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Indian Standard

GUIDE FOR
PRESENTATION OF PROJECT REPORT
FOR RIVER VALLEY PROJECTS
(*First Revision*)

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INDIAN STANDARDS INSTITUTION
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Indian Standard

GUIDE FOR PRESENTATION OF PROJECT REPORT FOR RIVER VALLEY PROJECTS (*First Revision*)

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Indian Standard

GUIDE FOR
PRESENTATION OF PROJECT REPORT
FOR RIVER VALLEY PROJECTS
(First Revision)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 31 October 1985, after the draft finalized by the River Valley Planning, Project Reports, Progress and Completion Reports Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 Project reports are being prepared and submitted to the concerned authorities in so many different patterns, sizes and formats that necessity for some kind of uniformity in presentation has been felt since long. This standard is proposed to serve as a guide to achieve this object. Invariably all the project reports have to include a number of drawings. The sizes, practices and standard of preparation of drawings vary so much from state to state and organization to organization that need for such a guide to bring about uniformity was felt.

0.3 This guide covers all important items which are generally considered in the preparation of project reports for river valley projects. The guide will, therefore, provide the necessary check against omission of any important item while preparing such project reports.

0.4 This standard was published in 1967. In this revision, based on the experience gained in the use of the standard, drawing sheet sizes have been modified to correspond to IS : 10711-1983*.

1. SCOPE

1.1 This standard provides guidance regarding presentation of a project report for river valley projects and covers items on titles and title page

*Sizes of drawing sheets.

of the report, table of contents, size of paper, margins, page numbring, drawings, etc.

2. TITLES AND TITLE PAGE

2.1 The title page of a project report has been divided, for the sake of convenience, into three parts, namely, top, middle and bottom.

2.1.1 *Top of the Title Page* — The title page of project report shall carry at the top on the right 'For Official Use Only', the emblem and name of the State Government or other authority, responsible for the preparation of the project report.

2.1.2 *Middle of the Title Page* — The middle of the title page shall carry the following items :

- a) Name of the project,
- b) Project report, its volume number and the corresponding title, for example, Project Report Volume I, General Report; or Project Report Volume II, Design Report; or Project Report Volume III, Cost and Estimate Report.
- c) Revision number, if any (*see 2.1.3.3*).

2.1.3 *Bottom of the Title Page*

2.1.3.1 At the bottom towards right of the title page, the name of the project authority and its division responsible for the preparation of the project report shall be written.

2.1.3.2 At the bottom towards left, the place and month and year of release of the report shall be written. In case of revision of the report month and year in which revised version was released shall be written.

2.1.3.3 When a project report is revised, the revised version shall carry in italics and in parenthesis the word(s) 'first revision', 'second revision', 'third revision', as the case may be. These words shall appear at the middle of the title page.

NOTE — The words 'first revision', 'second revision', shall appear only after the project has been sanctioned.

2.1.4 A sample title page is shown in Appendix A.

3. LETTER OF TRANSMITTAL

3.1 A letter of transmittal shall immediately follow the title page. This part of the report shall be addressed to the Government or other body

which authorized the project investigations. It should state briefly the authority and acknowledge help rendered by various agencies or individuals. It may trace very briefly the history leading up to the preparation of the project report and its broad features.

4. ILLUSTRATIVE MAP OF THE PROJECT

4.1 An illustrative schematic map of the project giving important items at a glance shall follow the letter of transmittal.

5. TABLE OF CONTENTS

5.1 All project reports shall have a table of contents which shall immediately follow the letter of transmittal. The title of the heading shall be 'Contents'.

5.2 Each volume of the project report, namely, General Report, Design Report, Cost and Estimate Report shall contain sections of all volumes in sequence, its own contents and detailed table of contents covering sections, paragraphs, sub-paragraphs, plates and appendices.

5.2.1 Each section shall be preceded by its own list of contents giving the titles of paragraphs and sub-paragraphs and shall be separated by a coloured sheet giving the title of the section.

6. SALIENT FEATURES

6.1 All project reports shall contain salient features of the project immediately after the table of contents and shall be in accordance with IS : 4186-1985*.

7. INDEX MAP

7.1 An index map of the project should be given in Plate I of the project report.

8. SIZE OF PAPER

8.1 The trimmed size of paper used for the project report shall be A4 size (210 × 297 mm) as specified in IS : 1064-1980†.

9. MARGINS

9.1 The minimum margin allowed shall be 40 mm on the left side and 15 mm on the remaining three sides.

NOTE — The wider left margin is necessary for binding.

*Guid for preparation of project report for river valley projects (*first revision*).

†Specification for paper sizes (*second revision*).

10. PAGE NUMBERING

10.1 All project report shall be presented in definite and well-defined sections. Page numbering shall be split for each section and the section number and page number shall be marked on each page within the section. Section numbers shall be indicated by large Roman numerals, such as I, II, III, etc, and page numbers by Hindu-Arabic numerals, such as 1, 2, 3, etc, the two being hyphenated.

