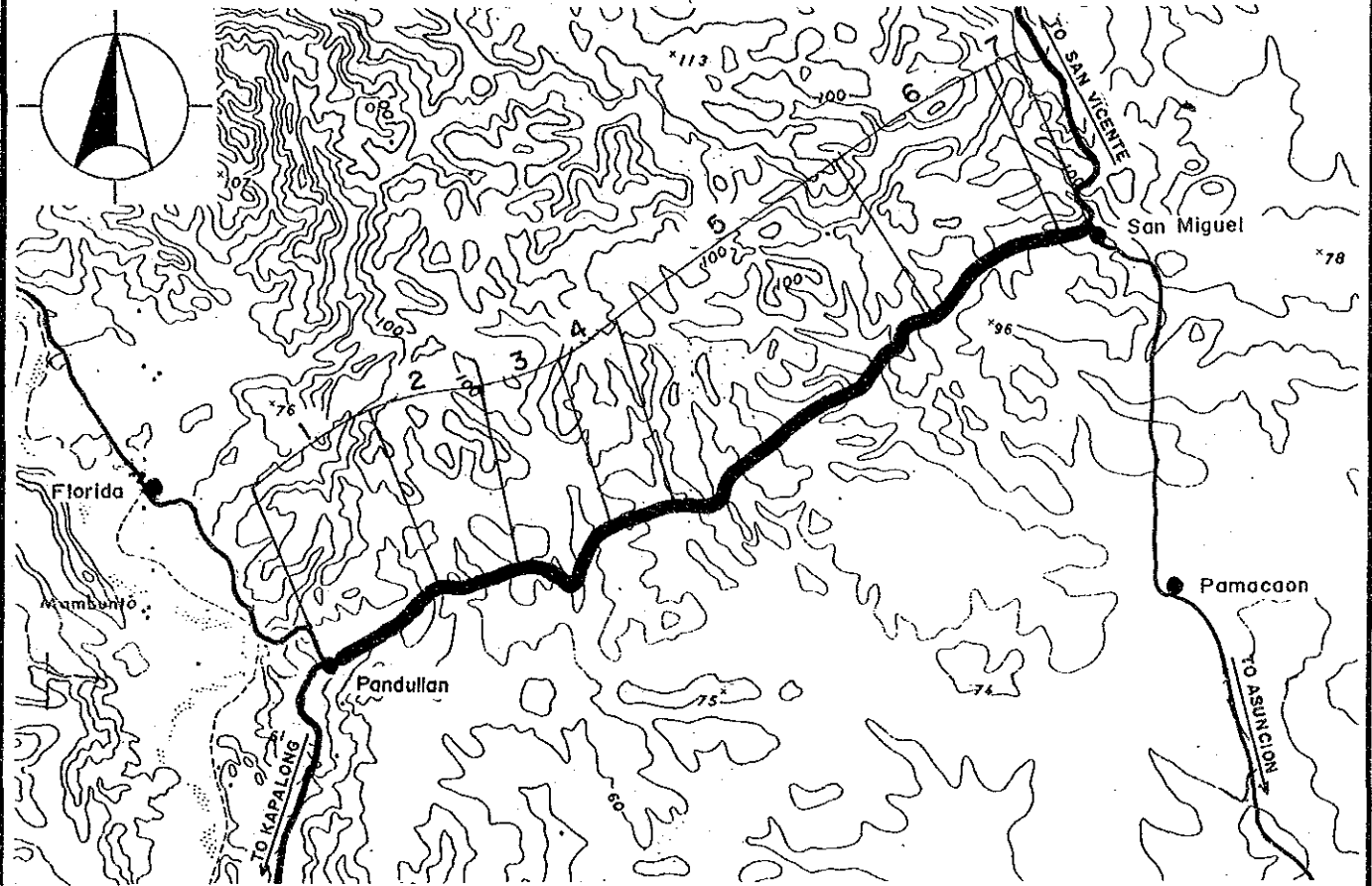
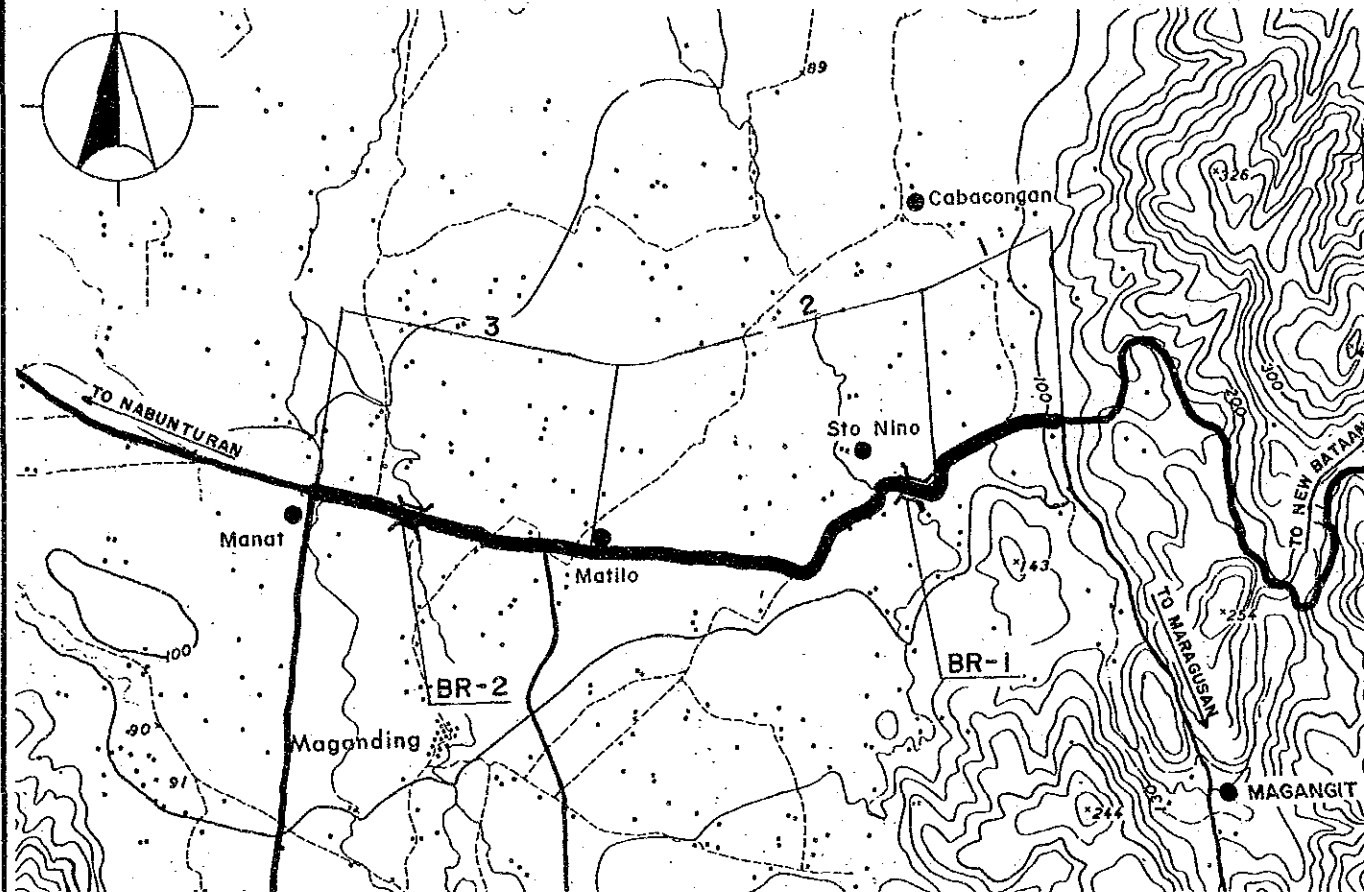
PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
30

Road No: P126-2 Road Name: CAMANLAGAN-STO. NINO ROAD
Location: NEW BATAAN, DAVAO DEL NORTE

Road No: P134 Road Name: PANDULIAN-JCT. PAMACAON ROAD
Location: KAPALONG, DAVAO DEL NORTE



| Road Classification | Second'y Major (Prov'l Road) | | |
|-----------------------|------------------------------|-------------------|-------------------|
| Total Length | 5.3 km | | |
| Sub-section No. | 1 | 2 | 3 |
| Length (km) | .9 | 2.4 | 2.0 |
| Terrain | Rolling | Flat | Flat |
| Existing Road Surface | 4.0-GRV (Fair) | 4.0-GRV (Fair) | 4.5-GRV (Fair) |
| Proposed Improvement | Impr.-2 | Impr.-2 | Impr.-2 |
| Improvement Type | * BMP | * BMP | * BMP |
| Surface Type | 6.0 | 6.0 | 6.0 |
| Carriageway Width(m) | 1.0 | 1.5 | 1.5 |
| Shoulder Width (m) | TYPE 3-4 | | |
| Ref. Typical Section | TYPE 3-4 | | |
| Bridge No. | BR-1 | BR-2 | |
| Existing Type | Concrete | Concrete | |
| Length (m) | 21 | 90 | |
| Proposed Type | - | - | |
| Length (m) | - | - | |
| No. of Spans | - | - | |

| Road Classification | Secondary Major (Provincial Road) | | | | | | |
|-----------------------|-----------------------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| Total Length | 7.2 km | | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Length (km) | 1.0 | .6 | .9 | .5 | 2.8 | 1.2 | .2 |
| Terrain | Rolling | Rolling | Rolling | Mt'nous | Mt'nous | Mt'nous | Rolling |
| Existing Road Surface | 4.0-GRV (Fair) | 3.2-GRV (Bad) | 3.2-GRV (Bad) | 3.2-GRV (Bad) | 3.2-GRV (Bad) | 3.4-GRV (Bad) | 3.2-GRV (V.Bad) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Carriageway Width(m) | .5 | .5 | .5 | .5 | .5 | .5 | .5 |
| Shoulder Width (m) | TYPE 4-4 | | | | | | |
| Ref. Typical Section | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Special Treatment | 100 | - | - | - | 100 | 200 | - |
| Steep Section Length | | | | | | | |

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

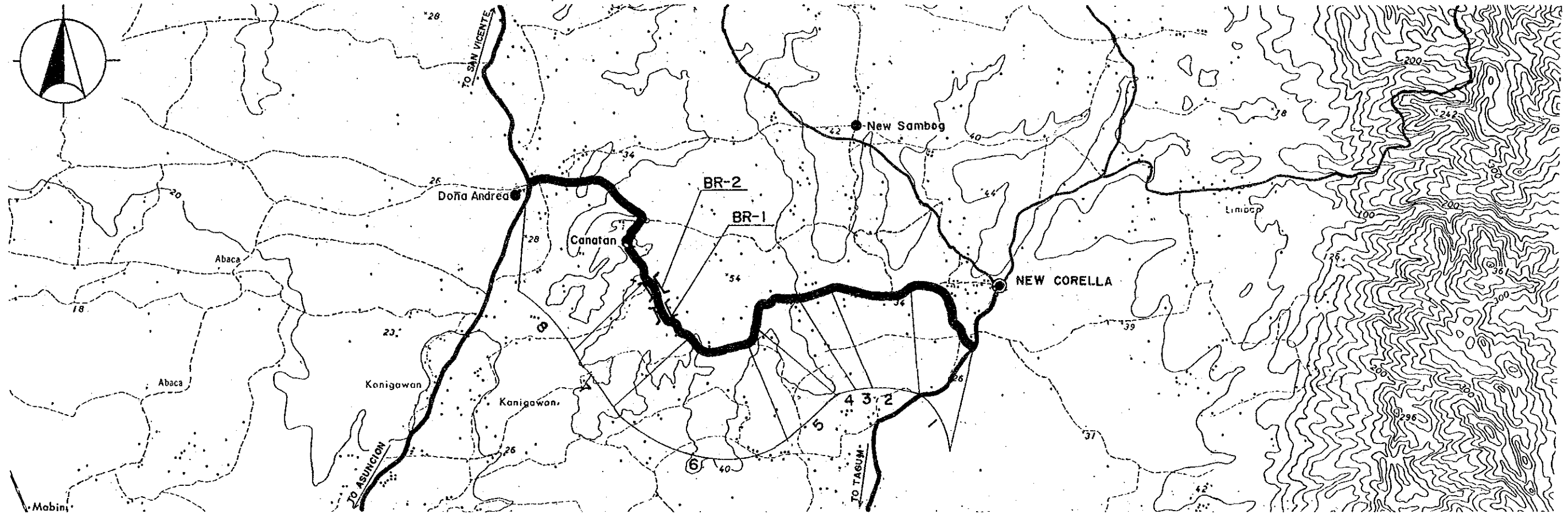
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
31

Road No: B14-21 Road Name: STA. CRUZ-SILANGAN-CANATAN ROAD
Location: NEW CORELLA & ASUNCION, DAVAO DEL NORTE



| Road Classification | Secondary Major (Barangay Road) | | | | | | | |
|-----------------------|---|------------------|------------------|------------------|--------------------|--------------------|--------------------|-------------------|
| Total Length | 7.9 km | | | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Length (km) | 1.4 | 1.1 | .4 | .8 | .3 | .8 | .9 | 2.2 |
| Terrain | Flat | Rolling | Rolling | Rolling | Flat | Flat | Rolling | Flat |
| Existing Road Surface | 2.4-GRV (Fair) | 2.4-GRV (Bad) | 2.0-EAR (Bad) | 2.0-GRV (Bad) | 2.0-EAR (V.Bad) | 2.0-EAR (V.Bad) | 2.0-EAR (V.Bad) | 4.0-GRV (Fair) |
| Proposed Improvement | Impr.-2 | Impr.-1 | Impr.-1 | Impr.-1 | Impr.-1 | Impr.-1 | Impr.-1 | Impr.-2 |
| 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 | 1.5 | 1.5 | 1.0 | 1.5 |
| Shoulder Width (m) | TYPE 3-4 TYPE 2-4 TYPE 2-7 TYPE 2-4 TYPE 2-7 TYPE 2-7 TYPE 2-7 TYPE 3-4 | | | | | | | |
| Ref. Typical Section | | | | | | | | |
| Special Treatment | | | | | | | | |
| Flood Section Length | - | - | - | - | 300 | 800 | - | - |
| Height | - | - | - | - | 1.0 | 1.0 | - | - |
| Bridge No. | BR-1 | BR-2 | | | | | | |
| Existing Type | Concrete Ford-Cr. | | | | | | | |
| Length (m) | 7 | - | | | | | | |
| Proposed Type | - | 2Lane-Br | | | | | | |
| Length (m) | - | 80 | | | | | | |
| No. of Spans | - | 4 | | | | | | |

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

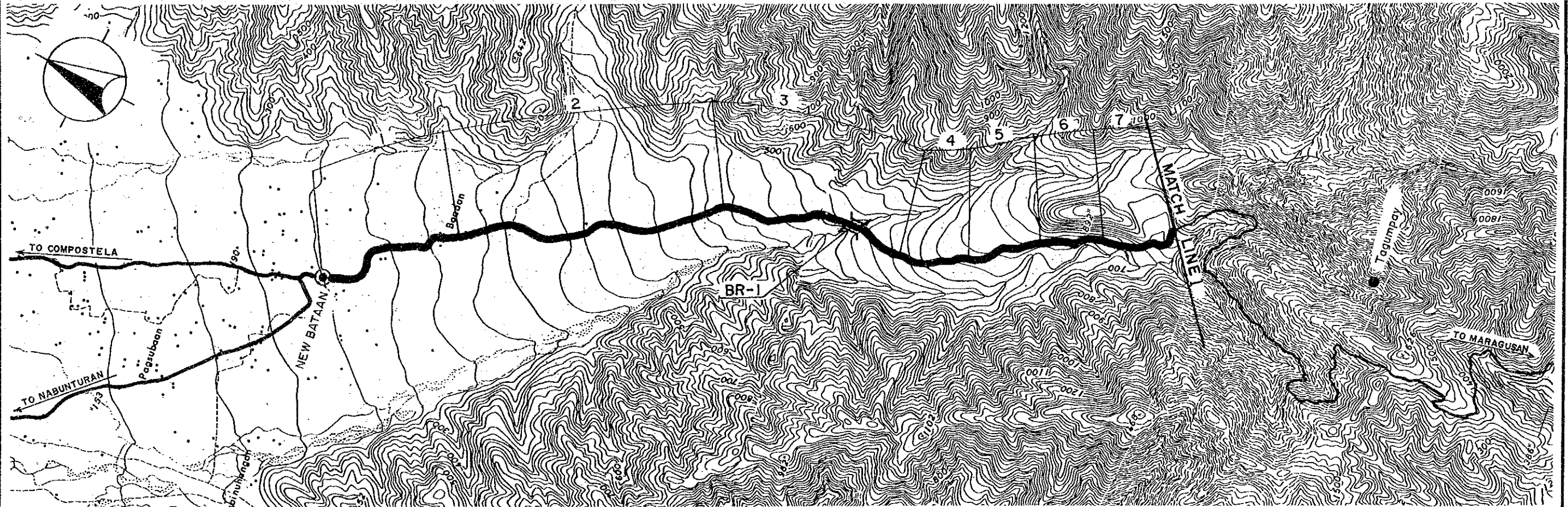
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
32

