## METHOD FOR ENGINEERING CLASSIFICATION OF ROCK MASS (JGS:3811-2004) 正誤表

頁	行( )	誤	E
	1.3 (5)	non-crystalline glass-like	amorphous or grassy
	1.3 (5)	gaps	pores
	[Notes] 1.1b	Identification and description of rock	Identification and classification of rock - Part1 Identification and description
右	[Notes] 1.3a	Matrix term is employed for base material in sedimentary rocks and igneous rocks. In this standard, this term is used as a general term.	Matrix is employed for matrix in sedimentary rocks and groundmass in igneous rocks. In this standard, this term is used as a general term of both
	[Notes] 1.3b	the physical properties of rock material and rock constituting elements, the characteristics of discontinuities of rock mass and the weathering state	the physical properties of rock material, the characteristics of discontinuities and the weathering degree of rock mass
	[Notes] 2b	performed for the selection of necessary parameters	selected and performed
	[Notes] 2.1	level of investigation	level of accuracy
	[Notes] 2.1 (4)	The response of rock to geological hammer	The sound by geological hammer blow
	[Notes] 2.1 (5)	name of rock material	rock name
	[Notes] 2.2	Investigation of Foliation	Investigation for Foliation
左	[Notes] 2.2	the occurrence of mechanical discontinities along this plane is quite likely	discontinity of mechanical properties across this plane is quite likely occured
	[Notes] 2.3a	The discontinuities in rock mass have three-dimensional orientational effects	The orientations of discontinuities in rock mass are three-dimensional
	[Notes] 2.3b	one-dimensional line	scanline
	[Notes] 2.3b	For this reason, it is recommended to use the discontinuity set with the smallest spacing among other sets as the representative spacing.	When the number of discontinuity sets is plural and the discontinuity spacing is rather close, this apparent spacing seems to be the representative spacing.
右	2[Notes].3d	differs	varies
	[Notes] 2.3d	and tertiary	削除
	[Notes] 2.4	Investigation on the Grain Size	Investigation for the Grain Size
	[Notes] 2.4	the detailed classification of rudaceous (particulate) soft rocks	third-step classification of massive soft rock mass
	[Notes] 2.4	particule size experiment	particle size distribution test
	[Notes] 2.4	If such experiments cannot be performed, its determination can be done through by naked-eye observations or touching test of rock material surface and can be denoted as sandy, silty, clayey or sand to fragment (gravel).	If such tests cannot be performed, the dominant grain size can be determined by naked-eye observations or touching test of rock surface and can be denoted as clayey, silty sandy or coarser than sand.
	[Notes] 2.5	In vestigation of Volume Ratio of Large Fragments	Investigation for the Content of Large Fragments
	[Notes] 2.5	volume ratio	volumetric ratio
	[Notes] 2.5	The fragment content (ratio)	The content of large fragment
	[Notes] 2.5	grain size distribution tests	particle size distribution tests
	[Notes] 2.5	either	削除
	[Notes] 2.5	or from	by
	[Notes] 2.5	fragment / boulder content	content of large fragment
	[Notes] 2.5(2)	fragment content	volumetric ratio of fragments
	[Notes] 2.5(2)	distribution of fragments	areal ratio of fragments
左	[Notes] 2.6	rocks	rock mass
_	[Notes] 2.7	Investigation of Weathering / Alteration	Investigation for Weathering / Alteration State
	[Notes] 2.7	The weathering of rock results from either chemical or physical actions.	Rock may be degraded as a result of physical or chemical weathering or the combined effects.
	[Notes] 2.7	The weathering is due to atmospheric agents	The weathering is induced by atmospheric agents
	[Notes] 2.7	result in similar effects	may also induce the similar effects
	[Notes] 2.7	except some special cases	except in some special cases
		Geological surveys are performed on large scale including rock mass outcrops as felt to be necessary and gathering the	In order to obtain some informations about rock mass structures, geological processes of rock mass and rock name
	[Notes] 2.8	existing geological investigation reports for determining the rock mass structure, geological formation of rock and	gathering the existing geological investigation reports of geological surveys on extensive region covering the
		rock material name.	objective area are performed

	3.1	for rock material of non-weathered rock mass and the fresh rock mass compared as for weathered rock mass	and the weathered rock mass also is considered the same only if the strength of its original rock material can be
	2.2		assumed to have the approximately same value  Third-step classifications is fundamental and indispensable,
石 ————————————————————————————————————	3.3	Third-step and Sub- Classifications are performed	in which rock mass is classified
	3.3	追加	On the other hand, sub-step classification is performed by selecting the required parameters for classification according to need.
