

## BUREAU OF INDIAN STANDARDS

### Program of Work

#### WRD 23 : Measurement and Cost Analysis of Works for River Valley Projects

Scope: Standardization in the field of measurement and cost analysis of civil engineering works for water resource projects.

Liaison:

### Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10061:2024	Analysis of Unit Rate of Excavation of Tunnels by Cyclic Drilling and Blasting i; ½ Proforma (Second Revision)		-	Indigenous
2	IS 10062:2024	Proforma for analysis of unit rate of quarrying rock by mechanical means second revision of IS 10062		-	Indigenous
3	IS 10160:2024	Proforma for analysis of unit rate of earthwork used in construction of river valley projects (first revision of IS 10160)		-	Indigenous
4	IS 10421:2025	Proforma for Analysis of Unit Rate of Shuttering/ Formwork for Concrete Works ( First Revision )		-	Indigenous
5	IS 10777:2025	Proforma for Analysis of Unit Rate of Rock Excavation by Mechanical Means Including Blasting for Open Excavation ( Second Revision )		-	Indigenous
6	IS 11399 (Part 1):1985 Reviewed In : 2021	Guidelines for estimating output norms of items of work in construction of river valley projects : Part 1 earthwork excavation	March, 2021	2	Indigenous
7	IS 11590:1995 Reviewed In : 2021	Guidelines for working out unit rate cost of the construction equipment used for river valley projects (First Revision)	March, 2021	-	Indigenous
8	IS 11638:2025	Proforma for Estimation of Unit Rate in Construction of Embankment by Mechanical Means ( Second Revision )		-	Indigenous
9	IS 13418:2025	Proforma for Analysis of Unit Rate of Grouting in River Valley Projects ( First Revision )		-	Indigenous
10	IS 13419:2025	Proforma for Analysis of Unit Rate of Shotcreting/Guniting in River Valley Projects ( First Revision )		-	Indigenous
11	IS 14590:2025	Proforma for Analysis of Unit Rate		-	Indigenous

		of Dewatering ( First Revision )			
12	IS 14749:2000 Reviewed In : 2021	Proforma for analysis of unit rate of underground excavation by cyclic drilling and blasting	March, 2021	-	Indigenous
13	IS 14835:2000 Reviewed In : 2021	Guidelines for estimating unit rate of items of works in construction of rubble masonry for river valley projects	March, 2021	-	Indigenous
14	IS 4851:2024	Estimating Unit Rate of Concrete Used in Mechanized Construction of River Valley Projects $i_c^{1/2}$ Proforma (Third Revision)		-	Indigenous
15	IS 4852:2024	Estimating Unit Rate of Random Rubble Masonry Used in Construction of River Valley Projects $i_c^{1/2}$ Proforma (Third Revision)		-	Indigenous
16	IS 4877:1968 Reviewed In : 2021	Guide for preparation of estimate for river valley projects	March, 2021	-	Indigenous
17	IS 9401 (Part 1):1999 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 1 excavation for foundation (First Revision)	March, 2022	-	Indigenous
18	IS 9401 (Part 2):2003 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 2 dewatering (First Revision)	December, 2022	-	Indigenous
19	IS 9401 (Part 3):2003 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 3 grouting (Second Revision)	December, 2022	-	Indigenous
20	IS 9401 (Part 4):2018 Reviewed In : 2023	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 4 Concrete work	September, 2023	-	Indigenous
21	IS 9401 (Part 5):2014 Reviewed In : 2024	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 5 masonry (First Revision)	May, 2024	-	Indigenous
22	IS 9401 (Part 6):2013 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 6 ventilation pipes and other embedded Materials (First Revision)	December, 2022	-	Indigenous
23	IS 9401 (Part 7):2013 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 7 joints (First Revision)	December, 2022	-	Indigenous
24	IS 9401 (Part 8):1985 Reviewed In : 2025	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 8 instrumentation	February, 2025	1	Indigenous
25	IS 9401 (Part 9):1987 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 9 lining	July, 2022	-	Indigenous
26	IS 9401 (Part	Method of measurement of works in	July, 2022	-	Indigenous