Road No: N5-3 Road Name: NEW BATAAN-MARAGUSAN ROAD
Location: NEW BATAAN & MARAGUSAN, DAVAO DEL NORTE



| | | | | | | | |
|-----------------------|----------------------------|------------------|------------------|-------------------|-------------------|------------------|------------------|
| Road Classification | Minor Road (National Road) | | | | | | |
| Total Length | 43.0 km | | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Length (km) | 1.8 | 3.8 | 2.5 | .9 | 1.0 | 1.0 | 1.0 |
| Terrain | Rolling | Rolling | Rolling | Rolling | Rolling | Rolling | Rolling |
| Existing Road Surface | 4.0-GRV (Bad) | 3.6-GRV (Bad) | 4.0-GRV (Bad) | 4.0-GRV (Fair) | 3.2-GRV (Fair) | 3.2-GRV (Bad) | 2.4-GRV (Bad) |
| Proposed Improvement | Rehabil. | Rehabil. | Rehabil. | Widening | Widening | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Carriageway Width(m) | .5 | .5 | .5 | .5 | .5 | .5 | .5 |
| Shoulder Width (m) | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 4-4 | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 |
| Ref. Typical Section | - | - | - | - | - | - | - |
| Special Treatment | | | | | | | |
| Flood Section Length | | | | | | | |
| Height | | | | | | | |
| Bridge No. | BR-1 | | | | | | |
| Existing Type | Bailey | | | | | | |
| Length (m) | 16 | | | | | | |
| Proposed Type | - | | | | | | |
| Length (m) | - | | | | | | |
| No. of Spans | - | | | | | | |

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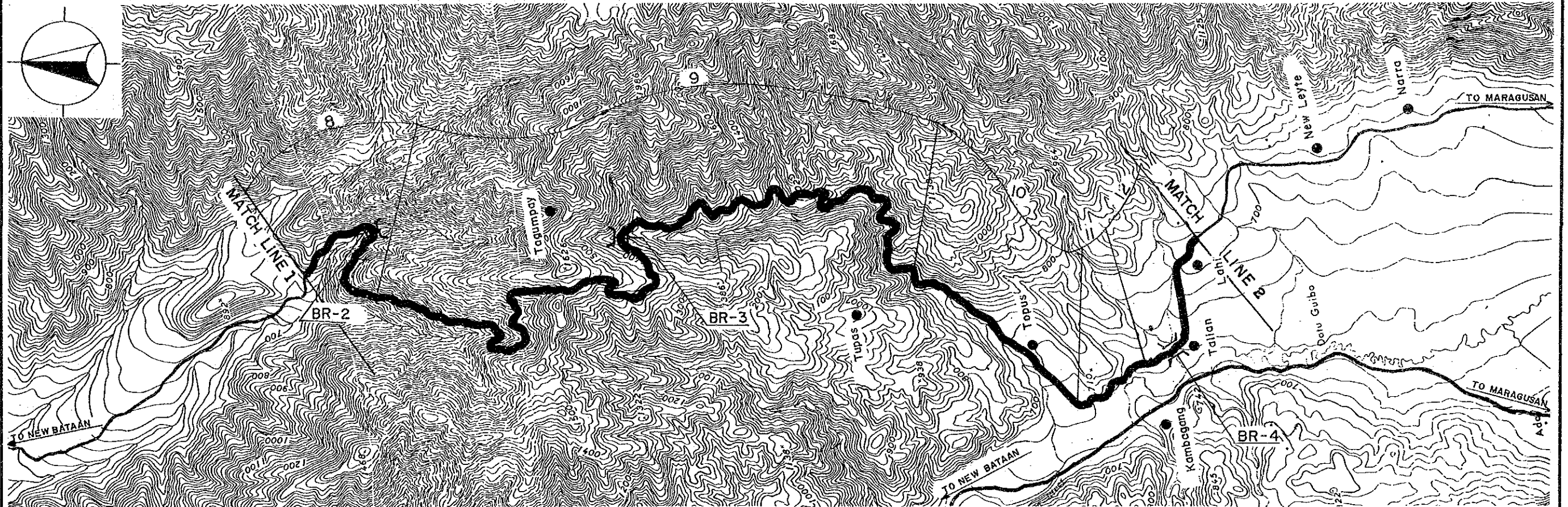
Scale

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Drawing No.

33

Road No: N5-3 Road Name: NEW BATAAN-MARAGUSAN ROAD
Location: NEW BATAAN & MARAGUSAN, DAVAO DEL NORTE



| Road Classification | | | | | |
|-----------------------|------------------|--------------------|------------------|-------------------|-------------------|
| Total Length | | | | | |
| Sub-section No. | 8 | 9 | 10 | 11 | 12 |
| Length (km) | 2.0 | 12.3 | 3.9 | .9 | 1.9 |
| Terrain | Rolling | Mt'nous | Rolling | Rolling | Flat |
| Existing Road Surface | 2.4-GRV (Bad) | .8-EAR (Impass) | 3.2-GRV (Bad) | 3.2-GRV (Fair) | 3.6-GRV (Fair) |
| Proposed Improvement | | | | | |
| Improvement Type | Rehabil. | Impr.-1 | Rehabil. | Widening | Widening |
| Surface Type | Gravel | Gravel | Gravel | Gravel | Gravel |
| Carriageway Width(m) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Shoulder Width (m) | .5 | .5 | .5 | .5 | 1.0 |
| Ref. Typical Section | TYPE 1-6 | TYPE 2-8 | TYPE 1-6 | TYPE 4-4 | TYPE 4-4 |
| Special Treatment | | | | | |
| Flood Section Length | - | - | - | - | 100 |
| Height | - | - | - | - | .5 |
| Bridge No. | | | | | |
| | BR-2 | BR-3 | BR-4 | | |
| Existing Type | | | | | |
| | Ford-Cr. | Ford-Cr. | Ford-Cr. | | |
| Proposed Type | | | | | |
| Length (m) | - | - | - | | |
| | 2Lane-Sp | 2Lane-Sp | 2Lane-Sp | | |
| Length (m) | 10 | 20 | 20 | | |
| No. of Spans | - | - | - | | |

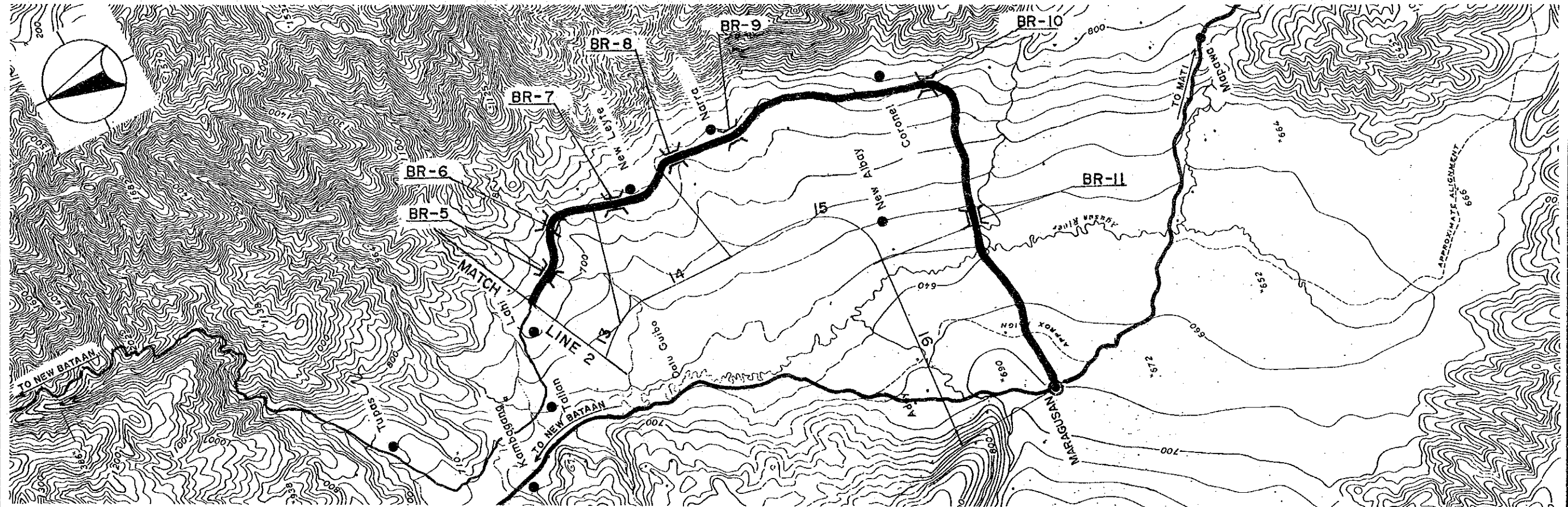
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
34

Road No: N5-3 Road Name: NEW BATAAN-MARAGUSAN ROAD
Location : NEW BATAAN & MARAGUSAN, DAVAO DEL NORTE



| Road Classification | | | | | | | |
|-----------------------|------------------|-------------------|------------------|-------------------|------|-------|--------|
| Total Length | | | | | | | |
| Sub-section No. | 13 | 14 | 15 | 16 | | | |
| Length (km) | 2.0 | 1.2 | 5.1 | 1.7 | | | |
| Terrain | Flat | Rolling | Rolling | Flat | | | |
| Existing Road Surface | 4.0-GRV (Bad) | 3.4-GRV (Fair) | 4.0-GRV (Bad) | 3.4-GRV (Fair) | | | |
| Proposed Improvement | | | | | | | |
| Improvement Type | Rehabil. | Widening | Rehabil. | Widening | | | |
| Surface Type | Gravel | Gravel | Gravel | Gravel | | | |
| Carriageway Width(m) | 6.0 | 6.0 | 6.0 | 6.0 | | | |
| Shoulder Width (m) | 1.0 | .5 | .5 | 1.0 | | | |
| Ref. Typical Section | TYPE 1-6 | TYPE 4-4 | TYPE 1-6 | TYPE 4-4 | | | |
| Special Treatment | | | | | | | |
| Flood Section Length | 1000 | - | - | - | | | |
| Height | .5 | - | - | - | | | |
| Bridge No. | | | | | | | |
| | BR-5 | BR-6 | BR-7 | BR-8 | BR-9 | BR-10 | BR-11 |
| Existing Type | | | | | | | |
| Type | Bailey | RCBC | RCBC | Ford-Cr. | RCBC | RCBC | Bailey |
| Length (m) | 9 | 5 | 5 | - | 5 | 5 | 24 |
| Proposed Type | | | | | | | |
| Type | - | - | - | 2Lane-Sp | - | - | - |
| Length (m) | - | - | - | 20 | - | - | - |
| No. of Spans | - | - | - | - | - | - | - |

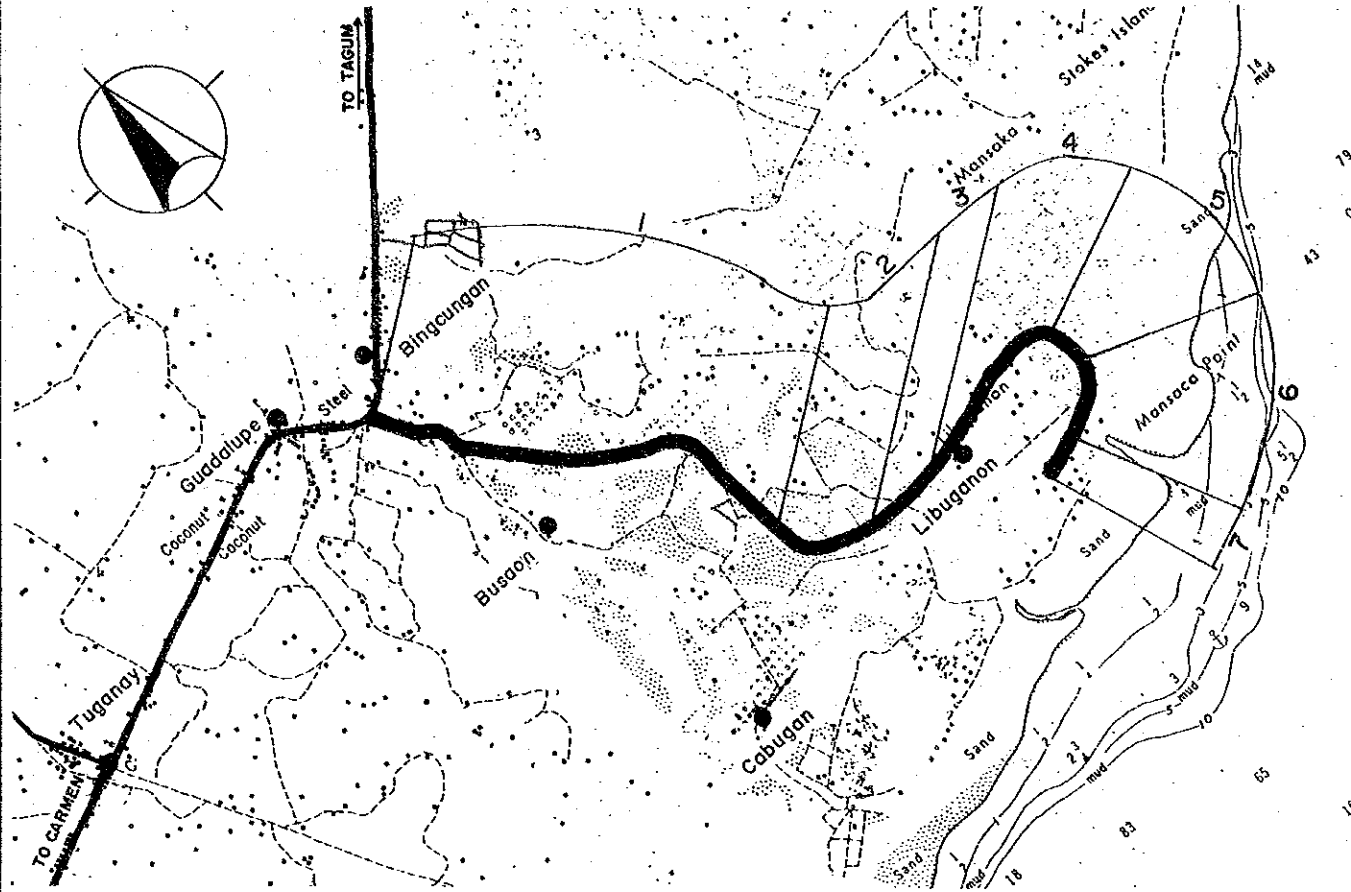
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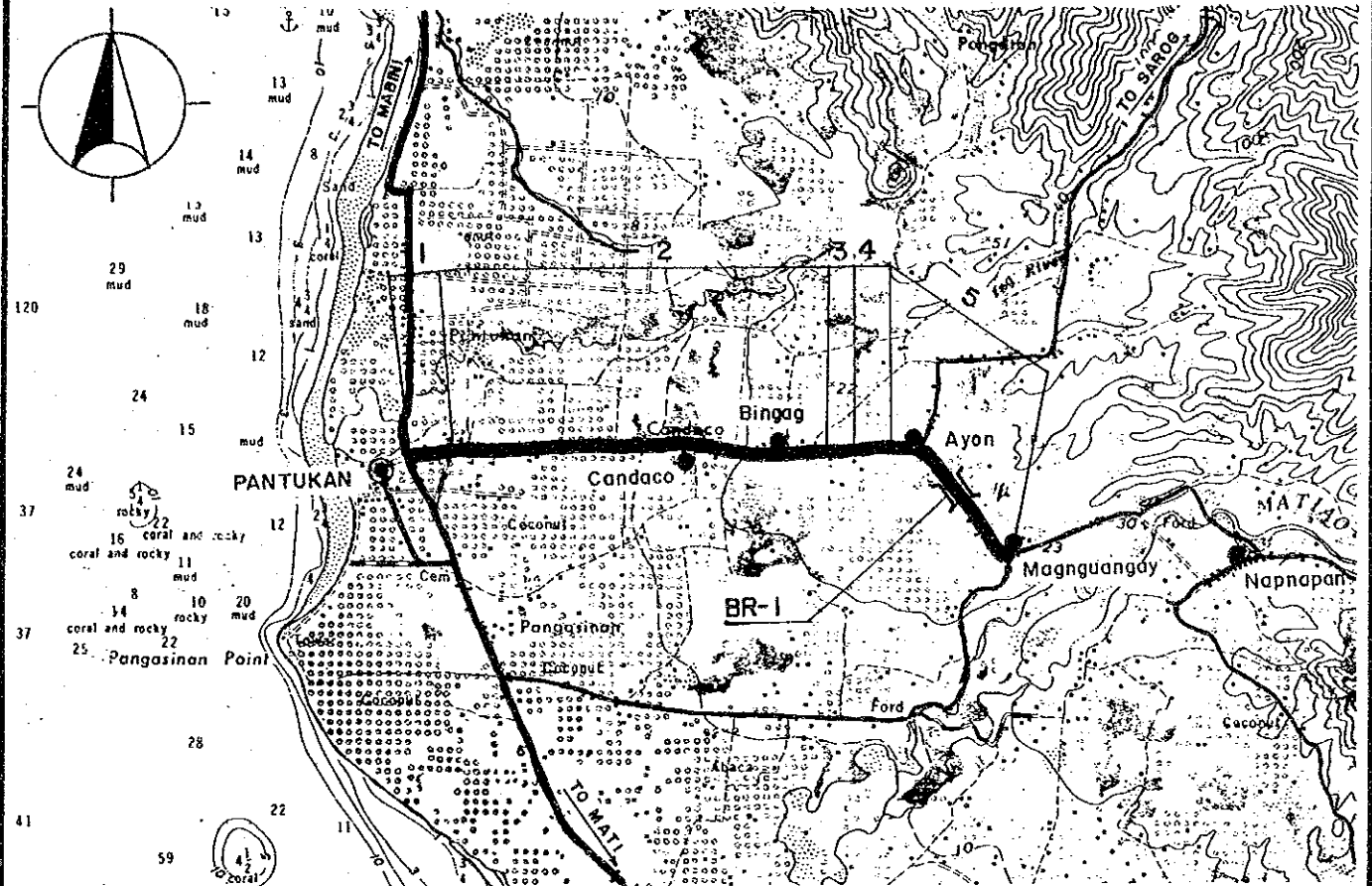
Scale
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Drawing No.
36

