

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**

**DEPARTMENT OF IRRIGATION**

**MINISTRY OF WATER RESOURCES**

**HIS MAJESTY'S GOVERNMENT OF NEPAL**

**THE FEASIBILITY STUDY  
ON  
THE SUNSARI RIVER IRRIGATION  
PROJECT  
IN  
THE KINGDOM OF NEPAL**

**FINAL REPORT  
DRAWINGS**

January, 2003

**SANYU CONSULTANTS INC.**

<b>AFA</b>
<b>JR</b>
<b>03-06</b>

# LIST OF DRAWINGS

## A) GENERAL

DRAWING NO.	TITLE
GP-1to3	IRRIGATION AND DRAINAGE CANAL NET WORK (Ortho-Photo Map) (1/3)-(3/3)
GP-4	IRRIGATION AND DRAINAGE CANAL NET WORK

## B) HEADWORKS

DRAWING NO.	TITLE
HW-1	TYPICAL SECTION OF HEADWORKS -PLAN-
HW-2	TYPICAL SECTION OF HEADWORKS -ELEVATION-
HW-3	TYPICAL SECTION OF HEADWORKS -SPILLWAY-
HW-4	TYPICAL SECTION OF HEADWORKS -SCOURING SLUICE-
HW-5to6	TYPICAL SECTION OF HEADWORKS -PIER (1/2)-(2/2)-
HW-7	TYPICAL SECTION OF INTAKE STRUCTURES
HW-8	TYPICAL SECTION OF TRANSITION RETAINING WALL

## C) CANAL

DRAWING NO.	TITLE
CN-1	PROPOSED DIMENSIONS OF HEAD RACE AND MAIN CANAL
CN-2	TYPICAL SECTION OF SECONDARY AND TERTIARY CANAL
CN-3	TYPICAL SECTION OF SUKSENA MAIN CANAL
CN-4to9	SUKSENA MAIN CANAL PLAN AND LONGITUDINAL SECTION (1/6)-(6/6)
CN-10	TYPICAL CROSS SECTION OF SHANKARPUR MAIN CANAL
CN-11to16	SHANKARPUR MAIN CANAL PLAN AND LONGITUDINAL SECTION (1/6)-(6/6)
CN-17	TYPICAL DRAWING OF WATERCOURSE IRRIGATION SYSTEM

## E) DRAINAGE

DRAWING NO.	TITLE
DR-1	TYPICAL DRAWING OF DRAINAGE RE-USE STRUCTURE
DR-2	BOX CULVERT FOR DRAINAGE (DRAIN CROSSING CANAL)
DR-3	PIPE CULVERT FOR DRAINAGE (DRAIN CROSSING CANAL)
DR-4	DRAINAGE OUTFALL

## D) ANCILLARY FACILITIES OF CANAL

DRAWING NO.	TITLE
AF-1	MAIN CANAL CROSS REGULATOR
AF-2	MAIN CANAL OUTLET
AF-3	MAIN CANAL SYPHON (SUKSENA MAIN CANAL)
AF-4	MAIN CANAL AQUEDUCT (SHANKARPUR MAIN CANAL)
AF-5	MAIN CANAL ESCAPE STRUCTURE
AF-6	TYPICAL DRAWING OF HEAD RACE CROSSING
AF-7	TYPICAL DRAWING OF PROPORTIONAL DISTRIBUTOR
AF-8	TYPICAL DRAWING OF FARM TURNOUT
AF-9	POSITION OF CANAL PROTECTION WORKS
AF-10	TYPICAL DRAWING OF CANAL PROTECTION WORKS
AF-11	TYPICAL DRAWING OF SLIPWAY AND STEPS IN CANAL
AF-12	TYPICAL DRAWING OF PIPE CULVERT (TERTIARY CANAL CROSSING ROAD)
AF-13	TYPICAL DRAWING OF FOOT BRIDGE

## F) RIVER TRAINING

DRAWING NO.	TITLE
RT-1to2	PROPOSED RIVER TRAINING SECTION OF SUNSARI RIVER (1/2)-(2/2)

