SYMBOLS AND TERMS

SOIL DESCRIPTION

Behavioural properties, such as structure and strength, take precedence over particle gradation in describing soils. Terminology describing soil structure are as follows:

Desiccated	-	having visible signs of weathering by oxidation of clay minerals, shrinkage cracks, etc.
Fissured	-	having cracks, and hence a blocky structure.
Varved	-	composed of regular alternating layers of silt and clay.
Stratified	-	composed of alternating layers of different soil types, e.g. silt and sand or silt and clay.
Well-Graded	-	Having wide range in grain sizes and substantial amounts of all intermediate particle sizes (see Grain Size Distribution).
Uniformly-Graded	-	Predominantly of one grain size (see Grain Size Distribution).

The standard terminology to describe the strength of cohesionless soils is the relative density, usually inferred from the results of the Standard Penetration Test (SPT) 'N' value. The SPT N value is the number of blows of a 63.5 kg hammer, falling 760 mm, required to drive a 51 mm O.D. split spoon sampler 300 mm into the soil after an initial penetration of 150 mm.

Relative Density	'N' Value	Relative Density %
Very Loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe the strength of cohesive soils is the consistency, which is based on the undisturbed undrained shear strength as measured by the in situ or laboratory vane tests, penetrometer tests, unconfined compression tests, or occasionally by Standard Penetration Tests.

Consistency	Undrained Shear Strength (kPa)	'N' Value
Very Soft	<12	<2
Soft	12-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very Stiff	100-200	15-30
Hard	>200	>30

SYMBOLS AND TERMS (continued)

SOIL DESCRIPTION (continued)

Cohesive soils can also be classified according to their “sensitivity”. The sensitivity is the ratio between the undisturbed undrained shear strength and the remoulded undrained shear strength of the soil.

Terminology used for describing soil strata based upon texture, or the proportion of individual particle sizes present is provided on the Textural Soil Classification Chart at the end of this information package.

ROCK DESCRIPTION

The structural description of the bedrock mass is based on the Rock Quality Designation (RQD).

The RQD classification is based on a modified core recovery percentage in which all pieces of sound core over 100 mm long are counted as recovery. The smaller pieces are considered to be a result of closely-spaced discontinuities (resulting from shearing, jointing, faulting, or weathering) in the rock mass and are not counted. RQD is ideally determined from NXL size core. However, it can be used on smaller core sizes, such as BX, if the bulk of the fractures caused by drilling stresses (called “mechanical breaks”) are easily distinguishable from the normal in situ fractures.

RQD %	ROCK QUALITY
90-100	Excellent, intact, very sound
75-90	Good, massive, moderately jointed or sound
50-75	Fair, blocky and seamy, fractured
25-50	Poor, shattered and very seamy or blocky, severely fractured
0-25	Very poor, crushed, very severely fractured

SAMPLE TYPES

SS	-	Split spoon sample (obtained in conjunction with the performing of the Standard Penetration Test (SPT))
TW	-	Thin wall tube or Shelby tube
PS	-	Piston sample
AU	-	Auger sample or bulk sample
WS	-	Wash sample
RC	-	Rock core sample (Core bit size AXT, BXL, etc.). Rock core samples are obtained with the use of standard diamond drilling bits.
P	-	Split-spoon pushed through sampling interval which was also tested using a vane apparatus and resulted in a obtaining a sample of disturbed material (i.e., blow-counts not reflective of undisturbed, in-situ soils and not considered relevant)

SYMBOLS AND TERMS (continued)

GRAIN SIZE DISTRIBUTION

MC%	-	Natural moisture content or water content of sample, %
LL	-	Liquid Limit, % (water content above which soil behaves as a liquid)
PL	-	Plastic limit, % (water content above which soil behaves plastically)
PI	-	Plasticity index, % (difference between LL and PL)
Dxx	-	Grain size which xx% of the soil, by weight, is of finer grain sizes These grain size descriptions are not used below 0.075 mm grain size
D10	-	Grain size at which 10% of the soil is finer (effective grain size)
D60	-	Grain size at which 60% of the soil is finer
Cc	-	Concavity coefficient = $(D30)^2$ / (D10 x D60)
Cu	-	Uniformity coefficient = D60 / D10

Cc and Cu are used to assess the grading of sands and gravels:
Well-graded gravels have: $1 < Cc < 3$ and $Cu > 4$
Well-graded sands have: $1 < Cc < 3$ and $Cu > 6$
Sands and gravels not meeting the above requirements are poorly-graded or uniformly-graded.
Cc and Cu are not applicable for the description of soils with more than 10% silt and clay
(more than 10% finer than 0.075 mm or the #200 sieve)

CONSOLIDATION TEST

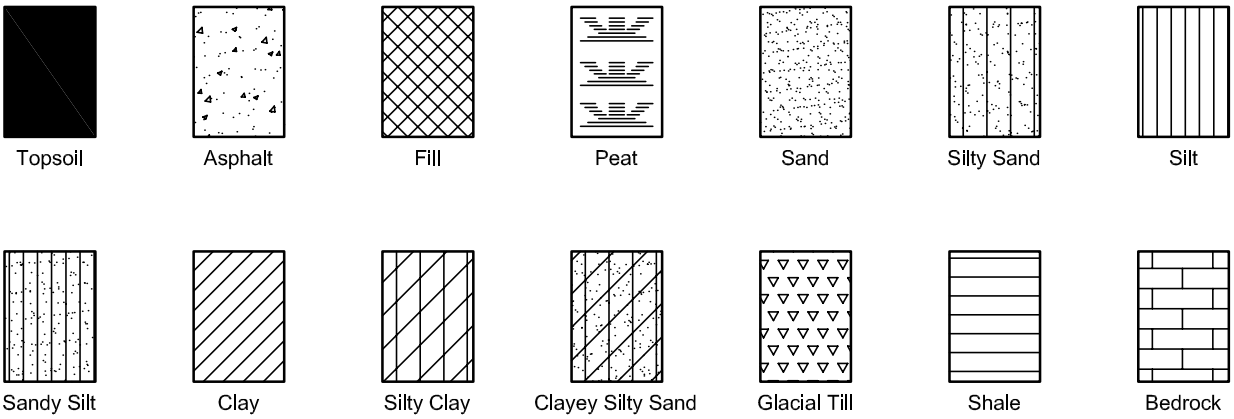
p'_o	-	Present effective overburden pressure at sample depth
p'_c	-	Preconsolidation pressure of (maximum past pressure on) sample
Ccr	-	Recompression index (in effect at pressures below p'_c)
Cc	-	Compression index (in effect at pressures above p'_c)
OC Ratio		Overconsolidaton ratio = p'_c / p'_o
Void Ratio		Initial sample void ratio = volume of voids / volume of solids
Wo	-	Initial water content (at start of consolidation test)

PERMEABILITY TEST

k	-	Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during the test.

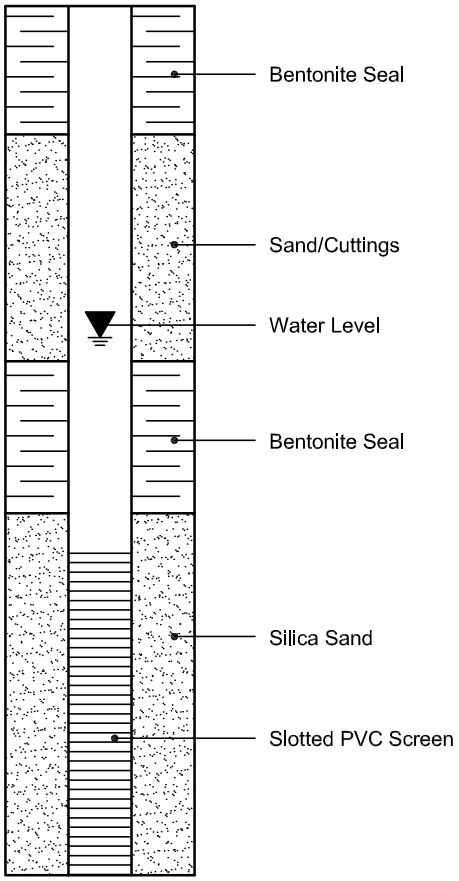
SYMBOLS AND TERMS (continued)

STRATA PLOT

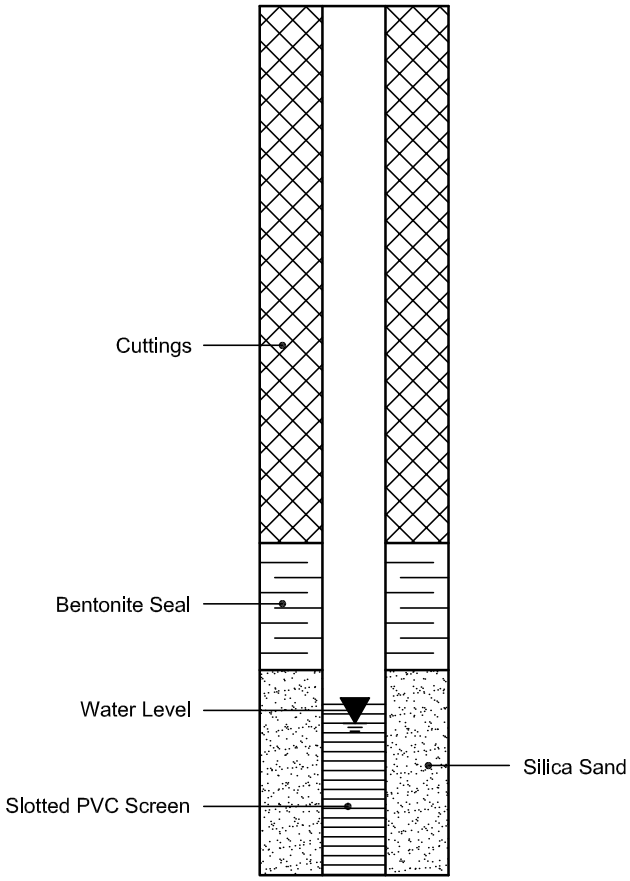


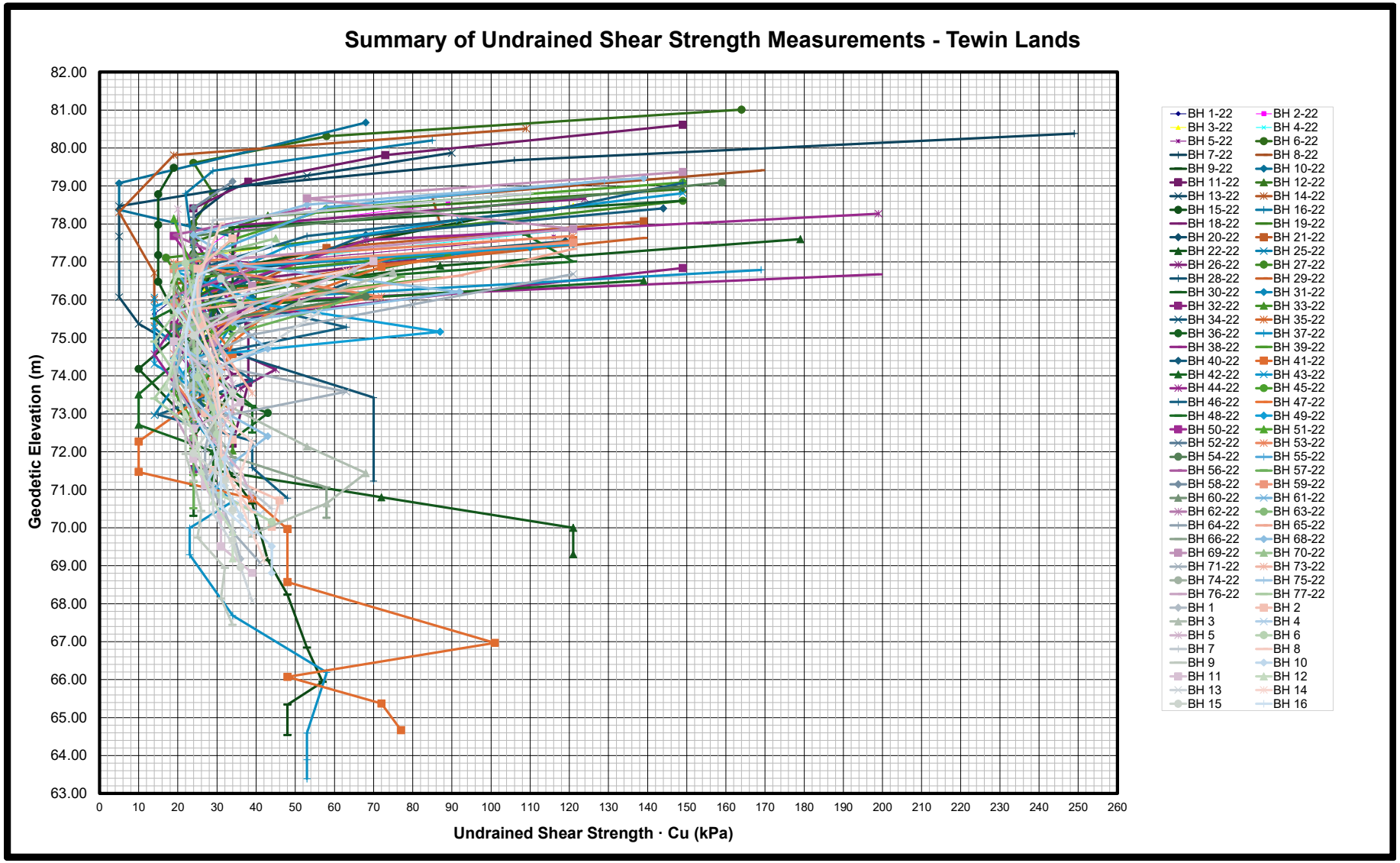
MONITORING WELL AND PIEZOMETER CONSTRUCTION

MONITORING WELL CONSTRUCTION

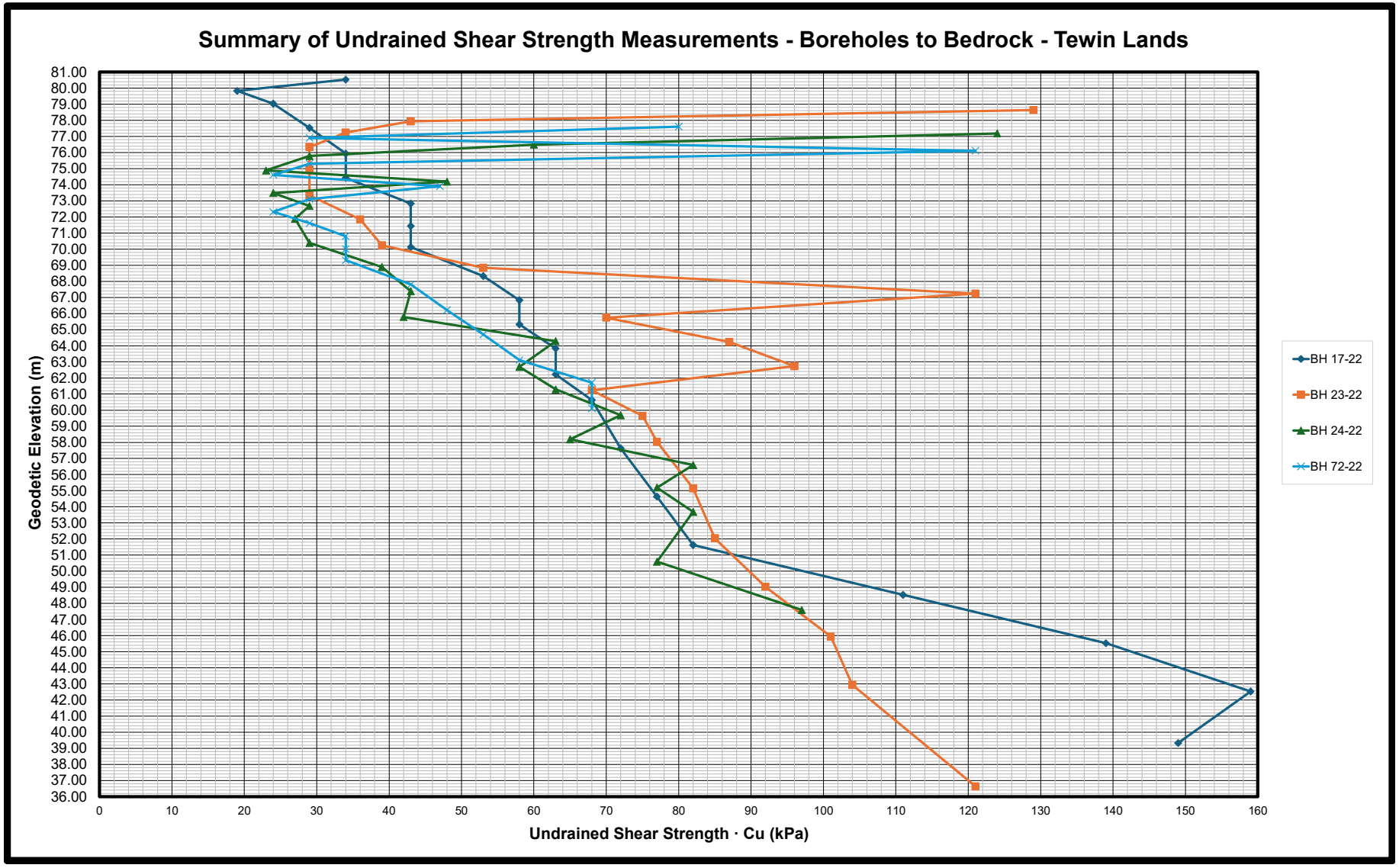


PIEZOMETER CONSTRUCTION

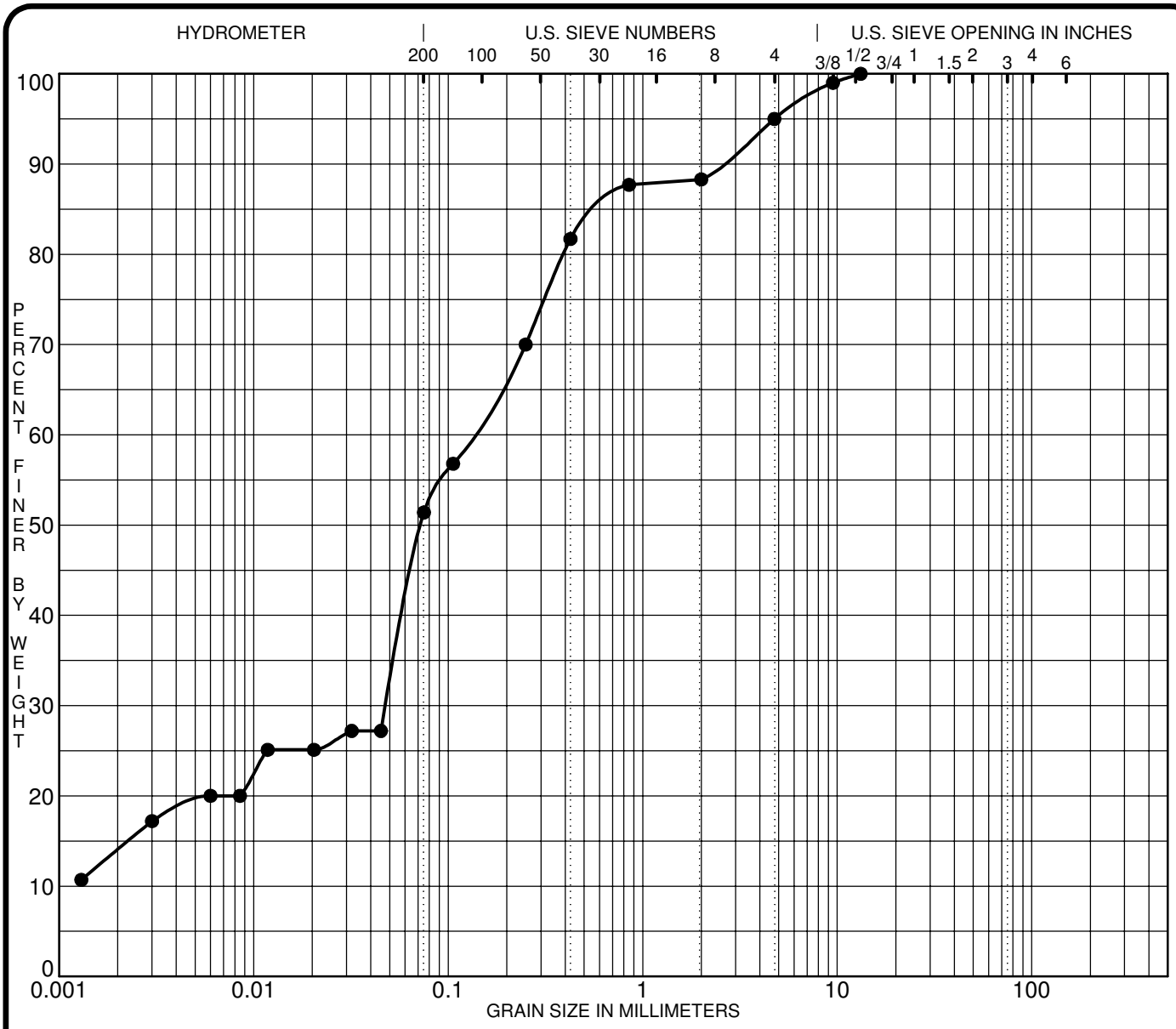




PATERSON GROUP



PATERSON GROUP



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 1-22 AU1**							
⊠								
▲								
★								

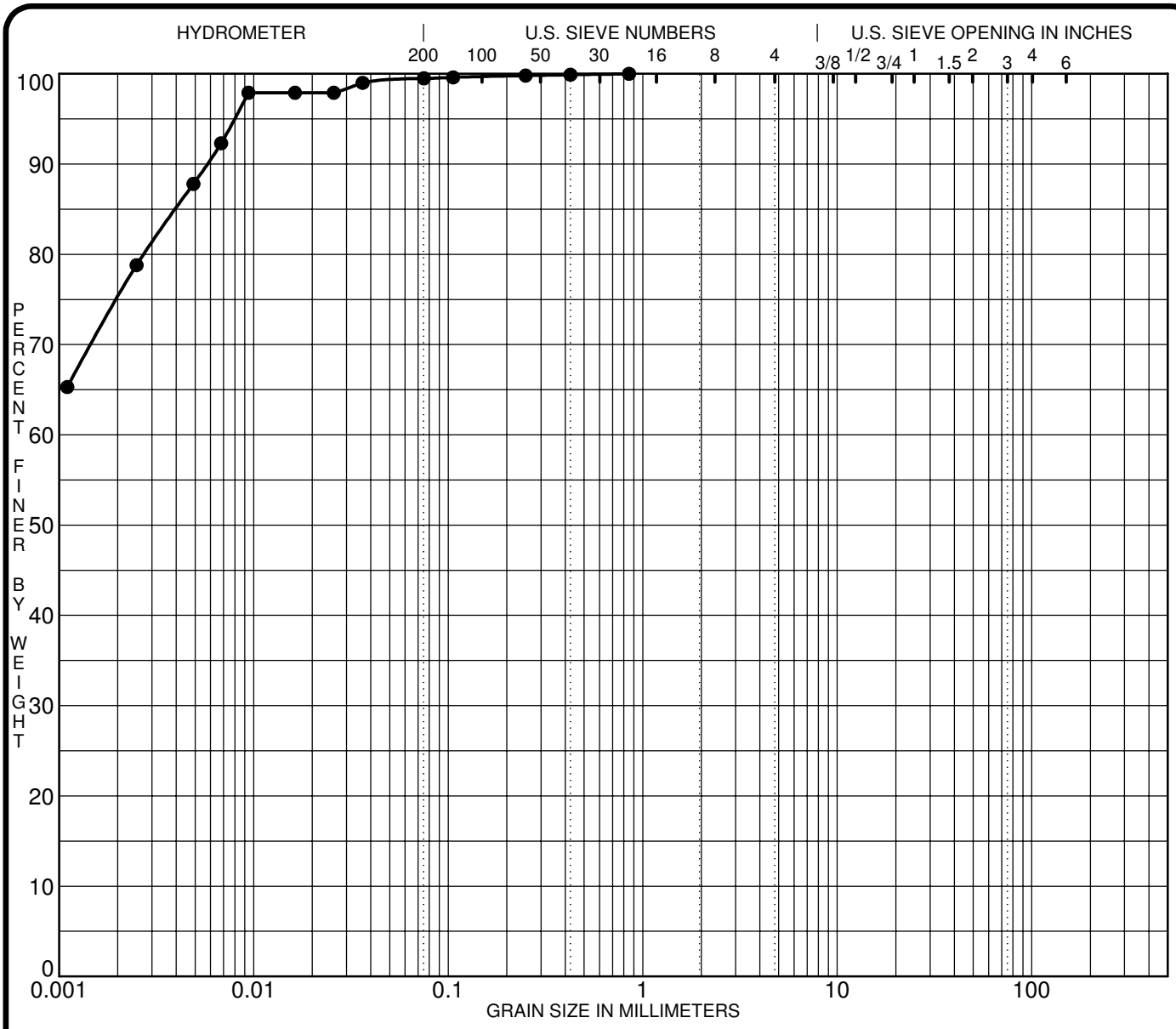
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 1-22 AU1**	**13.20**	**0.13**	**0.048**		**5.0**	**43.6**	**51.4**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **14 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 2-22 SS3**							
⊠								
▲								
★								

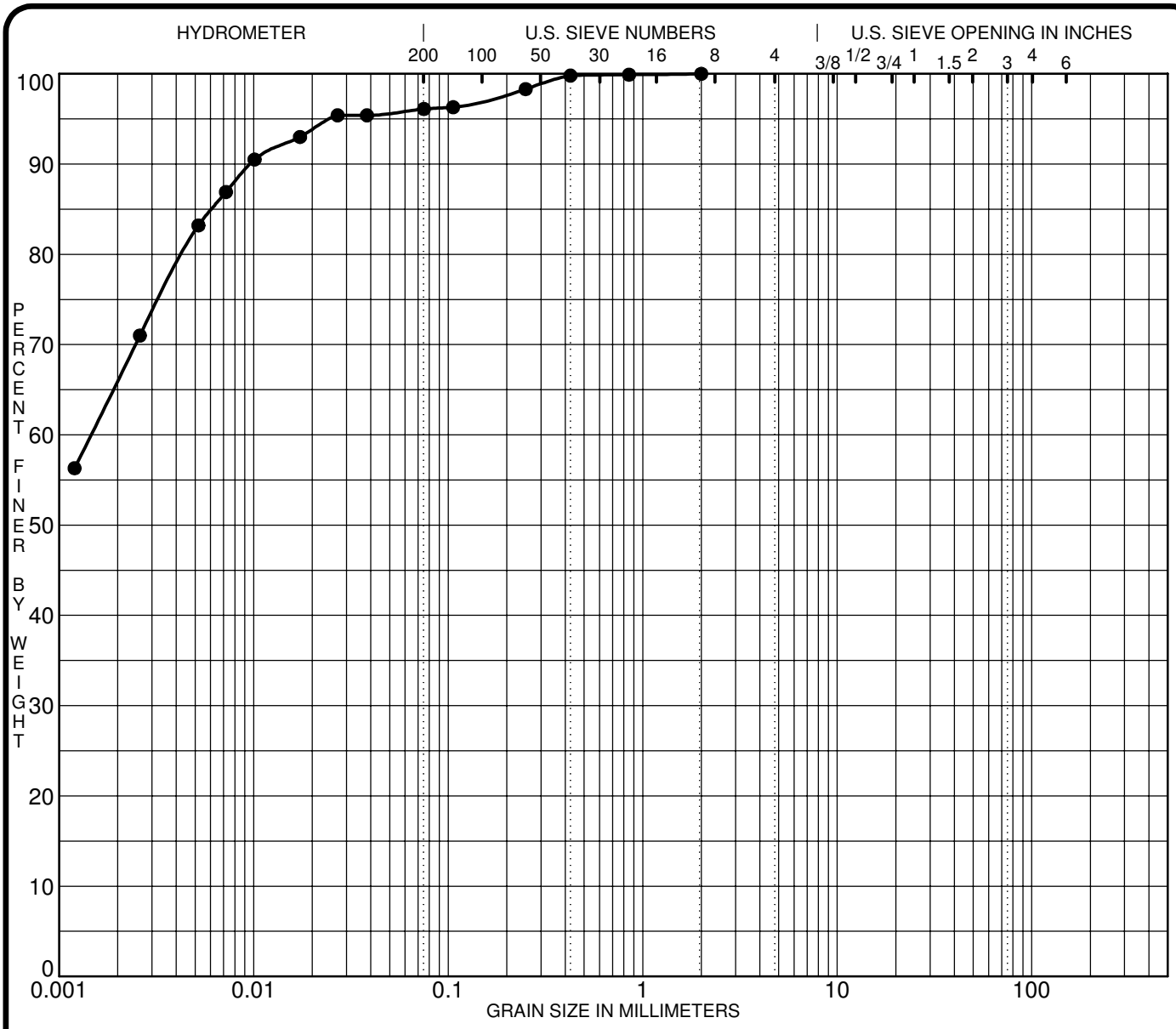
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 2-22 SS3**	**0.85**				**0.0**	**0.5**	**99.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **14 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 3-22 SS4**							
⊠								
▲								
★								

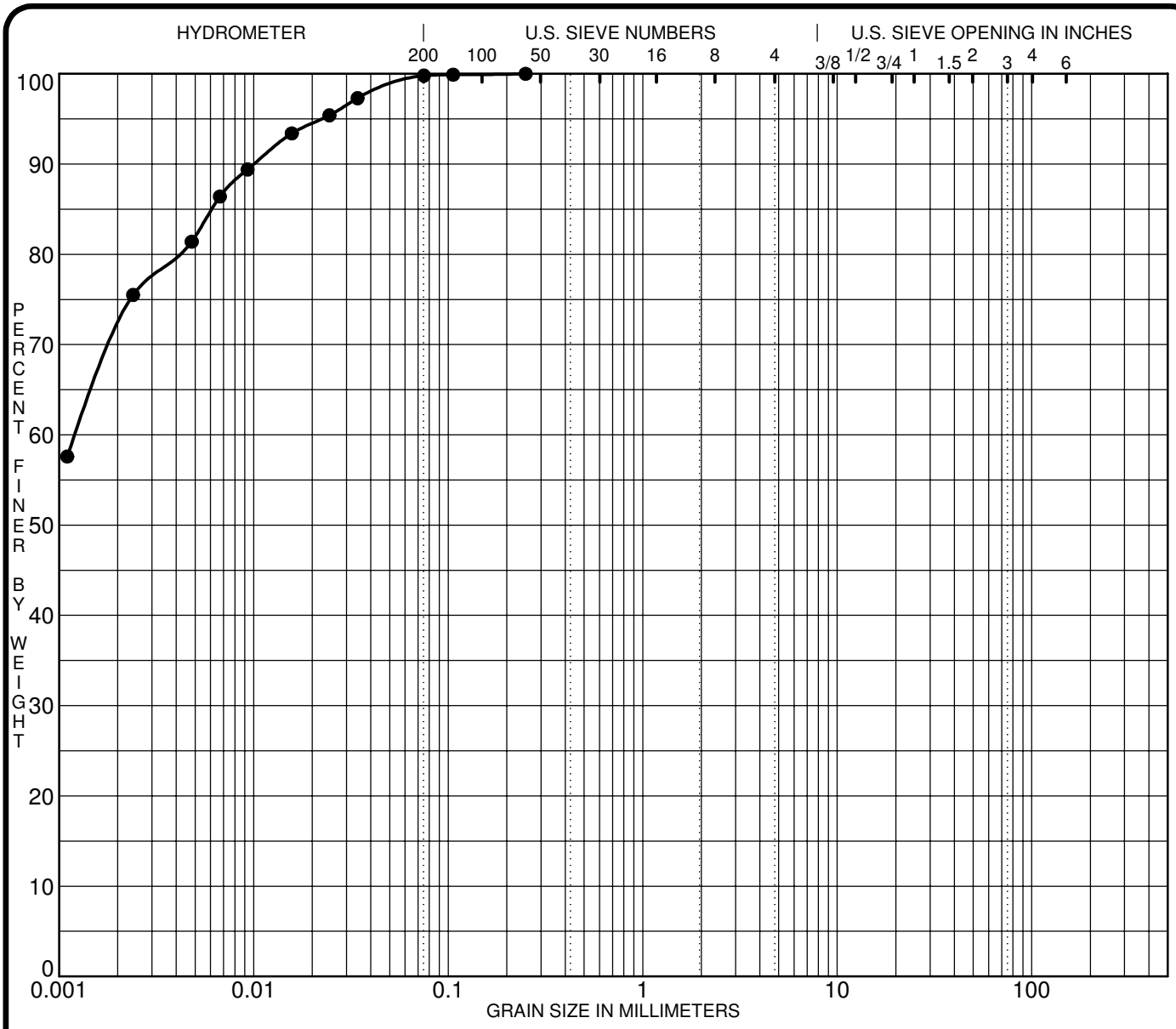
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 3-22 SS4**	**2.00**	**0.00**			**0.0**	**3.9**	**96.1**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **15 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 4-22 SS4**							
⊠								
▲								
★								

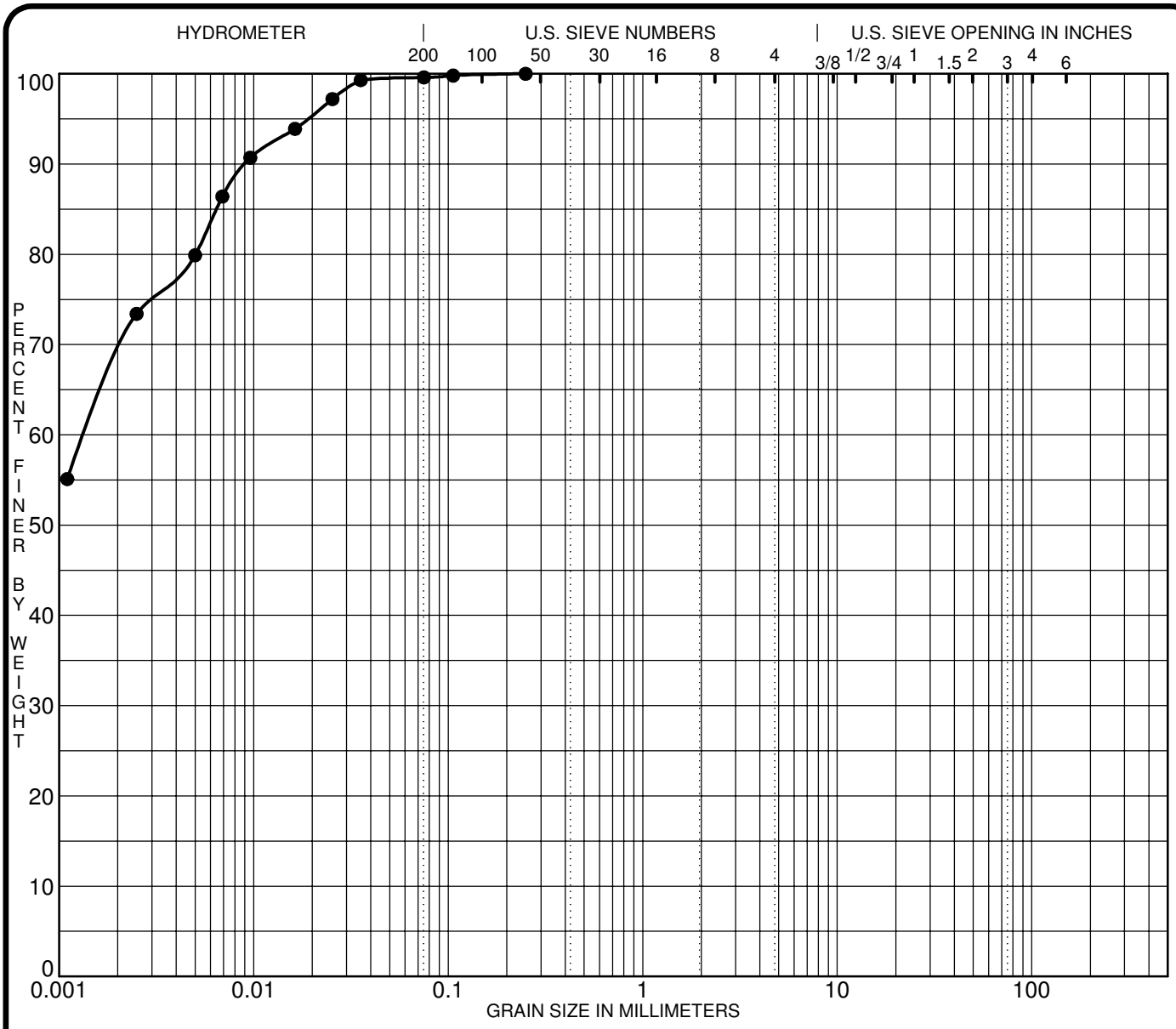
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 4-22 SS4**	**0.25**	**0.00**			**0.0**	**0.2**	**99.8**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **15 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 5-22 SS3**							
⊠								
▲								
★								

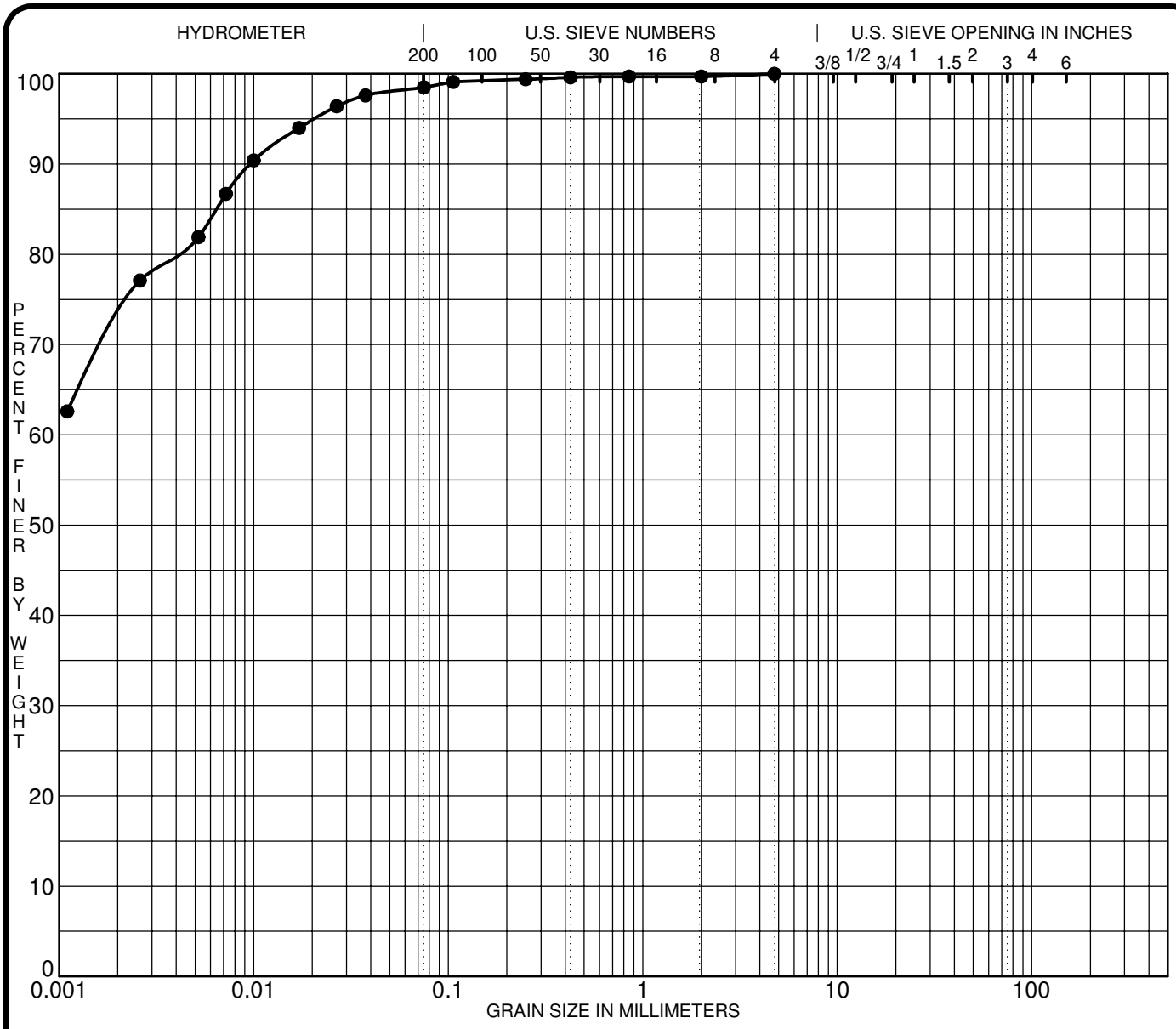
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 5-22 SS3**	**0.25**	**0.00**			**0.0**	**0.4**	**99.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **15 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 6-22 SS3**	**CH - Inorganic clays of high plasticity**		**60**	**30**	**30**		
⊠								
▲								
★								

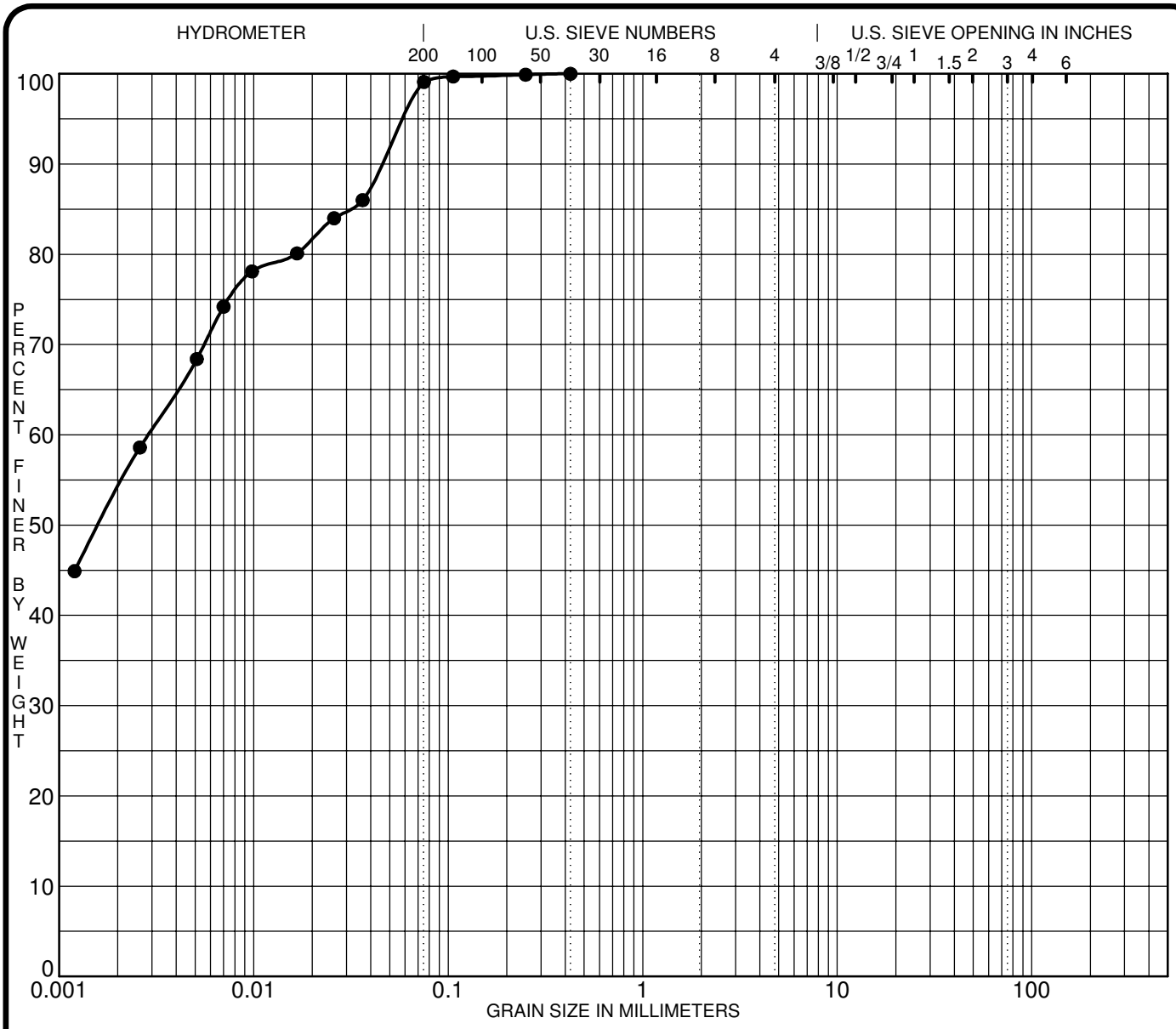
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 6-22 SS3**	**4.75**				**0.0**	**1.5**	**98.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **16 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 7-22 SS3**							
⊠								
▲								
★								

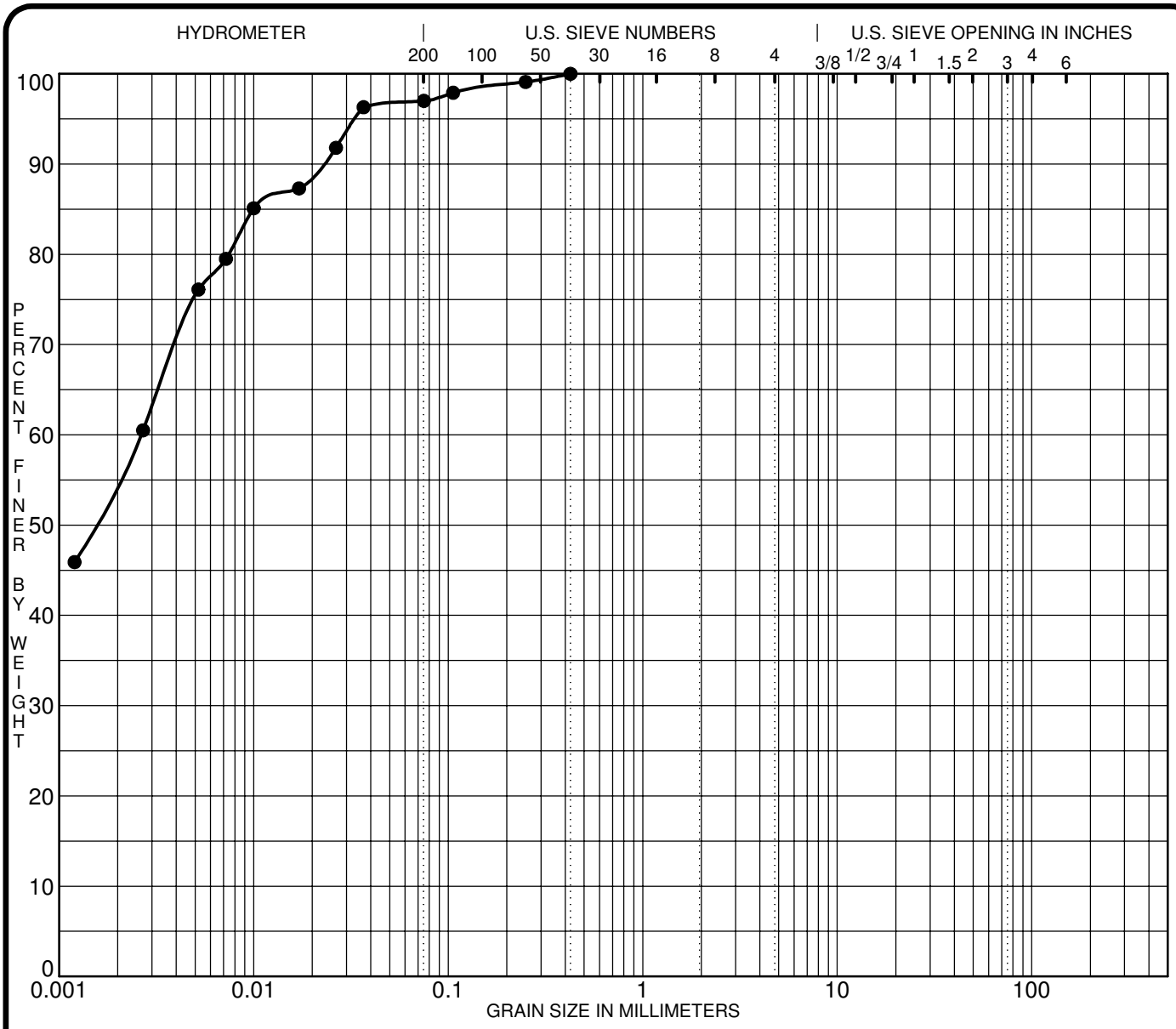
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 7-22 SS3**	**0.43**	**0.00**			**0.0**	**0.9**	**99.1**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **16 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 8-22 SS3**							
⊠								
▲								
★								

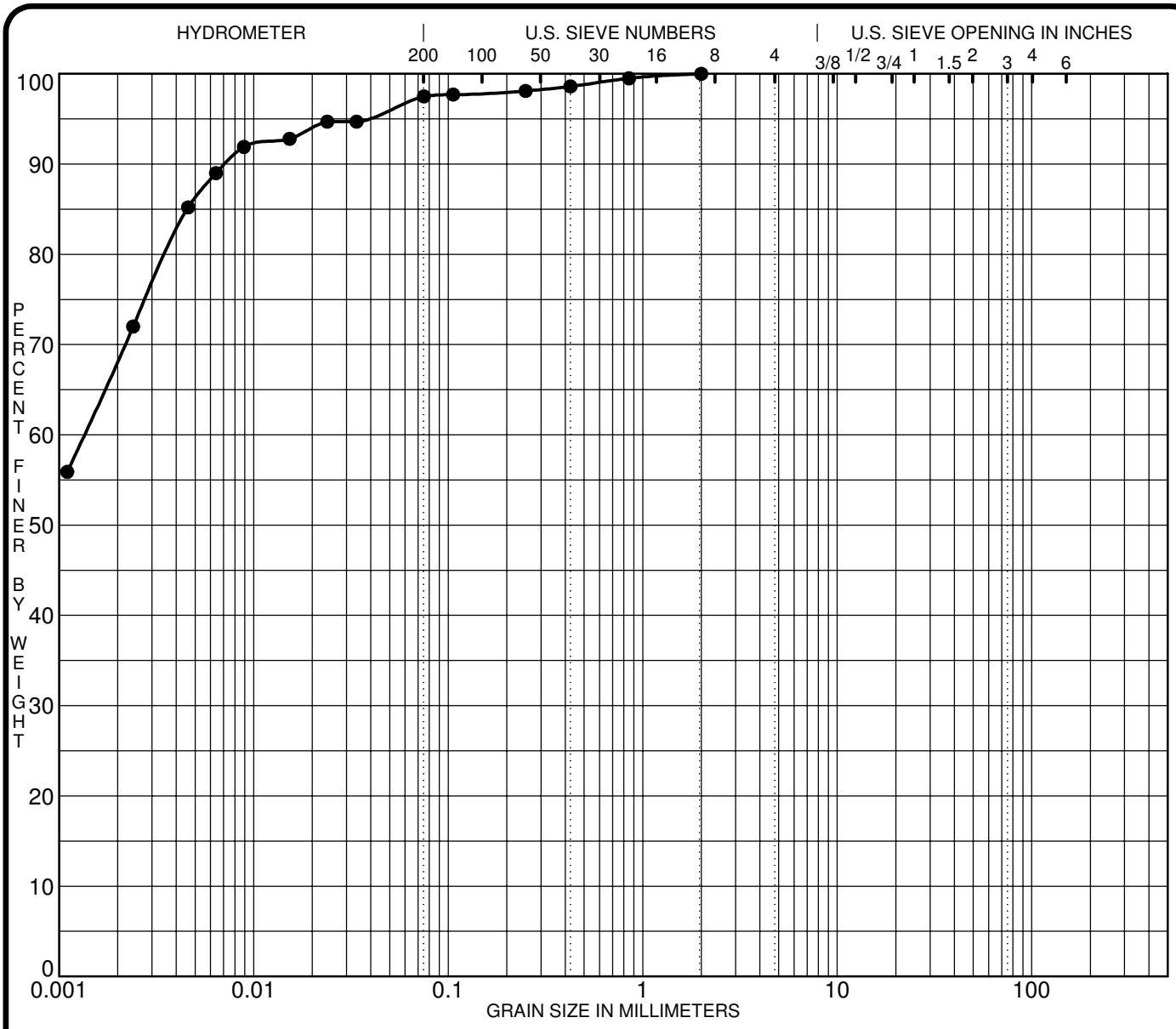
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 8-22 SS3**	**0.43**	**0.00**			**0.0**	**3.0**	**97.0**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **17 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH 9-22 SS9**							
⊠								
▲								
★								

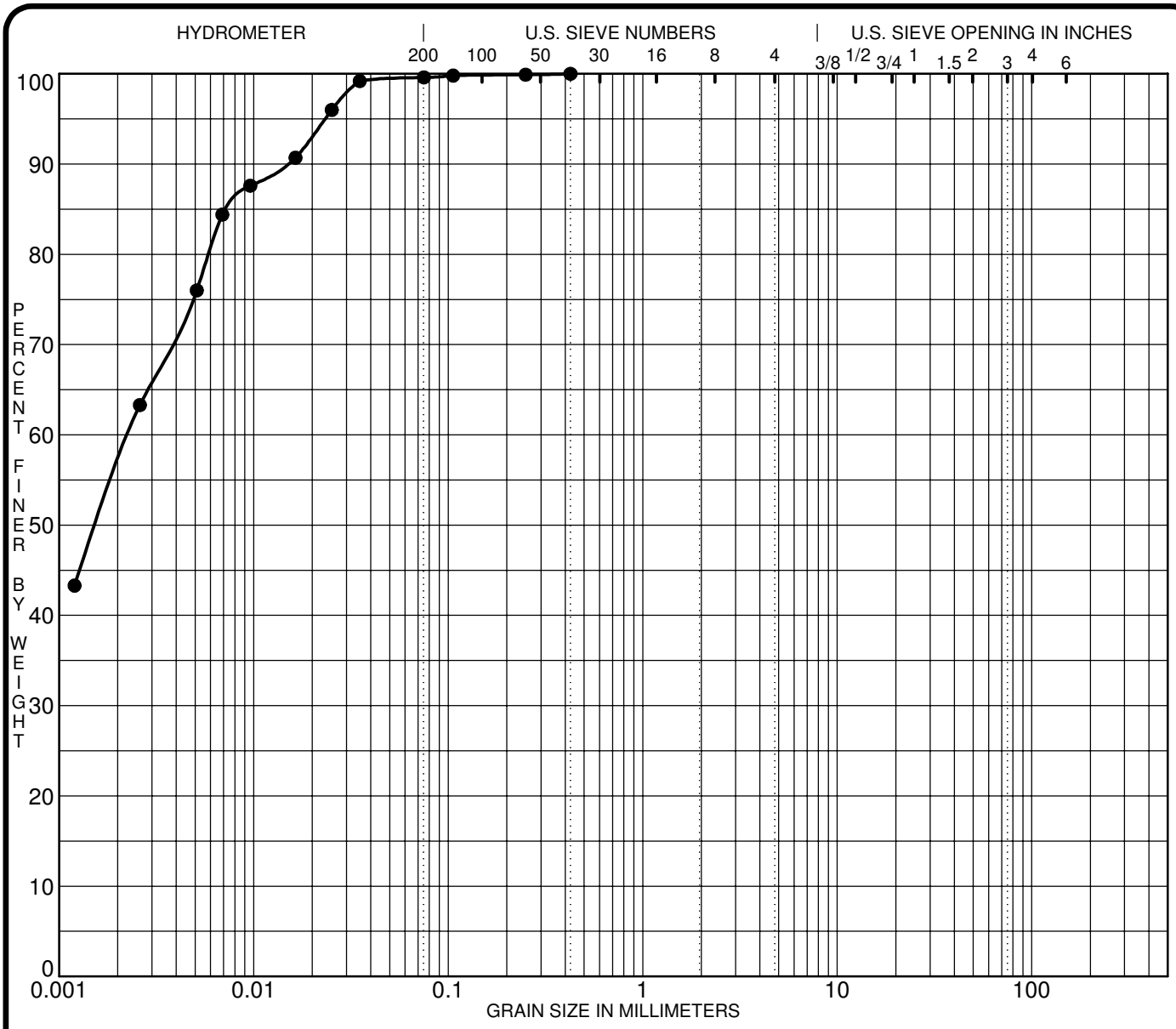
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH 9-22 SS9**	**2.00**	**0.00**			**0.0**	**2.5**	**97.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **18 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH10-22 SS5**							
⊠								
▲								
★								

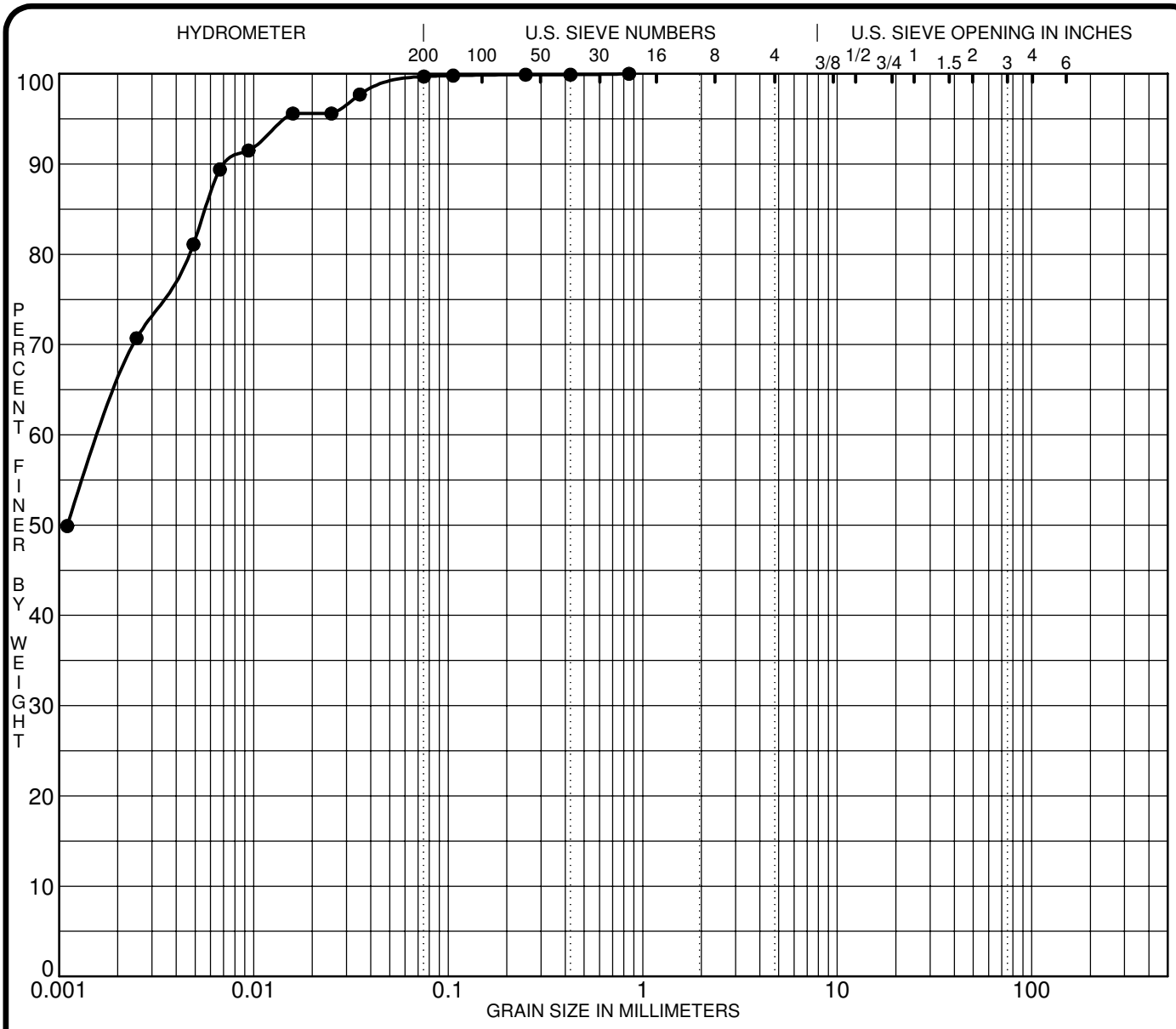
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH10-22 SS5**	**0.43**	**0.00**			**0.0**	**0.4**	**99.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **21 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH11-22 SS6**							
⊠								
▲								
★								

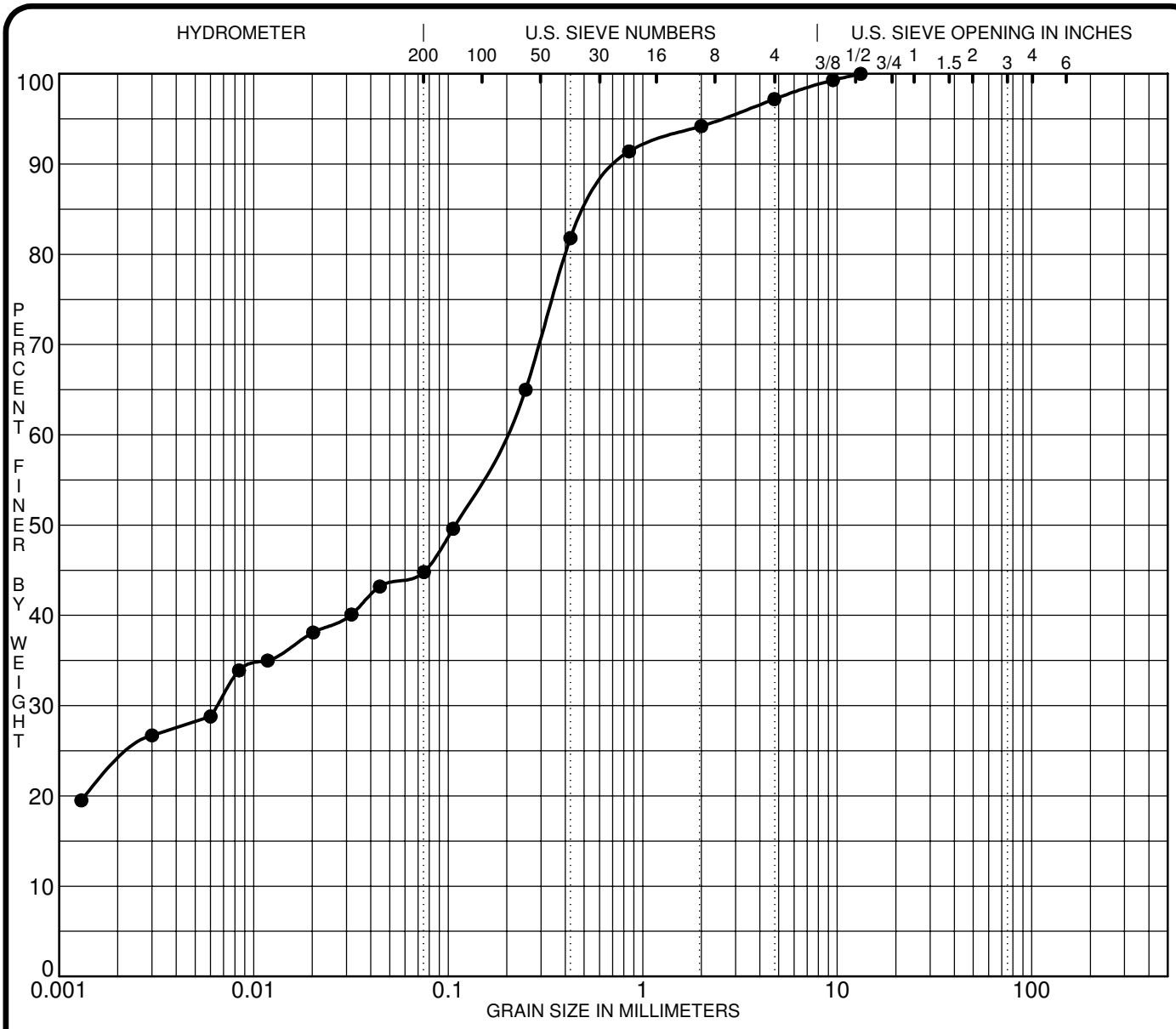
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH11-22 SS6**	**0.85**	**0.00**			**0.0**	**0.3**	**99.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **21 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH12-22 SS1**							
⊠								
▲								
★								

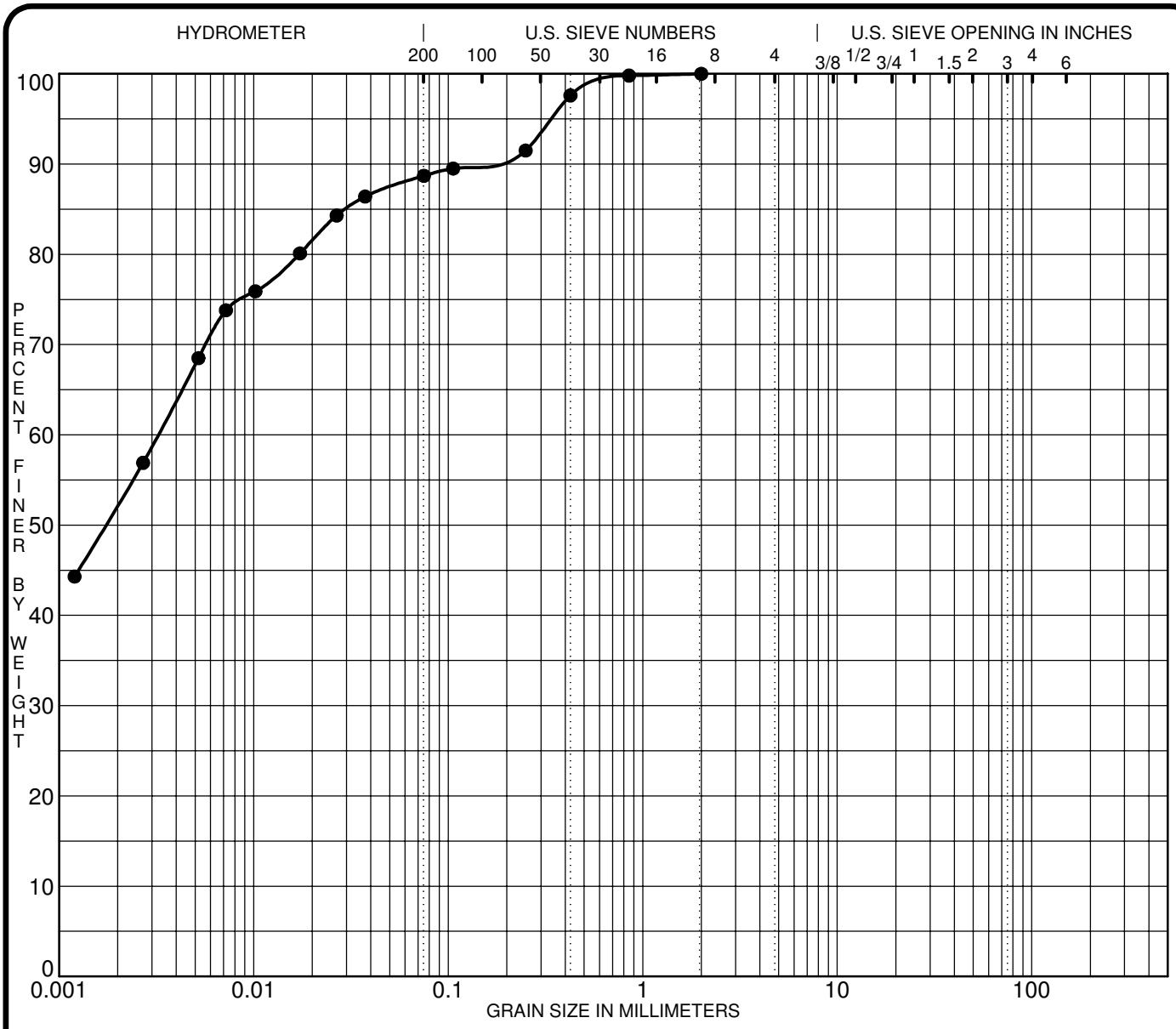
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH12-22 SS1**	**13.20**	**0.19**	**0.006**		**2.8**	**52.4**	**44.8**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **22 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH12-22 SS2**	**CL - Inorganic clays of low plasticity**		**46**	**21**	**25**		
⊠							
▲							
★							

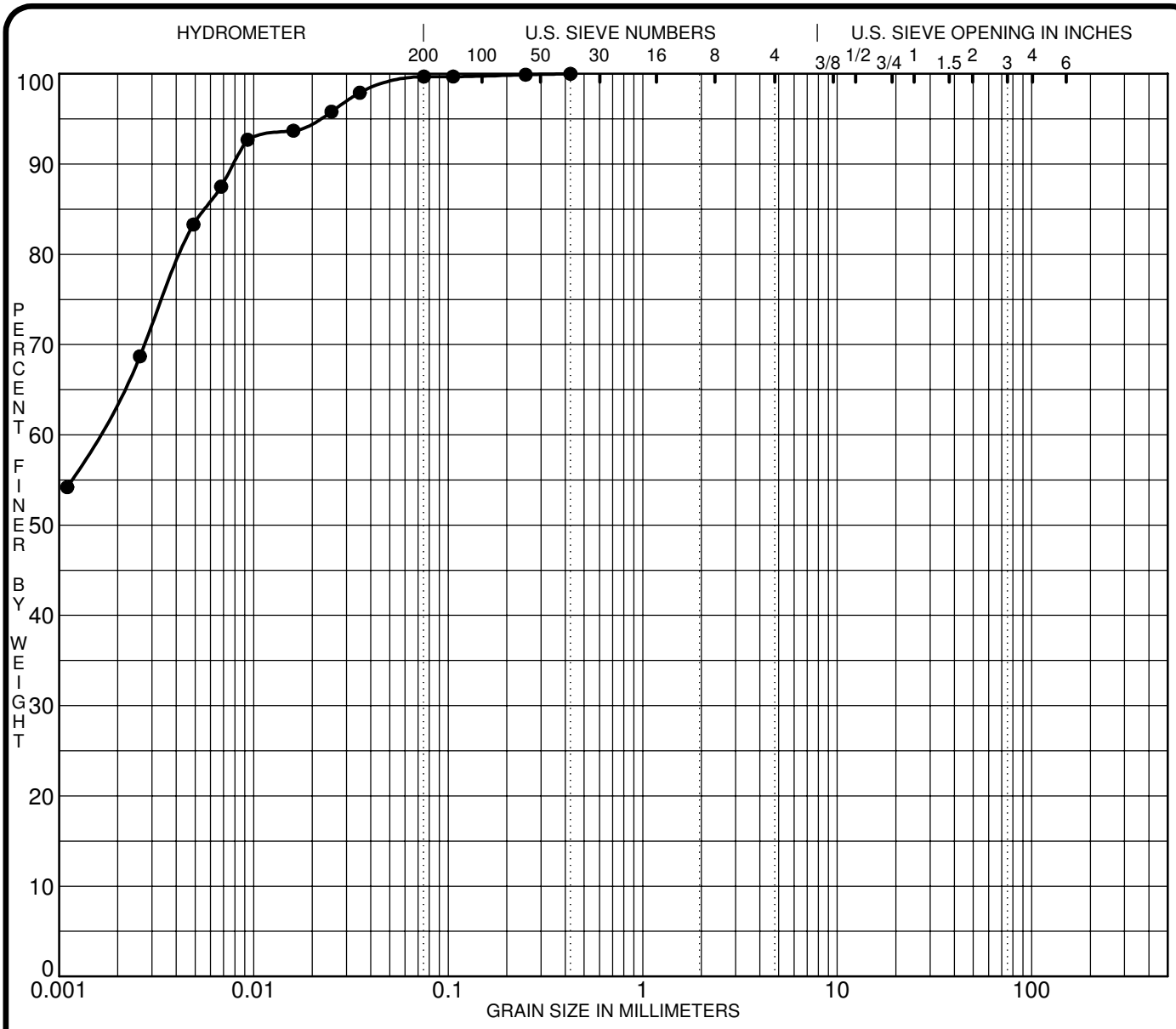
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH12-22 SS2**	**2.00**	**0.00**			**0.0**	**11.3**	**88.7**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **22 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH13-22 SS4**							
⊠								
▲								
★								

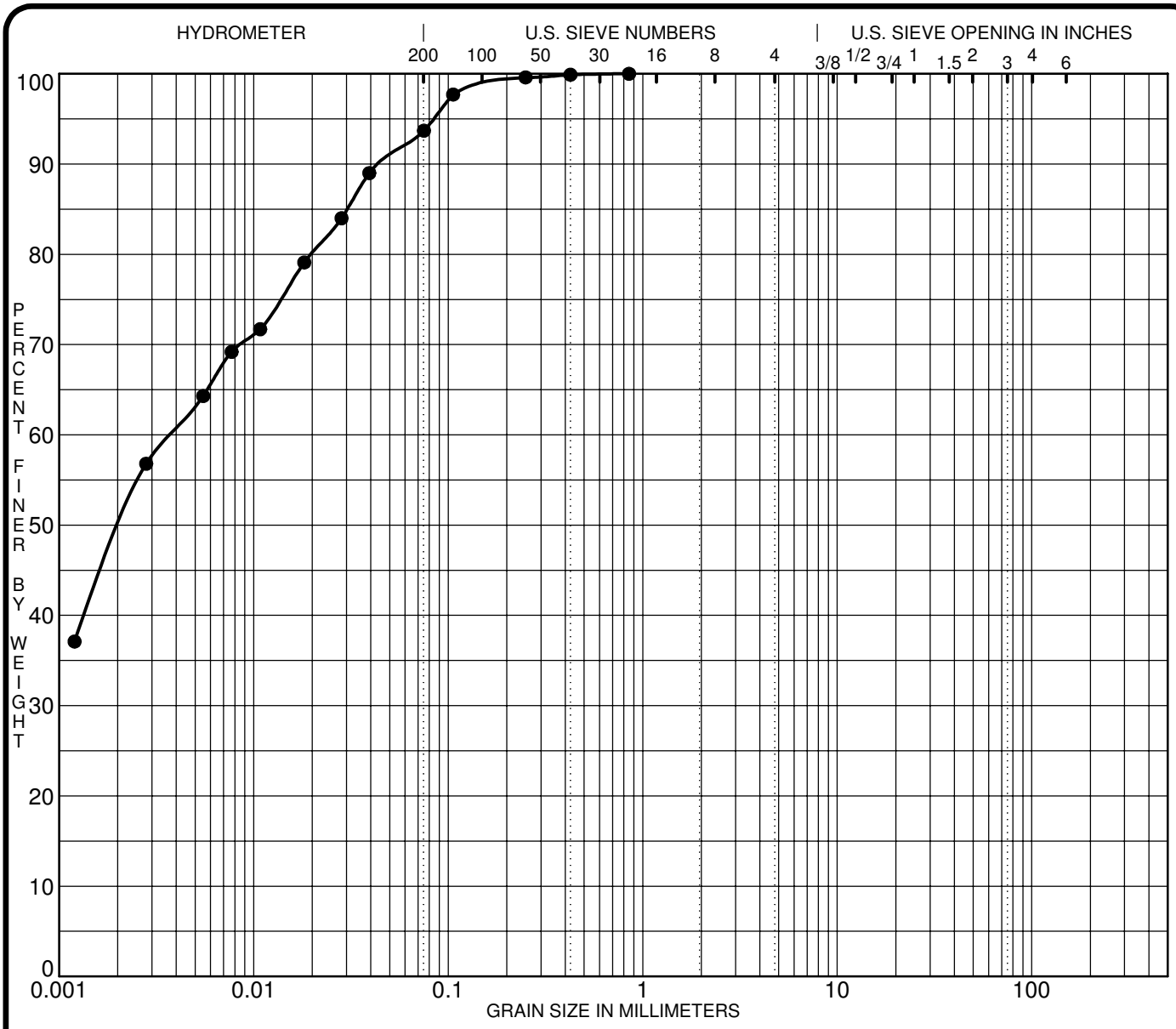
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH13-22 SS4**	**0.43**	**0.00**			**0.0**	**0.3**	**99.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **28 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH14-22 SS3**							
⊠							
▲							
★							

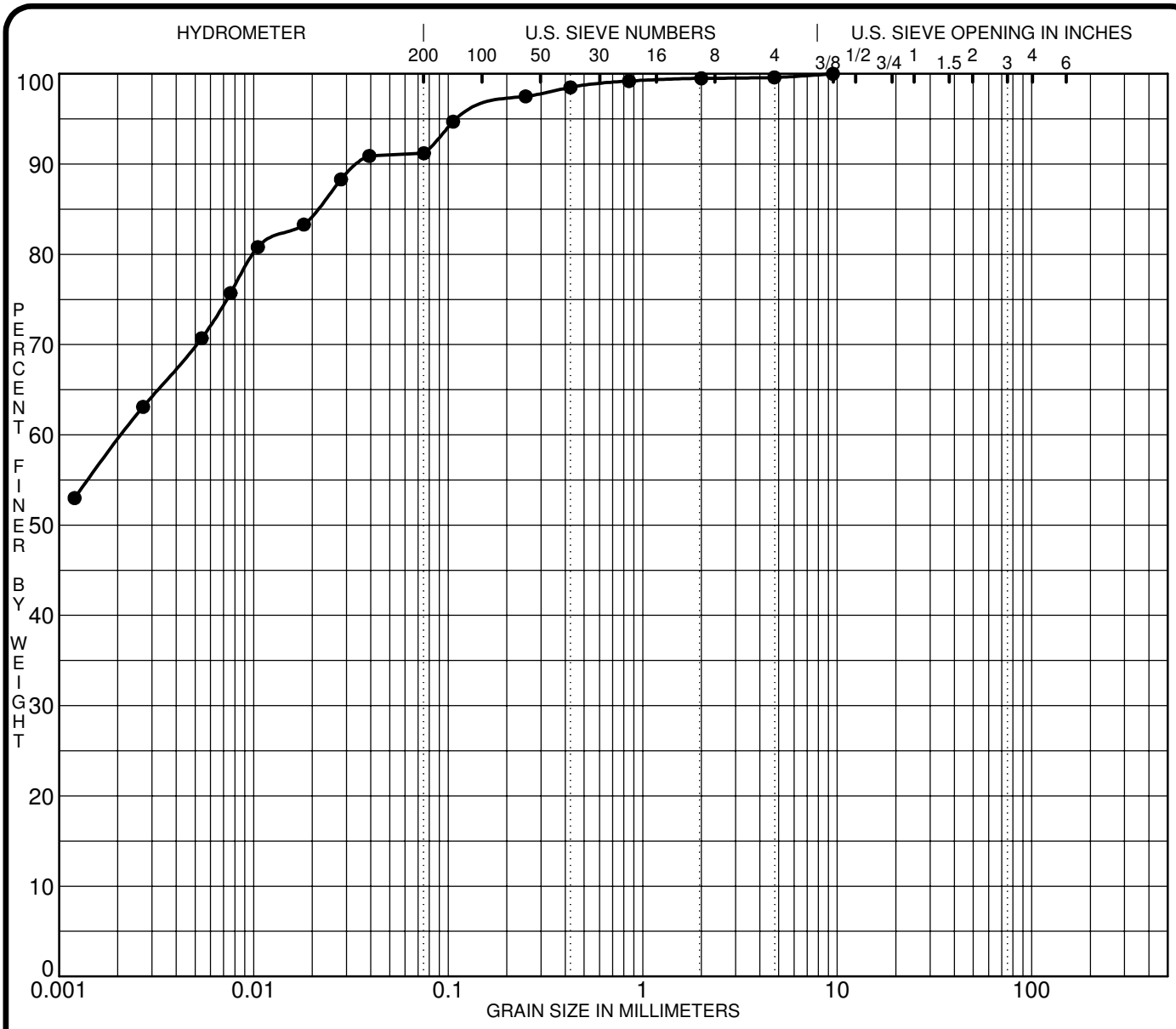
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH14-22 SS3**	**0.85**	**0.00**			**0.0**	**6.3**	**93.7**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **29 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH15-22 SS3**							
⊠								
▲								
★								