Road No: P2 Road Name: BINGCUNGAN-LIBOGANON ROAD
Location: CARMEN, DAVAO DEL NORTE



Road No: P4-1 Road Name: POB. PANTUKAN-MANGUNGANAY ROAD
Location: PANTUKAN, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | | | | | |
|-----------------------|------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| Total Length | 7.0 km | | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Length (km) | 3.4 | .6 | .4 | 1.5 | .2 | .6 | .3 |
| Terrain | Flat | Flat | Flat | Flat | Flat | Flat | Flat |
| Existing Road Surface | 3.7-GRV (Fair) | 4.0-GRV (Fair) | 4.5-GRV (Bad) | 3.6-GRV (Bad) | 2.4-GRV (Bad) | 3.2-GRV (Bad) | 2.4-GRV (Bad) |
| Proposed Improvement | Widening | Widening | Rehabil. | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel |
| Carriageway Width(m) | 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 | 1.0 | 1.0 | 1.0 |
| Ref. Typical Section | TYPE 4-4 | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Special Treatment | | | | | | | |
| Flood Section Length | - | 600 | 400 | 1500 | 200 | 600 | 300 |
| Height | - | .6 | .6 | .5 | .5 | .5 | .5 |

| Road Classification | Minor Road (Provincial Road) | | | | |
|-----------------------|------------------------------|-------------------|--------------------|------------------|--------------------|
| Total Length | 4.8 km | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 |
| Length (km) | .3 | 2.8 | .2 | .3 | 1.2 |
| Terrain | Flat | Flat | Flat | Flat | Rolling |
| Existing Road Surface | 4.5-GRV (Bad) | 4.5-GRV (Fair) | 4.0-GRV (V.Bad) | 4.0-GRV (Bad) | 4.0-GRV (V.Bad) |
| Proposed Improvement | Rehabil. | Widening | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | 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 | .5 |
| Ref. Typical Section | TYPE 1-6 | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Bridge No. | BR-1 | | | | |
| Existing Type | Concrete | | | | |
| Length (m) | 12 | | | | |
| Proposed Type | - | | | | |
| Length (m) | - | | | | |
| No. of Spans | - | | | | |

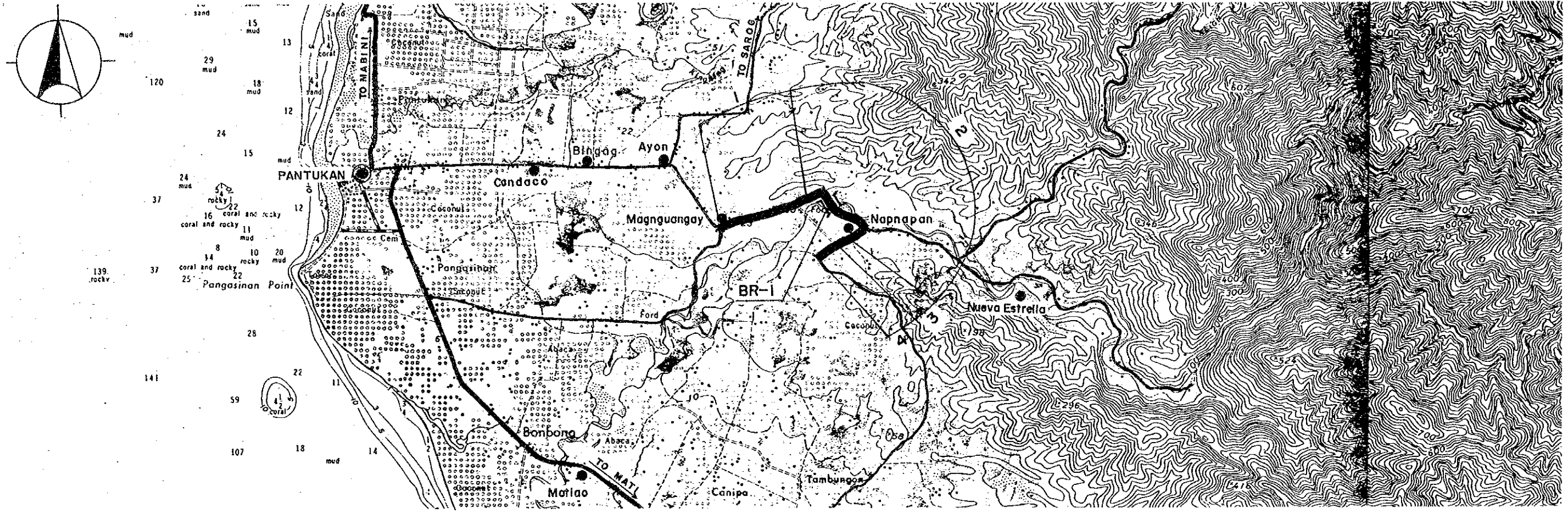
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
37

Road No: P4-2 Road Name: NAPANAPAN-CANDUCO ROAD
Location: PANTUKAN, DAVAO DEL NORTE



| | | | | |
|---------------------------|------------------------------|---------------------|--------------------|------------------|
| Road Classification | Minor Road (Provincial Road) | | | |
| Total Length | 2.6 km | | | |
| Sub-section No. | 1 | 2 | 3 | 4 |
| Length (km) | 1.1 | 1.0 | .3 | .2 |
| Terrain | Flat | Flat | Flat | Flat |
| Existing Road Surface | 4.0-GRV (V.Bad) | 1.6-EAR (Impass) | 2.4-GRV (V.Bad) | 4.0-GRV (Bad) |
| Proposed Improvement Type | Rehabil. | Impr.-1 | Rehabil. | Rehabil. |
| 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 1-6 | TYPE 2-8 | TYPE 1-6 | TYPE 1-6 |
| Bridge No. | BR-1 | | | |
| Existing Type | Ford-Cr. | | | |
| Length (m) | - | | | |
| Proposed Type | 2Lane-Br | | | |
| Length (m) | 50 | | | |
| No. of Spans | 2 | | | |

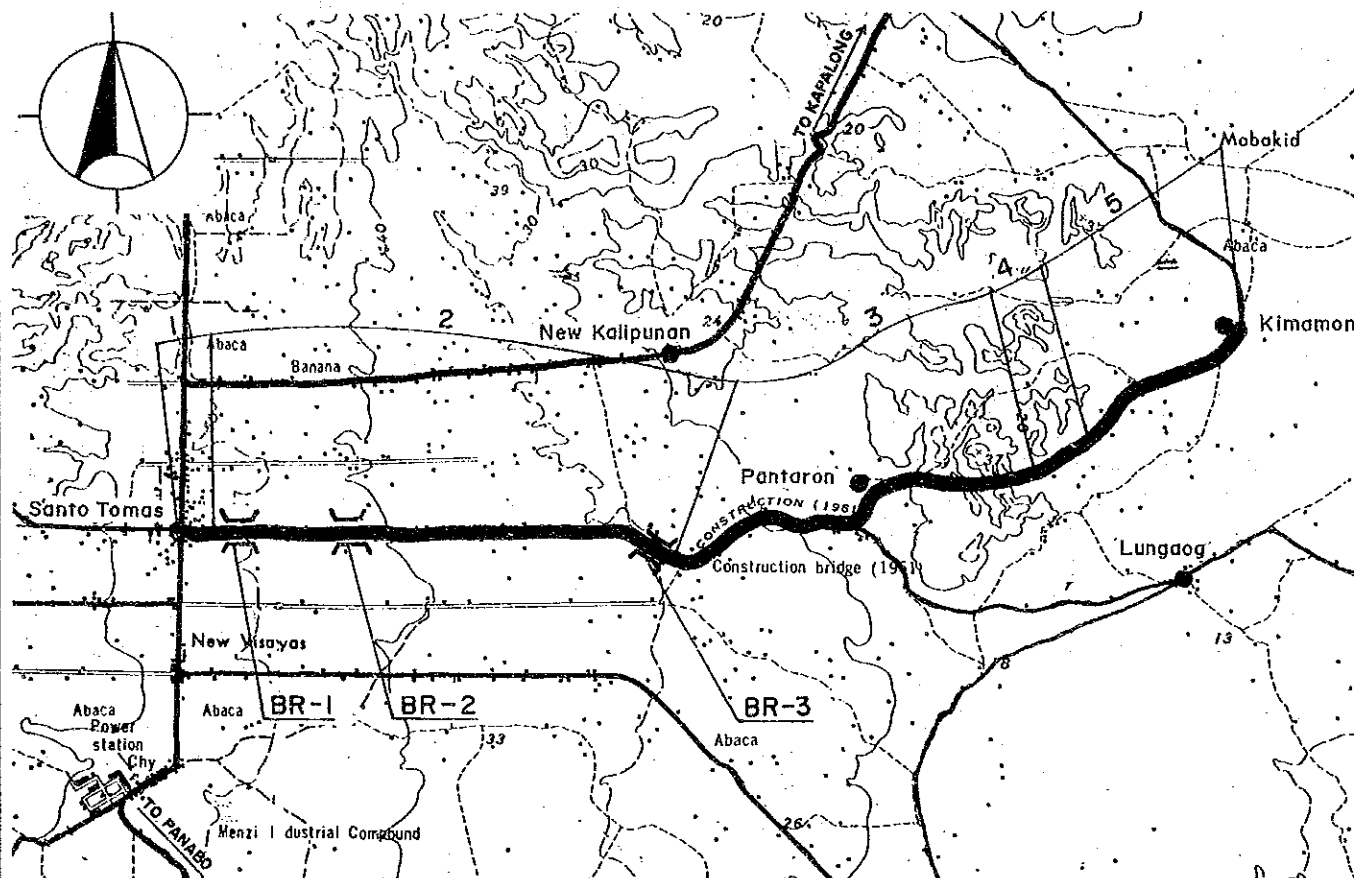
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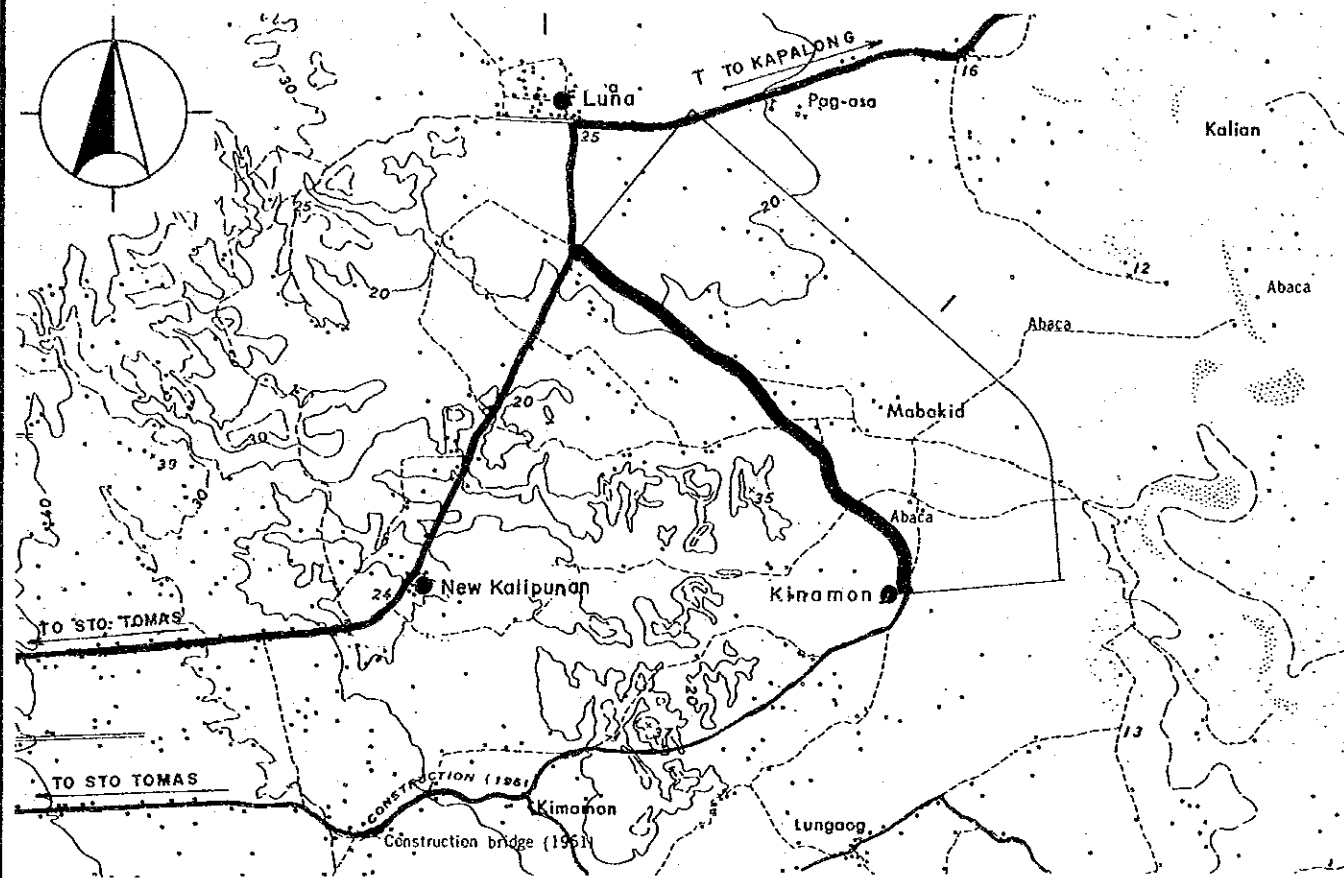
Scale
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Drawing No.
38

