

REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF AGRICULTURE  
REGIONAL FIELD UNIT NO. 5  
SAN AGUSTIN, PULI, CAMARINES SUR.

**PROJECT TITLE**

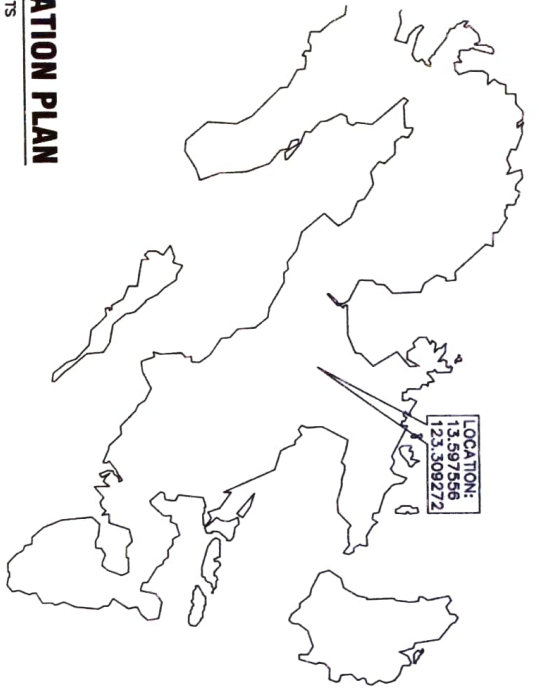
*P R O P O S E D :*

**CONSTRUCTION OF  
DEL ROSARIO DIVERSION DAM**

**LOCATION: DEL ROSARIO, PULI, CAMARINES SUR**

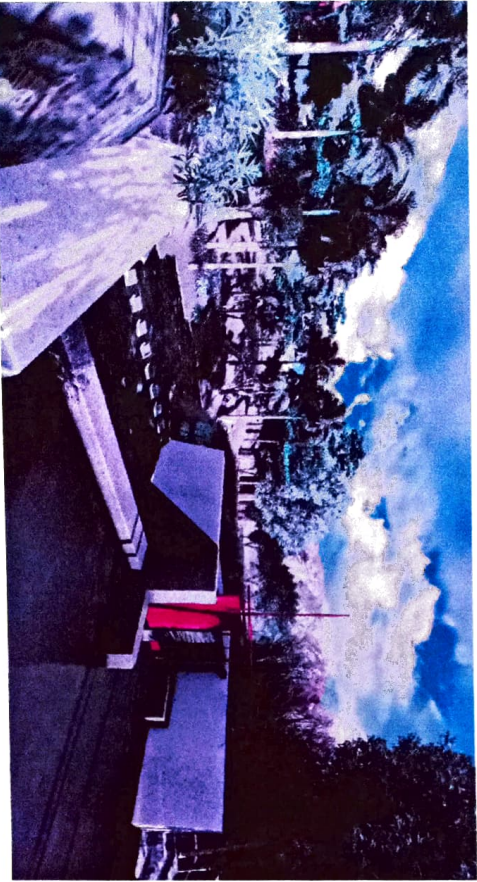
*P R E P A R E D B Y :*  
**RAED OFFICE**





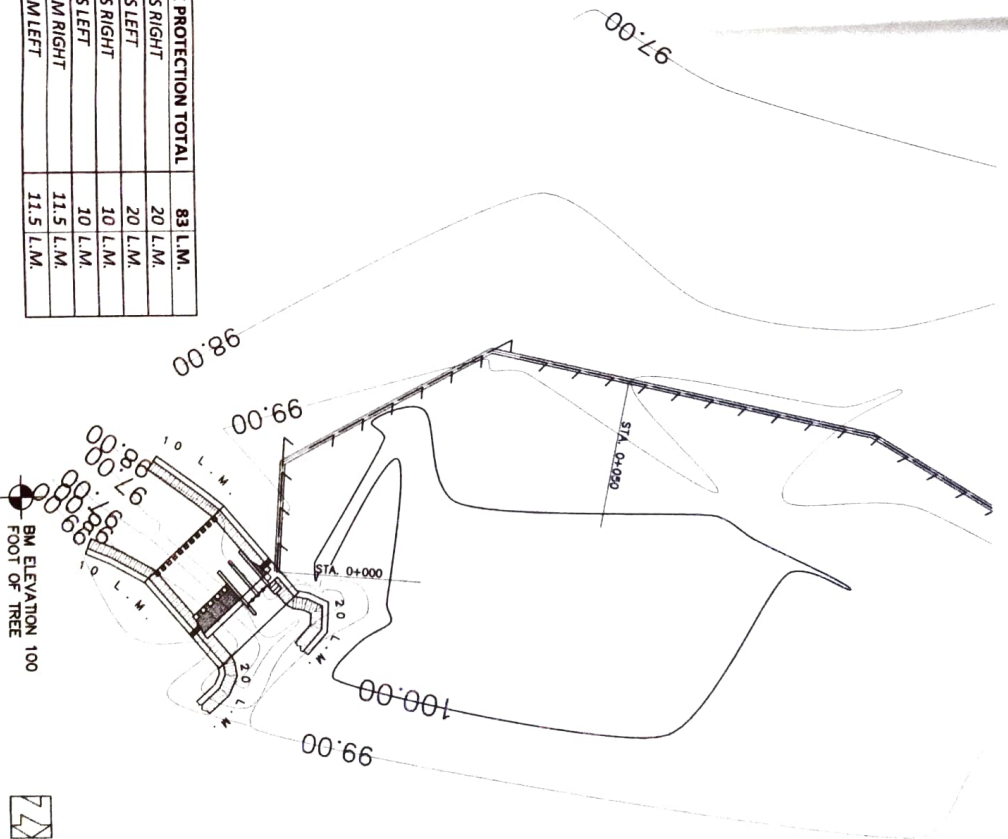
**LOCATION PLAN**

SCALE NTS



**PERSPECTIVE VIEW**

| SCOPE PROTECTION TOTAL | 83 L.M.   |
|------------------------|-----------|
| U/S RIGHT              | 20 L.M.   |
| U/S LEFT               | 20 L.M.   |
| D/S RIGHT              | 10 L.M.   |
| D/S LEFT               | 10 L.M.   |
| DAM RIGHT              | 11.5 L.M. |
| DAM LEFT               | 11.5 L.M. |



**SITE DEVELOPMENT PLAN**

SCALE 1:200



Department of Agriculture  
 REGIONAL FIELD  
 OFFICE NO. 5  
 SAN ADAMIN, PUL, CAMARINES SUR  
 REGIONAL AGRICULTURAL  
 ENGINEERING DIVISION

Title: **CONSTRUCTION OF DEL ROSARIO DD**  
 Special Comment: **Dal Rosario, Pul, Camarines Sur**