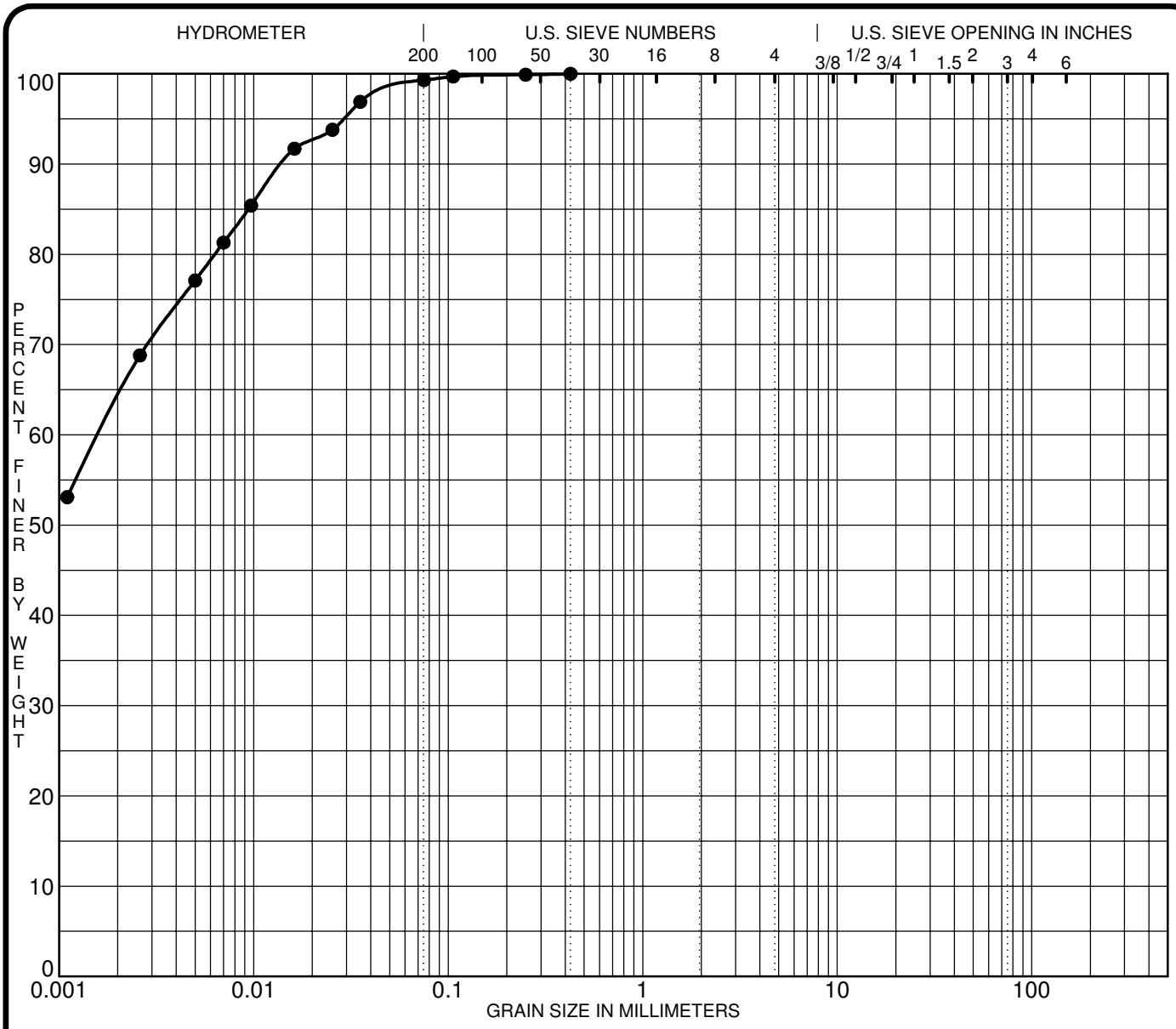
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH15-22 SS3**	**9.50**	**0.00**			**0.4**	**8.4**	**91.2**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **29 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH16-22 SS3**							
⊠								
▲								
★								

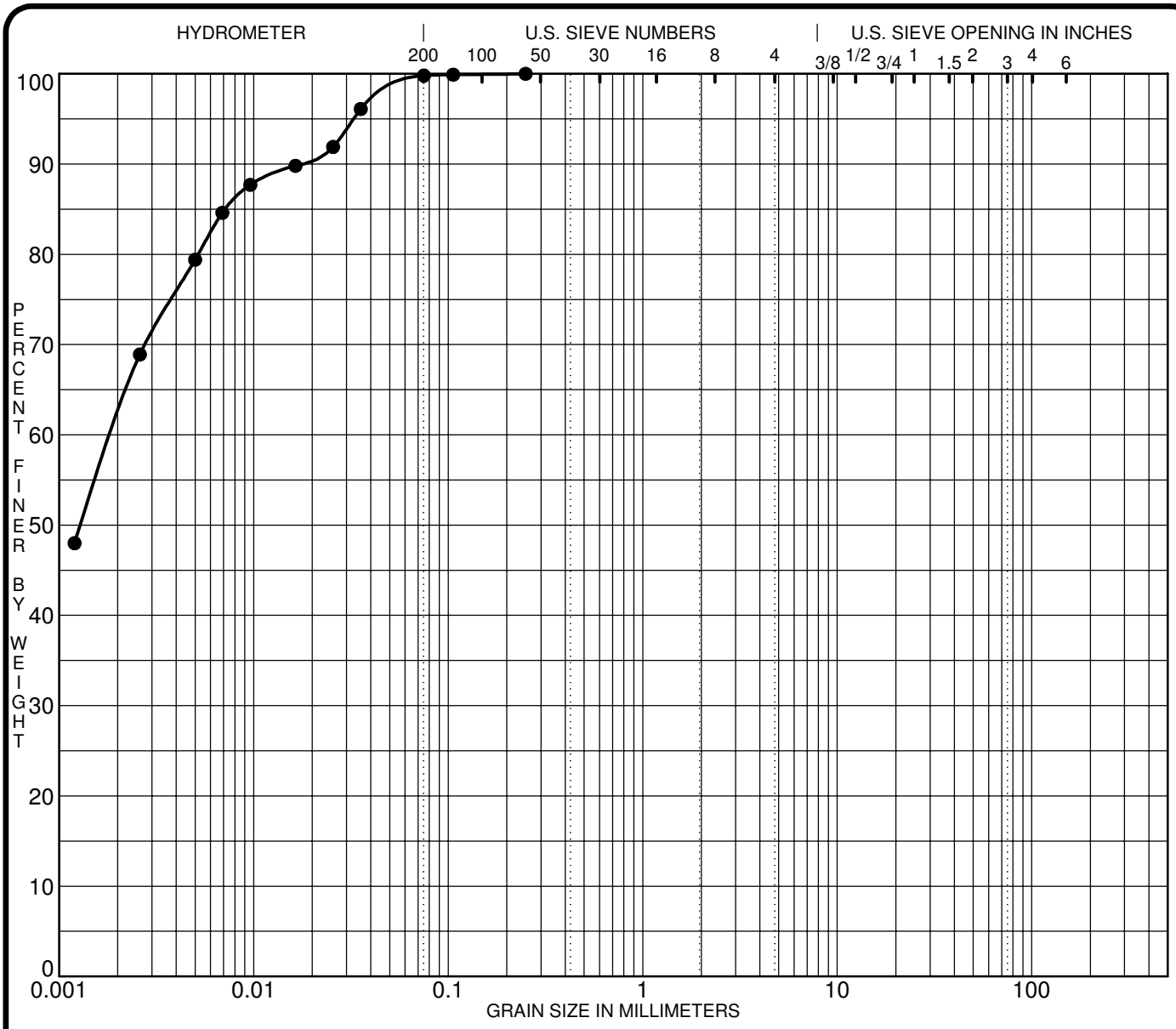
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH16-22 SS3**	**0.43**	**0.00**			**0.0**	**0.7**	**99.3**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **30 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH18-22 SS7**							
⊠							
▲							
★							

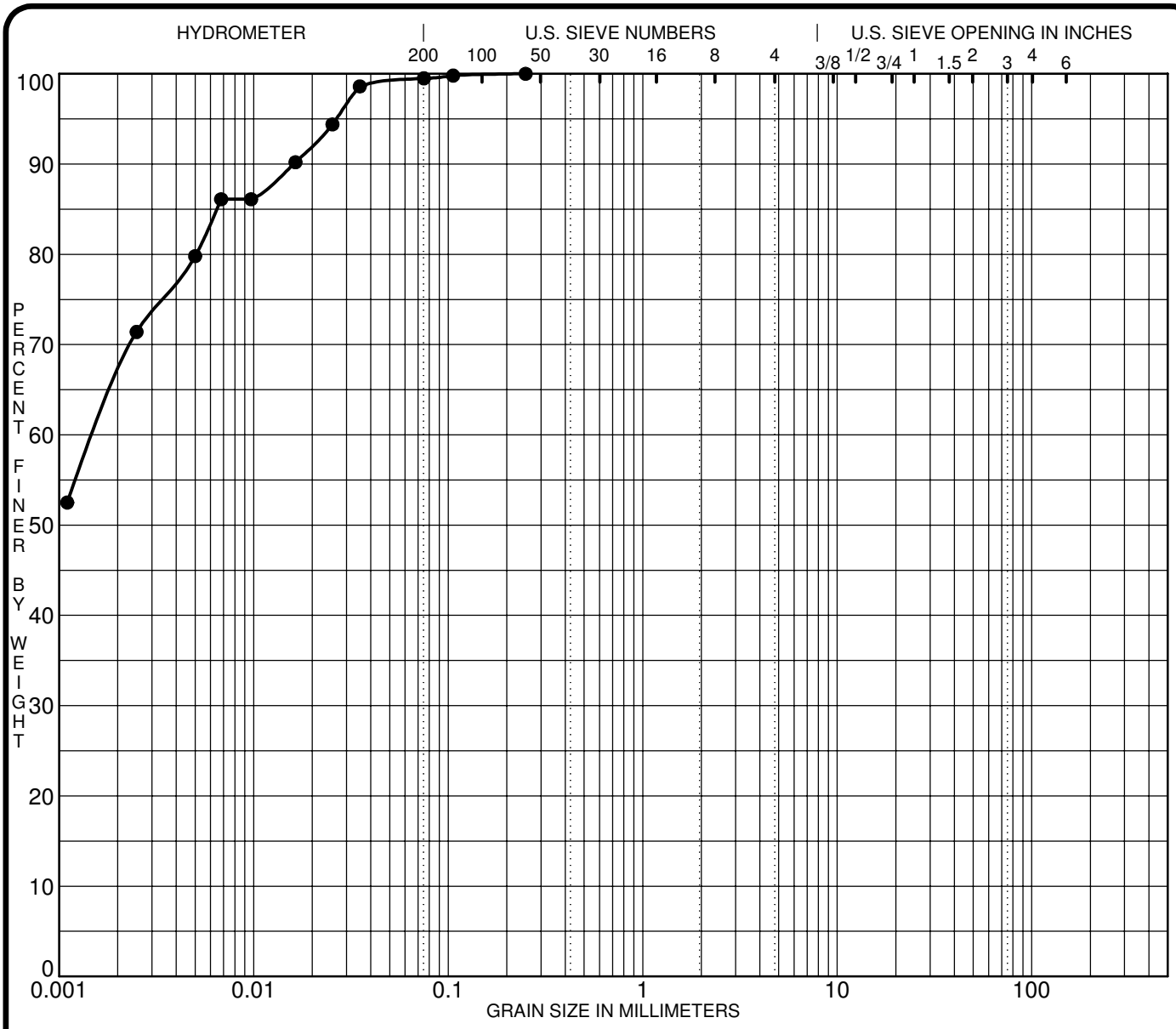
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH18-22 SS7**	**0.25**	**0.00**			**0.0**	**0.2**	**99.8**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **12 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH18A-22 SS3**							
⊠								
▲								
★								

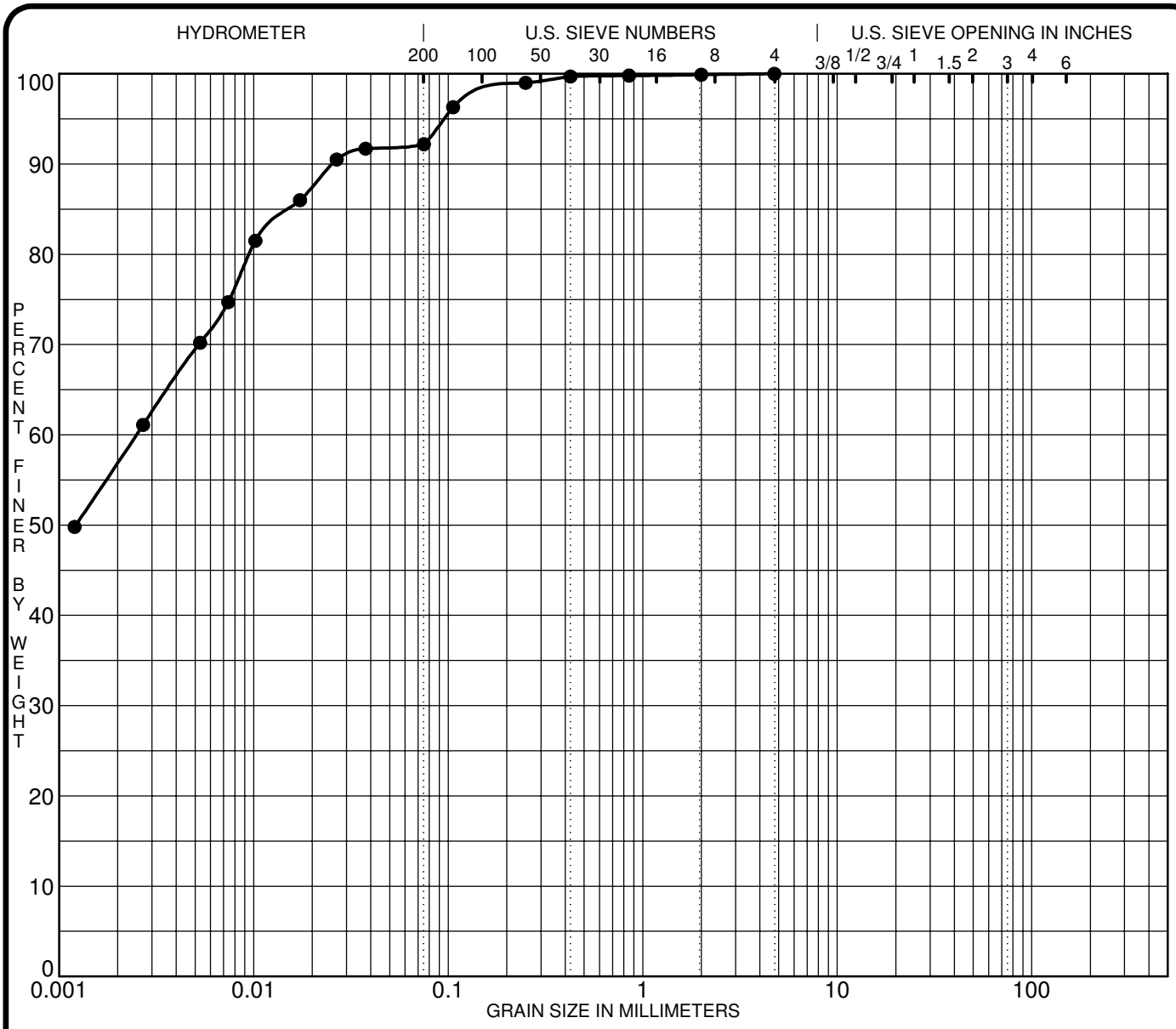
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH18A-22 SS3**	**0.25**	**0.00**			**0.0**	**0.5**	**99.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **12 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH19-22 SS2**							
⊠								
▲								
★								

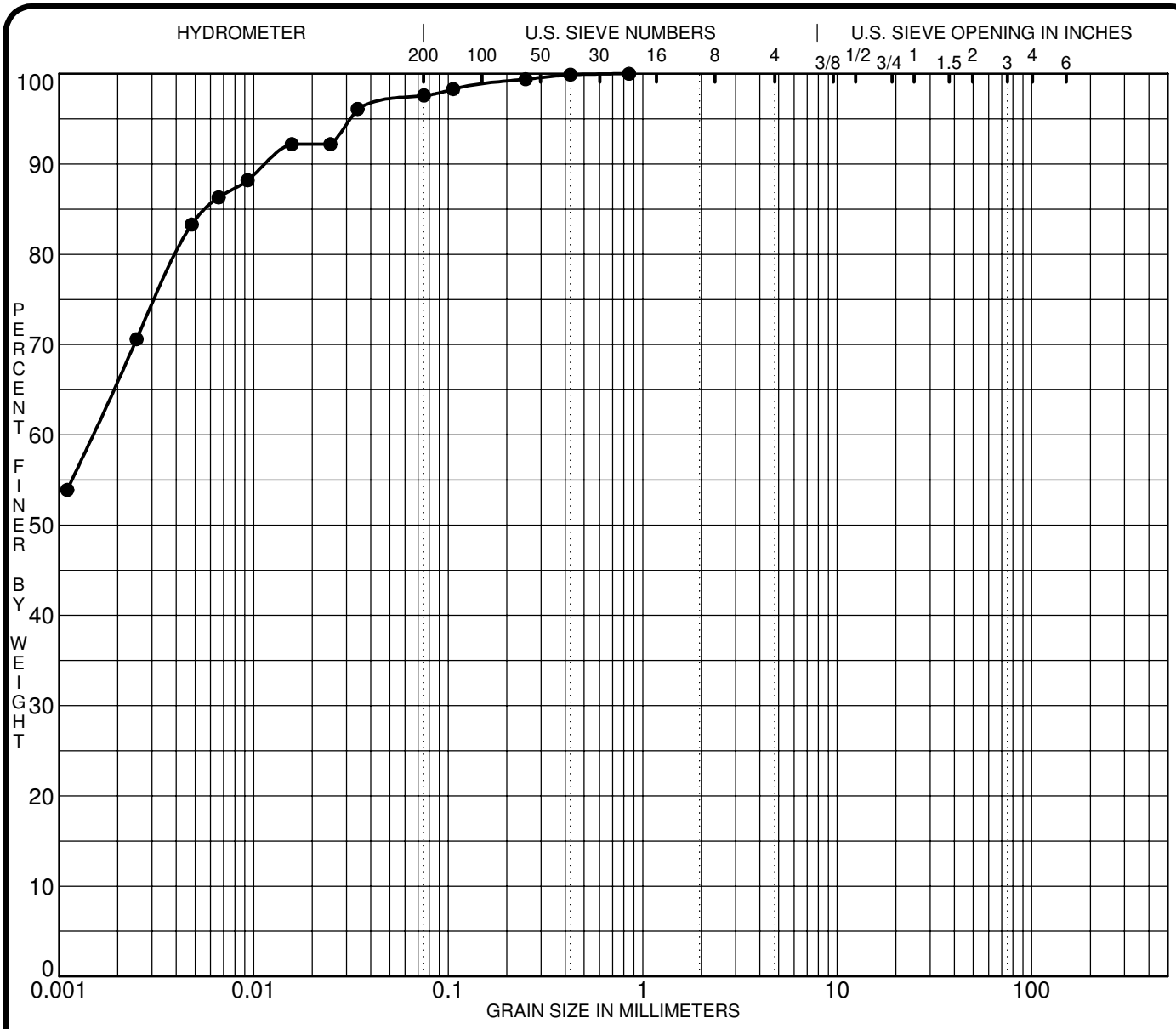
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH19-22 SS2**	**4.75**	**0.00**			**0.0**	**7.8**	**92.2**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **11 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH20-22 SS3**							
⊠								
▲								
★								

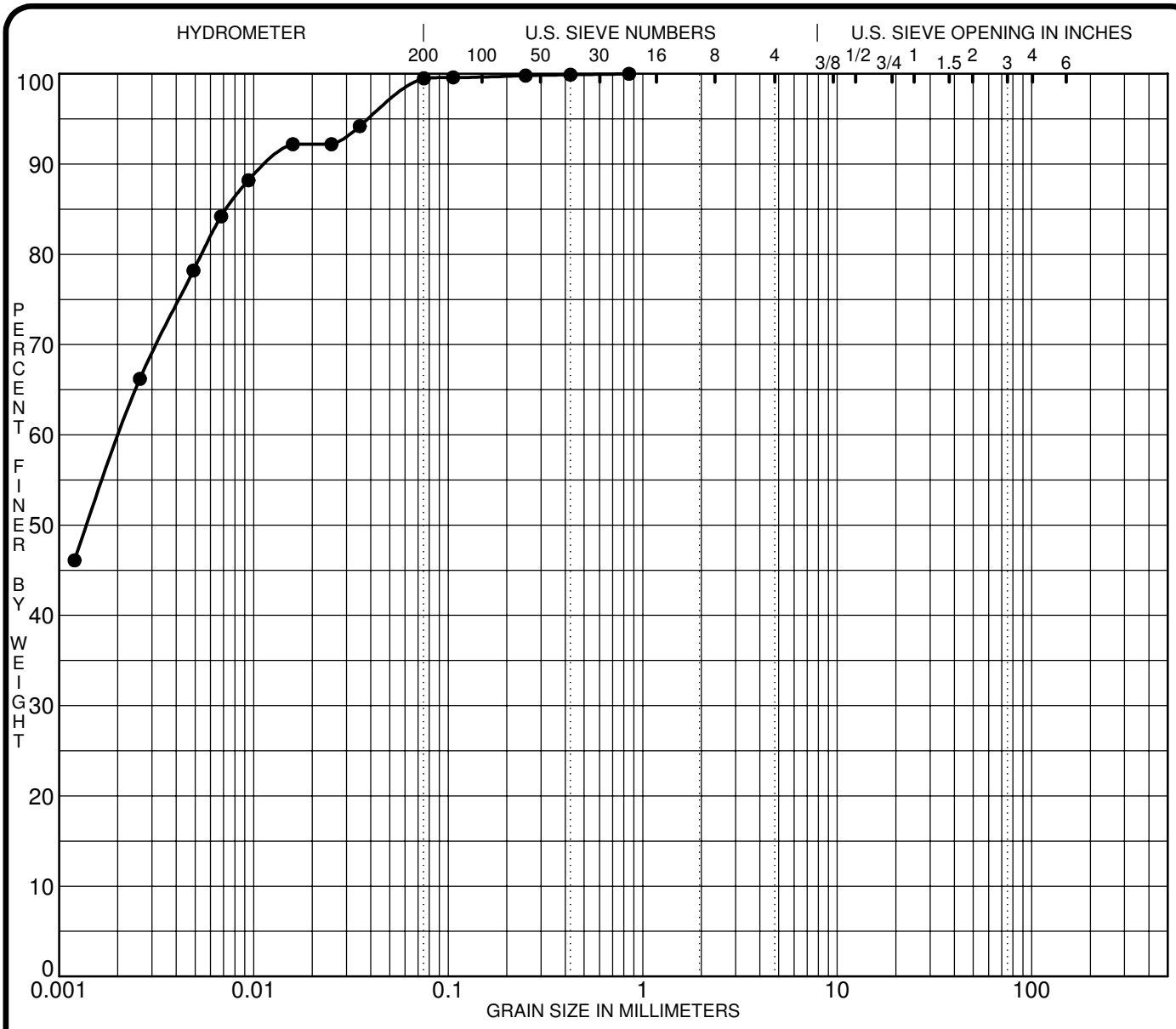
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH20-22 SS3**	**0.85**	**0.00**			**0.0**	**2.4**	**97.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **12 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH22-22 SS12**							
⊠								
▲								
★								

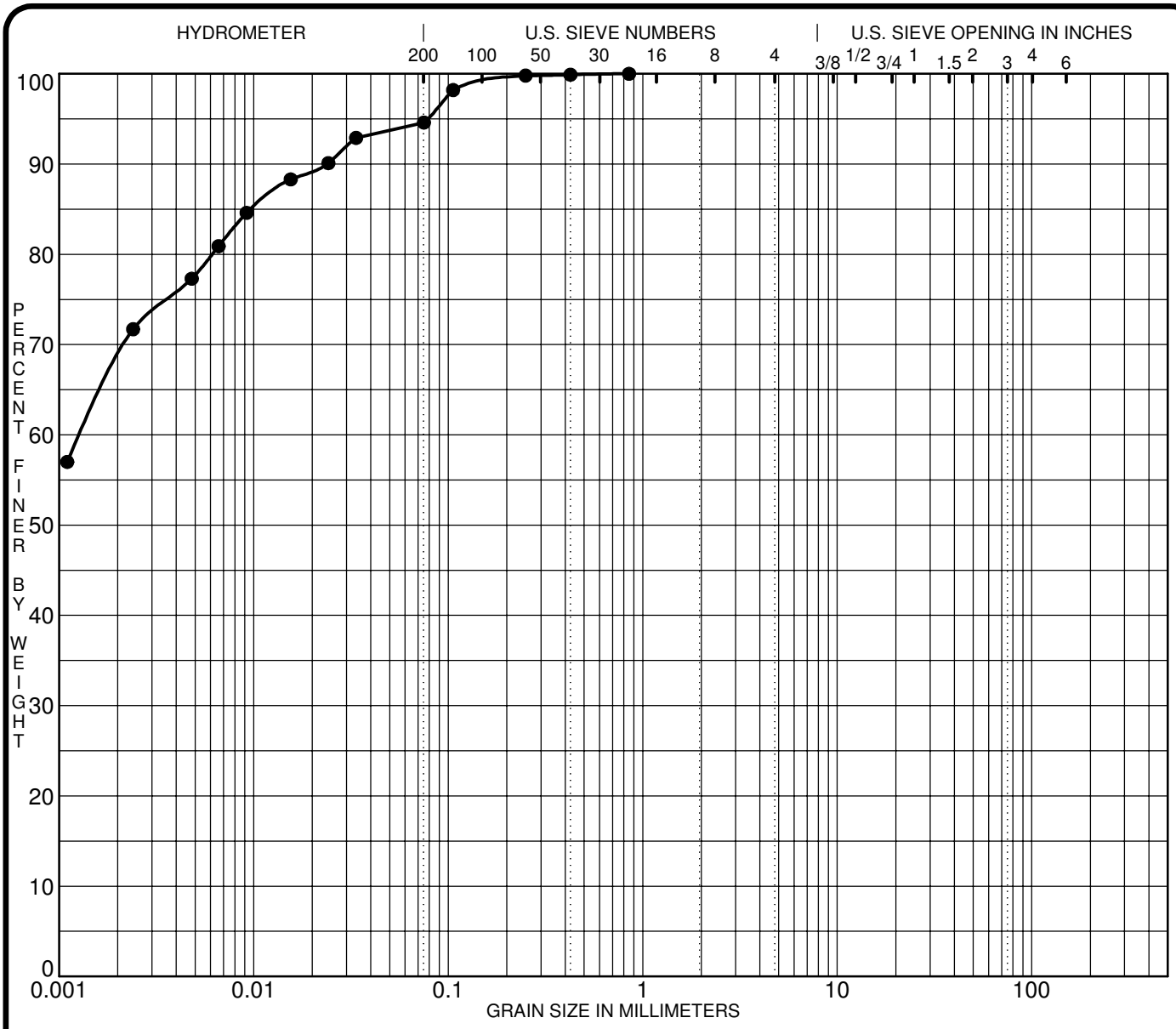
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH22-22 SS12**	**0.85**	**0.00**			**0.0**	**0.5**	**99.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **8 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH22A-22 SS2**							
⊠							
▲							
★							

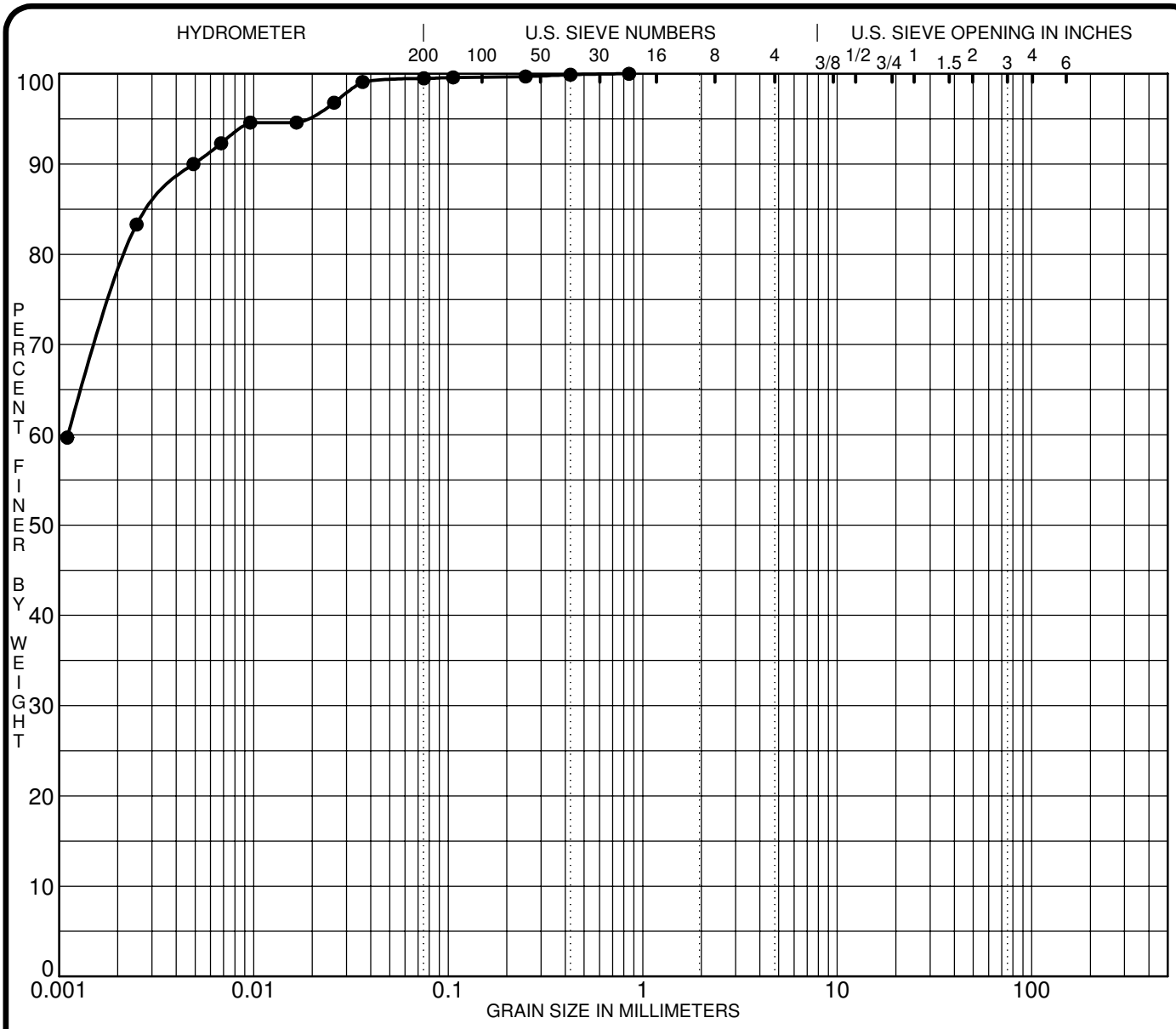
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH22A-22 SS2**	**0.85**	**0.00**			**0.0**	**5.4**	**94.6**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **11 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH23-22 SS3**							
⊠								
▲								
★								

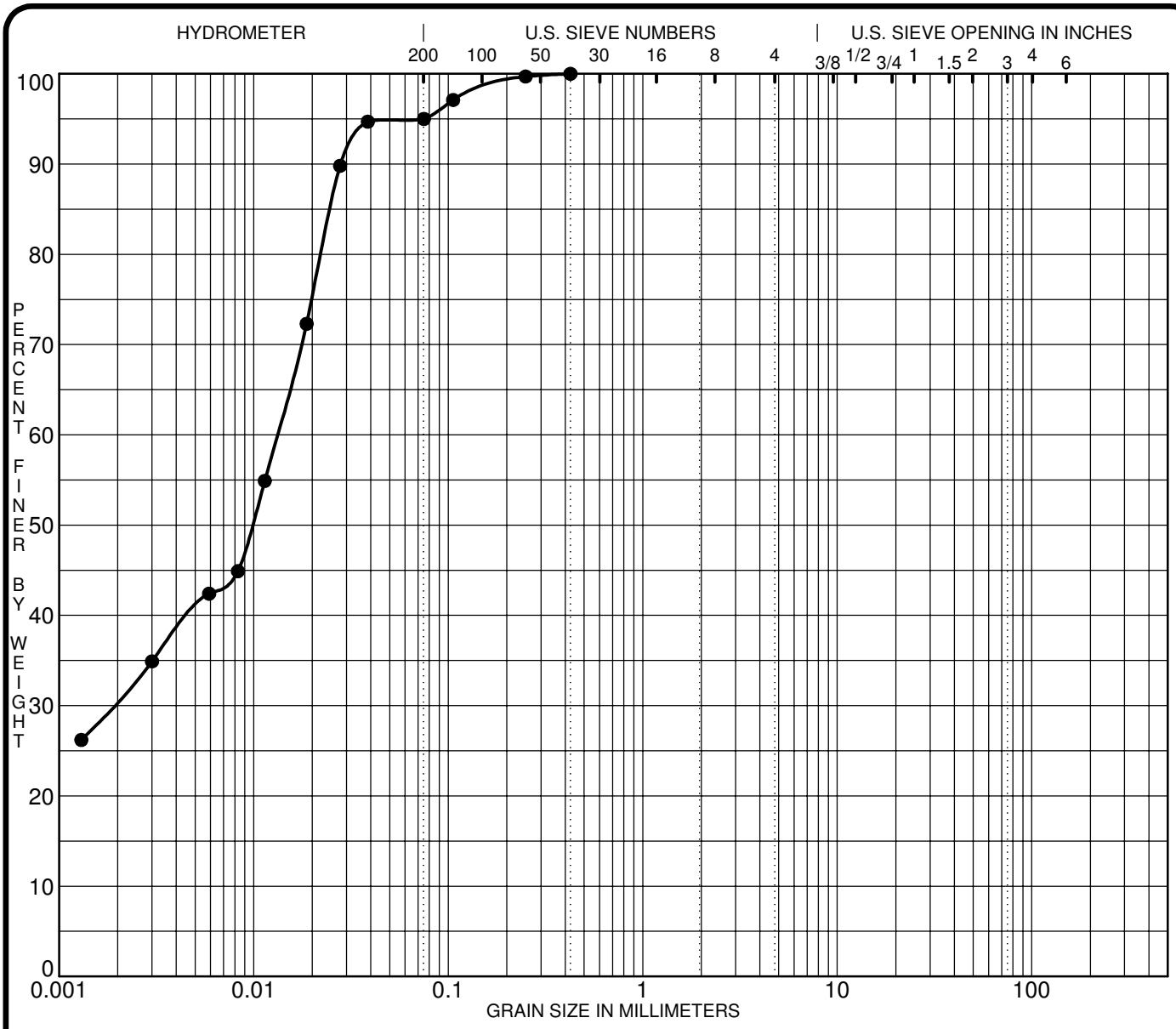
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH23-22 SS3**	**0.85**	**0.00**			**0.0**	**0.5**	**99.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Jun 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH24-22**							
⊠							
▲							
★							

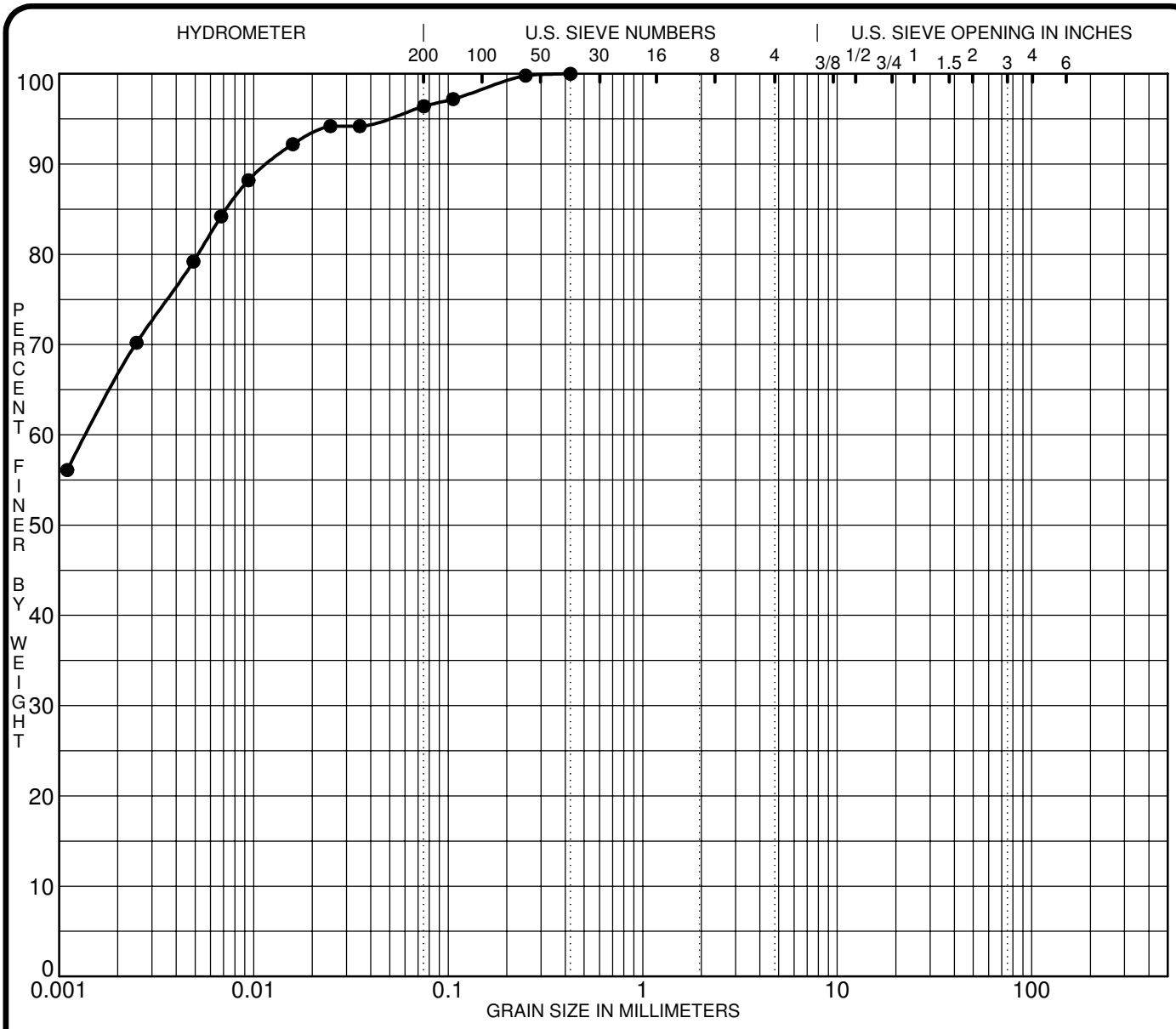
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH24-22**	**0.43**	**0.01**	**0.002**		**0.0**	**5.0**	**95.0**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **1 Jun 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH26-22 SS5**							
⊠								
▲								
★								

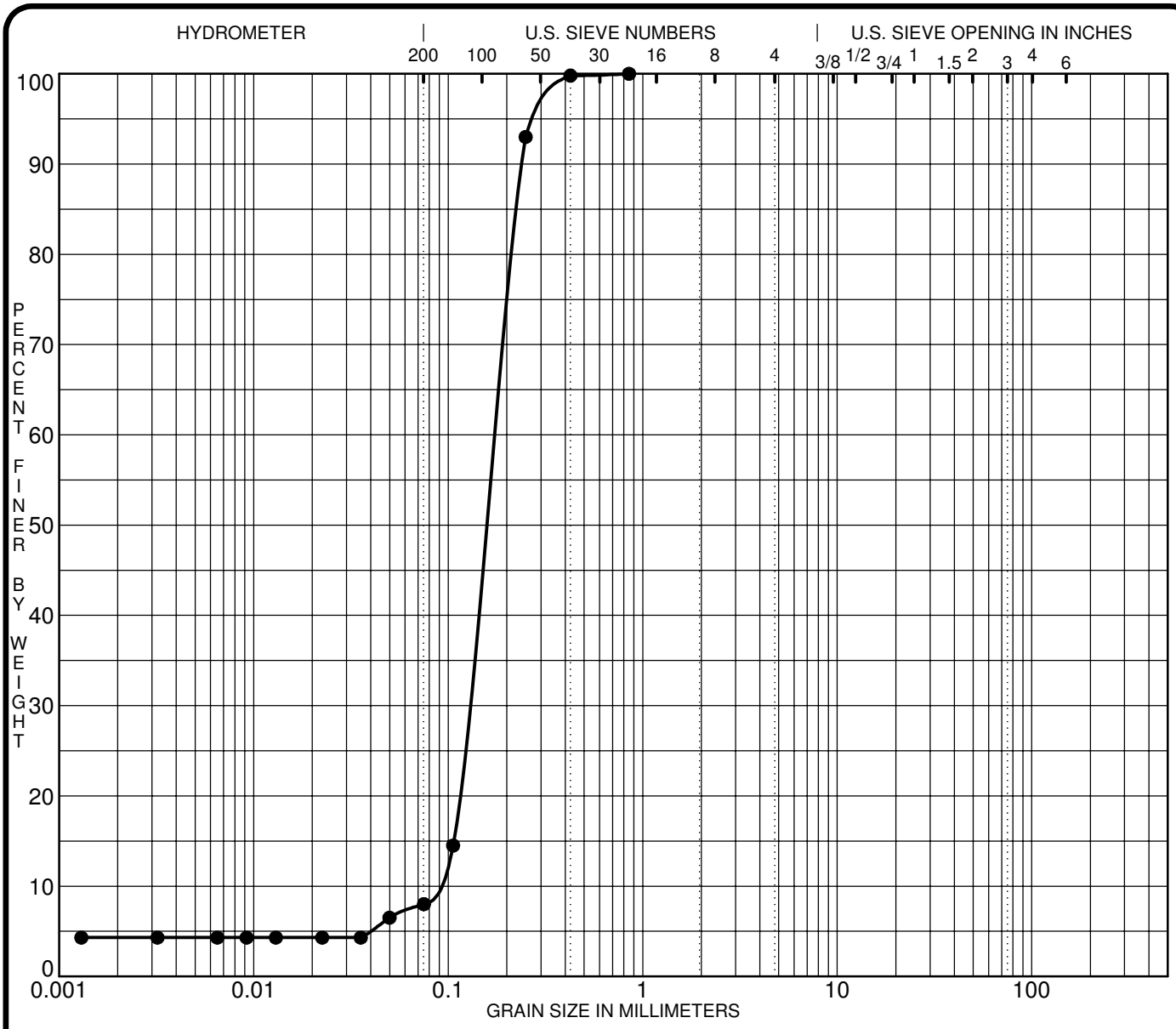
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH26-22 SS5**	**0.43**	**0.00**			**0.0**	**3.6**	**96.4**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH26A-22 SS2**						**1.08**	**2.1**
⊠								
▲								
★								

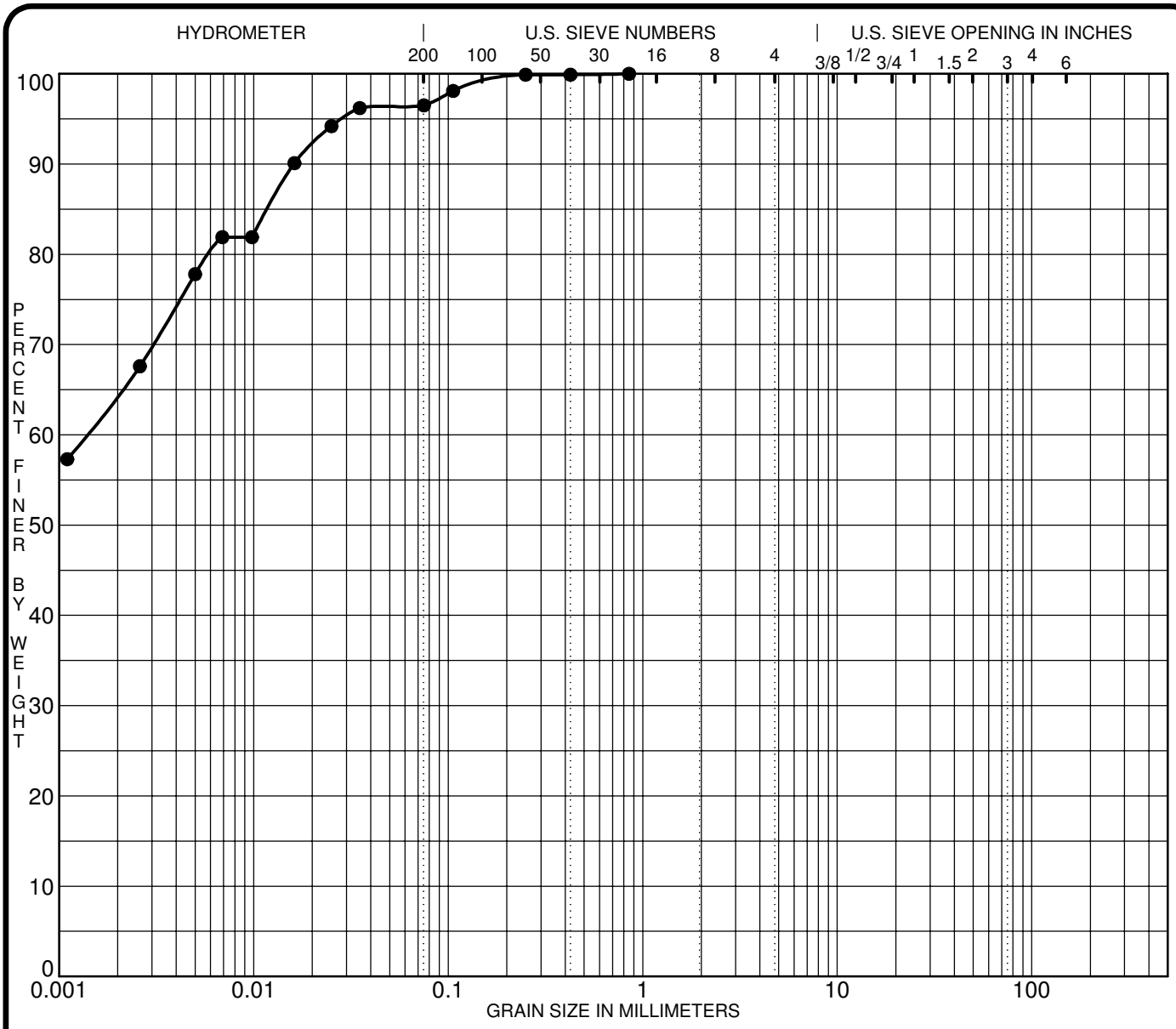
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH26A-22 SS2**	**0.85**	**0.17**	**0.126**	**0.0834**	**0.0**	**92.0**	**8.0**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH27-22 SS6**							
⊠								
▲								
★								

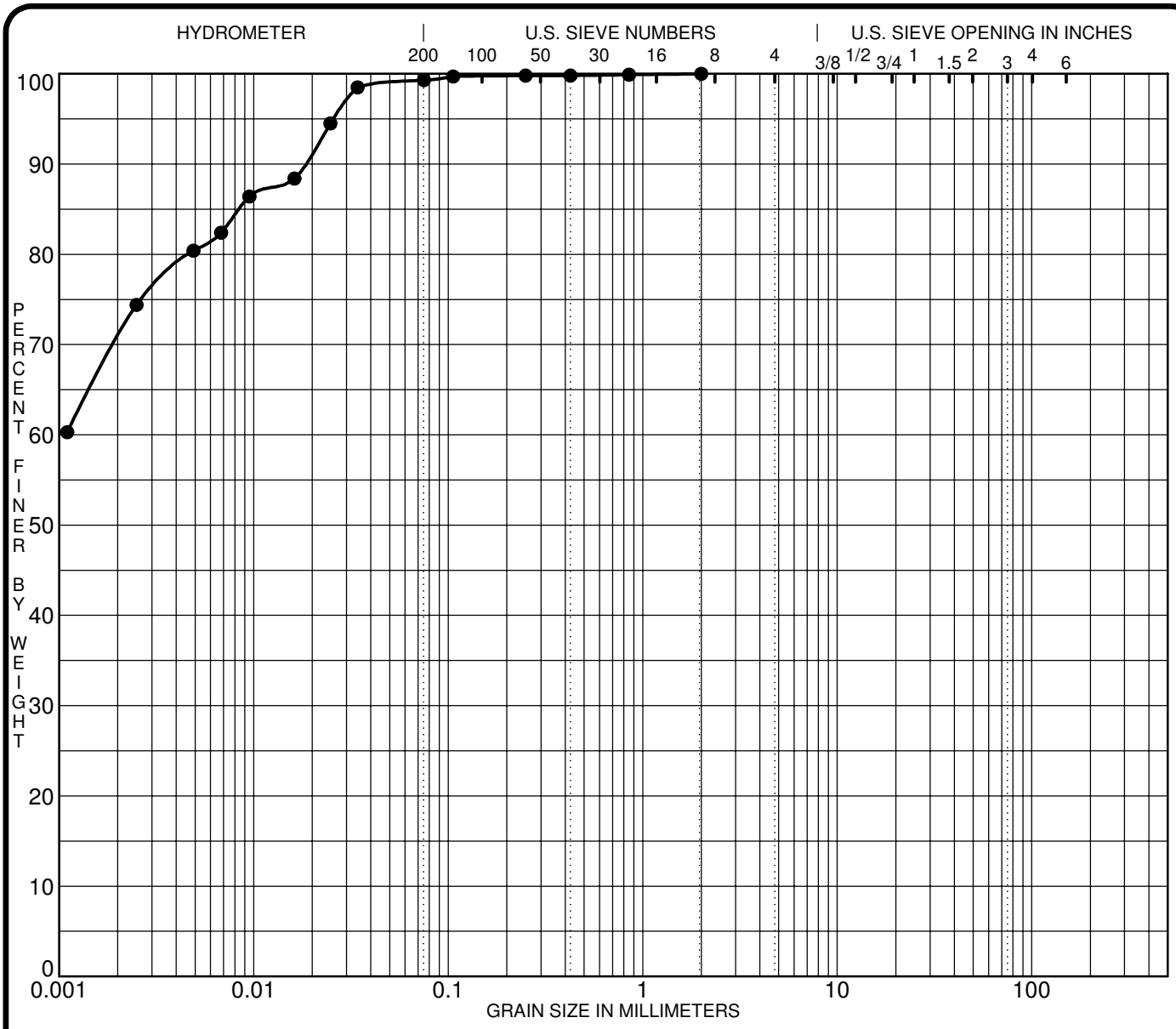
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH27-22 SS6**	**0.85**	**0.00**			**0.0**	**3.5**	**96.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH28A-22 SS2**							
⊠								
▲								
★								

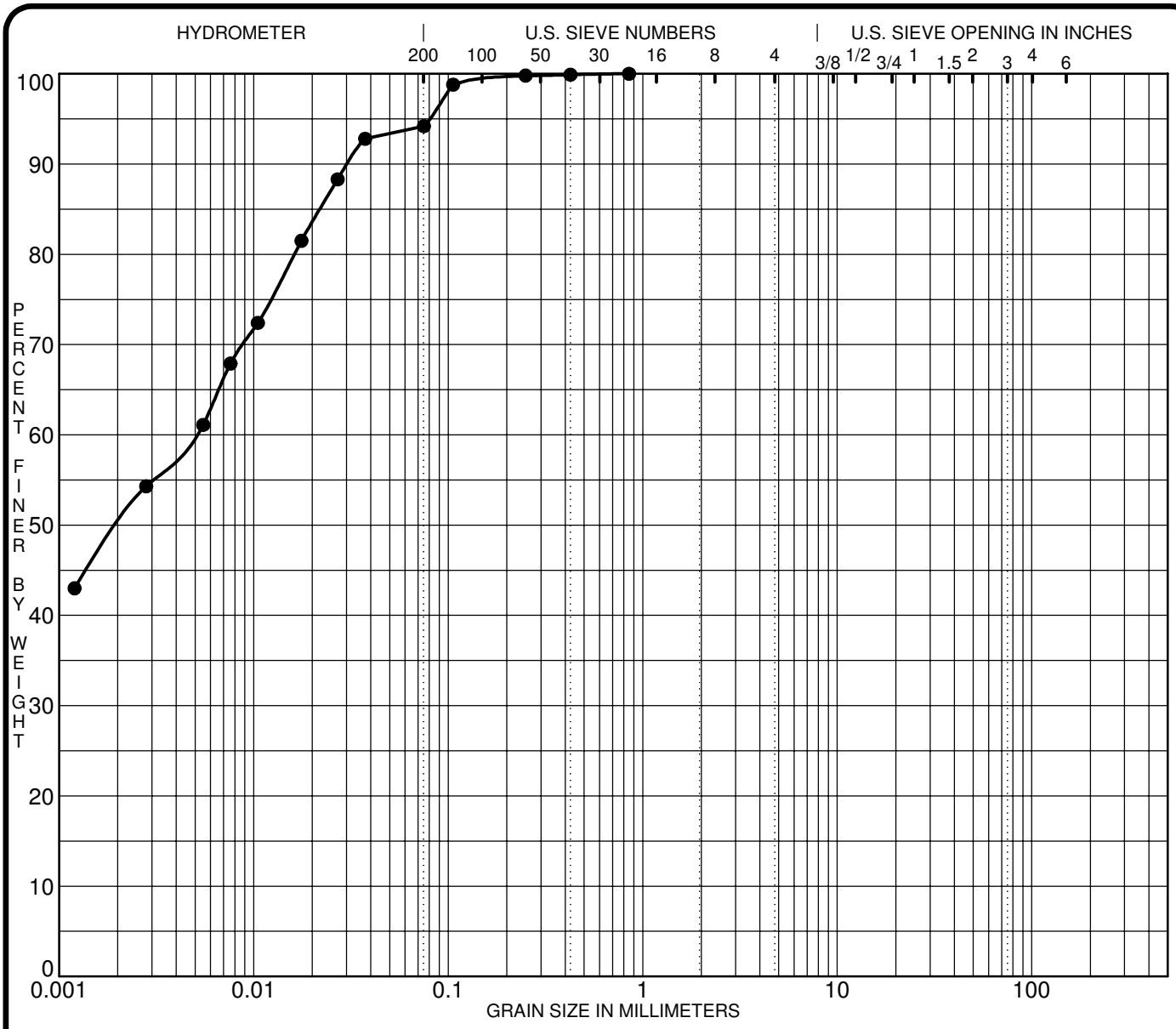
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH28A-22 SS2**	**2.00**				**0.0**	**0.7**	**99.3**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **7 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH29-22 SS3**							
⊠								
▲								
★								

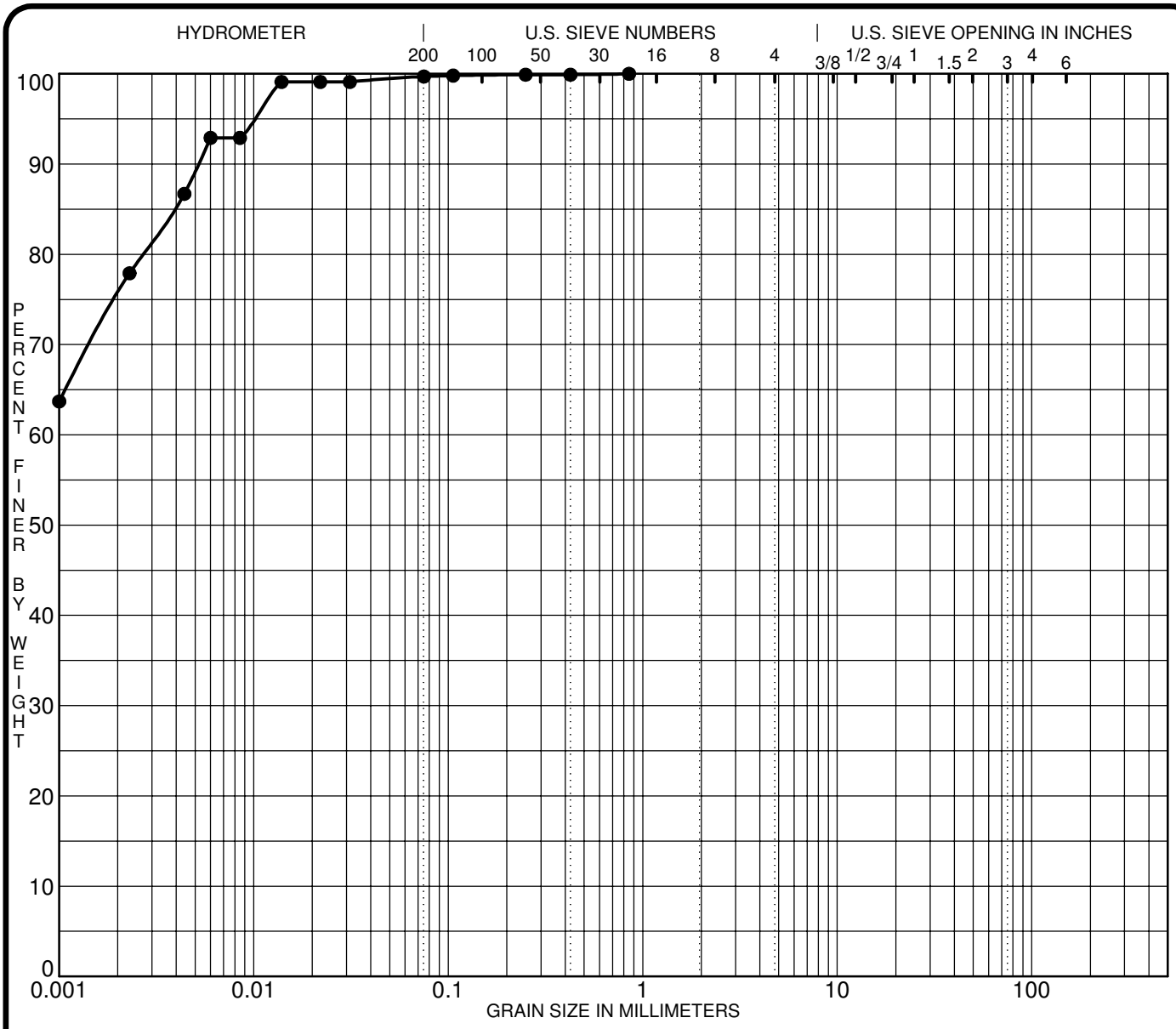
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH29-22 SS3**	**0.85**	**0.00**			**0.0**	**5.8**	**94.2**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **7 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH30-22 SS11**							
⊠								
▲								
★								

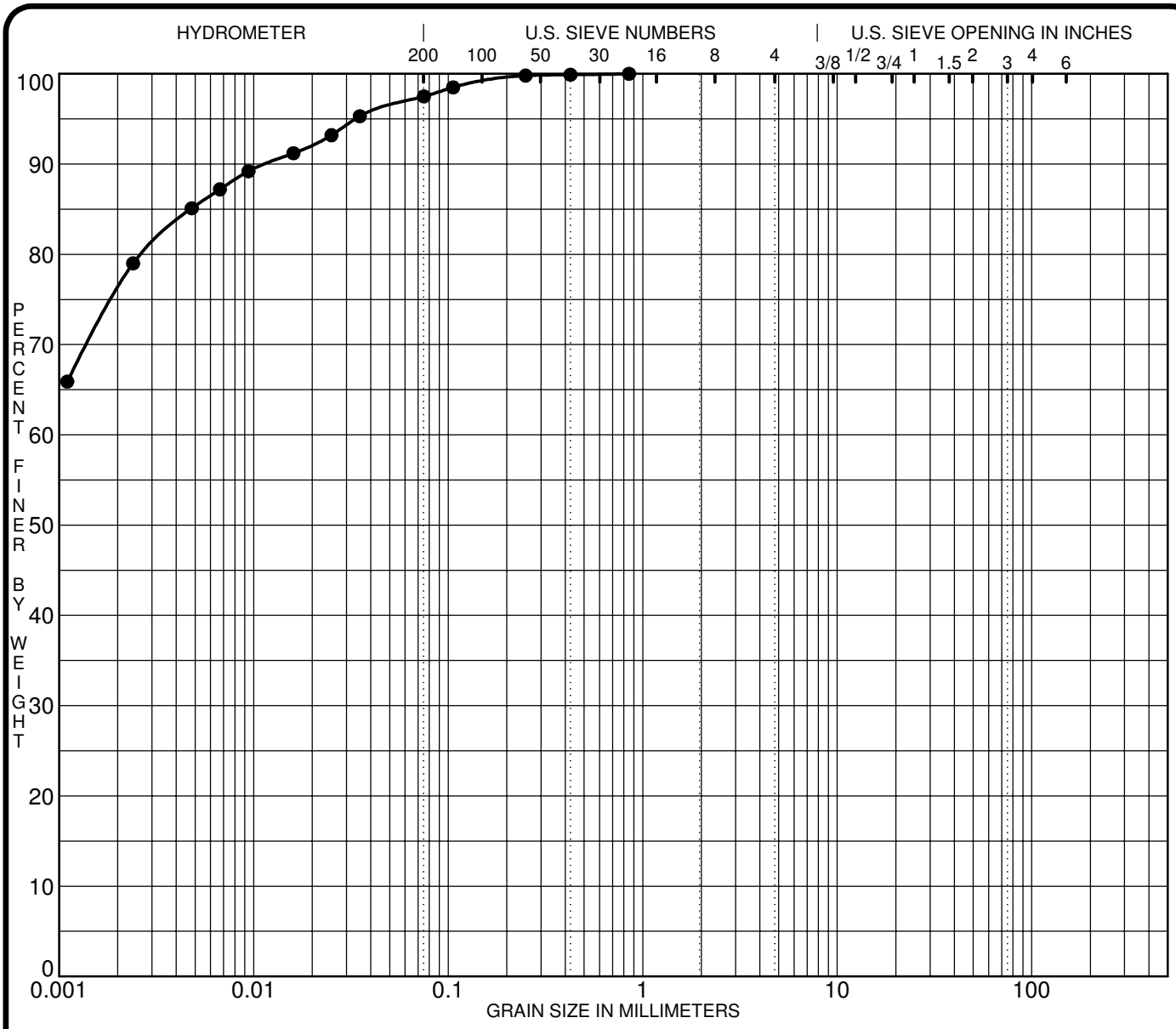
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH30-22 SS11**	**0.85**				**0.0**	**0.3**	**99.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **7 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH31-22 SS2**							
⊠								
▲								
★								

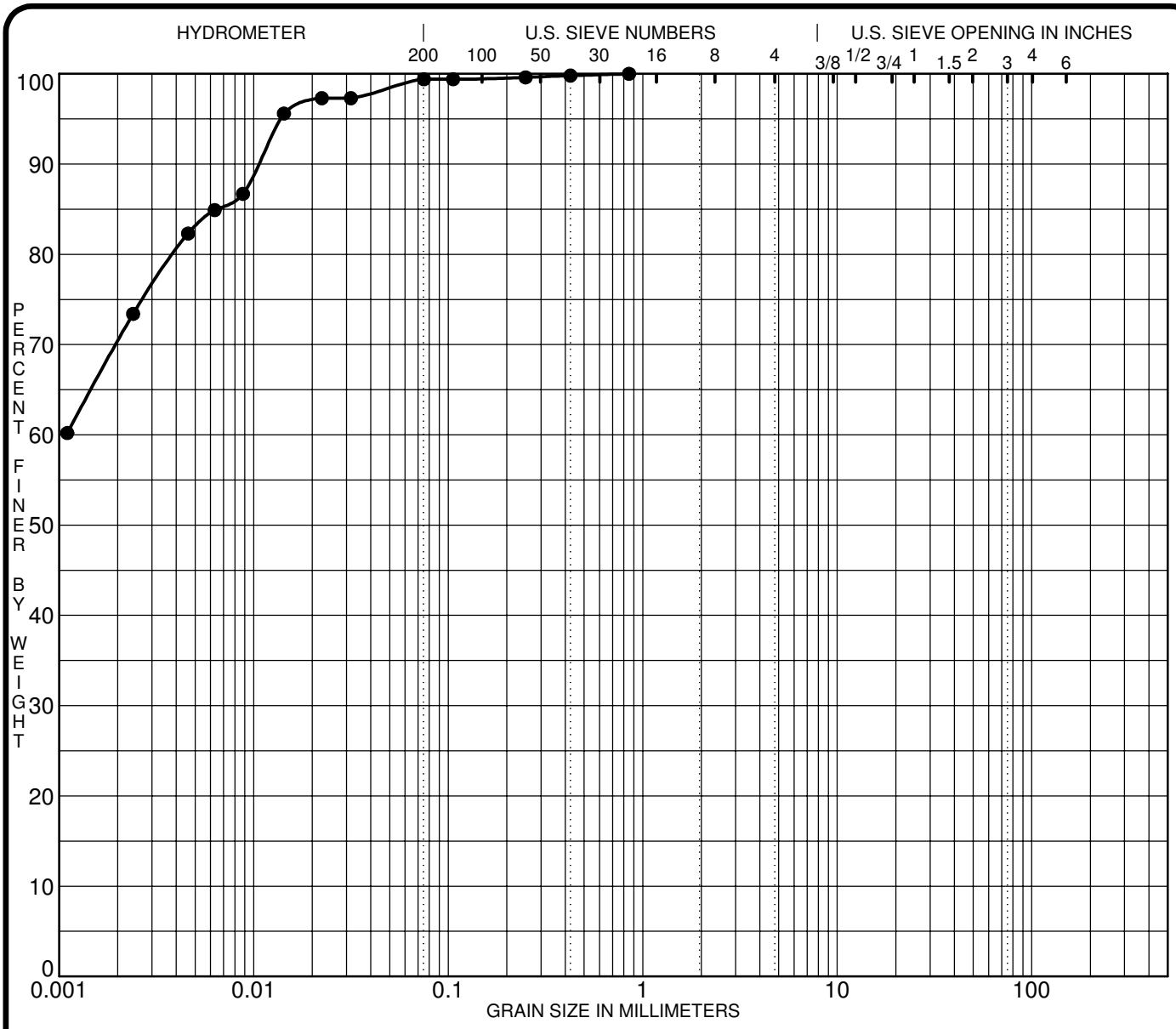
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH31-22 SS2**	**0.85**				**0.0**	**2.5**	**97.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH32-22 SS7**							
⊠								
▲								
★								

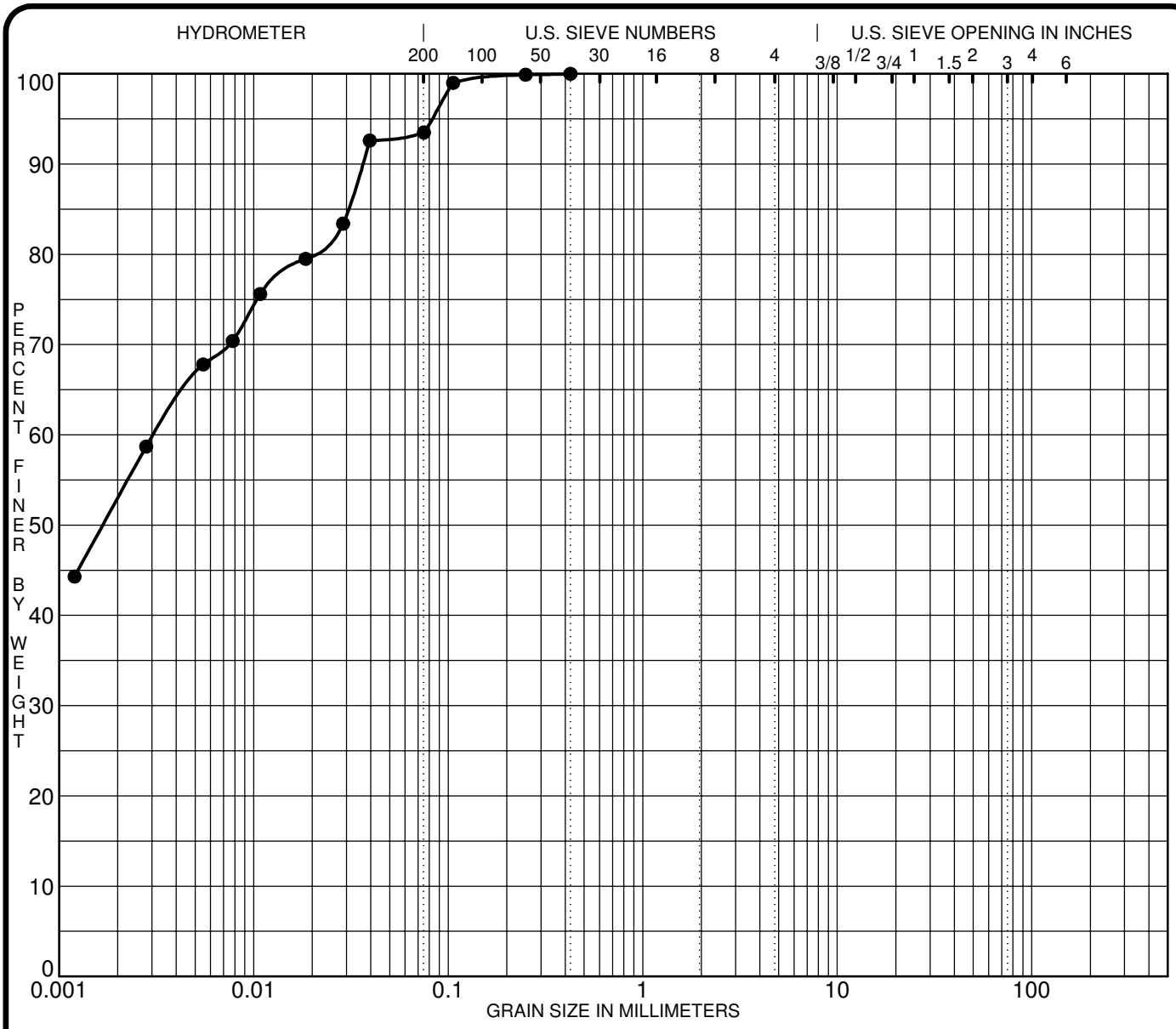
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH32-22 SS7**	**0.85**				**0.0**	**0.6**	**99.4**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH33-22 SS3**							
⊠								
▲								
★								

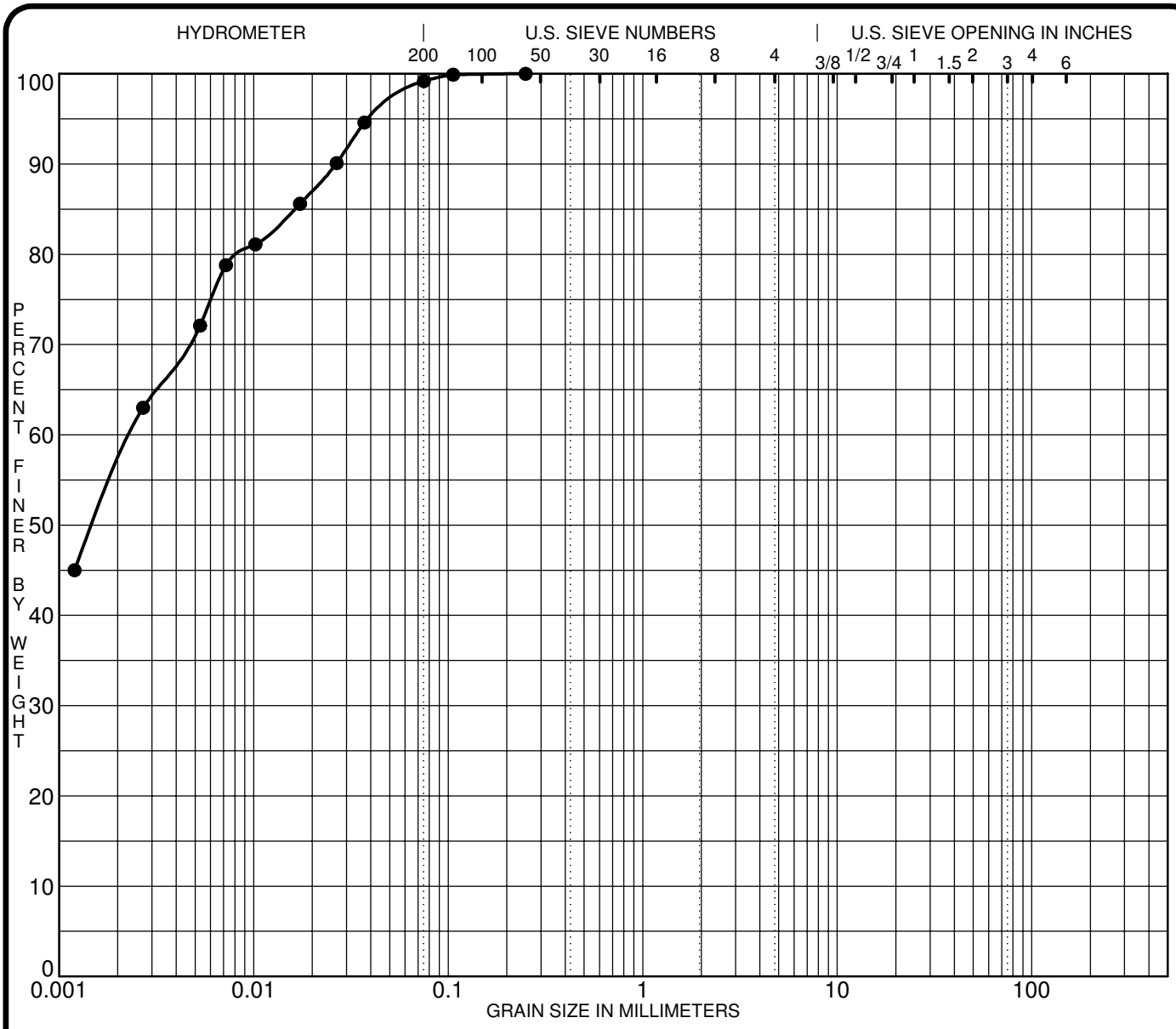
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH33-22 SS3**	**0.43**	**0.00**			**0.0**	**6.5**	**93.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH34-22 SS7**							
⊠							
▲							
★							

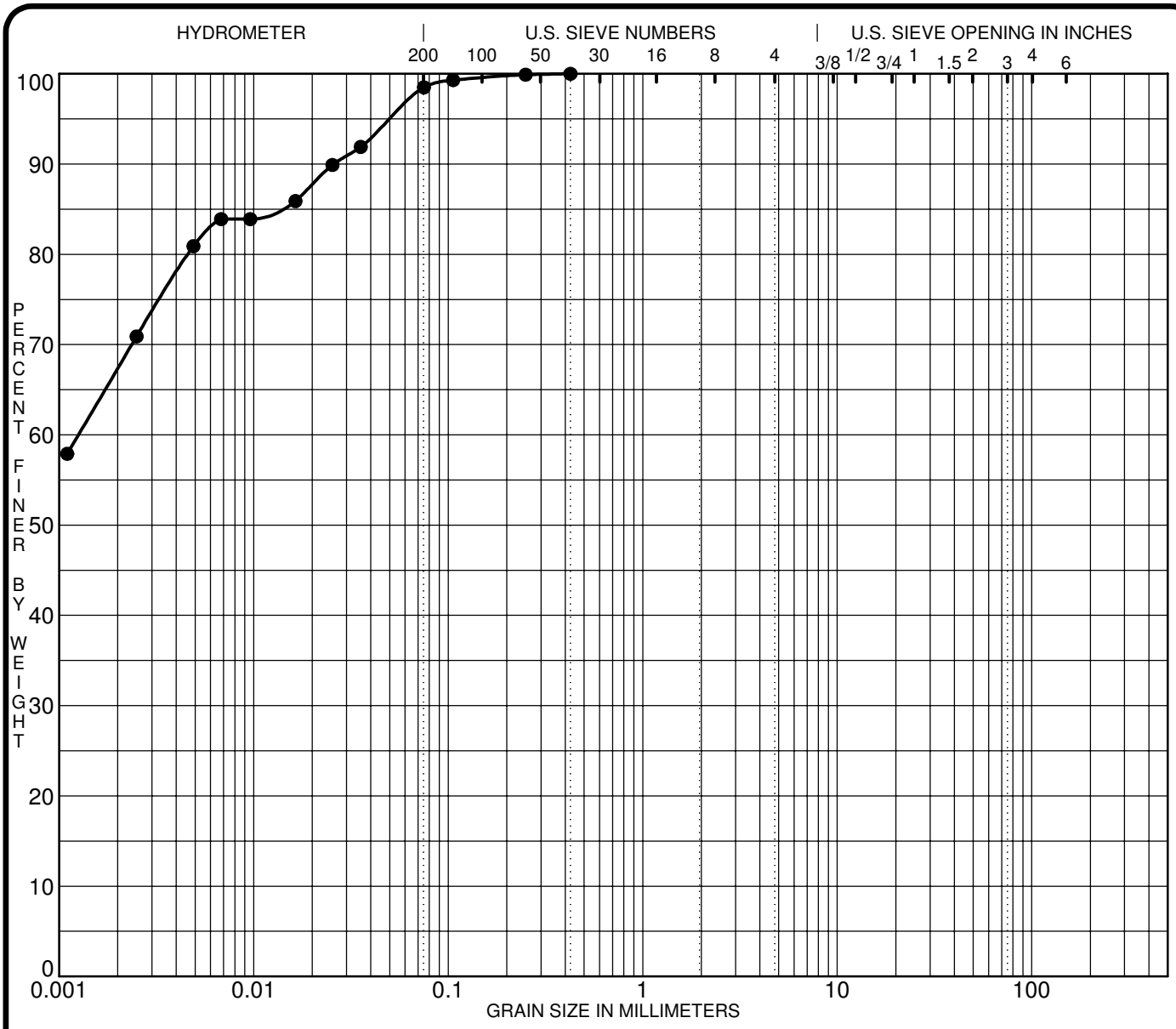
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH34-22 SS7**	**0.25**	**0.00**			**0.0**	**0.8**	**99.2**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **5 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH35-22 SS6**							
⊠								
▲								
★								