Road No: P10-1 Road Name: STO. TOMAS-KINAMON ROAD
Location: STO. TOMAS, DAVAO DEL NORTE



Road No: P10-2 Road Name: KINAMON-LUNA ROAD
Location: STO. TOMAS, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | | | |
|-----------------------|--|------------------|------------------|------------------|-------------------|
| Total Length | 8.3 km | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 |
| Length (km) | .2 | 3.4 | 2.8 | .4 | 1.5 |
| Terrain | Flat | Flat | Flat | Flat | Flat |
| Existing Road Surface | 4.5-GRV (Fair) | 4.5-GRV (Bad) | 4.0-GRV (Bad) | 3.6-GRV (Bad) | 4.5-GRV (Fair) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. | Rehabil. | Widening |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Carriageway Width(m) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Shoulder Width (m) | TYPE 4-4 TYPE 1-6 TYPE 1-6 TYPE 1-6 TYPE 4-4 | | | | |
| Ref. Typical Section | | | | | |
| Bridge No. | BR-1 | BR-2 | BR-3 | | |
| Existing Type | Bailey | Bailey | Bailey | | |
| Length (m) | 16 | 18 | 26 | | |
| Proposed Type | - | - | - | | |
| Length (m) | - | - | - | | |
| No. of Spans | - | - | - | | |

| Road Classification | Minor Road (Provincial Road) |
|-----------------------|---------------------------------|
| Total Length | 3.4 km |
| Sub-section No. | 1 |
| Length (km) | 3.4 |
| Terrain | Flat |
| Existing Road Surface | 4.0-GRV (Fair) |
| Proposed Improvement | Widening |
| Improvement Type | Gravel |
| Surface Type | 6.0 |
| Carriageway Width(m) | 1.0 |
| Shoulder Width (m) | TYPE 4-4 |
| Ref. Typical Section | |

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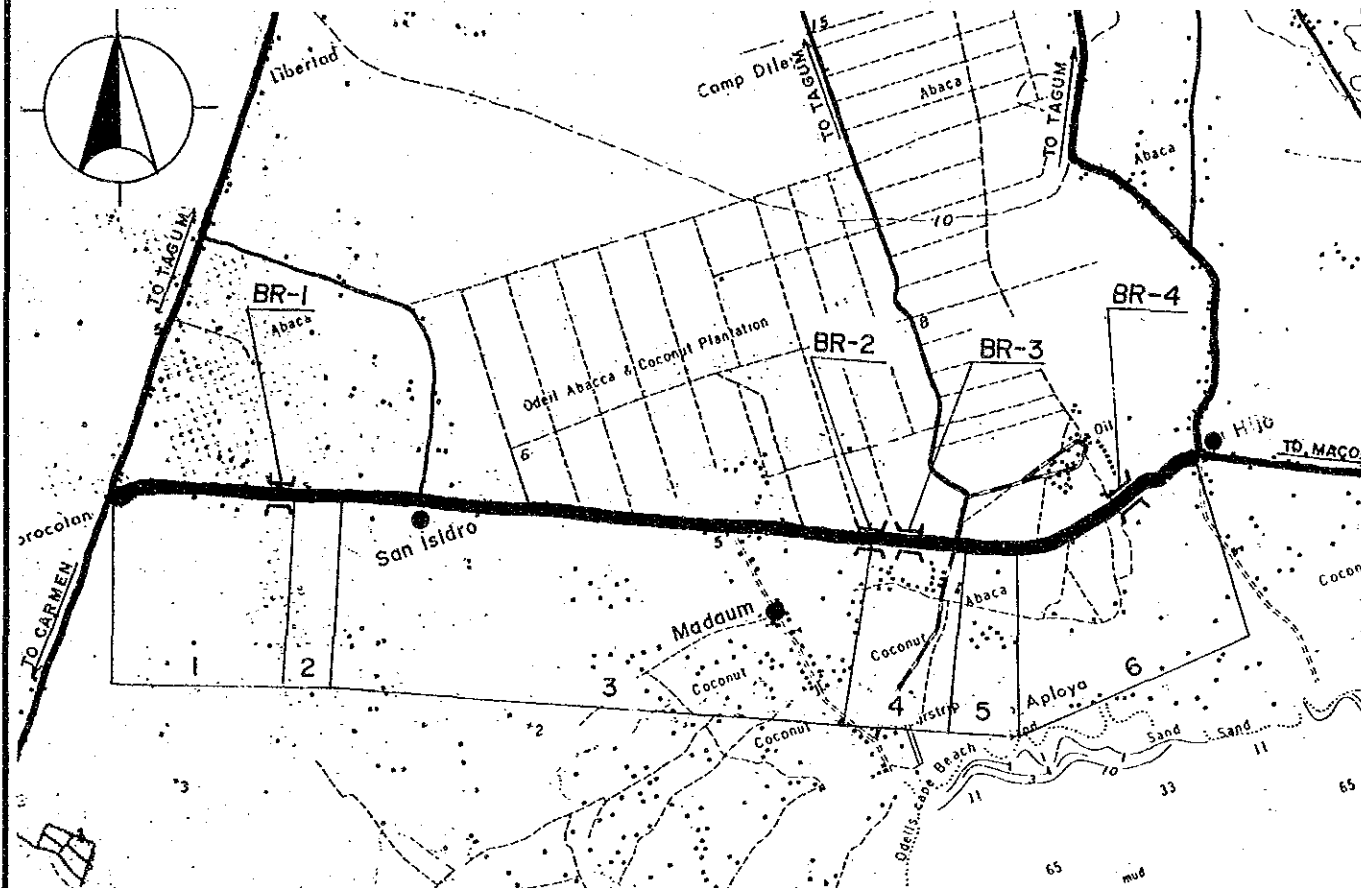
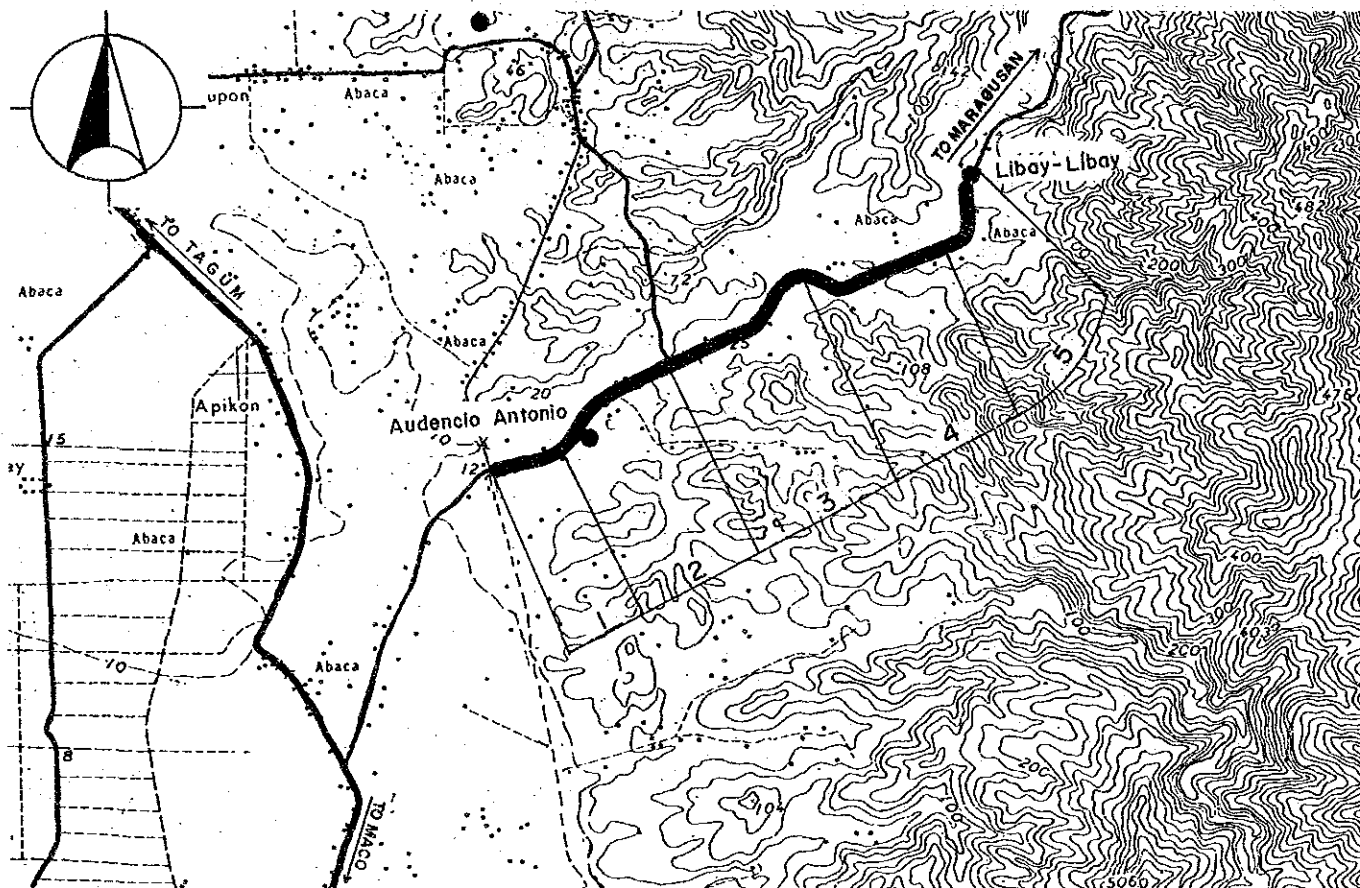
PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
39

Road No: P11-2 Road Name: ANTONIO-LIBAY LIBAY ROAD
Location: MACO, DAVAO DEL NORTE

Road No: P14 Road Name: HIGHWAY-HIJO ROAD
Location: TAGUM, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | | | |
|-----------------------|------------------------------|------------------|------------------|------------------|------------------|
| Total Length | 3.9 km | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 |
| Length (km) | .4 | 1.0 | 1.0 | .9 | .6 |
| Terrain | Flat | Flat | Flat | Rolling | Rolling |
| Existing Road Surface | 3.4-GRV (Bad) | 3.6-GRV (Bad) | 4.0-GRV (Bad) | 3.2-GRV (Bad) | 3.6-GRV (Bad) |
| Proposed Improvement | Rehabil. | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | | | | | |
| Carriageway Width(m) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Shoulder Width (m) | 1.0 | 1.0 | 1.0 | .5 | .5 |
| Ref. Typical Section | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |

| Road Classification | Minor Road (Provincial Road) | | | | | |
|-----------------------|------------------------------|-------------------|-------------------|-------------------|------------------|-------------------|
| Total Length | 7.6 km | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 |
| Length (km) | 1.3 | .2 | 3.8 | .6 | .3 | 1.4 |
| Terrain | Flat | Flat | Flat | Flat | Flat | Flat |
| Existing Road Surface | 5.2-GRV (Fair) | 4.5-GRV (Fair) | 6.0-PCC (Good) | 4.5-GRV (Fair) | 6.0-BTM (Bad) | 5.5-GRV (Fair) |
| Proposed Improvement | Impr.-2 | Impr.-2 | - | Impr.-2 | Rehabil. | Impr.-2 |
| Improvement Type | * BMP | * BMP | - | * BMP | * BMP | * BMP |
| Surface Type | | | | | | |
| Carriageway Width(m) | 6.0 | 6.0 | - | 6.0 | 6.0 | 6.0 |
| Shoulder Width (m) | 1.5 | 1.5 | - | 1.5 | 1.5 | 1.5 |
| Ref. Typical Section | TYPE 3-4 | TYPE 3-4 | - | TYPE 3-4 | TYPE 1-5 | TYPE 3-4 |
| Bridge No. | BR-1 | BR-2 | BR-3 | BR-4 | | |
| Existing Type | Concrete | Concrete | Timber | Ford-Cr. | | |
| Length (m) | 16 | 16 | 5 | - | | |
| Proposed Type | - | - | 1cell-RC | 2Lane-Br | | |
| Length (m) | - | - | 5 | 75 | | |
| No. of Spans | - | - | 1 | 5 | | |

