



THIS TABLE APPLIES TO HIGH STRENGTH VITRIFIED CLAY PIPE (VCP)
 DEPTHS LISTED BELOW = DEPTH OF COVER (IN FEET) TO TOP OF PIPE

SEWER PIPE I.D.	NARROW DITCH CONDITION ("")					INTERMEDIATE DITCH CONDITION ("")					WIDE TRENCH CONDITION ("")								
	CLASSIFICATION OF BEDDING					CLASSIFICATION OF BEDDING					CLASSIFICATION OF BEDDING								
	CLSM CRADLE	D	C	B	BB	CLSM	CLSM CRADLE	D	C	B	BB	CLSM	CLSM CRADLE	D	C	B	BB	CLSM	
2'-6"	1-4	4-12	12-17	17-50	*	1-4	4-12	12-17	17-21	21-36	*	1-4	4-12	12-17	17-21	21-25	25-50	A	
2'-6"	1-4	4-11	11-21	21-50	*	1-4	4-10	10-14	14-18	18-27	27-50	1-4	4-10	10-14	14-18	18-20	20-50	A	
2'-9"	1-4	4-10	10-19	19-50	*	1-4	4-10	10-14	14-18	18-25	25-50	1-4	4-10	10-14	14-17	17-19	19-50	A	
3'-6"	1-4	4-8	8-13	13-20	20-27	27-50	1-4	4-9	9-13	13-16	16-21	21-50	1-4	4-9	9-13	13-16	16-18	18-50	A
4'-0"	1-4	4-8	8-13	13-16	16-25	25-50	1-4	4-9	9-13	13-16	16-20	20-50	1-4	4-9	9-12	12-16	16-18	18-50	A
4'-3"	1-4	4-9	9-14	14-20	18-27	27-50	1-4	4-9	9-12	12-18	18-23	23-50	1-4	4-9	9-12	12-16	16-18	18-50	A
4'-6"	1-4	4-10	10-15	15-23	23-30	30-50	1-4	4-9	9-12	12-16	16-21	21-50	1-4	4-9	9-12	12-16	16-18	18-50	A
4'-9"	1-4	4-10	10-15	15-22	22-30	30-50	1-4	4-9	9-12	12-17	17-21	21-50	1-4	4-9	9-12	12-15	15-18	18-50	A
5'-0"	1-4	4-10	10-15	15-22	22-29	29-50	1-4	4-8	8-12	12-16	16-20	20-50	1-4	4-8	8-12	12-15	15-17	17-50	A
5'-3"	1-4	4-10	10-15	15-21	21-27	27-50	1-4	4-8	8-11	11-15	15-19	19-50	1-4	4-7	7-11	11-14	14-16	16-50	A
5'-6"	1-4	4-10	10-15	15-22	22-28	28-50	1-4	4-7	7-11	11-16	16-19	19-50	1-4	4-7	7-11	11-14	14-16	16-50	A
6'-0"	1-4	4-9	9-14	14-20	20-25	25-50	1-4	4-7	7-11	11-15	15-19	19-50	1-4	4-7	7-11	11-14	14-16	16-50	A
6'-3"	1-4	4-9	9-14	15-20	20-25	25-50	1-4	4-7	7-11	11-15	15-18	18-50	1-4	4-7	7-10	10-13	13-15	15-50	A

THIS TABLE APPLIES TO PLASTIC PIPE

DEPTH OF COVER TO TOP OF PIPE	CLASSIFICATION OF BEDDING	CLASSIFICATION OF BEDDING	DEPTH OF COVER TO TOP OF PIPE	CLASSIFICATION OF BEDDING
4" TO 20"	CLASS "BB"	ENCASUREMENT NO. 2	LESS THAN 4'	CLASS "D"
GREATER THAN 20"	SPECIAL DESIGN *	CLASS "B"	4' TO 8'	CLASS "D"
		ENCASUREMENT NO. 2	9' TO 20'	CLASS "B"
		SPECIAL DESIGN	20'-30'	ENCASUREMENT NO. 2
			GREATER THAN 30'	SPECIAL DESIGN

VCP PIPE

EMWD CLASS	BEDDING MATERIAL	LOAD FACT.	2006 NCP CLASS
D	SELECT NATIVE MATERIAL	1.1	MOD. D
C	CRUSHED ROCK PAD	1.5	C
B	CRUSHED ROCK BED	1.9	B
BB	CRUSHED ROCK ENVELOPE	2.2	-
CLSM	CLSM SIDE CRADLE	2.8	CLSM

- NOTES
1. - DEPTHS OF COVER GREATER THAN THOSE LISTED IN THE BEDDING CHARTS REQUIRE A SOILS INVESTIGATION AND ANALYSIS BY THE ENGINEER.
 2. X - DENOTES TRANSITION WIDTH WHICH IS THE DISTANCE AT WHICH THE TRENCH WIDTH MAY BE INCREASED WITHOUT ADDING TO THE WEIGHT ON THE PIPE.
 3. DETERMINATION OF BEDDING TYPES BASED ON CONSTANT TRENCH WIDTH, 1.25 FACTOR OF SAFETY, AND A SOIL WEIGHT - WET CLAY = 130 LBS/CUBIC FOOT PER NCP MANUAL.
 4. REFERENCE NCP TRENCH DESIGN <http://www.ncpi.org/techdoc.asp>, AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) 2012 EDITION.
 5. BEDDING CLASS SHALL BE EQUAL OR EXCEED THAT GIVEN IN THE APPLICABLE BEDDING TABLES.

FOR BEDDING REQUIREMENTS REFER TO STD DWG SB-157

EASTERN MUNICIPAL WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA		EASTERN MUNICIPAL WATER DISTRICT	
CLASSIFICATION OF PIPE ZONE BEDDING FOR SEWER PIPE		APPROVED <i>William E. Plummer</i> 3/8/03 ASST. GENERAL MANAGER ENGINEERING	
APPROVED <i>Joseph D. Van Sickle</i> 3/3/03 DIRECTOR OF ENGINEERING		APPROVED <i>William E. Plummer</i> 3/8/03 ASST. GENERAL MANAGER ENGINEERING	
REVISIONS		APPROVALS	
NO.	DATE	INITIAL	DATE
1	4/11/13	AS-A	4/11/13
2	9/22/06	JMM	9/25/06
3	6/20/00	VJB	6/22/00
4	1/6/00	VJB	1/26/00
REVISIONS DESCRIPTION		INSPECTIONS OPERATIONS	
REVISED TABLES FOR CLSM, ADDED D, C, B BEDDING TO INTERMEDIATE DITCH CONDITION TABLE, REMOVED A & AA BEDDING, AND UPDATED NOTES		SUBMITTED VJB 3/19/03	
REVISED TABLE		OPERATIONS	
DEFINED SPECIAL DESIGN CRITERIA		RECOMMENDED	
REVISED BEDDING CLASS & DEPTHS FOR SDR 35		RECOMMENDED <i>Joseph D. Van Sickle</i> 3/3/03 DIRECTOR OF ENGINEERING	
REFERENCES: SUPERCEDES SB-76		SCALE: NONE	
FILE I.D.: KAUAI/ENGINEERING/STD/DWG		DRAWN BY: KER	