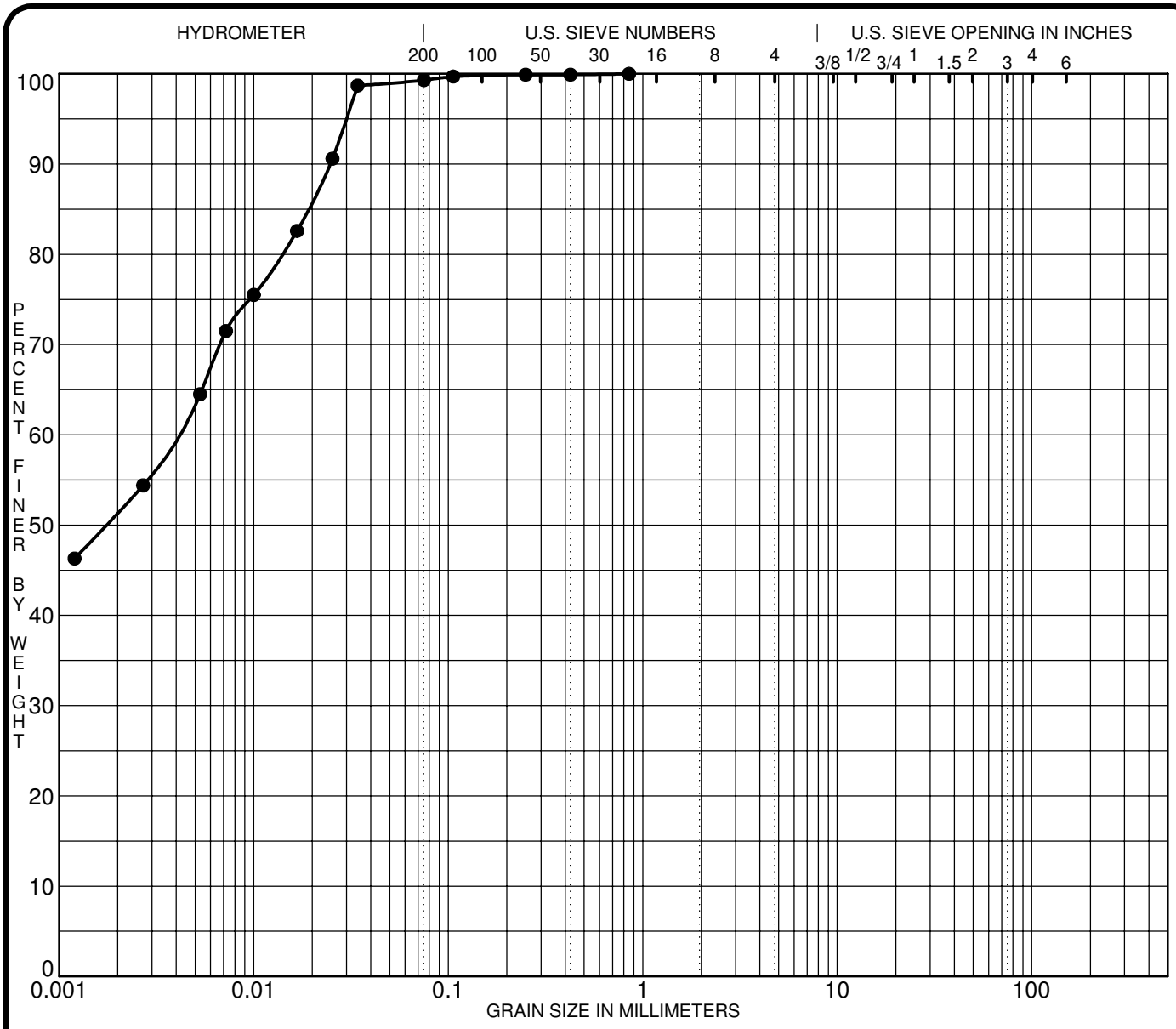
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH35-22 SS6**	**0.43**	**0.00**			**0.0**	**1.5**	**98.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **5 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH36-22 SS5**							
⊠								
▲								
★								

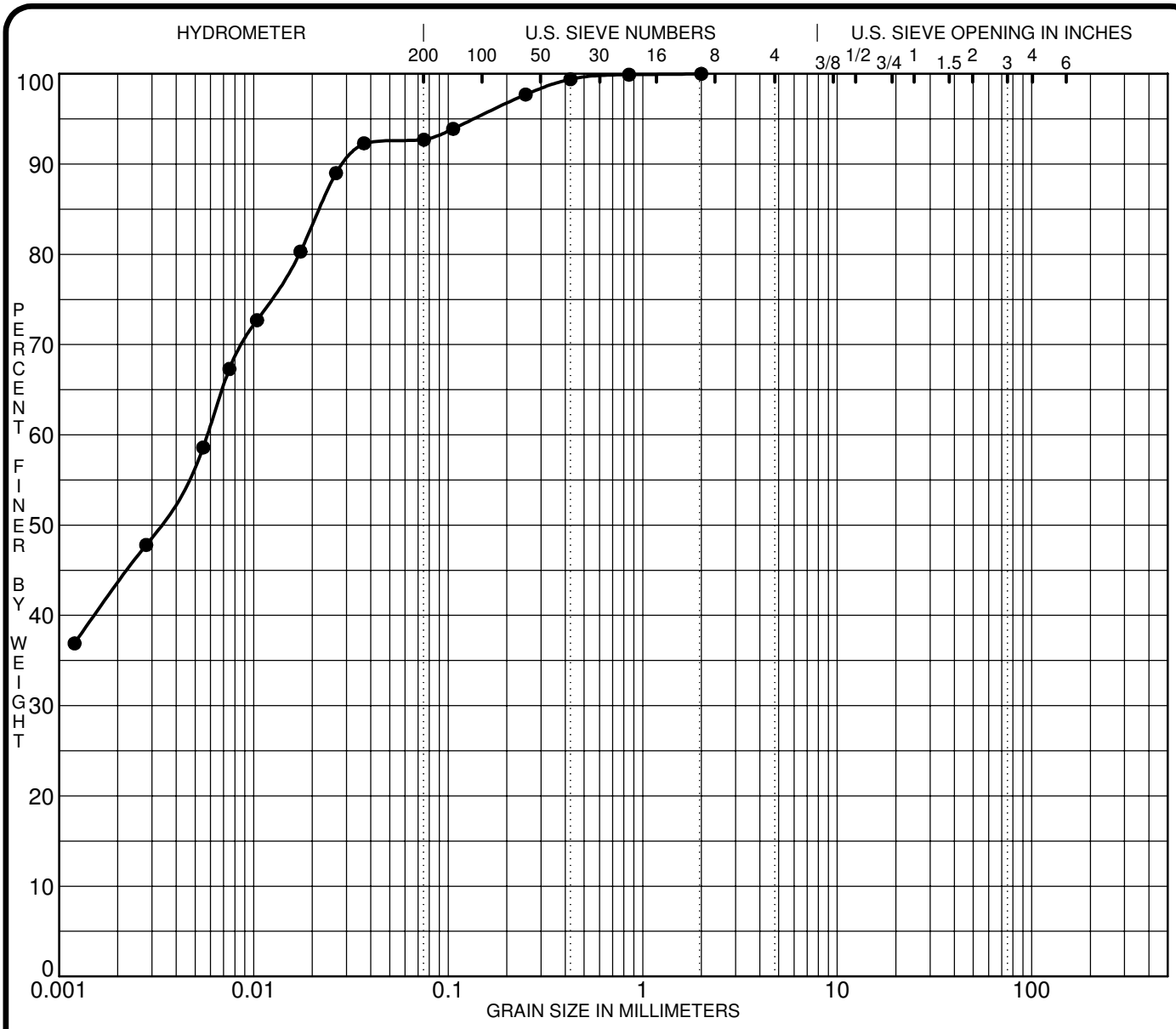
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH36-22 SS5**	**0.85**	**0.00**			**0.0**	**0.7**	**99.3**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **4 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH37-22 SS3**							
⊠								
▲								
★								

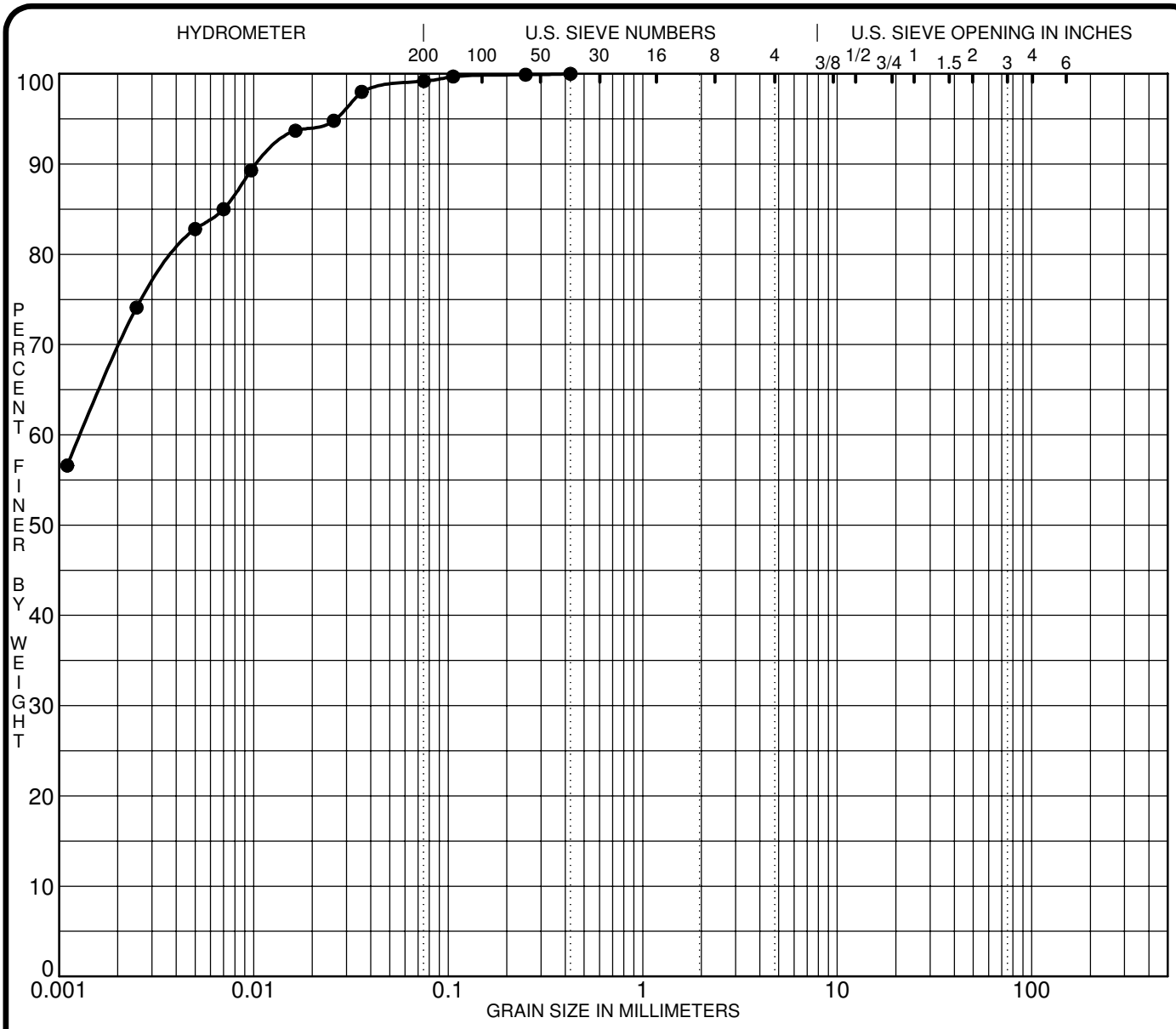
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH37-22 SS3**	**2.00**	**0.01**			**0.0**	**7.3**	**92.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **4 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH38-22 SS3**							
⊠							
▲							
★							

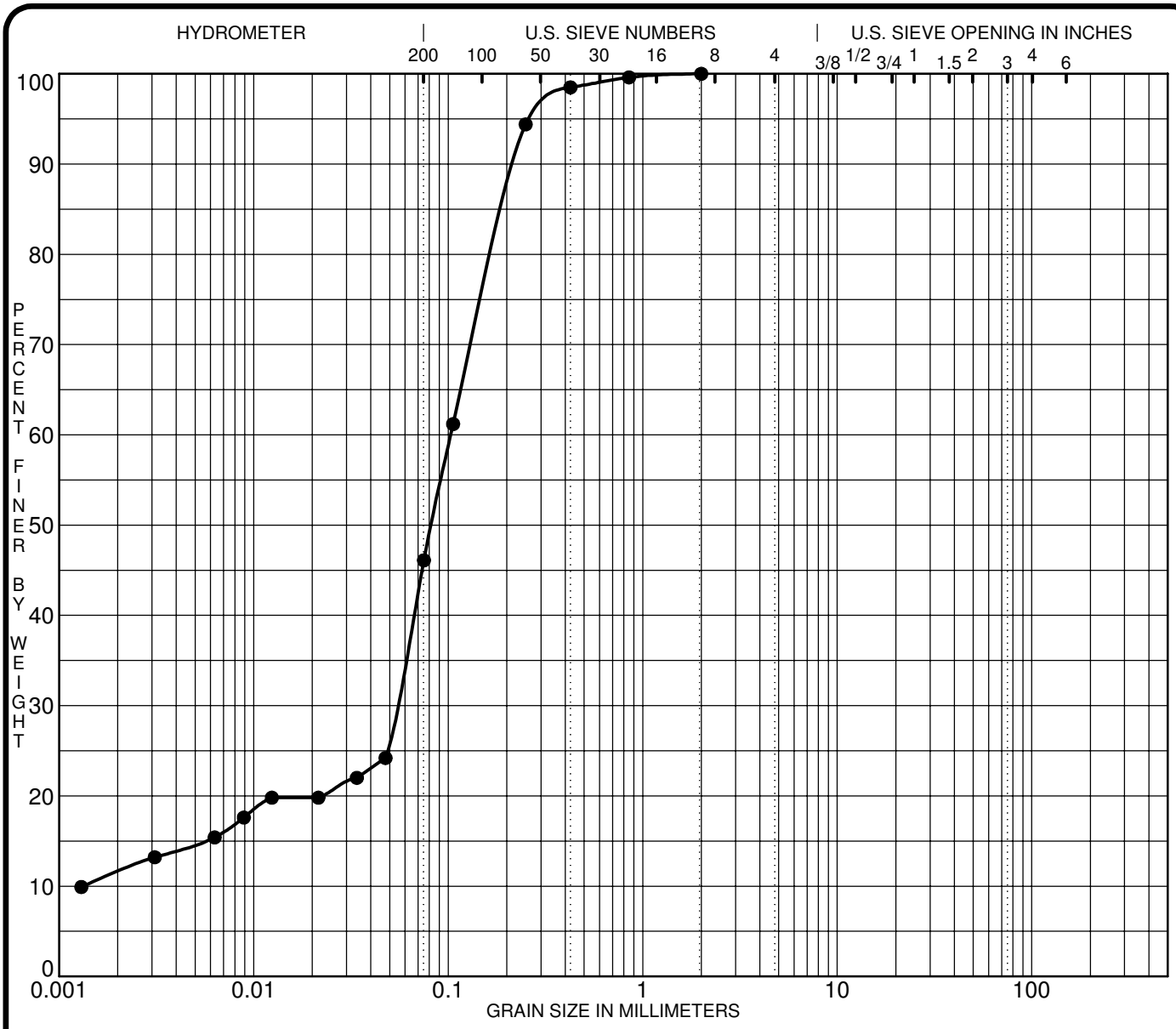
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH38-22 SS3**	**0.43**	**0.00**			**0.0**	**0.8**	**99.2**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **4 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH38A-22 SS1**						**20.94**	**77.3**
⊠								
▲								
★								

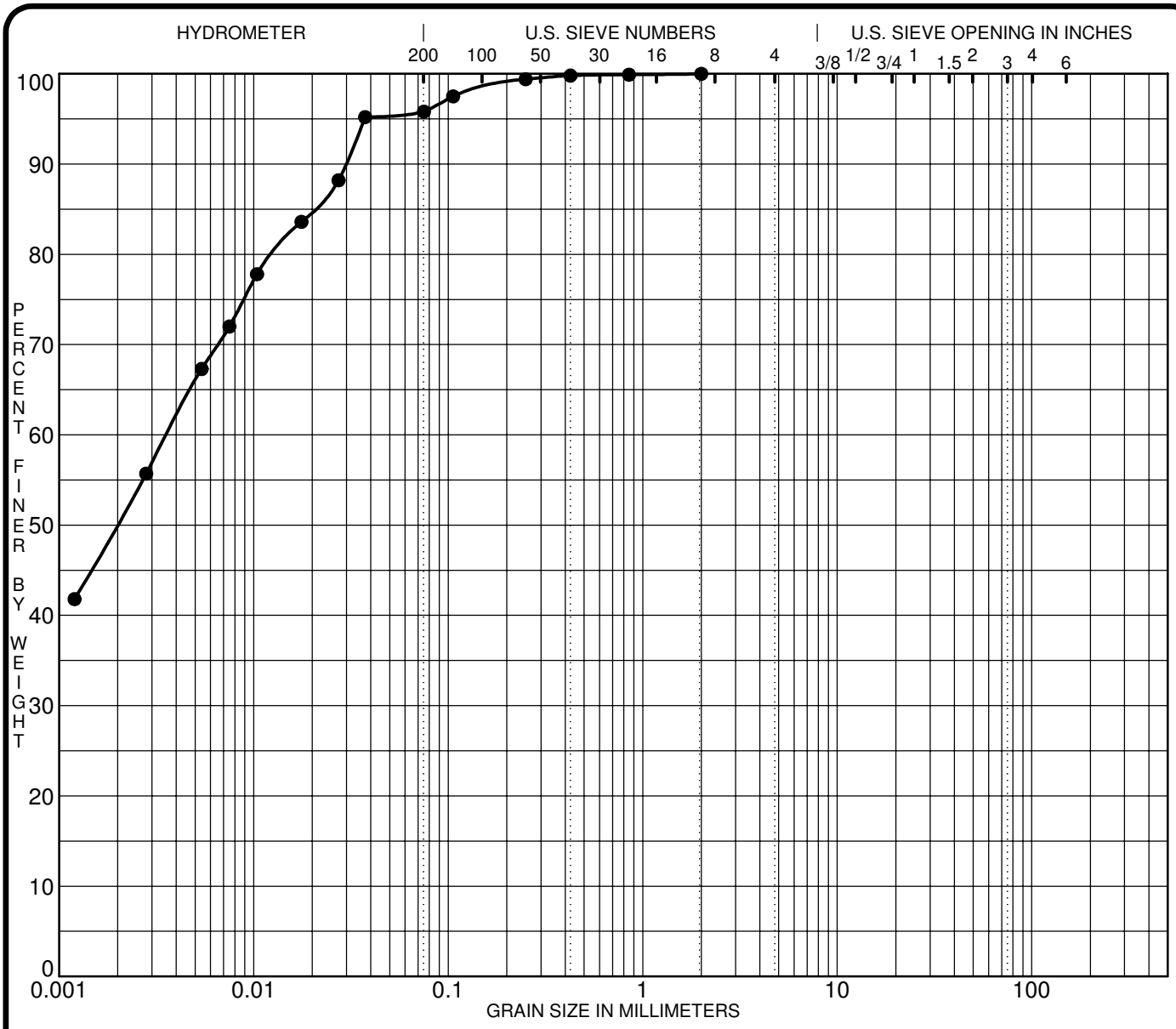
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH38A-22 SS1**	**2.00**	**0.10**	**0.054**	**0.0013**	**0.0**	**53.9**	**46.1**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **1 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH39-22 SS3**							
⊠								
▲								
★								

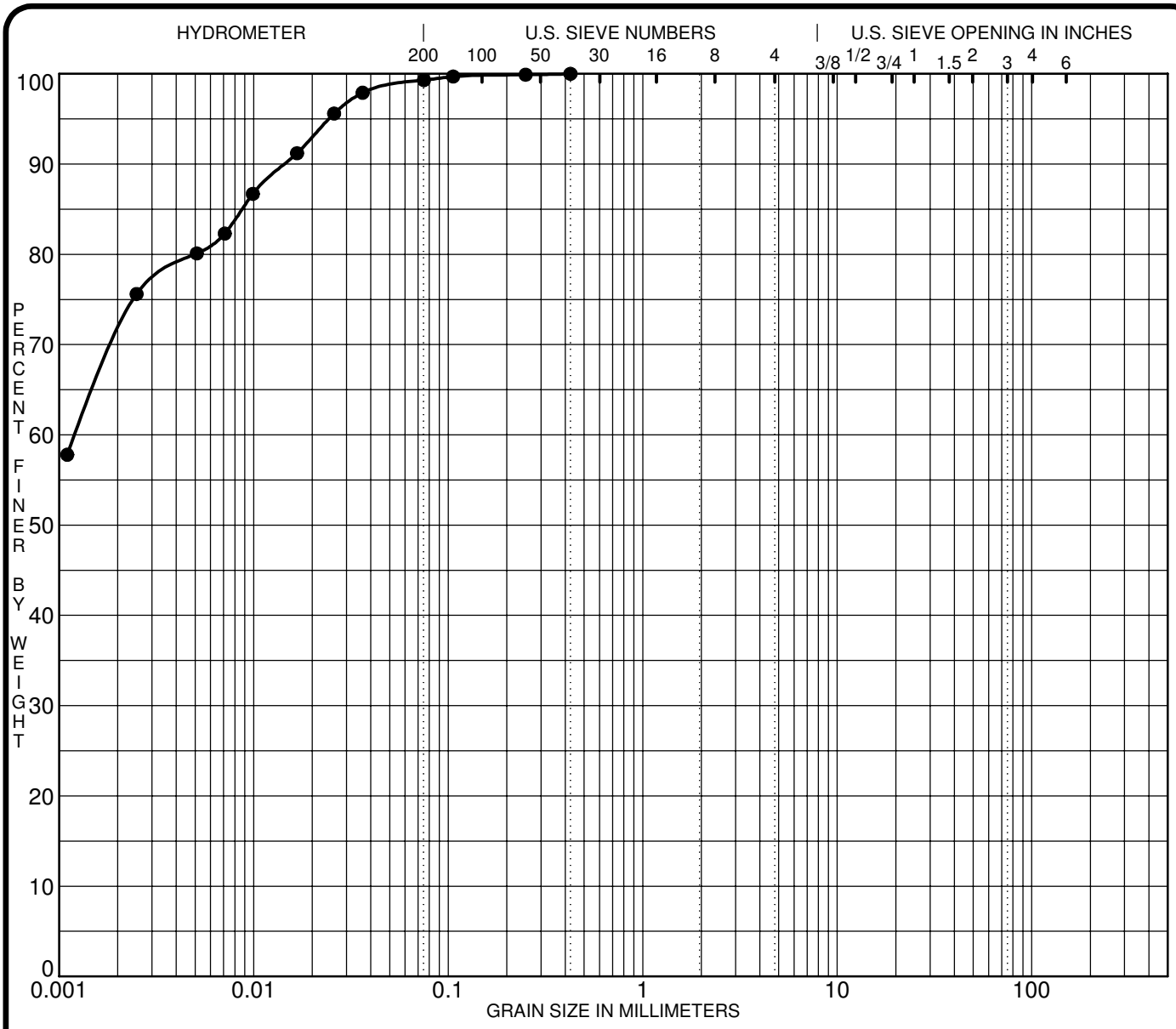
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH39-22 SS3**	**2.00**	**0.00**			**0.0**	**4.2**	**95.8**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **1 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH40-22 SS3**							
⊠							
▲							
★							

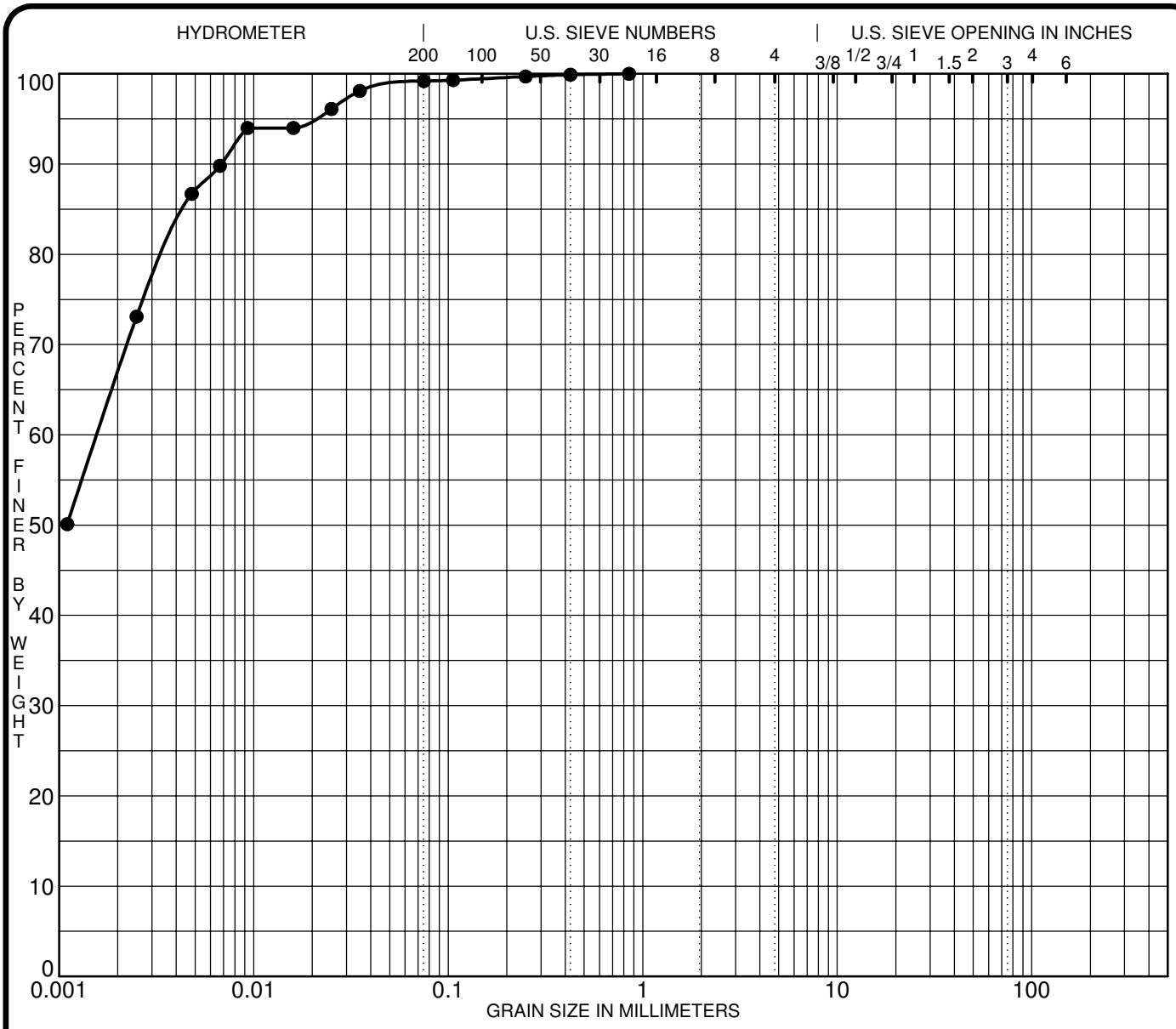
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH40-22 SS3**	**0.43**	**0.00**			**0.0**	**0.7**	**99.3**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **16 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH41-22 SS9**							
⊠							
▲							
★							

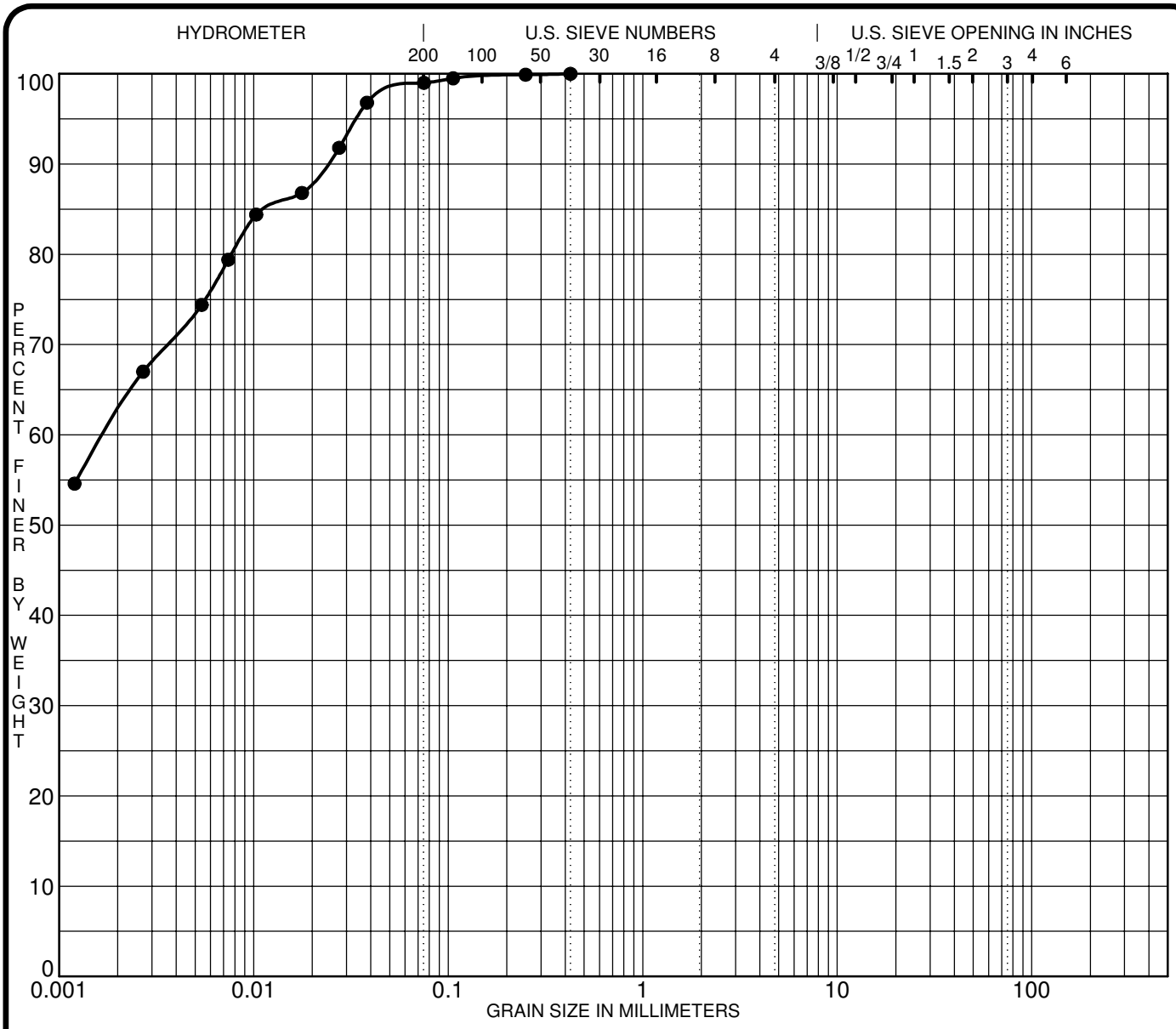
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH41-22 SS9**	**0.85**	**0.00**			**0.0**	**0.8**	**99.2**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **16 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH42-22 SS3**							
⊠								
▲								
★								

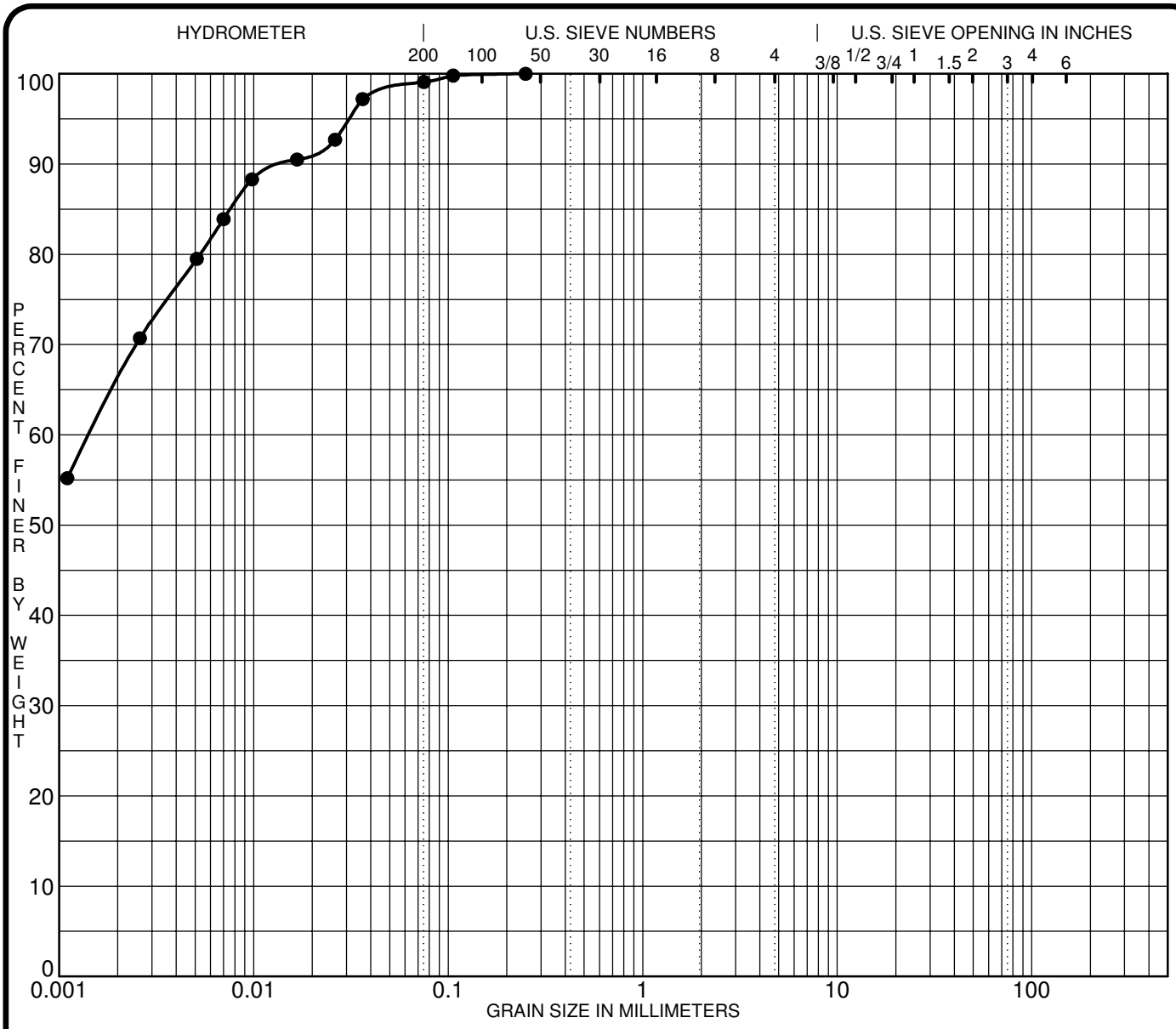
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH42-22 SS3**	**0.43**	**0.00**			**0.0**	**1.0**	**99.0**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **17 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH43-22 SS3**							
⊠								
▲								
★								

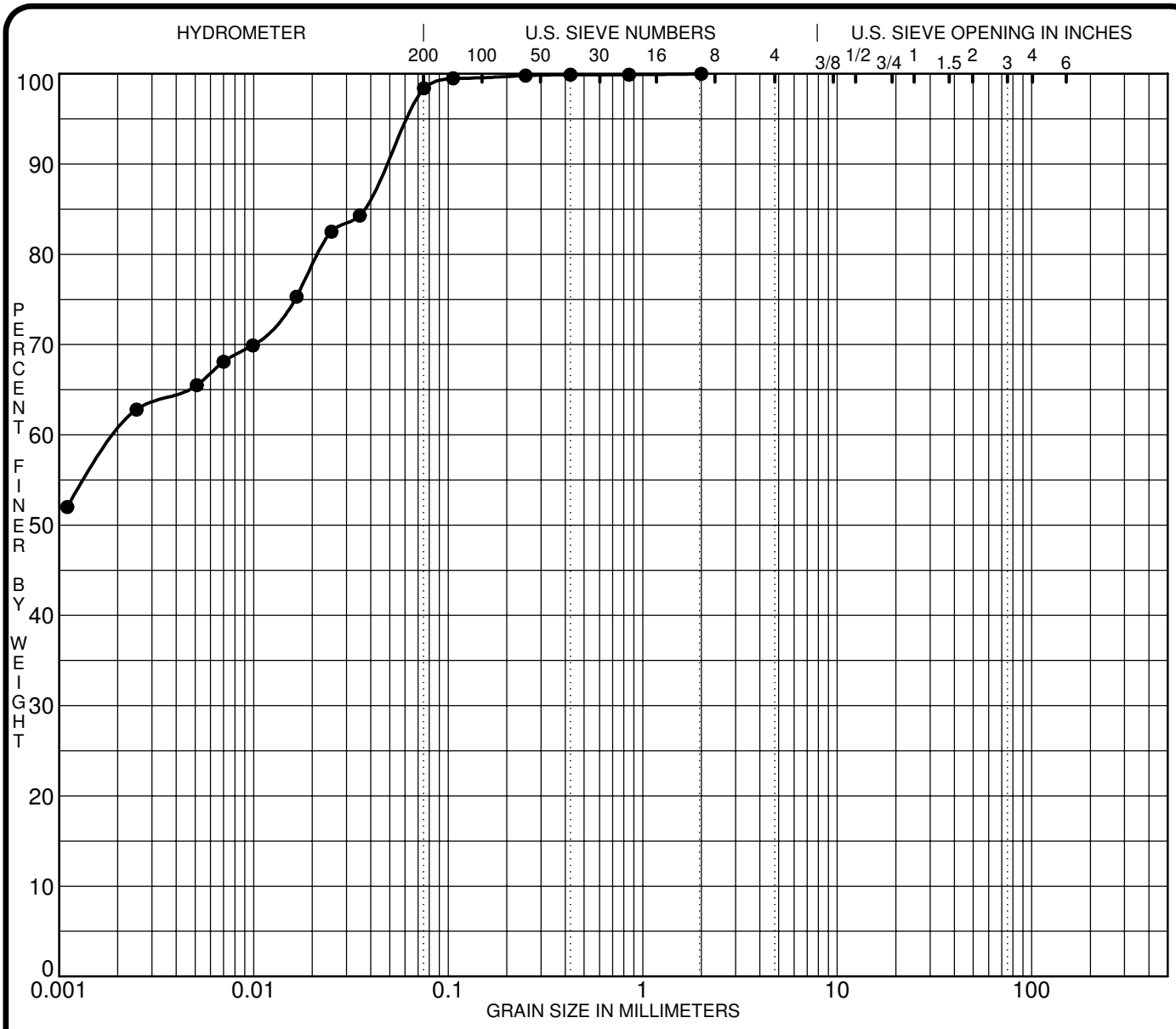
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH43-22 SS3**	**0.25**	**0.00**			**0.0**	**0.9**	**99.1**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **17 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH44-22 SS3**							
⊠							
▲							
★							

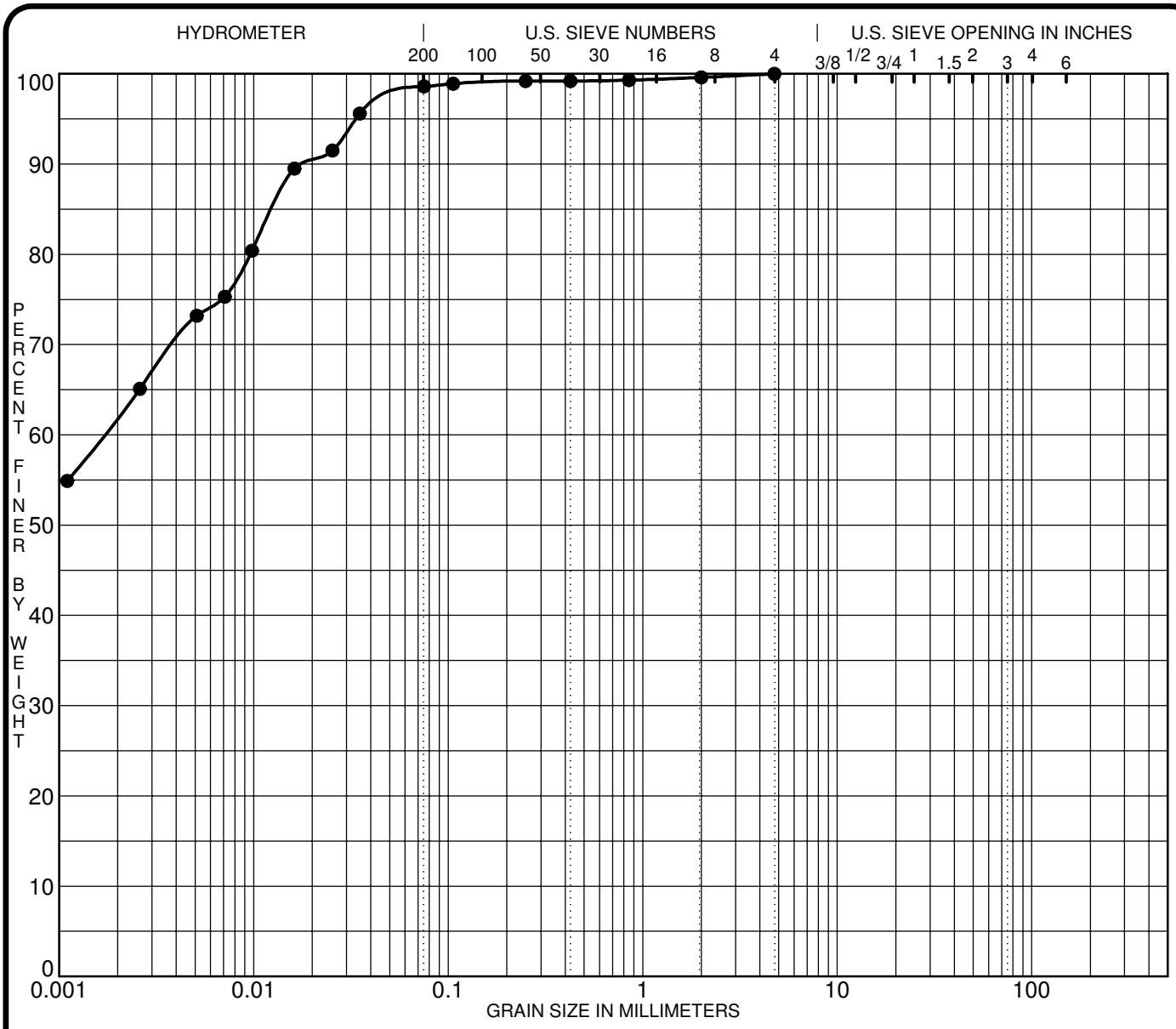
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH44-22 SS3**	**2.00**	**0.00**			**0.0**	**1.6**	**98.4**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **17 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH45-22 SS3**							
⊠							
▲							
★							

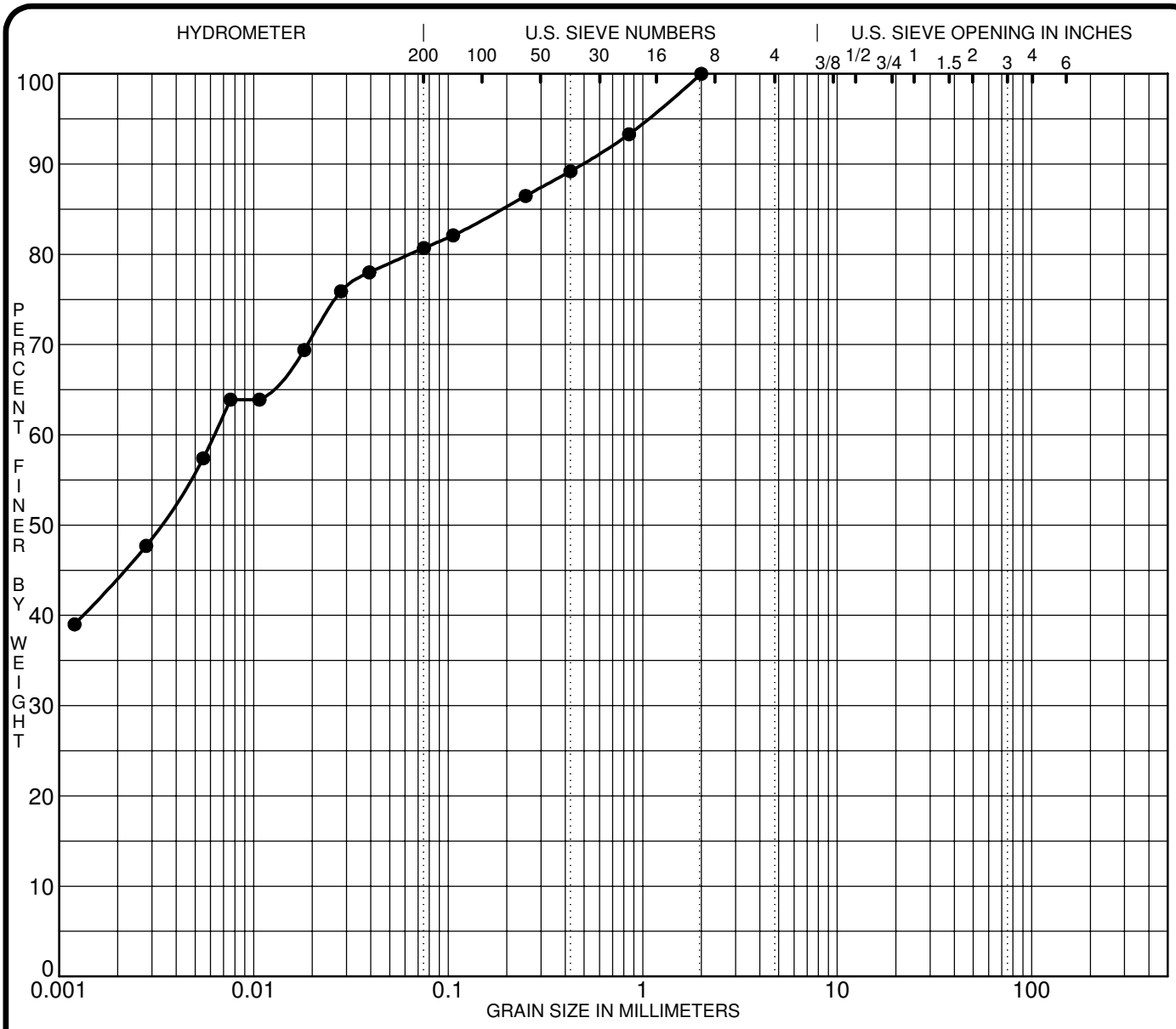
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH45-22 SS3**	**4.75**	**0.00**			**0.0**	**1.4**	**98.6**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **18 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH45A-22 SS1**							
⊠							
▲							
★							

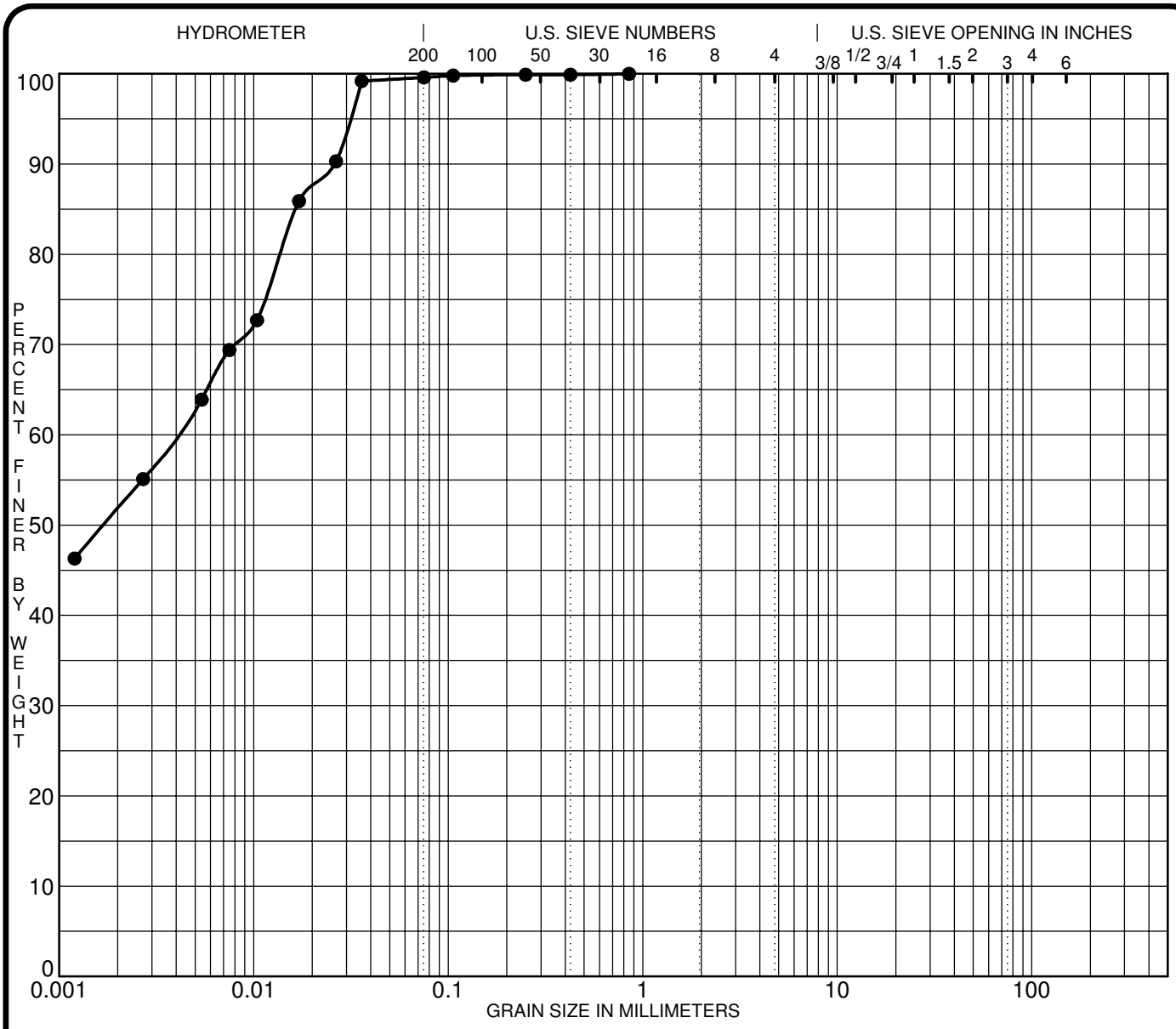
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH45A-22 SS1**	**2.00**	**0.01**			**0.0**	**19.3**	**80.7**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **18 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH46-22 SS10**							
⊠							
▲							
★							

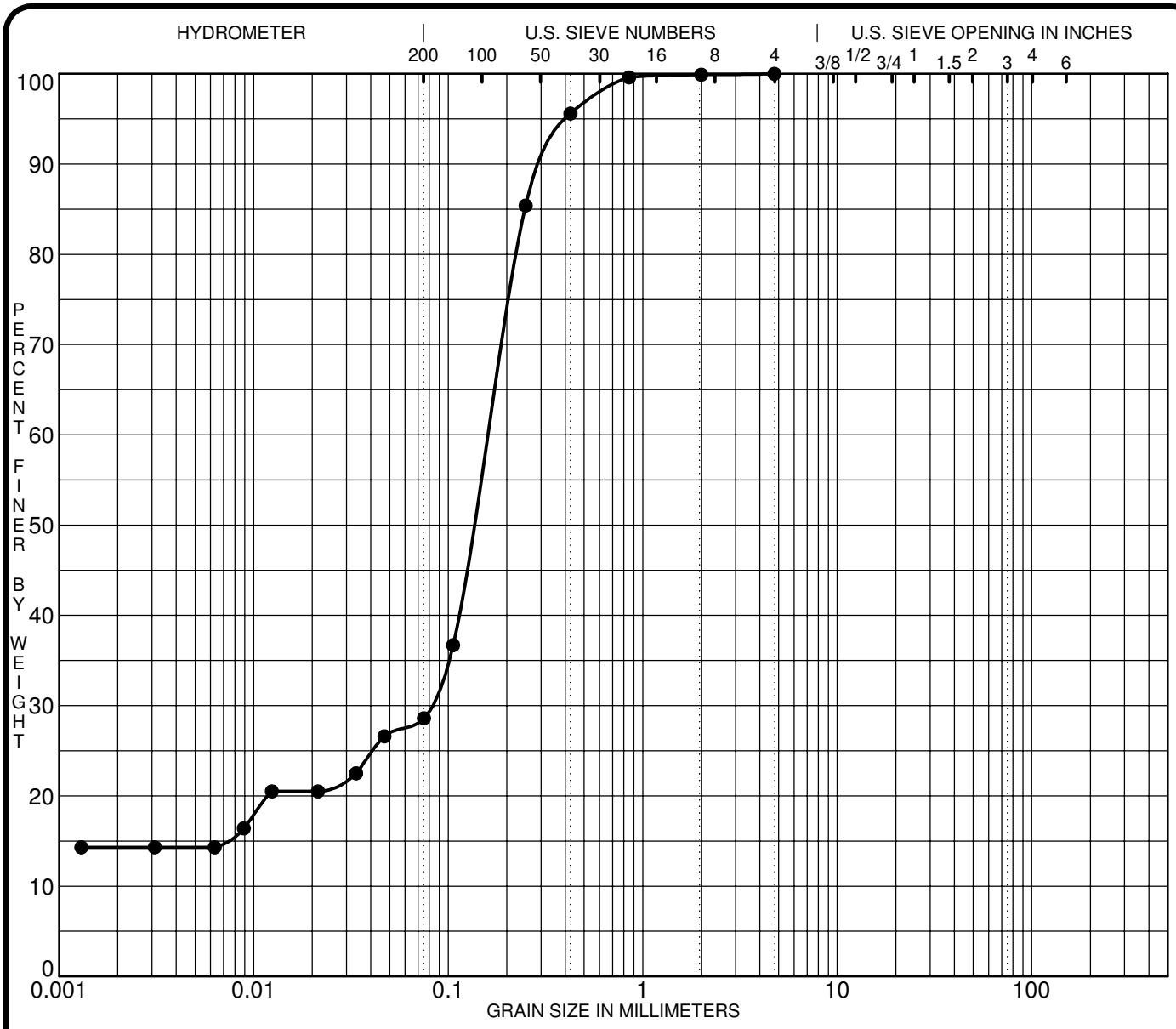
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH46-22 SS10**	**0.85**	**0.00**			**0.0**	**0.4**	**99.6**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **18 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH47-22 SS1**							
⊠								
▲								
★								

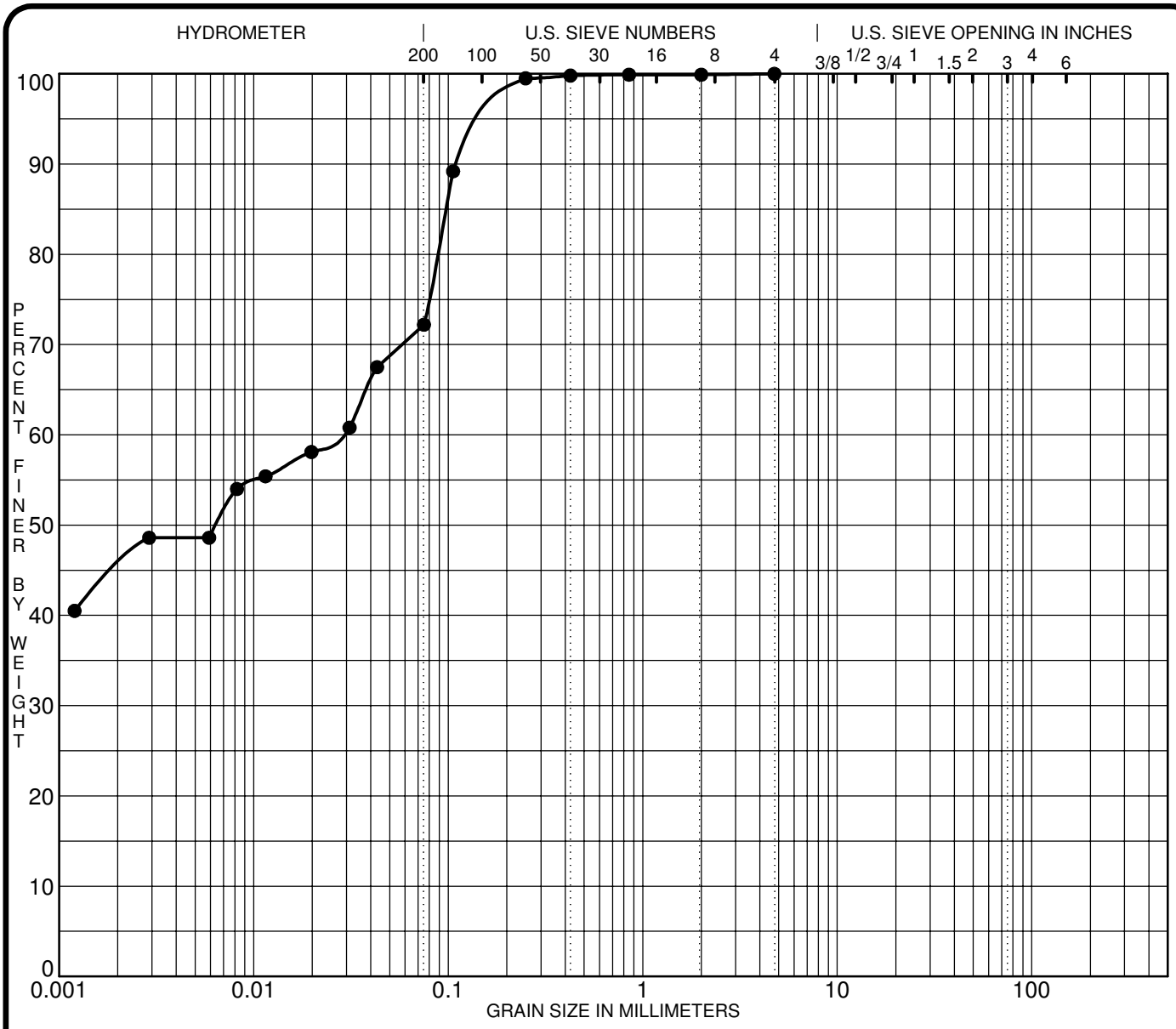
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH47-22 SS1**	**4.75**	**0.16**	**0.080**		**0.0**	**71.4**	**28.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **21 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH48-22 SS3**							
⊠								
▲								
★								

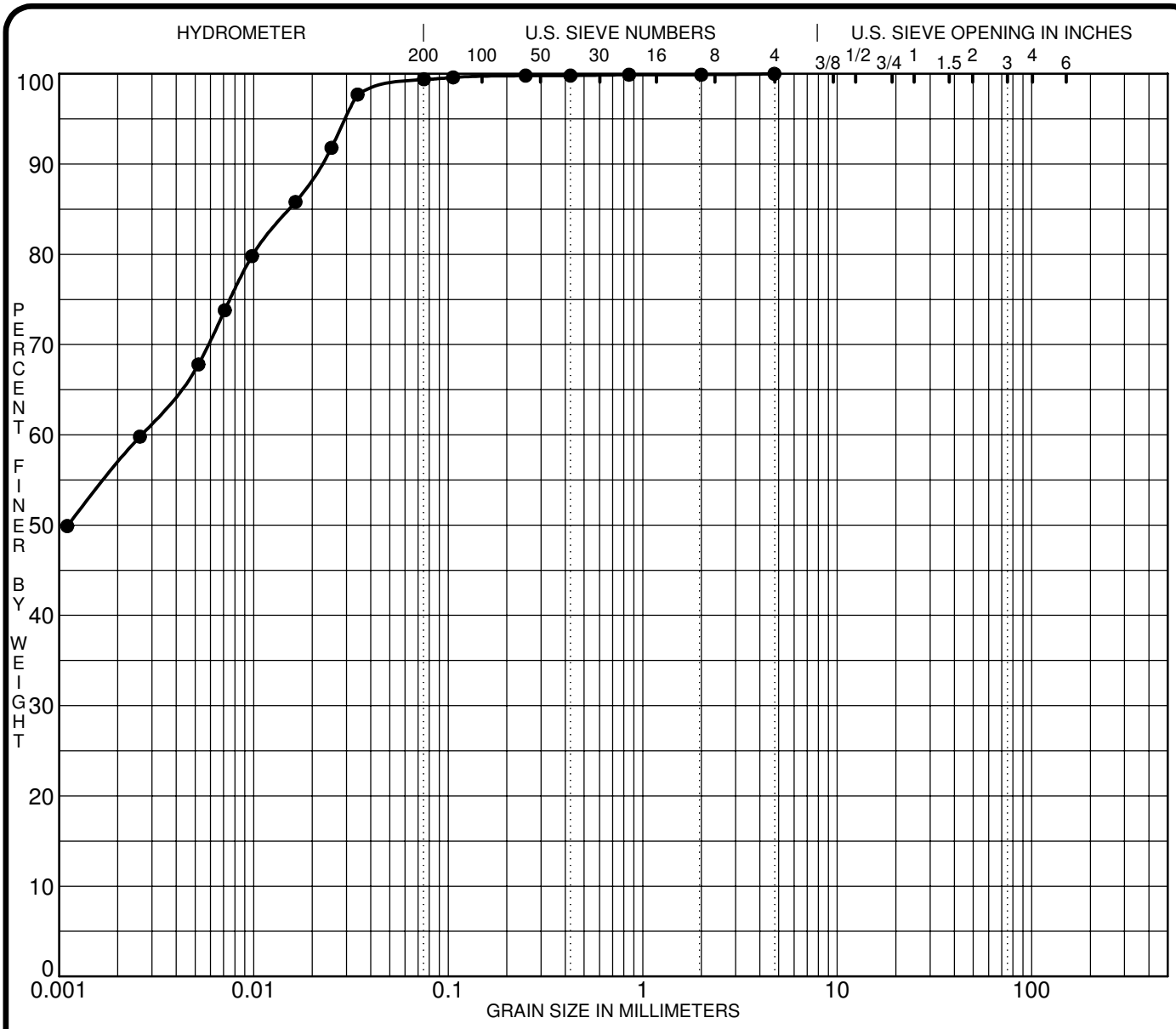
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH48-22 SS3**	**4.75**	**0.03**			**0.0**	**27.8**	**72.2**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **21 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH49-22 SS8**							
⊠							
▲							
★							

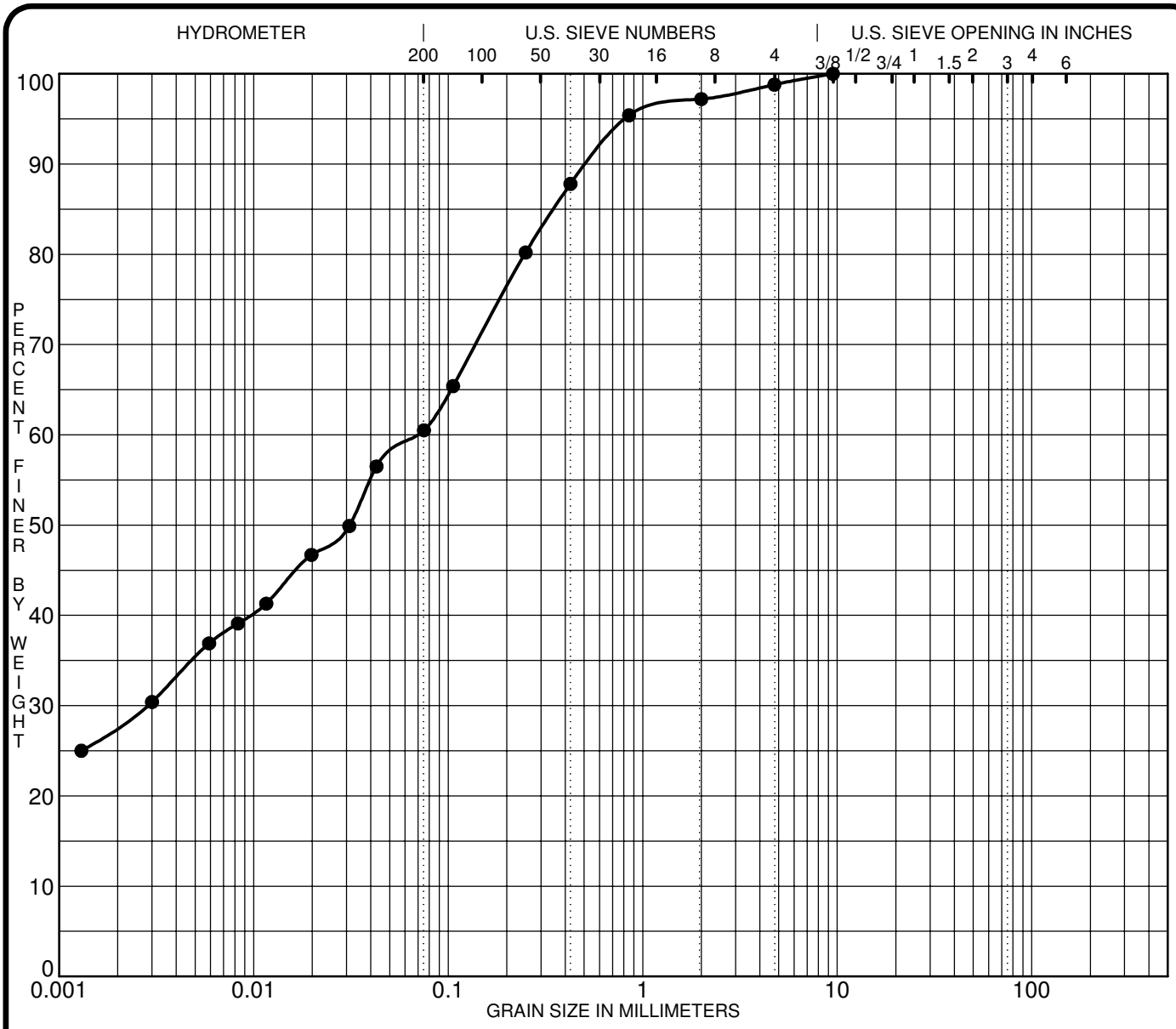
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH49-22 SS8**	**4.75**	**0.00**			**0.0**	**0.6**	**99.4**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **22 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH49A-22 SS1**							
⊠								
▲								
★								

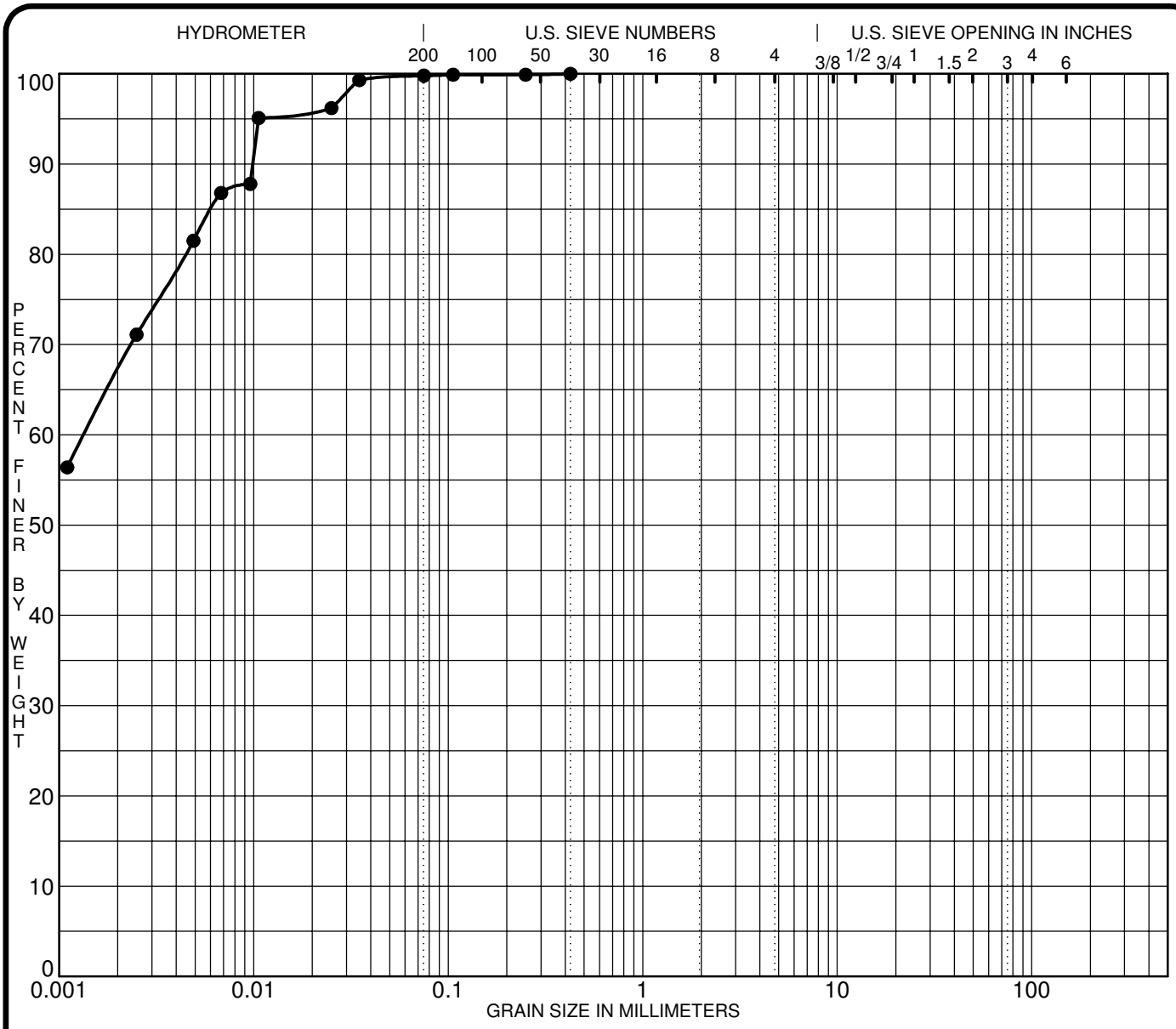
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH49A-22 SS1**	**9.50**	**0.07**	**0.003**		**1.2**	**38.3**	**60.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **22 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH50-22 SS8**							
⊠								
▲								
★								

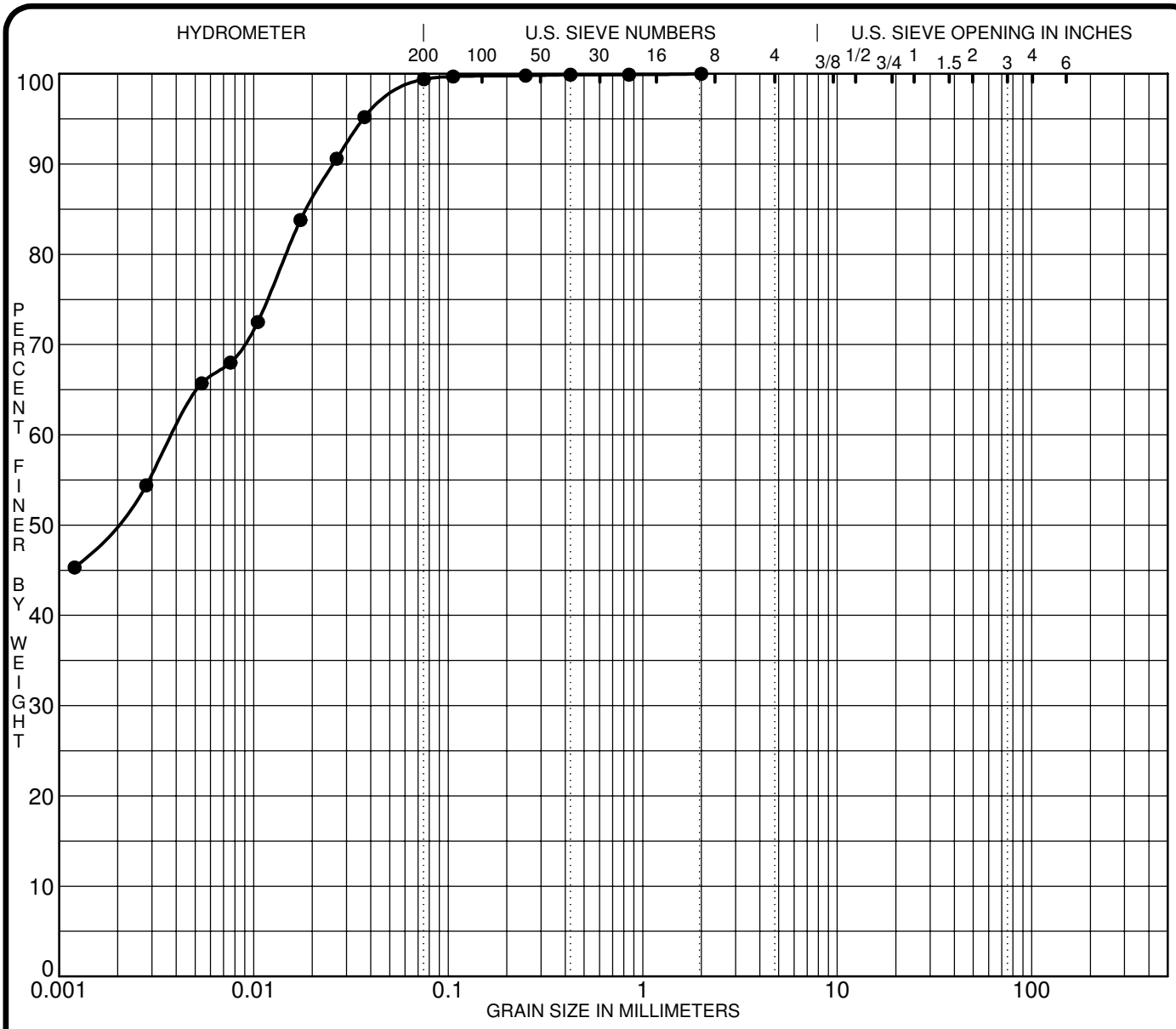
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH50-22 SS8**	**0.43**	**0.00**			**0.0**	**0.2**	**99.8**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **23 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH51-22 SS6**							
⊠								
▲								
★								

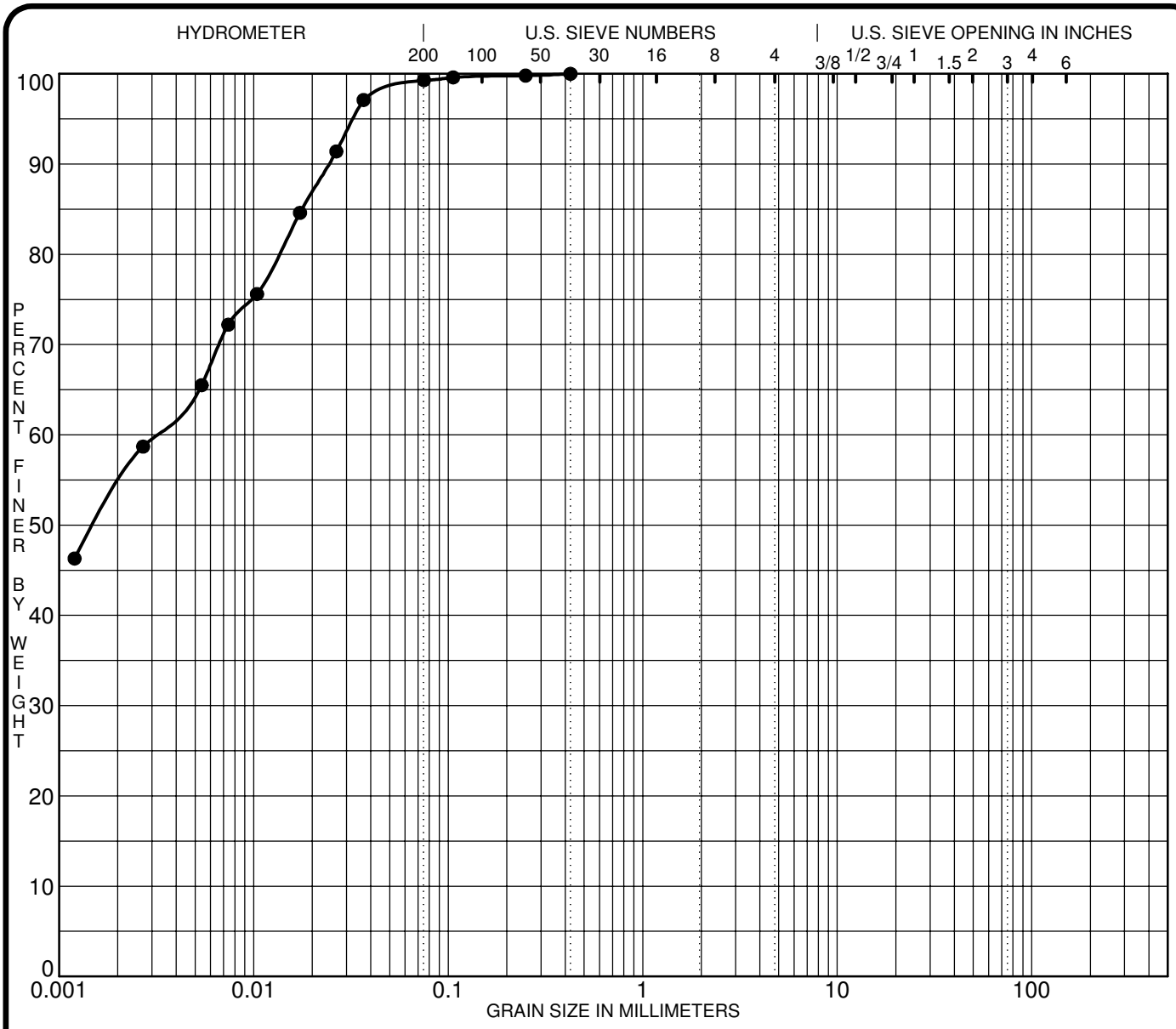
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH51-22 SS6**	**2.00**	**0.00**			**0.0**	**0.6**	**99.4**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **23 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH52-22 SS6**	**CH - Inorganic clays of high plasticity**		**53**	**25**	**28**		
⊠								
▲								
★								