Prepared by: **JAD R. ATOLE**  
 Technical Staff

Checked by: **ARTHUR B. MIRA**  
 Engineer II

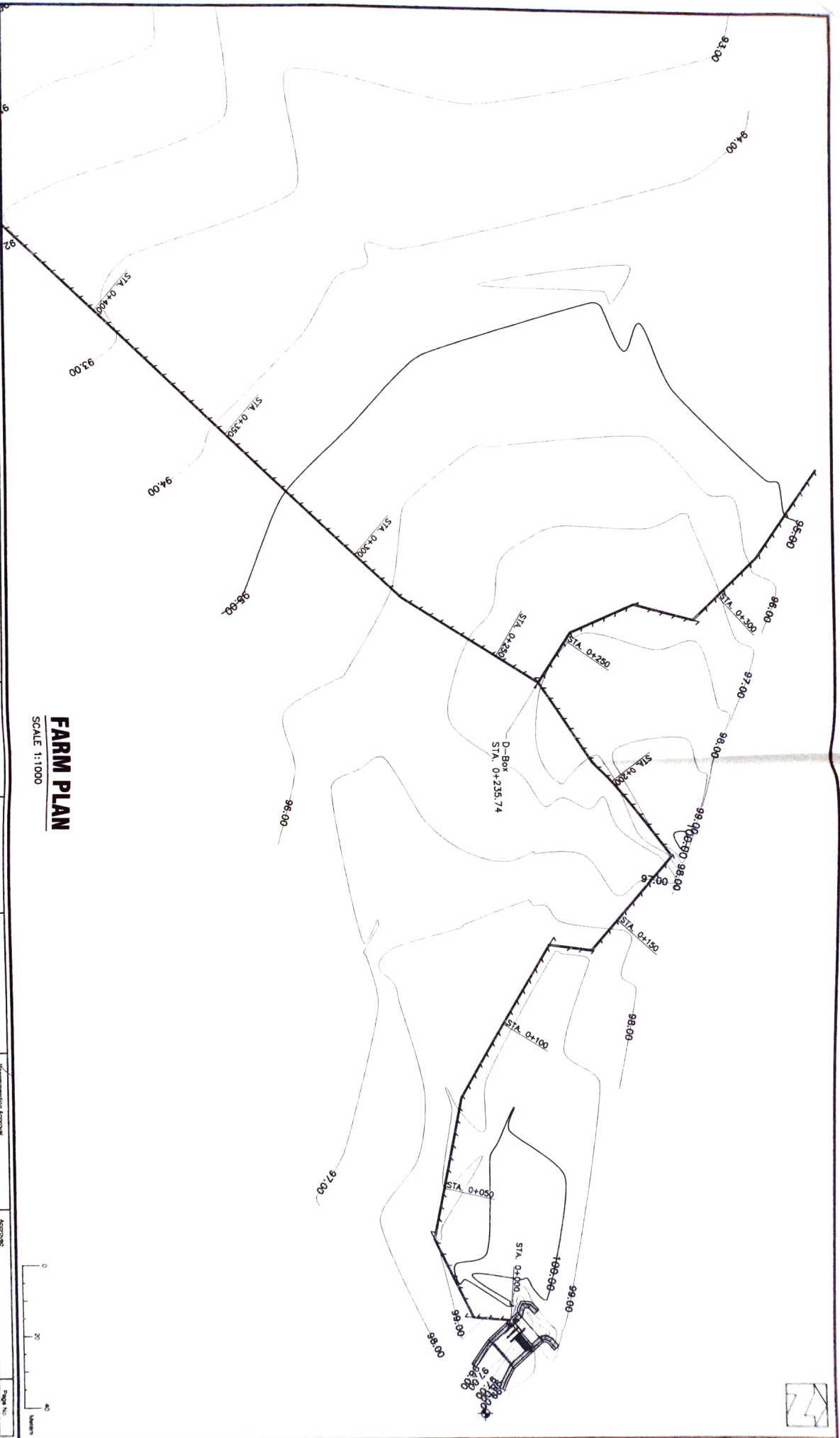
Reviewed by: **JERRY A. EBORA**  
 Head, ERSB

Noted by: **MILDA T. ALBANO**  
 Chief, FIED

Recommendatory Approval: **LUIZ R. MARCELINO**  
 RFD for Operation and Estimation

Approved: **RODEL B. DOMINICK MABE**  
 Regional Director

Page No: 1/10



**FARM PLAN**  
SCALE 1:1000

|                       |  |  |  |  |  |
|-----------------------|--|--|--|--|--|
| Title                 | CONSTRUCTION OF DEL ROSARIO DD   |  |  |  |  |
| Prepared by           | <br><b>JAD H. ATOLE</b><br>Technical Staff                           |  |  |  |  |
| Checked by            | <br><b>ARTHUR B. MIRA</b><br>Engineer II                           |  |  |  |  |
| Reviewed by           | <br><b>JERRY A. EBONA</b><br>Head, EROSS                           |  |  |  |  |
| Noted by              | <br><b>NILDA T. ALBANO</b><br>Chief, RAED                          |  |  |  |  |
| Recommending Approval | <br><b>LIZ R. MARCELINO</b><br>RTM for Operation and Estimation    |  |  |  |  |
| Approved              | <br><b>RODEL P. TORRILLO</b><br>Regional Engineer, District Office |  |  |  |  |
| Page No.              | 2  |  |  |  |  |

Same Content  
 FARM PLAN





Title: **CONSTRUCTION OF DEL ROSARIO DD**  
 Drawn by: **DAI ROSARIO, P.E., CHAIRMAN, SUR**  
 Checked by: **DAM**