	3.3	The indices and classes of items of Third-step and Sub-Classifications	The parameters and their classes of third-step and sub-step classifications
	Figure 2	Figure 2 The description of Large and Medium Scale classification and definitions	Figure 2 Description of first-step and second-step classification and definitions
	Figure 3	追加	Large scale (1 ~ 2m)
	Table 1	n <sub>4</sub> : More than 4 sets	n <sub>4</sub> : 4 sets and above
	Table 1	f <sub>2</sub> : Partial filling material	f <sub>2</sub> : Partially filled
	Table 2	b <sub>1</sub> : More than 10	b <sub>1</sub> : More than or equal to 10
左	3.3.1 (2)	discontinuity set number	number of discontinuity sets
	Table 3	Weathering or alteration of rock material and discontinuity walls are visible	Colour change of rock material and/or discontinuity walls is visible
	3.3.4 (2)	dominant matrix particle diameter	dominant size of matrix particles
	3.3.4 (2)	the large-size fragment content	large fragment content
右	` ′	the ratio of weak layers	percentage of weak layer
	[Notes] 3b	strength of rock material is 1-5 MPa	strength of matrix is 5-10 MPa
左	[Notes] 3.2a	strong anisotropy regarding its mechanical properties	distinct anisotropy of mechanical properties and may be inhomogeneous
	[Notes] 3.3b	Suplementary	[Note]
	[Notes] 3.3c	hard layer rock material strength D,E,F,G and weak layer rock material strength D,E,F,G	strength class of hard layer D,E,F,G and strength class of weak layer D,E,F,G
	[Notes] 3.3.1a	volcanic rocks	igneous rocks
右	[Notes] 3.3.4a	Autobrecciated lava with weak matrix, melange, olistostrome or rock formations containing fragment and matrix belong to this class.	Among autobrecciated lava with weak matrix, melange, olistostrome, some rocks containing fragment and matrix also belong to this class.
	[Notes] 3.3.4b	When the fragment size is several mm and fragments are distributed uniformly within volcanic tuff breccia, and rocks with fragments which may be difficult to describe, are classified as massive soft rock mass.	When the grain size is uniform in several mm as volcanic lapilli tuff, or fragments are obscure and difficult to describe, such rocks may be classified as massive soft rock mass.
	[Notes] 3.3.4c	Rock mass designated as SR	Mechanical properties of SR
	[Notes] 3.3.4c	the content of large fragments, their dominant size	large fragment content, dominant fragment size
	[Notes] 3.3.4d	The content of large size fragment	Large fragment content
左	[Notes] 3.3.5b	layer thickness	layer strength
	[Notes] 3.3.5d	evaluate this properties of each layer	classify one layer
	[Notes] 3.3.6a	is, generally, subjected to shearing and slickensided planes are the some of typical features	has, generally, some of typical features such as shearing structures or slickensided planes
	[Notes] 3.3.6a	Since fracture zones consists of large scale particles and fine material, its classification as Rudaceous soft rock mass SR may be the simple classification.	Since fracture zones generally consists of large fragments and fine material, classification for rudaceous soft rock mass SR may be mostly applicable.
	[Notes] 3.3.6b	added to	added in front of the symbol for
右	[Notes] 4 (1)	weathering / alteration	weathering degree
	[Notes] 4 (2)	required sensitivity	required accuracy
	[Notes] 4 (2)	class decision of classification parameters and its method	the method for decision of classification parameters
	[Notes] 4 (3)a	geological outcrop surveys	geological surveys
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	[Notes] 4 (3)a	rock name, formation name	formation name, rock name