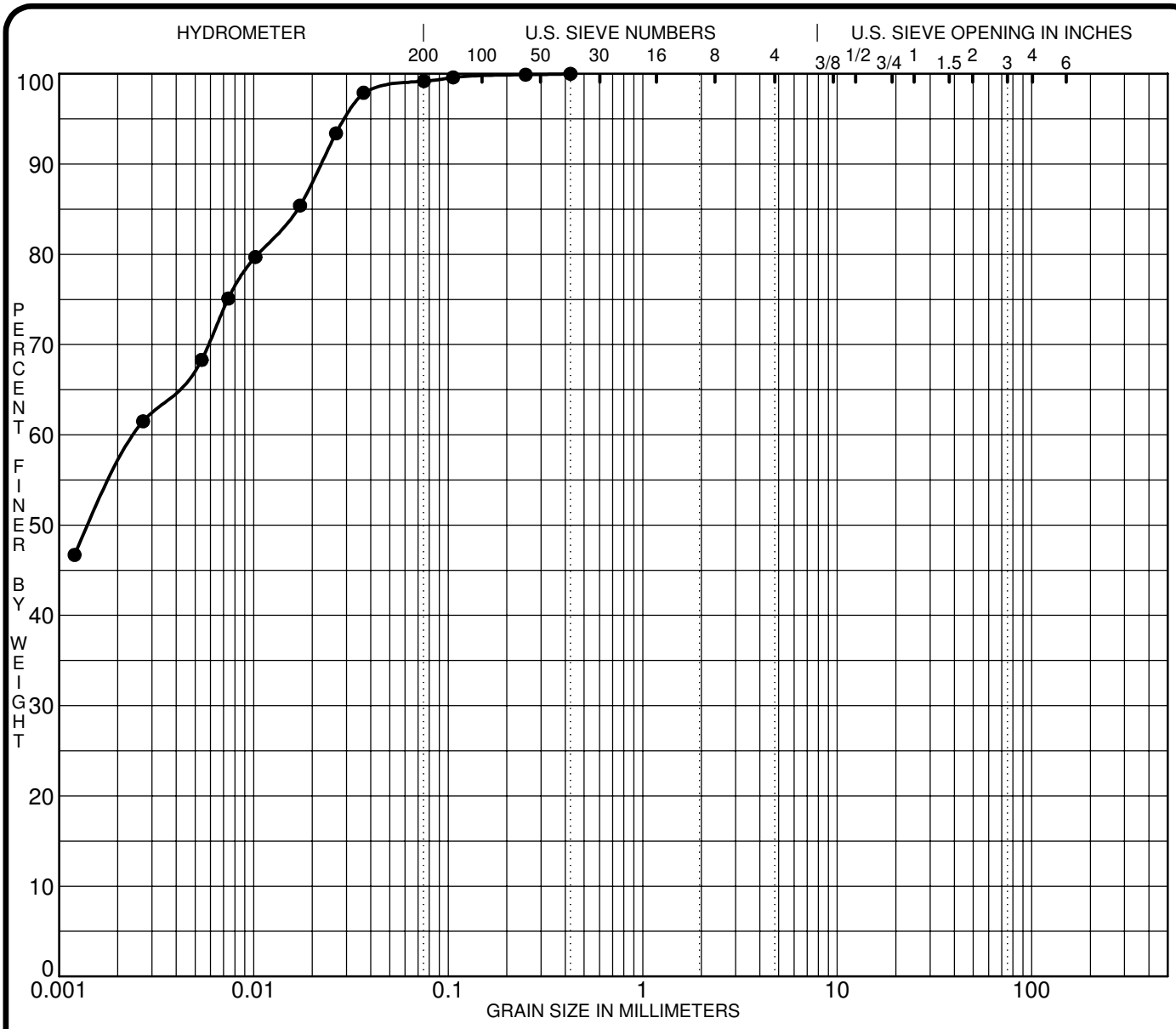
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH52-22 SS6**	**0.43**	**0.00**			**0.0**	**0.7**	**99.3**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **23 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH53-22 SS5**							
⊠								
▲								
★								

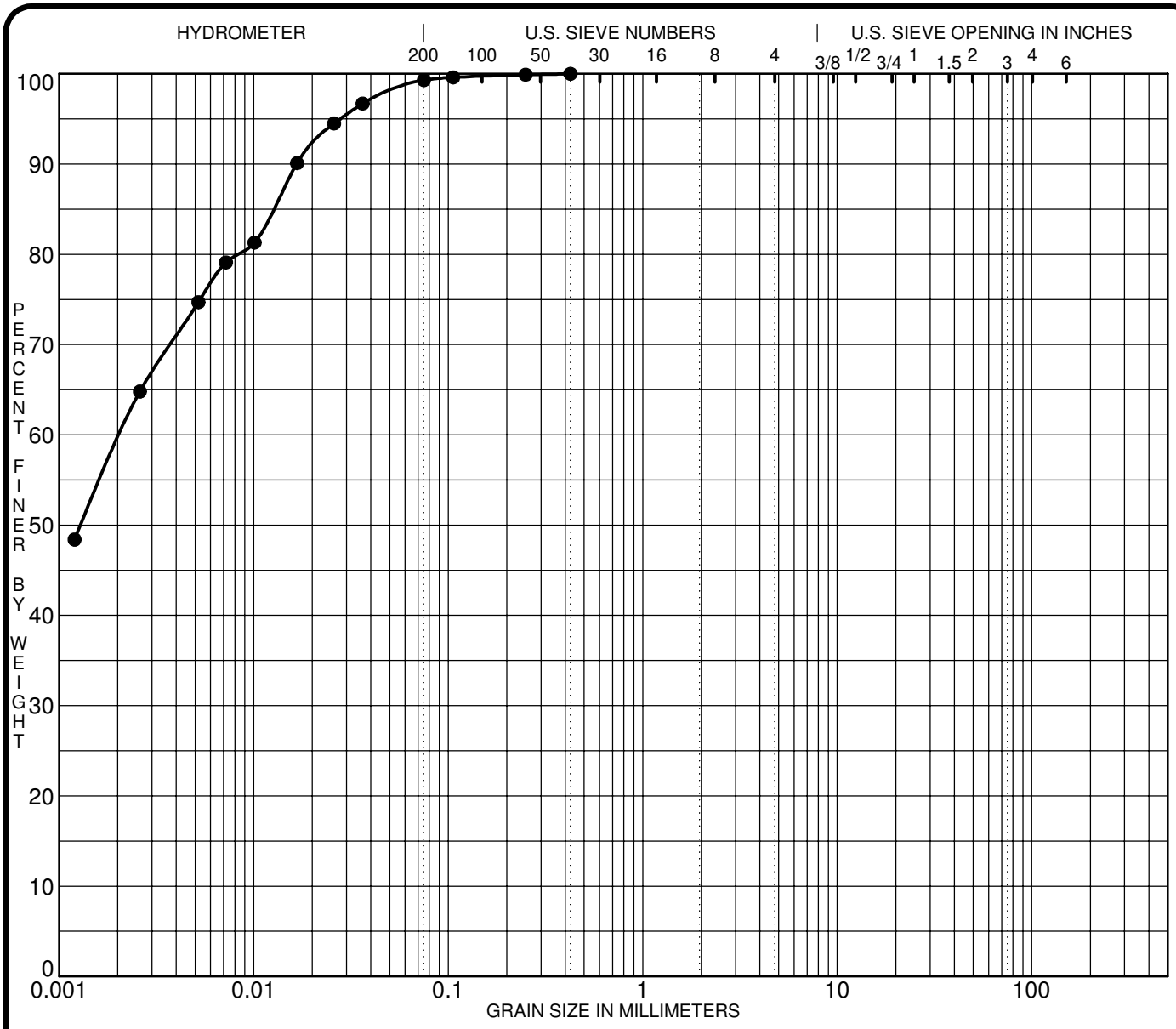
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH53-22 SS5**	**0.43**	**0.00**			**0.0**	**0.8**	**99.2**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **24 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH54-22 SS7**							
⊠								
▲								
★								

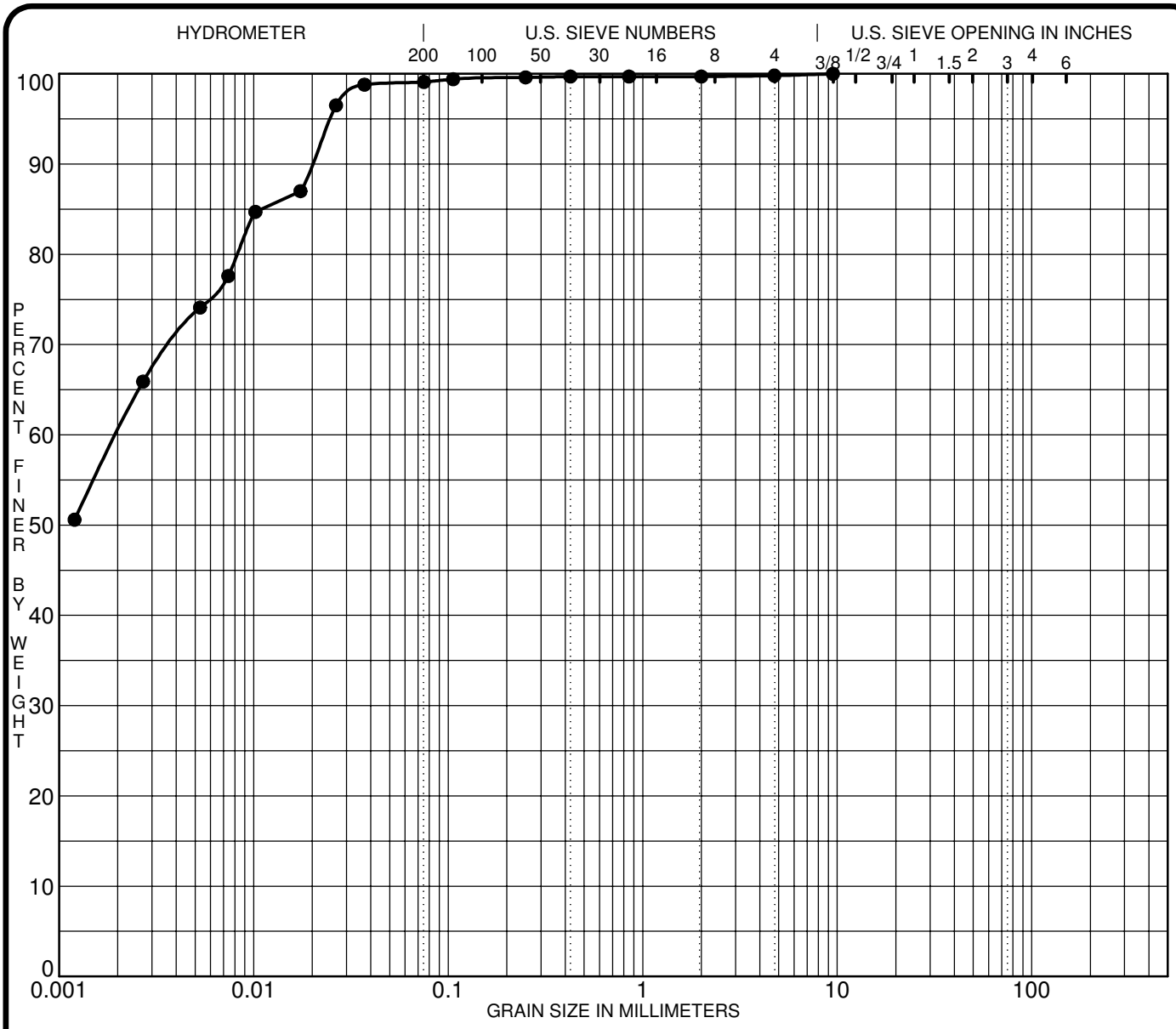
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH54-22 SS7**	**0.43**	**0.00**			**0.0**	**0.7**	**99.3**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **24 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH55-22 SS5**							
⊠							
▲							
★							

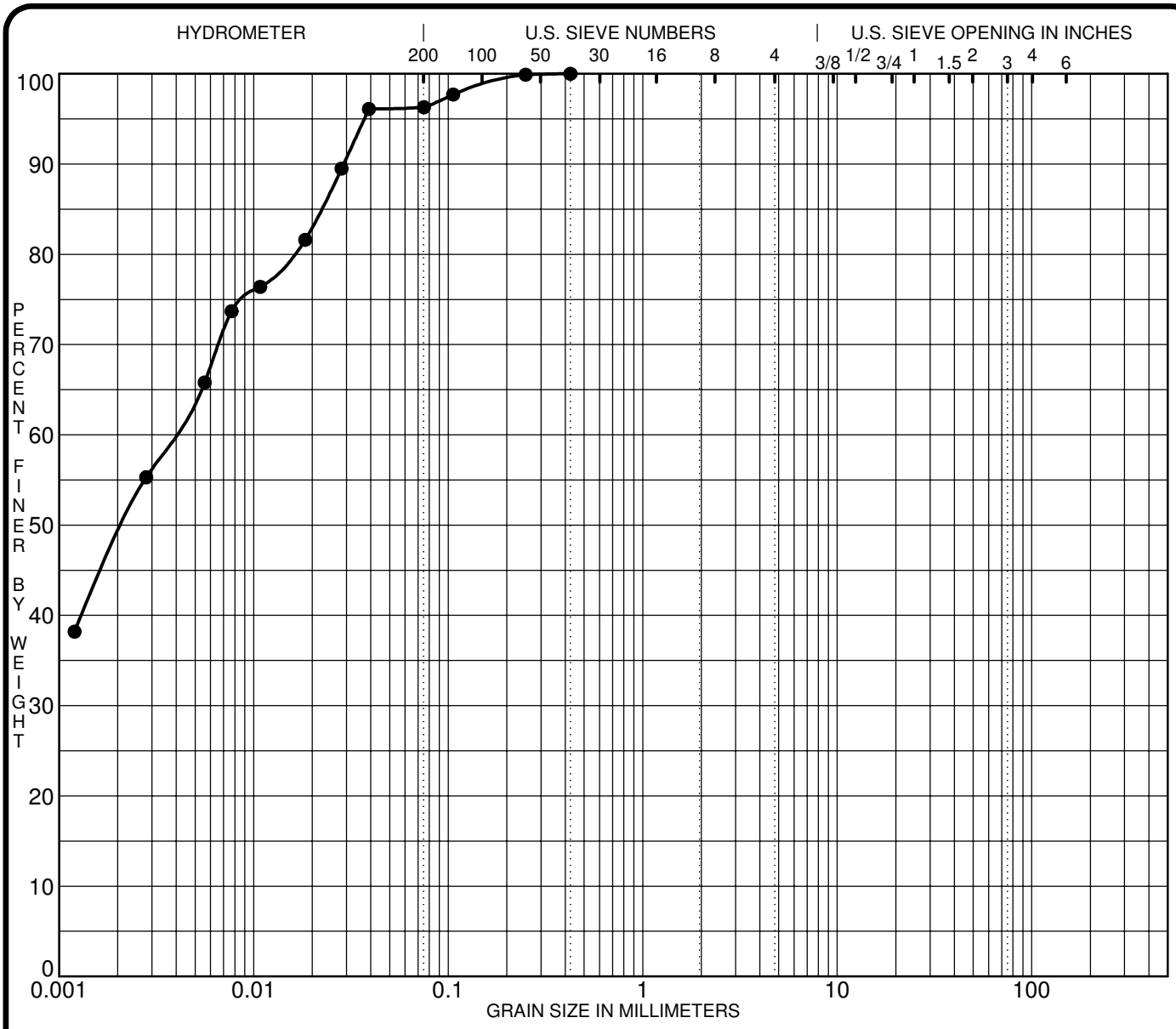
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH55-22 SS5**	**9.50**	**0.00**			**0.2**	**0.7**	**99.1**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **24 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH56A-22 SS2**							
⊠								
▲								
★								

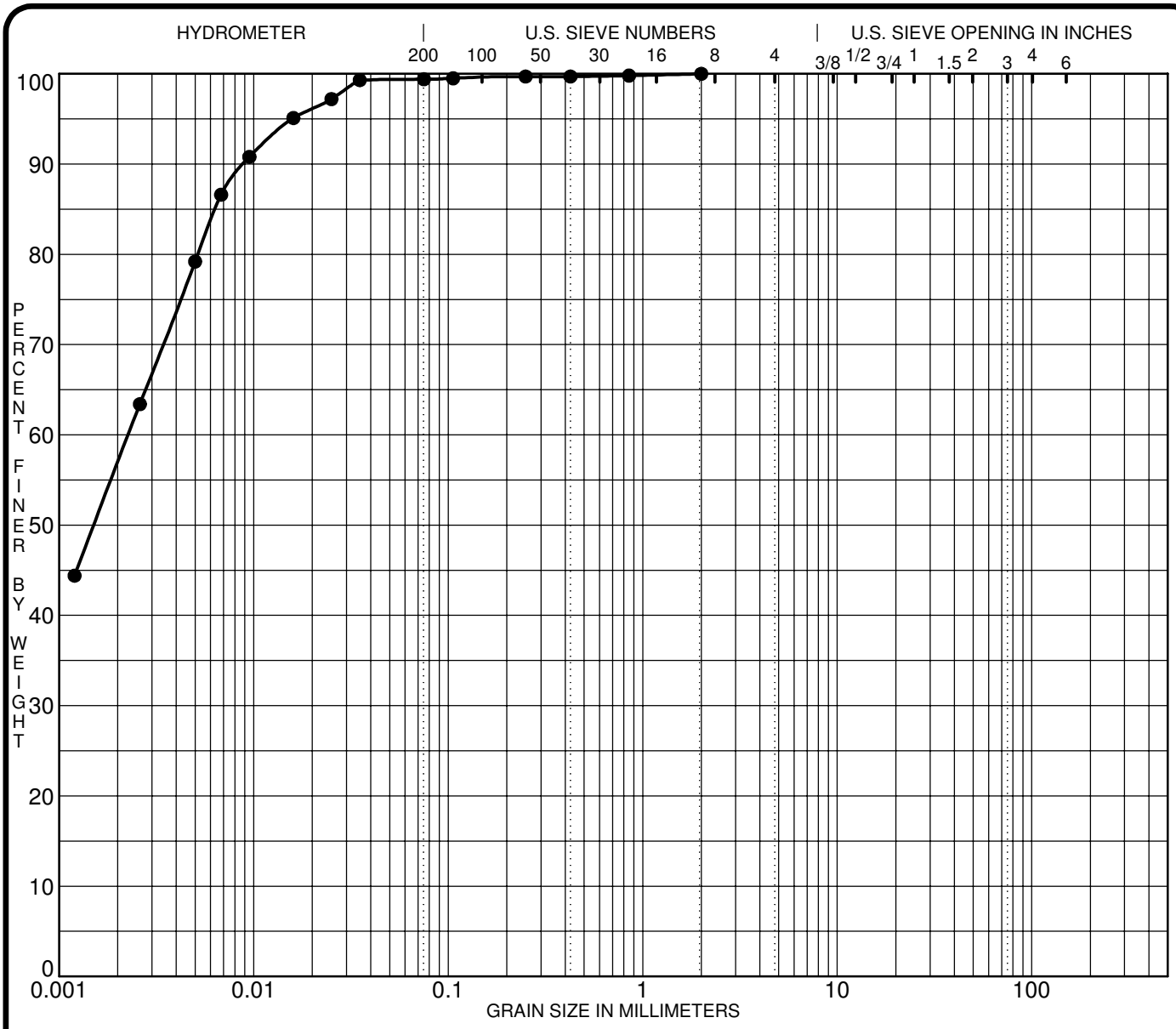
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH56A-22 SS2**	**0.43**	**0.00**			**0.0**	**3.7**	**96.3**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **25 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH57-22 SS12**							
⊠								
▲								
★								

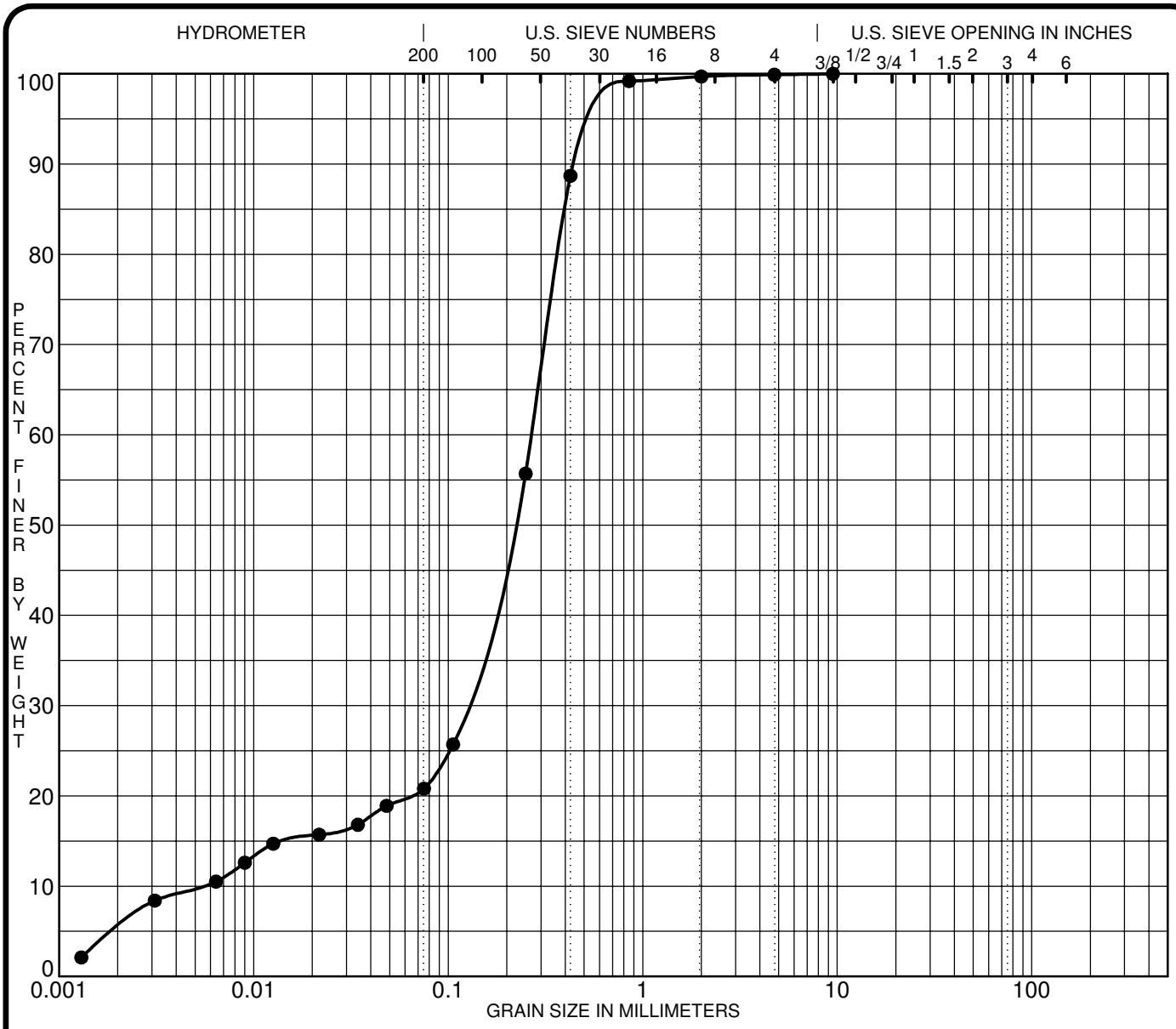
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH57-22 SS12**	**2.00**	**0.00**			**0.0**	**0.6**	**99.4**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **25 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH58-22 SS1**						**9.96**	**49.7**
⊠								
▲								
★								

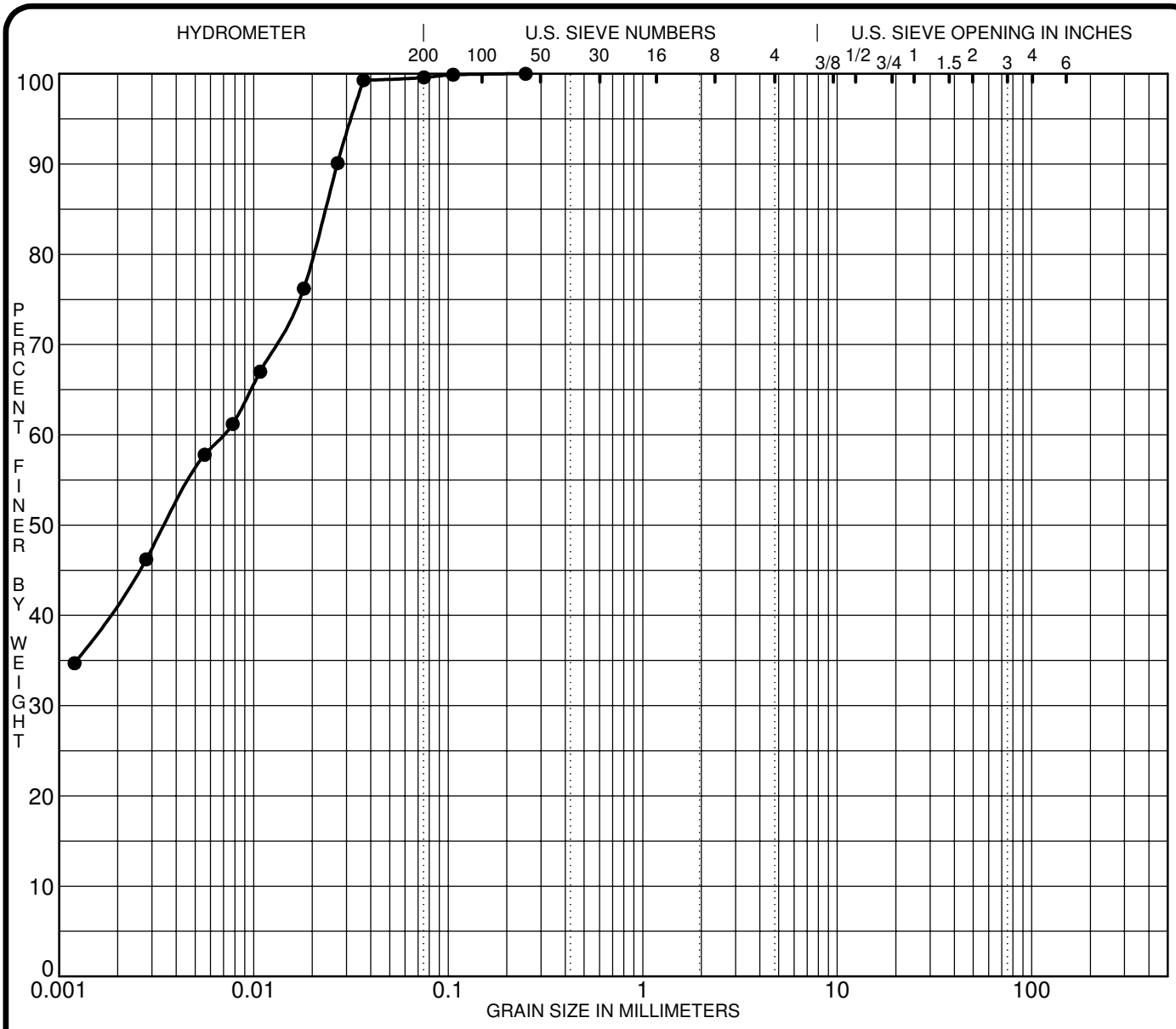
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH58-22 SS1**	**9.50**	**0.27**	**0.120**	**0.0054**	**0.1**	**79.1**	**20.8**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **28 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH59-22 SS7**							
⊠								
▲								
★								

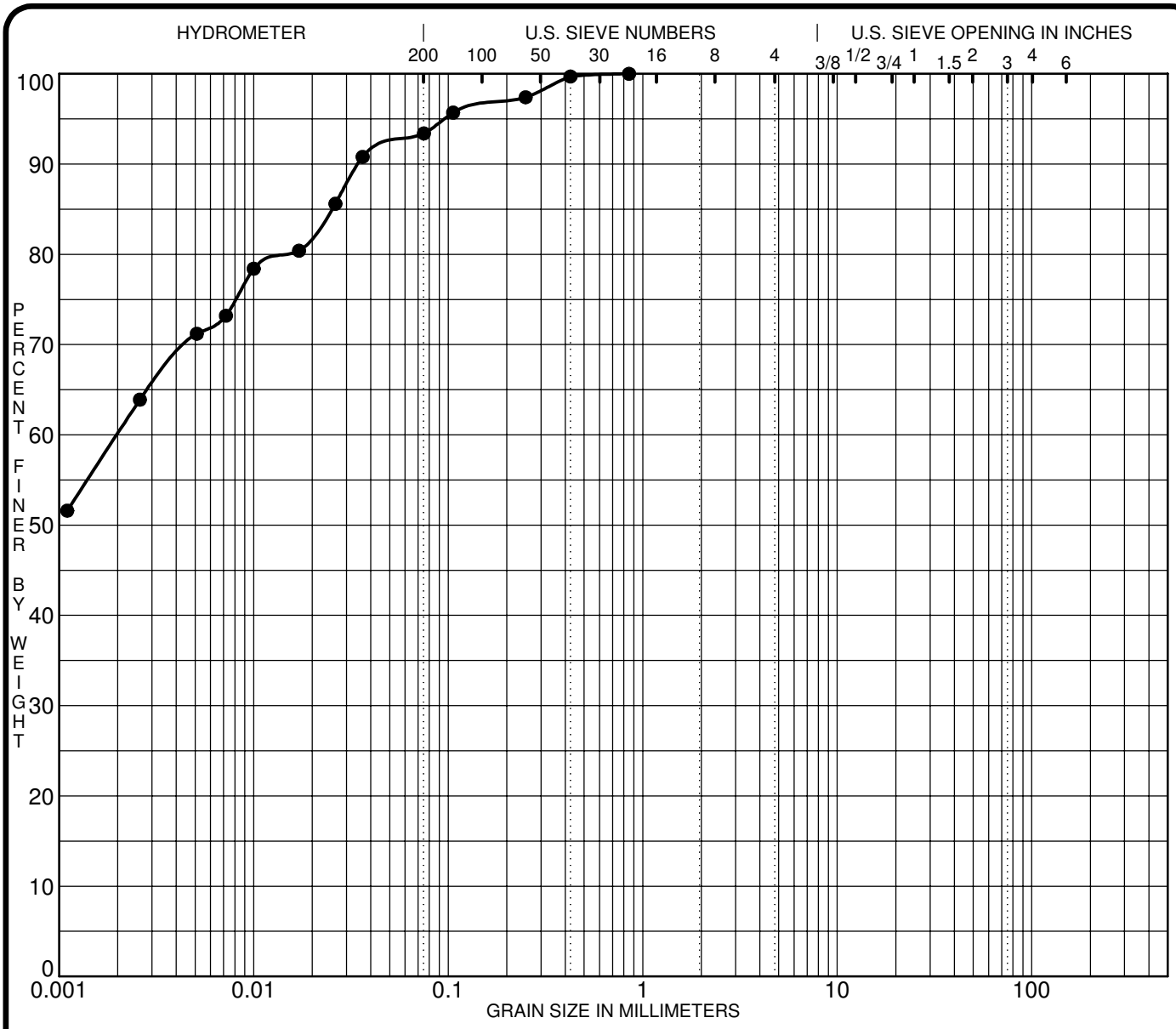
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH59-22 SS7**	**0.25**	**0.01**			**0.0**	**0.4**	**99.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **28 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH59A-22 SS2**							
⊠							
▲							
★							

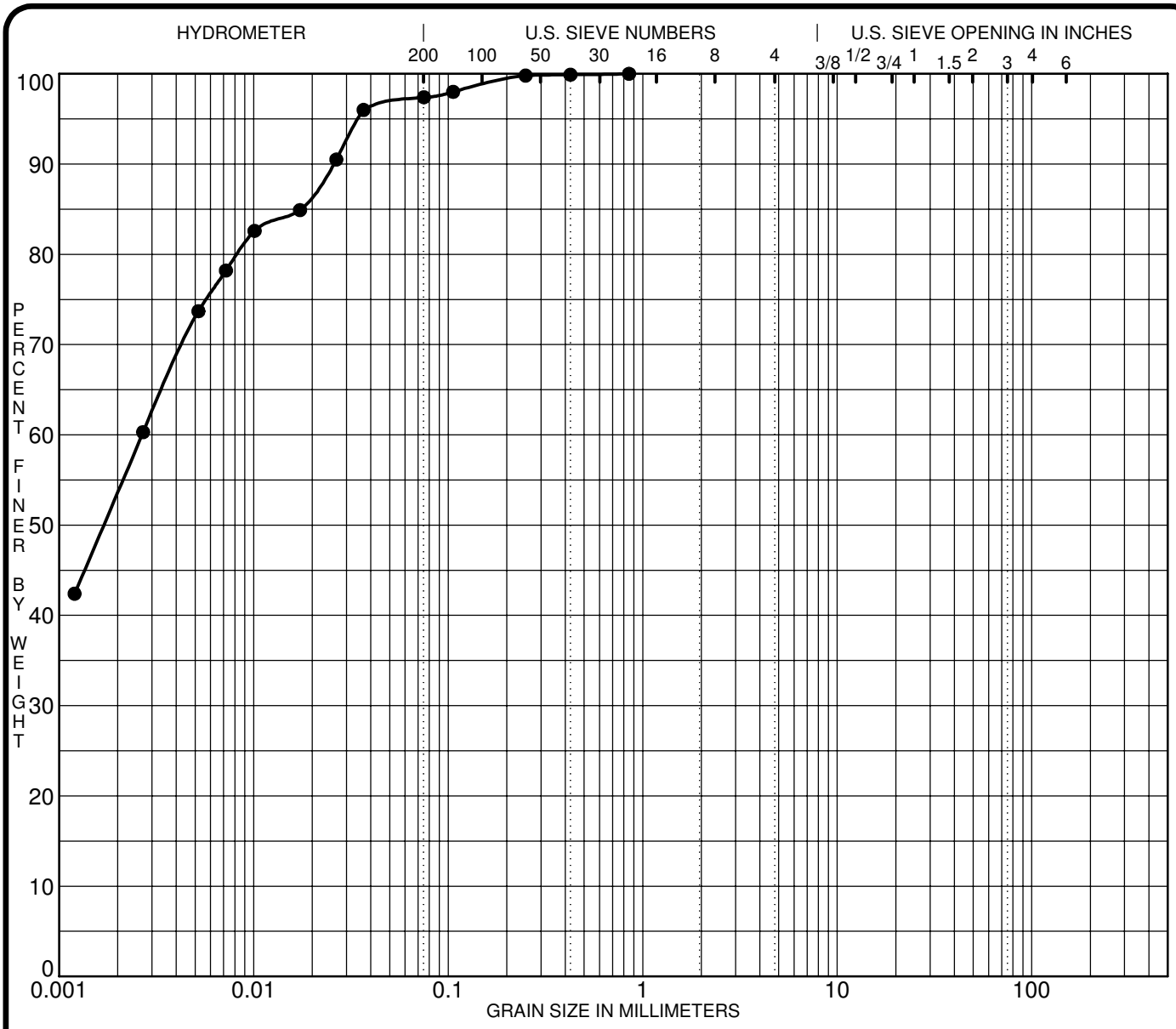
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH59A-22 SS2**	**0.85**	**0.00**			**0.0**	**6.6**	**93.4**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **28 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH60-22 SS3**							
⊠							
▲							
★							

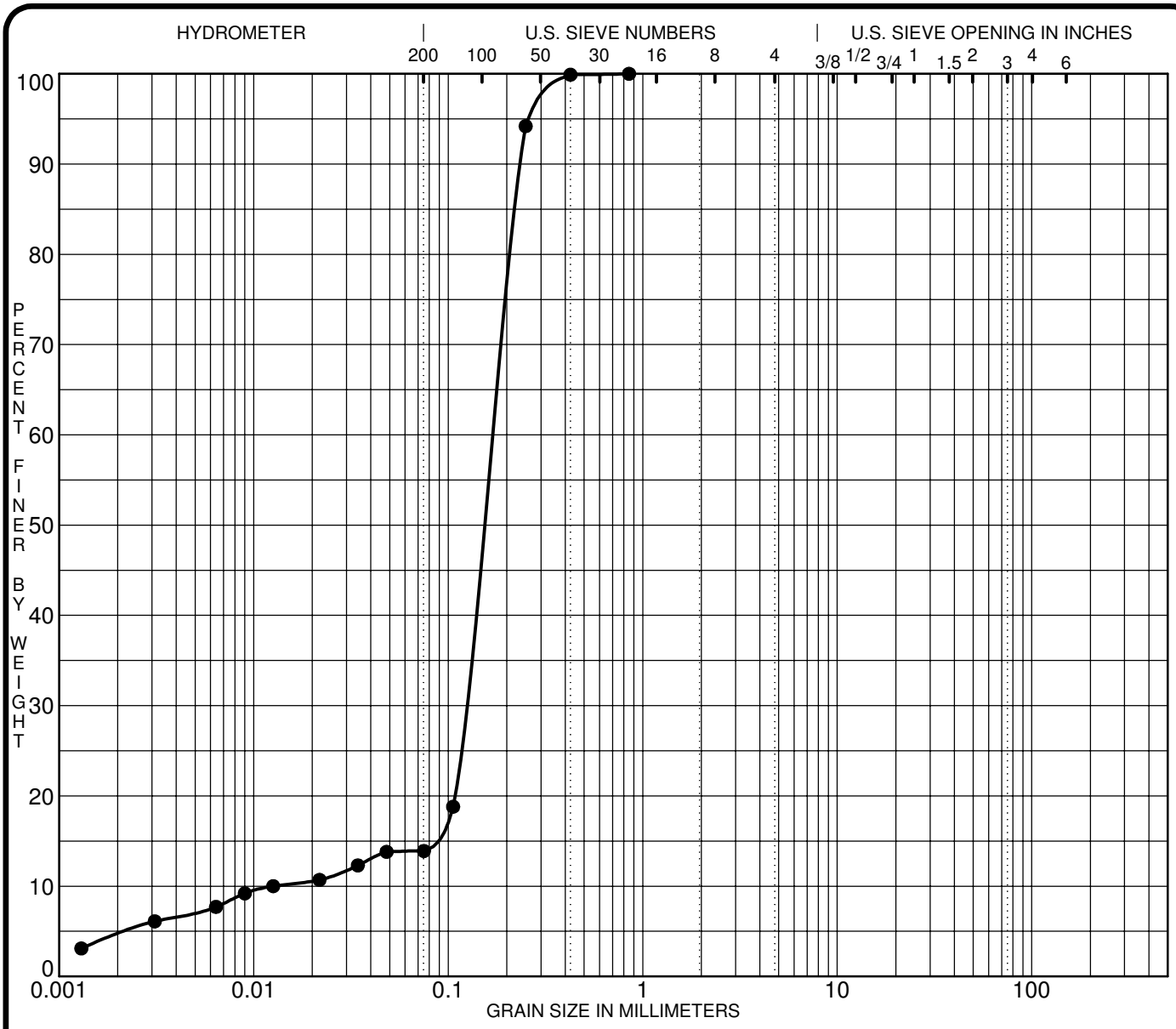
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH60-22 SS3**	**0.85**	**0.00**			**0.0**	**2.6**	**97.4**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **29 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH60A-22 SS1**						**6.79**	**13.4**
⊠								
▲								
★								

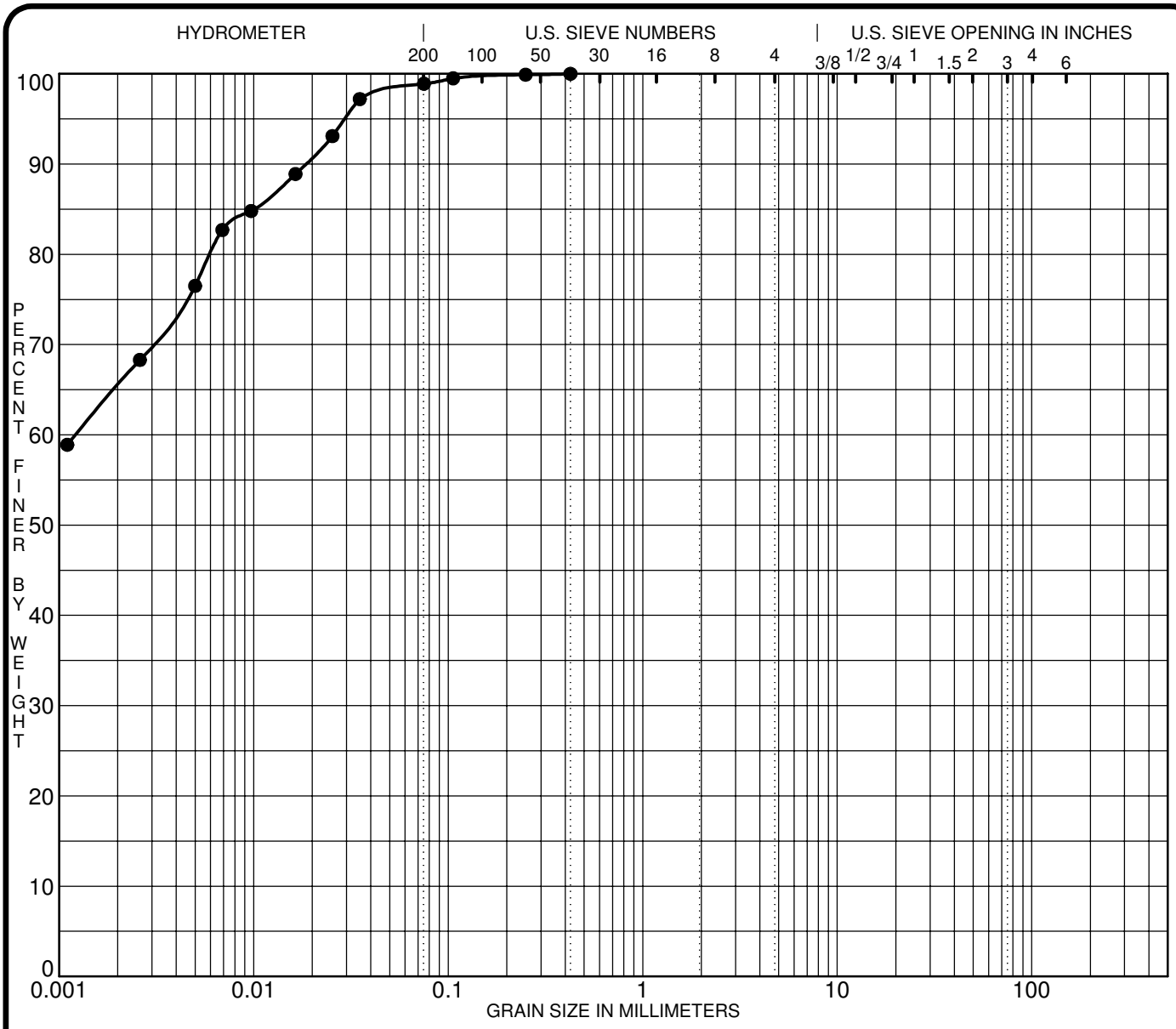
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH60A-22 SS1**	**0.85**	**0.17**	**0.120**	**0.0126**	**0.0**	**86.1**	**13.9**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **29 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH61-22 SS3**							
⊠								
▲								
★								

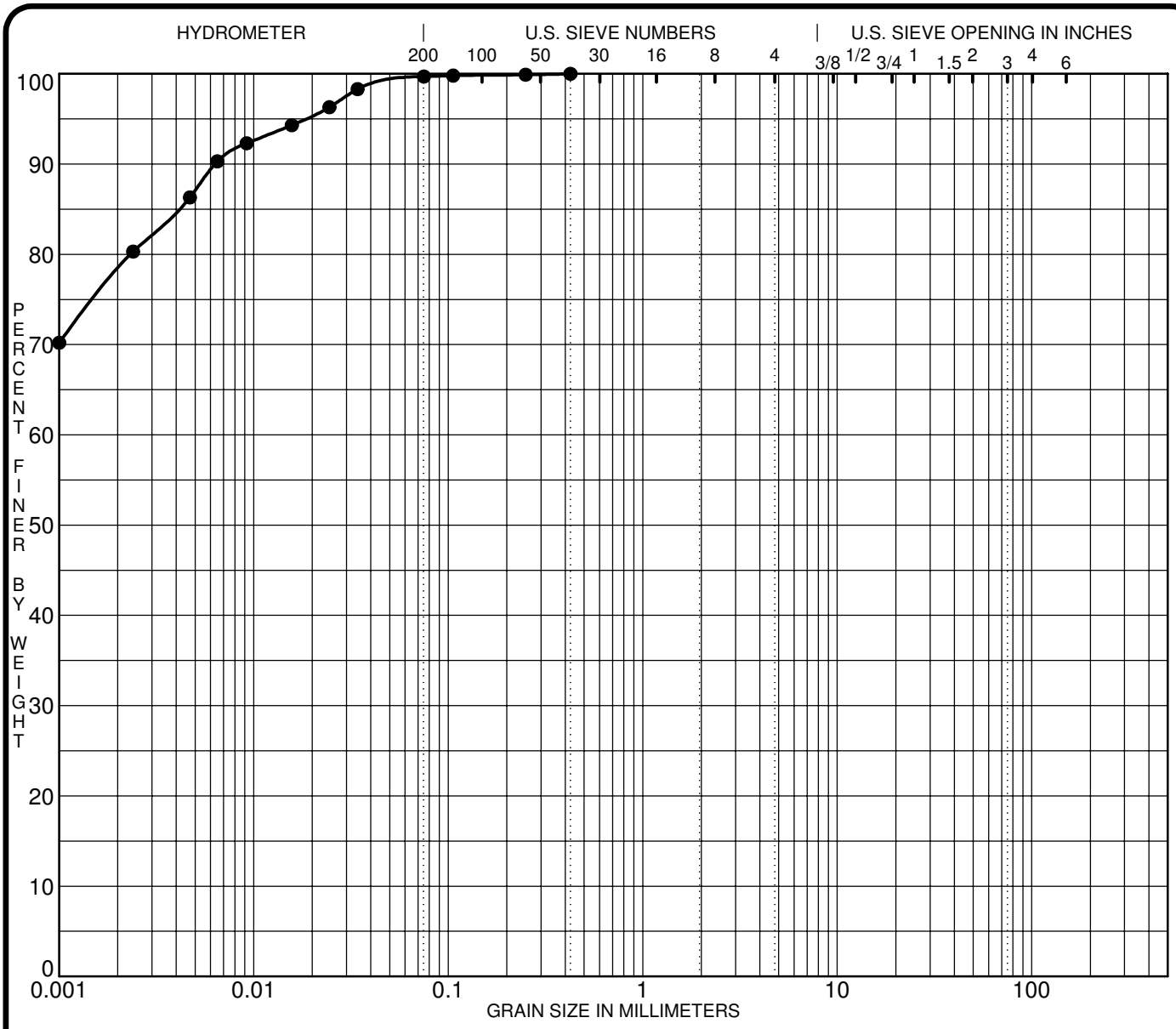
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH61-22 SS3**	**0.43**	**0.00**			**0.0**	**1.1**	**98.9**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **29 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH62-22 SS6**							
⊠								
▲								
★								

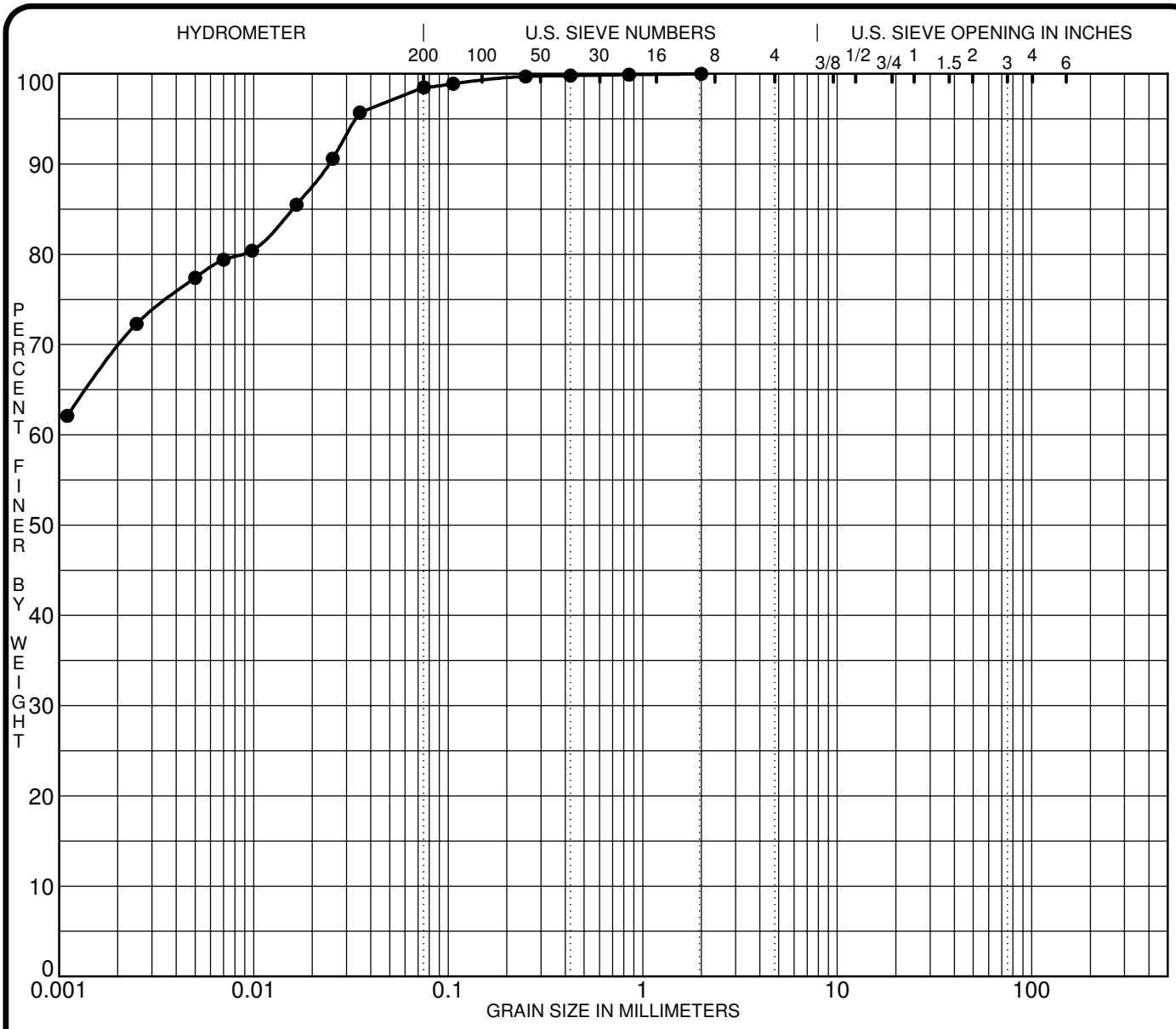
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH62-22 SS6**	**0.43**				**0.0**	**0.3**	**99.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **30 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH63-22 SS3**							
⊠								
▲								
★								

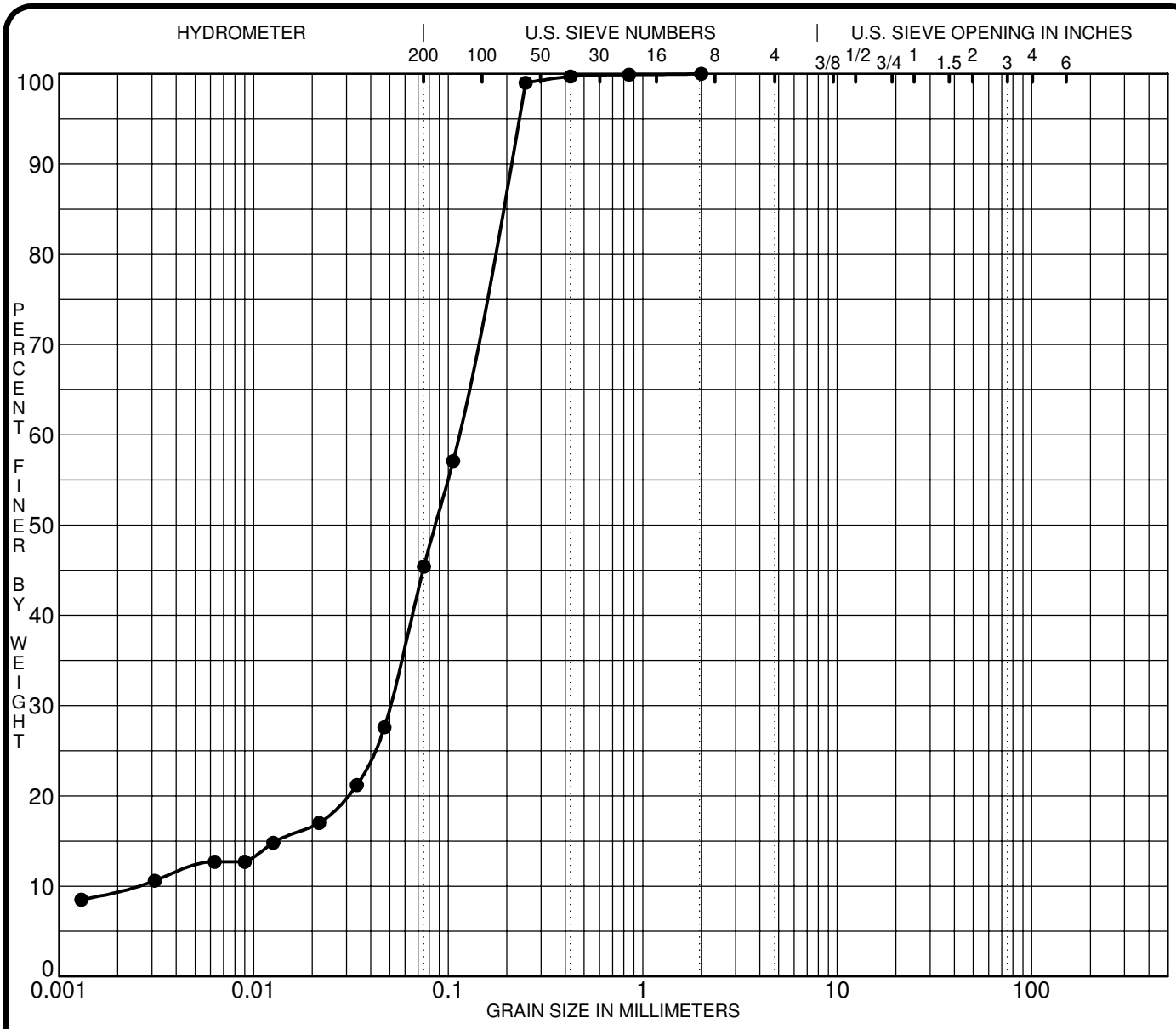
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH63-22 SS3**	**2.00**				**0.0**	**1.5**	**98.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **30 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH63A-22 SS1**						**9.21**	**46.5**
⊠								
▲								
★								

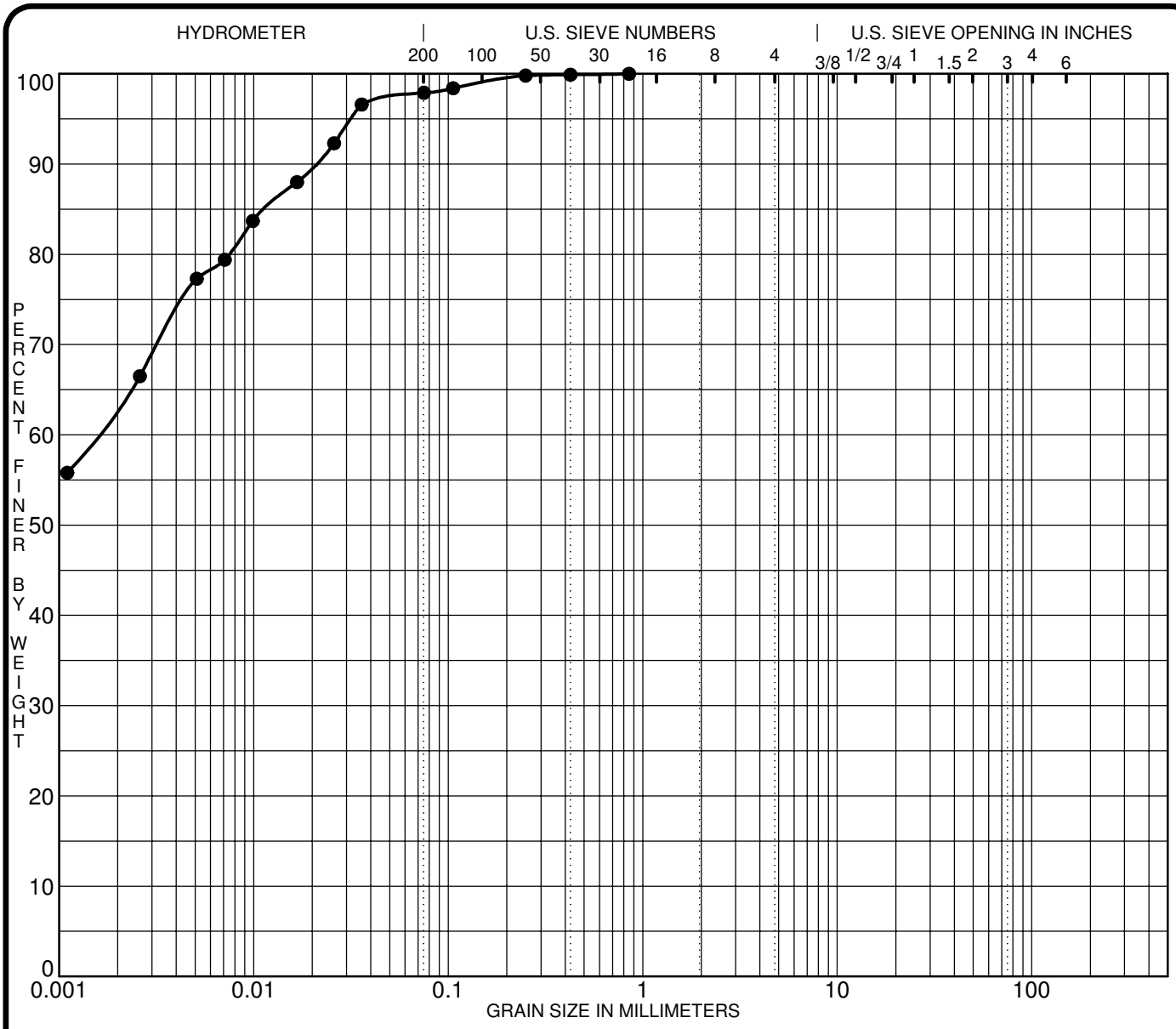
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH63A-22 SS1**	**2.00**	**0.11**	**0.050**	**0.0024**	**0.0**	**54.6**	**45.4**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **30 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH64-22 SS5**							
⊠							
▲							
★							

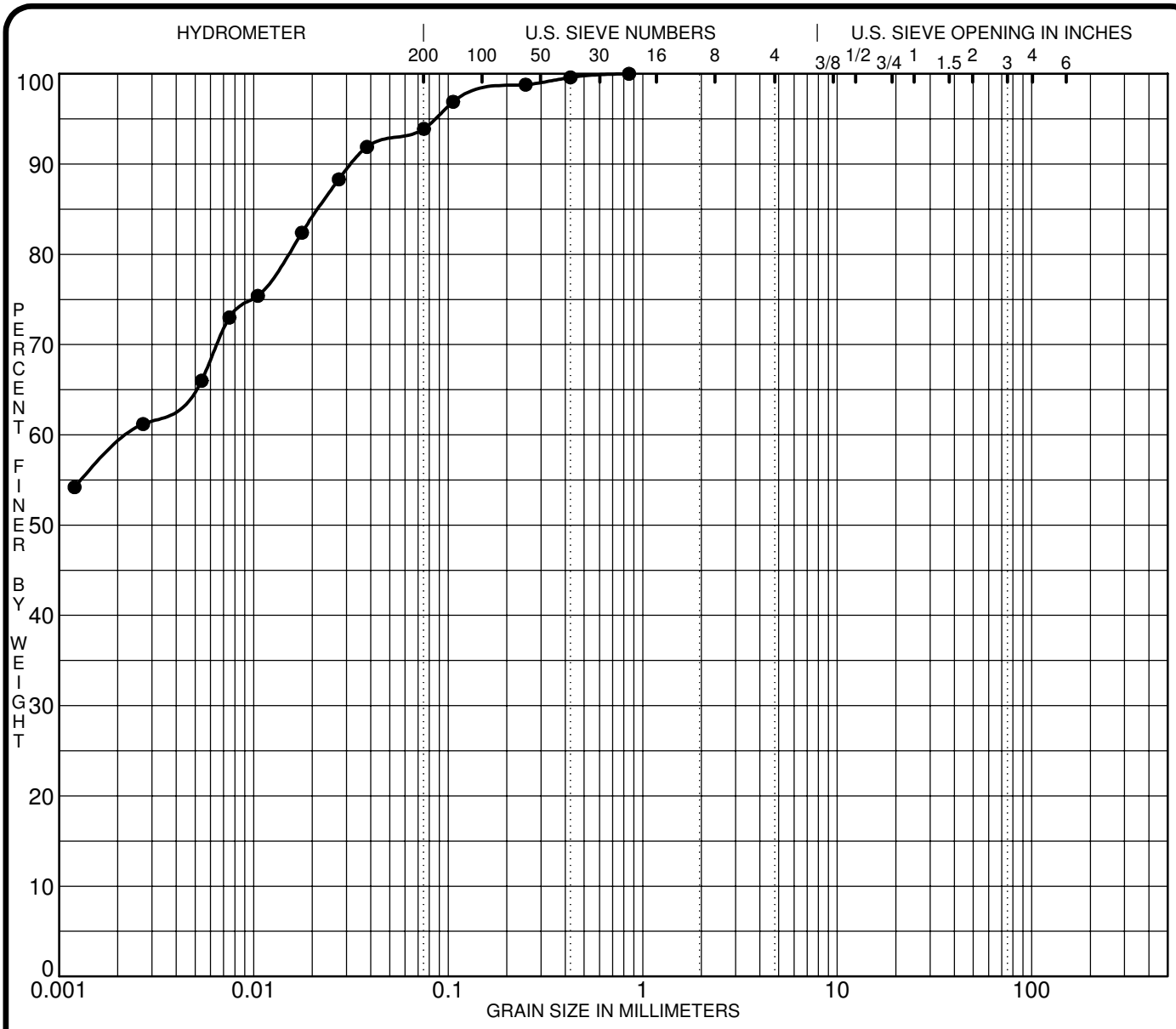
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH64-22 SS5**	**0.85**	**0.00**			**0.0**	**2.1**	**97.9**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **30 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH65-22**							
⊠								
▲								
★								

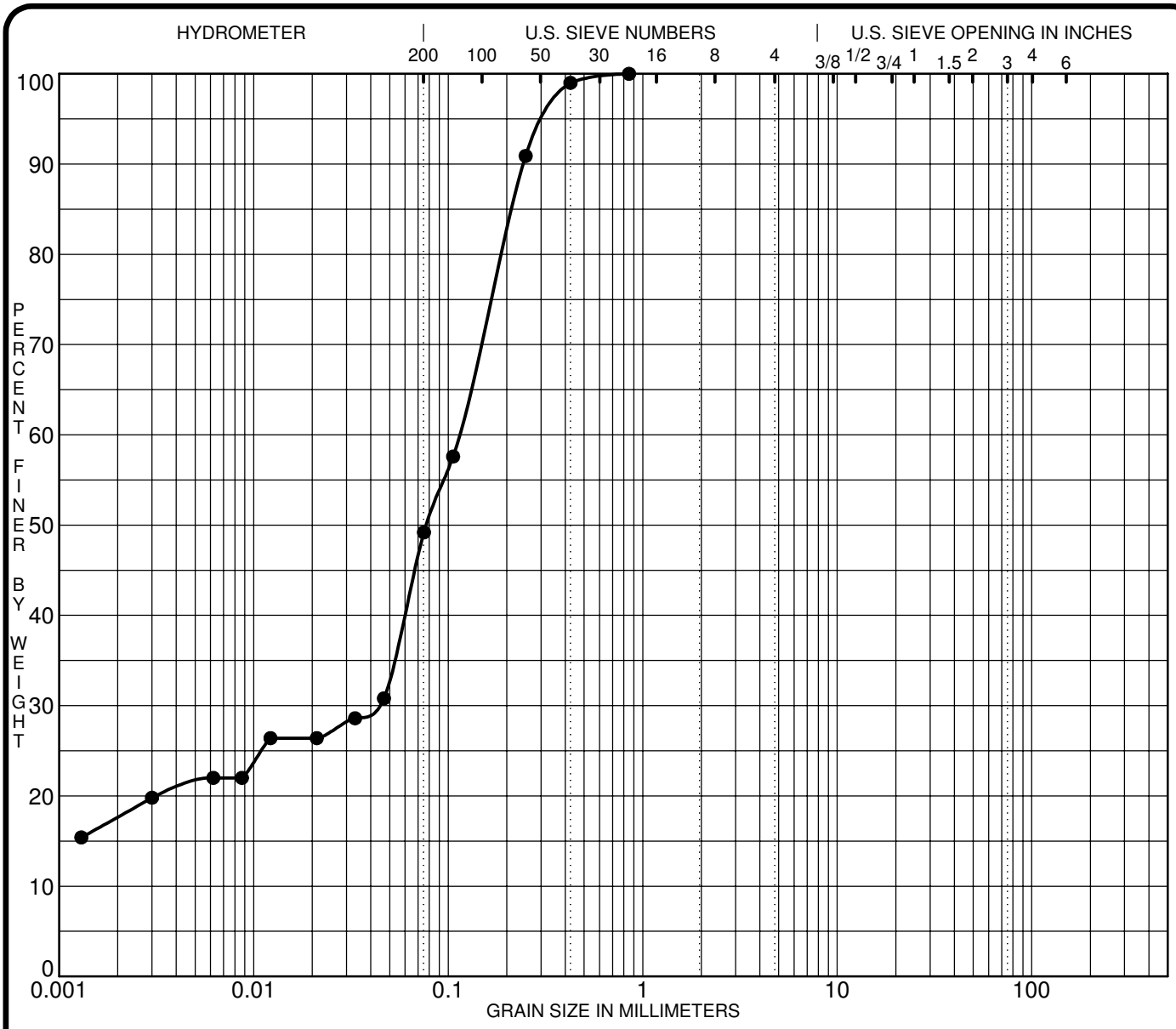
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH65-22**	**0.85**	**0.00**			**0.0**	**6.1**	**93.9**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **31 Mar 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH68-22 SS1/2**							
⊠								
▲								
★								

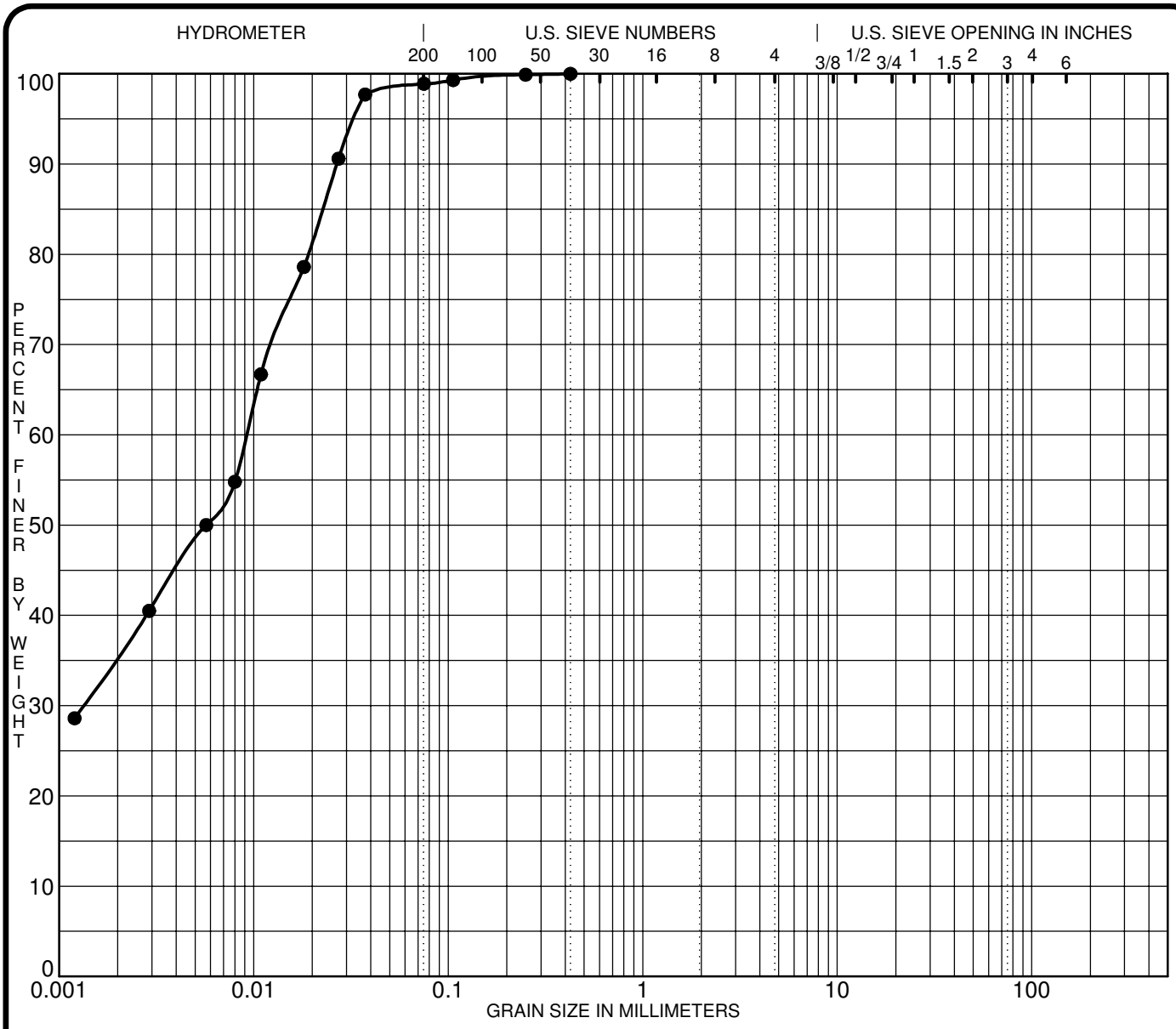
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH68-22 SS1/2**	**0.85**	**0.11**	**0.041**		**0.0**	**50.8**	**49.2**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **13 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH69-22 SS3**							
⊠								
▲								
★								

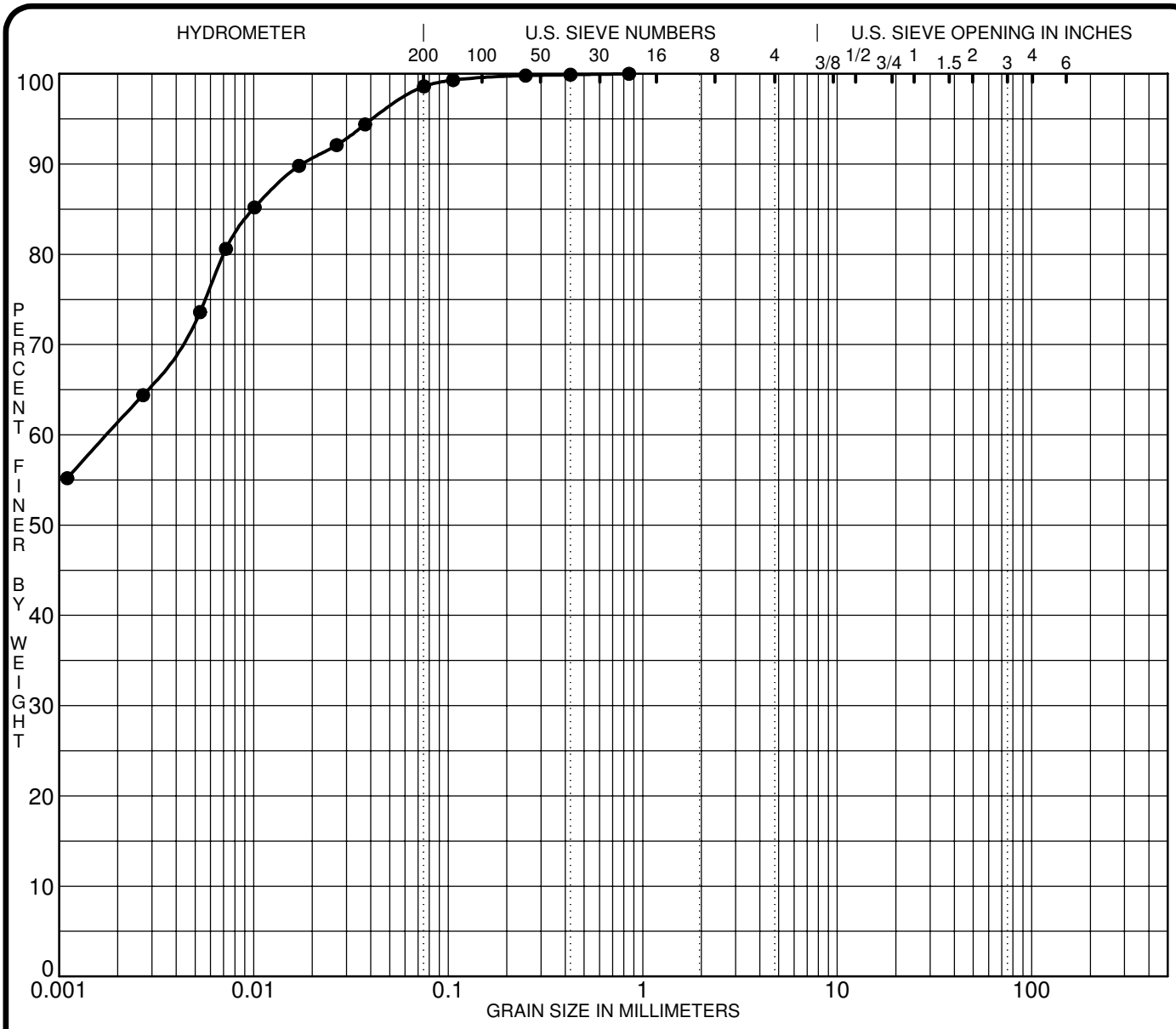
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH69-22 SS3**	**0.43**	**0.01**	**0.001**		**0.0**	**1.1**	**98.9**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **13 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH69A-22 SS1**							
⊠								
▲								
★								

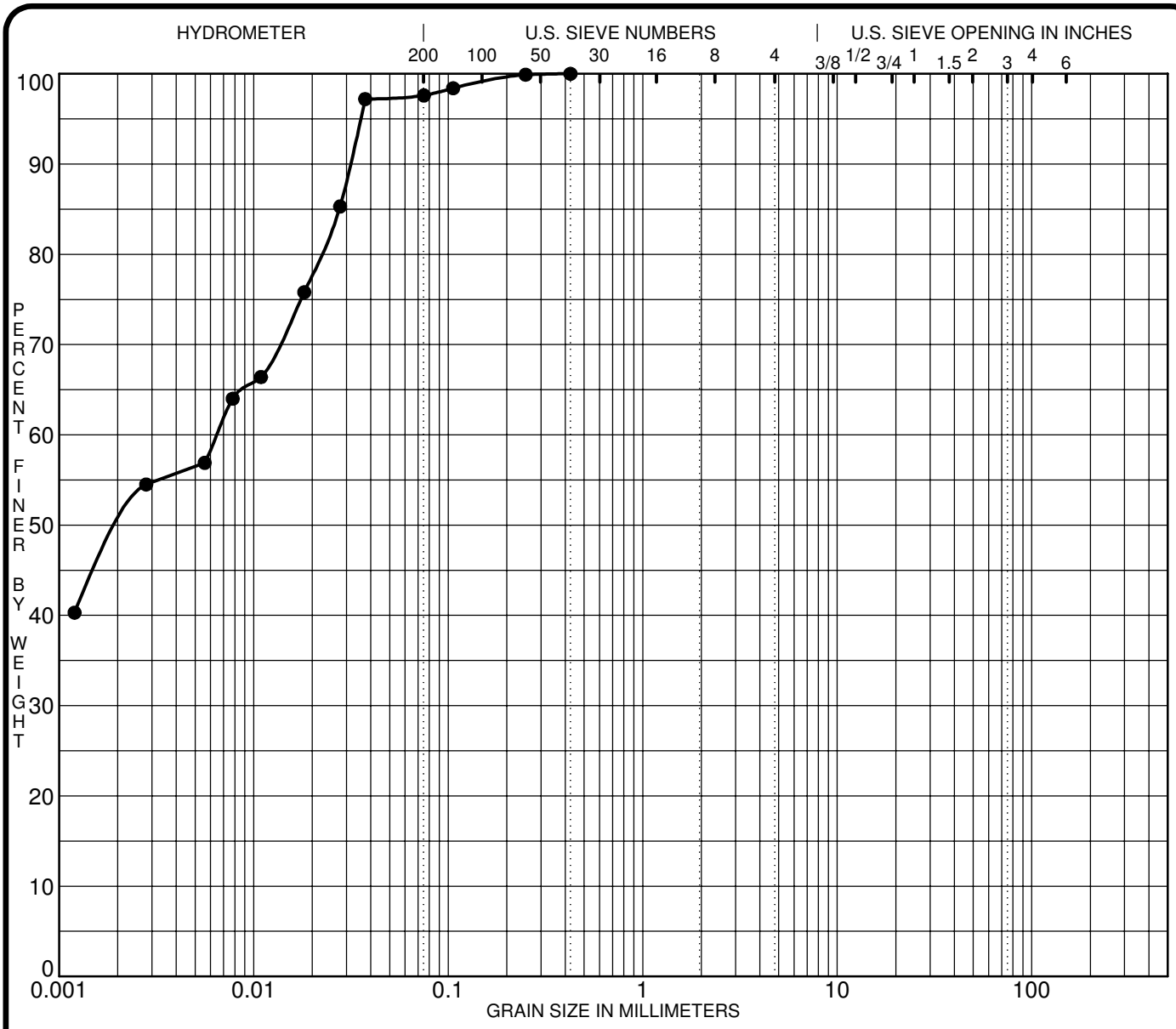
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH69A-22 SS1**	**0.85**	**0.00**			**0.0**	**1.4**	**98.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **13 Apr 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH71-22 SS4**							
⊠								
▲								
★								