Prepared by: **JAY H. ATOLE**  
 Technical Staff

Checked by: **ARTURIELA MIRA**  
 Engineer II

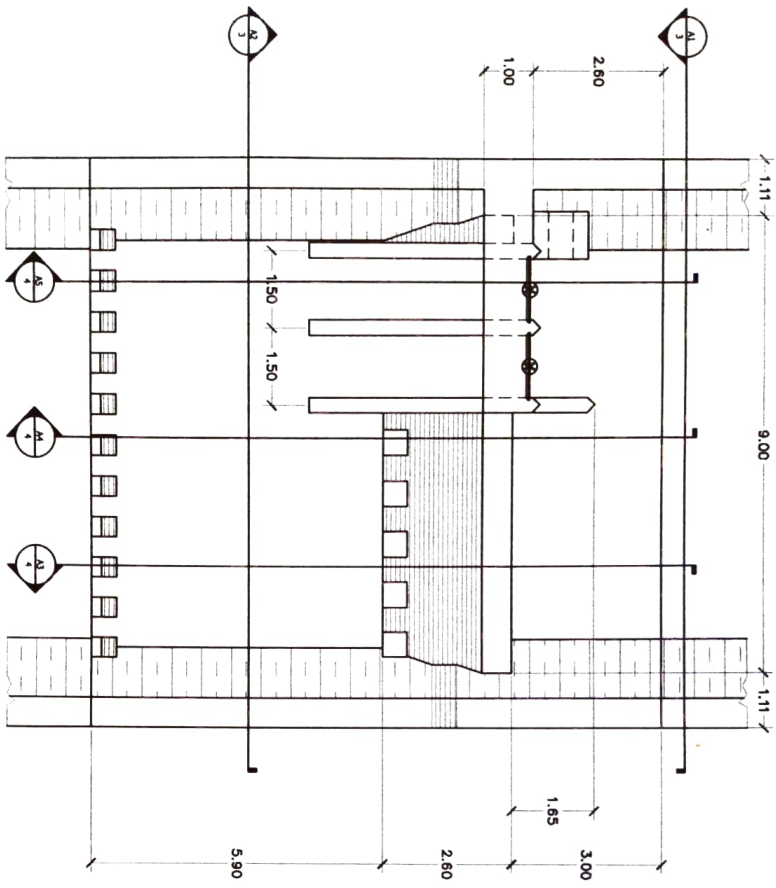
Reviewed by: **JERRY A. EBONIA**  
 P.E.

Noted by: **NILDA TREBLANO**  
 Chief Engineer

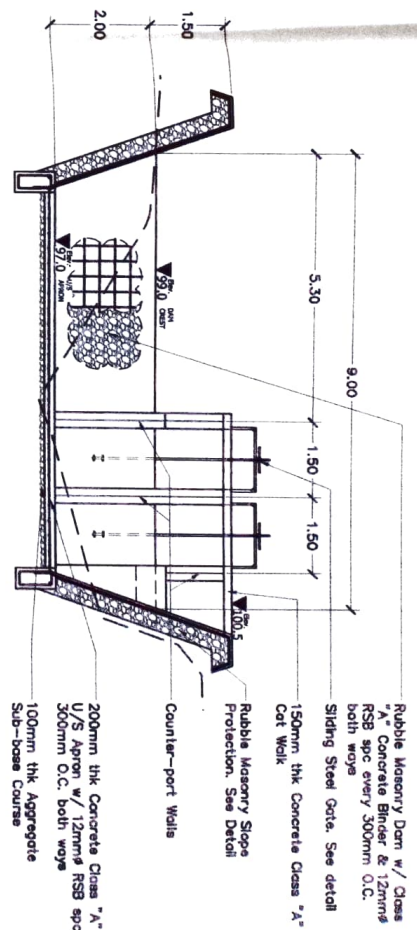
Recommending Approval: **LUIZ R. MARCELO**  
 FID for Operation and Estimation

Approved: **RODEL P. KORNILIA MABE**  
 Regional Engineering Director

**GENERAL PLAN**  
 SCALE 1:100

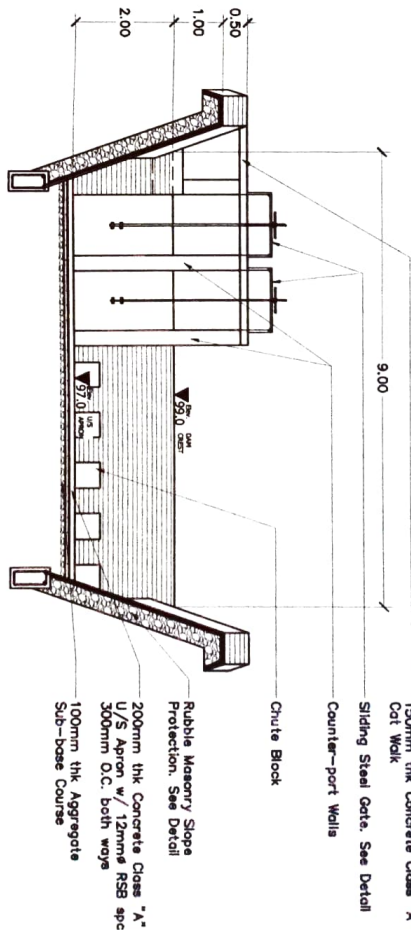


**A1-UPSTREAM SECTION**  
 SCALE 1:100

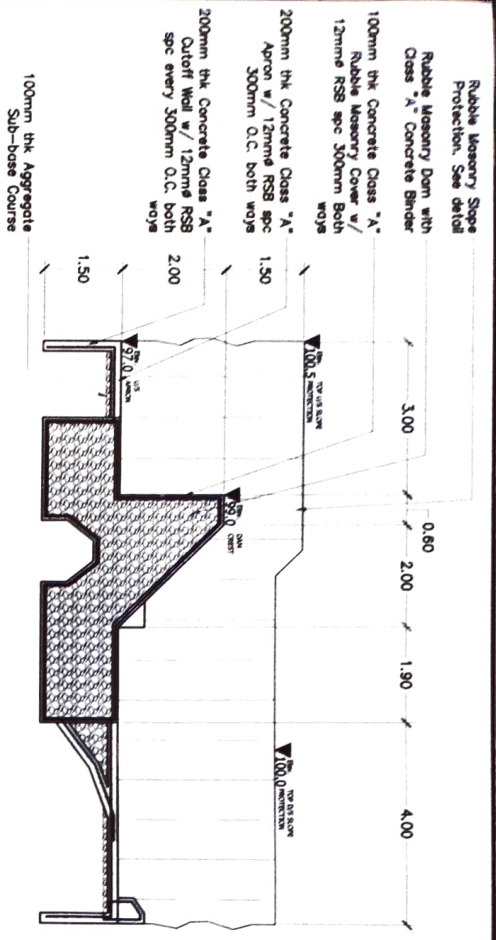


- Rubble Masonry Dam w/ Class "A" Concrete Binder & 12mm RSB spc every 300mm O.C. both ways
- Sliding Steel Gate. See detail
- 150mm thk Concrete Class "A" Cast Wall
- Rubble Masonry Slope Protection. See Detail
- Counter-port Walls
- 200mm thk Concrete Class "A" U/S Apron w/ 12mm RSB spc 300mm O.C. both ways
- 100mm thk Aggregate Sub-base Course