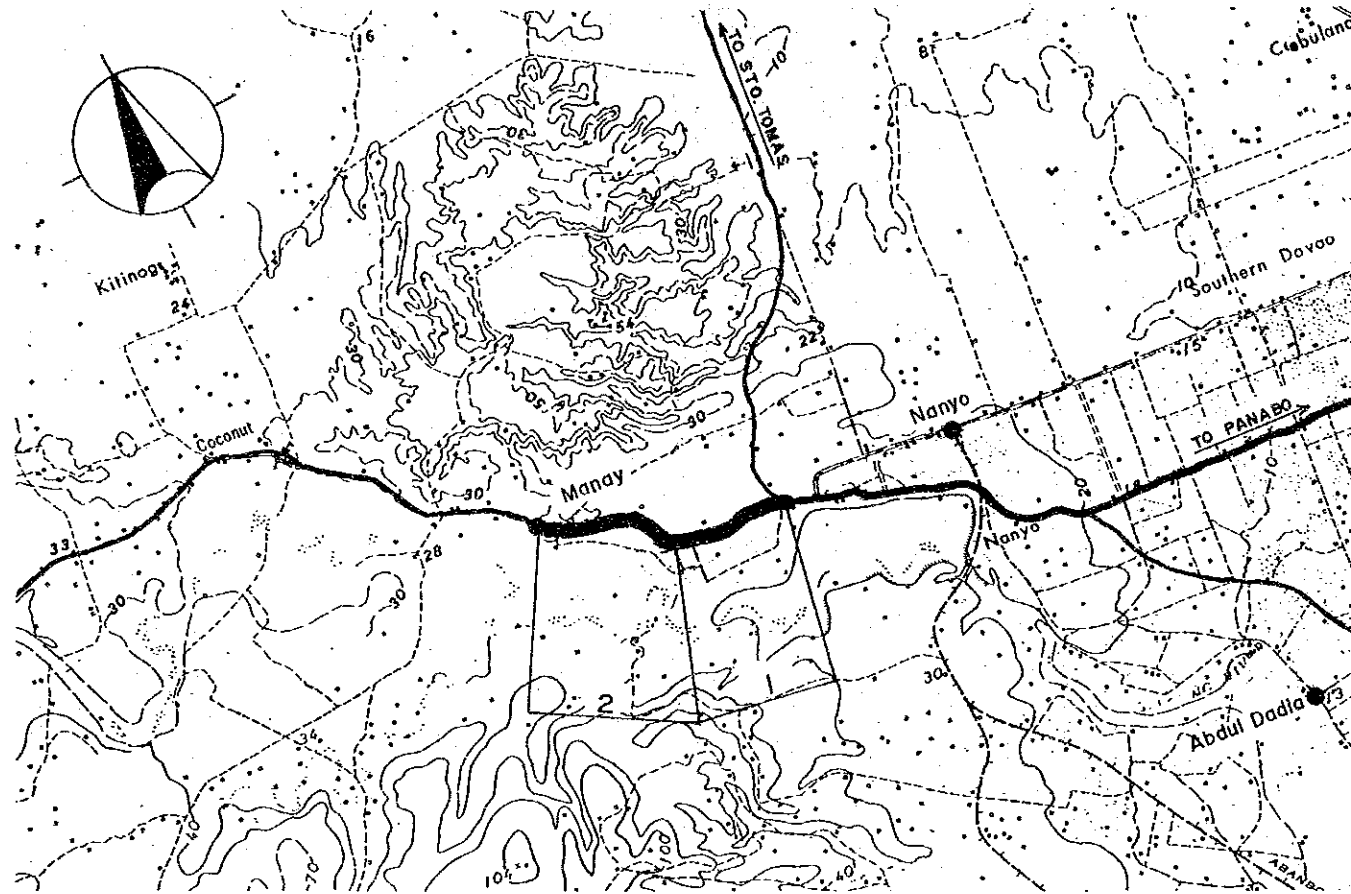
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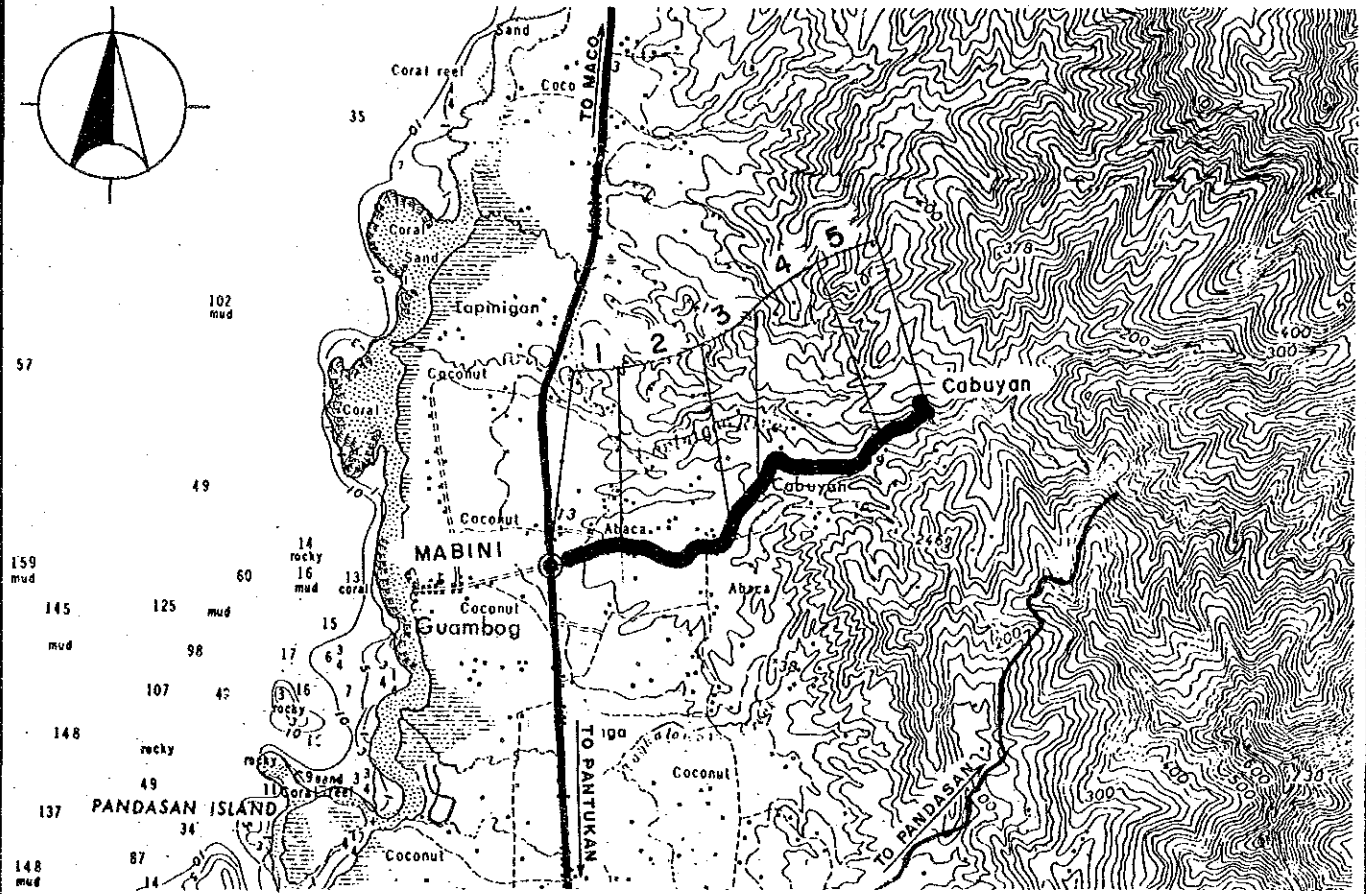
Drawing No.
40

Road No: P18 Road Name: NANYO-MANAY ROAD
Location: CARMEN and PANABO, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | |
|-----------------------|------------------------------|---------------|
| Total Length | 1.6 km | |
| Sub-section No. | 1 | 2 |
| Length (km) | .8 | .8 |
| Terrain | Flat | Mt'nous |
| Existing Road Surface | 5.0-GRV (Bad) | 4.5-GRV (Bad) |
| Proposed Improvement | Rehabil. | Rehabil. |
| Improvement Type | Rehabil. | Rehabil. |
| Surface Type | Gravel | Gravel |
| Carriageway Width(m) | 6.0 | 6.0 |
| Shoulder Width (m) | 1.0 | .5 |
| Ref. Typical Section | TYPE 1-6 | TYPE 1-6 |

Road No: P27 Road Name: MABINI-CABUYUAN ROAD
Location: MABINI, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | | | |
|-----------------------|------------------------------|---------------|---------------|---------------|---------------|
| Total Length | 3.2 km | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 |
| Length (km) | .6 | .8 | .3 | 1.2 | .3 |
| Terrain | Flat | Flat | Rolling | Flat | Mt'nous |
| Existing Road Surface | 2.8-GRV (Fair) | 3.2-GRV (Bad) | 3.2-GRV (Bad) | 2.8-GRV (Bad) | 3.2-GRV (Bad) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Widening | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Surface Type | 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 | .5 | 1.0 | .5 |
| Ref. Typical Section | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Special Treatment | - | - | - | - | - |
| Step Section Length | - | - | - | - | 90 |

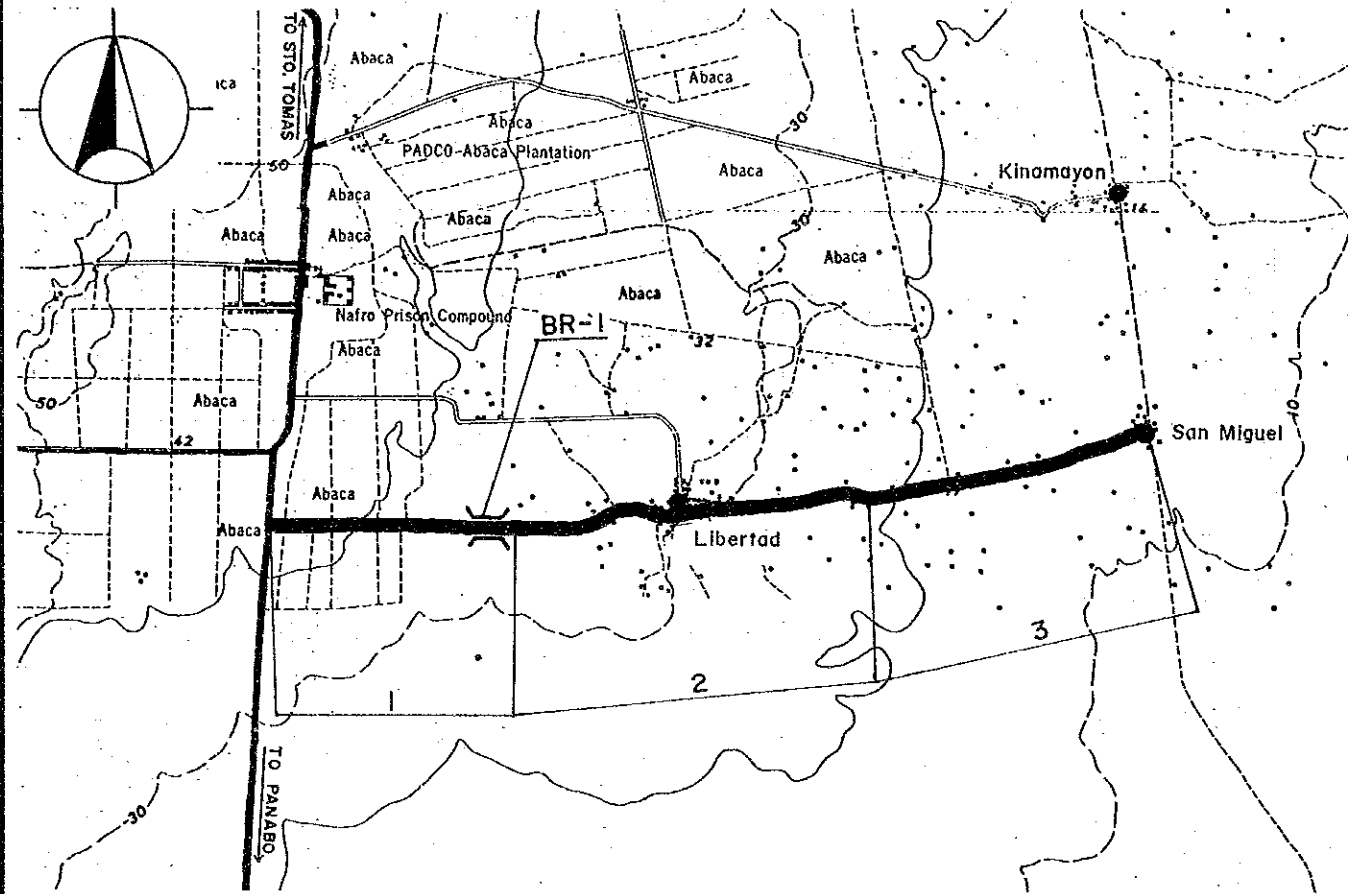
**THE FEASIBILITY STUDY ON THE RURAL ROAD NETWORK DEVELOPMENT PROJECT
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

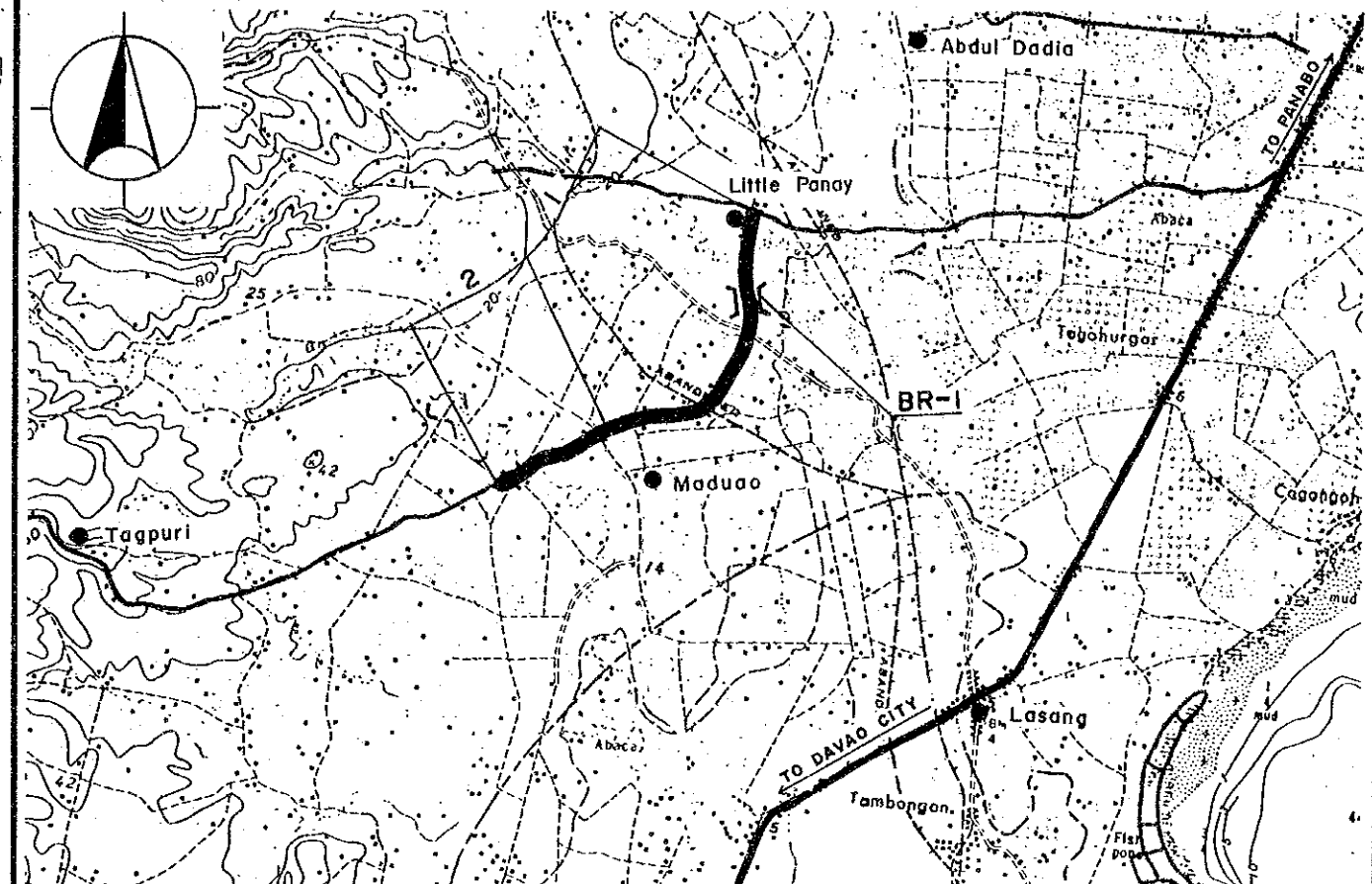
Drawing No.
41

Road No: P36 Road Name: NAFEO-SAN MIGUEL ROAD
Location : STO. TOMAS, DAVAO DEL NORTE



| | | | |
|-----------------------|------------------------------|-------------------|------------------|
| Road Classification | Minor Road (Provincial Road) | | |
| Total Length | 6.4 km | | |
| Sub-section No. | 1 | 2 | 3 |
| Length (km) | 1.6 | 2.7 | 2.1 |
| Terrain | Flat | Flat | Flat |
| Existing Road Surface | 6.0-GRV (Fair) | 4.5-GRV (Fair) | 4.0-GRV (Bad) |
| Proposed Improvement | - | | |
| Improvement Type | - Widening Rehabil. | | |
| Surface Type | - Gravel Gravel | | |
| Carriageway Width(m) | - 6.0 6.0 | | |
| Shoulder Width (m) | - 1.0 1.0 | | |
| Ref. Typical Section | - TYPE 4-4 TYPE 1-6 | | |
| Bridge No. | BR-1 | | |
| Existing Type | Timber | | |
| Length (m) | 45 | | |
| Proposed Type | 2Lane-Br | | |
| Length (m) | 45 | | |
| No. of Spans | 2 | | |

Road No: P40 Road Name: MADUAO-LITTLE PANAY ROAD
Location : PANABO, DAVAO DEL NORTE



| | | |
|-----------------------|------------------------------|------------------|
| Road Classification | Minor Road (Provincial Road) | |
| Total Length | 2.8 km | |
| Sub-section No. | 1 | 2 |
| Length (km) | 2.1 | .7 |
| Terrain | Rolling | Flat |
| Existing Road Surface | 4.5-GRV (Fair) | 4.0-GRV (Bad) |
| Proposed Improvement | - | |
| Improvement Type | Widening Rehabil. | |
| Surface Type | Gravel Gravel | |
| Carriageway Width(m) | 6.0 6.0 | |
| Shoulder Width (m) | .5 1.0 | |
| Ref. Typical Section | TYPE 4-4 TYPE 1-6 | |
| Bridge No. | BR-1 | |
| Existing Type | Bailey | |
| Length (m) | 9 | |
| Proposed Type | - | |
| Length (m) | - | |
| No. of Spans | - | |