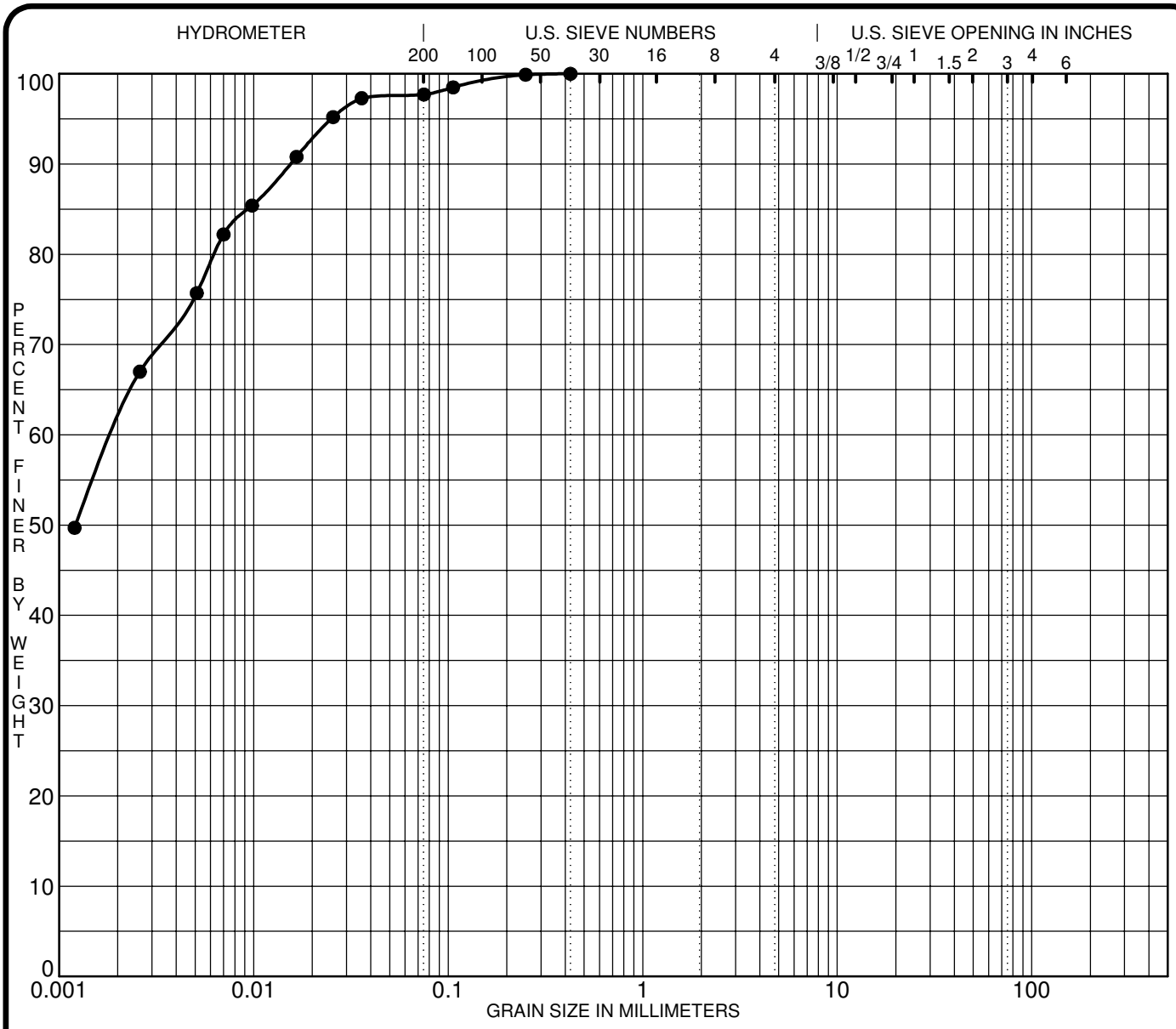
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH71-22 SS4**	**0.43**	**0.01**			**0.0**	**2.4**	**97.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **2 Jun 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH72-22 SS4**							
⊠								
▲								
★								

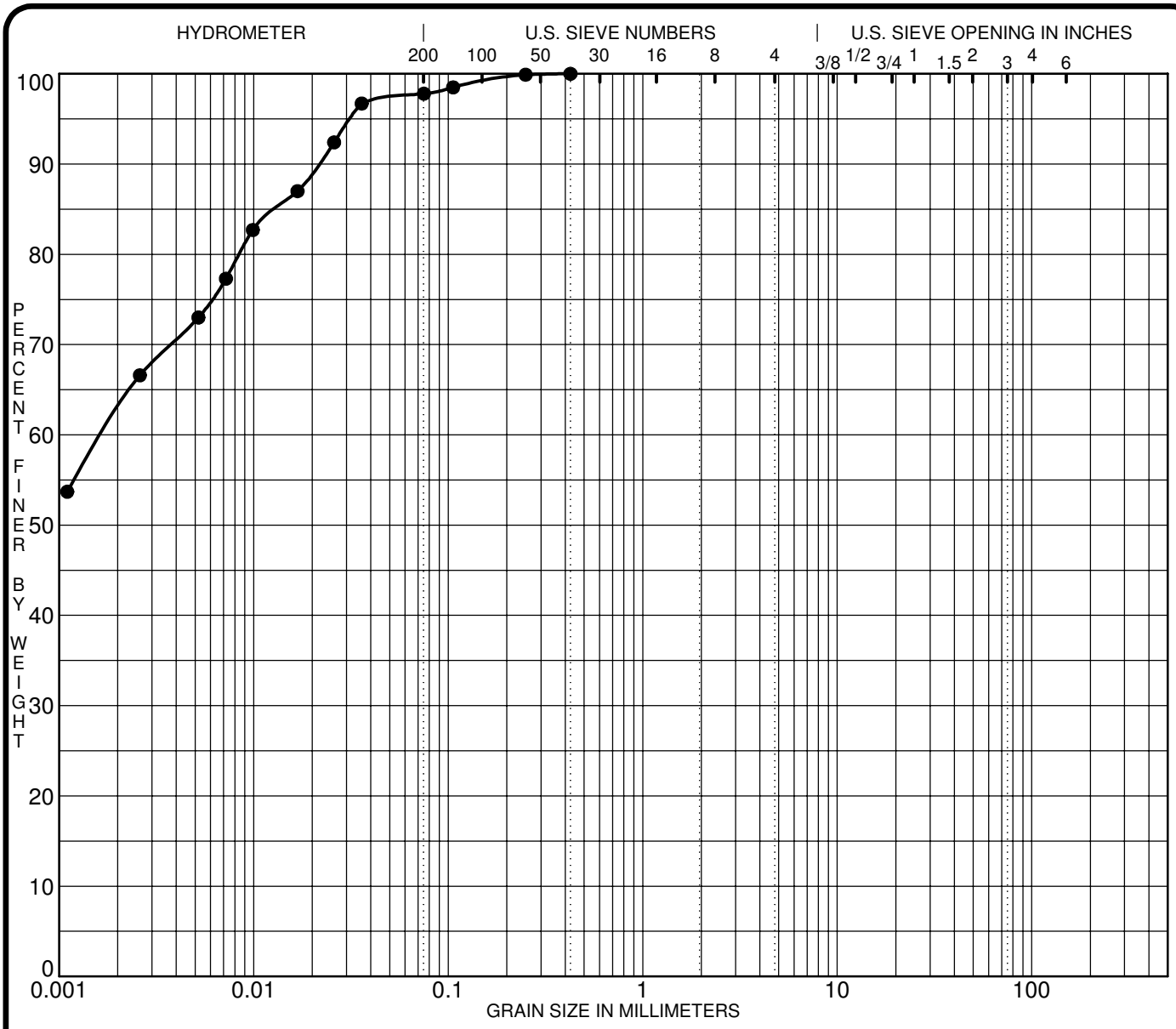
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH72-22 SS4**	**0.43**	**0.00**			**0.0**	**2.3**	**97.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **27 May 22**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH25-22 SS5**							
⊠								
▲								
★								

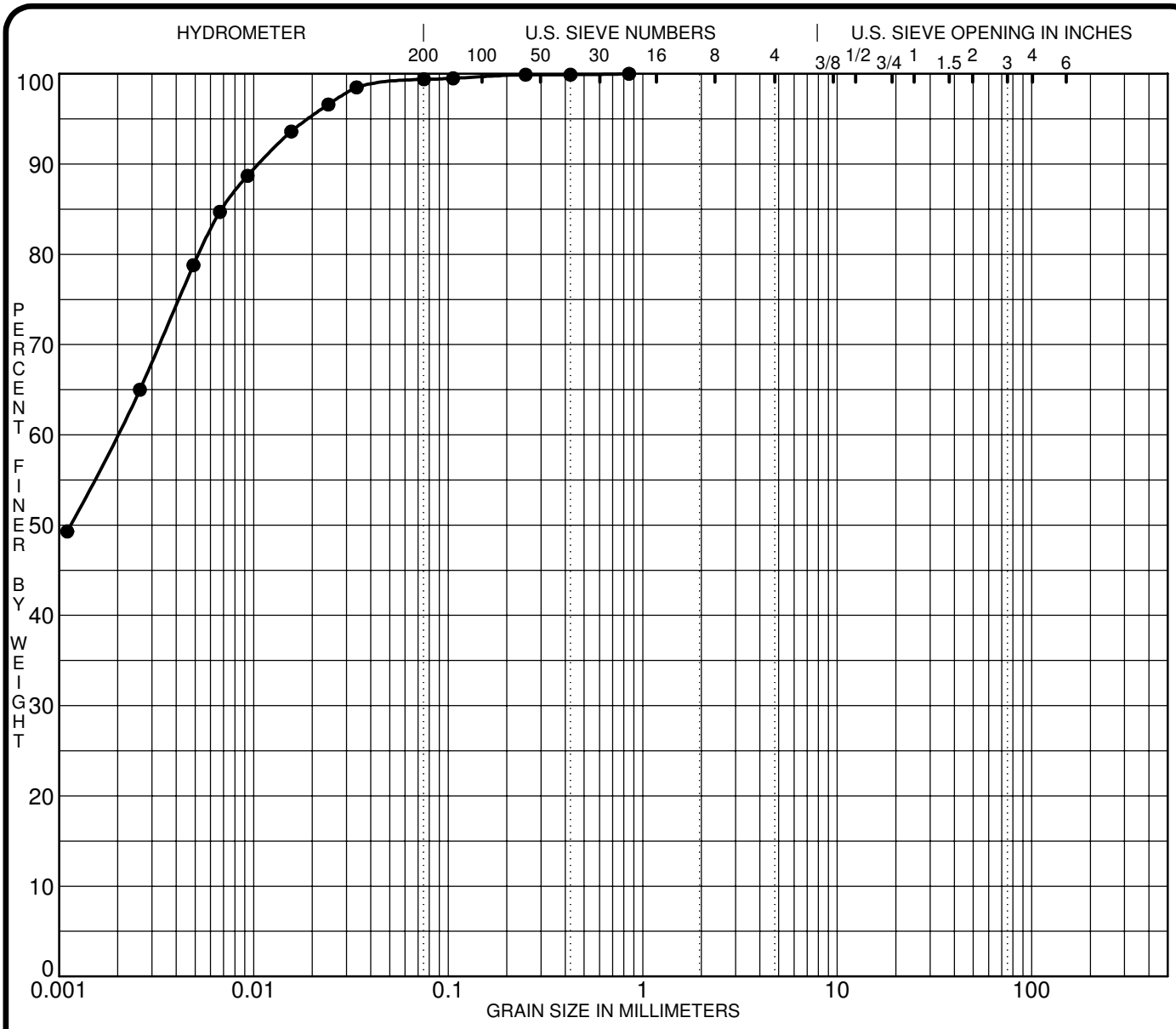
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH25-22 SS5**	**0.43**	**0.00**			**0.0**	**2.2**	**97.8**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **7 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH70-22 SS7**							
⊠								
▲								
★								

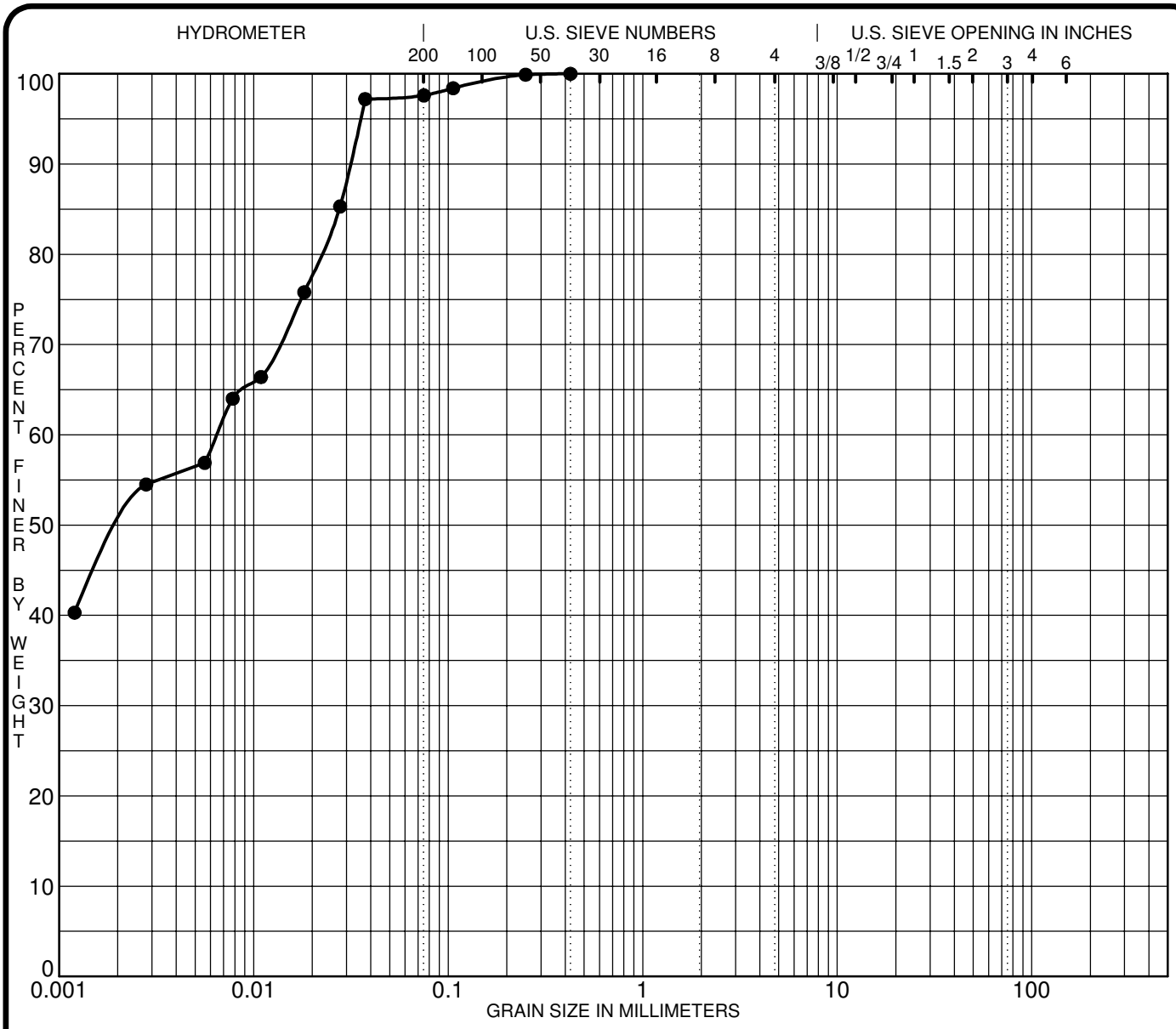
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH70-22 SS7**	**0.85**	**0.00**			**0.0**	**0.6**	**99.4**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **5 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH71-22 SS4**							
⊠								
▲								
★								

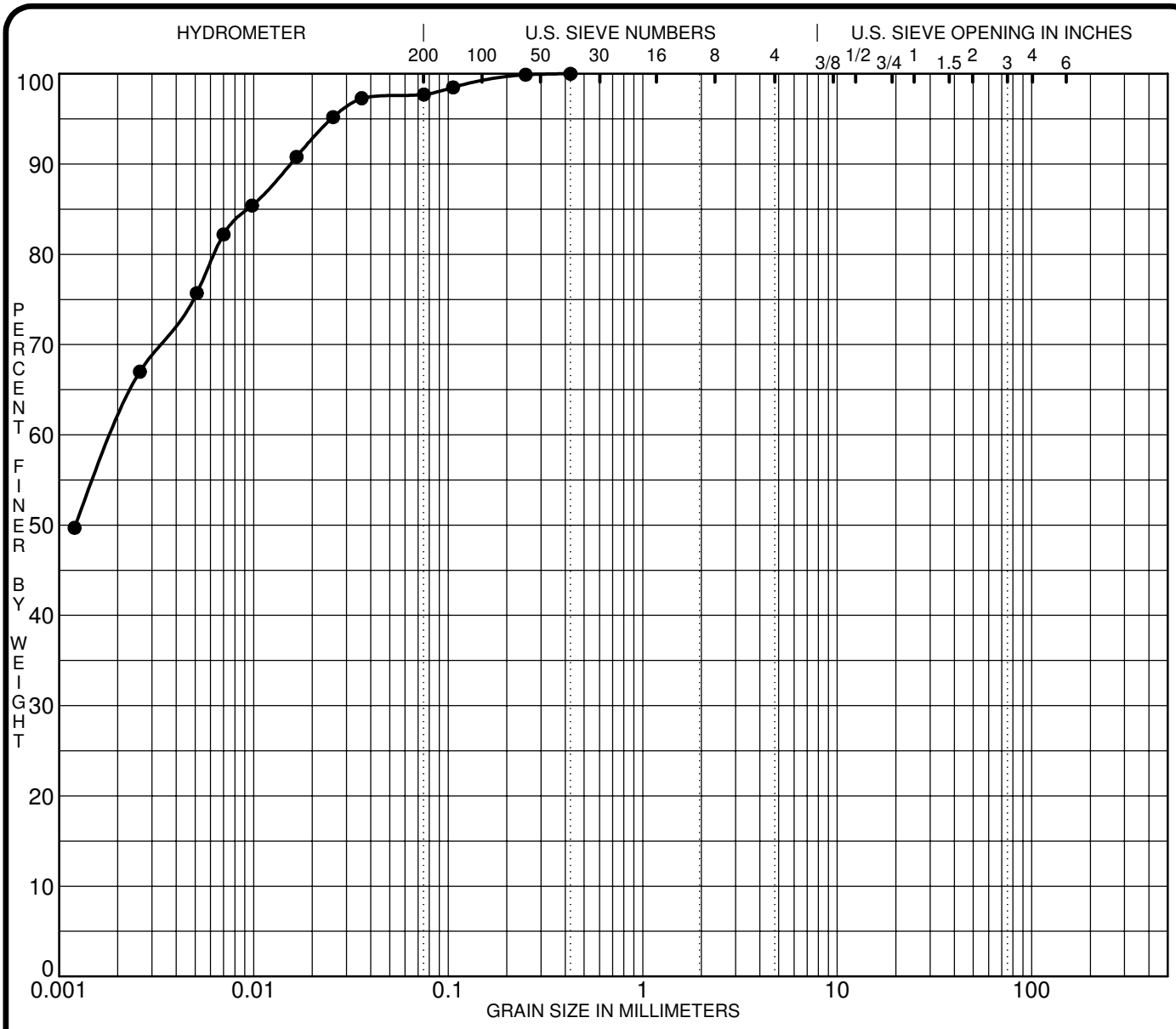
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH71-22 SS4**	**0.43**	**0.01**			**0.0**	**2.4**	**97.6**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **2 Jun 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH72-22 SS4**							
⊠								
▲								
★								

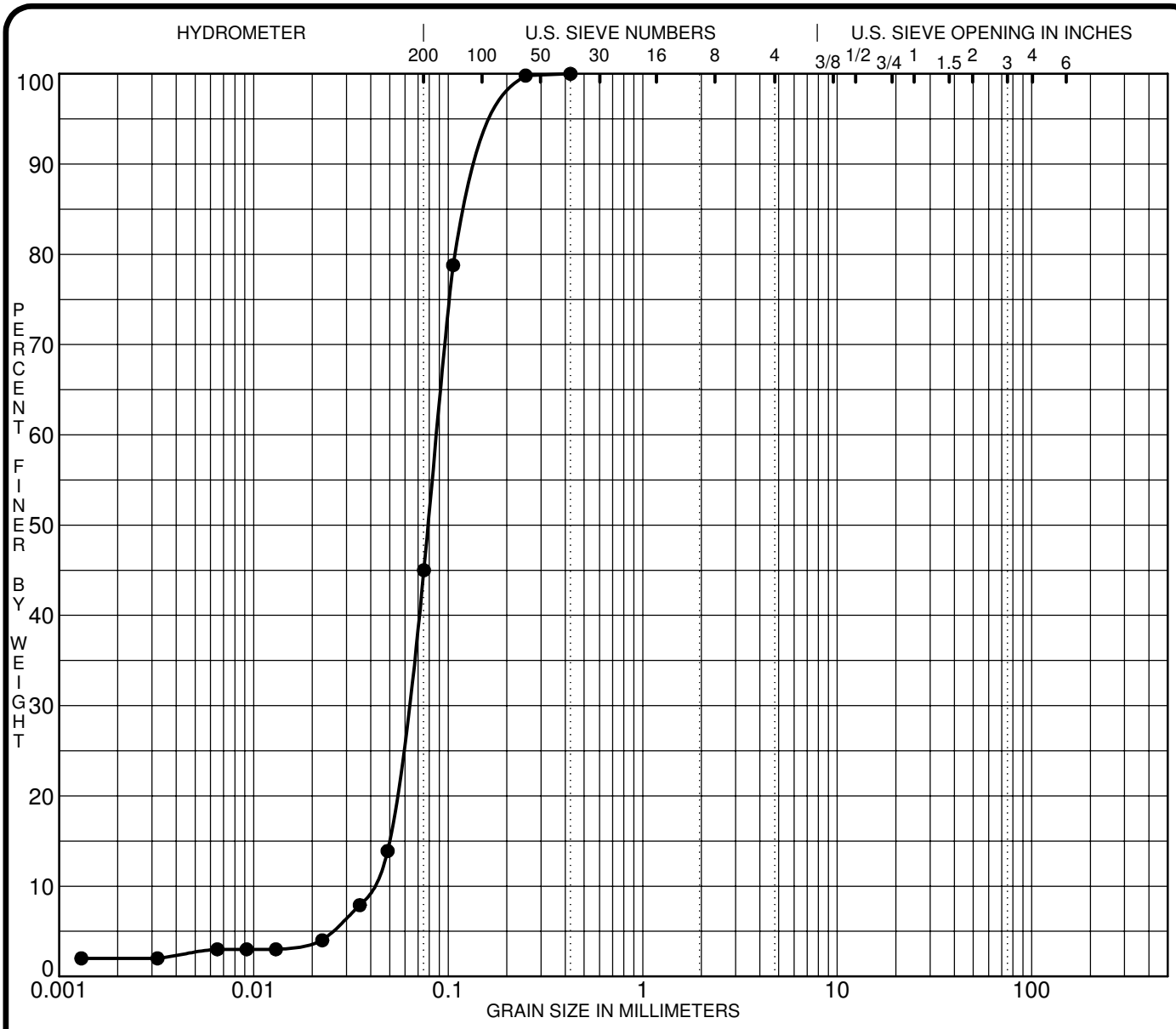
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH72-22 SS4**	**0.43**	**0.00**			**0.0**	**2.3**	**97.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **27 May 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH73-22 SS4**						**1.08**	**2.2**
⊠								
▲								
★								

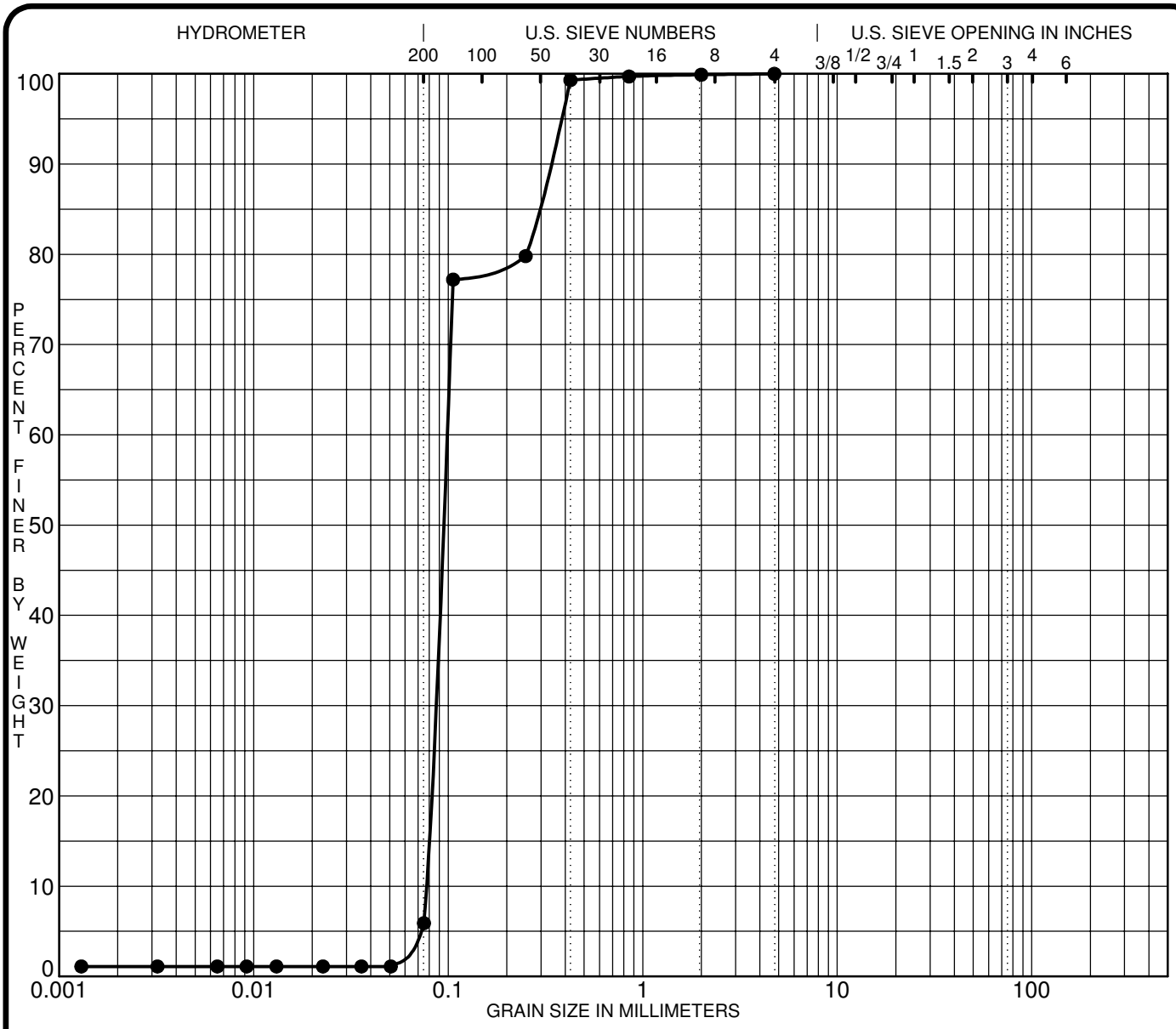
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH73-22 SS4**	**0.43**	**0.09**	**0.061**	**0.0394**	**0.0**	**55.0**	**45.0**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **5 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH74-22 SS4**						**0.95**	**1.3**
⊠								
▲								
★								

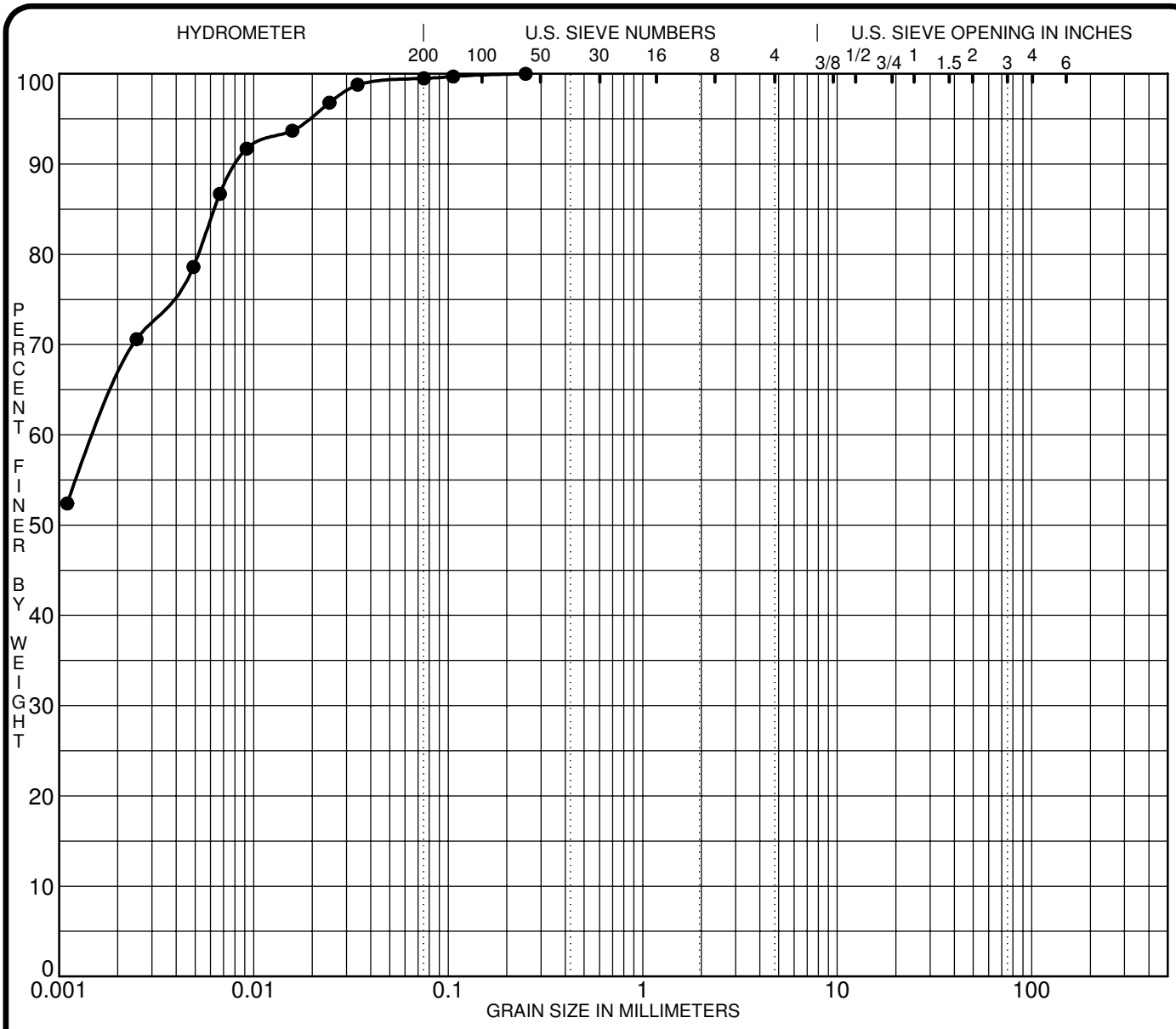
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH74-22 SS4**	**4.75**	**0.10**	**0.084**	**0.0765**	**0.0**	**94.1**	**5.9**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH74-22 SS9**							
⊠								
▲								
★								

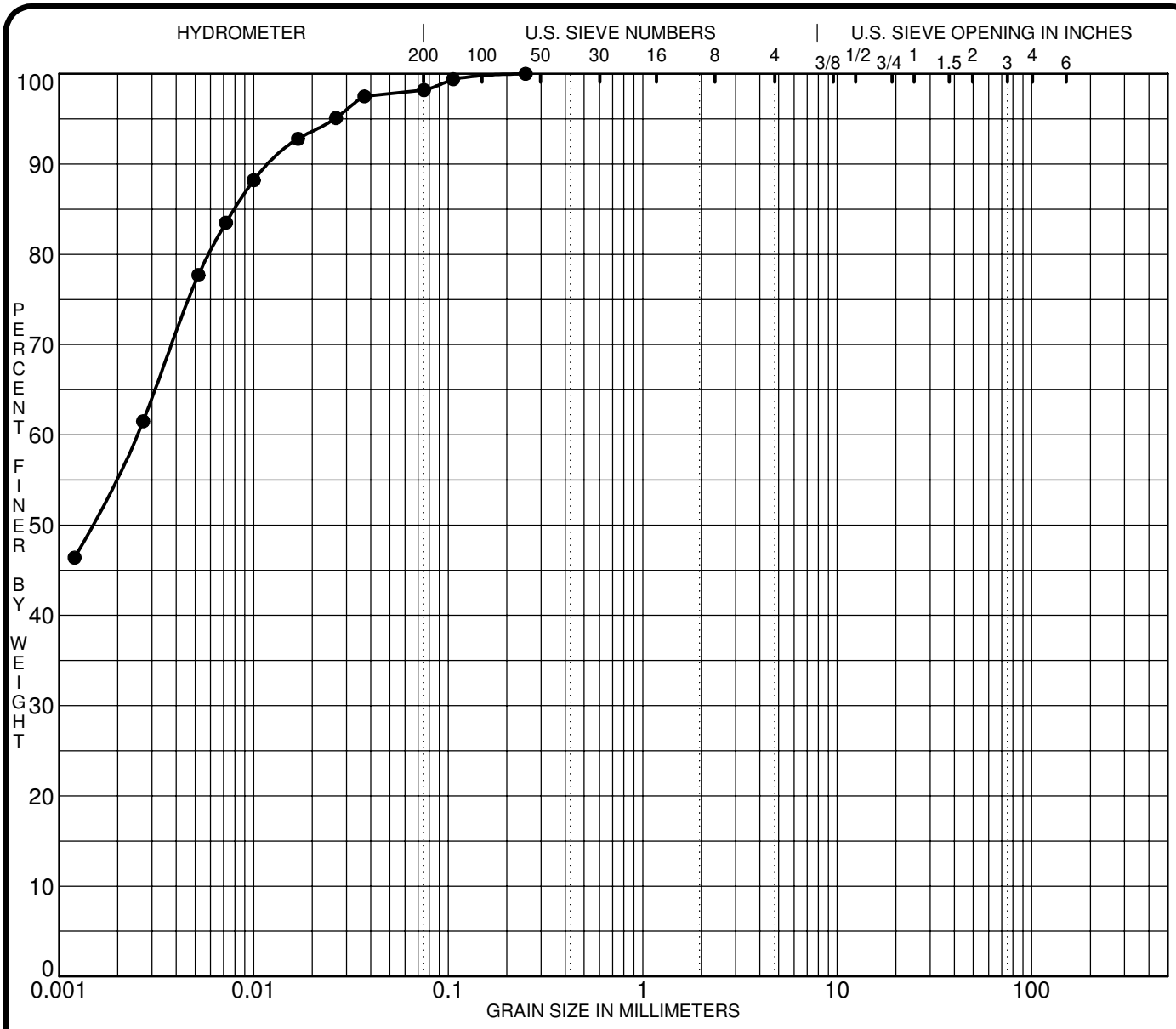
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH74-22 SS9**	**0.25**	**0.00**			**0.0**	**0.5**	**99.5**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● **BH75-22 SS6**							
⊠							
▲							
★							

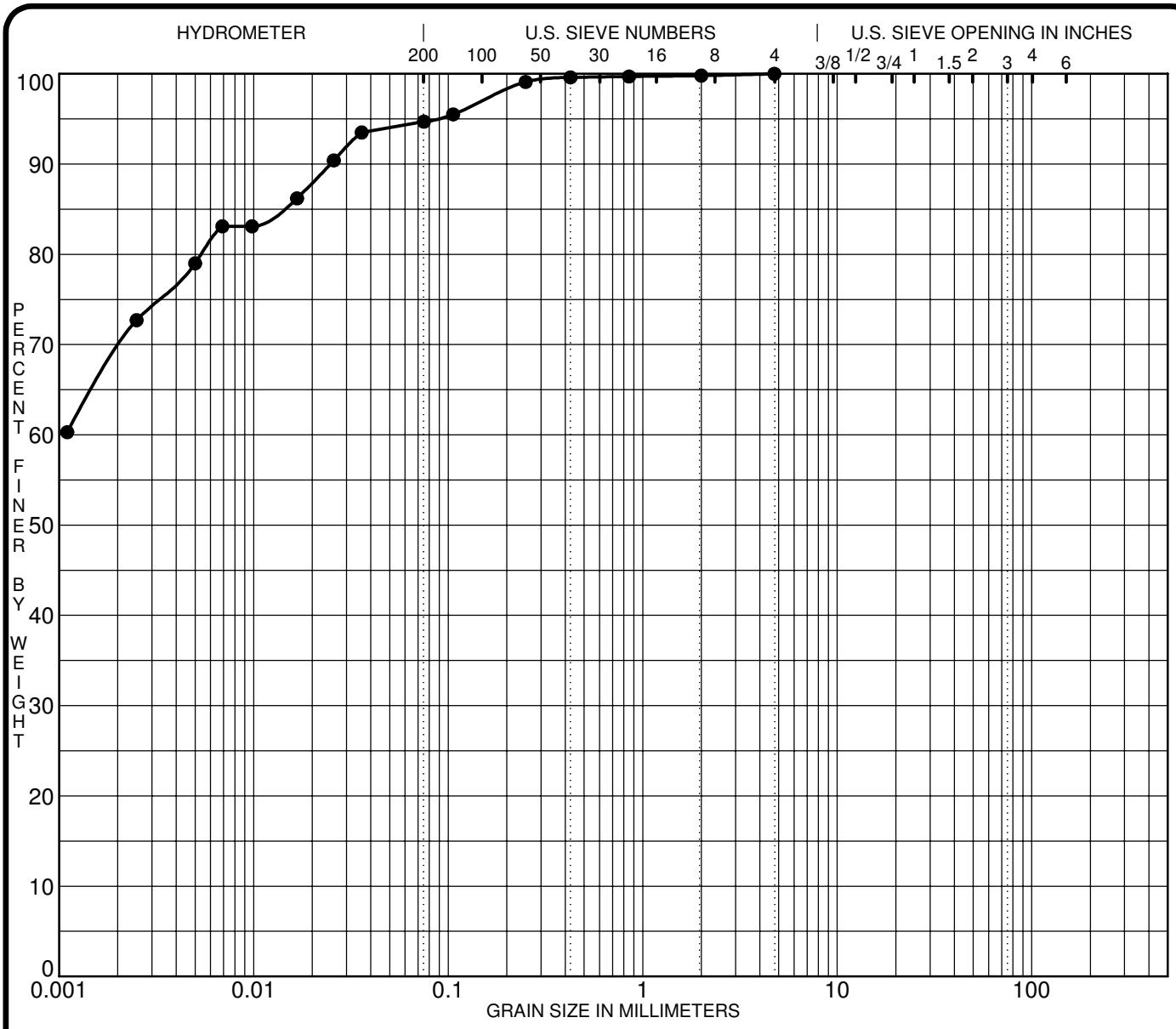
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BH75-22 SS6**	**0.25**	**0.00**			**0.0**	**1.8**	**98.2**	
⊠								
▲								
★								

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **5 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH76-22 SS3**							
⊠								
▲								
★								

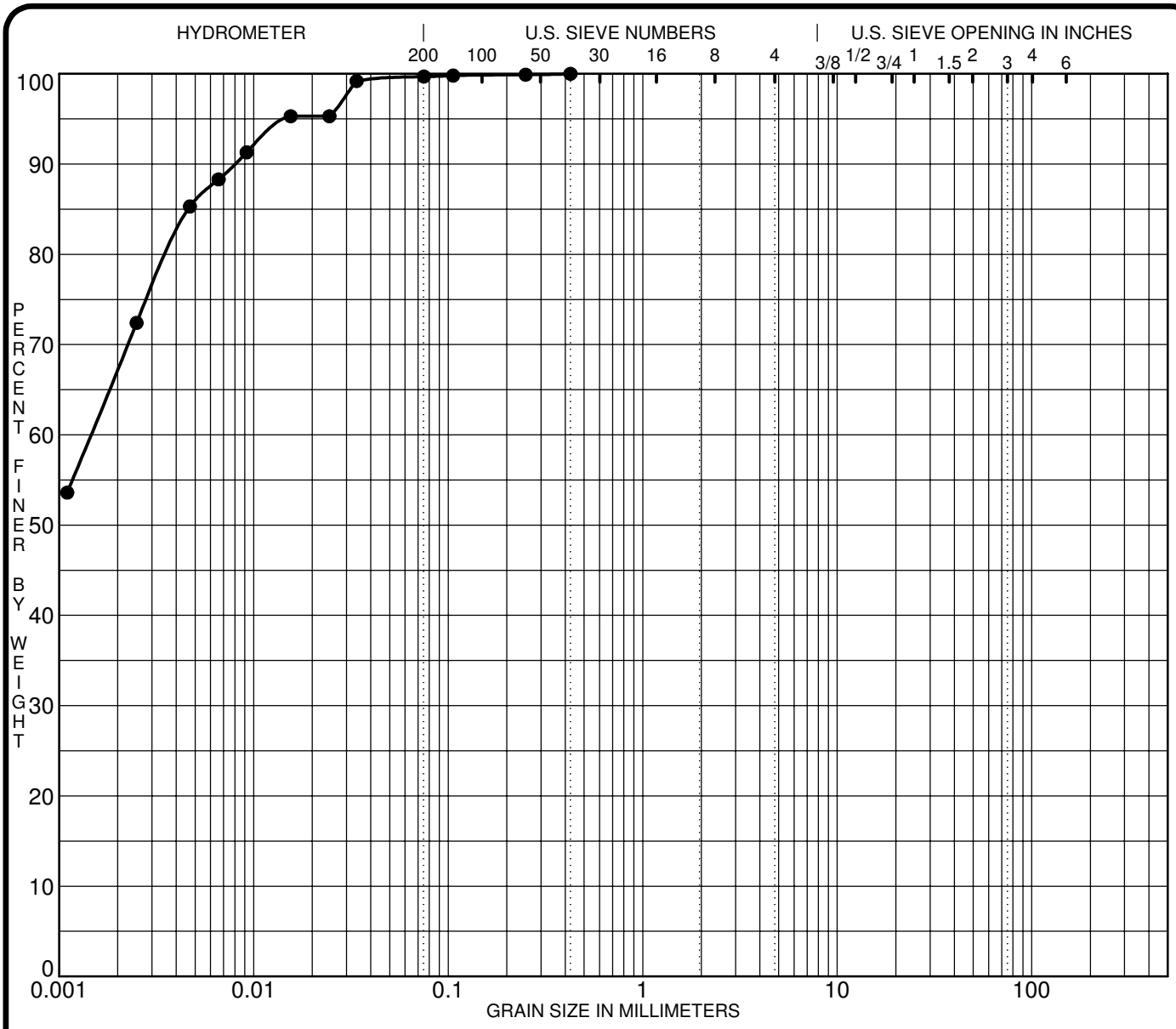
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH76-22 SS3**	**4.75**				**0.0**	**5.3**	**94.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

	Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
●	**BH77-22 SS5**							
⊠								
▲								
★								

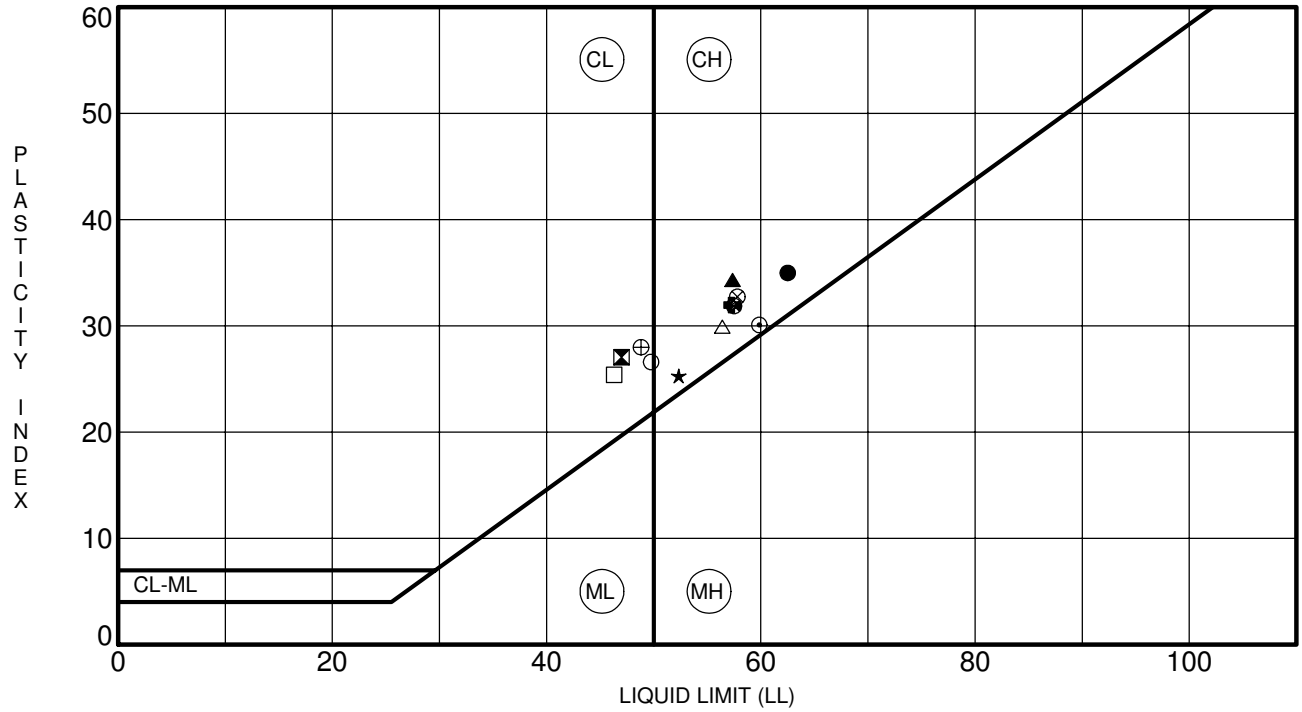
	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BH77-22 SS5**	**0.43**	**0.00**			**0.0**	**0.3**	**99.7**	
⊠									
▲									
★									

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **5 Dec 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

GRAIN SIZE DISTRIBUTION



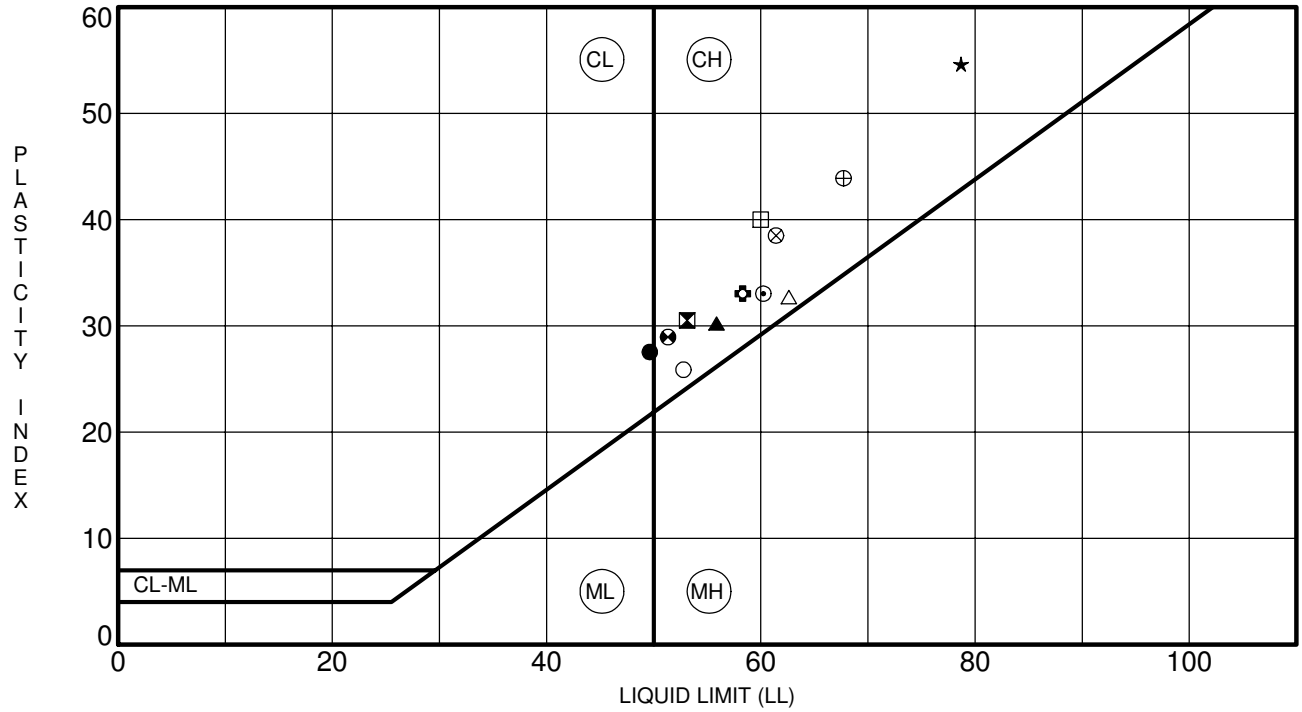
Specimen Identification			LL	PL	PI	Fines	Classification
●	BH 1-22	SS2	63	28	35		CH - Inorganic clays of high plasticity
⊠	BH 2-22	SS2	47	20	27		CL - Inorganic clays of low plasticity
▲	BH 4-22	SS2	57	23	34		CH - Inorganic clays of high plasticity
★	BH 5-22	SS2	52	27	25		CH - Inorganic clays of high plasticity
⊙	BH 6-22	SS3	60	30	30	98.5	CH - Inorganic clays of high plasticity CH
✿	BH 7-22	SS2	57	25	32		CH - Inorganic clays of high plasticity
○	BH 8-22	SS2	50	23	27		CL - Inorganic clays of low plasticity
△	BH 9-22	SS2	56	26	30		CH - Inorganic clays of high plasticity
⊗	BH10-22	SS3	58	25	33		CH - Inorganic clays of high plasticity
⊕	BH11-22	SS2	49	21	28		CL - Inorganic clays of low plasticity
□	BH12-22	SS2	46	21	25	88.7	CL - Inorganic clays of low plasticity CL
⊛	BH13A-22	SS1	57	26	32		CH - Inorganic clays of high plasticity

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **28 Mar 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

ATTERBERG LIMITS' RESULTS



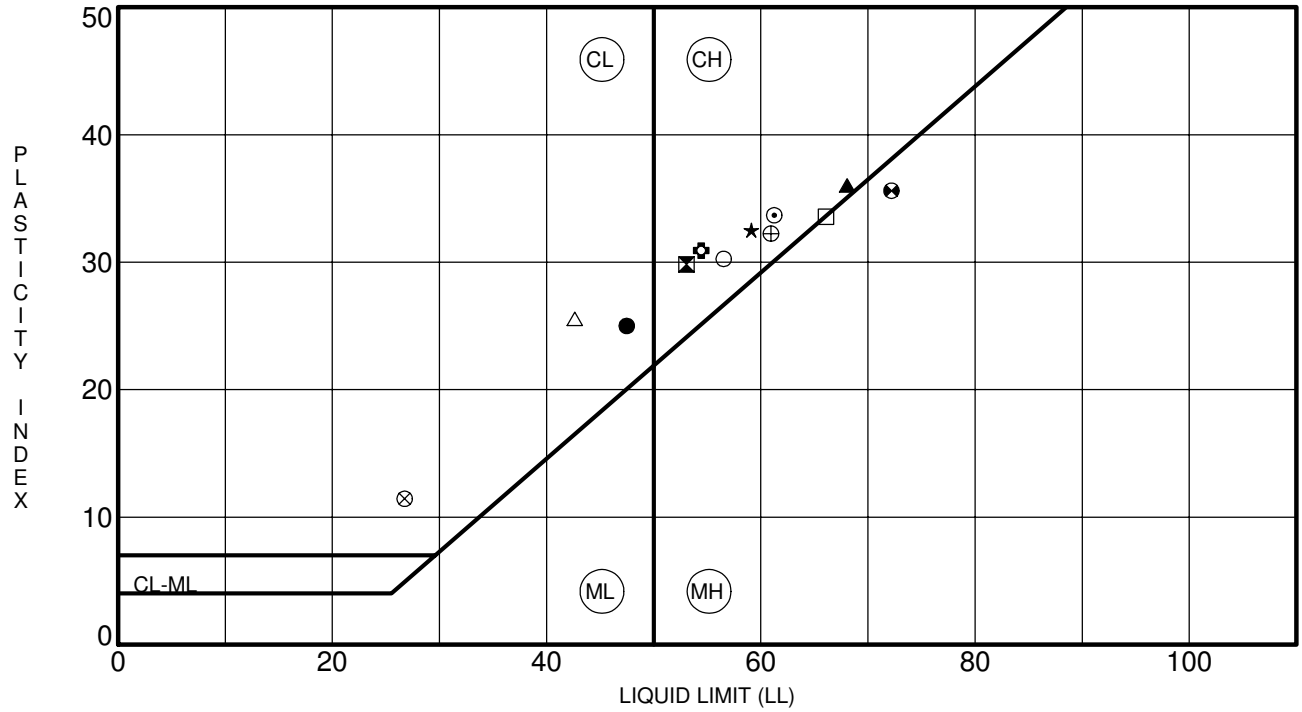
Specimen Identification			LL	PL	PI	Fines	Classification
●	BH14-22	SS2	50	22	28		CL - Inorganic clays of low plasticity
⊠	BH15-22	SS2	53	23	31		CH - Inorganic clays of high plasticity
▲	BH16-22	SS2	56	26	30		CH - Inorganic clays of high plasticity
★	BH17-22	SS3	79	24	55		CH - Inorganic clays of high plasticity
⊙	BH18-22	SS2	60	27	33		CH - Inorganic clays of high plasticity
✿	BH19-22	SS4	58	25	33		CH - Inorganic clays of high plasticity
○	BH20-22	SS2	53	27	26		CH - Inorganic clays of high plasticity
△	BH22-22	SS2	63	30	33		CH - Inorganic clays of high plasticity
⊗	BH23-22	SS2	61	23	39		CH - Inorganic clays of high plasticity
⊕	BH24-22	SS2	68	24	44		CH - Inorganic clays of high plasticity
□	BH25-22	SS3	60	20	40		CH - Inorganic clays of high plasticity
⊛	BH26A-22	SS1	51	22	29		CH - Inorganic clays of high plasticity

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **6 Apr 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

ATTERBERG LIMITS' RESULTS



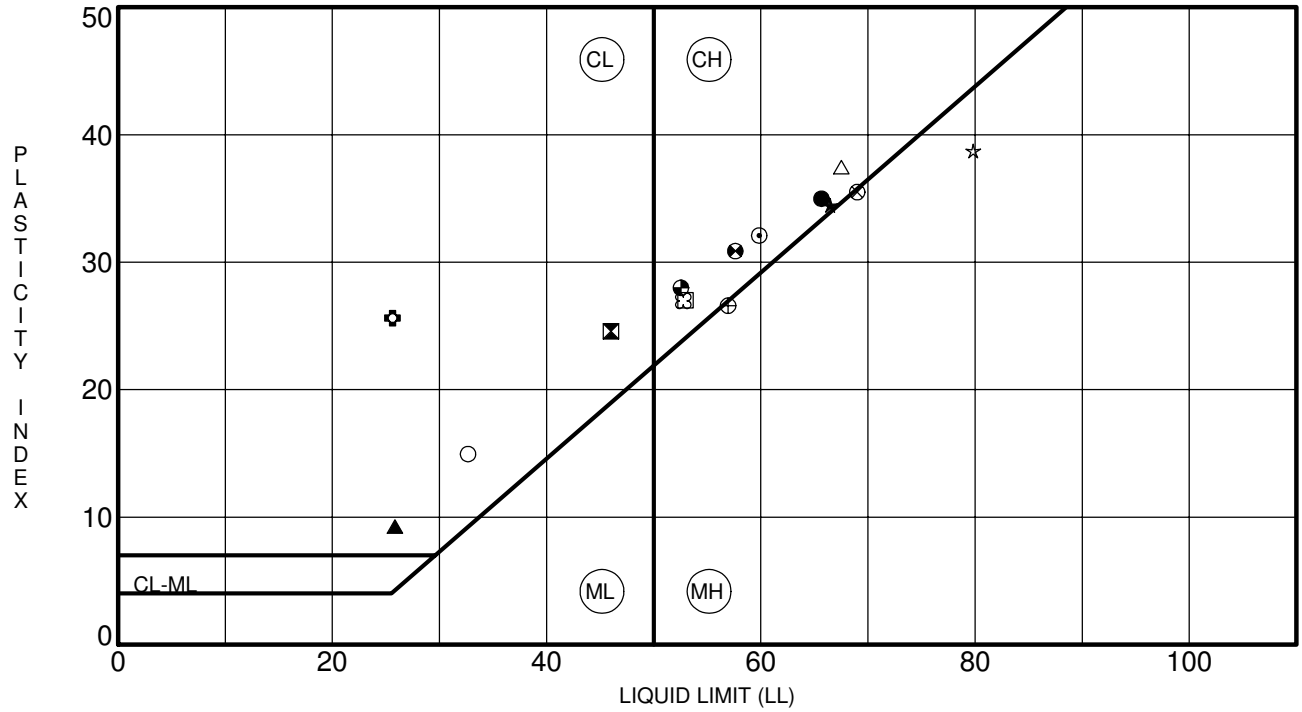
Specimen Identification			LL	PL	PI	Fines	Classification
●	BH27-22	SS3	47	22	25		CL - Inorganic clays of low plasticity
⧓	BH29-22	SS2	53	23	30		CH - Inorganic clays of high plasticity
▲	BH30-22	SS2	68	32	36		CH - Inorganic clays of high plasticity
★	BH31-22	SS2	59	27	33		CH - Inorganic clays of high plasticity
⊙	BH32-22	SS2	61	28	34		CH - Inorganic clays of high plasticity
✿	BH33-22	SS2	54	24	31		CH - Inorganic clays of high plasticity
○	BH34-22	SS5	57	26	30		CH - Inorganic clays of high plasticity
△	BH35-22	SS3	43	17	26		CL - Inorganic clays of low plasticity
⊗	BH36-22	SS4	27	15	11		CL - Inorganic clays of low plasticity
⊕	BH37-22	SS2	61	29	32		CH - Inorganic clays of high plasticity
□	BH38-22	SS2	66	33	34		CH - Inorganic clays of high plasticity
☢	BH39-22	SS2	72	37	36		CH - Inorganic clays of high plasticity

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **1 Apr 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

ATTERBERG LIMITS' RESULTS



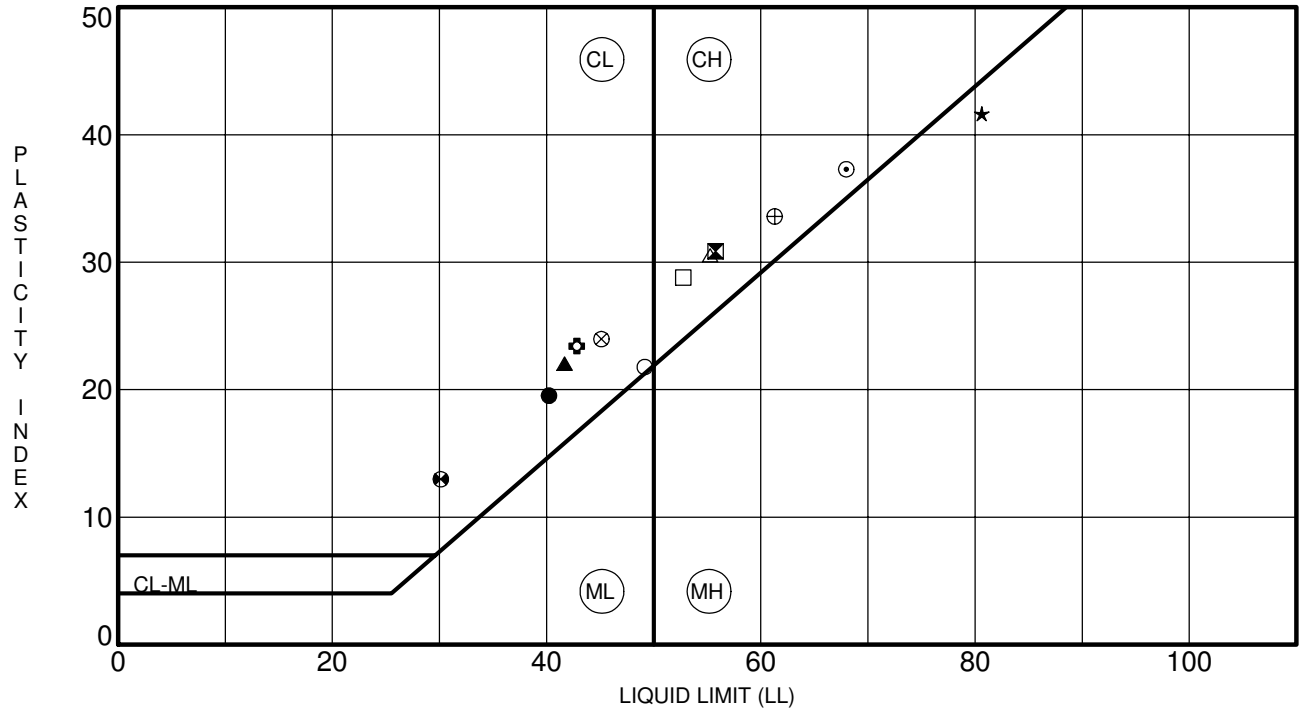
Specimen Identification			LL	PL	PI	Fines	Classification
●	BH40-22	SS2	66	31	35		CH - Inorganic clays of high plasticity
⊠	BH41-22	SS2	46	21	25		CL - Inorganic clays of low plasticity
▲	BH42-22	SS2	26	17	9		CL - Inorganic clays of low plasticity
★	BH43-22	SS2	66	32	34		CH - Inorganic clays of high plasticity
⊙	BH44-22	SS2	60	28	32		CH - Inorganic clays of high plasticity
✿	BH45-22	SS2	26	NP	26		CL - Inorganic clays of low plasticity
○	BH46A-22	SS1	33	18	15		CL - Inorganic clays of low plasticity
△	BH47-22	SS3	68	30	37		CH - Inorganic clays of high plasticity
⊗	BH48-22	SS2	69	33	35		CH - Inorganic clays of high plasticity
⊕	BH49-22	SS2	57	30	27		CH - Inorganic clays of high plasticity
□	BH50-22	SS3	53	26	27		CH - Inorganic clays of high plasticity
⊛	BH51-22	SS3	58	27	31		CH - Inorganic clays of high plasticity
◕	BH52-22	SS6	53	25	28	99.3	CH - Inorganic clays of high plasticity CH
☆	BH53-22	SS2	80	41	39		MH - Inorganic silts of high plasticity
⊠	BH54-22	SS2	53	26	27		CH - Inorganic clays of high plasticity

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **24 Mar 22**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

ATTERBERG LIMITS' RESULTS



Specimen Identification			LL	PL	PI	Fines	Classification
●	BH55-22	SS2	40	21	20		CL - Inorganic clays of low plasticity
⊠	BH56-22	SS3	56	25	31		CH - Inorganic clays of high plasticity
▲	BH57-22	SS2	42	20	22		CL - Inorganic clays of low plasticity
★	BH58-22	SS3	81	39	42		MH - Inorganic silts of high plasticity
⊙	BH59-22	SS2	68	31	37		CH - Inorganic clays of high plasticity
✿	BH60-22	AU1	43	19	23		CL - Inorganic clays of low plasticity
○	BH61-22	SS2	49	27	22		CL - Inorganic clays of low plasticity
△	BH62-22	SS3	55	25	31		CH - Inorganic clays of high plasticity
⊗	BH63-22	SS1	45	21	24		CL - Inorganic clays of low plasticity
⊕	BH64-22	SS2	61	28	34		CH - Inorganic clays of high plasticity
□	BH65-22	SS2	53	24	29		CH - Inorganic clays of high plasticity
⊖	BH68-22	SS3	30	17	13		CL - Inorganic clays of low plasticity

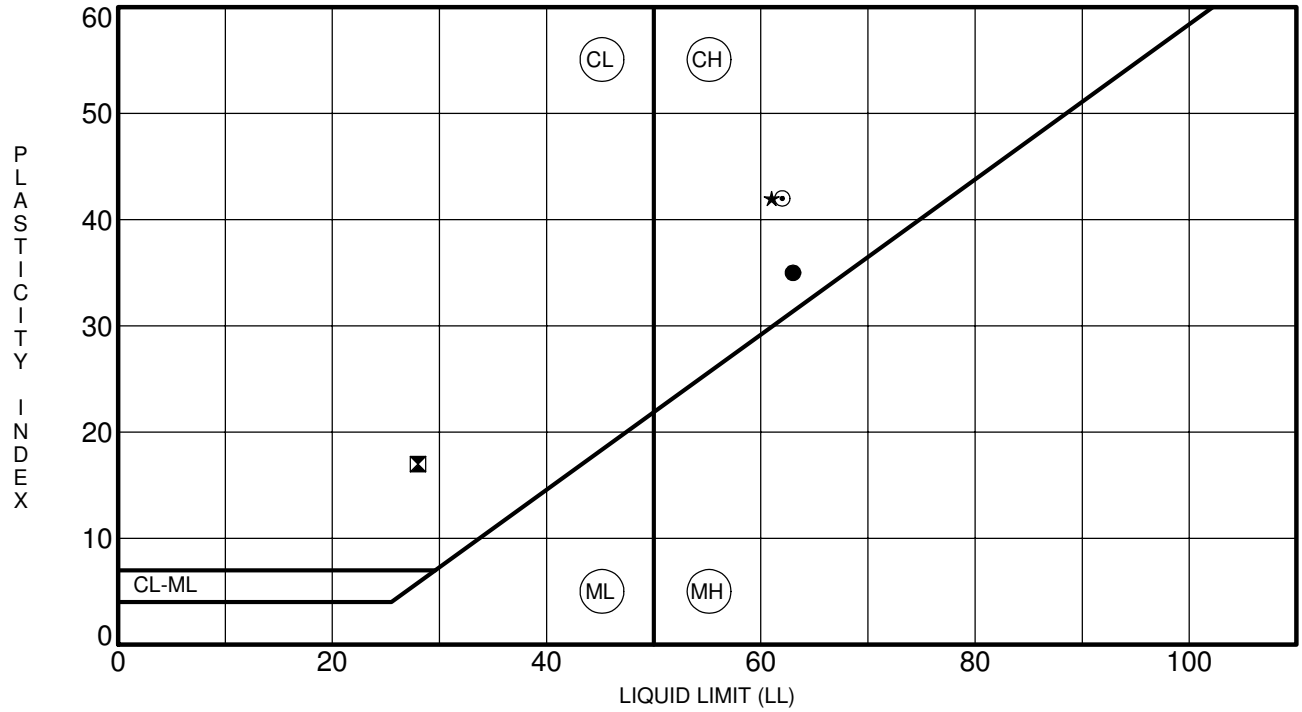
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **13 Apr 22**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

ATTERBERG LIMITS' RESULTS



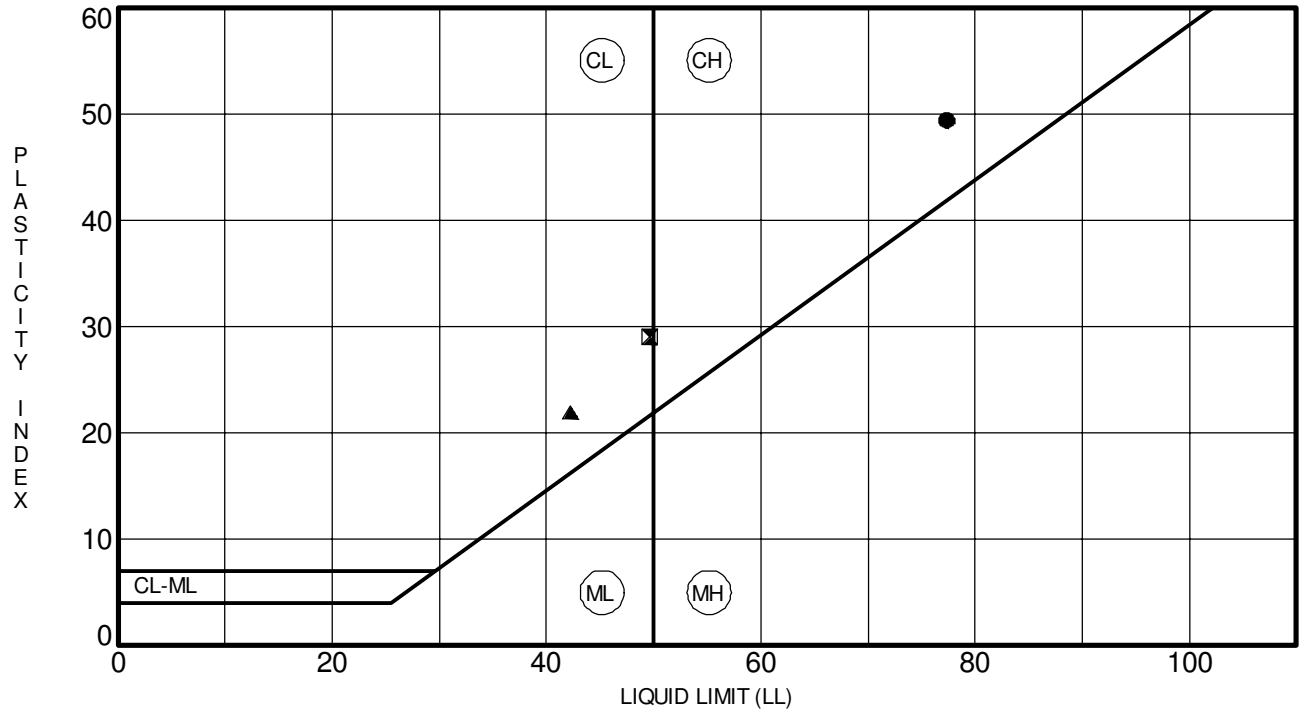
Specimen Identification			LL	PL	PI	Fines	Classification
●	BH69-22	SS2	63	28	35		CH - Inorganic clays of high plasticity
⊠	BH70-22	SS3	28	11	17		CL - Inorganic clay of low plasticity
▲	BH72-22	SS2	69	24	45		CH - Inorganic clays of high plasticity
⊙	BH76-22	SS4	62	20	42		CH - Inorganic clays of high plasticity
	BH76-22	SS2	62	20	42		CH - Inorganic clays of high plasticity

CLIENT	**Taggart Investments**	FILE NO.	**PG5827**
PROJECT	**Geotechnical Investigation - Proposed Mixed-Use Community Development**	DATE	**6 Dec 22**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

ATTERBERG LIMITS' RESULTS

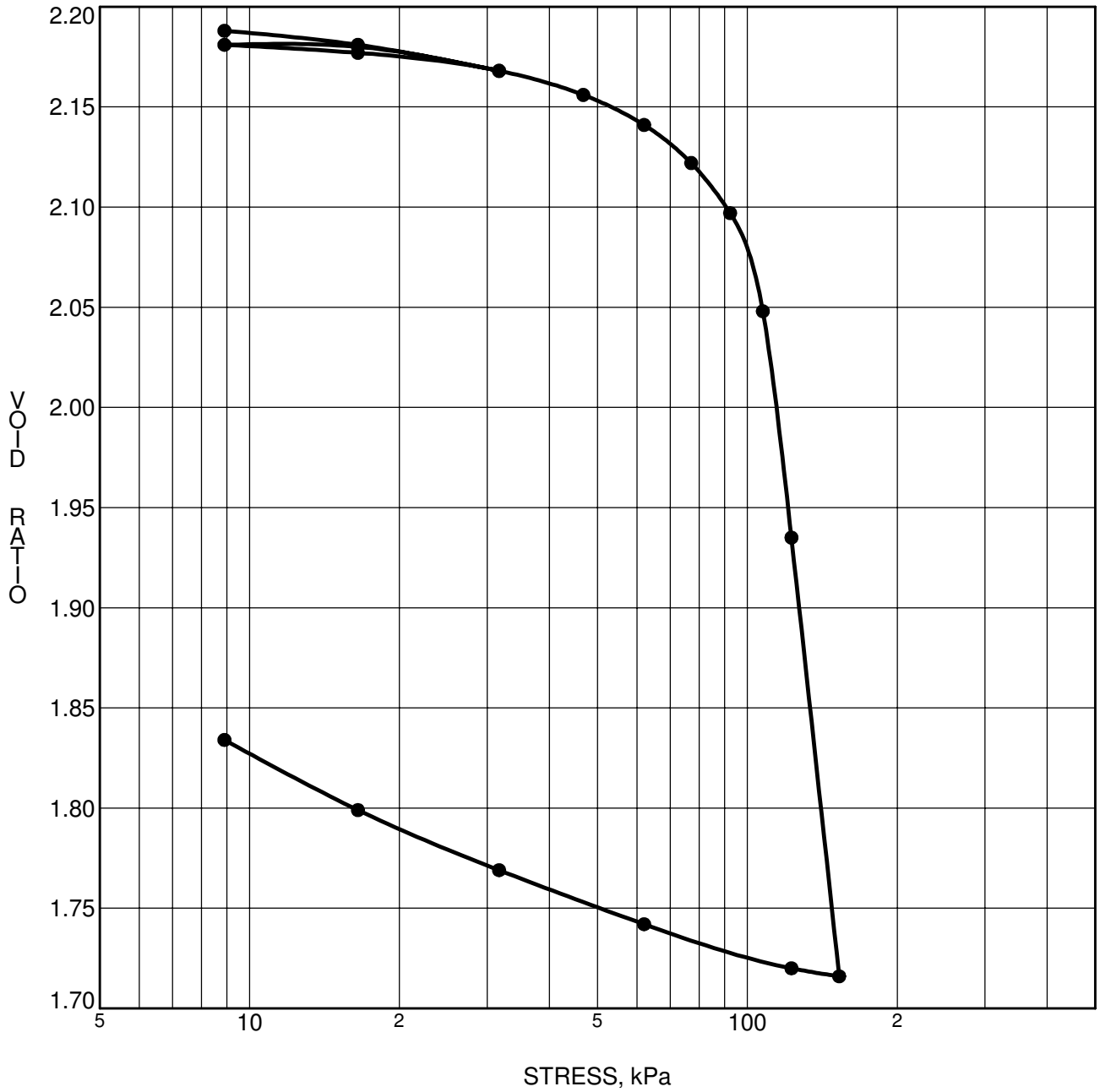


Specimen Identification			LL	PL	PI	Fines	Classification
●	**BH 3**	**TW 3**	**77**	**28**	**49**		**Clays of high plasticity**
⊠	**BH 8**	**TW 3**	**50**	**21**	**29**		**Clays of low plasticity**
▲	**BH 9**	**TW 4**	**42**	**20**	**22**		**Clays of low plasticity**

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**30 Sep 11**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

