BUREAU OF INDIAN STANDARDS

Program of Work

WRD 13: Canals And Cross Drainage Works

Published Standards

Reaffirm M-Y

No. of Amds

1

1

Eqv.

Indigenous

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Indigenous

Indigenous

Scope: Standardization of criteria for planning, location, design, construction, inspection, maintenance

and other related aspects for canals and cross drainage works.

TITLE

Lining of canals with burnt clay

tiles - Code of practice (First Revision)

Laying .cement concrete/stone slab

lining on canals - Code of practice

(Second Revision)

GLOSSARY OF TERMS

RELATING TO RIVER VALLEY **PROJECTS PART 5 CANALS** (Second Revision)

GLOSSARY OF TERMS

Liaison:

S.No

IS No.

IS 10430:2000

IS 3872:2002

Reviewed In: 2022

IS 3873:1993

Reviewed In: 2024

IS 4410 (Part

5):2023

IS 4410 (Part 15/Sec

10

11

12

Criteria for design of lined canals September, 2024 Indigenous Reviewed In: 2024 and guidance for selection of type of lining (First Revision) IS 10646:1991 2 Canal linings - Cementconcrete September, 2024 3 Indigenous Reviewed In: 2024 tiles - Specification (First Reaffirmed but not Revision) taken up for revision IS 11570:1985 3 Criteria for hydraulic design of March, 2024 1 Indigenous Reviewed In: 2024 irrigation intake structures IS 11809:1994 Lining for canals by stone masonry 4 September, 2024 2 Indigenous Reviewed In: 2024 Code of practice (First Revision) Reaffirmed but not taken up for revision IS 12331:1988 5 General requirements for canal August, 2022 1 Indigenous Reviewed In: 2022 outlets IS 12379:1988 Code of practice for lining of water August, 2022 2 Indigenous 6 Reviewed In: 2022 - Courses and field channels IS 13143:1991 7 Jointsin concreteliningofcanals -March, 2024 Indigenous Sealing compound - Specification Reviewed In: 2024 IS 16238:2017 Planning of parallel canals -8 April, 2022 Indigenous Guidelines Reviewed In: 2022 IS 16472:2016 February, 2021 Indigenous 9 Design and construction of water courses - Guidelines Reviewed In: 2021

August, 2022

September, 2024

	1):2023	RELATING TO RIVER VALLEY PROJECTS PART 15 CANAL STRUCTURES Section 1 General Terms			
14	IS 4410 (Part 15/Sec 2):2023	GLOSSARY OF TERMS RELATING TO RIVER VALLEY PROJECTS PART 15 CANAL STRUCTURES Section 2 Transitions		-	Indigenous
15	IS 4410 (Part 15/Sec 3):1977 Reviewed In : 2025 Reaffirmed but not taken up for revision	Glossary of terms relating to river valley projects: Part 15 canal structures: Sec 3 flume.	March, 2025	-	Indigenous
16	4):1977	Glossary of terms relating to river valley projects: Part 15 canal structures: Sec 4 regulating works	March, 2025	-	Indigenous
17	IS 4410 (Part 15/Sec 5):2023	GLOSSARY OF TERMS RELATING TO RIVER VALLEY PROJECTS PART 15 CANAL STRUCTURES Section 5 Cross- Drainage Works		-	Indigenous
18	IS 4515:2002 Reviewed In : 2022	Stone pitched lining for canals - Code of practice (Second Revision)	August, 2022	-	Indigenous
19	IS 4558:1995 Reviewed In : 2021	Under - Drainage of lined canals - Code of practice (Second Revision)	February, 2021	1	Indigenous
20	IS 4701:1982 Reviewed In : 2024	Code of practice for earthwork on canals (First Revision	September, 2024	-	Indigenous
21	IS 4839 (Part 1):1992 Reviewed In : 2022	Maintenance of canals code of practice: Part 1 unlined canals (Second Revision)	August, 2022	1	Indigenous
22	IS 4839 (Part 2):1992 Reviewed In : 2021	Maintenance of canals - Codb of practice: Part 2 lined canals (Second Revision)	February, 2021	1	Indigenous
23	IS 4839 (Part 3):1992 Reviewed In : 2022	Code of practice for maintenance of canals: Part 3 canal structures, drains, outlets, jungle, clearance, plantation and regulation f second revision)	August, 2022	1	Indigenous
24	IS 5256:1992 Reviewed In : 2022	Sealing expansion joints in concrete lining of canals - Code of practice (First Revision)	August, 2022	-	Indigenous
25	IS 5690:1982 Reviewed In : 2024 Reaffirmed but not taken up for revision	Guide for laying combination lining for existing unlined canals (First Revision)	September, 2024	1	Indigenous
26	IS 5968:1987 Reviewed In : 2022	Guide for planning and layout of canal system for krrlGatlOn (First Revision)	August, 2022	-	Indigenous
27	IS 6004:1980 Reviewed In : 2024 Reaffirmed but not taken up for revision	Criteria for hydraulic design of sediment ejector for irrigation and power channels (First Revision)	September, 2024	-	Indigenous
28	IS 6522:1972	Criteria for design of silt vanes for	September, 2024	-	Indigenous