Example:

Page 12 of section IV shall be numbered as IV-12.

10.2 Page number shall be written in the centre of bottom margin of each page.

10.3 The pages comprising, letter of transmittal, contents, schematic map, salient features, etc, preceding the first section, shall be numbered continuously with small Roman numerals in the centre of the bottom margin.

10.4 Appendices appearing at the end of all sections shall be numbered as Appendix A, Appendix B, etc.

10.4.1 Pages in appendices will be numbered as A-1, A-2, A-3, B-1, etc.

10.4.2 Immediately under the appendix designation, reference to the relevant section and paragraph shall be given in parenthesis followed by the title of the appendix as shown below:

A P P E N D I X A

(*Section IV, Clause 4.3*)

METHOD OF COMPUTATION OF RESERVOIR LIFE

10.5 Drawings appearing at the end of the text of each section shall be numbered as Plate IV-1, V-2, etc.

11. DRAWINGS

11.1 All original drawings, unless otherwise specifically directed by the supervising engineer, shall be made in ink.

11.2 Sizes A-Series (First Choice) — The preferred sizes of trimmed drawing sheets are given in Table 1.

TABLE 1 A — SERIES (SIZES)

(Clause 11.2)

DESIGNATION	DIMENSIONS, mm
A0	841 × 1 189
A1	594 × 841
A2	420 × 594
A3	297 × 420
A4	210 × 297

11.3 Special Elongated Sizes (Second Choice) — When a sheet of greater length is needed, one of the sizes given in Table 2 shall be used.

TABLE 2 SPECIAL ELONGATED SIZES

DESIGNATION	DIMENSIONS, mm
A3 × 3	420 × 891
A3 × 4	420 × 1 189
A4 × 3	297 × 630
A4 × 4	297 × 841
A4 × 5	297 × 1 051

11.4 Exceptional Elongated Sizes (Third Choice) — When a very large or extra elongated sheet is essential, one of the sizes given in Table 3 shall be used.

11.5 Title Block

11.5.1 The title block is an important feature in drawing, since it facilitates obtaining uniformity and presents details like title of drawing, name of organization, drawing number and date of drawing in a definite manner. The title block shall be placed at the bottom right hand corner of the sheet.

11.5.2 Typical layout for the title block for all sheet sizes is shown in Fig. 1.

11.5.3 No title blocks for sheet size A4 and A3 is required. Only a title shall be provided.

TABLE 3 EXCEPTIONAL ELONGATED SIZES

(Clause 11.4)

DESIGNATION	DIMENSIONS, mm
A0 × 2*	1 189 × 1 682
A0 × 3	1 189 × 2 523†
A1 × 3	841 × 1 783
A1 × 4	841 × 2 378†
A2 × 3	594 × 1 261
A2 × 4	594 × 1 682
A2 × 5	594 × 2 102
A3 × 5	420 × 1 486
A3 × 6	420 × 1 783
A3 × 7	420 × 2 080
A4 × 6	297 × 1 261
A4 × 7	297 × 1 471
A4 × 8	297 × 1 682
A4 × 9	297 × 1 892

*The size is equal to 2A0 of the A—Series.

†For practical reasons the use of these sizes is not advisable.

11.5.4 In the title block the following abbreviations have been used:

<i>Words</i>	<i>Abbreviations</i>
Designed	DSGN
Drawn	DRN
Checked	CHKD
Inspected	INSP
Submitted	SUBM
Recommended	RECM
Approved	APPD

11.6 Revisions

11.6.1 It is most important that drawings should record all alterations, or revisions which are made from time to time. A convenient form is a pannel giving the revision number, date of revision and initials of checking, submitting, recommending and approving authorities. The revision pannel should be provided continuous with the title block as shown in Fig. 1.

15 10 10 10 10 10	APPD	IRRIGATION BRANCH, PWD, PUNJAB, INDIA			7	
	SUBD	BHAKRA DAM TUNNEL OUTLET WORK 2-4 m GATE AND VALVE INSTALLATION			29	
	CHKD	DSGN ORN CHKD	INSP SUBM	RECM APPD	16	
	MADE	BHAKRA AND BEAS DESIGNS ORGANIZATION			9	
	REV No.	83-BBD-630	NEW DELHI 8 APR 1983	BDD - 333	7	
7		7	43	71	57	59
			49	79		
185						

All dimensions in millimetres.

FIG. 1 TITLE BLOCK FOR DRAWING SHEET

11.6.2 The revised portion of the drawing should be shown encircled and a brief note regarding revision shall be given in the space kept reserved on top of the title block.

11.7 Numbering of Drawings

11.7.1 File Number — All final drawings should be allotted a file number which shall be entered in the lower left corner of the title block. The file number shall consist of 3 parts as follows:

- a) Feature number;
- b) A three letter abbreviation defining the project to which the drawing relates, say BRG for bargi, NRM for Narbada, etc; and
- c) The assigned sequence number under this particular feature.

Example :

11-BRG-40 would represent serial No. 40 in the file relating to feature No. 11 in the Bargi Project.