ATTERBERG LIMITS' RESULTS



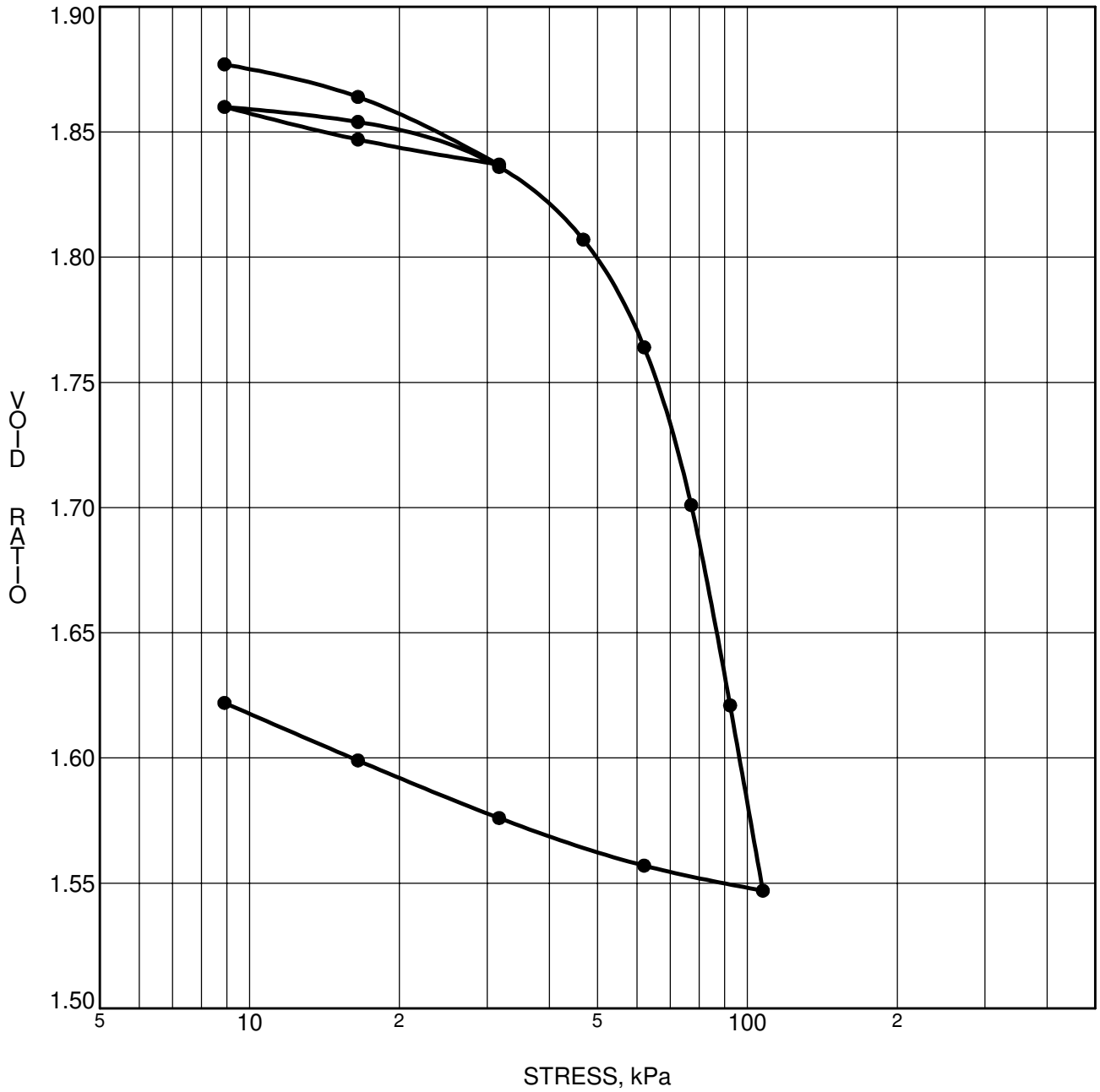
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 5-22**	p'o	**33.29** kPa	Ccr	**0.023**
Sample No.	**TW4**	p'c	**102.33** kPa	Cc	**2.143**
Sample Depth	**3.40** m	OC Ratio	**3.1**	Wo	**79.6** %
Sample Elev.	**75.36** m	Void Ratio	**2.189**	Unit Wt.	**15.2** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **04/14/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



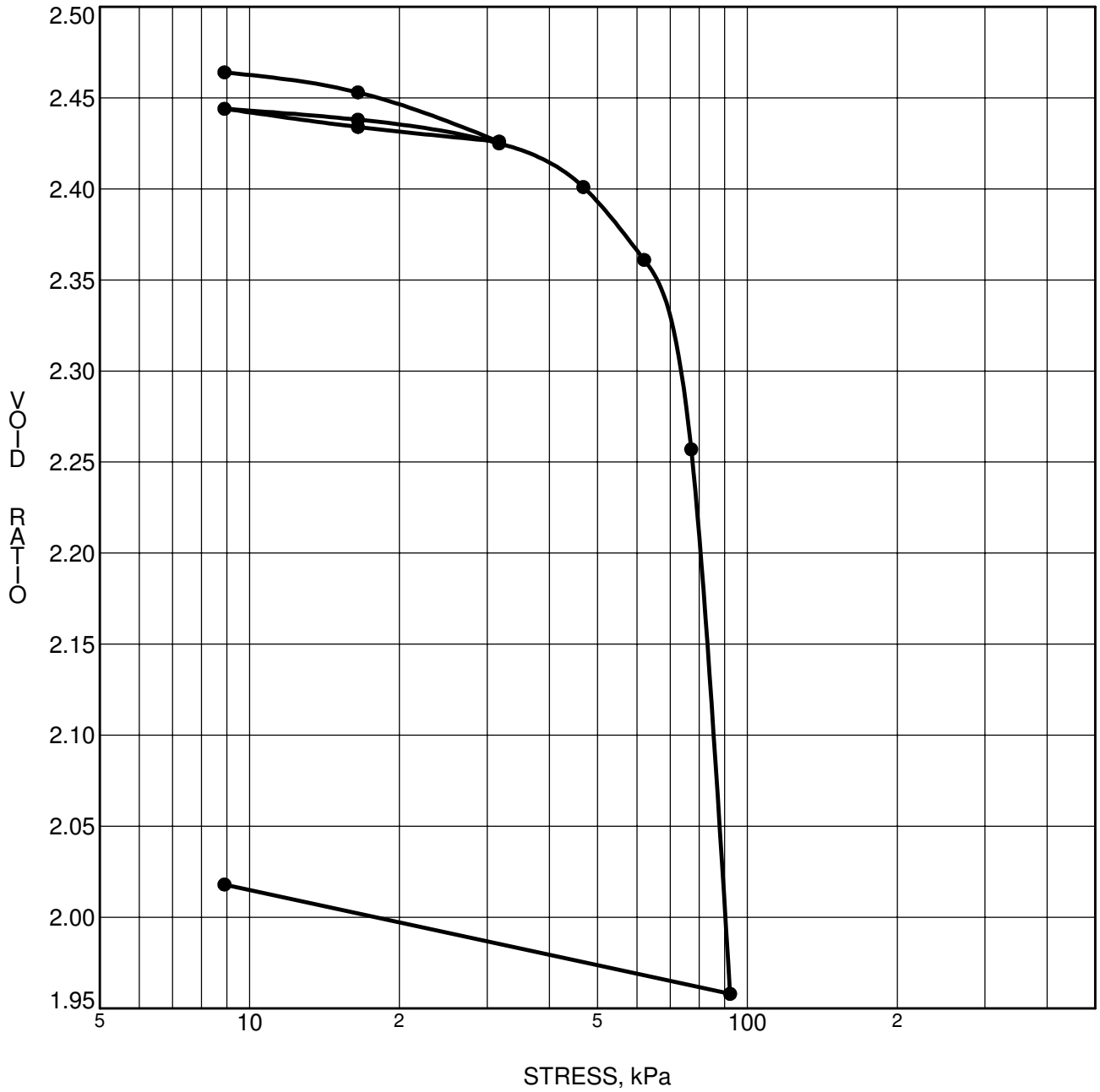
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 6A-22**	p'o	**35.4** kPa	Ccr	**0.042**
Sample No.	**TW3**	p'c	**70** kPa	Cc	**1.152**
Sample Depth	**2.67** m	OC Ratio	**2.0**	Wo	**68.3** %
Sample Elev.	**79.44** m	Void Ratio	**1.879**	Unit Wt.	**15.8** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **04/14/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



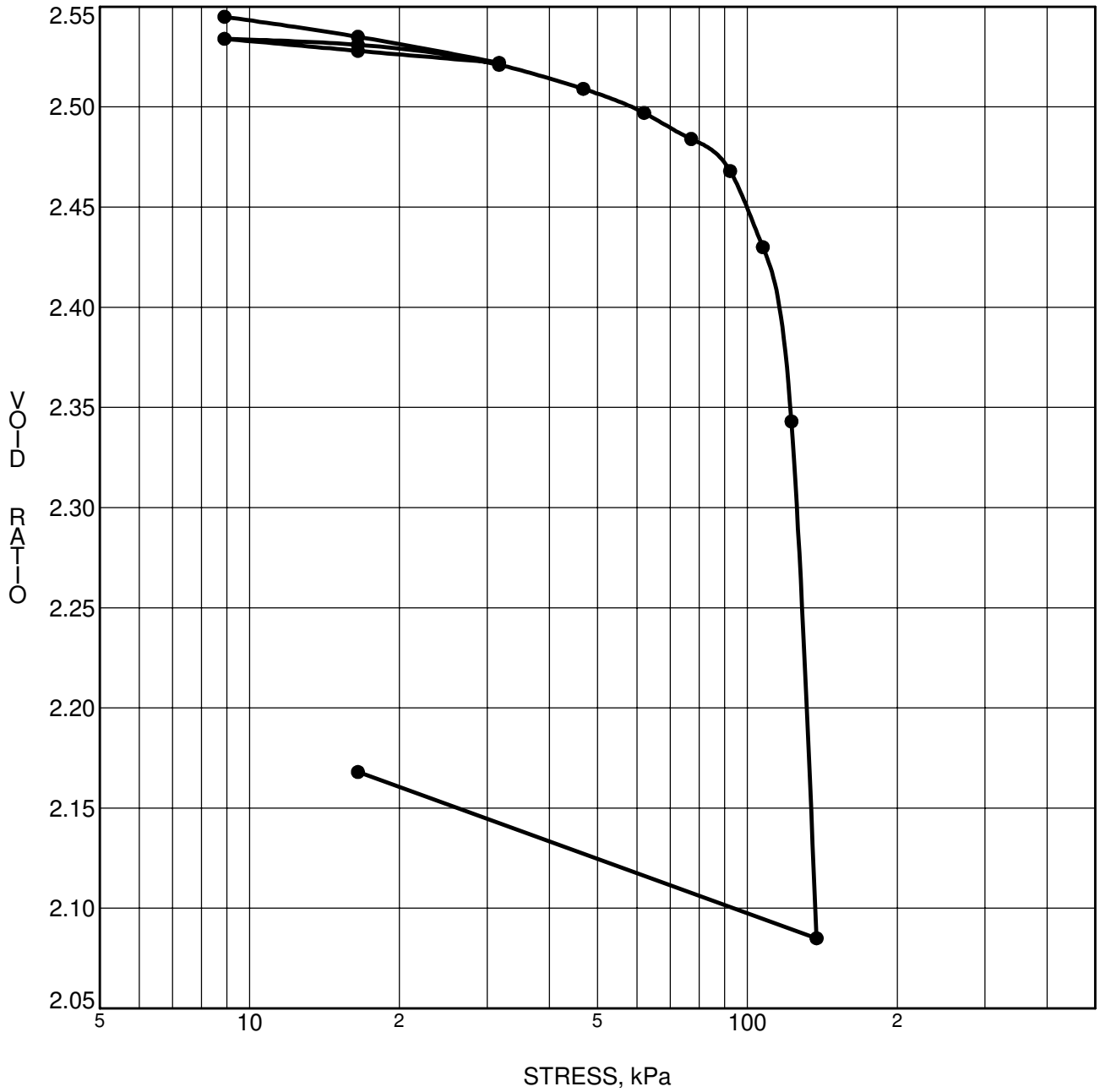
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 8-22**	p'o	**67.2** kPa	Ccr	**0.036**
Sample No.	**TW5**	p'c	**70.8** kPa	Cc	**4.000**
Sample Depth	**4.90** m	OC Ratio	**1.1**	Wo	**97.8** %
Sample Elev.	**75.61** m	Void Ratio	**2.688**	Unit Wt.	**14.5** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/21/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 9-22**	p'o	**78.06** kPa	Ccr	**0.024**
Sample No.	**TW7**	p'c	**120.23** kPa	Cc	**4.794**
Sample Depth	**9.45** m	OC Ratio	**1.5**	Wo	**92.7** %
Sample Elev.	**69.79** m	Void Ratio	**2.549**	Unit Wt.	**14.7** kN/m ^{3}

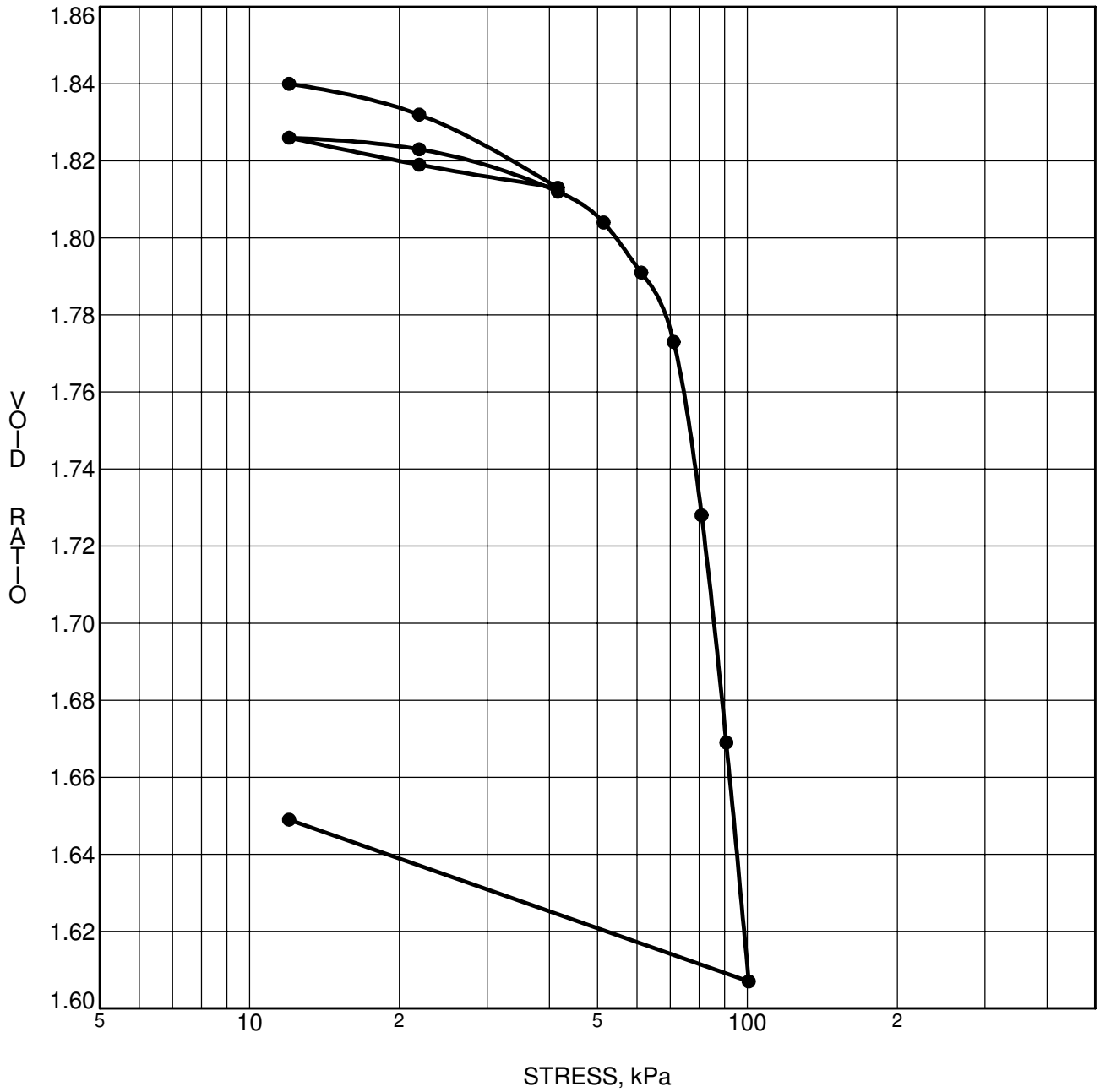
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **05/01/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH10-22**	p'o	**36.18** kPa	Ccr	**0.026**
Sample No.	**TW4**	p'c	**73.34** kPa	Cc	**1.277**
Sample Depth	**2.54** m	OC Ratio	**2.0**	Wo	**67.3** %
Sample Elev.	**79.93** m	Void Ratio	**1.849**	Unit Wt.	**15.8** kN/m ^{3}

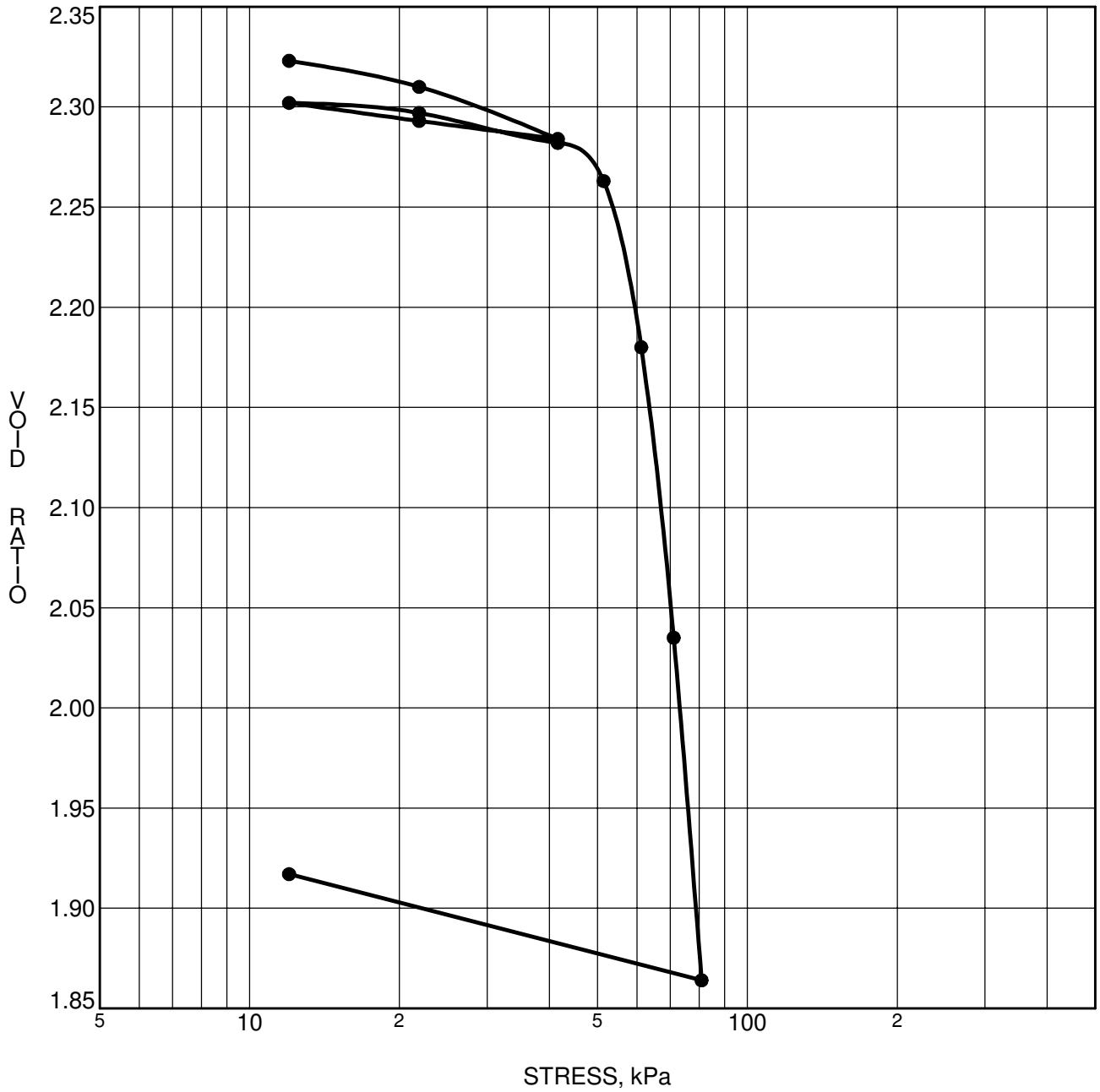
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/29/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



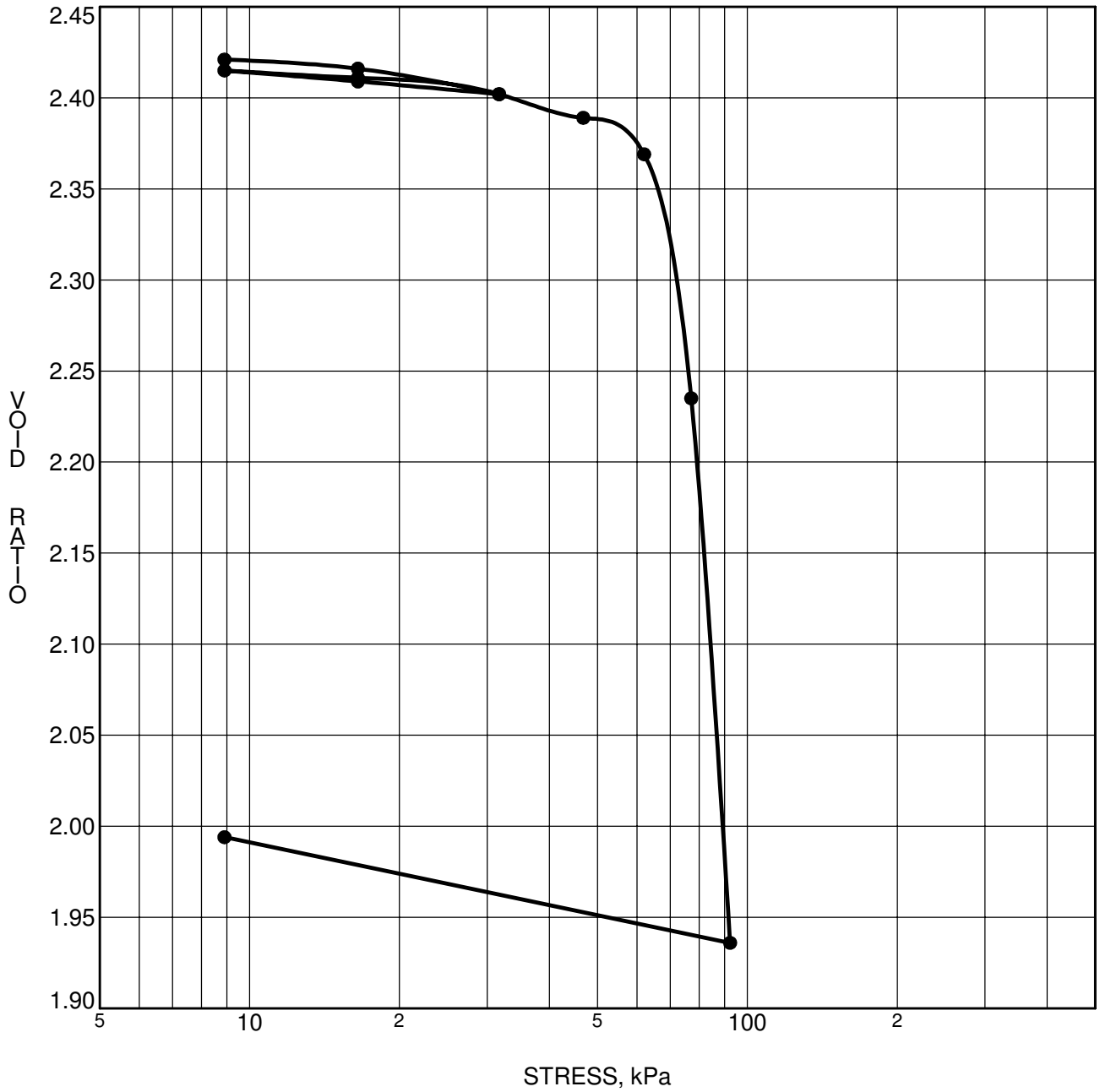
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH13A-22**	p'o	**38.21** kPa	Ccr	**0.040**
Sample No.	**TW3**	p'c	**60.26** kPa	Cc	**3.088**
Sample Depth	**3.35** m	OC Ratio	**1.6**	Wo	**85.1** %
Sample Elev.	**77.62** m	Void Ratio	**2.34**	Unit Wt.	**15.0** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/29/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH13B-22**	p'o	**43.43** kPa	Ccr	**0.025**
Sample No.	**TW1**	p'c	**72.11** kPa	Cc	**3.724**
Sample Depth	**4.19** m	OC Ratio	**1.7**	Wo	**88.1** %
Sample Elev.	**76.78** m	Void Ratio	**2.422**	Unit Wt.	**14.8** kN/m ^{3}

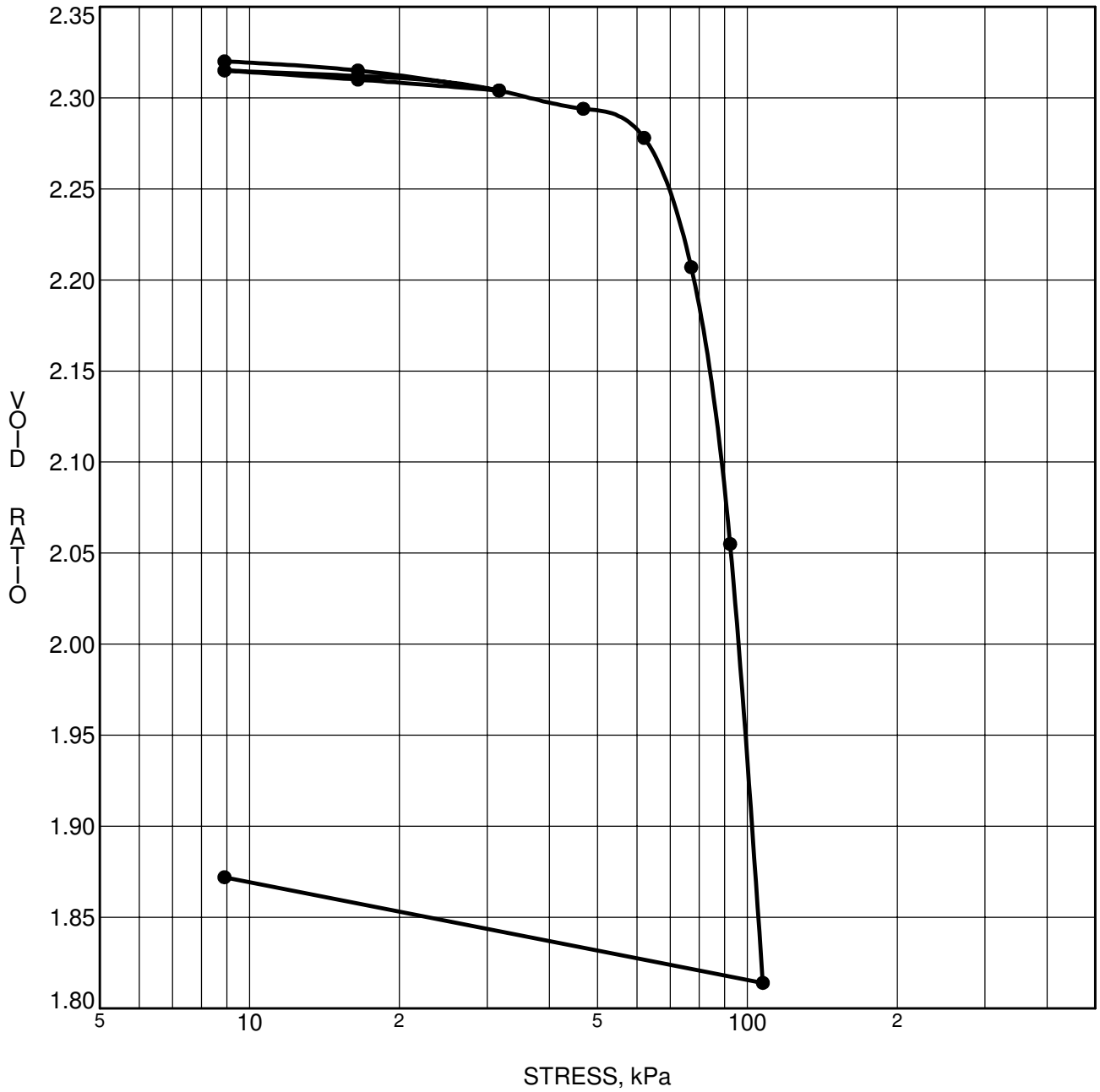
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **09/30/22**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH14-22**	p'o	**38.63** kPa	Ccr	**0.020**
Sample No.	**TW5**	p'c	**81.28** kPa	Cc	**3.608**
Sample Depth	**4.14** m	OC Ratio	**2.1**	Wo	**84.5** %
Sample Elev.	**77.47** m	Void Ratio	**2.323**	Unit Wt.	**15.0** kN/m ^{3}

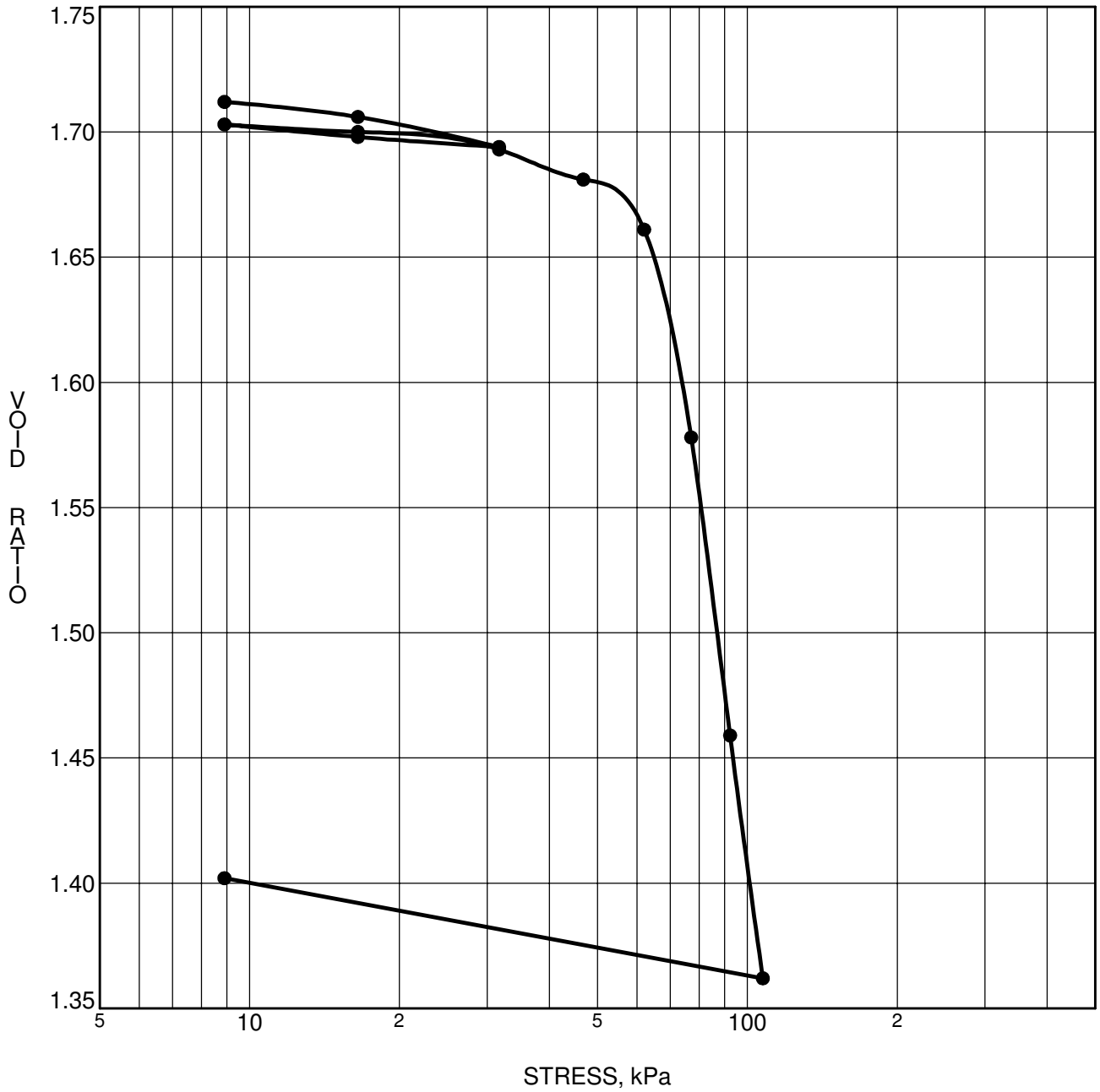
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **09/17/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH16-22**	p'o	**34.48** kPa	Ccr	**0.020**
Sample No.	**TW4**	p'c	**67.61** kPa	Cc	**1.493**
Sample Depth	**3.35** m	OC Ratio	**2.0**	Wo	**62.4** %
Sample Elev.	**77.95** m	Void Ratio	**1.717**	Unit Wt.	**16.1** kN/m ^{3}

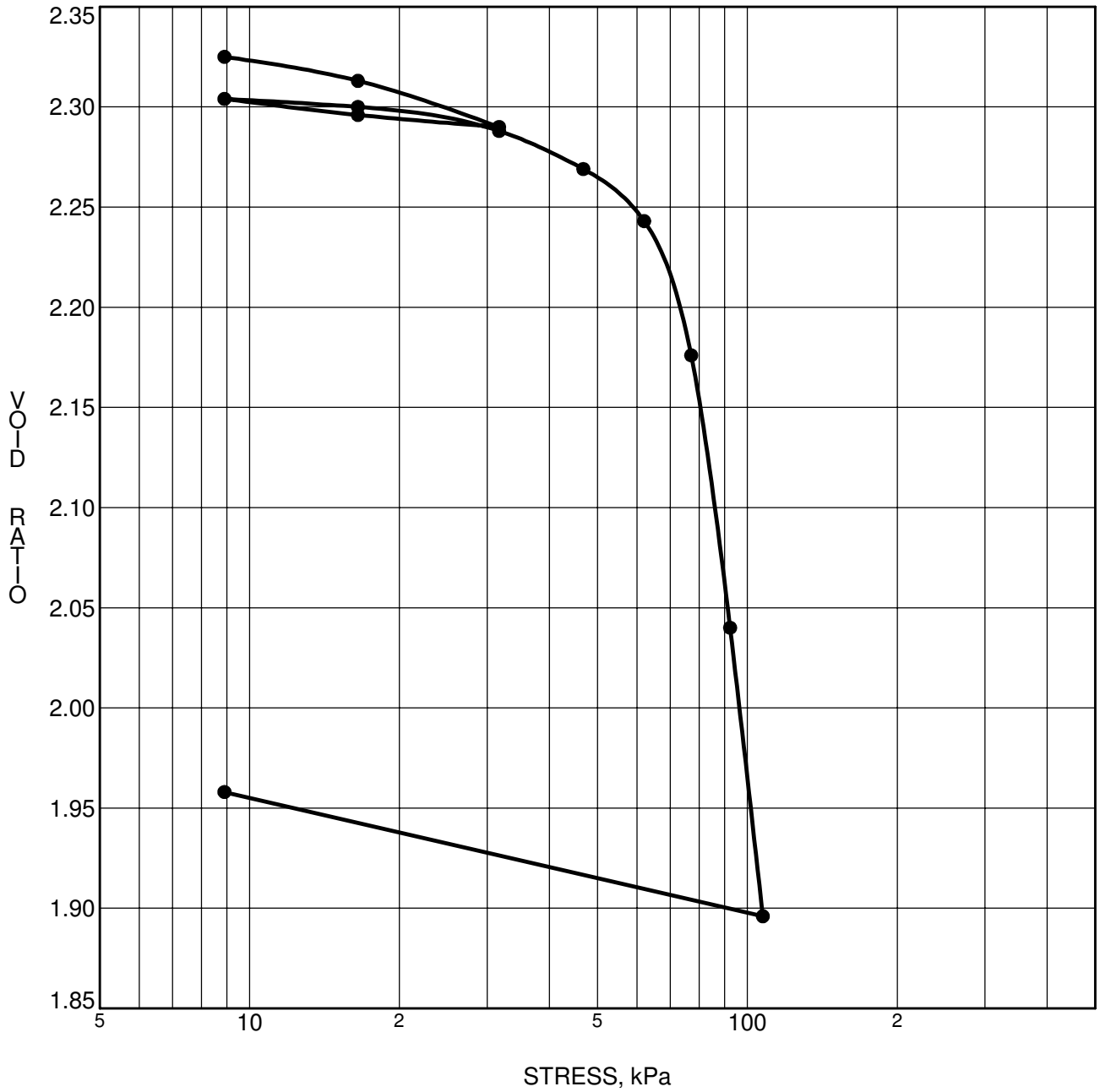
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **10/07/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH16-22**	p'o	**43.89** kPa	Ccr	**0.030**
Sample No.	**TW6**	p'c	**70.8** kPa	Cc	**1.935**
Sample Depth	**4.88** m	OC Ratio	**1.6**	Wo	**84.8** %
Sample Elev.	**76.42** m	Void Ratio	**2.332**	Unit Wt.	**15.0** kN/m ^{3}

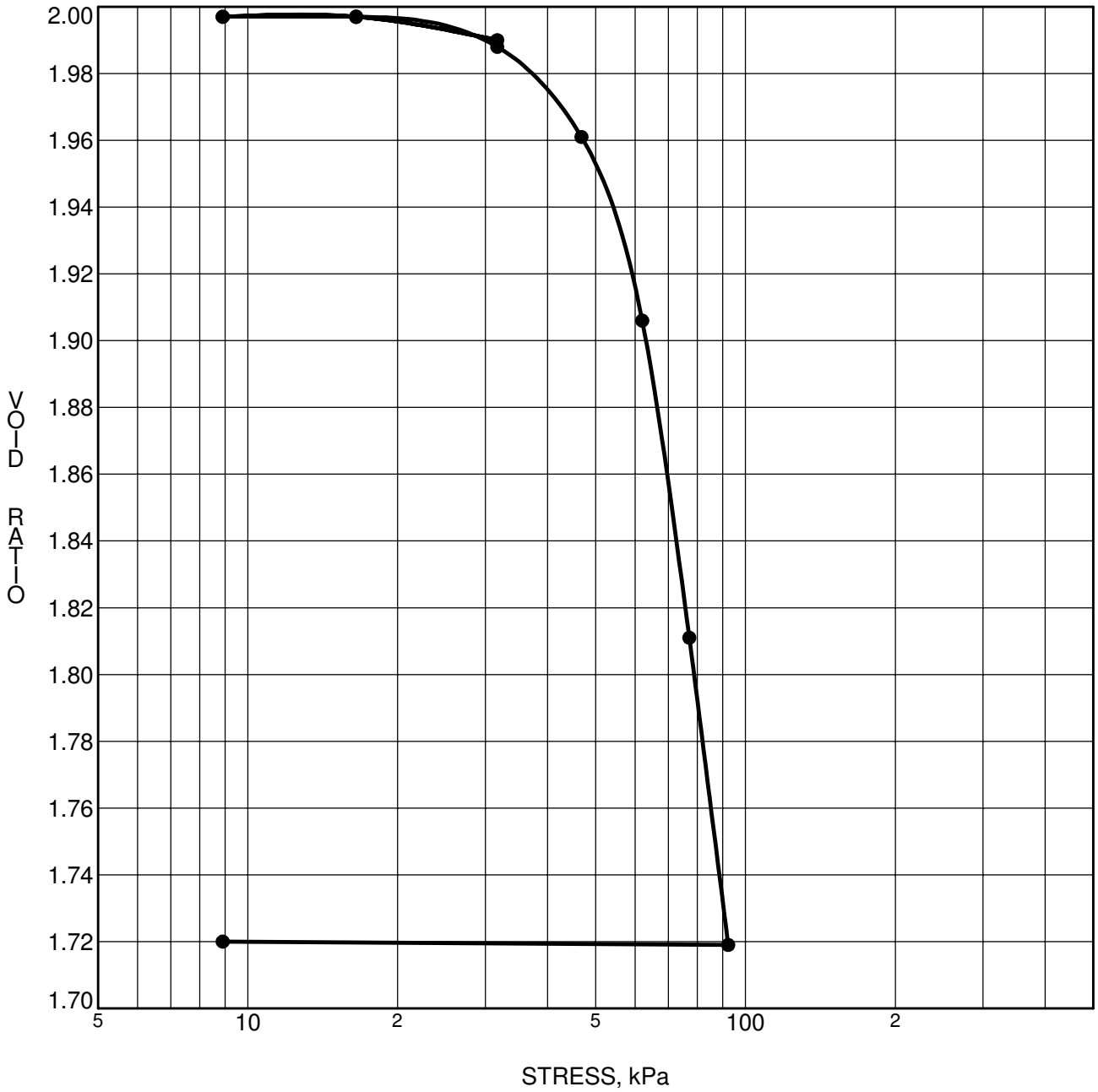
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/28/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



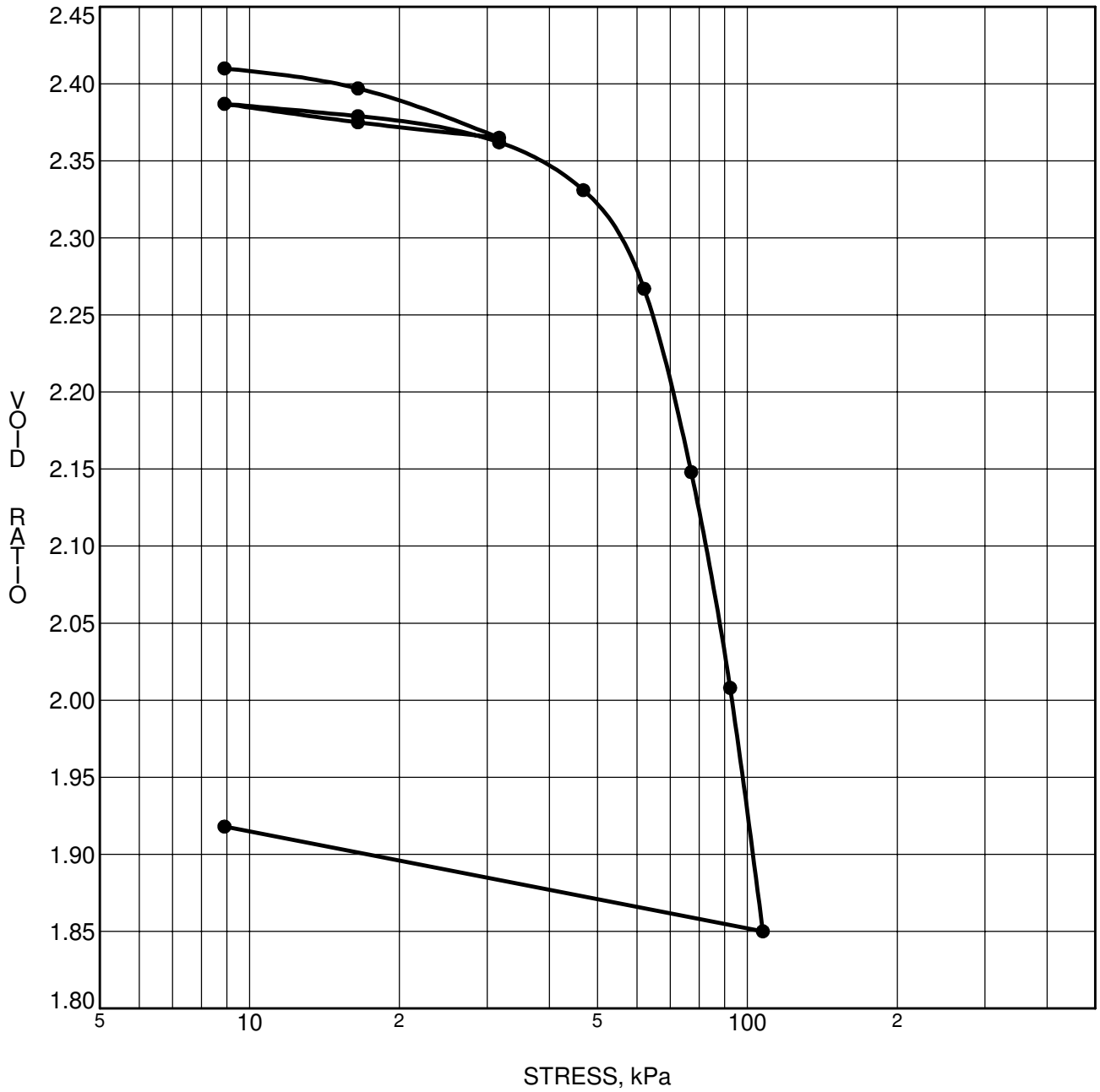
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH19-22**	p'_o	**27.51** kPa	Ccr	**0.017**
Sample No.	**TW3**	p'_c	**56.23** kPa	Cc	**1.087**
Sample Depth	**1.93** m	OC Ratio	**2.0**	Wo	**72.6** %
Sample Elev.	**76.54** m	Void Ratio	**1.997**	Unit Wt.	**15.5** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **05/11/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



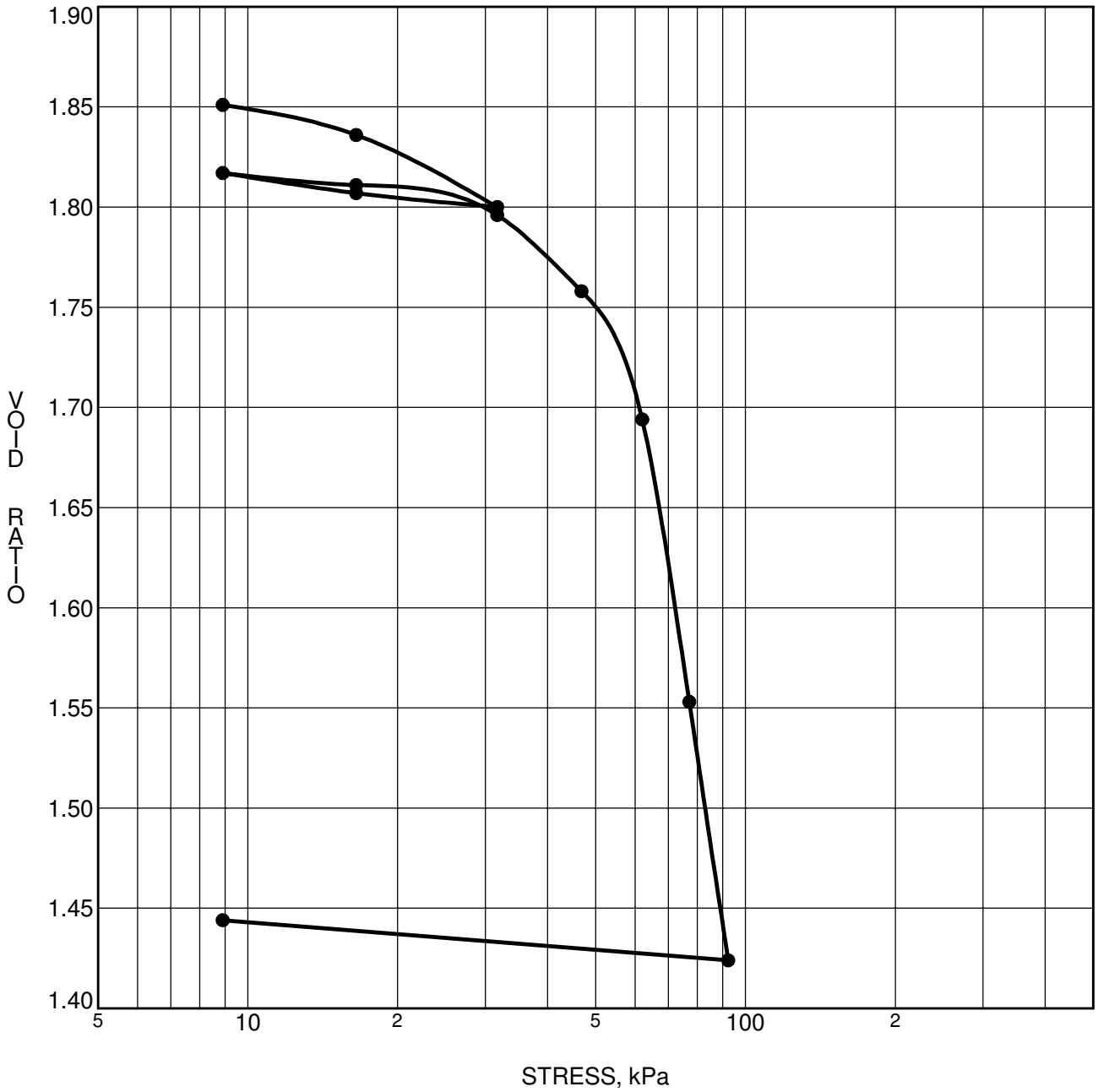
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH21-22**	p'o	**35.61** kPa	Ccr	**0.047**
Sample No.	**TW4**	p'c	**72.44** kPa	Cc	**2.518**
Sample Depth	**2.59** m	OC Ratio	**2.0**	Wo	**87.9** %
Sample Elev.	**76.58** m	Void Ratio	**2.416**	Unit Wt.	**14.8** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **11/01/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



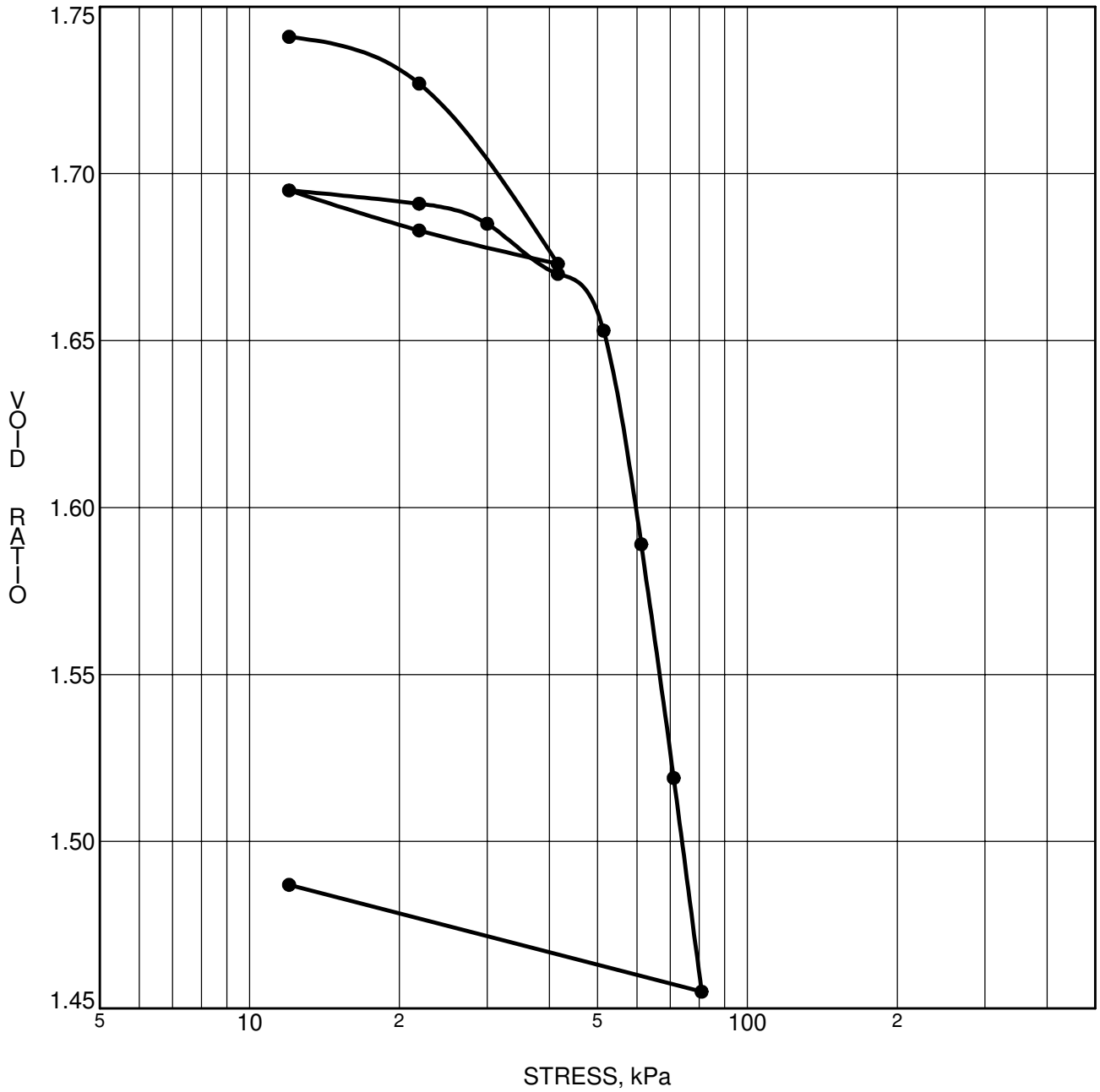
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH21-22**	p'o	**45.04** kPa	Ccr	**0.037**
Sample No.	**TW6**	p'c	**56.23** kPa	Cc	**1.579**
Sample Depth	**4.11** m	OC Ratio	**1.2**	Wo	**67.6** %
Sample Elev.	**75.06** m	Void Ratio	**1.859**	Unit Wt.	**15.8** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **06/10/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



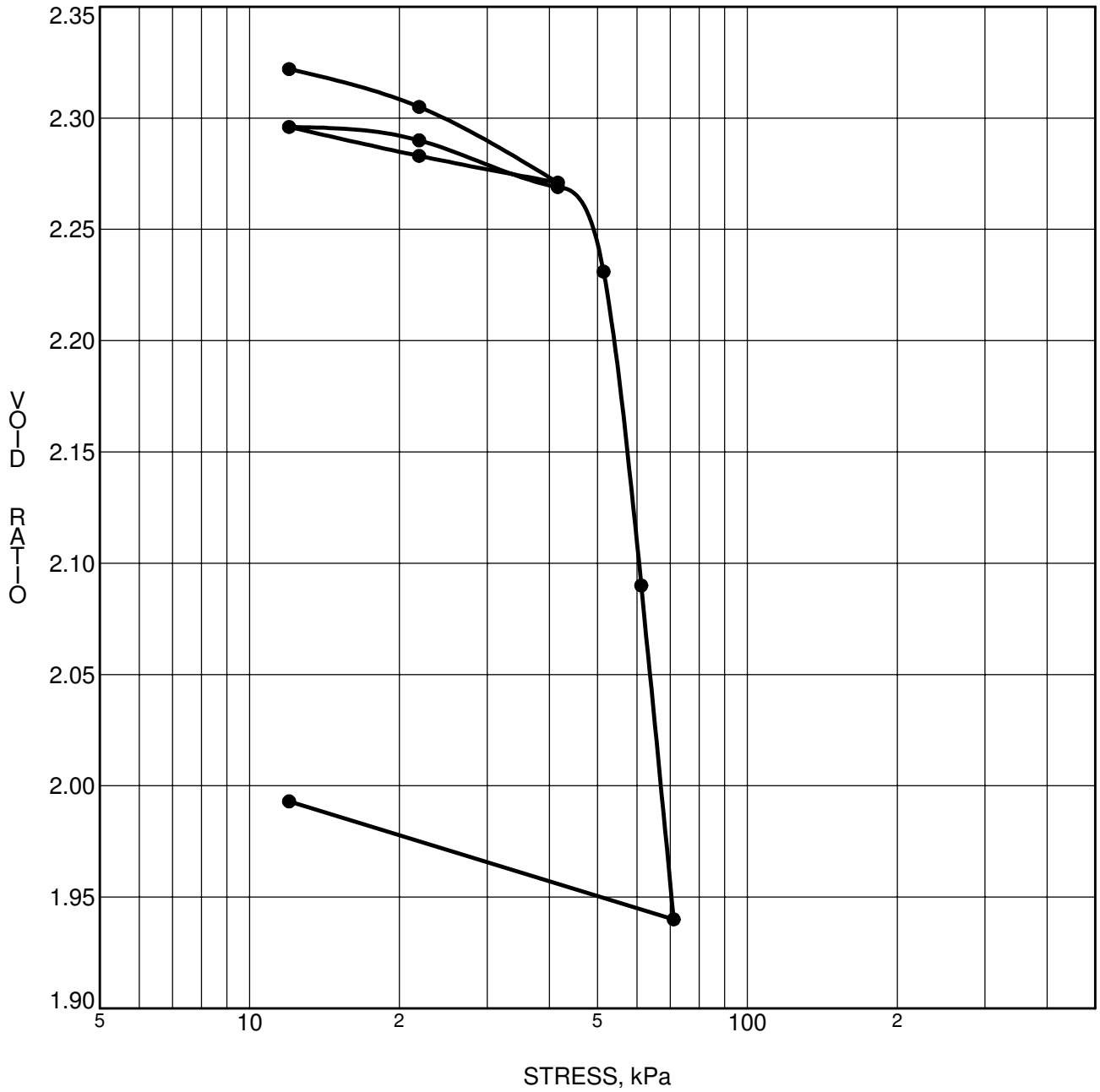
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH22A-22**	p'o	**34.9** kPa	Ccr	**0.041**
Sample No.	**TW1**	p'c	**53.95** kPa	Cc	**1.368**
Sample Depth	**2.59** m	OC Ratio	**1.5**	Wo	**64.1** %
Sample Elev.	**76.11** m	Void Ratio	**1.763**	Unit Wt.	**16.0** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **06/10/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST

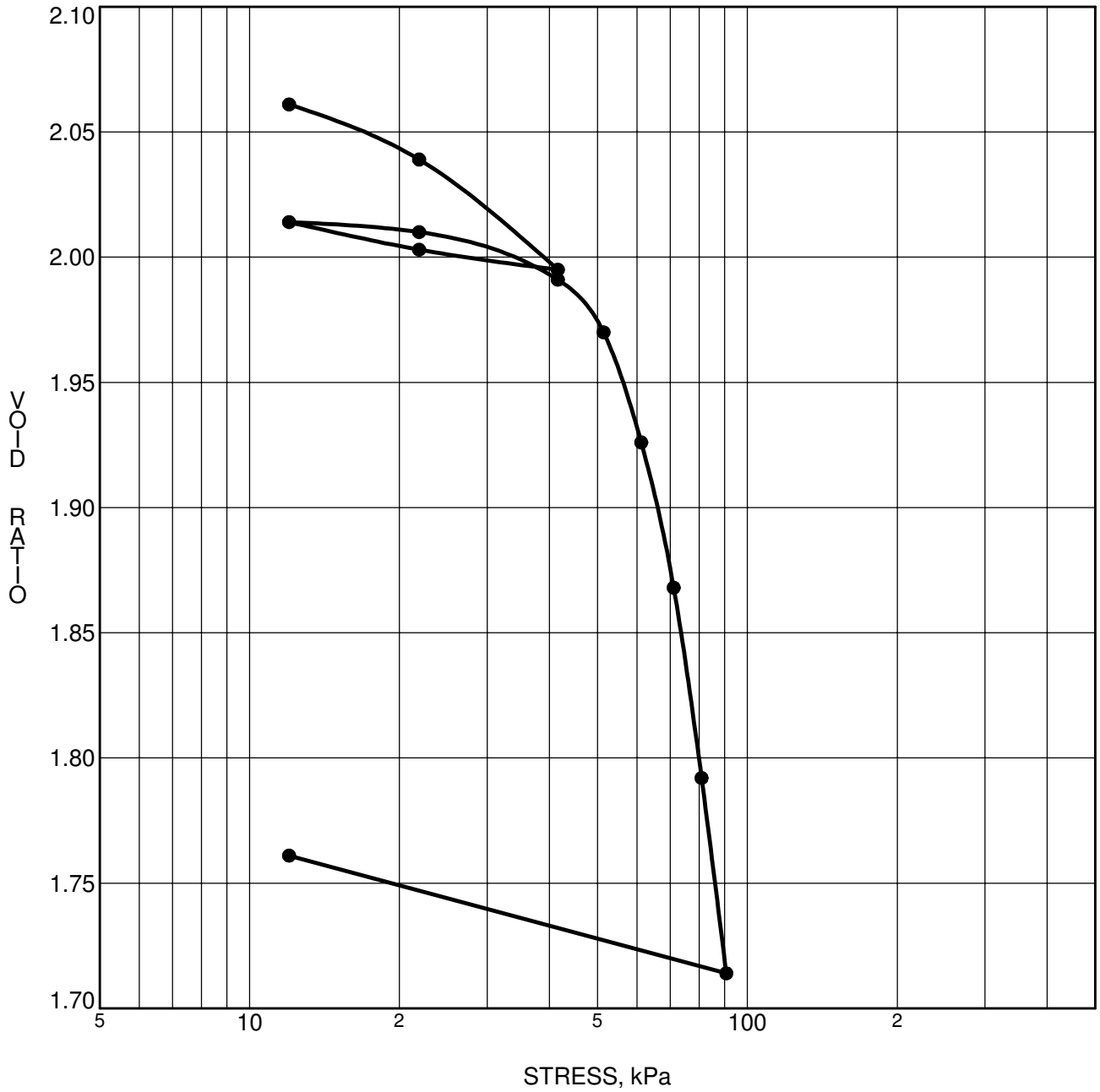


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH27-22**	p'o	**23.37** kPa	Ccr	**0.047**
Sample No.	**W4**	p'c	**53.13** kPa	Cc	**2.364**
Sample Depth	**1.91** m	OC Ratio	**2.3**	Wo	**85.1** %
Sample Elev.	**77.81** m	Void Ratio	**2.339**	Unit Wt.	kN/m ^{3}

CLIENT	**Taggart Investments**	FILE NO.	**PG5827**
PROJECT	**Geotechnical Investigation - Proposed Mixed-Use Community Development**	DATE	**14.95**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH28-22**	p'o	**25.69** kPa	Ccr	**0.041**
Sample No.	**TW5**	p'c	**67.09** kPa	Cc	**1.909**
Sample Depth	**3.35** m	OC Ratio	**2.6**	Wo	**75.8** %
Sample Elev.	**74.18** m	Void Ratio	**2.086**	Unit Wt.	**15.4** kN/m ^{3}

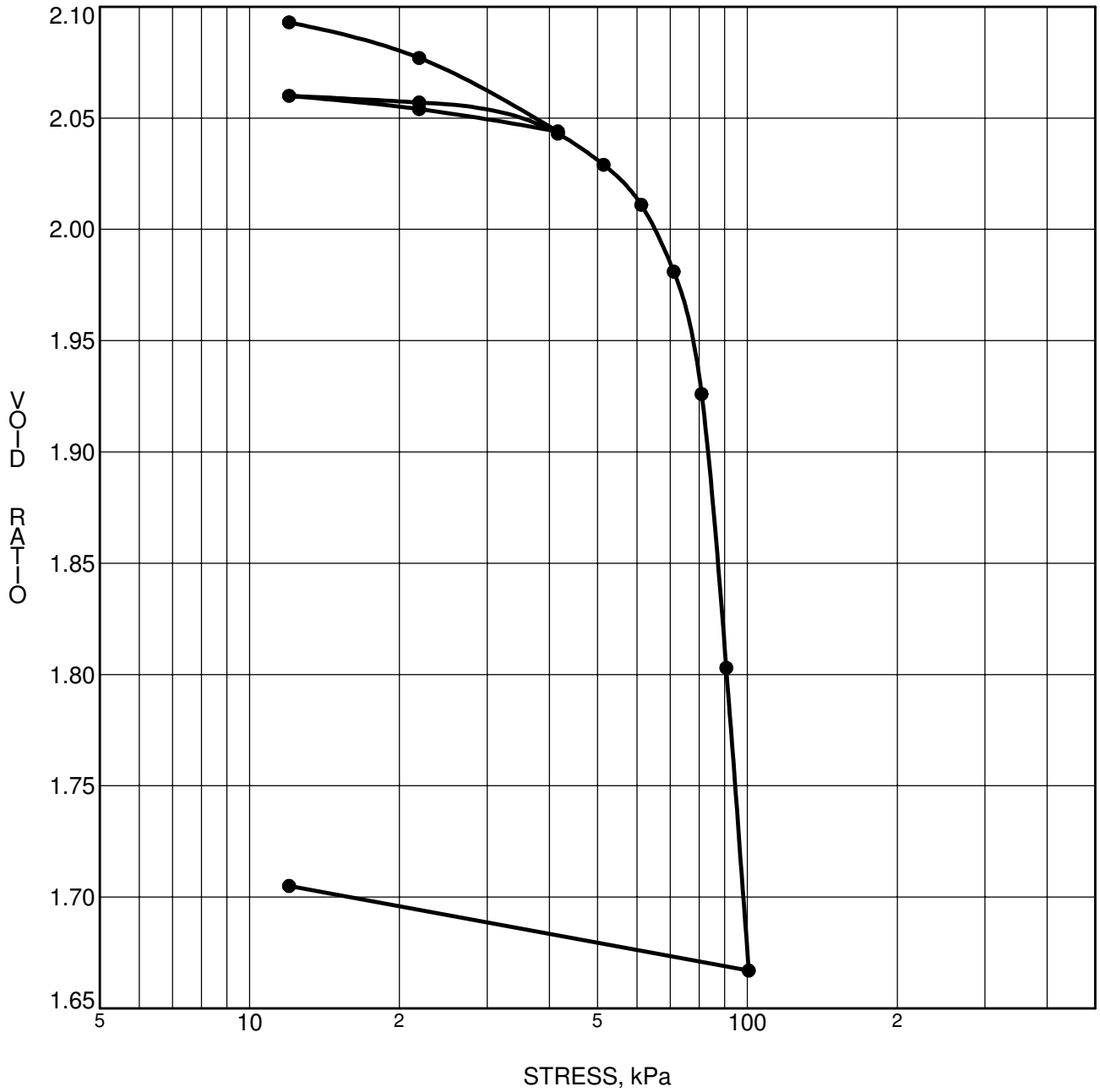
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **11/02/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



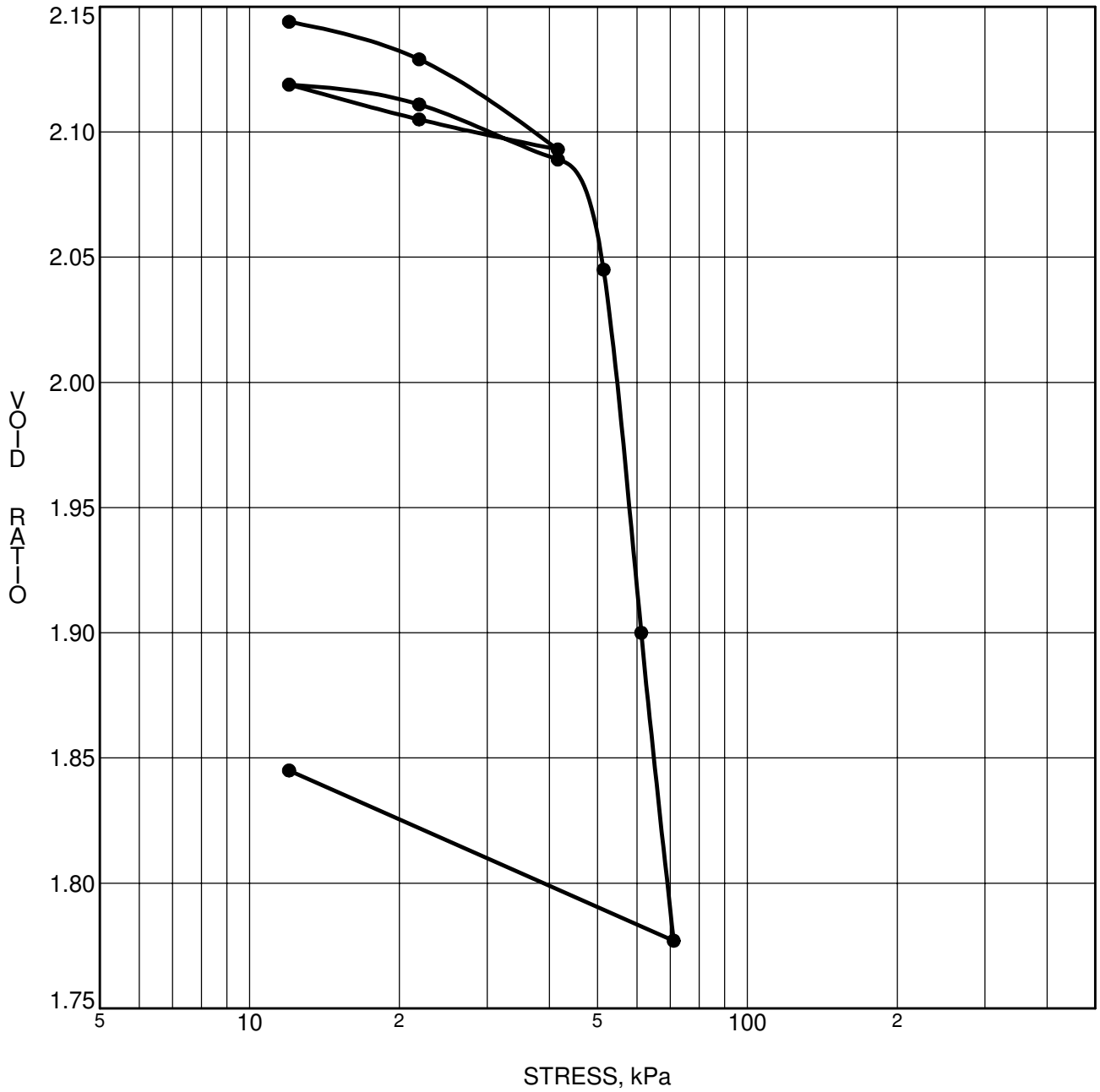
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH30-22**	p'o	**56.33** kPa	Ccr	**0.091**
Sample No.	**TW10**	p'c	**81.41** kPa	Cc	**3.302**
Sample Depth	**7.16** m	OC Ratio	**1.4**	Wo	**6.7** %
Sample Elev.	**72.55** m	Void Ratio	**2.11**	Unit Wt.	**15.3** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **09/25/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH34-22**	p'o	**29.3** kPa	Ccr	**0.056**
Sample No.	**TW4**	p'c	**50.74** kPa	Cc	**1.916**
Sample Depth	**2.67** m	OC Ratio	**1.7**	Wo	**78.6** %
Sample Elev.	**76.38** m	Void Ratio	**2.161**	Unit Wt.	**15.2** kN/m ^{3}

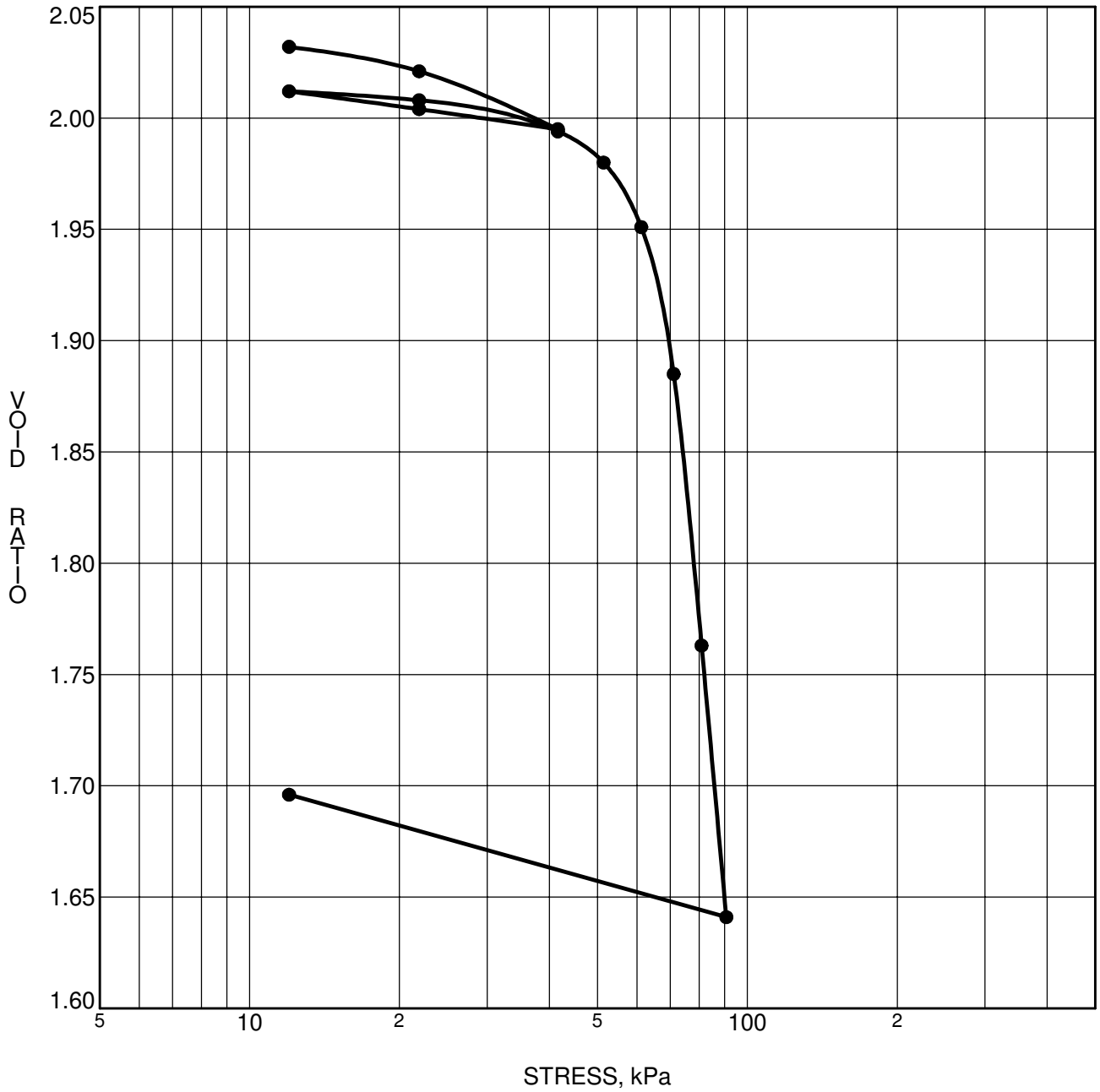
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **09/30/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH36-22**	p'o	**32.97** kPa	Ccr	**0.036**
Sample No.	**TW5**	p'c	**70** kPa	Cc	**2.638**
Sample Depth	**3.35** m	OC Ratio	**2.1**	Wo	**74.5** %
Sample Elev.	**75.27** m	Void Ratio	**2.048**	Unit Wt.	**15.4** kN/m ^{3}

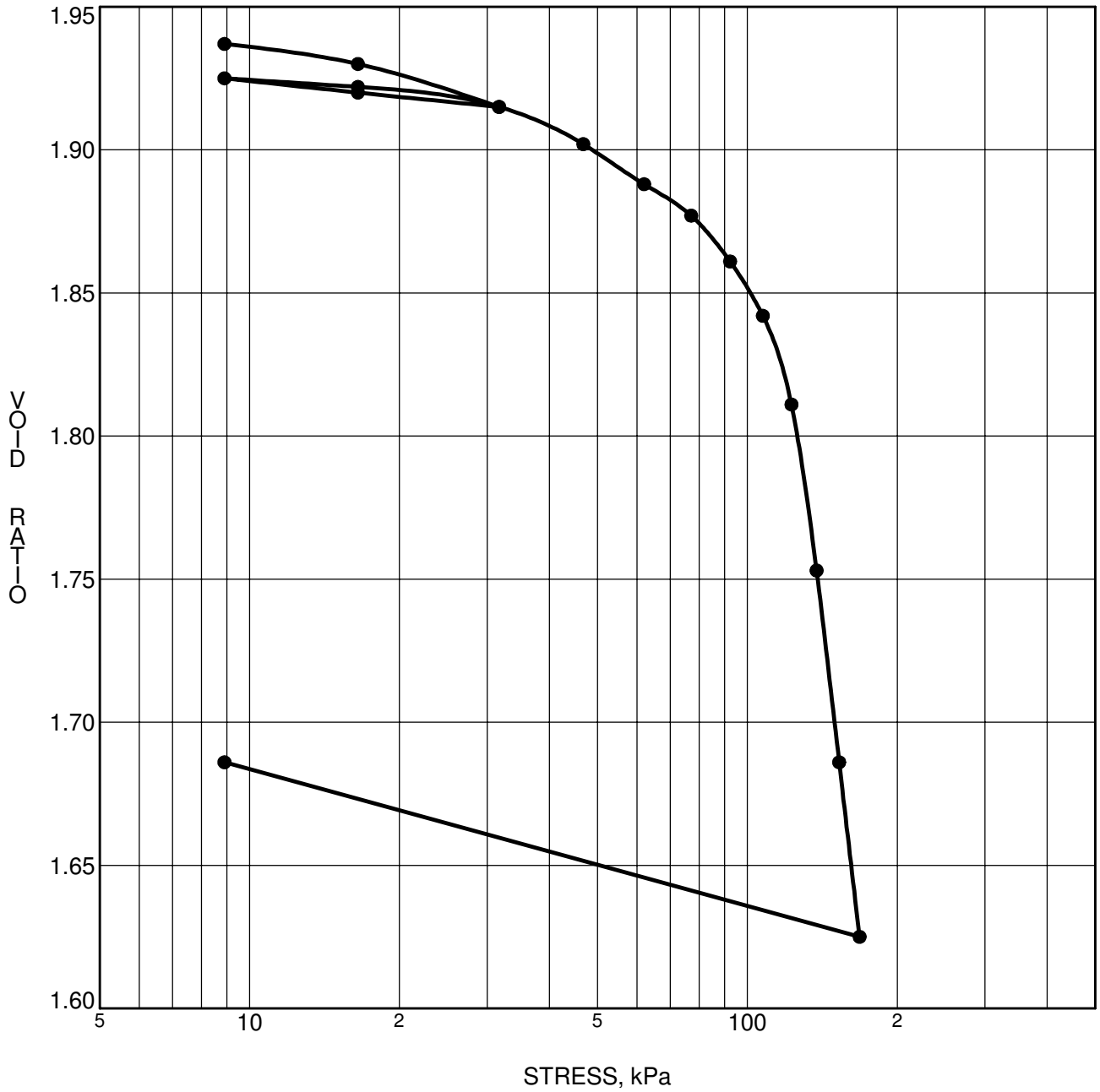
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **11/04/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