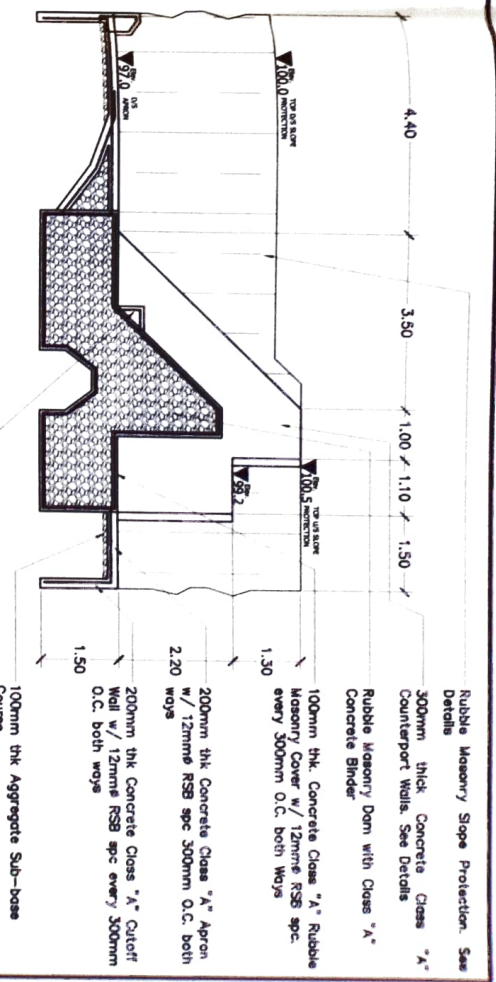
**A2-DOWNSTREAM SECTION**  
 SCALE 1:100



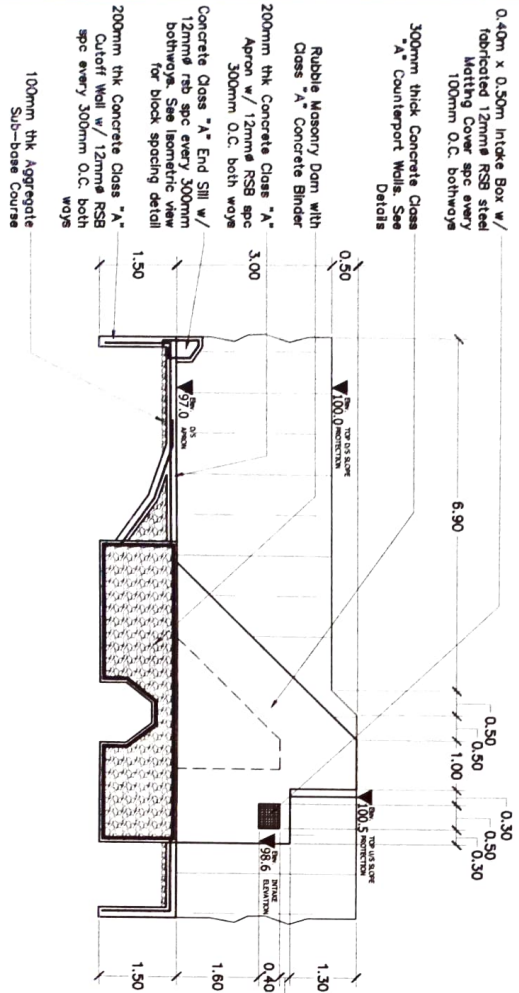
- 150mm thk Concrete Class "A" Cast Wall
- Sliding Steel Gate. See Detail
- Counter-port Walls
- Chute Block
- Rubble Masonry Slope Protection. See Detail
- 200mm thk Concrete Class "A" U/S Apron w/ 12mm RSB spc 300mm O.C. both ways
- 100mm thk Aggregate Sub-base Course



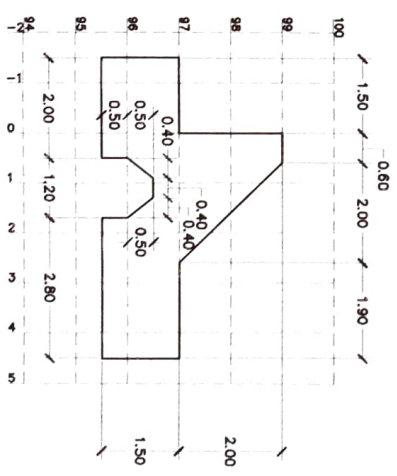
**SECTION THRU "A3"**  
SCALE 1:100



**SECTION THRU "A4"**  
SCALE 1:100



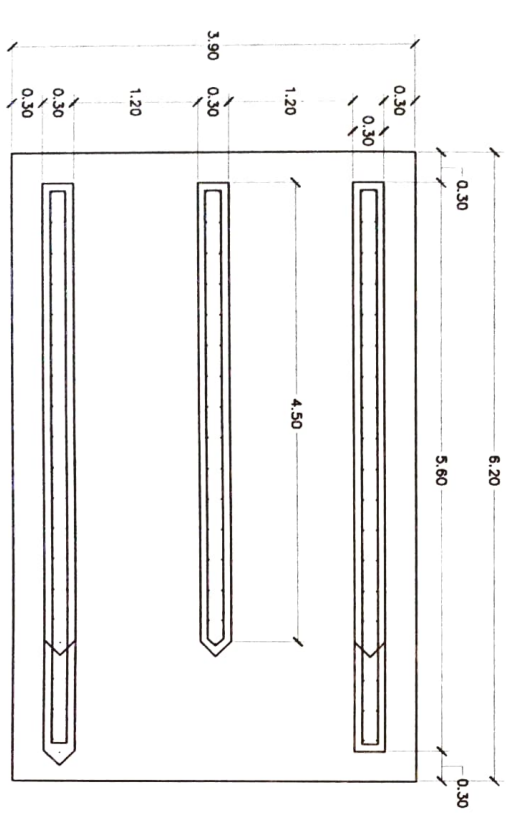
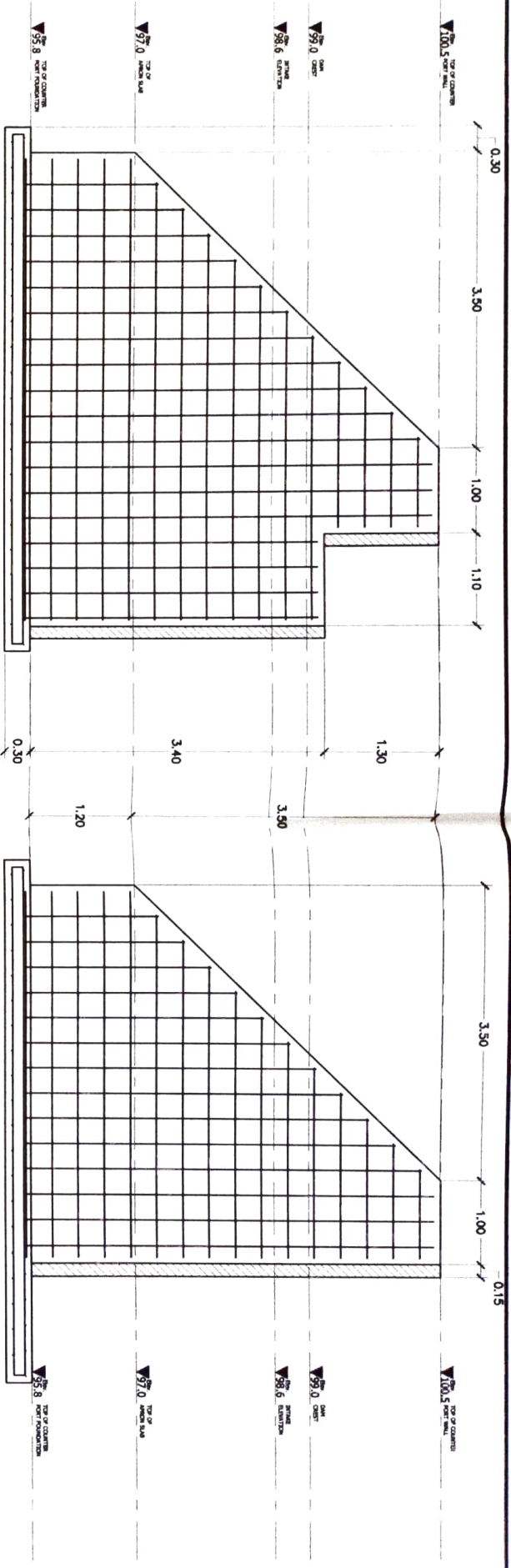
**SECTION THRU "A5"**  
SCALE 1:100