11.7.1.1 A typical list of the features for different items is given at Appendix B.

11.8 Orientation and Layout — As far as possible, general location and vicinity maps should be oriented with the North to the top of the sheet. A North-point arrow shall be placed on such drawings and a streamflow arrow shall be included wherever practicable. Detail maps, plans and layout drawings for dams, reservoirs and other major structures should be oriented so that the direction of stream flow is towards the top or the right side of the sheet. All sections parallel to the direction of streamflow should be drawn with the direction of flow towards the right, unless a particular detail cannot be properly illustrated with such an orientation. All vertical section and elevations normal to the direction of flow should be shown looking downstream unless such arrangement would fail to show the feature intended by the section.

11.8.1 As nearly as possible, the following plan should be followed for the layout of the drawing. The principal views should be placed at the top and left of the sheet; the secondary views to the right or beneath the principal views, and minor views (miscellaneous details, etc) where they fit best, preferably to the right or beneath all other views. After all the views are drawn, letter designation to view sub-titles should be assigned in alphabetical order, from top and left towards bottom and right. All notes and scales pertaining to the drawing should be accommodated in the space reserved for the purpose above the title block.

NOTE — In a drawing more than two scales should not be used. If any particular detail has unavoidably to be shown on a third scale, that detail should indicate clearly as drawn ' Hot to Scale '.

11.9 Additional Information — Where appropriate additional information and notes on the following may be included to make the drawings complete and self contained as far as possible:

- a) *North Point* — Where necessary North point shall be drawn on the right-hand top corner of the drawing.
- b) *Levels* — Reference to bench marks, Survey of India Topo Sheets, etc, where necessary shall be placed immediately below the top border line near the centre of the sheet and the scale and sheet number of topo sheets may be given.
- c) *Other Informations* — Any additional information suited to meet any special requirement may also be added.

11.10 Scales — Scales adopted for drawings for different purposes shall conform to the requirement of 6 of IS : 962-1967*.

11.11 Lines — All lines on drawing sheets shall conform to the requirement of 8 of IS : 962 - 1967*.

11.12 Lettering and Dimensioning — Requirements for lettering and dimensioning of drawings shall conform to 9 of IS : 962-1967*.

11.13 Conventional Representation of Materials in Section — Methods for indicating materials by hatching or colouring shall be those as given under 12 of IS : 962-1967*.

12. ESTIMATES

12.1 The estimates of the projects shall be prepared in accordance with IS : 4186-1985† and IS : 4877-1968‡.

*Code of practice for architectural and building drawings (*first revision*).

†Guide for preparation of project report for river valley projects (*first revision*).

‡Guide for preparation of estimate of river valley projects.

APPENDIX A

(Clause 2, I. 4)

SAMPLE TITLE PAGE OF A PROJECT REPORT FOR RIVER VALLEY PROJECTS

FOR OFFICIAL USE ONLY



GOVERNMENT OF PUNJAB

BEAS PROJECT-UNIT II

BEAS DAM AT PONG

PROJECT REPORT

(*First Revision*)

VOLUME I

GENERAL REPORT

TALWARA TOWNSHIP
PUNJAB, INDIA
MARCH 1985

BEAS PROJECT ADMINISTRATION
PUBLIC WORKS DEPARTMENT
IRRIGATION BRANCH

APPENDIX B*(Clause 11.7.1.1)***TYPICAL LIST OF FEATURES FOR DIFFERENT ITEMS**

1. Introduction to the project
2. Water resources including water quality
3. Reservoir
4. Planning of facilities for project purposes like irrigation, power, flood control, navigation, water supplies, etc
5. Geology
6. Surveys
7. Construction materials
8. Construction programme
9. Equipment for construction plant and job facilities
10. Environmental and ecological aspects
11. Cost of various components
12. Benefits and financial aspects
13. Personnel and organization
14. Design report for water and power studies, care and handling of river during construction, dams, instrumentation intake structures, water conductor system, power of plants, etc
15. Mechanical equipment and auxiliaries for dams, tunnels, channels, etc
16. Irrigation canals
17. Cost and estimate including analysis of rates for principal items of work and equipment

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	$1 \text{ N} = 1 \text{ kg.m/s}^2$
Energy	joule	J	$1 \text{ J} = 1 \text{ N.m}$
Power	watt	W	$1 \text{ W} = 1 \text{ J/s}$
Flux	weber	Wb	$1 \text{ Wb} = 1 \text{ V.s}$
Flux density	tesla	T	$1 \text{ T} = 1 \text{ Wb/m}^2$
Frequency	hertz	Hz	$1 \text{ Hz} = 1 \text{ c/s (s}^{-1}\text{)}$
Electric conductance	siemens	S	$1 \text{ S} = 1 \text{ A/V}$
Electromotive force	volt	V	$1 \text{ V} = 1 \text{ W/A}$
Pressure, stress,	pascal	Pa	$1 \text{ Pa} = 1 \text{ N/m}^2$

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