	Reviewed In : 2024 Reaffirmed but not taken up for revision	sediment control in offtaking canals			
29	IS 6531:2021	Canal head regulators criteria for design Second Revision		-	Indigenous
30	IS 6936:1992 Reviewed In : 2022	Guide for location, selection and hydraulic design of canal escapes (First Revision)	August, 2022	-	Indigenous
31	IS 7112:2002 Reviewed In : 2022	Criteria for design of cross -: Sec for unlined canals in alluvial soil (First Revision)	August, 2022	-	Indigenous
32	IS 7113:2003 Reviewed In : 2022	Soil - Cement lining for canals - Code of practice (First Revision)	August, 2022	1	Indigenous
33	IS 7114:1973 Reviewed In : 2024 Reaffirmed but not taken up for revision	Criteria for hydraulic destgn of cross regulators for canals	September, 2024	-	Indigenous
34	IS 7331:1981 Reviewed In : 2022	Code of practice for inspbction and maintenance of cross drainage works (First Revision)	August, 2022	-	Indigenous
35	IS 7495:1974 Reviewed In : 2024 Reaffirmed but not taken up for revision	Criteria for hydraulic design of silt selective head regulator for sediment control in offtaking canals	August, 2024	-	Indigenous
36	IS 7784 (Part 1):2013 Reviewed In : 2024	Design of cross drainage works - Code of practice: Part 1 general features (Second Revision)	September, 2024	-	Indigenous
37	IS 7784 (Part 2/Sec 1):1995 Reviewed In : 2025 Reaffirmed but not taken up for revision	Design of cross drainage works code of practice: Part 2 specific requirements: Sec 1 aqueducts (First Revision J	March, 2025	-	Indigenous
38	IS 7784 (Part 2/Sec 2):2000 Reviewed In : 2024	Code of practice for design of cross drainage works: Part 2 specific requirements: Sec 2 superpassages (First Revision)	September, 2024	1	Indigenous
39	IS 7784 (Part 2/Sec 3):1996 Reviewed In : 2021	Code of practice for design of cross drainage works: Part 2 specific requirements: Sec 3 canal slrphons (First Revision)	February, 2021	-	Indigenous
40	IS 7784 (Part 2/Sec 4):1999 Reviewed In : 2024 Reaffirmed but not taken up for revision	Design of cross drainage works - Code of practice: Part 2 specific requirements: Sec 4 level crossings (First Revision)	August, 2024	-	Indigenous
41	IS 7784 (Part 2/Sec 5):2000 Reviewed In : 2024	Code of practice for design of cross drainage works part2 specific requirements: Sec 5 syphon aqueducts (First Revision)	September, 2024	1	Indigenous
42	IS 7871:1975 Reviewed In : 2024	Criteria for hydraulic design of groyne walls (Curved Wing) for sediment distribution at offtake points in a canal	March, 2024	-	Indigenous
43	IS 7873:1975	Code of practice for limb concrete	March, 2024	1	Indigenous

	Reviewed In: 2024 Decision taken to Reaffirm and Archive	lining for canals			
44	IS 7880:1975 Reviewed In : 2024 Reaffirmed but not taken up for revision	Criteria for hydraulic design qf skimming platform for sediment control in offtaking canal	September, 2024	-	Indigenous
45	IS 7986:1976 Reviewed In : 2024 Reaffirmed but not taken up for revision	Code of practice for canal outlets	September, 2024	1	Indigenous
46	IS 8835:1978 Reviewed In : 2024 Reaffirmed but not taken up for revision	Guidelines for planning and design of surface drains	September, 2024	-	Indigenous
47	IS 9097:1979 Reviewed In : 2024	Guide for laying lining of canals with hot bitumen or bituminous felts	March, 2024	-	Indigenous
48	IS 9447:2023	Assessment of Seepage Losses in Canals by Analytical method- Guidelines (first revision)		-	Indigenous
49	IS 9451:2022	Guidelines for Lining of Canals in Expansive Soils Third Revision		-	Indigenous
50	IS 9452 (Part 1):1993 Reviewed In : 2024	Measurement of seepage losses from canals - Code of practice: Part 1 Ponding method	March, 2024	-	Indigenous
51	IS 9452 (Part 2):1980 Reviewed In : 2024	Code of practice for measurement of seepage losses from canals: Part 2 inflow - O - utflow method	March, 2024	-	Indigenous
52	IS 9452 (Part 3):1988 Reviewed In : 2024	Code of practice for measurement of seepage losses from canals: Part 3 seepage meter method	March, 2024	-	Indigenous
53	IS 9698:1995 Reviewed In : 2025 Reaffirmed but not taken up for revision	Lining of canals with polyethylene film - Code of practice (First Revision)	March, 2025	1	Indigenous
54	IS 9913:2000 Reviewed In : 2024	Code of practice for construction of cross drainage works (First Revision)	September, 2024	1	Indigenous

Standards under Development

Projects Approved				
SI. No.	Doc No.	Title		
No Records Found				

Preliminary Draft Standards			
SI. No. Doc No.		Title	
1	WRD 13 (24526) Revision	UNDER-DRAINAGE OF LINED CANALS - CODE OF PRACTICE	
	of: IS 4558:1995		

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 13 (24522)	LAYING OF CEMENT CONCRETE AND STONE SLABS LINING IN CANALS CODE OF			
		PRACTICE Third Revision of IS 3873			
2	WRD 13 (24576)	EARTHWORK ON CANALS CODE OF PRACTICE Second Revision of IS 4701			

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:54 Total Standards Under development:3

Aspect Wise Report

Product: 2
Code of Practices: 44
Methods of Test: 0
Terminology: 7
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 3860:1966	Precast Cement Concreat Slabs for Cannal Lining	
	Reviewed In: 2003		
2	IS 4745:1968	Code of Practice for Design of Cross-section of Lined Canals	
3	IS 4969:1968	Method of Test for Determining Flexural Strength of Precast Cement Concrete Slabs for Canal	
		Lining	
4	IS 5331:1969	Guide for Selection of Type of Lining for Canals	

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	1 IS 10646:1991 Canal linings - Cementconcrete tiles - Specification First Revision	
	Reviewed In: 2024	
	Reaffirmed but not taken up	
	for revision	
2 IS 13143:1991 Jointsin concretelining of canals - Sealing compound - Specification		

Reviewed	In	. 2024