

October 19, 2010

ROADWAY & BORROW EXCAVATION & EMBANKMENTS

Matls. IM 204

Supersedes October 16, 2007

Section 2102 & 2107

Appendix A (Metric) Units

MATERIAL OR CONSTRUCTION ITEM	TESTS	METHOD OF ACCEPTANCE & RELATED IMs	QUALITY CONTROL				INDEPENDENT ASSURANCE & VERIFICATION S&T				REMARKS			
			SAMPLE BY	FREQ.	SAMPLE SIZE	TEST BY	REPORT	S&T TYPE	SAMPLE BY	FREQ.		SAMPLE SIZE	TEST BY	REPORT
SOURCE INSPECTION														
Special Backfill Crushed Stone (4132.02) Crushed Concrete (4132.02) RAP (2303.02) Gravel (4132.03)		AS												
		209												
		209,210												
		209												
Granular Backfill (4133, 4134)	Quality	AS												
Engr. Fabric (4196)	Quality	AS												
GRADE INSPECTION														
Moisture Control, (QC by Contractor) Note 1	Proctor	309	CONTR	1/ soil class	12 kg	CONTR	Field Book & Test Report	V	RCE	1/ 10 req'd QC tests 1/proj.	12 kg	RCE	Field Book	
	Moisture	334	CONTR	1/lift/450 m (for max of 1000m³)	0.5 kg	CONTR	Field Book & Test Report	V	DME CONTR/ RCE DME	1/ 10 req'd QC tests Witness 1/proj.	12 kg 0.5 kg	CTRL RCE	Test Report Field Book	Note 2
Moisture & Density Control, including Special Compaction of Subgrade (2109.03C), (QC by Contractor) Note 1	Proctor	309	CONTR	1/ soil class	12 kg	CONTR	Field Book & Test Report	V	RCE	1/ 10 req'd QC tests 1/proj.	12 kg	RCE	Field Book	
	Moisture	334	CONTR	1/lift/450 m (for max of 1000m³)	0.5 kg	CONTR	Field Book & Test Report	V	DME CONTR/ RCE DME	1/ 10 req'd QC tests Witness 1/proj.	12 kg 0.5 kg	CTRL RCE	Test Report Field Book	Note 2
	In-place Density	326, 334	CONTR	1/lift/450 m (for max of 1000m³)	As req'd by test	CONTR	Field Book & Test Report	V	RCE/ DME DME	1/10 req'd QC tests Witness 1/proj.		RCE/ DME	Field Book	Note 3
AS-Approved Source ASD-Approved Shop Drawing S&T-Sampling & Testing		Cert A-Type A Certification Cert C-Type C Certification Cert D-Type D Certification			RCE-Resident Construction Engineer/Project Engineer DME-District Materials Engineer CTRL-Central Materials Office CONTR-Contractor			IA-Independent Assurance V-Verification						

Note 1: When Contractor QC testing is not required in the contact documents. The RCE will perform verification testing at the frequency listed for QC.

Note 2: RCE will direct the Contractor to take a moisture sample beside the RCE verification sample location.

Note 3: If testing is done with a portable moisture-density gauge, the gauge calibration will be verified on the Validator block.

Note: For earthwork quantities of less than 40,000 m³, No IA will be required.