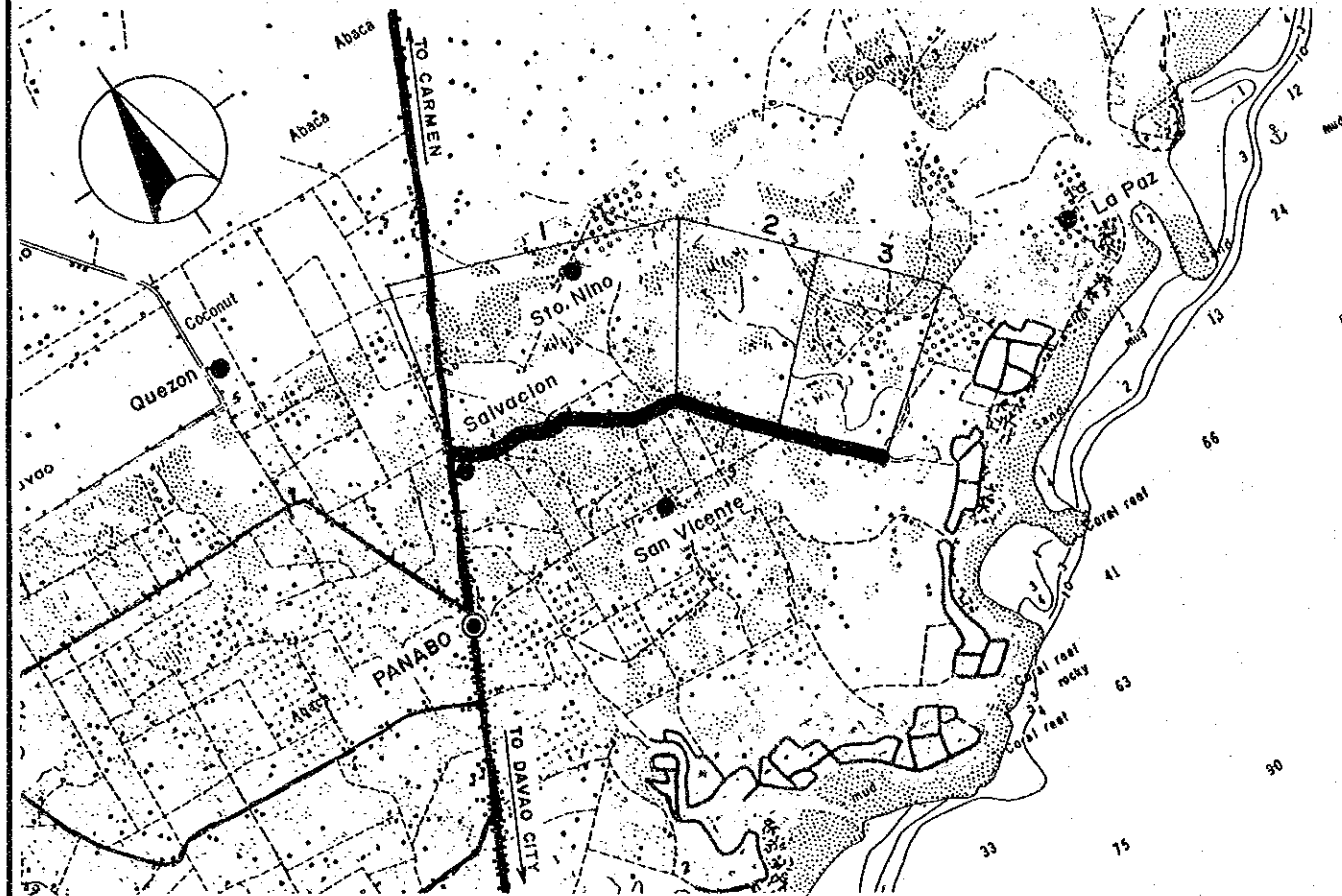
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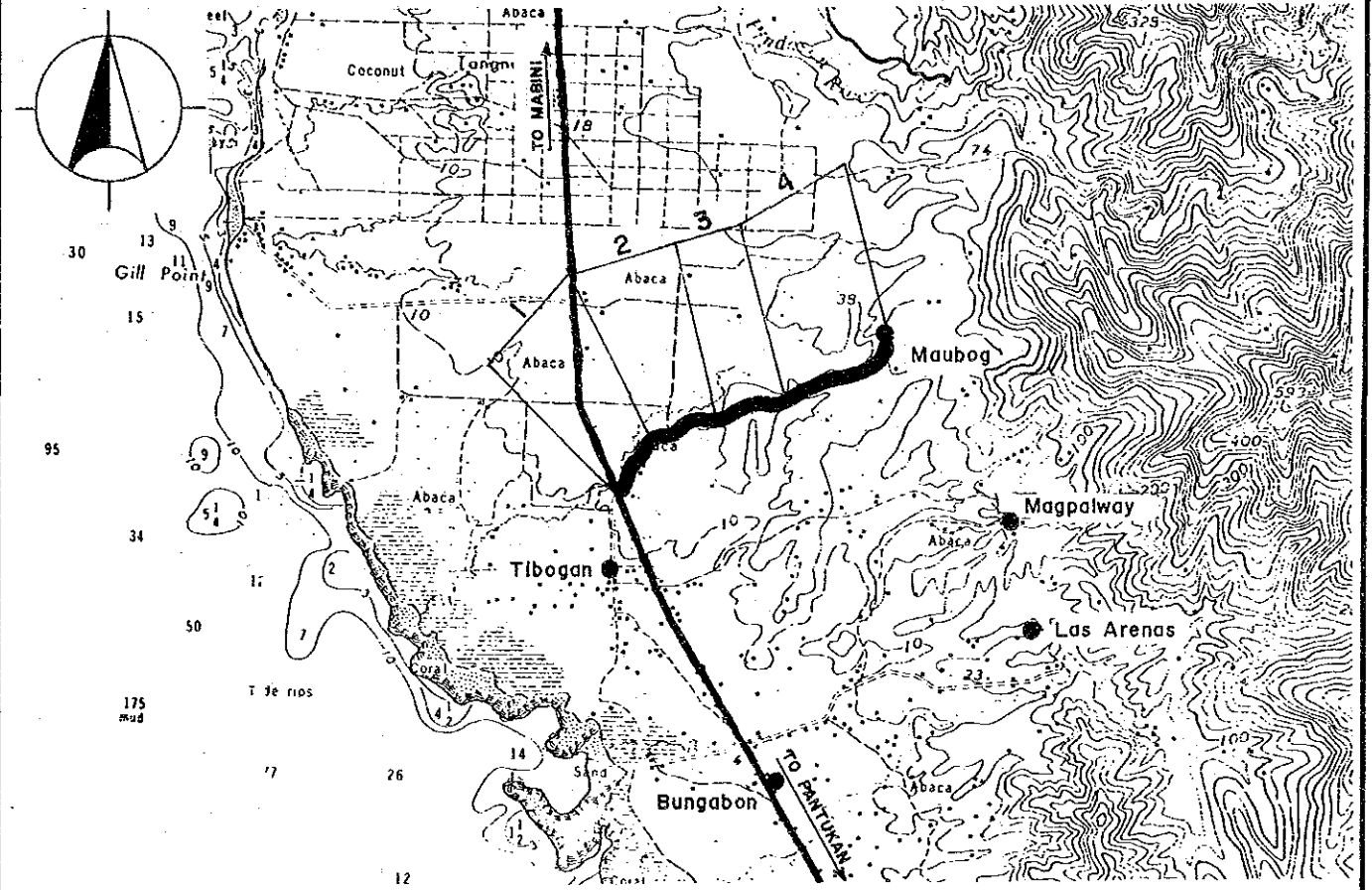
Drawing No.
42

Road No: P54 Road Name: PANABO-SAN VICENTE ROAD
Location: PANABO, DAVAO DEL NORTE



| | | | |
|-----------------------|------------------------------|------------------|------------------|
| Road Classification | Minor Road (Provincial Road) | | |
| Total Length | 3.2 km | | |
| Sub-section No. | 1 | 2 | 3 |
| Length (km) | 1.7 | .7 | .8 |
| Terrain | Flat | Flat | Flat |
| Existing Road Surface | 4.5-GRV (Fair) | 3.2-GRV (Bad) | 2.4-GRV (Bad) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 | 6.0 |
| Carriageway Width (m) | 1.0 | 1.0 | 1.0 |
| Shoulder Width (m) | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 |
| Ref. Typical Section | | | |

Road No: P67 Road Name: BONGABONG-MAUBOG ROAD
Location: MABINI, DAVAO DEL NORTE



| | | | | |
|-----------------------|------------------------------|------------------|------------------|------------------|
| Road Classification | Minor Road (Provincial Road) | | | |
| Total Length | 2.5 km | | | |
| Sub-section No. | 1 | 2 | 3 | 4 |
| Length (km) | .5 | .4 | .5 | 1.1 |
| Terrain | Rolling | Mt'nous | Mt'nous | Mt'nous |
| Existing Road Surface | 3.6-GRV (Bad) | 3.2-GRV (Bad) | 4.0-GRV (Bad) | 3.2-GRV (Bad) |
| Proposed Improvement | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 | 6.0 | 6.0 |
| Carriageway Width (m) | .5 | .5 | .5 | .5 |
| Shoulder Width (m) | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Ref. Typical Section | | | | |
| Special Treatment | | | 150 | |
| Steep Section Length | | | | |

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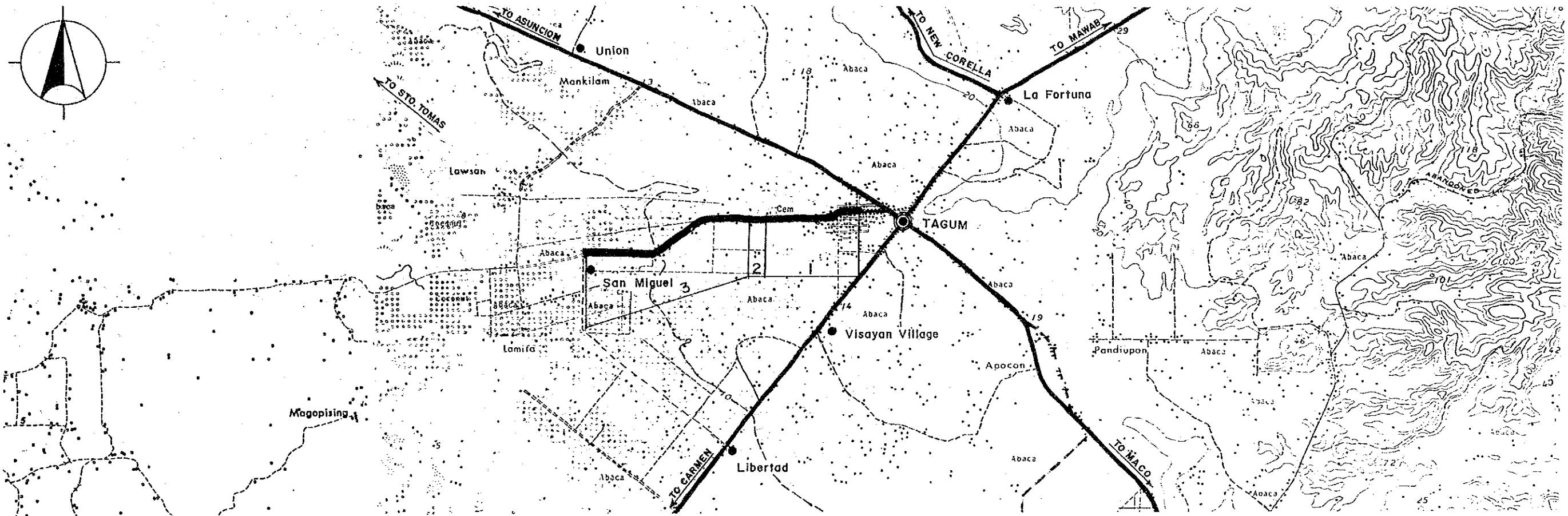
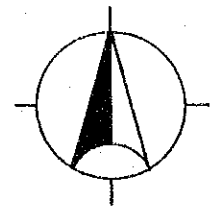
PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
43

Road No: P74

Road Name: CAMP 4-POB. TAGUM
Location: TAGUM, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | |
|-----------------------|------------------------------|-------------------|-------------------|
| Total Length | 3.3 km | | |
| Sub-section No. | 1 | 2 | 3 |
| Length (km) | 1.2 | .2 | 1.9 |
| Terrain | Flat | Flat | Flat |
| Existing Road Surface | 6.7-PCC (Good) | 4.5-GRV (Fair) | 4.5-GRV (Fair) |
| Proposed Improvement | | | |
| Improvement Type | - | Impr.-2 | Impr.-2 |
| Surface Type | - | AC | AC |
| Carriageway Width(m) | - | 6.0 | 6.0 |
| Shoulder Width (m) | - | 1.5 | 1.5 |
| Ref. Typical Section | - | TYPE 3-3 | TYPE 3-3 |

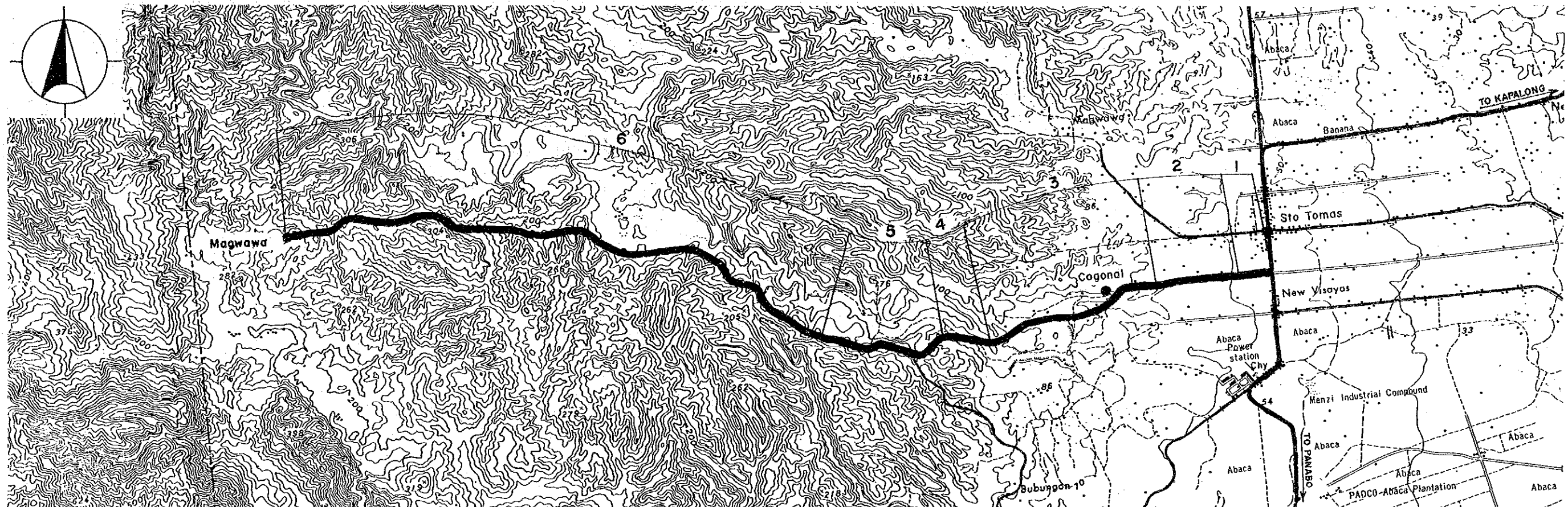
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
44

Road No: P78 Road Name: FEEDER ROAD NO.2-MAGWAWA ROAD
Location : STO. TOMAS, DAVAO DEL NORTE



| | | | | | | |
|-----------------------|---|------------------|------------------|------------------|------------------|------------------|
| Road Classification | Minor Road (Provincial Road) | | | | | |
| Total Length | 13.2 km | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 |
| Length (km) | .4 | 1.0 | 2.1 | .5 | 1.6 | 7.6 |
| Terrain | Flat | Flat | Rolling | Rolling | Mt'nous | Mt'nous |
| Existing Road Surface | 5.5-GRV (Fair) | 4.5-GRV (Bad) | 4.0-GRV (Bad) | 3.2-GRV (Bad) | 4.0-GRV (Bad) | 3.2-GRV (Bad) |
| Proposed Improvement | Widening Rehabil. Rehabil. Rehabil. Rehabil. Rehabil. | | | | | |
| Improvement Type | Gravel Gravel Gravel Gravel Gravel Gravel | | | | | |
| Surface Type | Gravel Gravel Gravel Gravel Gravel Gravel | | | | | |
| Carriageway Width(m) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Shoulder Width (m) | 1.0 | 1.0 | .5 | .5 | .5 | .5 |
| Ref. Typical Section | TYPE 4-4 TYPE 1-6 TYPE 1-6 TYPE 1-6 TYPE 1-6 TYPE 1-6 | | | | | |
| Special Treatment | | | | | | |
| Steep Section Length | - | - | - | - | 100 | - |