	10):1990 Reviewed In : 2022	river valley projects(Dams - And Appurtenant Structures): Part 10 formwork			
27	IS 9401 (Part 11):1998 Reviewed In : 2022	Methods of measurement of work in river valley projects (Damsand Appurtenantstructures): Part 11 diaphragm walls (First Revision)	July, 2022	-	Indigenous
28	IS 9401 (Part 12):1992 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures)	July, 2022	1	Indigenous
29	IS 9401 (Part 13):1992 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 13 earth and fill dams	July, 2022	-	Indigenous
30	IS 9401 (Part 14):1992 Reviewed In : 2022	Method of measurement of works in river valley projects (Damsand Appurtenantstructures): Part 14 canal works	July, 2022	-	Indigenous
31	IS 9401 (Part 15):2010 Reviewed In : 2025	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 15 investigation works - Drilling of bore holes and exploratory drifting and logging	March, 2025	-	Indigenous
32	IS 9401 (Part 16):1999 Reviewed In : 2021	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 16 tunneling	March, 2021	-	Indigenous
33	IS 9401 (Part 17):1999 Reviewed In : 2021	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 17 hydromechanical and related metal works	March, 2021	-	Indigenous
34	IS 9401 (Part 18):2000 Reviewed In : 2021	Method of measurement of work in river valley projects (Dams And Appurtenant Structures): Part 18 sheet pilcng	March, 2021	-	Indigenous
35	IS 9401 (Part 19):2022 Reviewed In : 2022	Method of measurement of works in river valley projects Dams and appurtenant structures Part 19 Electro Mechanical Works		-	Indigenous
36	IS 9401 (Part 20):2013 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 20 protection works	December, 2022	-	Indigenous

### Standards under Development

#### Projects Approved

SI. No.	Doc No.	Title
No Records Found		

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
1	WRD 23 (27520) Revision of: IS 9401:1985	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 8 INSTRUMENTATION

2	WRD 23 (27521) Revision of: IS 9401:1992	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 13 EARTH AND FILL DAMS
3	WRD 23 (27522) Revision of: IS 9401:1992	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 14 CANAL WORKS
4	WRD 23 (27523) Revision of: IS 9401:2010	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 15 INVESTIGATION WORKS DRILLING OF BORE HOLES AND EXPLORATORY DRIFTING AND LOGGING
5	WRD 23 (27524) Revision of: IS 9401:1999	METHODS OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 16 TUNNELING
6	WRD 23 (27525) Revision of: IS 9401:1999	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 17 HYDROMECHANICAL AND RELATED METAL WORKS
7	WRD 23 (28147) Revision of: IS 4877:1968	GUIDE FOR PREPARATION OF ESTIMATE FOR RIVER VALLEY PROJECTS
8	WRD 23 (28148) Revision of: IS 11590:1995	GUIDELINES FOR WORKING OUT UNIT RATE COST OF THE CONSTRUCTION EQUIPMENT USED FOR RIVER VALLEY PROJECTS
9	WRD 23 (28149) Revision of: IS 11399:1985	GUIDELINES FOR ESTIMATING OUTPUT NORMS OF ITEMS OF WORK IN CONSTRUCTION OF RIVER VALLEY PROJECTS PART 1 EARTHWORK EXCAVATION

### Drafts Standards in WC Stage

SI. No.	Doc No.	Title
No Records Found		

### Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	WRD 23 (27473)	METHOD OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 1 EXCAVATION FOR FOUNDATION
2	WRD 23 (27474)	METHOD OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 9 LINING
3	WRD 23 (27477)	METHOD OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 10 FORMWORK
4	WRD 23 (27478)	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 11 DIAPHRAGM WALLS
5	WRD 23 (27479)	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 12 TOPOGRAPHICAL SURVEYS

### Finalized Draft Indian Standard

SI. No.	Doc No.	Title
No Records Found		

### Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
No Records Found		

**Total Published Standards:36 Total Standards Under development:14**

### Aspect Wise Report

Product : 0  
Code of Practices : 35  
Methods of Test : 0  
Terminology : 0  
Dimensions : 0  
System Standard : 0

Safety Standard : 0  
Others : 1  
Service Specification : 0  
Process Specification : 0  
Unclassified : 0

**Annexure-I :List of Indian Standards Withdrawn/Superseded**

SI. No.	IS No. & Year	Title
1	IS 9401 (Part 15/Sec 1):1993 Reviewed In : 2007	Method of measurement of works in river valley projects Dams and appurtenant structures Part 15 Investigation works Section 1 Drilling of bore holes
2	IS 9401 (Part 15/Sec 2):1992 Reviewed In : 2007	Method of Measurement of Works in River Valley Projects dams and appurtenant structures - Part 15 Investigation Works - Section 2 Exploratory Drifting

**Annexure-II :List of Indian Product Standards**

SI. No.	IS No. & Year	Title
No Records Found		