**GEOMETRIC DETAIL OF DAM**  
SCALE 1:100

|                                |                               |                               |                                |                               |  |   |
|--------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|--|---|
| Form                           | Checked by                    | Reviewed by                   | Noted by                       | Recommending Approval         | Approved   | Page No.  |
| CONSTRUCTION OF DEL ROSARIO DD | JMD RAYOLE<br>Technical Staff | ARTHUR A. MIRA<br>Engineer II | JERRY A. ESPINA<br>Team Leader | NILDA J. ALBANO<br>Civil Engr | LUIZ R. MARCELINO<br>RITD for Operation and Estimation | RODEL P. DONNOLA MABE<br>Regional Structural Engineer |
| SECTION OF DAM                 |                               |                               |                                |                               |  | 7   |





- NOTES:
1. ALL CONCRETE STRUCTURE SHOULD BE CONCRETE CLASS "A" UNLESS SPECIFIED IN THE PLANS.
  2. COUNTER PORT WALLS ARE 300MM THICK WITH SHARP RISING IN UPSTREAM ABOUT 150MM.
  3. THE FOUNDATION IS 300MM THICK & THE REINFORCEMENT IS 12MM# DOUBLE MATTING STEEL.
  4. REINFORCING BARS ARRANGE AS SHOWN IN THE DETAILS.
  5. ALL SPACING OF REINFORCING BAR IS UNIFORMLY 300MM BOTH SIDES.
- THE VERTICAL BAR OR MAIN BAR OF THE COUNTER PORTS IS 12MM# & THE TIE BAR/LATERAL BAR IS 10MM#.

**DETAIL OF COUNTERPORT WALL**

SCALE 1:50

DEPARTMENT OF AGRICULTURE  
REGIONAL OFFICE NO. 5  
SAN AGUSTIN PK., CAMARINES SUR  
REGIONAL AGRICULTURAL  
ENGINEERING DIVISION

Department of Agriculture  
REGIONAL FIELD  
OFFICE NO. 5  
SAN AGUSTIN Pk., CAMARINES SUR  
REGIONAL AGRICULTURAL  
ENGINEERING DIVISION

Prepared by  
**JAD N. ATOLE**  
Technical Staff

Checked by  
**ARTHUR B. MIRA**  
Engineer II

Reviewed by  
**JERRY A. EBONIA**  
Head Boss

Noted by  
**NILDTA PERALTA**  
Chief Road

Recommending Approval  
**LUIZ R. MARCELIÑO**  
RTO for Construction and Extension

Approved  
**RODEL P. ROYAL A. MARE**  
Regional Engineer

Page No.  
5  
10

Division Office  
**CONSTRUCTION OF DEL ROSARIO DD**  
Del Rosario Pk., Camarines Sur  
**COUNTER PORT WALLS**



Department of Agriculture  
**REGIONAL FIELD OFFICE NO. 5**  
 SAN JOSE DEL MONTE, CAVITE, PHILIPPINES  
 REGIONAL AGRICULTURAL ENGINEERING DIVISION

Title: **CONSTRUCTION OF DEL ROSARIO DD**  
 Del Rosario, Pili, Cavatines Sur

Prepared by: **JAD H. ATOLE**  
 Technical Staff

Checked by: **ARTHUR B. MIRA**  
 Engineer II

Reviewed by: **JERRY A. EBONA**  
 Head, SPSS

Noted by: **NILDA T. ALBANO**  
 Chief, RABED

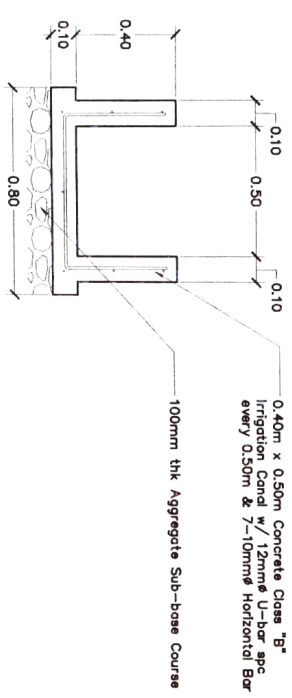
Recommending Approval: **LIZ R. MARCELINO**  
 RTO for Operation and Extension

Approved: **RODEL ESTORNA LA MARE**  
 Regional Agricultural Engineer

Page No. 6/10

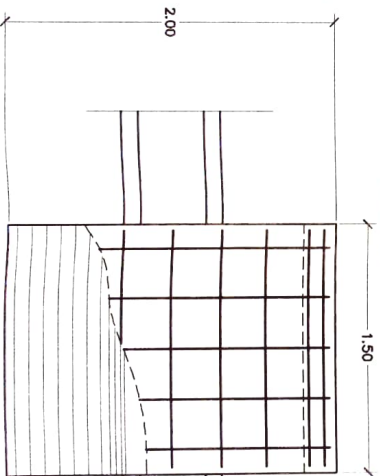
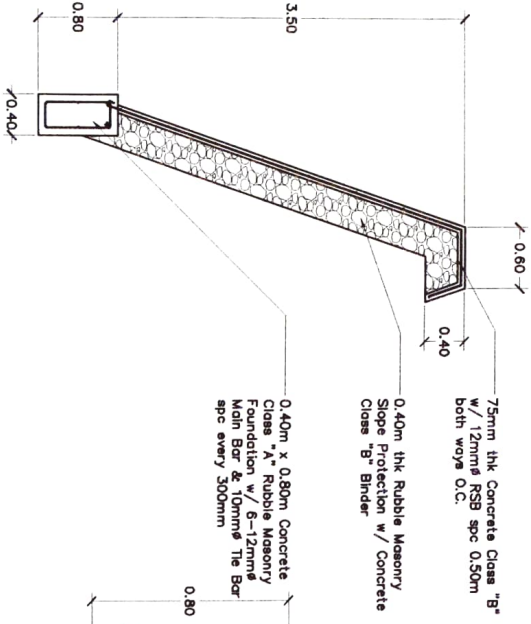
### DETAIL OF IRRIGATION CANAL (L=970)

