

RECOMMENDED		EMBANKMENT MATERIAL																			
UNIFIED SOIL CLASSIFICATION		GW	GP	GMd	GMu	GM GC	GC	SW	SP	SMd	SMu	SM SC	SC	ML	CL	ML CL	MH	CH	OL	OH	Pt.
MIN. SUBGRADE SHOULDER HT. ABOVE DHWL (m)	SYSTEM 1 & 2	1.1	1.1	1.1	1.2	1.5	1.5	1.1	1.1	1.2	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.5	NOT TO BE USED UNDER TRAVELLED PORTION OF EMBANKMENT.		
	SYSTEM 3, 4 & 5	1.0	1.0	1.0	1.1	1.2	1.2	1.0	1.0	1.1	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.2			
MINIMUM SUBGRADE SHOULDER HEIGHT ABOVE HWL (m)		0.6	0.6	0.6	0.6	1.0	1.0	0.6	0.6	0.6	1.0	1.0	1.0	1.2	1.2	1.2	1.2	1.2			
MINIMUM SLOPE BELOW DHWL (m:1)		2.5	2.5	2.5	3	3	3	3	3	3	4	4	4	5	5	5	6	6			
NOTE: - There is no allowance in these figures for wave action, wave set-up or for a more permanent high water level (such as a causeway). - For fills on poor foundations, stability and settlement problems must be referred to the District Materials Engineer. - Design high water level is the water level that occurs on an average once in ten years at approximately the first of June (after frost is out of the grade) on intermittent sloughs where there is no water at the first of June, natural ground will be used as the design high water level. - The high water level is the highest recorded water level of that body of water. It is not a headwater level and would occur after spring runoff has ceased. - Fill heights must be at specified height above DHWL, except they can not be less than specified height above HWL. EXAMPLE: on a System (1) or (2) Road - Material MH, HWL 492.4 m DHWL 492.0 m required subgrade shoulder height 493.8 m - Material CL, HWL 494.9 m DHWL 494.0 m required subgrade shoulder height 496.1 m - The minimum slopes below DHWL are mainly for erosion control. Rip rap may be required above DHWL. - This does not apply to alkali sloughs. Refer to District Materials Engineer.																					

APPROVED

PRINCIPAL GEOTECHNICAL ENG.

DATE: JUNE 4, 1976

CHIEF ENGINEER

SASKATCHEWAN DEPARTMENT OF HIGHWAYS

MINIMUM FILLS ABOVE HIGH WATER LEVELS AND MINIMUM SUBMERGED SLOPES

STANDARD PLAN No. 22010