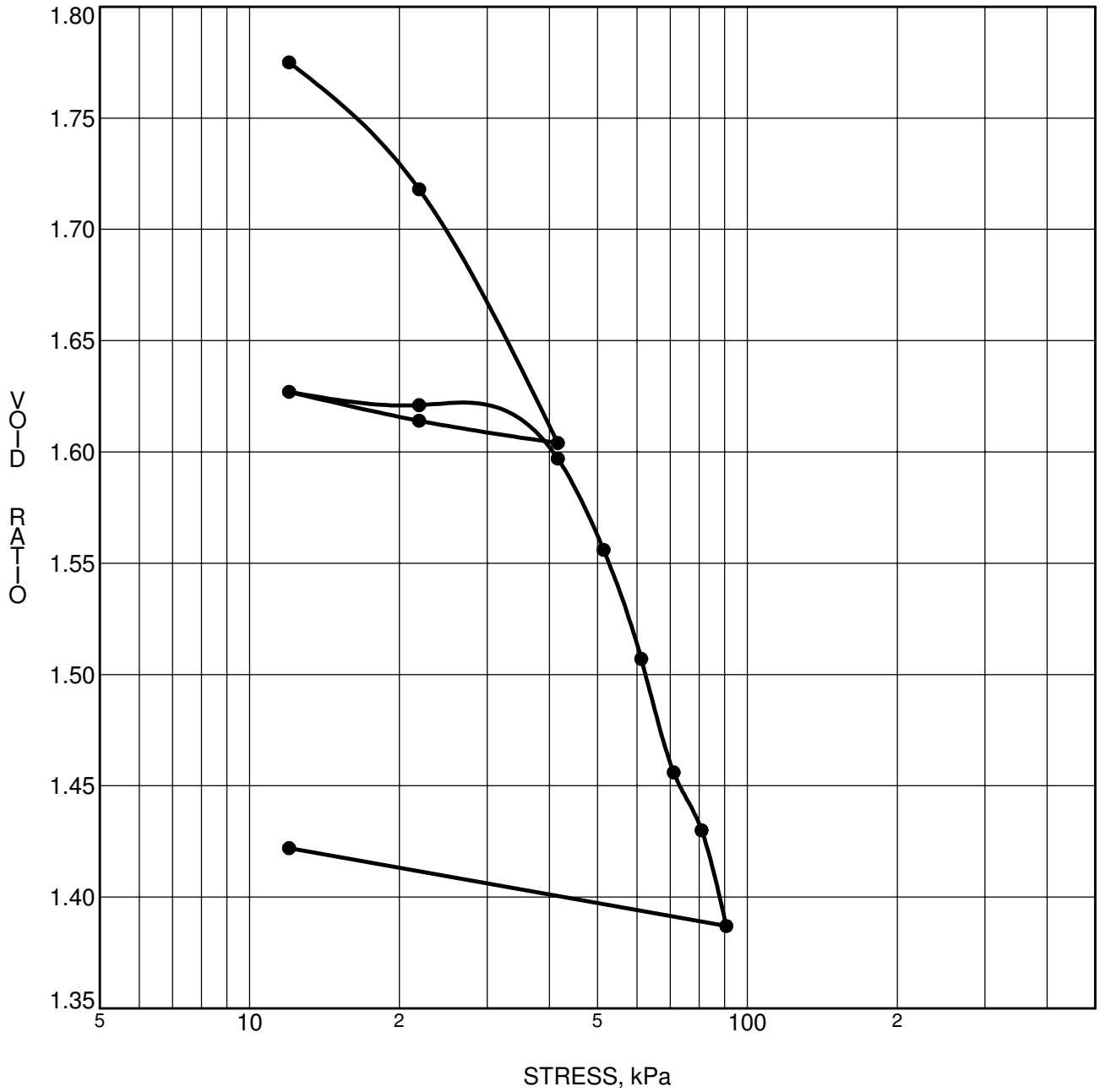
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH37-22**	p'o	**86.41** kPa	Ccr	**0.018**
Sample No.	**TW15**	p'c	**112.2** kPa	Cc	**1.471**
Sample Depth	**10.97** m	OC Ratio	**1.3**	Wo	**70.6** %
Sample Elev.	**66.92** m	Void Ratio	**1.94**	Unit Wt.	**15.7** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **09/23/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



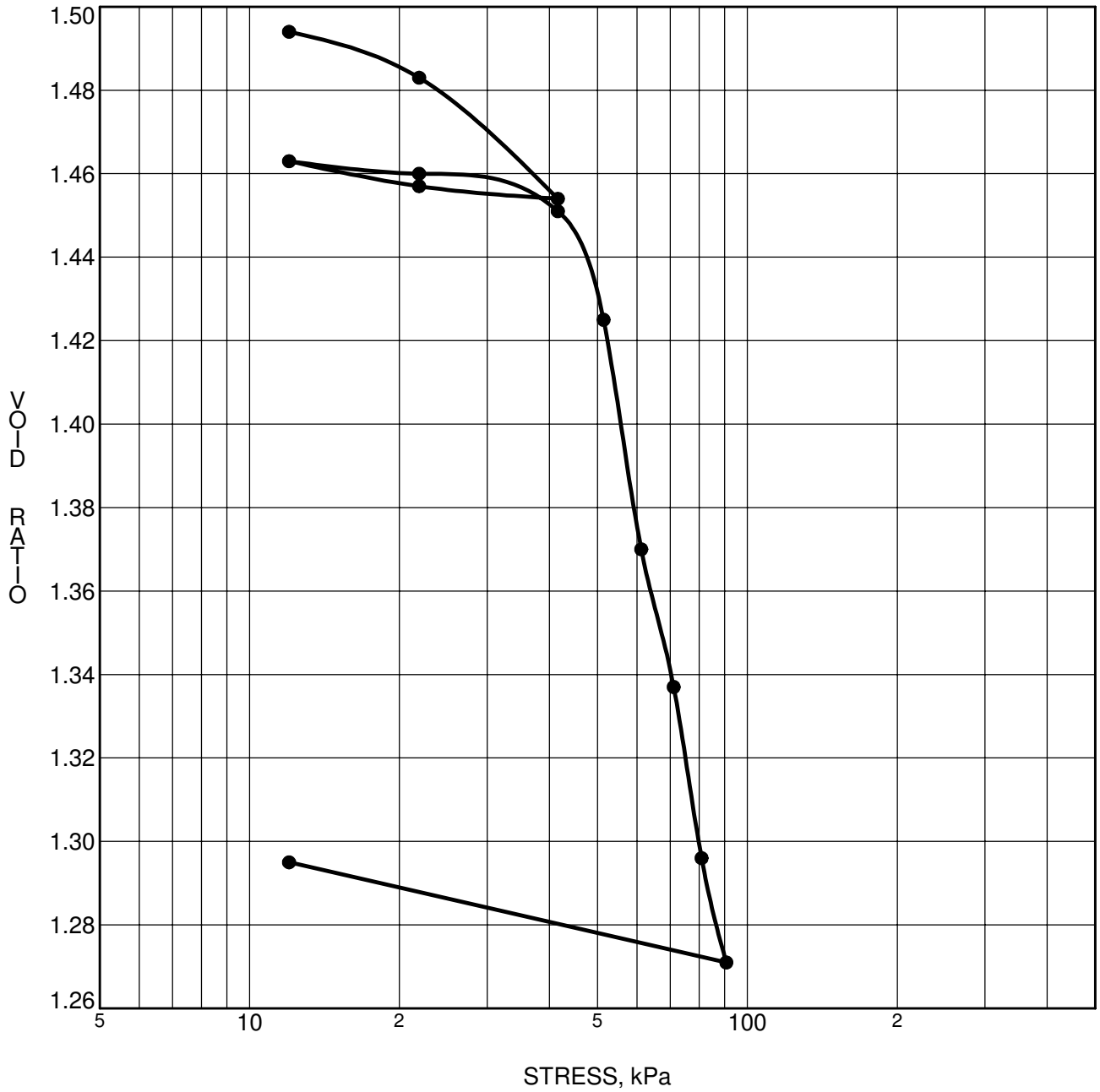
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH38A-22**	p'o	**39.62** kPa	Ccr	**0.053**
Sample No.	**TW5**	p'c	**62.52** kPa	Cc	**0.935**
Sample Depth	**3.35** m	OC Ratio	**1.6**	Wo	**66.1** %
Sample Elev.	**74.42** m	Void Ratio	**1.817**	Unit Wt.	**15.9** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **09/23/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



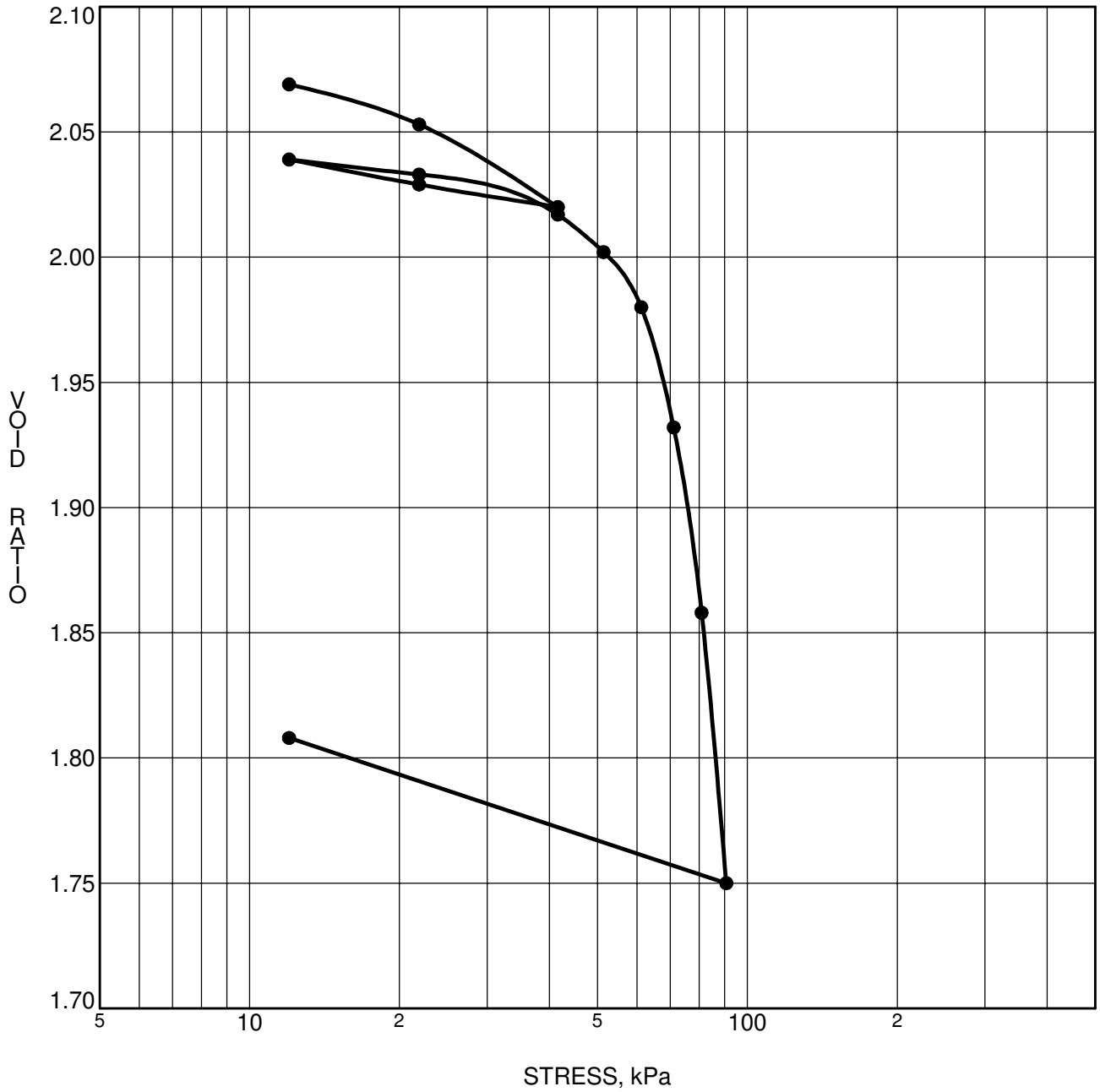
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH40-22**	p'o	**57.28** kPa	Ccr	**0.042**
Sample No.	**TW8**	p'c	**54.12** kPa	Cc	**0.750**
Sample Depth	**5.74** m	OC Ratio	**0.9**	Wo	**55.0** %
Sample Elev.	**73.77** m	Void Ratio	**1.512**	Unit Wt.	**16.7** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **06/16/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH43-22**	p'o	**51.23** kPa	Ccr	**0.045**
Sample No.	**TW6**	p'c	**71.34** kPa	Cc	**2.250**
Sample Depth	**5.05** m	OC Ratio	**1.4**	Wo	**76.0** %
Sample Elev.	**74.86** m	Void Ratio	**2.089**	Unit Wt.	**15.4** kN/m ^{3}

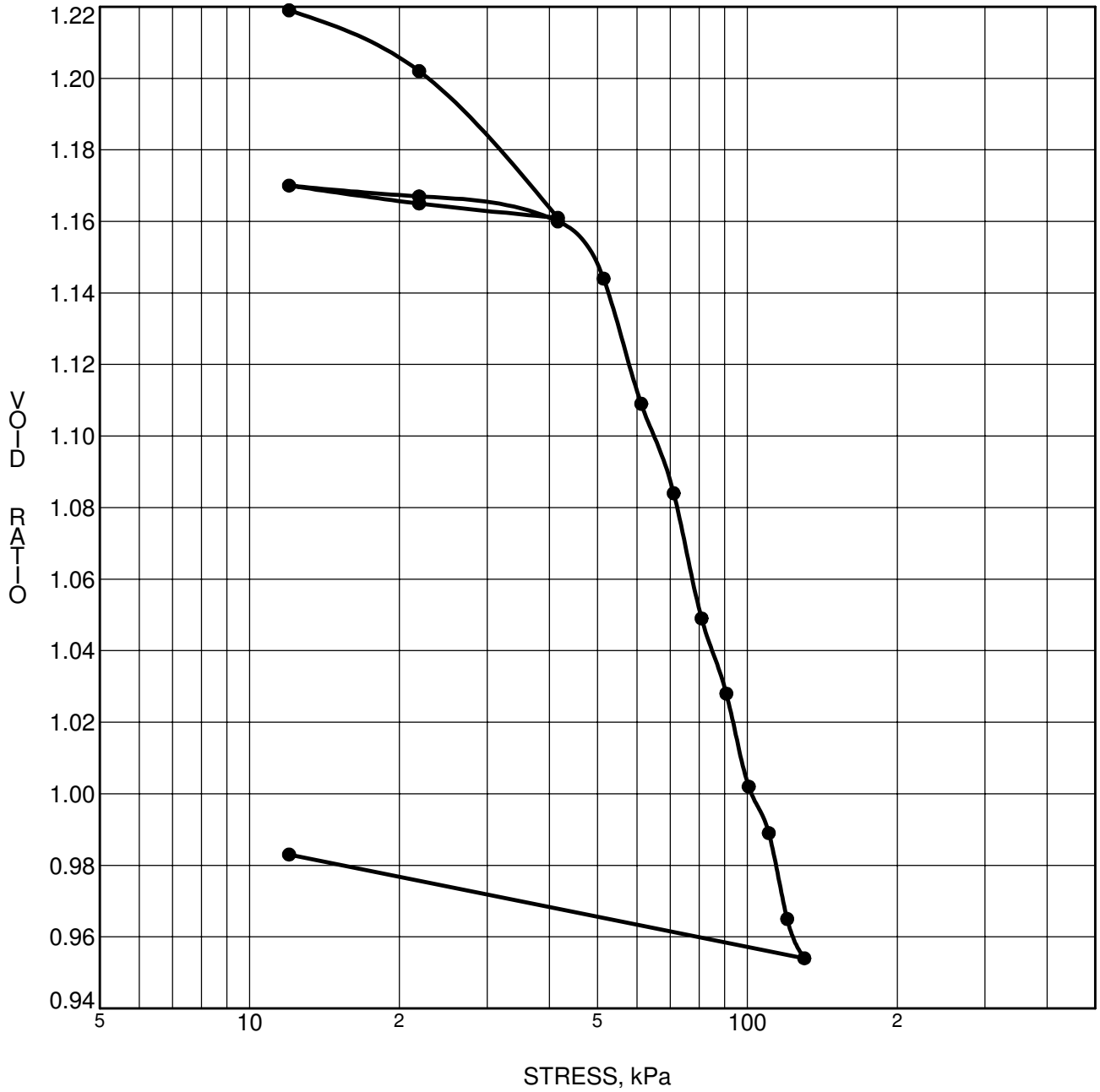
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/20/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



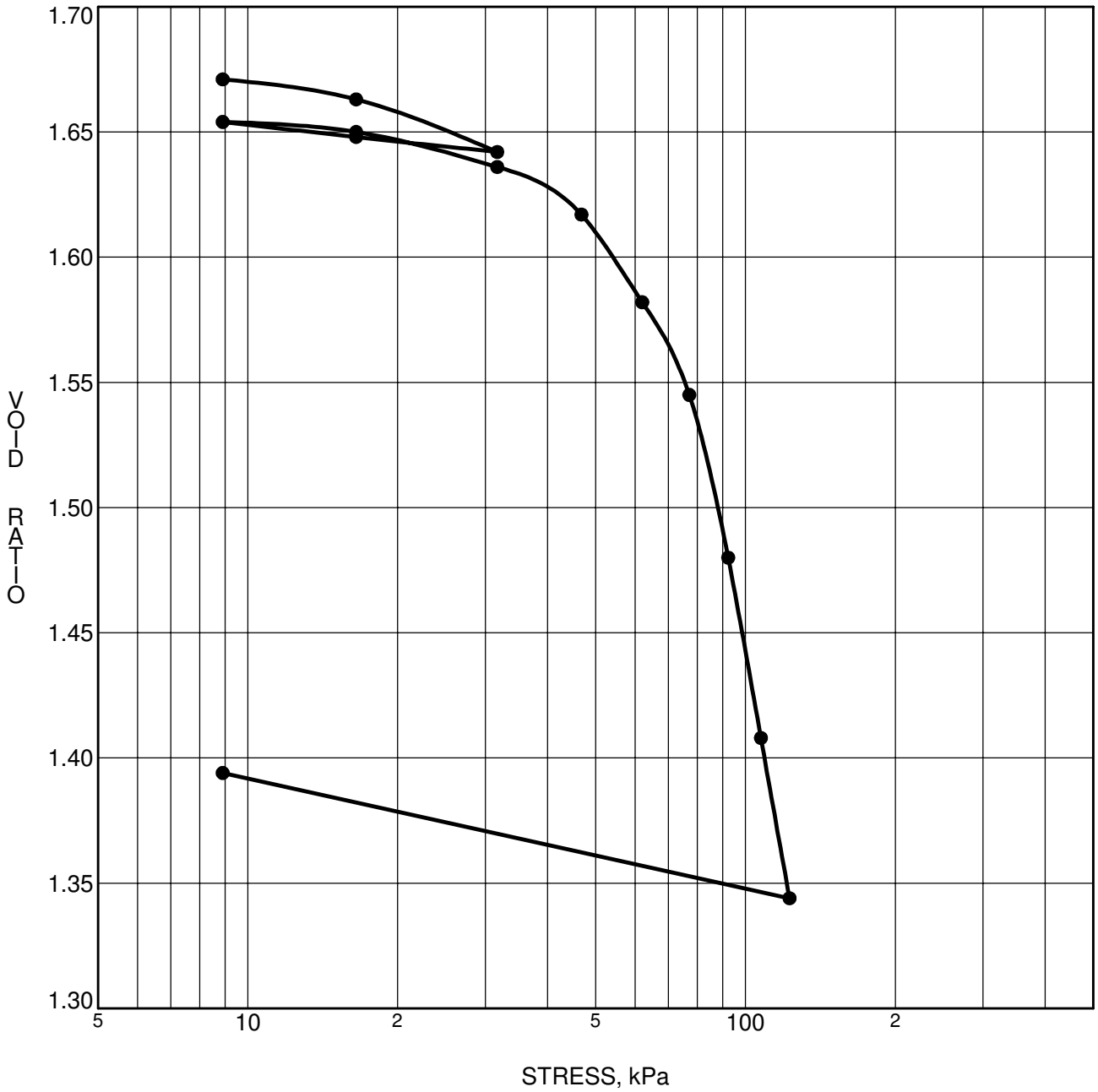
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH44-22**	p'o	**59.4** kPa	Ccr	**0.018**
Sample No.	**TW7**	p'c	**59.4** kPa	Cc	**0.484**
Sample Depth	**5.82** m	OC Ratio	**1.0**	Wo	**45.1** %
Sample Elev.	**73.55** m	Void Ratio	**1.24**	Unit Wt.	**17.5** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **10/22/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



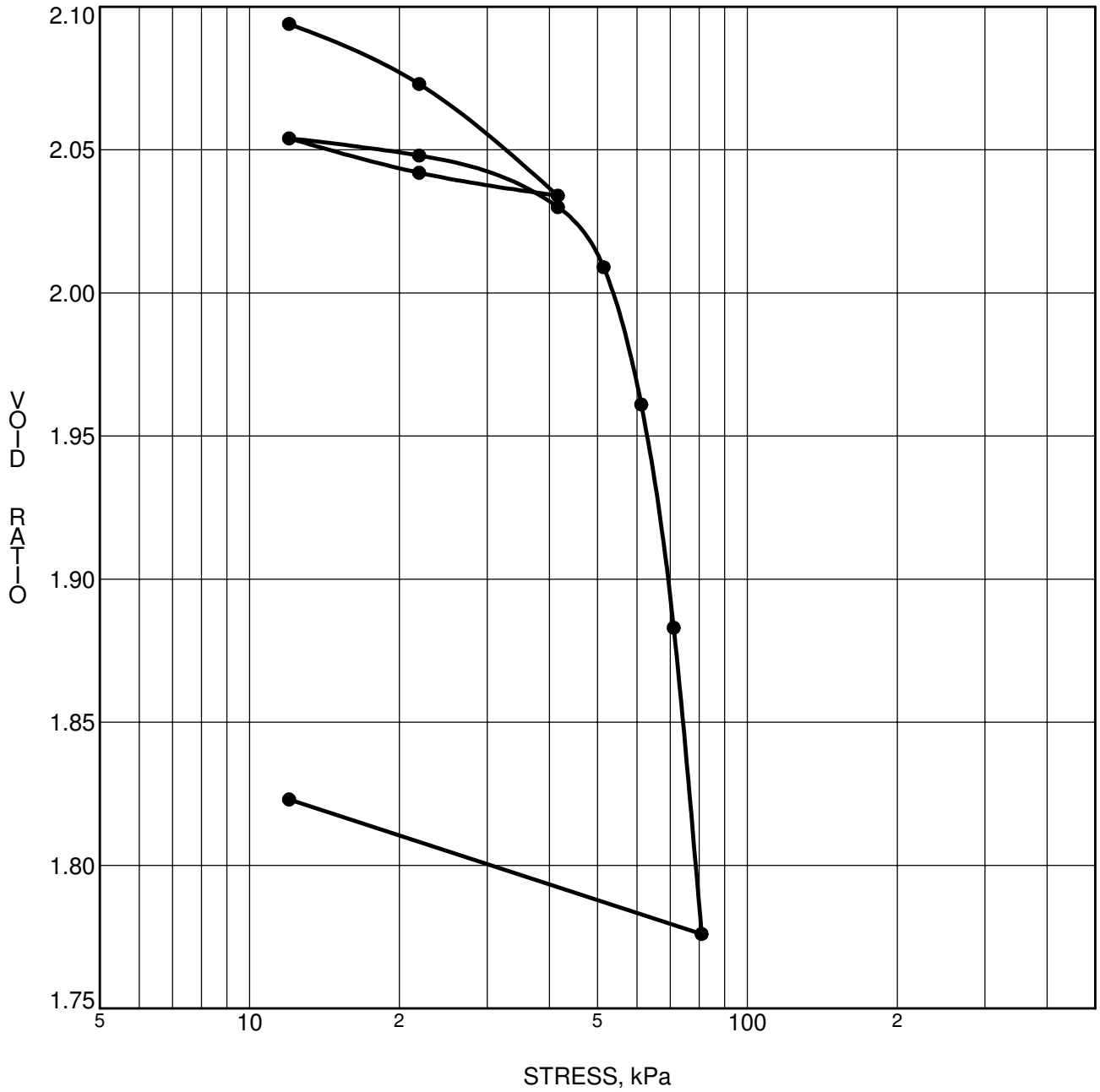
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH45-22**	p'o	**45.24** kPa	Ccr	**0.033**
Sample No.	**TW6**	p'c	**74.47** kPa	Cc	**1.148**
Sample Depth	**4.12** m	OC Ratio	**1.6**	Wo	**61.0** %
Sample Elev.	**76.08** m	Void Ratio	**1.677**	Unit Wt.	**16.2** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **10/29/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



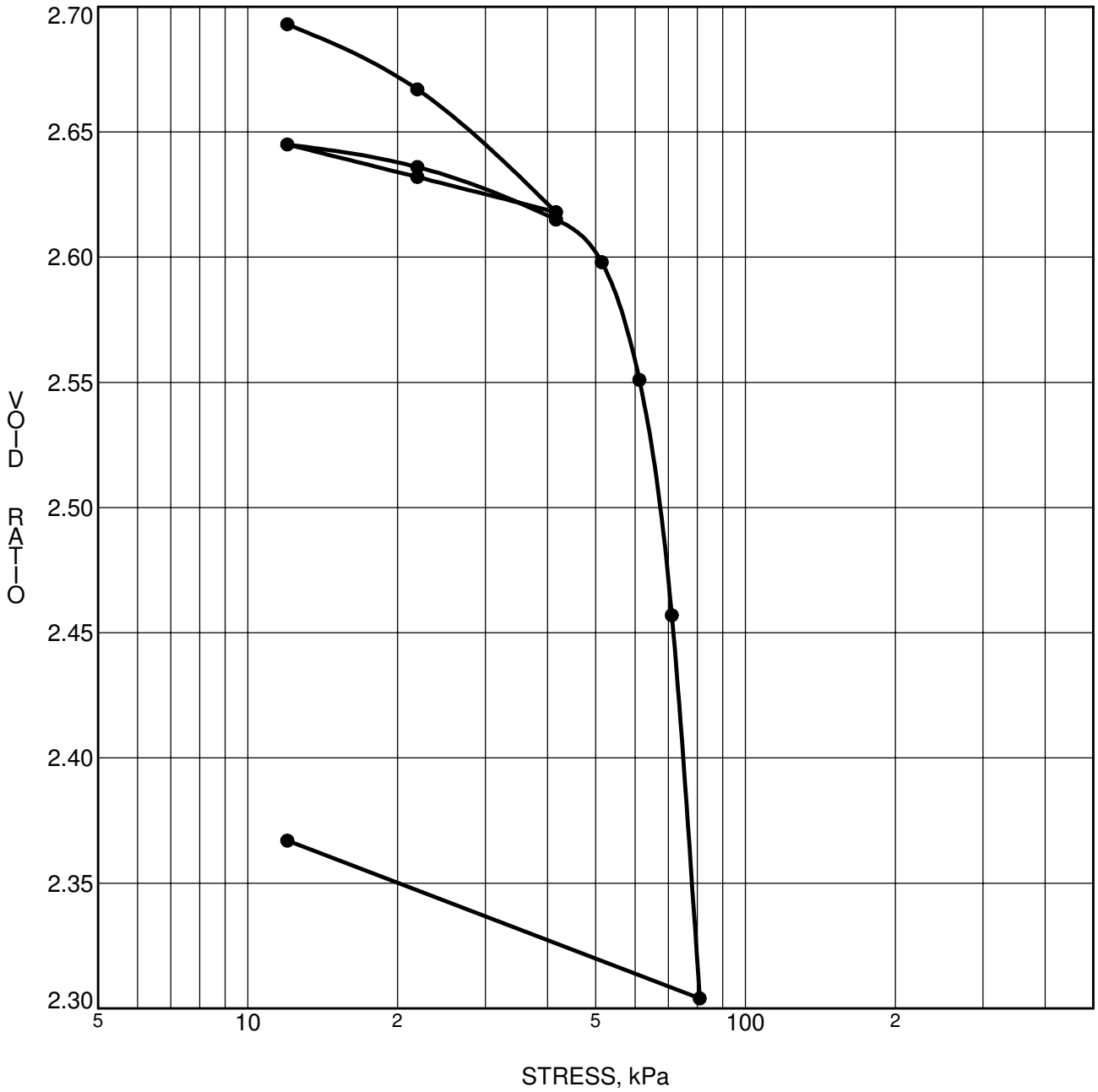
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH46A-22**	p'o	**72.79** kPa	Ccr	**0.046**
Sample No.	**TW3**	p'c	**63.1** kPa	Cc	**2.000**
Sample Depth	**7.26** m	OC Ratio	**0.9**	Wo	**76.4** %
Sample Elev.	**72.92** m	Void Ratio	**2.101**	Unit Wt.	**15.4** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/21/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



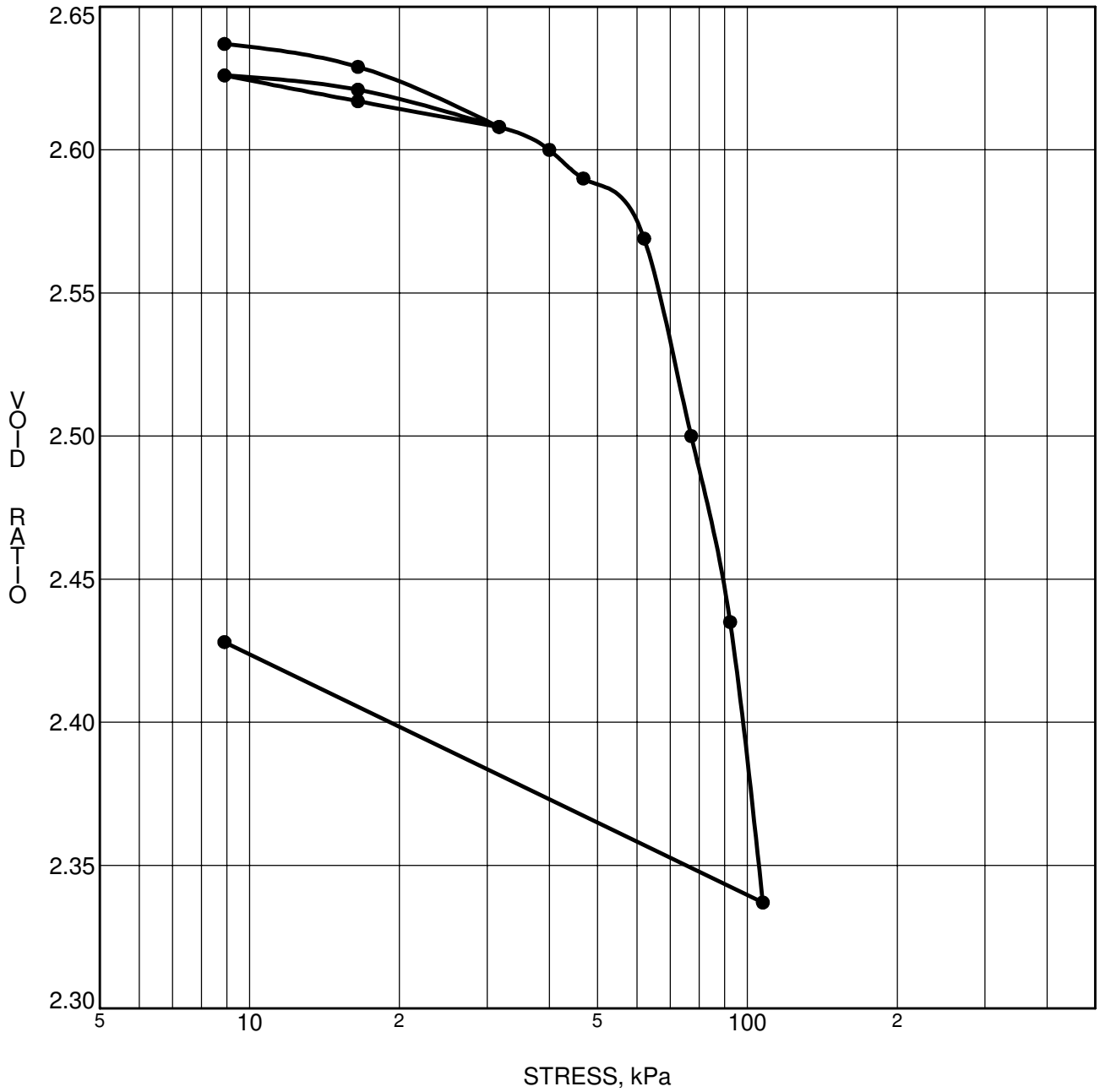
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH47-22**	p'o	**50.32** kPa	Ccr	**0.055**
Sample No.	**TW6**	p'c	**63.096** kPa	Cc	**2.647**
Sample Depth	**4.67** m	OC Ratio	**1.3**	Wo	**99.5** %
Sample Elev.	**74.32** m	Void Ratio	**2.735**	Unit Wt.	**14.4** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **06/24/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



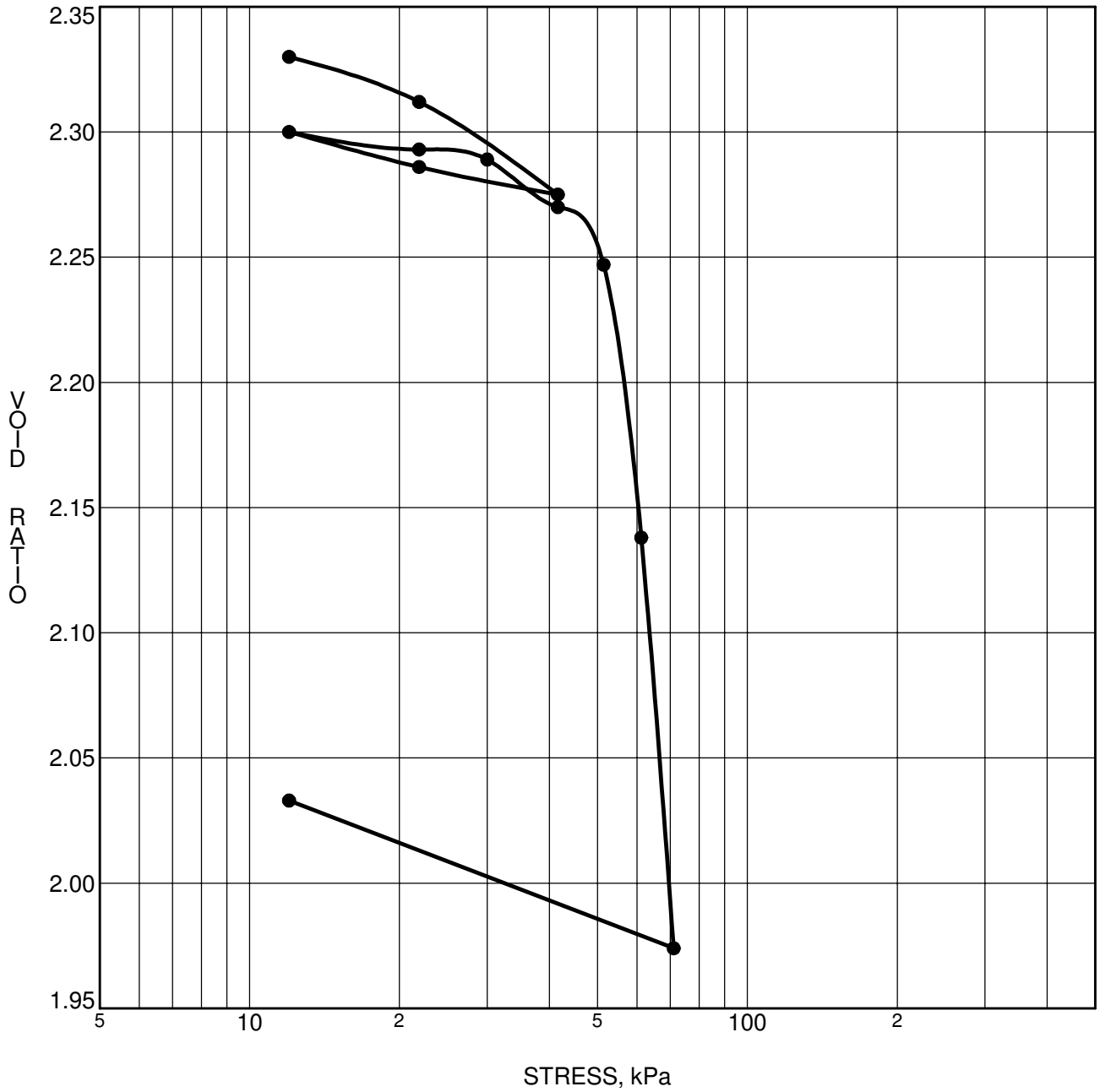
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH48-22**	p'_o	**44.96** kPa	Ccr	**0.033**
Sample No.	**TW6**	p'_c	**74.13** kPa	Cc	**1.515**
Sample Depth	**4.22** m	OC Ratio	**1.6**	Wo	**97.3** %
Sample Elev.	**74.59** m	Void Ratio	**2.676**	Unit Wt.	**14.5** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **06/24/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



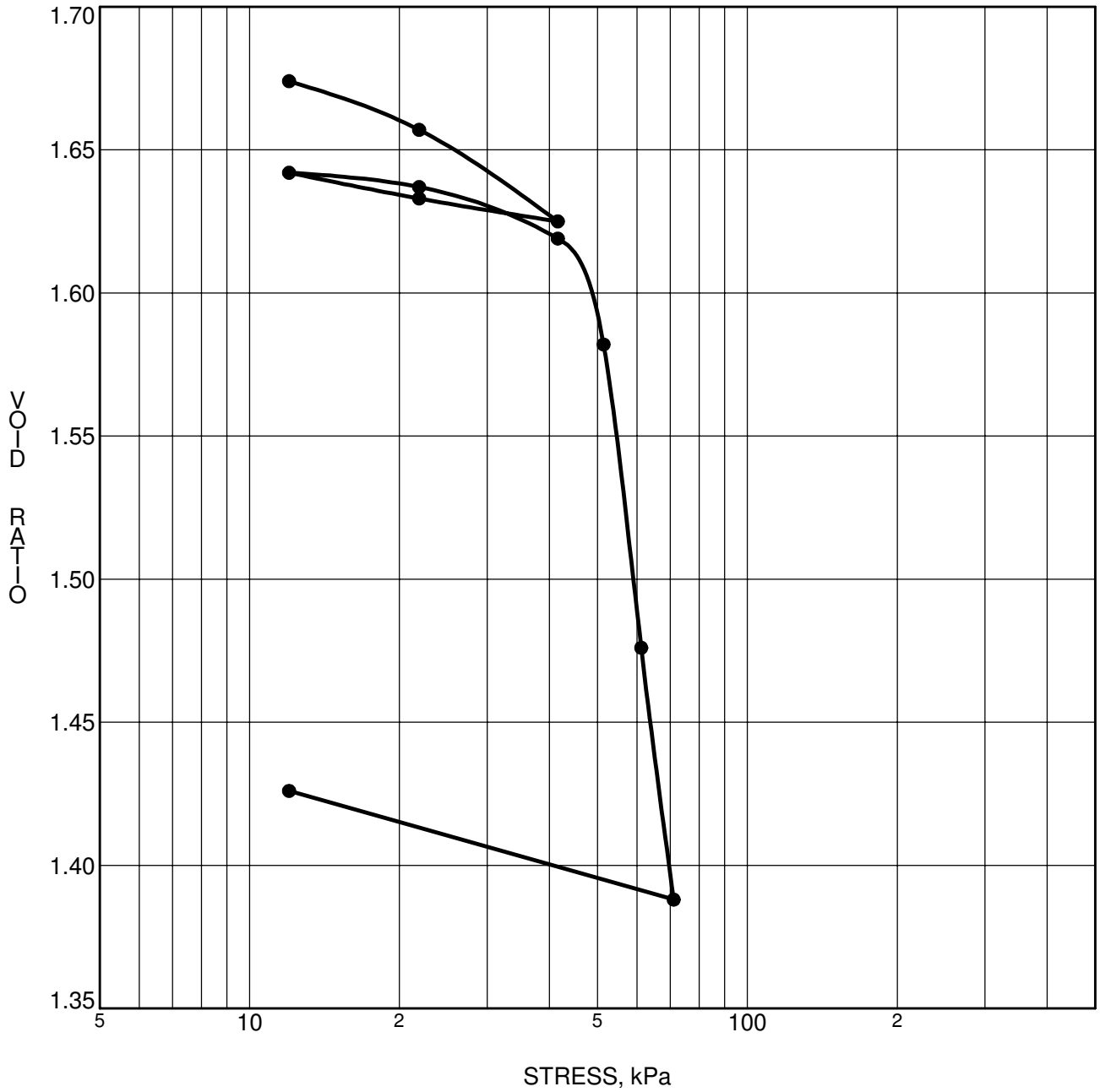
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH49A-22**	p'o	**36.74** kPa	Ccr	**0.075**
Sample No.	**TW3**	p'c	**54.95** kPa	Cc	**2.586**
Sample Depth	**2.59** m	OC Ratio	**1.5**	Wo	**86.0** %
Sample Elev.	**76.67** m	Void Ratio	**2.365**	Unit Wt.	**14.9** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/13/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



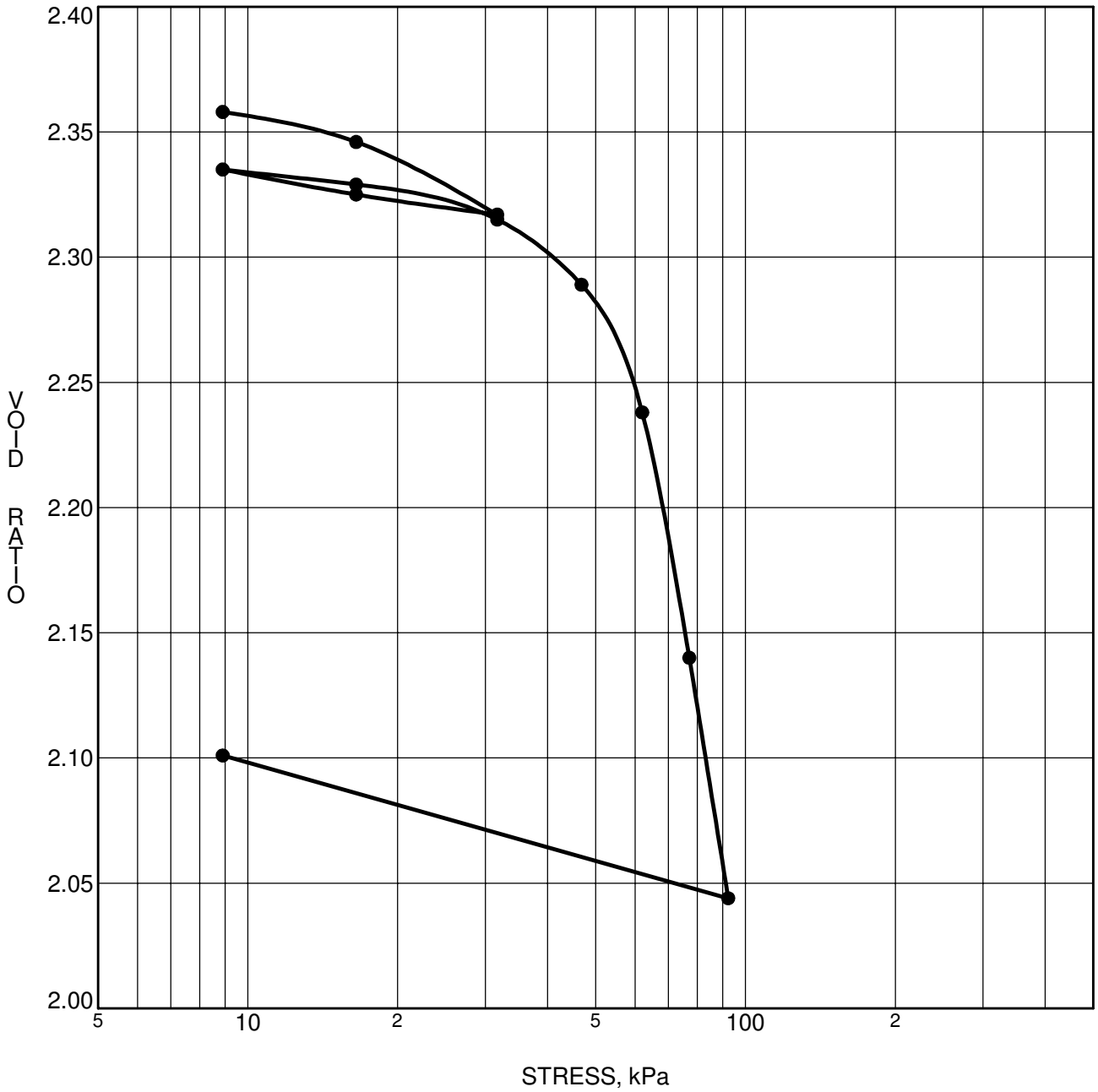
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH49A-22**	p'_o	**50.11** kPa	Ccr	**0.043**
Sample No.	**TW4**	p'_c	**50.12** kPa	Cc	**1.364**
Sample Depth	**4.75** m	OC Ratio	**1.0**	Wo	**63.2** %
Sample Elev.	**74.51** m	Void Ratio	**1.737**	Unit Wt.	**16.1** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **06/24/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



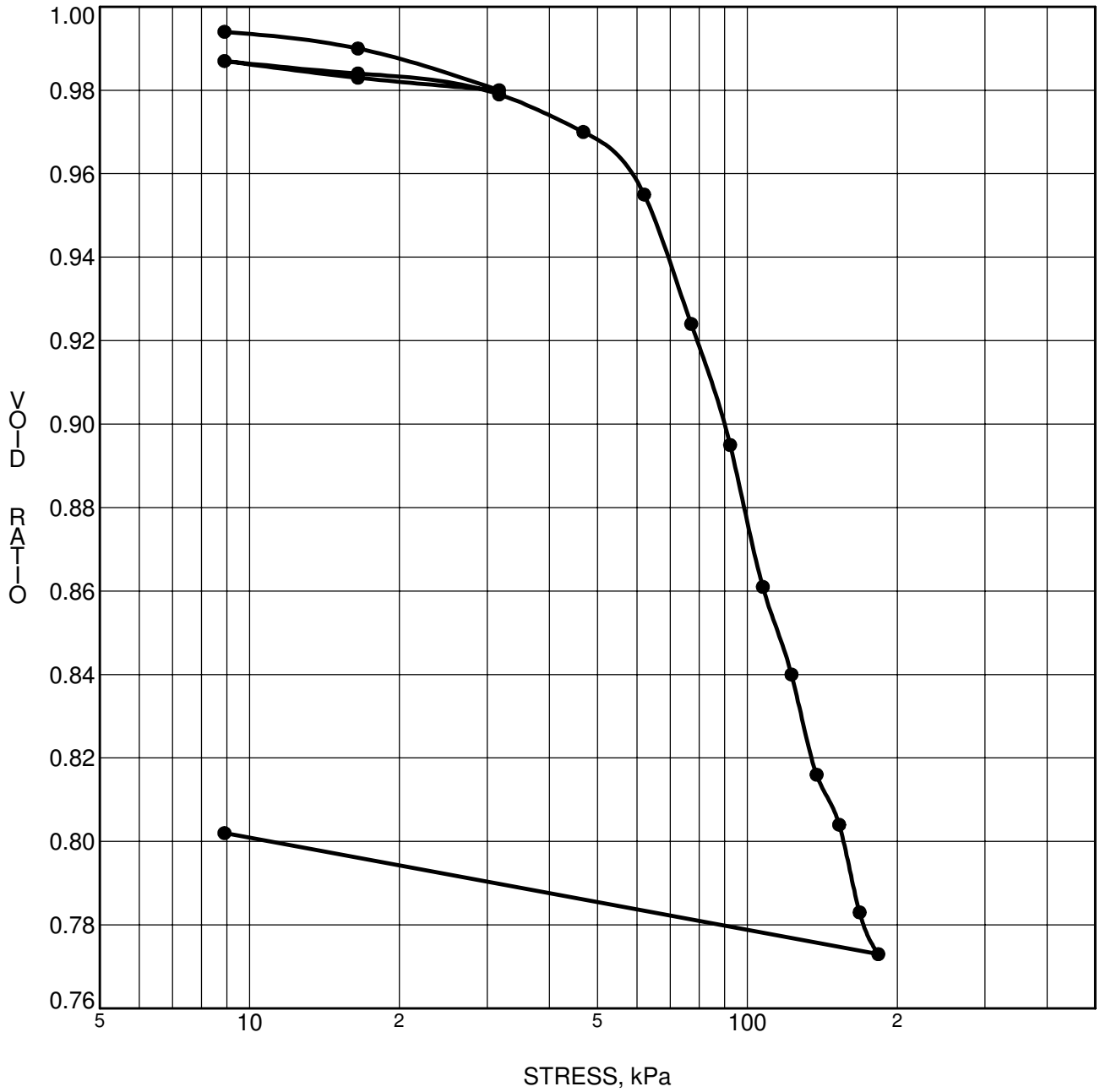
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH55-22**	p'o	**54.71** kPa	Ccr	**0.037**
Sample No.	**TW8**	p'c	**57.54** kPa	Cc	**1.111**
Sample Depth	**5.79** m	OC Ratio	**1.1**	Wo	**86.0** %
Sample Elev.	**74.45** m	Void Ratio	**2.365**	Unit Wt.	**2.4** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/14/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



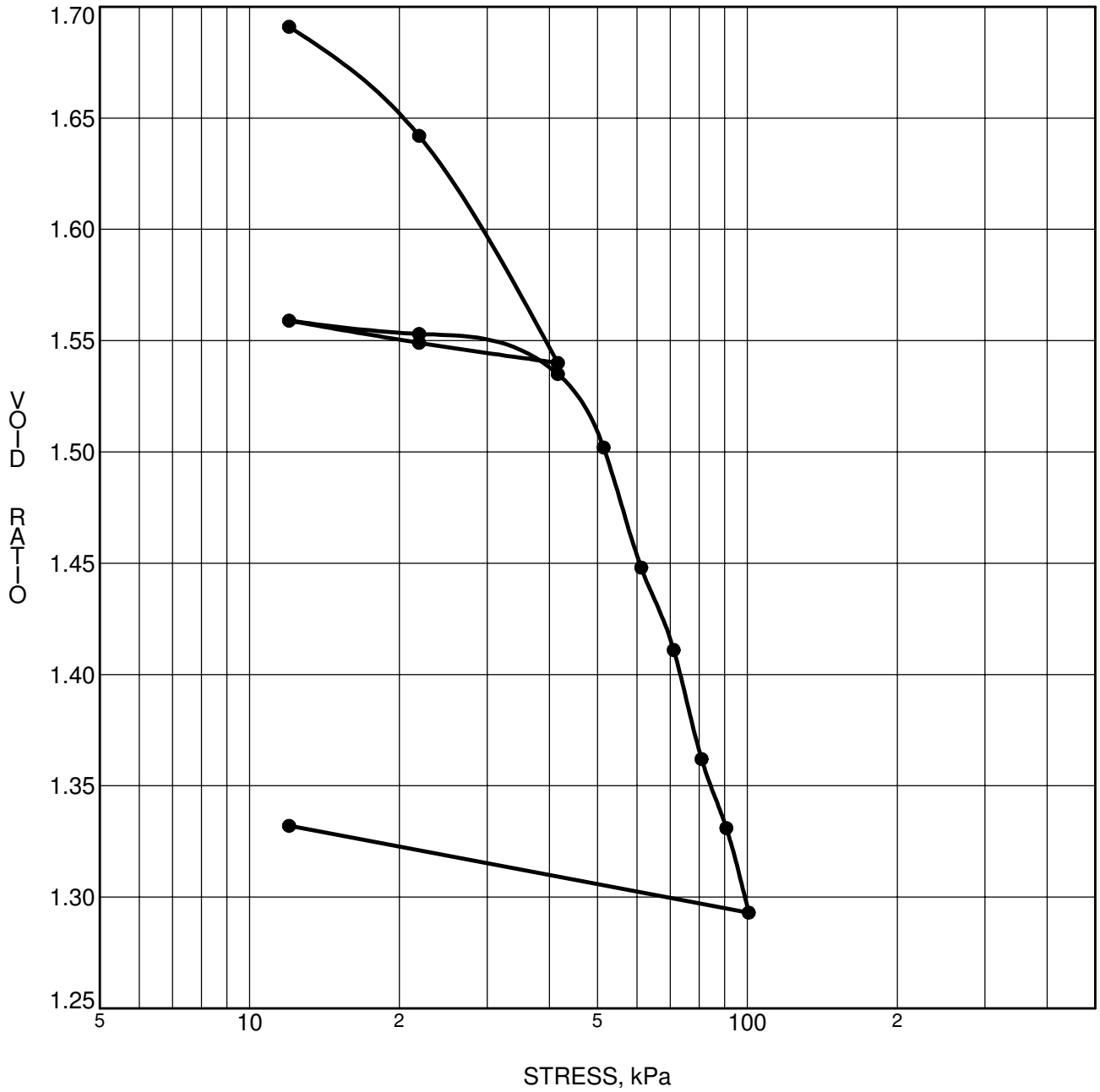
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH56A-22**	p'o	**28.25** kPa	Ccr	**0.022**
Sample No.	**TW3**	p'c	**66.07** kPa	Cc	**0.409**
Sample Depth	**2.59** m	OC Ratio	**2.3**	Wo	**36.2** %
Sample Elev.	**77.62** m	Void Ratio	**0.995**	Unit Wt.	**18.4** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **10/20/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



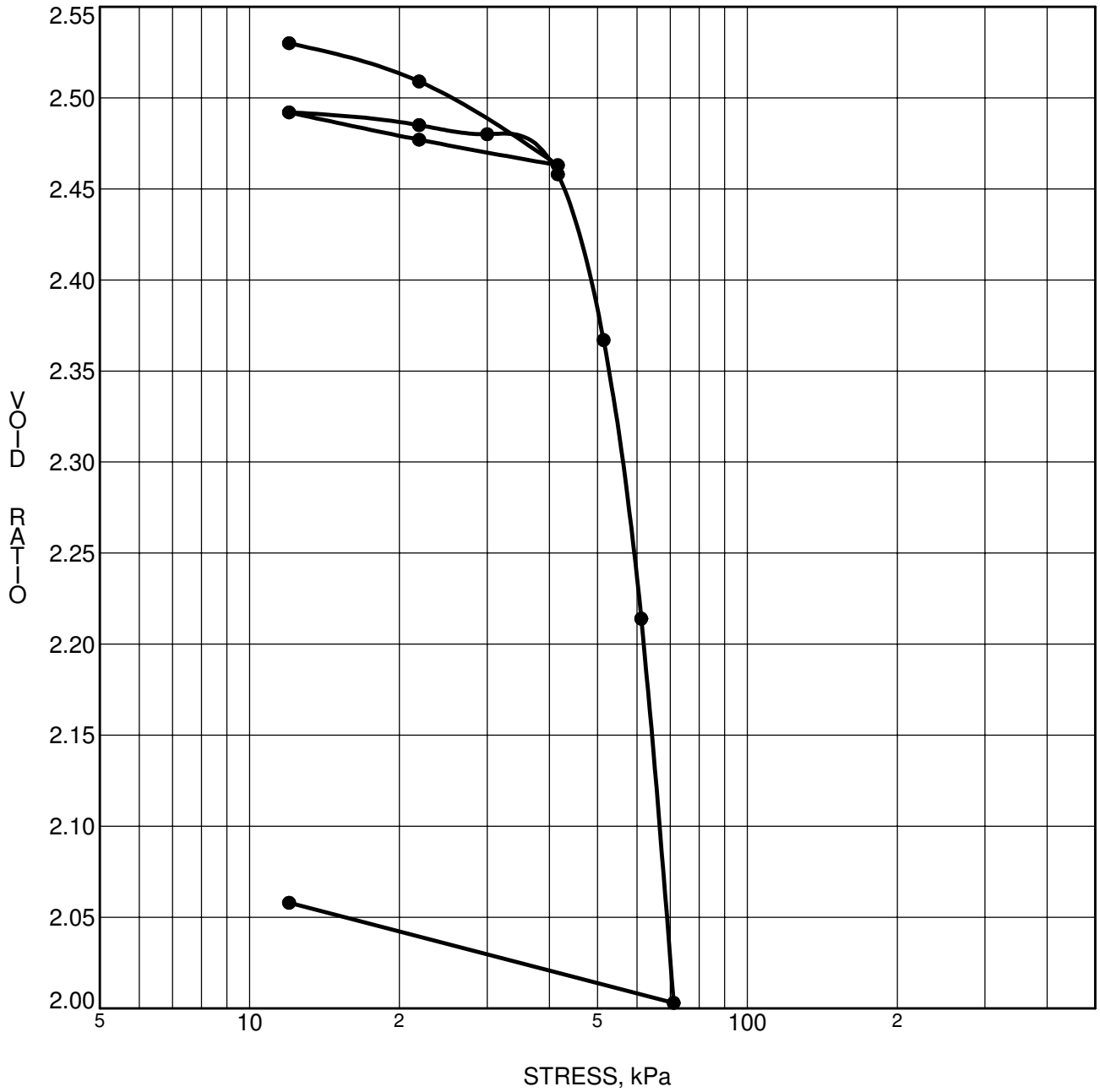
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH59A-22**	p'o	**34.92** kPa	Ccr	**0.043**
Sample No.	**TW3**	p'c	**63.1** kPa	Cc	**0.856**
Sample Depth	**2.59** m	OC Ratio	**1.8**	Wo	**63.7** %
Sample Elev.	**76.72** m	Void Ratio	**1.753**	Unit Wt.	**16.1** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **10/26/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH61-22**	p'o	**37.69** kPa	Ccr	**0.060**
Sample No.	**TW6**	p'c	**54.45** kPa	Cc	**4.771**
Sample Depth	**4.12** m	OC Ratio	**1.4**	Wo	**92.9** %
Sample Elev.	**75.09** m	Void Ratio	**2.554**	Unit Wt.	**14.6** kN/m ^{3}

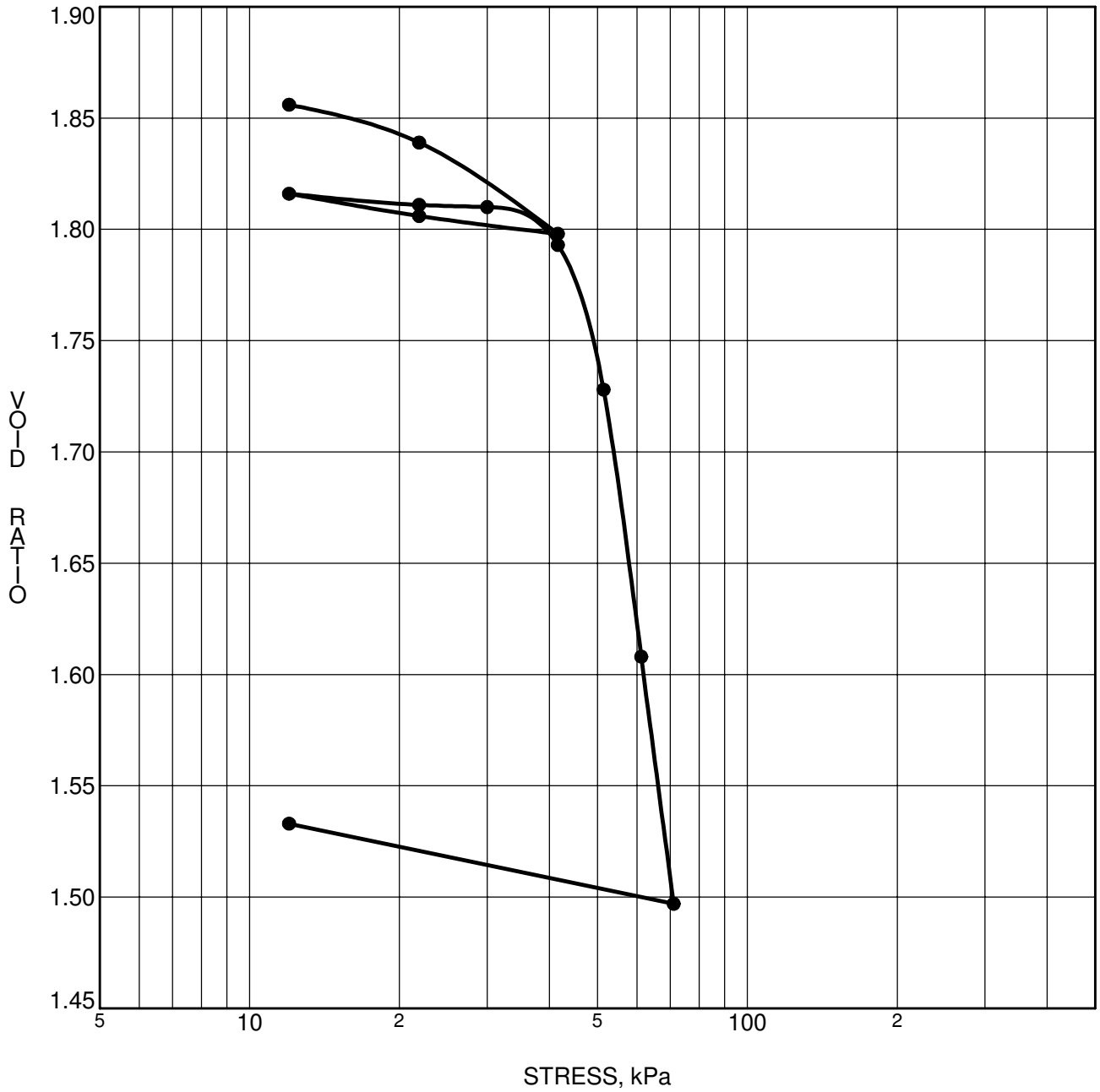
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **10/24/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH62-22**	p'o	**33.6** kPa	Ccr	**0.040**
Sample No.	**TW5**	p'c	**48.6** kPa	Cc	**1.630**
Sample Depth	**3.45** m	OC Ratio	**1.4**	Wo	**68.3** %
Sample Elev.	**75.53** m	Void Ratio	**1.877**	Unit Wt.	**15.8** kN/m ^{3}

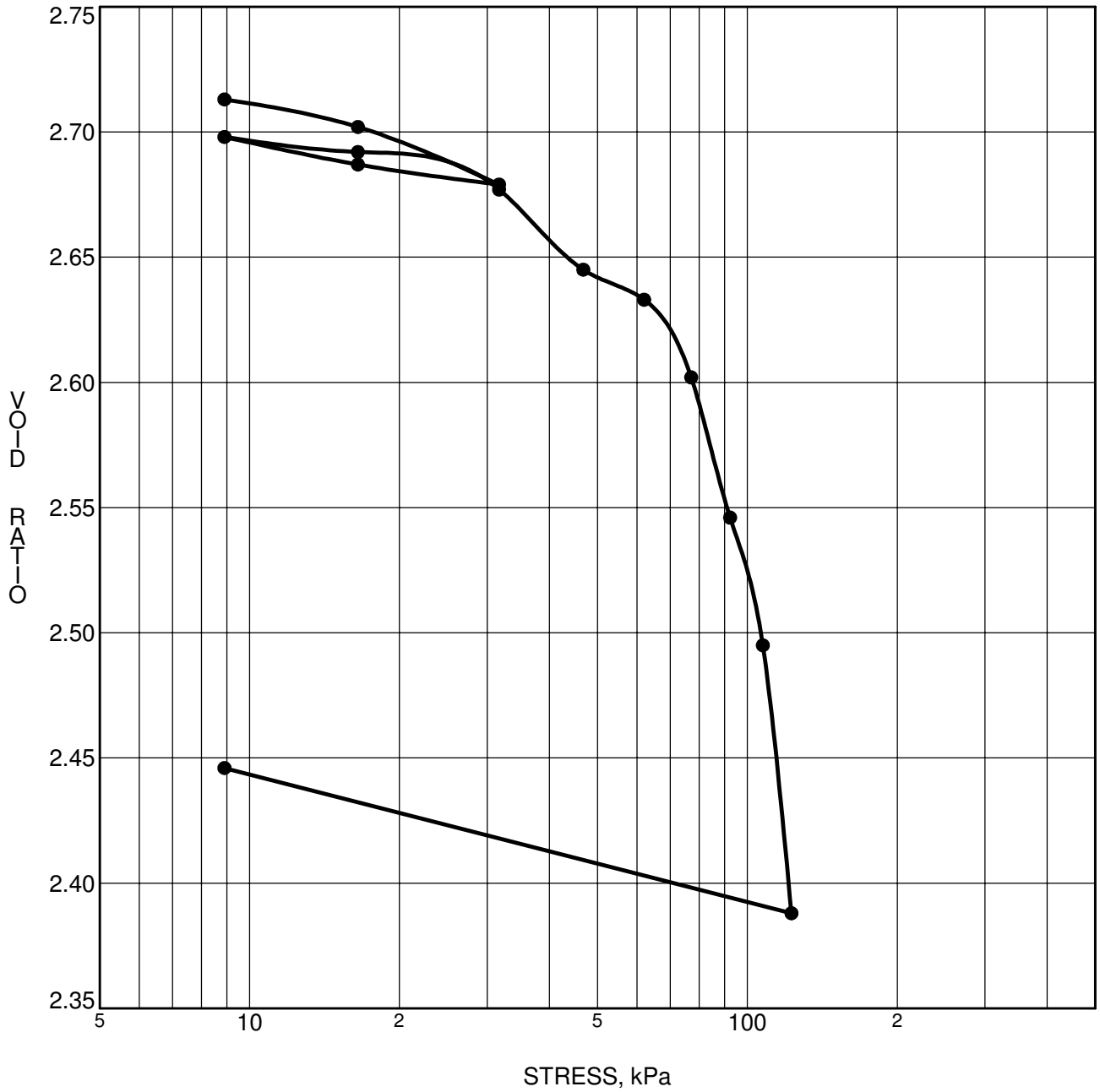
CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/15/2022**

patersongroup Consulting Engineers

9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



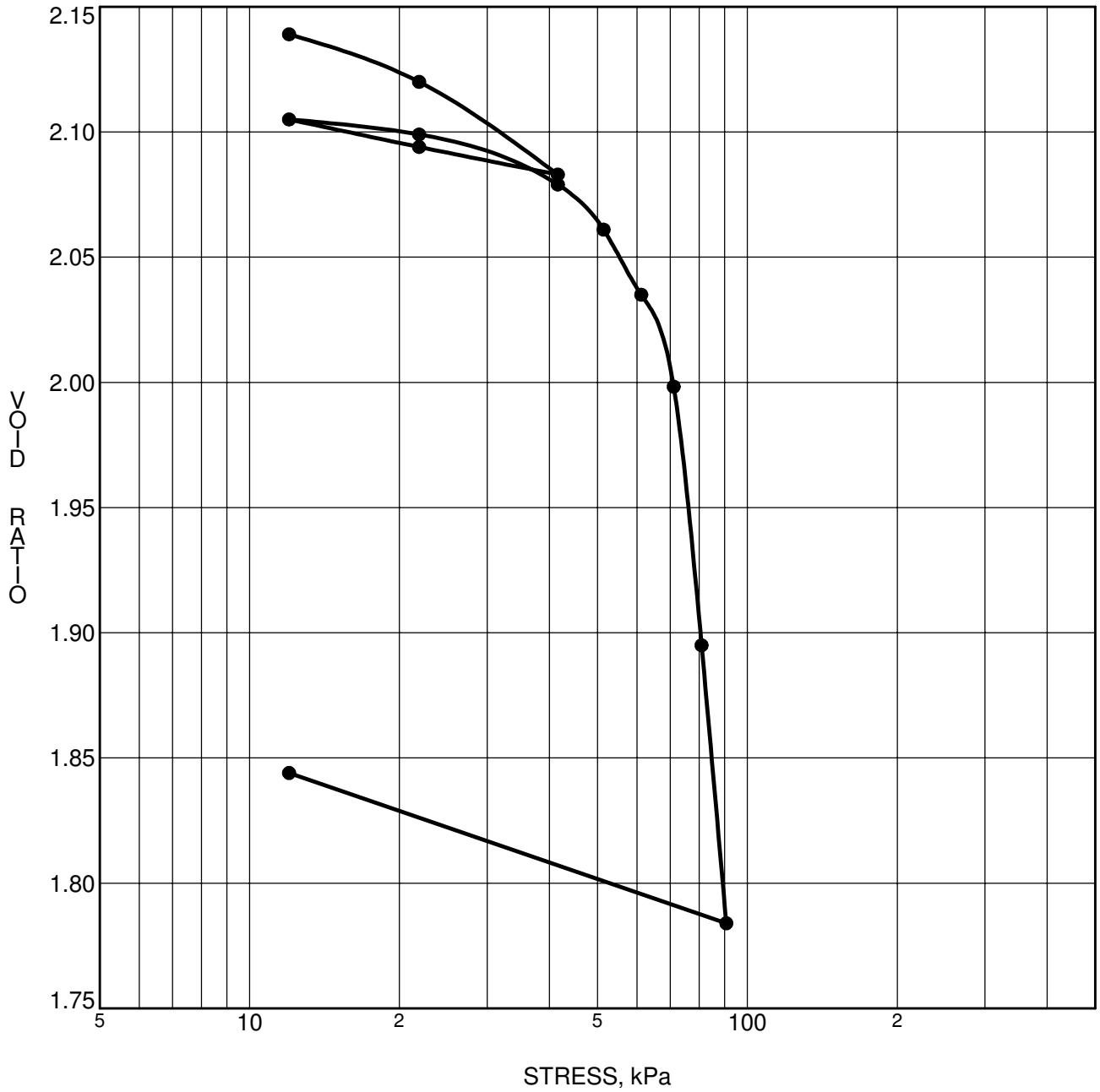
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH64-22**	p'o	**37.57** kPa	Ccr	**0.038**
Sample No.	**TW4**	p'c	**77.625** kPa	Cc	**1.282**
Sample Depth	**2.77** m	OC Ratio	**2.1**	Wo	**98.8** %
Sample Elev.	**76.06** m	Void Ratio	**2.718**	Unit Wt.	**14.4** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/07/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST



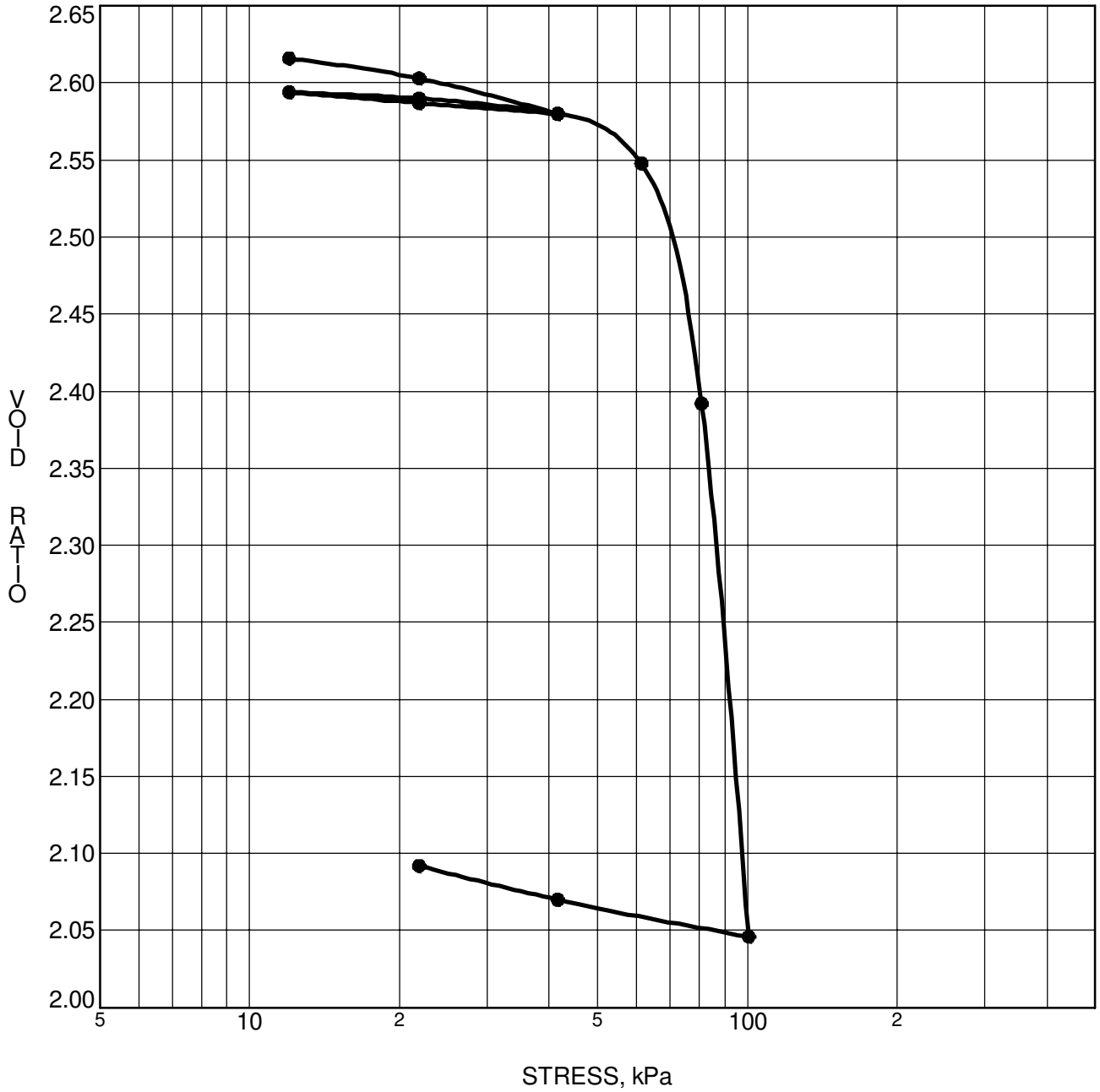
CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH64-22**	p'o	**46.53** kPa	Ccr	**0.049**
Sample No.	**TW6**	p'c	**69.18** kPa	Cc	**2.344**
Sample Depth	**4.22** m	OC Ratio	**1.5**	Wo	**78.6** %
Sample Elev.	**74.61** m	Void Ratio	**2.16**	Unit Wt.	**15.2** kN/m ^{3}

CLIENT **Taggart Investments** FILE NO. **PG5827**

PROJECT **Geotechnical Investigation - Proposed Mixed-Use Community Development** DATE **07/08/2022**

patersongroup Consulting Engineers
9 Auriga Drive, Ottawa, Ontario K2E 7T9

CONSOLIDATION TEST

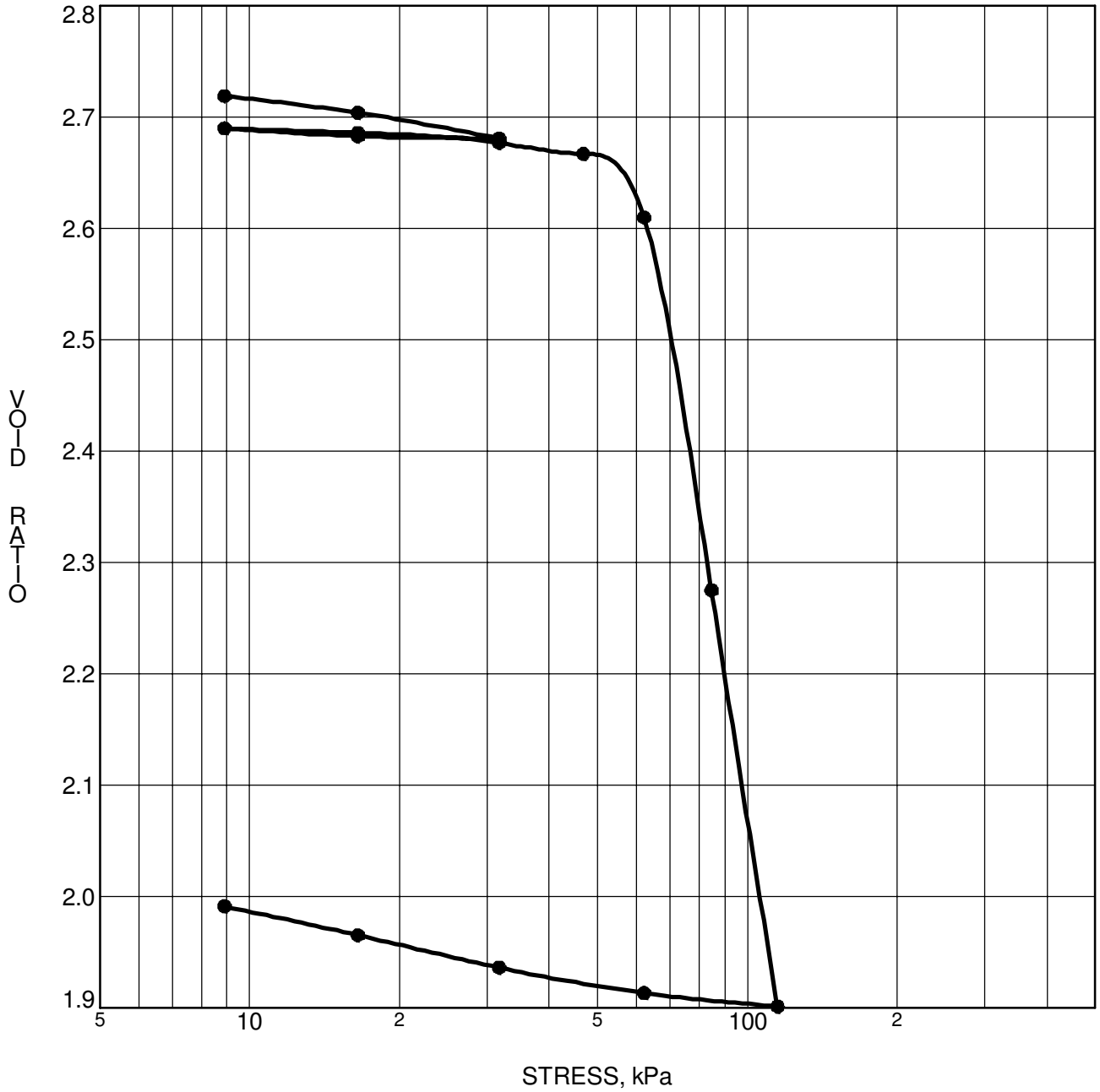


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 1**	p'_o	**44** kPa	Ccr	**0.027**
Sample No.	**TW 4**	p'_c	**74** kPa	Cc	**3.606**
Sample Depth	**4.36** m	OC Ratio	**1.7**	Wo	**95.7** %
Sample Elev.	**74.42** m	Void Ratio	**2.632**	Unit Wt.	**14.9** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**10/04/2011**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 2**	p'_o	**33** kPa	Ccr	**0.024**
Sample No.	**TW 3**	p'_c	**64** kPa	Cc	**2.803**
Sample Depth	**3.58** m	OC Ratio	**1.9**	Wo	**99.4** %
Sample Elev.	**76.04** m	Void Ratio	**2.735**	Unit Wt.	**14.7** kN/m ^{3}