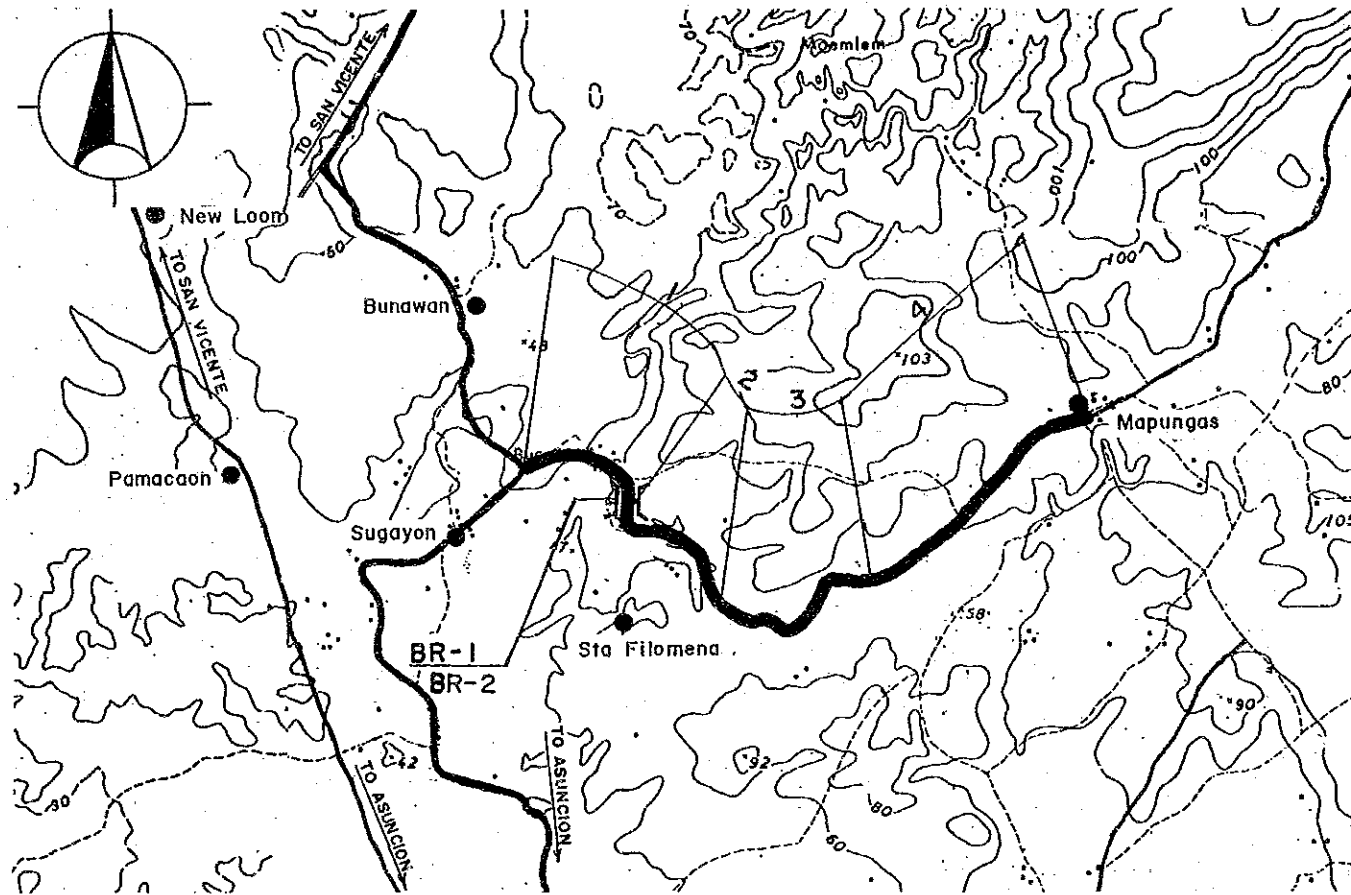
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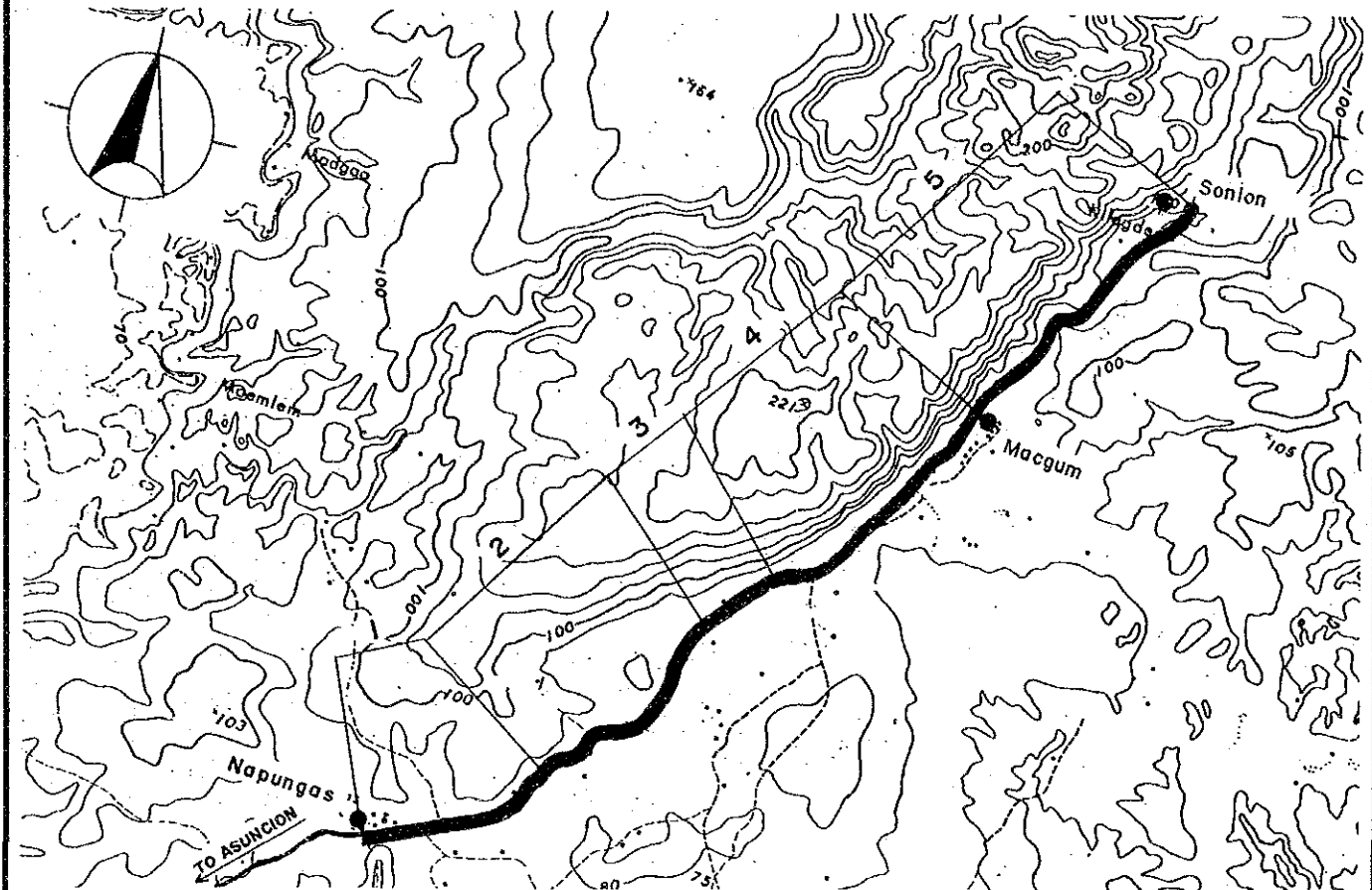
Scale
1:50,000

Drawing No.
45

Road No: P79-1 Road Name: SAGAYEN-NAPUNGAS ROAD
Location: ASUNCION, DAVAO DEL NORTE



Road No: P79-2 Road Name: NAPUNGAS-SONLON ROAD
Location: ASUNCION, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | | |
|-----------------------|------------------------------|------------------|------------------|-------------------|
| Total Length | 5.7 km | | | |
| Sub-section No. | 1 | 2 | 3 | 4 |
| Length (km) | 1.1 | 1.0 | 1.1 | 2.5 |
| Terrain | Flat | Flat | Rolling | Flat |
| Existing Road Surface | 3.2-GRV (Fair) | 2.4-GRV (Bad) | 3.2-GRV (Bad) | 4.0-GRV (Fair) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. | Widening |
| Improvement Type | Widening | Rehabil. | Rehabil. | 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 | .5 | 1.0 |
| Ref. Typical Section | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 4-4 |
| Bridge No: | BR-1 | BR-2 | | |
| Existing Type | Concrete | Bailey | | |
| Length (m) | 45 | 31 | | |
| Proposed Type | - | 2Lane-Br | | |
| Length (m) | - | 32 | | |
| No. of Spans | - | 2 | | |

| Road Classification | Minor Road (Provincial Road) | | | | |
|-----------------------|------------------------------|------------------|--------------------|--------------------|--------------------|
| Total Length | 7.4 km | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 |
| Length (km) | 1.3 | 1.8 | .4 | 1.9 | 2.0 |
| Terrain | Flat | Flat | Flat | Rolling | Mt'nous |
| Existing Road Surface | 3.2-GRV (Fair) | 2.8-GRV (Bad) | 2.4-GRV (V.Bad) | 2.4-EAR (V.Bad) | 2.8-EAR (V.Bad) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. | Impr.-1 | Impr.-1 |
| Improvement Type | Widening | Rehabil. | Rehabil. | Impr.-1 | Impr.-1 |
| Surface Type | 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 | .5 | .5 |
| Ref. Typical Section | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 2-8 | TYPE 2-8 |
| Special Treatment | | | | | |
| Steep Section Length | - | 100 | - | 200 | - |

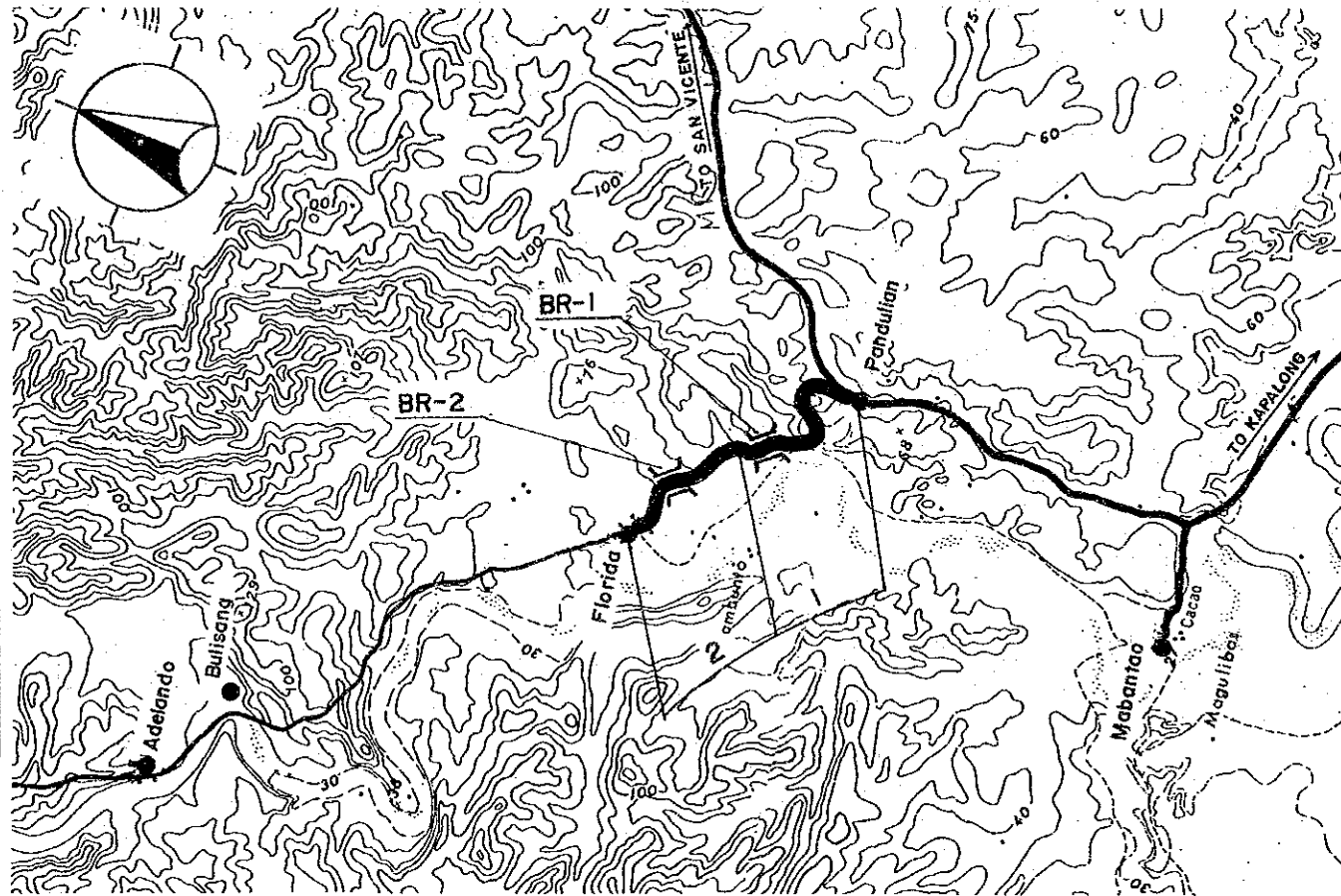
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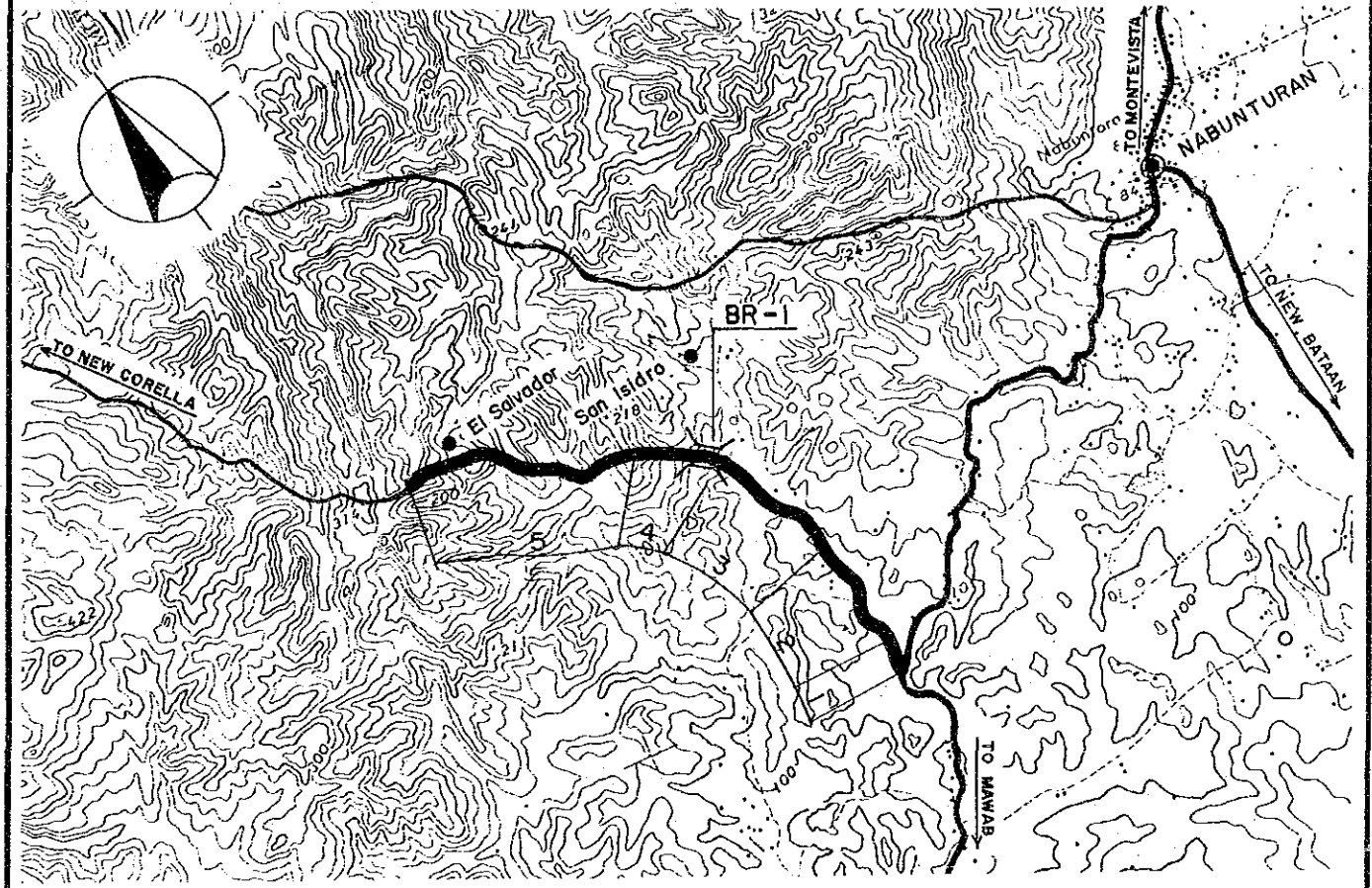
Drawing No.
46