SCALE 1:1:20



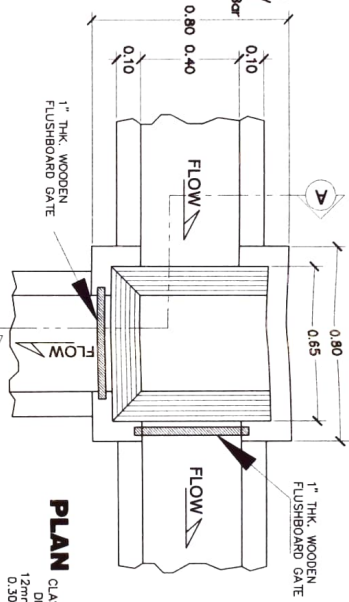
### DETAIL OF COUNTERPORT WALL

SCALE 1:1:30

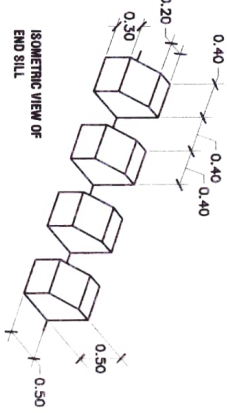
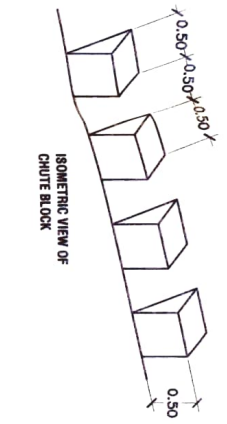
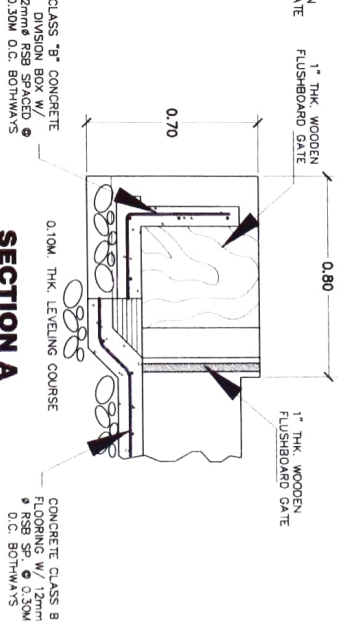