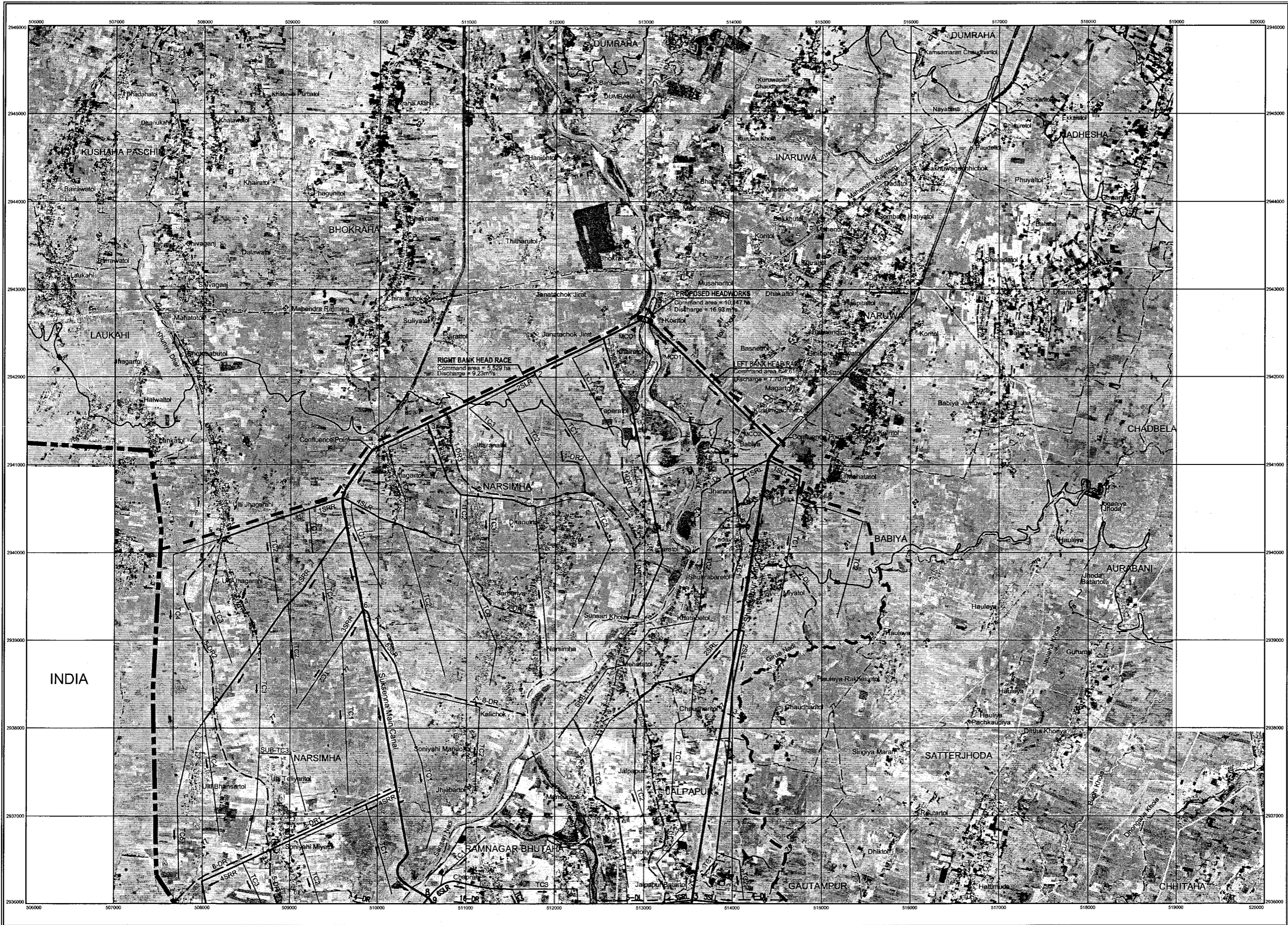
## G) MARIYA DHAR (OLD SUNSARI RIVER) SCHEME

DRAWING NO.	TITLE
MD-1	SUPPLEMENT IRRIGATION AND RURAL DEVELOPMENT FROM OLD SUNSARI RIVER
MD-2	SUBMERGED ROAD AND HEADWORKS

## H) OTHERS

DRAWING NO.	TITLE
RI-1	TYPICAL DRAWING OF ROAD IMPROVEMENT
FP-1	TYPICAL DRAWING OF FISH POND
CP-1	TYPICAL DRAWING OF COLLECTING POINT

ORTHO PHOTO OF  
SUNSARI RIVER IRRIGATION PROJECT



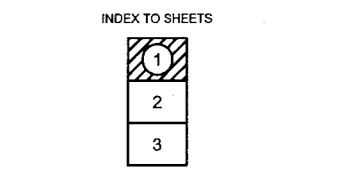
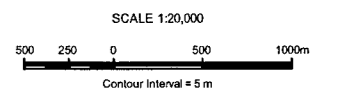
- LEGEND**
- Main canal
  - Secondary canal
  - Tertiary canal
  - Drainage
  - Main canal outlet
  - Project Boundary
  - International Boundary
  - VDC / Municipal Boundary
  - Contour
  - Spot Height
  - VDC / Municipality
  - Name of places



**HORIZONTAL DATUM**

Spheroid: Everest 1830  
 Projection: Modified Universal Transverse Mercator  
 Origin: Longitude 87 East, Latitude 0 North  
 False co-ordinates of origin: 500 000 m Easting, 0 m Northing  
 Scale factor at Central Meridian: 0.9999

- NOTES**
- This ortho-photo is prepared from 1:50,000 scale Aerial Photograph of 1982.
  - Contours and Spot Heights are from 1:25,000 Topographical Map of 1996.



**SANYU CONSULTANTS INC.**  
 FOREFRONT TOWER 1  
 KACHIDORI 13-11, CHUO-KU  
 TOKYO 104-0054, JAPAN  
 TEL: 81-3-3536-2483  
 FAX: 81-3-3536-2492

THE FEASIBILITY STUDY ON THE SUNSARI IRRIGATION PROJECT IN THE KINGDOM OF NEPAL	TITLE OF DRAWING	IRRIGATION AND DRAINAGE CANAL NETWORK
JAPAN INTERNATIONAL COOPERATION AGENCY (DRAWING NO.)		GP-1