Road No: P85-2 Road Name: PANDULIAN-FLORIDA ROAD
Location: KAPALONG, DAVAO DEL NORTE



| | | |
|-----------------------|------------------------------|----------------|
| Road Classification | Minor Road (Provincial Road) | |
| Total Length | 2.7 km | |
| Sub-section No. | 1 | 2 |
| Length (km) | 1.2 | 1.5 |
| Terrain | Rolling | Rolling |
| Existing Road Surface | 3.6-GRV (Fair) | 3.2-GRV (Fair) |
| Proposed Improvement | Widening | Widening |
| Improvement Type | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 |
| Carriageway Width(m) | .5 | .5 |
| Shoulder Width (m) | TYPE 4-4 | |
| Ref. Typical Section | TYPE 4-4 | |
| Bridge No. | BR-1 | BR-2 |
| Existing Type | Bailey | Bailey |
| Length (m) | 12 | 19 |
| Proposed Type | - | - |
| Length (m) | - | - |
| No. of Spans | - | - |

Road No: P87 Road Name: NABUNTURAN-EL SALVADOR ROAD
Location: NABUNTURAN, DAVAO DEL NORTE



| | | | | | |
|------------------------------|--|---------------|---------------|-----------------|-----------------|
| Road Classification | Minor Road (Provincial Road) | | | | |
| Total Length | 4.3 km | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 |
| Length (km) | .2 | .9 | 1.1 | .4 | 1.7 |
| Terrain | Mt'nous | Mt'nous | Mt'nous | Rolling | Mt'nous |
| Existing Road Surface | 3.4-GRV (Fair) | 3.4-GRV (Bad) | 2.8-GRV (Bad) | 2.4-GRV (V.Bad) | 2.4-GRV (V.Bad) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Carriageway Width(m) | .5 | .5 | .5 | .5 | .5 |
| Shoulder Width (m) | TYPE 4-4 TYPE 1-6 TYPE 1-6 TYPE 1-6 TYPE 1-6 | | | | |
| Ref. Typical Section | 60 | 270 | 100 | - | 200 |
| Special Treatment | - | - | - | - | 70 |
| Steep Section Length | - | | | | |
| Slope Protection (Cut Slope) | - | | | | |
| Bridge No. | BR-1 | | | | |
| Existing Type | Bailey | | | | |
| Length (m) | 21 | | | | |
| Proposed Type | - | | | | |
| Length (m) | - | | | | |
| No. of Spans | - | | | | |

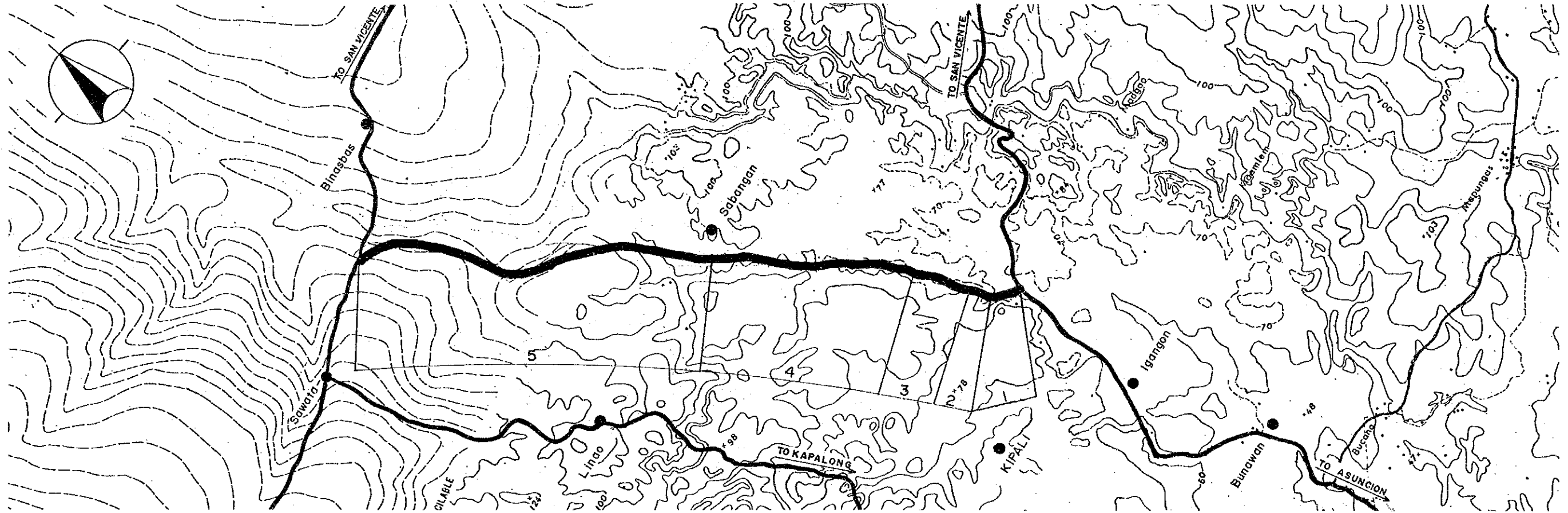
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
47

Road No: P91-2 Road Name: IGANGON-SAWATA ROAD
Location : SAN VICENTE, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | | | |
|-----------------------|------------------------------|------------------|--------------------|------------------|--------------------|
| Total Length | 8.7 km | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 |
| Length (km) | .4 | .2 | .7 | 2.4 | 5.0 |
| Terrain | Rolling | Rolling | Rolling | Rolling | Rolling |
| Existing Road Surface | 4.0-GRV (Fair) | 4.5-GRV (Bad) | 4.0-GRV (V.Bad) | 4.5-GRV (Bad) | 4.5-GRV (V.Bad) |
| Proposed Improvement | Widening | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Improvement Type | Gravel | Gravel | Gravel | Gravel | Gravel |
| Surface Type | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Carriageway Width(m) | .5 | .5 | .5 | .5 | .5 |
| Shoulder Width (m) | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Ref. Typical Section | - | - | - | 100 | - |
| Special Treatment | | | | | |
| Steep Section Length | | | | | |

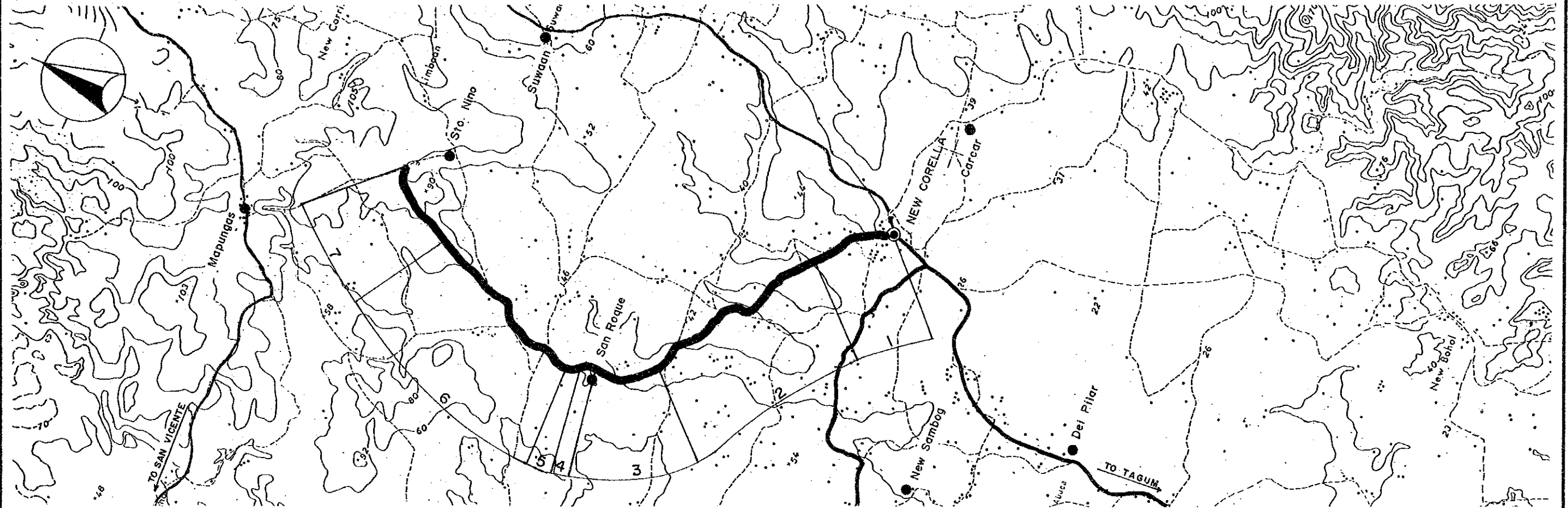
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Scale
1:50,000

Drawing No.
50

Road No: P118-1 Road Name: NEW CORELLA-SAN ROQUE ROAD
Location : NEW CORELLA, DAVAO DEL NORTE



| Road Classification | Minor Road (Provincial Road) | | | | | | |
|-----------------------|--|------------------|------------------|-------------------|--------------------|--------------------|-------------------|
| Total Length | 7.5 km | | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Length (km) | .9 | 2.2 | .8 | .1 | .1 | 2.4 | 1.0 |
| Terrain | Flat | Flat | Rolling | Flat | Flat | Rolling | Rolling |
| Existing Road Surface | 3.6-GRV (Fair) | 3.2-GRV (Bad) | 3.2-GRV (Bad) | 5.5-PCC (Fair) | 1.6-GRV (V.Bad) | 1.6-GRV (V.Bad) | .8-GRV (V.Bad) |
| Proposed Improvement | Widening Rehabil. Rehabil. Rehabil. Rehabil. Rehabil. Rehabil. | | | | | | |
| Improvement Type | Widening Rehabil. Rehabil. Rehabil. Rehabil. Rehabil. Rehabil. | | | | | | |
| Surface Type | Gravel | Gravel | Gravel | PCC | Gravel | Gravel | Gravel |
| Carriageway Width(m) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Shoulder Width (m) | 1.0 | 1.0 | .5 | 1.5 | 1.0 | .5 | .5 |
| Ref. Typical Section | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 1-1 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Special Treatment | - | | | | | | |
| Steep Section Length | - | - | - | - | - | 100 | - |

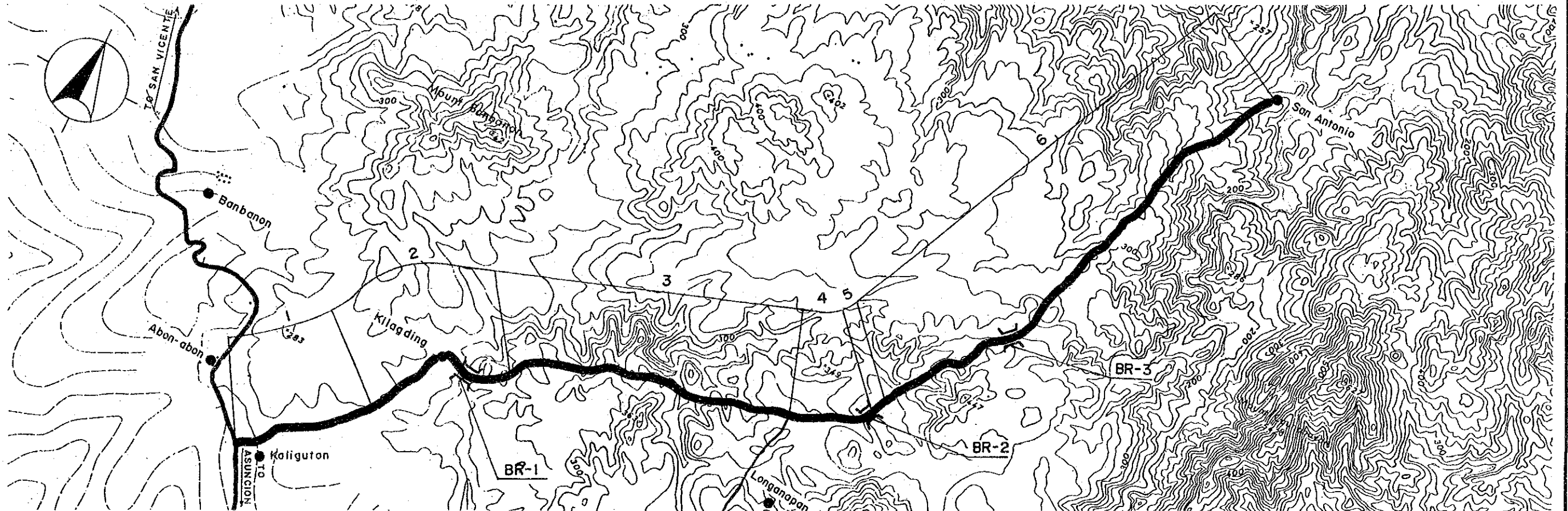
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PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale
1:50,000

Drawing No.
51

Road No: P120 Road Name: KALIGUTAN-SAN ANTONIO ROAD
Location : SAN VICENTE, DAVAO DEL NORTE



| | | | | | | |
|-----------------------|------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Road Classification | Minor Road (Provincial Road) | | | | | |
| Total Length | 14.8 km | | | | | |
| Sub-section No. | 1 | 2 | 3 | 4 | 5 | 6 |
| Length (km) | 1.7 | 2.1 | 3.6 | .8 | .1 | 6.5 |
| Terrain | Rolling | Rolling | Rolling | Rolling | Rolling | Rolling |
| Existing Road Surface | 3.6-GRV (Fair) | 3.2-GRV (Fair) | 2.8-GRV (V.Bad) | 3.2-GRV (V.Bad) | .8-GRV (Impass) | 2.4-GRV (V.Bad) |
| Proposed Improvement | Widening | | | | | |
| Improvement Type | Widening | Widening | Rehabil. | Rehabil. | Rehabil. | Rehabil. |
| Surface Type | Gravel | Gravel | Gravel | Gravel | Gravel | Gravel |
| Carriageway Width(m) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Shoulder Width (m) | .5 | .5 | .5 | .5 | .5 | .5 |
| Ref. Typical Section | TYPE 4-4 | TYPE 4-4 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 | TYPE 1-6 |
| Special Treatment | Steep Section Length | | | | | |
| | 100 | - | - | - | - | - |
| Bridge No. | BR-1 | BR-2 | BR-3 | | | |
| Existing Type | Ford-Cr. | Ford-Cr. | Bailey | | | |
| Length (m) | - | - | 12 | | | |
| Proposed Type | 2Lane-Sp | 2Lane-Sp | - | | | |
| Length (m) | 20 | 12 | - | | | |
| No. of Spans | - | - | - | | | |