### DETAIL OF DIVISION BOX

SCALE 1:1:20

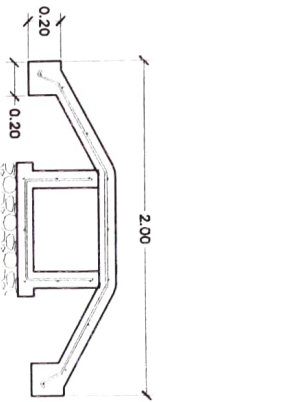


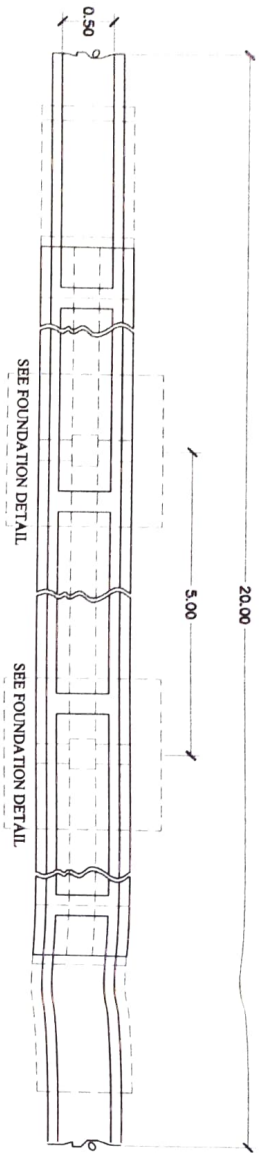
### SECTION A



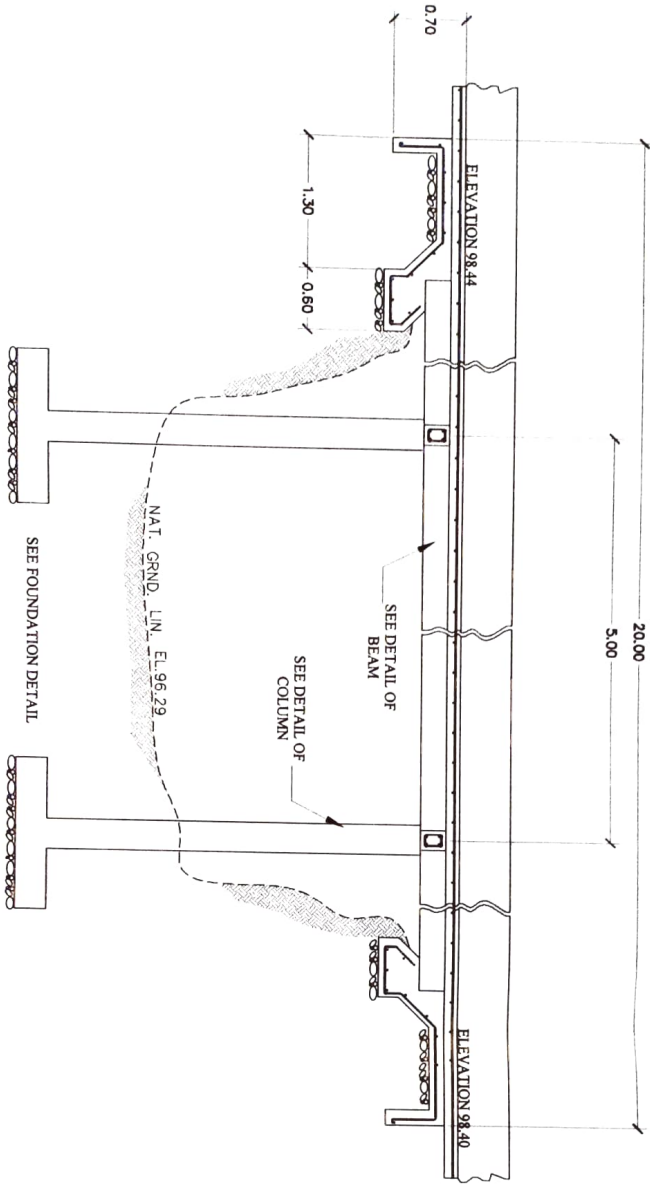
### DETAIL OF MACHINERY CROSSING

SCALE 1:1:30



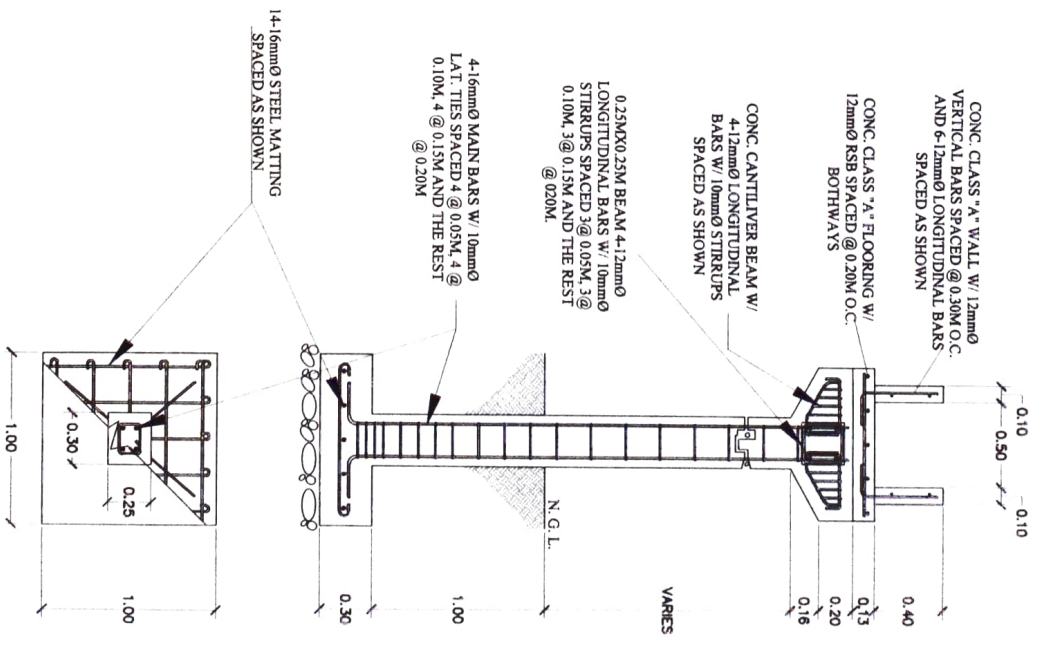


PLAN



PROFILE ALONG CENTERLINE OF FLUME "A"

**PLAN & PROFILE OF ELEVATED FLUME**  
SCALE 1:50



**DETAIL OF ELEVATED FLUME**  
SCALE 1:30

|  |   |  |  |   |   |  |                |
|--|---|--|--|---|---|--|----------------|
| Title<br><b>CONSTRUCTION OF DEL ROSARIO DD</b><br>Del Rosario, Pal, Camarines Sur<br><b>ELEVATED FLUME</b> | Prepared by:<br><br>JAD R. ATOLE<br>Technical Staff | Checked by:<br><br>ARYHUN B. MIRA<br>Engineer II | Reviewed by:<br><br>JERRY A. EBONA<br>Head, BRSS | Noted by:<br><br>NILDA Y. MARINO<br>Chief, RABD | Recommending Approval:<br><br>LUZ M. MARCELINO<br>RTO for Operation and Extension | Approved:<br><br>RODEL P. CORNILLA, MBE<br>Regional Engineering Director | Page No.<br>16 |
|--|---|--|--|---|---|--|----------------|





Department of Agriculture  
**REGIONAL FIELD OFFICE NO. 5**  
 SAN ANTONIO PUL. CALAMITAS SUR  
 REGIONAL AGRICULTURAL  
 ENGINEERING DIVISION

Title  
**CONSTRUCTION OF DEL. ROSARIO DD**  
 Del Rosario Pul. Calamitas Sur  
 CANAL PROFILE

Prepared by  
  
**JAD R. ATOLE**  
 Technical Staff

Checked by  
  
**ARTHUR B. MIRA**  
 Engineer II

Reviewed by  
  
**JERRY A. EBONIA**  
 Head Engineer

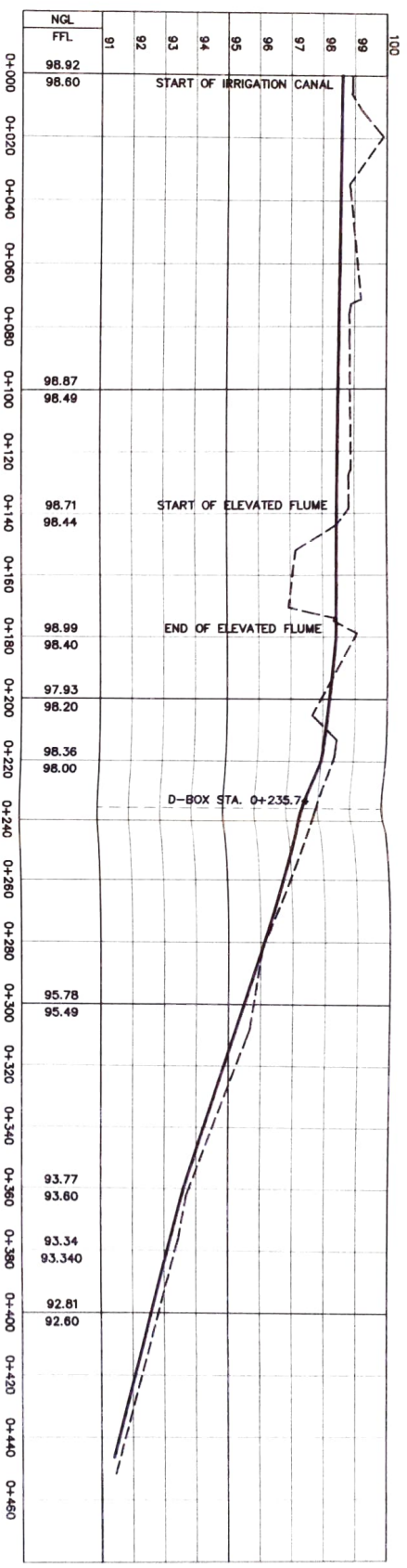
Noted by  
  
**NILDAT ALBANO**  
 Chief Road

Recommending Approval  
  
**LIZ R. MARCELO**  
 RFD for Operation and Extension

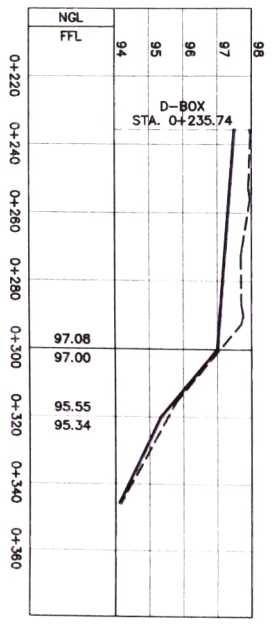
Approved  
  
**RODEL P. ORINA**  
 Regional Executive Director

Page No.  
 1  
 10

PROFILE ALONG CANAL-A



PROFILE ALONG CANAL-B



**PROFILE OF IRRIGATION CANAL**  
 SCALE V 1:150 H 1:1500



DEPARTMENT OF AGRICULTURE  
REGIONAL FIELD OFFICE NO. 5  
San Agustin, Pal. Camarines Sur

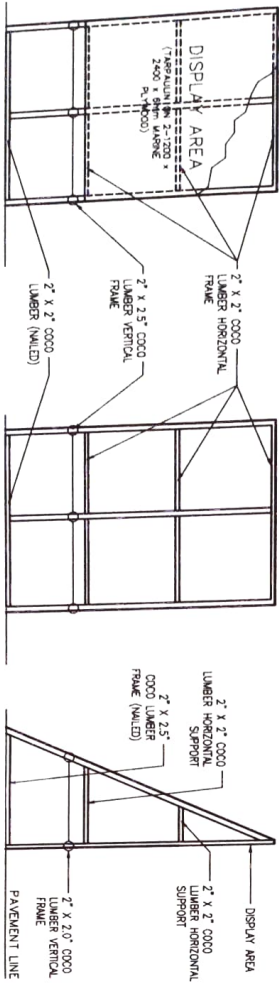
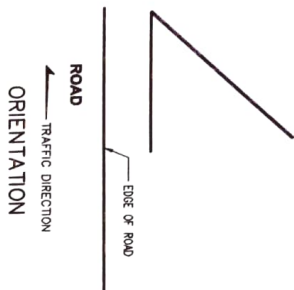
Project: \_\_\_\_\_  
Cost: \_\_\_\_\_  
Location: \_\_\_\_\_  
Fund Sources: \_\_\_\_\_  
Contractor: \_\_\_\_\_  
Brief Description of Project: \_\_\_\_\_

Project Details:

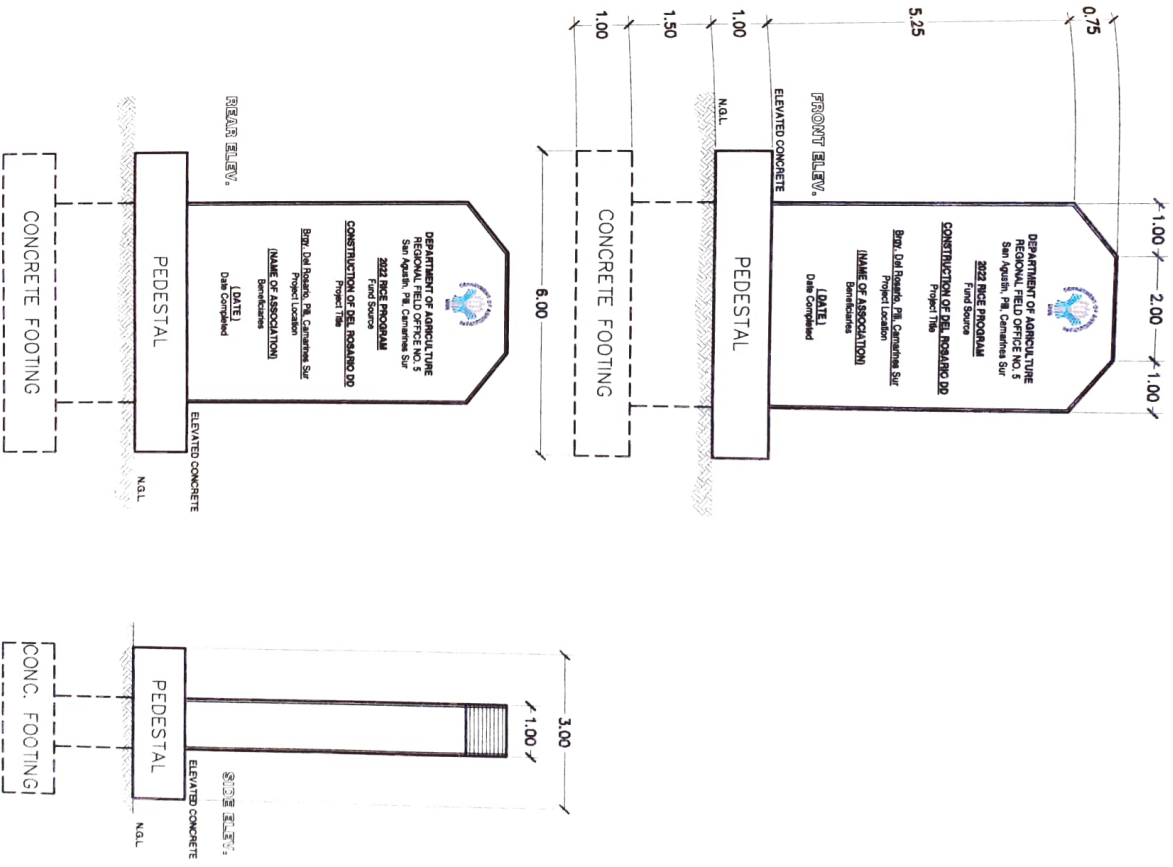
| Year | Item | Quantity | Unit | Rate | Total |
|------|------|----------|------|------|-------|
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |
|      |      |          |      |      |       |

1. For use in preparation of final report only.

2. For use in preparation of final report only.



**PROJECT BILLBOARD**  
SCALE 1:100



**PERMANENT MARKER**  
SCALE 1:100

|   |   |  |  |   |  |  |   |                           |
|---|---|--|--|---|--|--|---|---------------------------|
| <p>Department of Agriculture<br/>REGIONAL FIELD OFFICE NO. 5<br/>SAN AGUSTIN, PAL. CAMARINES SUR<br/>REGIONAL AGRICULTURAL ENGINEERING DIVISION</p> | <p>Title</p> <p><b>CONSTRUCTION OF DEL ROSARIO DD</b></p> <p>Drawn by: _____</p> <p>AS-SHOW</p> | <p>Prepared by:</p> <p><b>JABR ATOLE</b><br/>Technical Staff</p> | <p>Checked by:</p> <p><b>ARTHUR MIRA</b><br/>Engineer II</p> | <p>Reviewed by:</p> <p><b>JERRI A. BOLA</b><br/>HEAD OFFICE</p> | <p>Noted by:</p> <p><b>NILDT VALIANO</b><br/>Chief Field</p> | <p>Supervising Engineer:</p> <p><b>LUIZ R. MARCELINO</b><br/>HDD to Operation and Estimation</p> | <p>Approved:</p> <p><b>RODEL A. TORRALBA MASE</b><br/>Regional Engineering Director</p> | <p>Page No.</p> <p>10</p> |
|---|---|--|--|---|--|--|---|---------------------------|