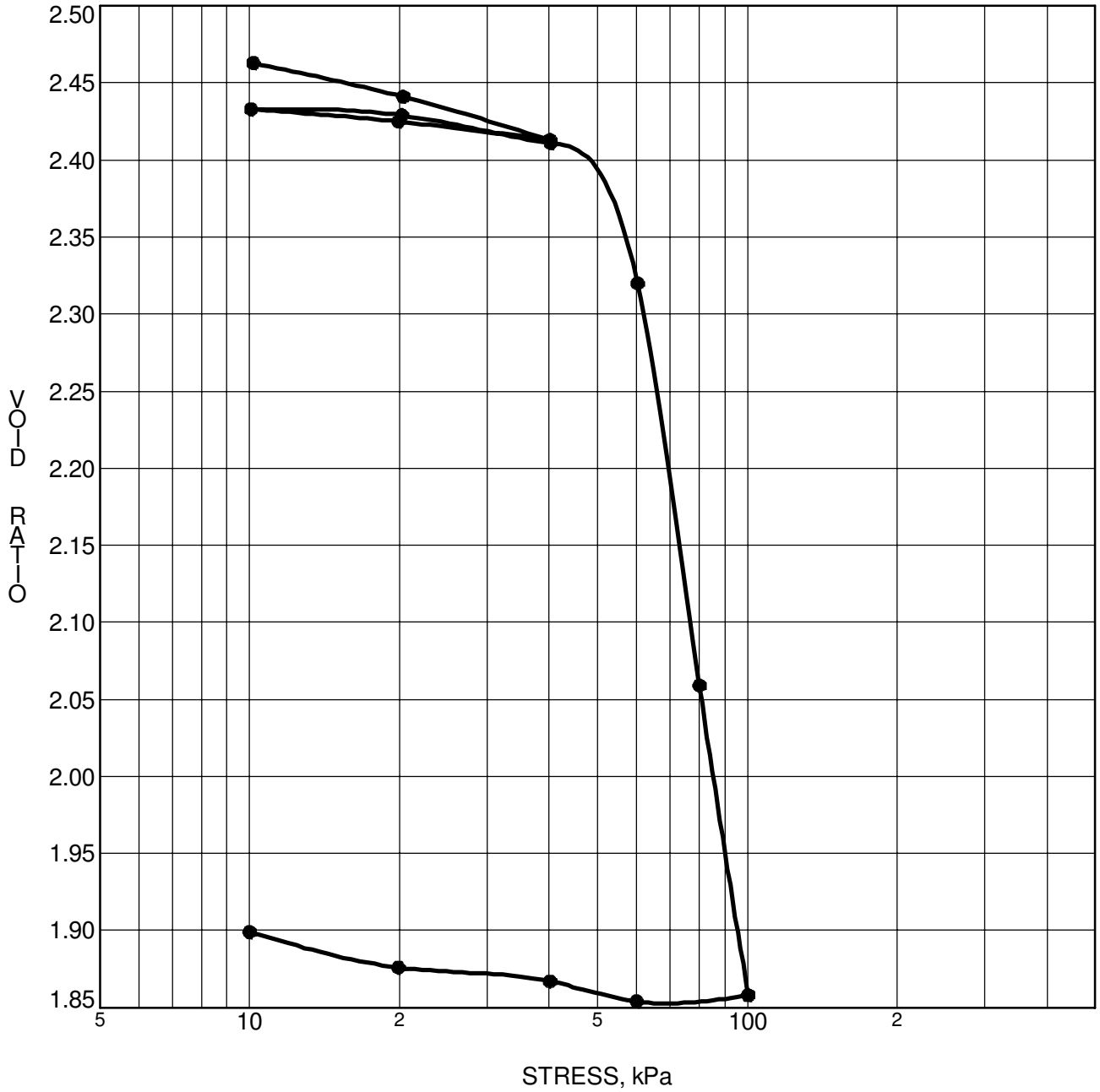
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **10/04/2011**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

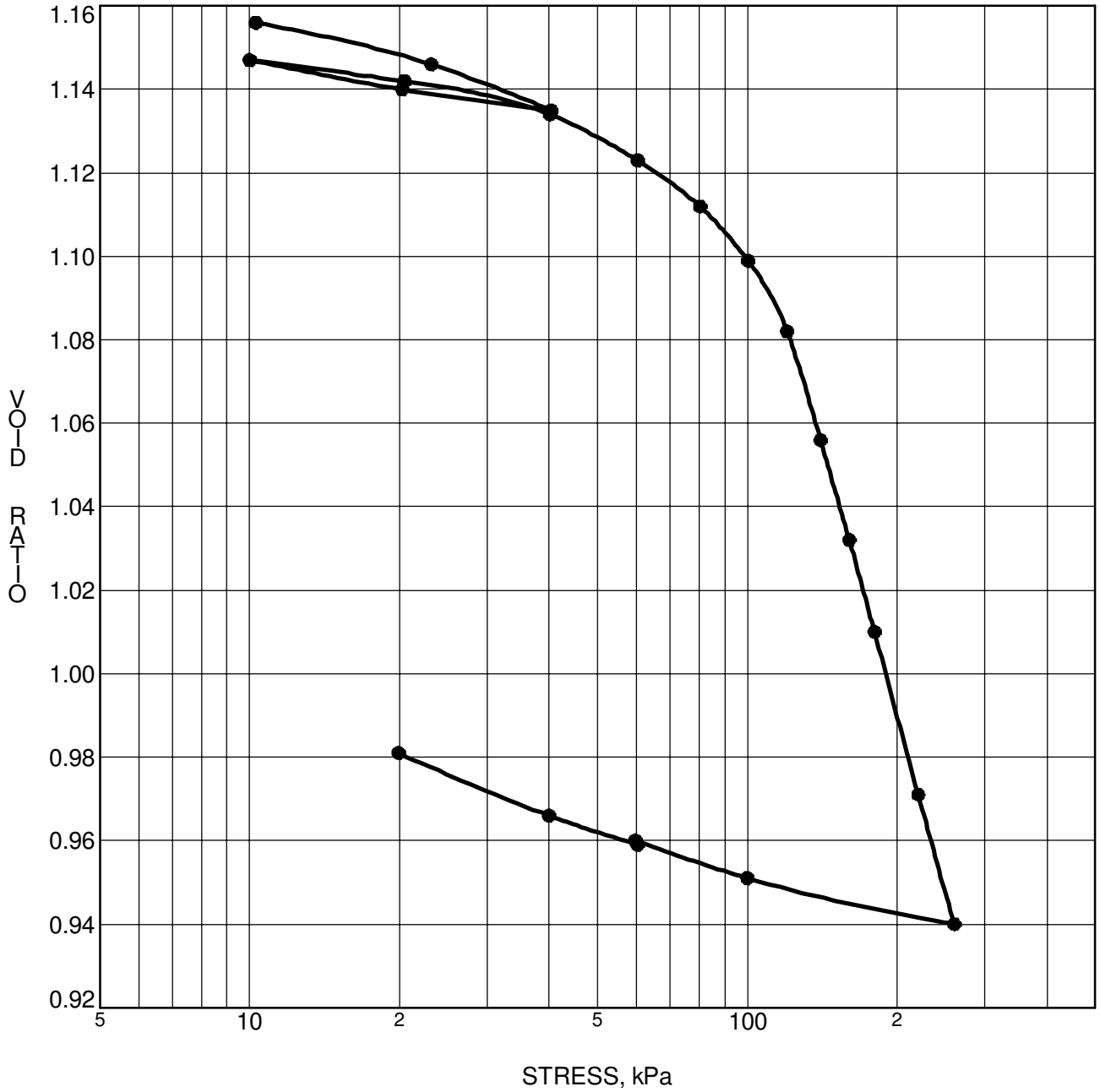


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 3**	p'_o	**53** kPa	Ccr	**0.019**
Sample No.	**TW 3**	p'_c	**66** kPa	Cc	**3.537**
Sample Depth	**4.27** m	OC Ratio	**1.2**	Wo	**90.6** %
Sample Elev.	**74.47** m	Void Ratio	**2.49**	Unit Wt.	**15.8** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**10/05/11**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 3**	p'_o	**63** kPa	Ccr	**0.020**
Sample No.	**TW 4**	p'_c	**116** kPa	Cc	**0.434**
Sample Depth	**5.87** m	OC Ratio	**1.8**	Wo	**42.4** %
Sample Elev.	**72.87** m	Void Ratio	**1.167**	Unit Wt.	**18.2** kN/m ^{3}

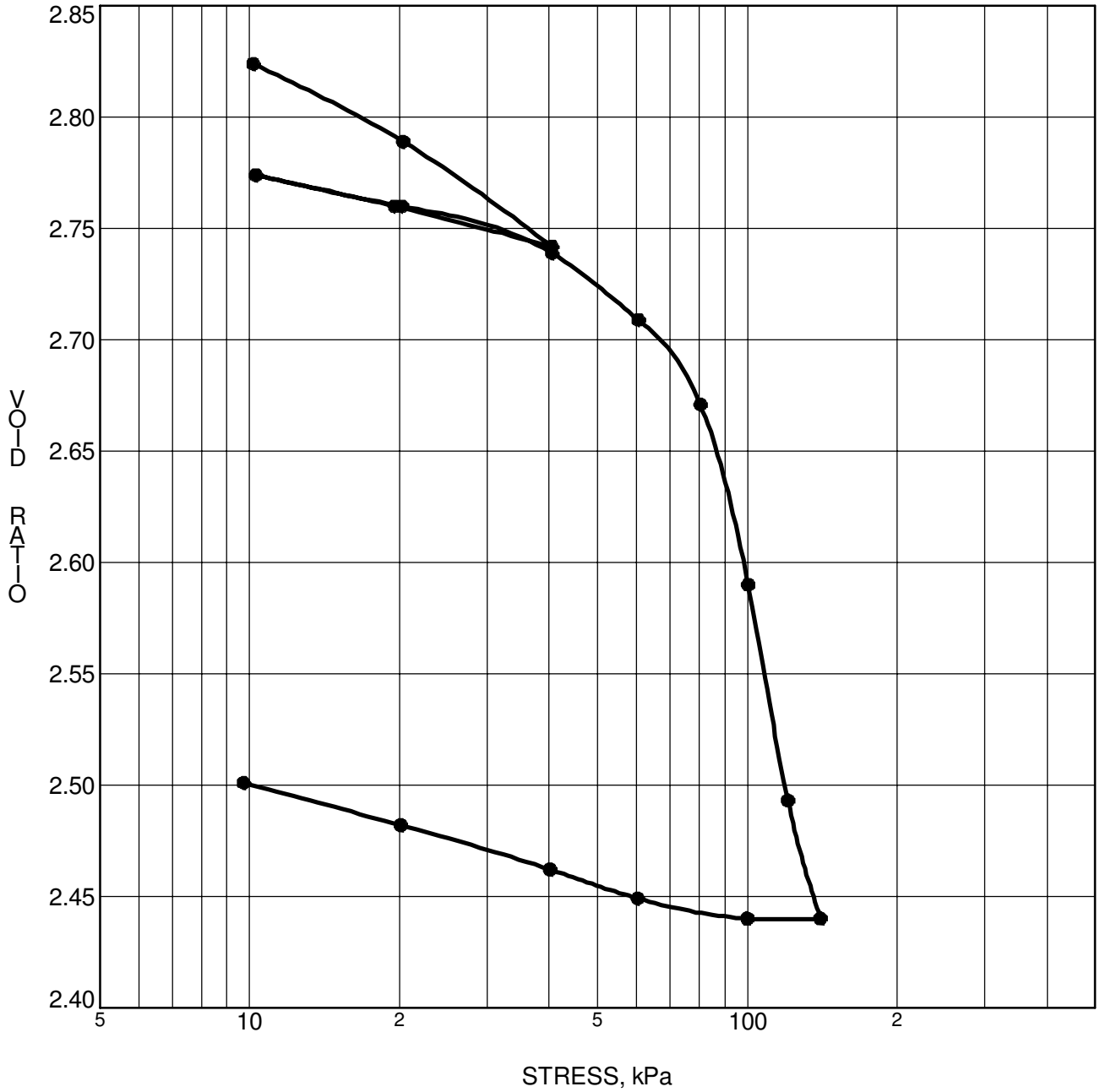
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **11/08/11**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

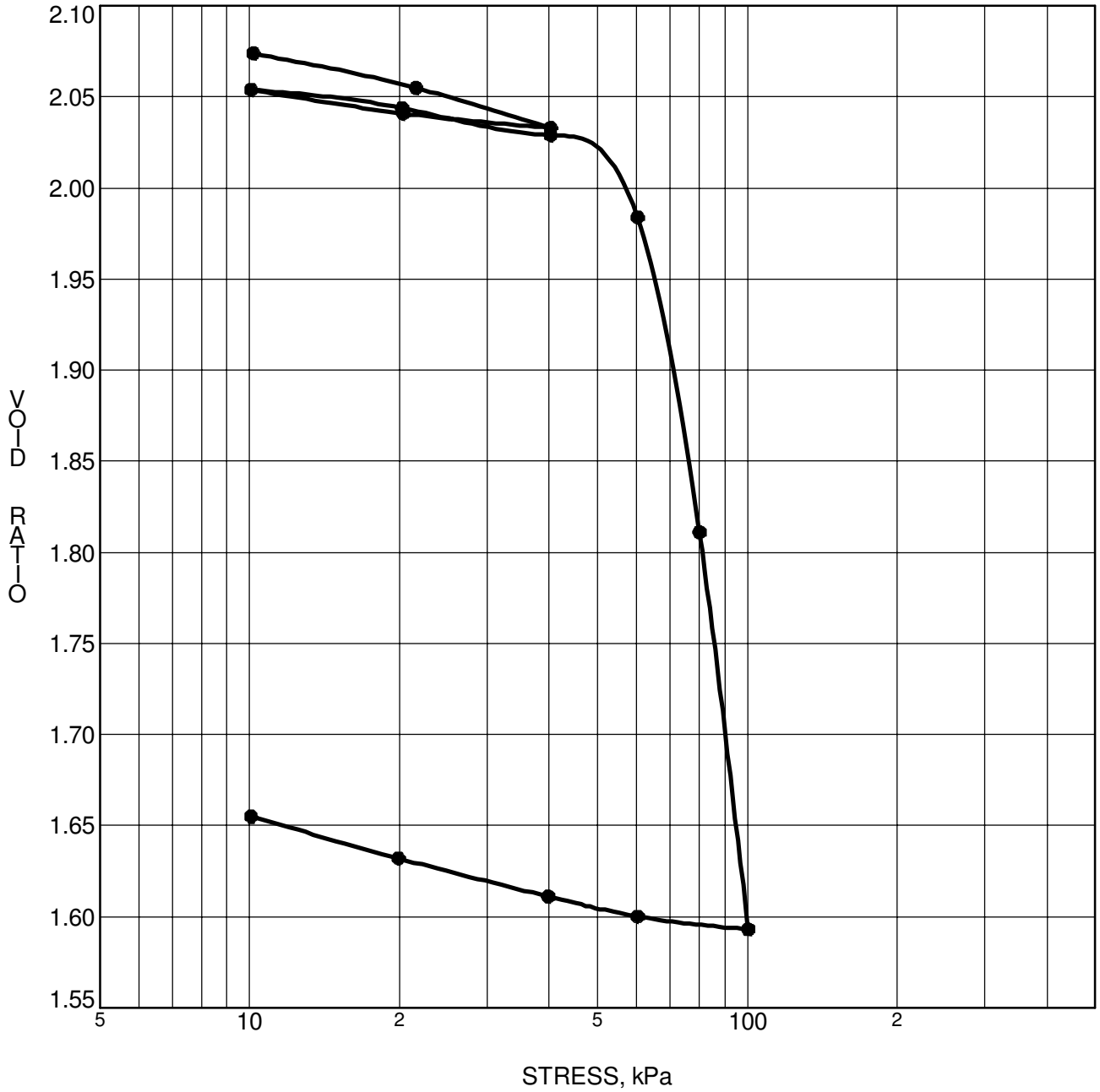


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 4**	p'_o	**38** kPa	Ccr	**0.056**
Sample No.	**TW 5**	p'_c	**86** kPa	Cc	**1.228**
Sample Depth	**4.27** m	OC Ratio	**2.3**	Wo	**103.8** %
Sample Elev.	**75.70** m	Void Ratio	**2.856**	Unit Wt.	**14.7** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**10/05/11**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 5**	p'_o	**31** kPa	Ccr	**0.039**
Sample No.	**TW 3**	p'_c	**67** kPa	Cc	**2.218**
Sample Depth	**3.20** m	OC Ratio	**2.2**	Wo	**76.1** %
Sample Elev.	**77.19** m	Void Ratio	**2.093**	Unit Wt.	**15.2** kN/m ^{3}

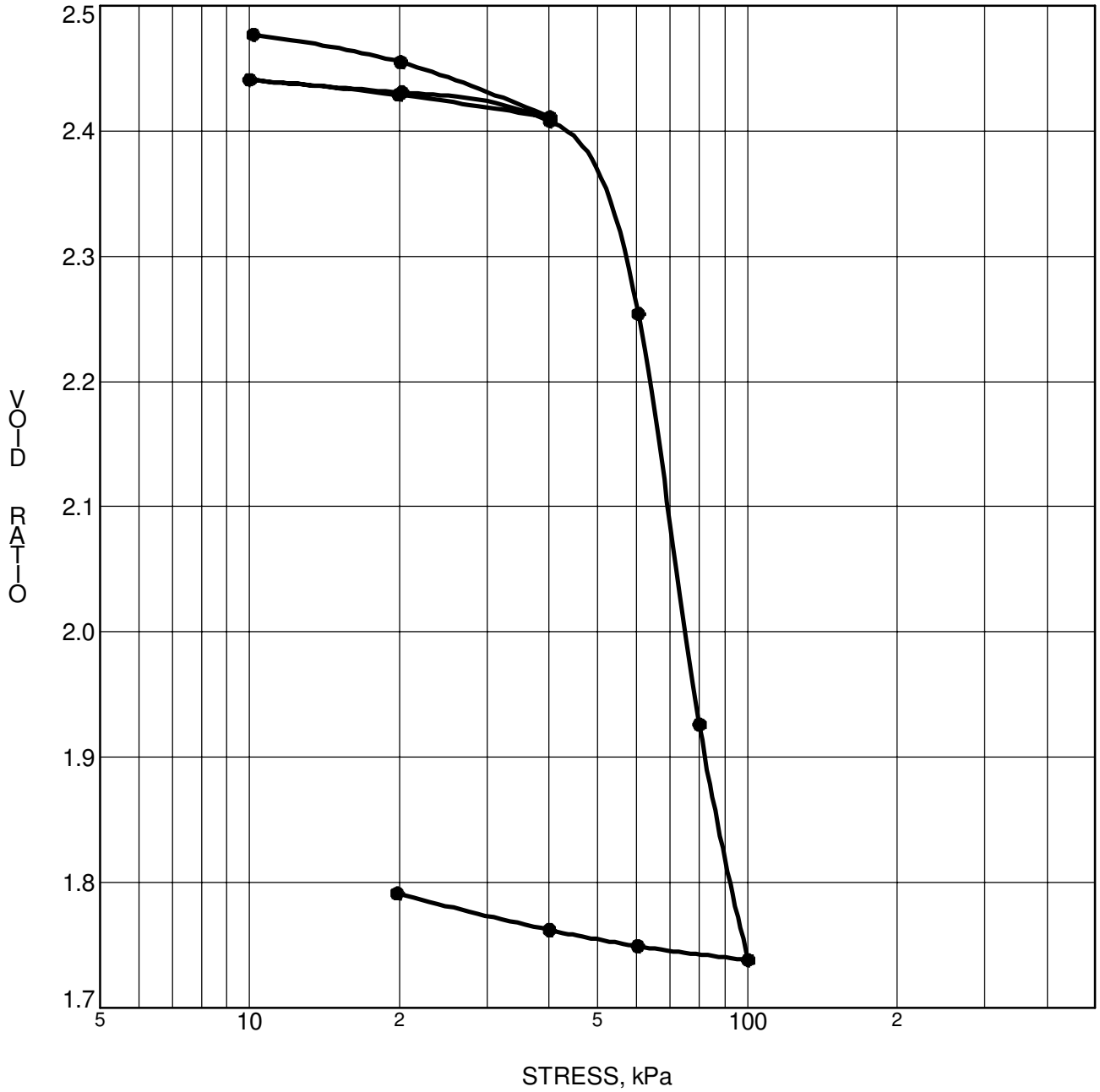
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **10/05/11**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 6**	p'_o	**34** kPa	Ccr	**0.050**
Sample No.	**TW 4**	p'_c	**55** kPa	Cc	**2.619**
Sample Depth	**3.61** m	OC Ratio	**1.6**	Wo	**91.0** %
Sample Elev.	**76.15** m	Void Ratio	**2.503**	Unit Wt.	**15.3** kN/m ^{3}

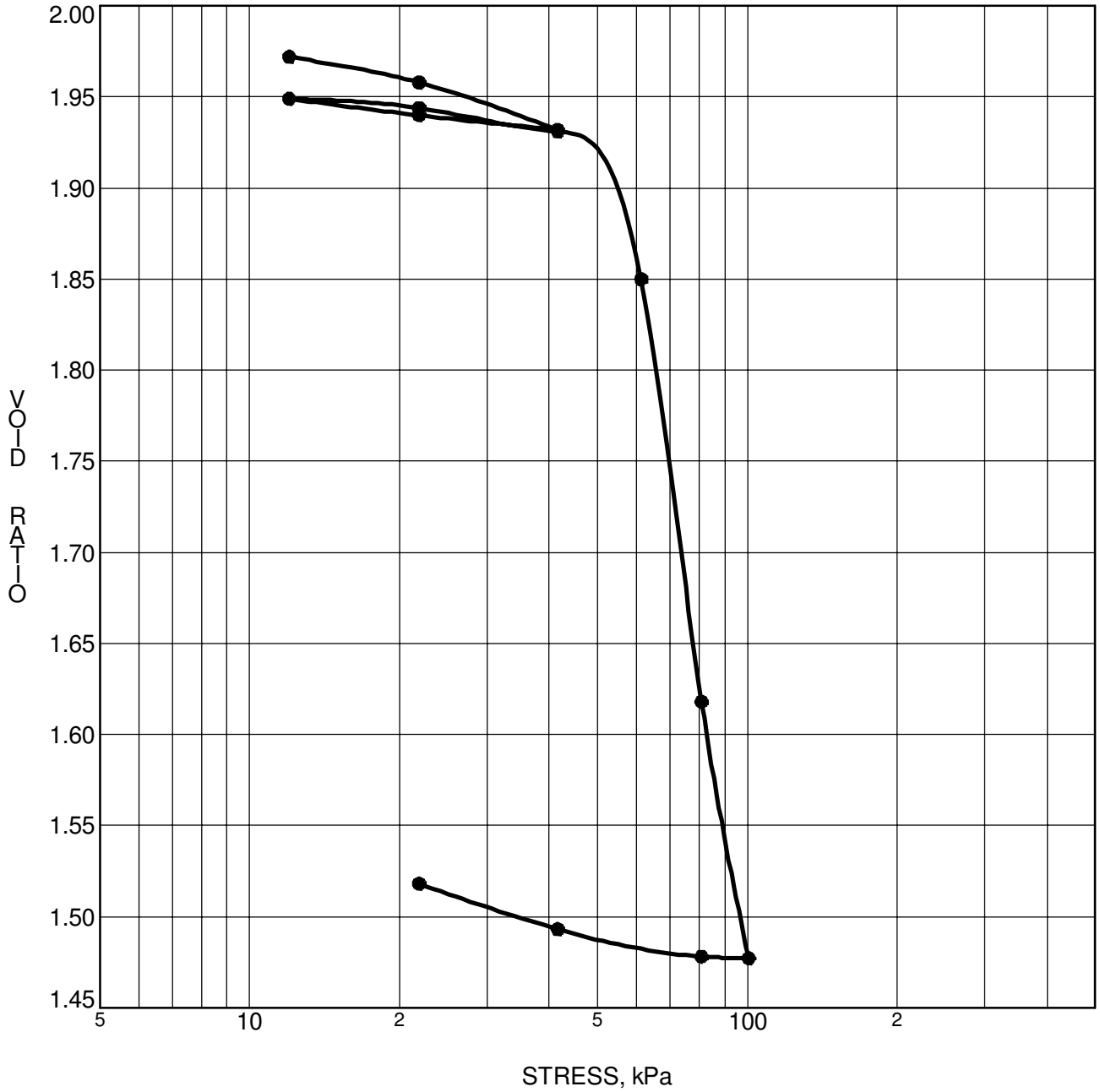
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **10/21/2011**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 6A**	p'_o	**24** kPa	Ccr	**0.032**
Sample No.	**TW 1**	p'_c	**62** kPa	Cc	**2.559**
Sample Depth	**2.04** m	OC Ratio	**2.6**	Wo	**72.3** %
Sample Elev.	**77.72** m	Void Ratio	**1.989**	Unit Wt.	**15.7** kN/m ^{3}

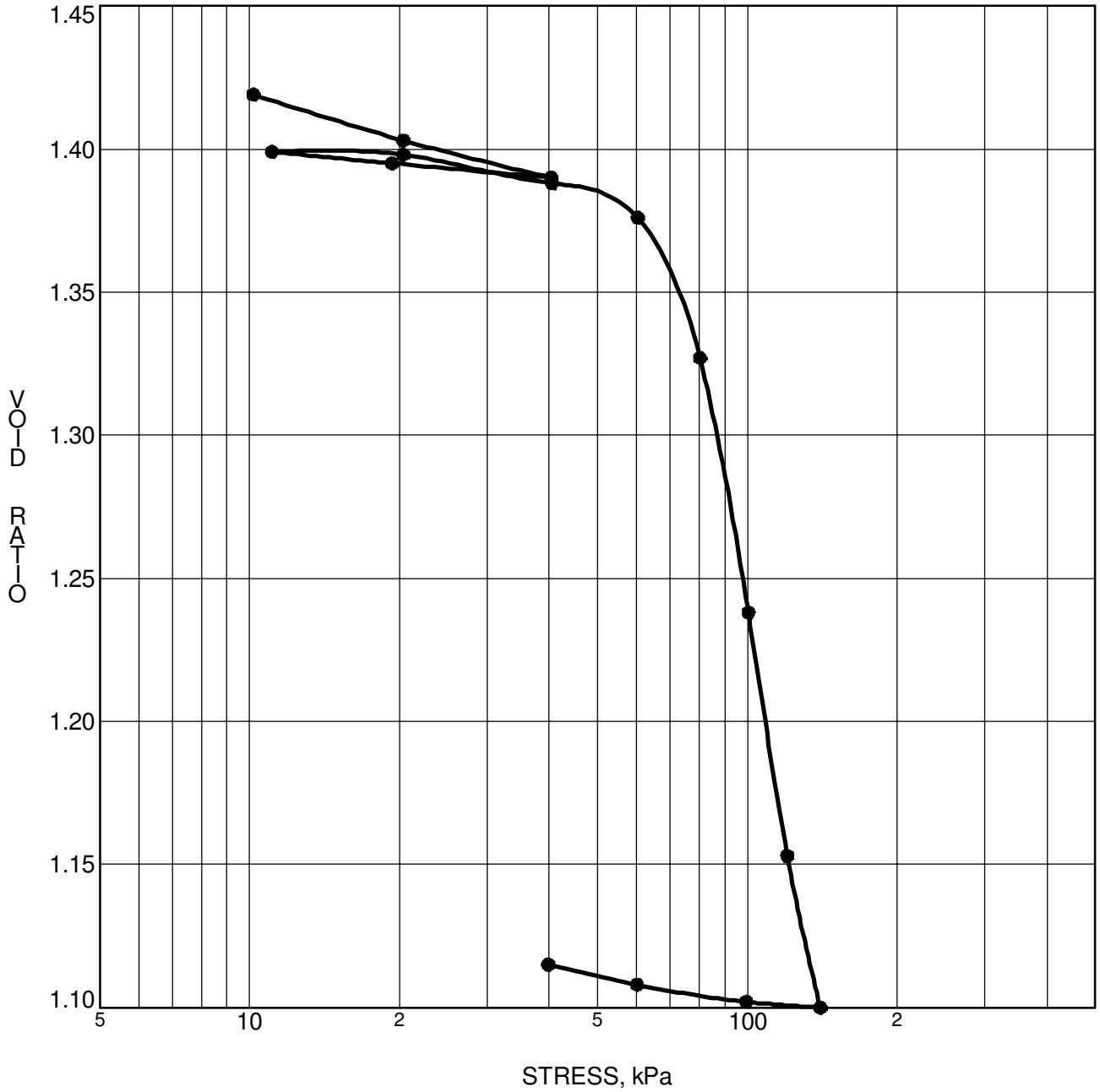
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **11/06/11**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 7**	p'_o	**29** kPa	Ccr	**0.019**
Sample No.	**TW 2**	p'_c	**78** kPa	Cc	**1.127**
Sample Depth	**2.82** m	OC Ratio	**2.7**	Wo	**52.1** %
Sample Elev.	**77.28** m	Void Ratio	**1.432**	Unit Wt.	**17.4** kN/m ^{3}

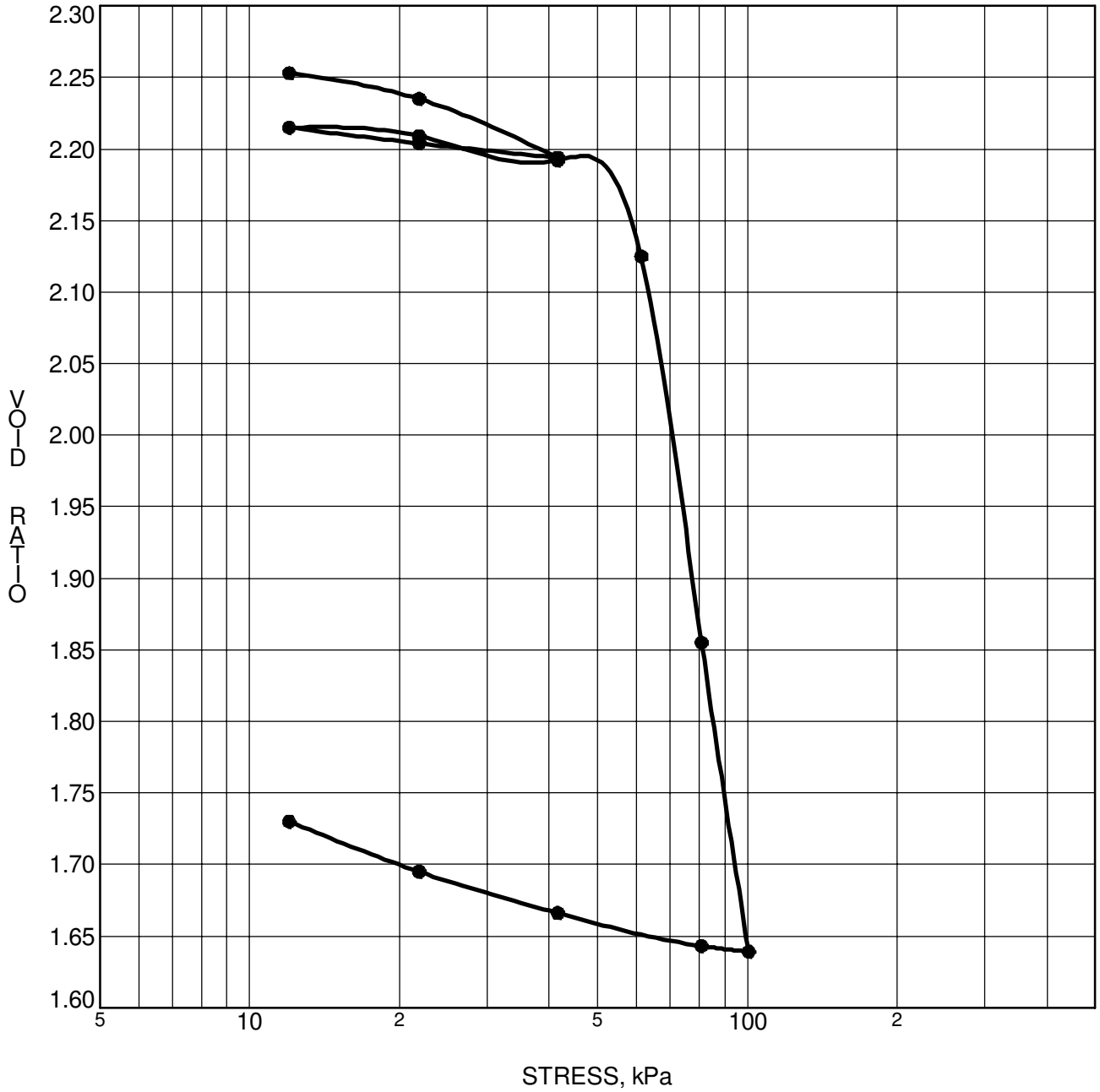
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **10/21/2011**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

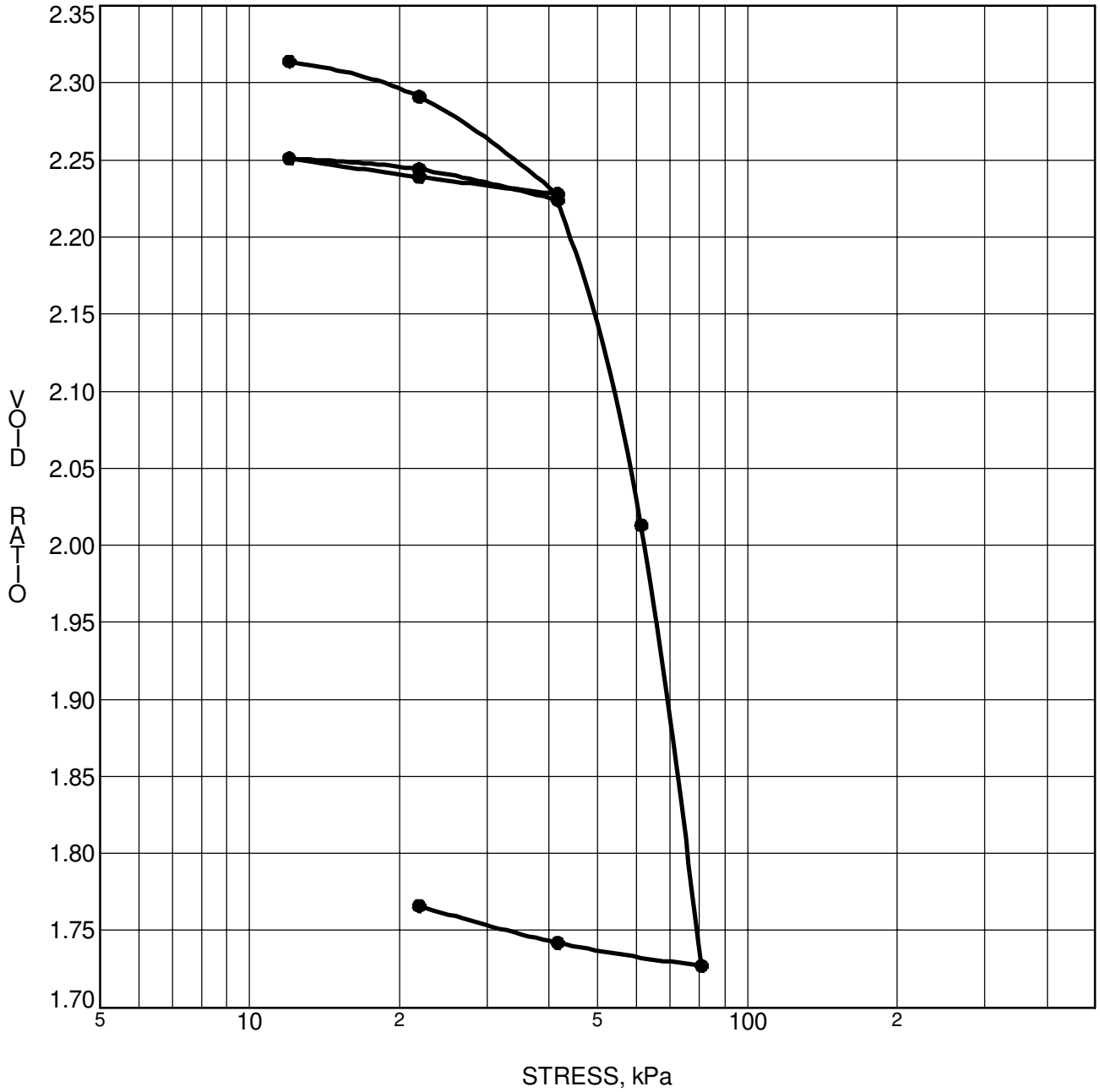


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 8**	p'_o	**28** kPa	Ccr	**0.040**
Sample No.	**TW 3**	p'_c	**60** kPa	Cc	**2.391**
Sample Depth	**2.72** m	OC Ratio	**2.1**	Wo	**83.0** %
Sample Elev.	**77.29** m	Void Ratio	**2.281**	Unit Wt.	**15.6** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**11/09/11**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

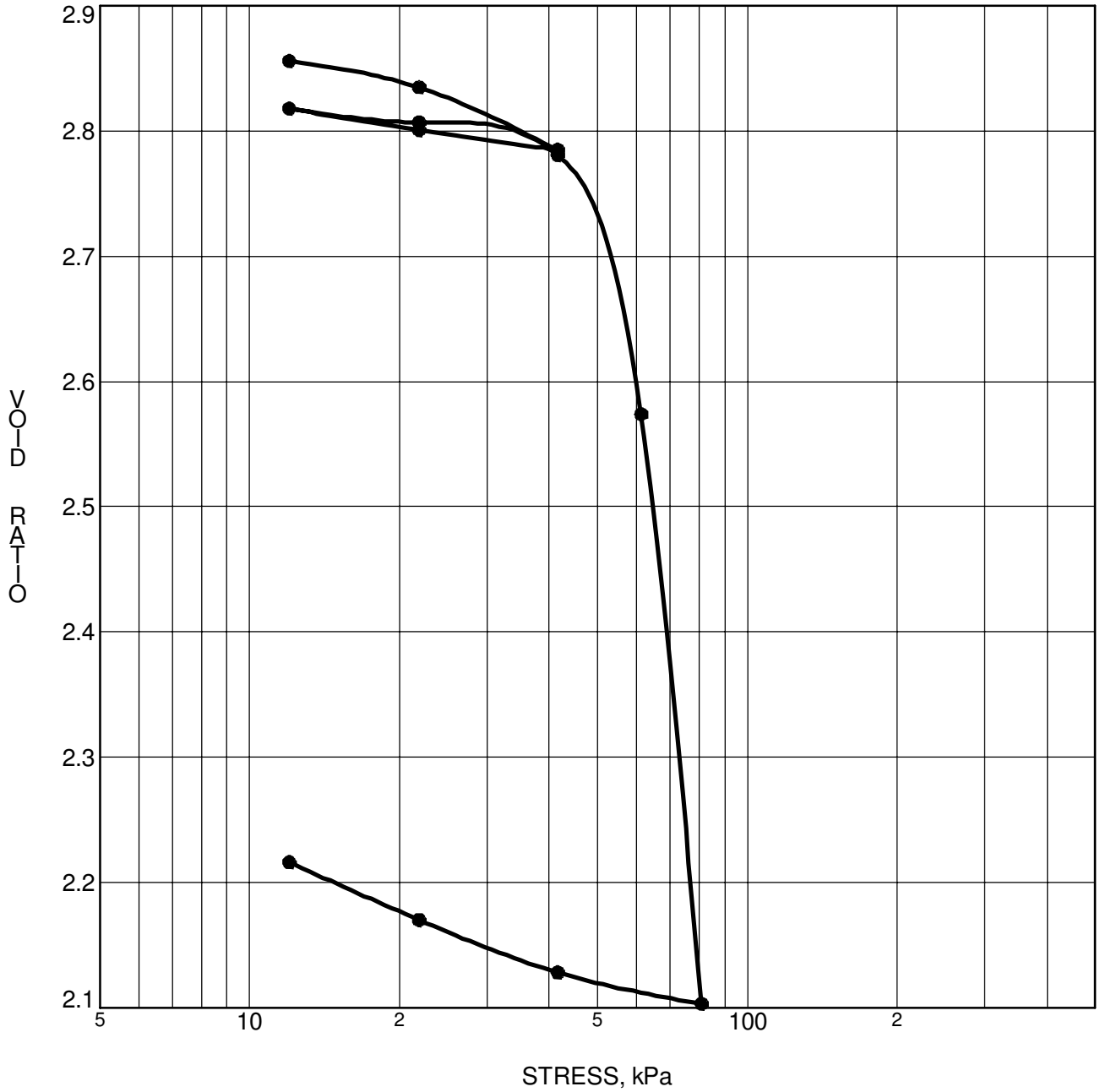


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 8**	p'_o	**38** kPa	Ccr	**0.046**
Sample No.	**TW 4**	p'_c	**51** kPa	Cc	**2.310**
Sample Depth	**4.36** m	OC Ratio	**1.3**	Wo	**85.3** %
Sample Elev.	**75.65** m	Void Ratio	**2.346**	Unit Wt.	**15.6** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**10/17/2011**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH 9**	p'_o	**32** kPa	Ccr	**0.067**
Sample No.	**TW 4**	p'_c	**55** kPa	Cc	**3.811**
Sample Depth	**3.38** m	OC Ratio	**1.7**	Wo	**105.2** %
Sample Elev.	**73.66** m	Void Ratio	**2.893**	Unit Wt.	**14.5** kN/m ^{3}

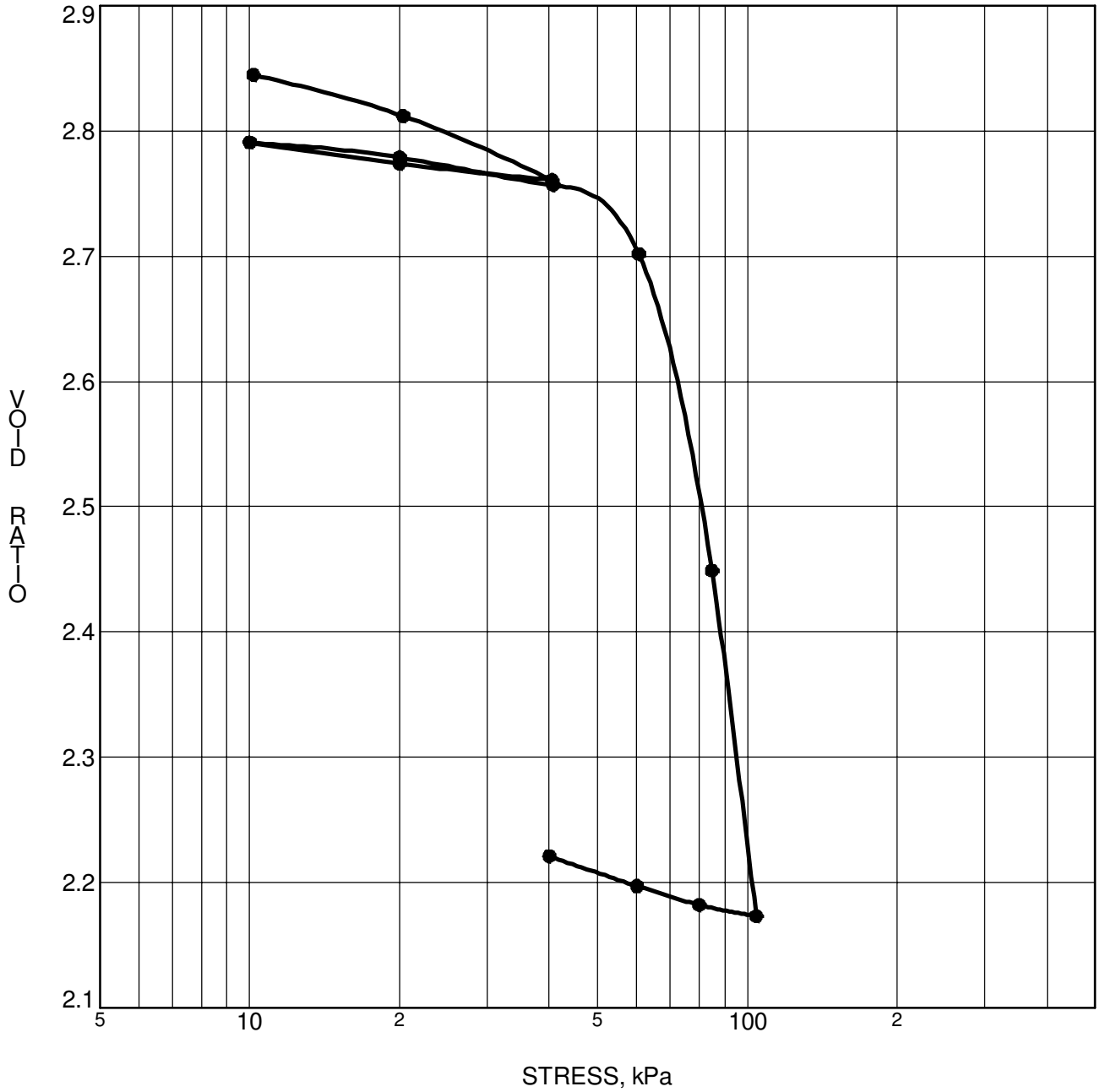
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **10/18/2011**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

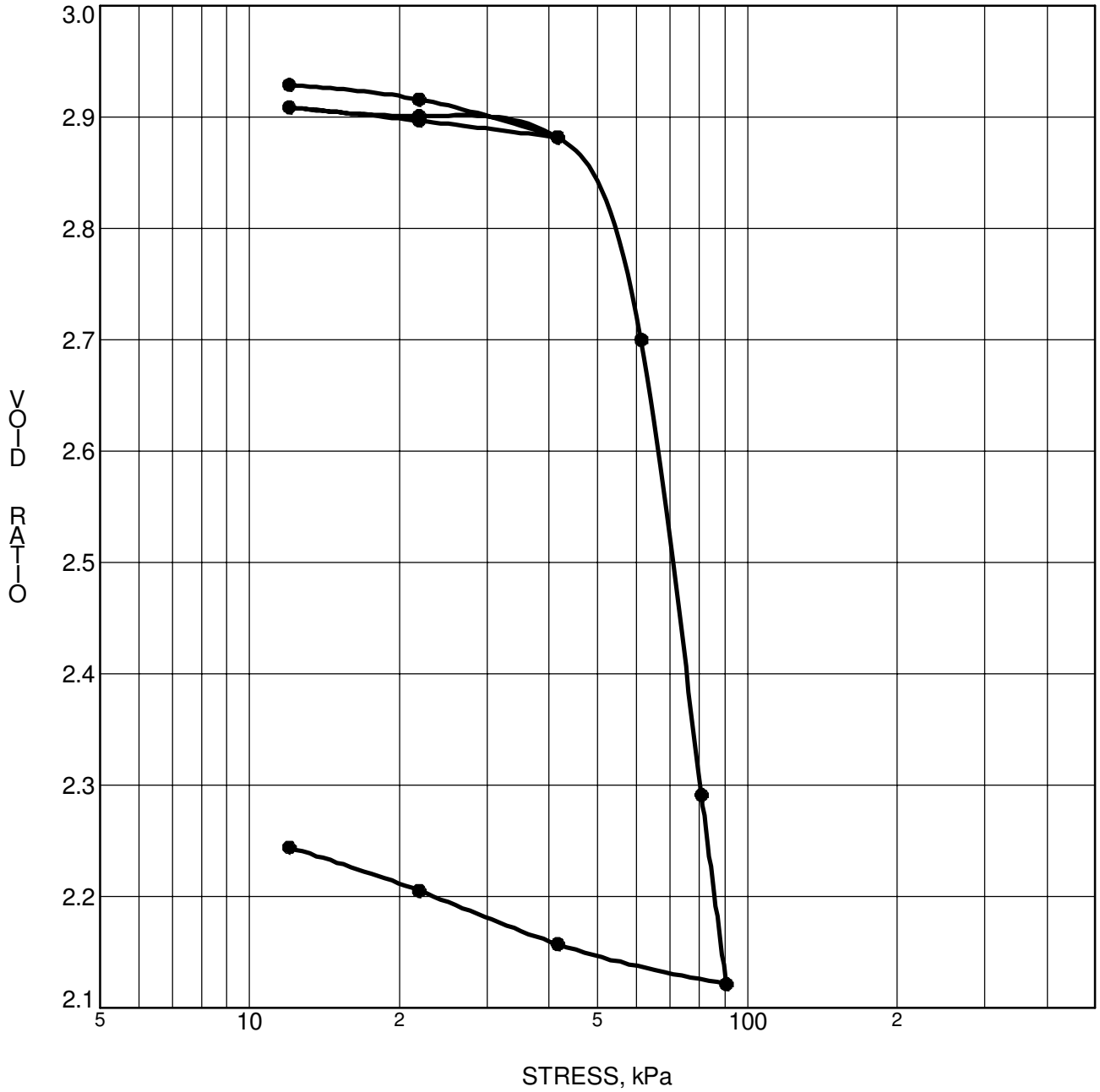


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH11**	p'_o	**45** kPa	Ccr	**0.051**
Sample No.	**TW 4**	p'_c	**71** kPa	Cc	**3.026**
Sample Depth	**4.29** m	OC Ratio	**1.6**	Wo	**105.1** %
Sample Elev.	**74.73** m	Void Ratio	**2.891**	Unit Wt.	**14.6** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**10/19/2011**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

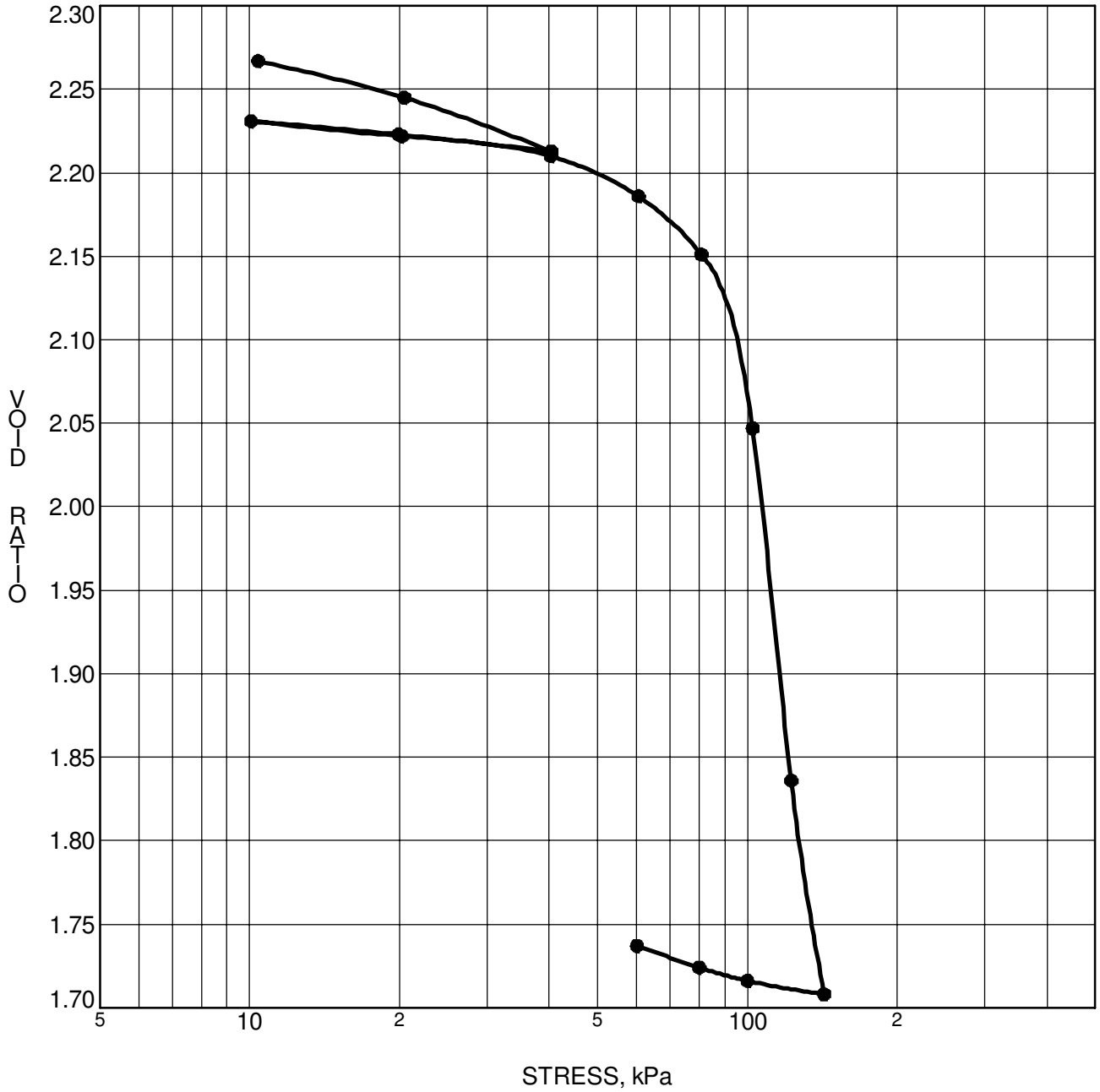


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH12A**	p'_o	**33** kPa	Ccr	**0.046**
Sample No.	**TW 1**	p'_c	**63** kPa	Cc	**5.112**
Sample Depth	**3.59** m	OC Ratio	**1.9**	Wo	**107.4** %
Sample Elev.	**75.20** m	Void Ratio	**2.954**	Unit Wt.	**14.5** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**10/25/2011**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

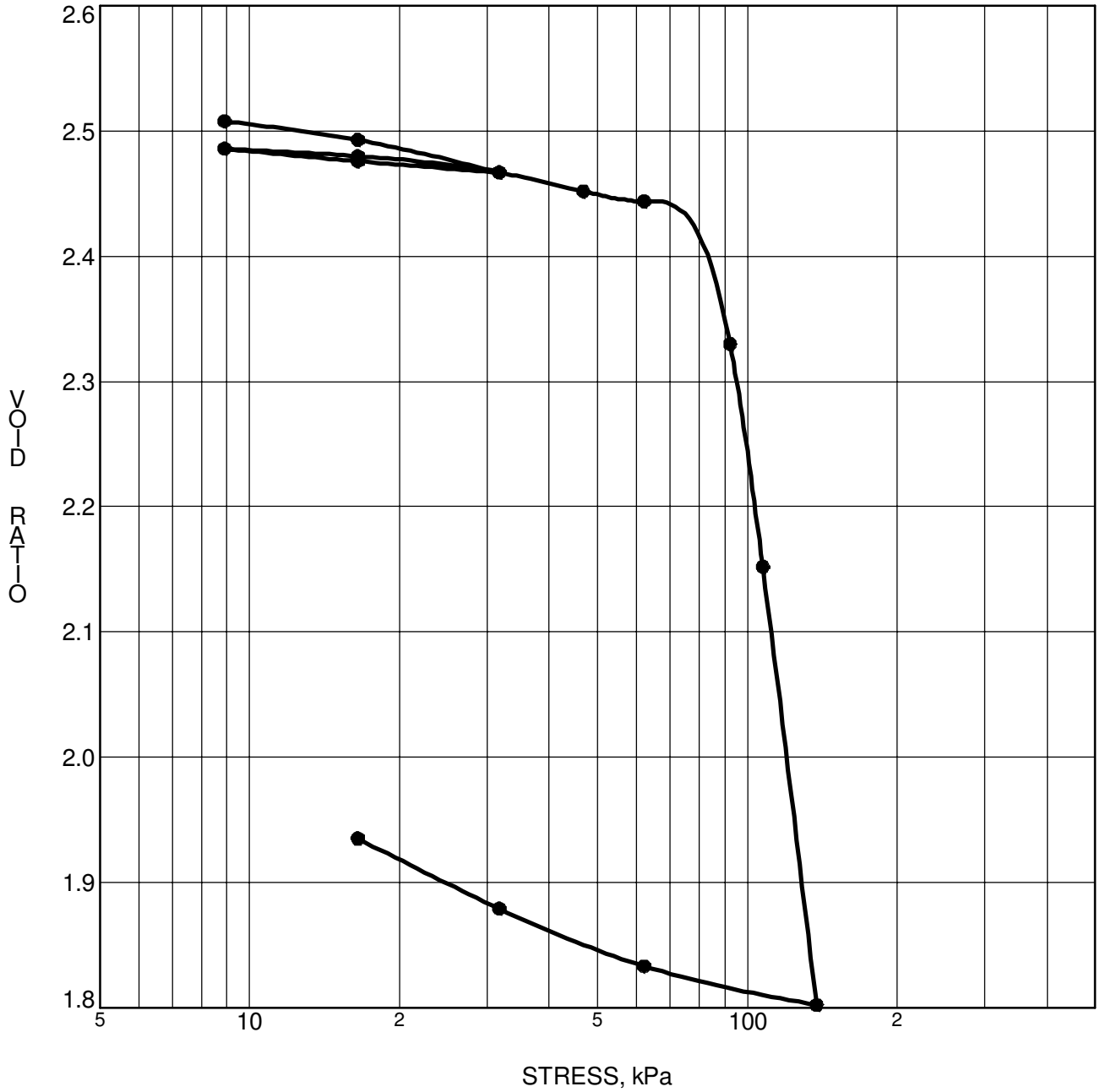


CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH13**	p'_o	**82** kPa	Ccr	**0.032**
Sample No.	**TW 5**	p'_c	**95** kPa	Cc	**2.616**
Sample Depth	**8.91** m	OC Ratio	**1.2**	Wo	**83.5** %
Sample Elev.	**68.76** m	Void Ratio	**2.296**	Unit Wt.	**15.5** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**10/19/2011**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH14**	p'_o	**40** kPa	Ccr	**0.032**
Sample No.	**TW 3**	p'_c	**90** kPa	Cc	**3.306**
Sample Depth	**3.49** m	OC Ratio	**2.3**	Wo	**91.8** %
Sample Elev.	**75.27** m	Void Ratio	**2.523**	Unit Wt.	**15.1** kN/m ^{3}

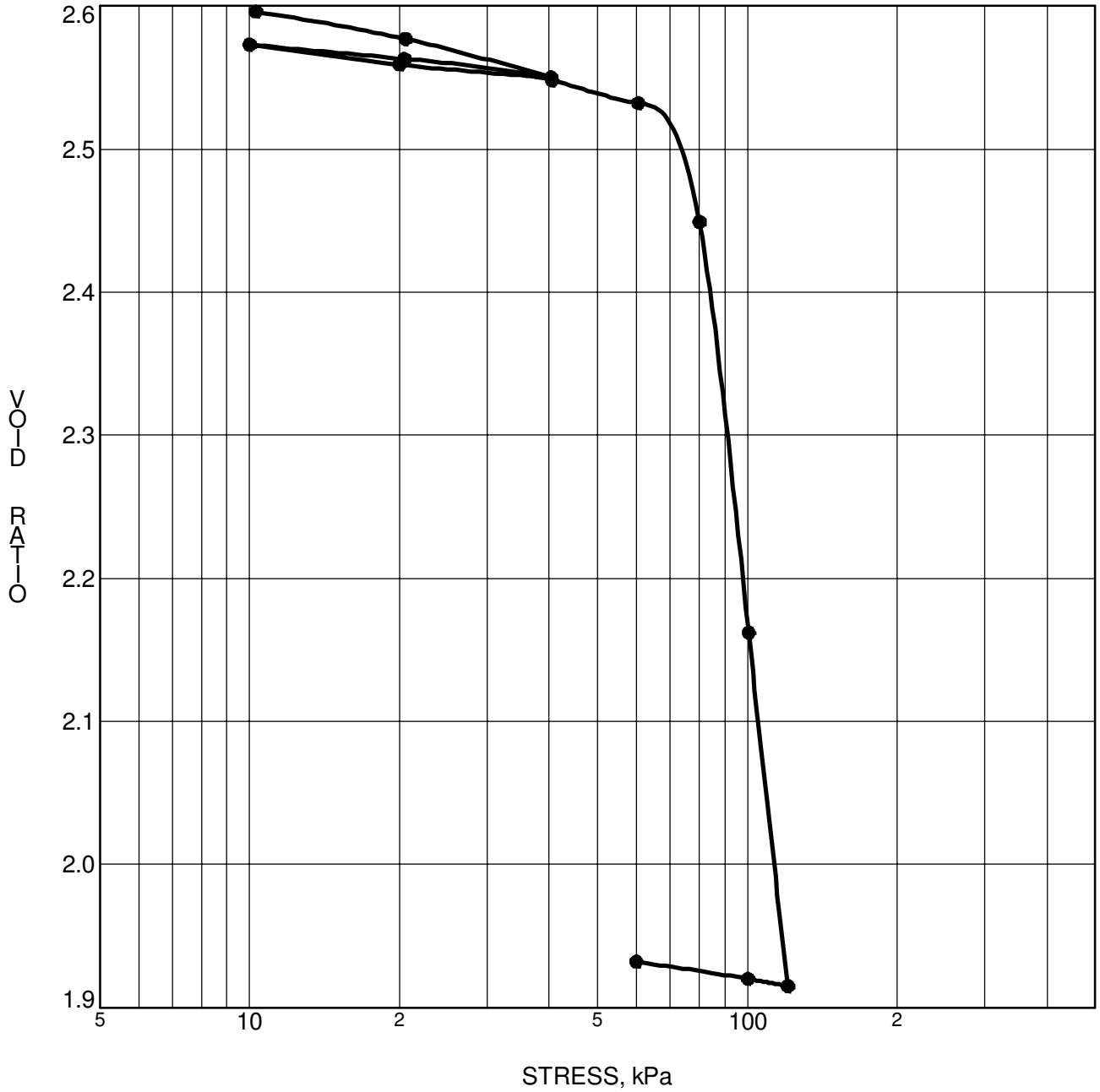
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **11/09/11**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH15**	p'_o	**46** kPa	Ccr	**0.041**
Sample No.	**TW 3**	p'_c	**79** kPa	Cc	**3.160**
Sample Depth	**5.34** m	OC Ratio	**1.7**	Wo	**95.2** %
Sample Elev.	**73.22** m	Void Ratio	**2.618**	Unit Wt.	**15.1** kN/m ^{3}

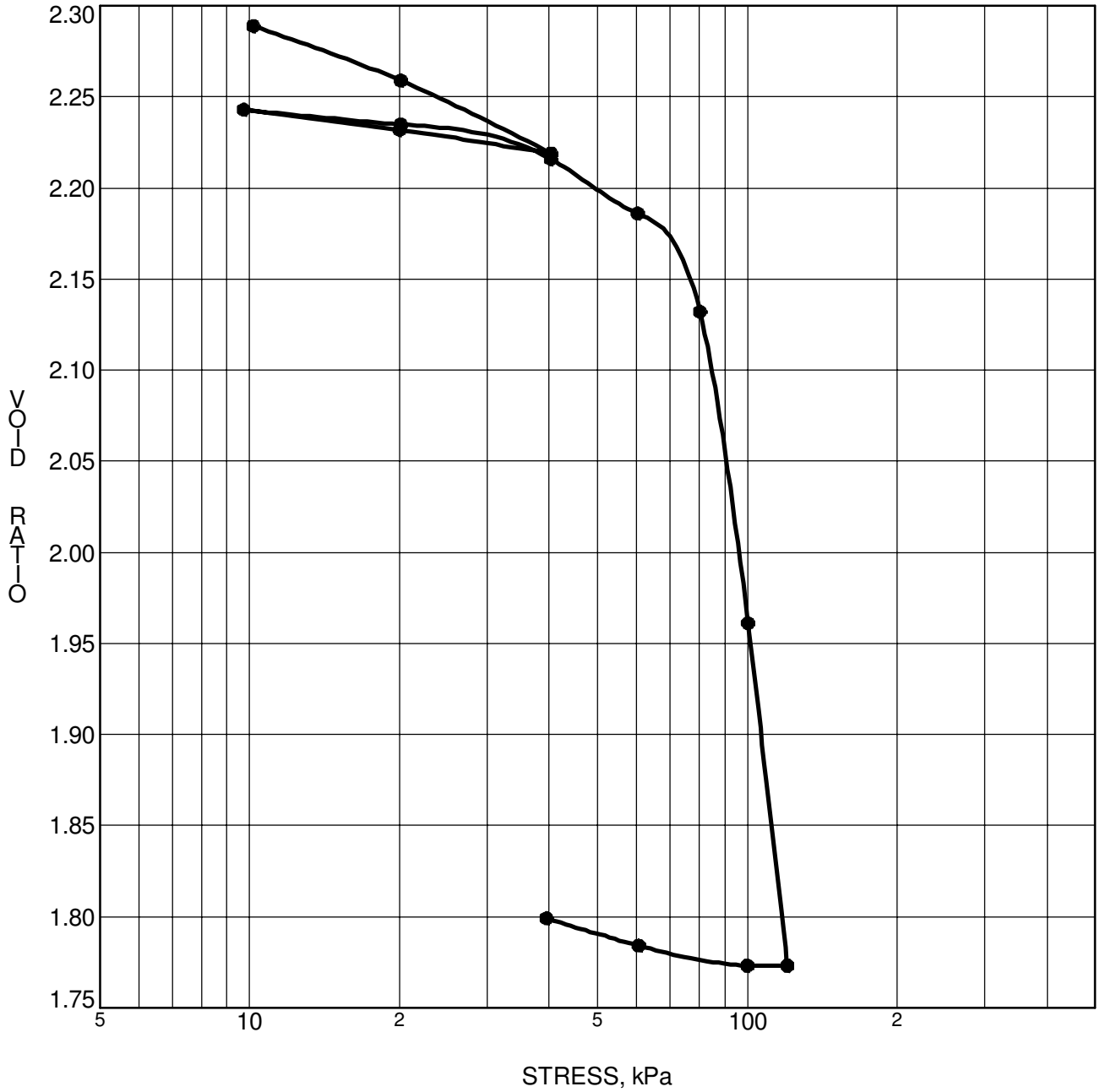
CLIENT **Fairlawn Sod c/o Mr. Ted Phillips** FILE NO. **PG2466**

PROJECT **Geotechnical Investigation - 8th Line Road and Anderson Road** DATE **11/08/11**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	**BH16**	p'_o	**49** kPa	Ccr	**0.041**
Sample No.	**TW 4**	p'_c	**85** kPa	Cc	**2.551**
Sample Depth	**5.03** m	OC Ratio	**1.7**	Wo	**84.1** %
Sample Elev.	**74.42** m	Void Ratio	**2.314**	Unit Wt.	**15.6** kN/m ^{3}

CLIENT	**Fairlawn Sod c/o Mr. Ted Phillips**	FILE NO.	**PG2466**
PROJECT	**Geotechnical Investigation - 8th Line Road and Anderson Road**	DATE	**11/08/11**

patersongroup Consulting Engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

CONSOLIDATION TEST

SUMMARY OF CONSOLIDATION TEST RESULTS – PG5827								
Sample No.	**Ground Elev. (m)**	**Depth (m)**	**Elevation (m)**	**p'c (kPa)**	**p'o (kPa)**	**Ccr**	**Cc**	**W.C. (%)**
2022 Testing Program								
BH5-22 - TW4	78.76	3.40	75.36	102.3	33.3	0.023	2.143	80
BH6A-22 - TW3	82.11	2.67	79.44	70.0	35.4	0.042	1.152	68
BH8-22 - TW5	80.51	4.90	75.61	70.8	67.2	0.036	4.000	98
BH9-22 - TW7	79.24	9.45	69.79	120.2	78.1	0.024	4.794	93
BH10-22 - TW4	82.47	2.54	79.93	73.3	36.2	0.026	1.277	67
BH13A-22 - TW3	80.97	3.35	77.62	60.3	38.2	0.040	3.088	85
BH13B-22 - TW1	80.97	4.19	76.78	72.1	43.4	0.025	3.724	88
BH14-22 - TW5	81.61	4.14	77.47	81.3	38.6	0.020	3.608	85
BH16-22 - TW4	81.30	3.35	77.95	67.6	34.5	0.020	1.493	62
BH16-22 - TW6	81.30	4.88	76.42	70.8	43.9	0.030	1.935	85
BH19-22 - TW3	78.47	1.93	76.54	56.2	27.5	0.017	1.087	73
BH21-22 - TW4	79.17	2.59	76.58	72.4	35.6	0.047	2.518	88
BH21-22 - TW6	79.17	4.11	75.06	56.2	45.0	0.037	1.579	68
BH22A-22 - TW1	78.70	2.59	76.11	54.0	34.9	0.041	1.368	64
BH27-22 - W4	79.71	1.91	77.81	53.1	23.4	0.047	2.364	85
BH28-22 - TW5	77.53	3.35	74.18	67.1	25.7	0.041	1.909	76
BH30-22 - TW10	79.71	7.16	72.55	81.4	56.3	0.091	3.302	77
BH34-22 - TW4	79.05	2.67	76.38	50.7	29.3	0.056	1.916	79
BH36-22 - TW5	78.62	3.35	75.27	70.0	33.0	0.036	2.638	75
BH37-22 - TW15	77.89	10.97	66.92	112.2	86.4	0.018	1.471	71
BH38A-22 - TW5	77.77	3.35	74.42	62.5	39.6	0.053	0.935	66
BH40-22 - TW8	79.51	5.74	73.77	54.1	57.3	0.042	0.750	55
BH43-22 - TW6	79.91	5.05	74.86	71.3	51.2	0.045	2.250	76
BH44-22 - TW7	79.37	5.82	73.55	59.4	59.4	0.018	0.484	45
BH45-22 - TW6	80.19	4.12	76.08	74.5	45.2	0.033	1.148	61
BH46A-22 - TW3	80.18	7.26	72.92	63.1	72.8	0.046	2.000	76
BH47-22 - TW6	78.99	4.67	74.32	63.1	50.3	0.055	2.647	100
BH48-22 - TW6	78.81	4.22	74.59	74.1	45.0	0.033	1.515	97
BH49A-22 - TW3	79.26	2.59	76.67	55.0	36.7	0.075	2.586	86
BH49A-22 - TW4	79.26	4.75	74.51	50.1	50.1	0.043	1.364	63
BH55-22 - TW8	80.24	5.79	74.45	57.5	54.7	0.037	1.111	86
BH56A-22 - TW3	80.21	2.59	77.62	66.1	28.3	0.022	0.409	36
BH59A-22 - TW3	79.31	2.59	76.72	63.1	34.9	0.043	0.856	64
BH61-22 - TW6	79.20	4.12	75.09	54.5	37.7	0.060	4.771	93
BH62-22 - TW5	79.98	3.45	75.53	48.6	33.6	0.040	1.630	68
BH64-22 - TW4	78.83	2.77	76.06	77.6	37.6	0.038	1.282	99
BH64-22 - TW6	78.83	4.22	74.61	69.2	46.5	0.049	2.344	79
2011 Testing Program								
BH1 - TW4	78.78	4.36	74.42	74.0	44.0	0.027	3.606	96
BH2 - TW3	79.62	3.58	76.04	64.0	33.0	0.024	2.803	99
BH 3 - TW3	78.74	4.27	74.47	66.0	53.0	0.019	3.537	91
BH3 - TW4	78.74	5.87	72.87	116.0	63.0	0.020	0.434	42
BH4 - TW5	79.97	4.27	75.70	86.0	38.0	0.056	1.228	104
BH5 - TW3	80.39	3.20	77.19	67.0	31.0	0.039	2.218	76
BH6 - TW4	79.96	3.61	76.15	55.0	34.0	0.050	2.619	91
BH6A - TW1	79.76	2.04	77.72	62.0	24.0	0.032	2.559	72
BH7 - TW2	80.10	2.82	77.28	78.0	29.0	0.019	1.127	52
BH8 - TW3	80.01	2.72	77.29	60.0	28.0	0.040	2.391	83
BH8 - TW4	80.01	4.36	75.65	51.0	38.0	0.046	2.310	85
BH9 - TW4	77.04	3.38	73.66	55.0	32.0	0.067	3.811	105
BH11 - TW4	79.02	4.29	74.73	71.0	45.0	0.051	3.026	105
BH12A - TW1	78.79	3.59	75.20	63.0	33.0	0.046	5.112	107
BH13 - TW5	77.67	8.91	68.76	95.0	82.0	0.032	2.616	84
BH14 - TW3	78.76	3.49	75.27	90.0	40.0	0.032	3.306	92
BH15 - TW3	78.56	5.34	73.22	79.0	46.0	0.041	3.160	95
BH16 - TW4	79.45	5.03	74.42	85.0	49.0	0.041	2.551	84

Certificate of Analysis

Report Date: 24-Mar-2022

Client: Paterson Group Consulting Engineers

Order Date: 21-Mar-2022

Client PO: 33929

Project Description: PG5827

	Client ID:	BH6A-22 SS2	BH42A-22 SS1	-	-
	Sample Date:	18-Mar-22 09:00	18-Mar-22 09:00	-	-
	Sample ID:	2213098-01	2213098-02	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	79.8	59.3	-	-
General Inorganics					
pH	0.05 pH Units	7.57	7.70	-	-
Resistivity	0.10 Ohm.m	26.2	20.2	-	-
Anions					
Chloride	5 ug/g dry	90	166	-	-
Sulphate	5 ug/g dry	87	48	-	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Paterson Group Consulting Engineers

Order Date: 14-Apr-2022

Client PO: 27362

Project Description: PG5827

	Client ID:	BH18-22 SS3	-	-	-
	Sample Date:	14-Apr-22 09:00	-	-	-
	Sample ID:	2216483-01	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	68.0	-	-	-
General Inorganics					
pH	0.05 pH Units	7.23	-	-	-
Resistivity	0.10 Ohm.m	18.5	-	-	-
Anions					
Chloride	5 ug/g dry	196	-	-	-
Sulphate	5 ug/g dry	89	-	-	-

Certificate of Analysis

Report Date: 18-Apr-2022

Client: Paterson Group Consulting Engineers

Order Date: 11-Apr-2022

Client PO: 33897

Project Description: PG5827

	Client ID:	BH33-22 SS3	BH38A-22 SS3	-	-
	Sample Date:	08-Apr-22 09:00	08-Apr-22 09:00	-	-
	Sample ID:	2216118-01	2216118-02	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	59.4	63.8	-	-
General Inorganics					
pH	0.05 pH Units	7.91	7.87	-	-
Resistivity	0.10 Ohm.m	10.8	21.4	-	-
Anions					
Chloride	5 ug/g dry	404	151	-	-
Sulphate	5 ug/g dry	314	52	-	-

Certificate of Analysis

Report Date: 29-Mar-2022

Client: Paterson Group Consulting Engineers

Order Date: 24-Mar-2022

Client PO: 33922

Project Description: PG5827

	Client ID:	BH45A-22 SS3	BH49A-22 SS2	-	-
	Sample Date:	24-Mar-22 09:00	24-Mar-22 09:00	-	-
	Sample ID:	2213504-01	2213504-02	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	64.7	74.4	-	-
General Inorganics					
pH	0.05 pH Units	7.91	7.68	-	-
Resistivity	0.10 Ohm.m	32.3	128	-	-
Anions					
Chloride	5 ug/g dry	16	13	-	-
Sulphate	5 ug/g dry	93	6	-	-

Certificate of Analysis

Report Date: 01-Apr-2022

Client: Paterson Group Consulting Engineers

Order Date: 28-Mar-2022

Client PO: 33769

Project Description: PG5827

	Client ID:	BH52-22 SS2	BH55-22 SS3	-	-
	Sample Date:	23-Mar-22 09:00	24-Mar-22 09:00	-	-
	Sample ID:	2214090-01	2214090-02	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	68.0	59.4	-	-
General Inorganics					
pH	0.05 pH Units	7.56	8.08	-	-
Resistivity	0.10 Ohm.m	33.6	13.7	-	-
Anions					
Chloride	5 ug/g dry	58	243	-	-
Sulphate	5 ug/g dry	52	35	-	-

Certificate of Analysis

Report Date: 07-Apr-2022

Client: Paterson Group Consulting Engineers

Order Date: 1-Apr-2022

Client PO: 33891

Project Description: PG5827

	Client ID:	BH59-22 SS3	BH64-22 SS3	-	-
	Sample Date:	01-Apr-22 09:00	01-Apr-22 09:00	-	-
	Sample ID:	2214535-01	2214535-02	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	76.4	78.3	-	-
General Inorganics					
pH	0.05 pH Units	6.95	7.81	-	-
Resistivity	0.10 Ohm.m	82.0	76.3	-	-
Anions					
Chloride	5 ug/g dry	16	36	-	-
Sulphate	5 ug/g dry	8	8	-	-

Certificate of Analysis

Report Date: 27-Feb-2023

Client: **Paterson Group Consulting Engineers**

Order Date: 21-Feb-2023

Client PO: **56848**

Project Description: PG5827

	Client ID:	BH66-23-SS3	-	-	-
	Sample Date:	17-Feb-23 00:00	-	-	-
	Sample ID:	2308089-01	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	83.8	-	-	-
General Inorganics					
pH	0.05 pH Units	7.87	-	-	-
Resistivity	0.10 Ohm.m	36.2	-	-	-
Anions					
Chloride	10 ug/g dry	78	-	-	-
Sulphate	10 ug/g dry	26	-	-	-

Certificate of Analysis

Report Date: 14-Jun-2022

Client: **Paterson Group Consulting Engineers**

Order Date: 7-Jun-2022

Client PO: **54898**

Project Description: PG5827

	Client ID:	BH71-22-SS2 (Bottom)	-	-	-
	Sample Date:	02-Jun-22 09:00	-	-	-
	Sample ID:	2224287-01	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	75.3	-	-	-
General Inorganics					
pH	0.05 pH Units	6.89	-	-	-
Resistivity	0.10 Ohm.m	107	-	-	-
Anions					
Chloride	5 ug/g dry	<5	-	-	-
Sulphate	5 ug/g dry	36	-	-	-

APPENDIX 2

FIGURE 1A TO FIGURE 37B - SLOPE STABILITY ANALYSIS CROSS-SECTIONS

PHOTOGRAPHS FROM SITE VISIT

FIGURE 38 - KEY PLAN

DRAWING PG5827-1 - TEST HOLE LOCATION PLAN

DRAWING PG5827-3 - SURFICIAL SAND LAYER THICKNESS CONTOUR PLAN

DRAWING PG5827-4 TO PG5827-8 - LIMIT OF HAZARD LANDS PLAN

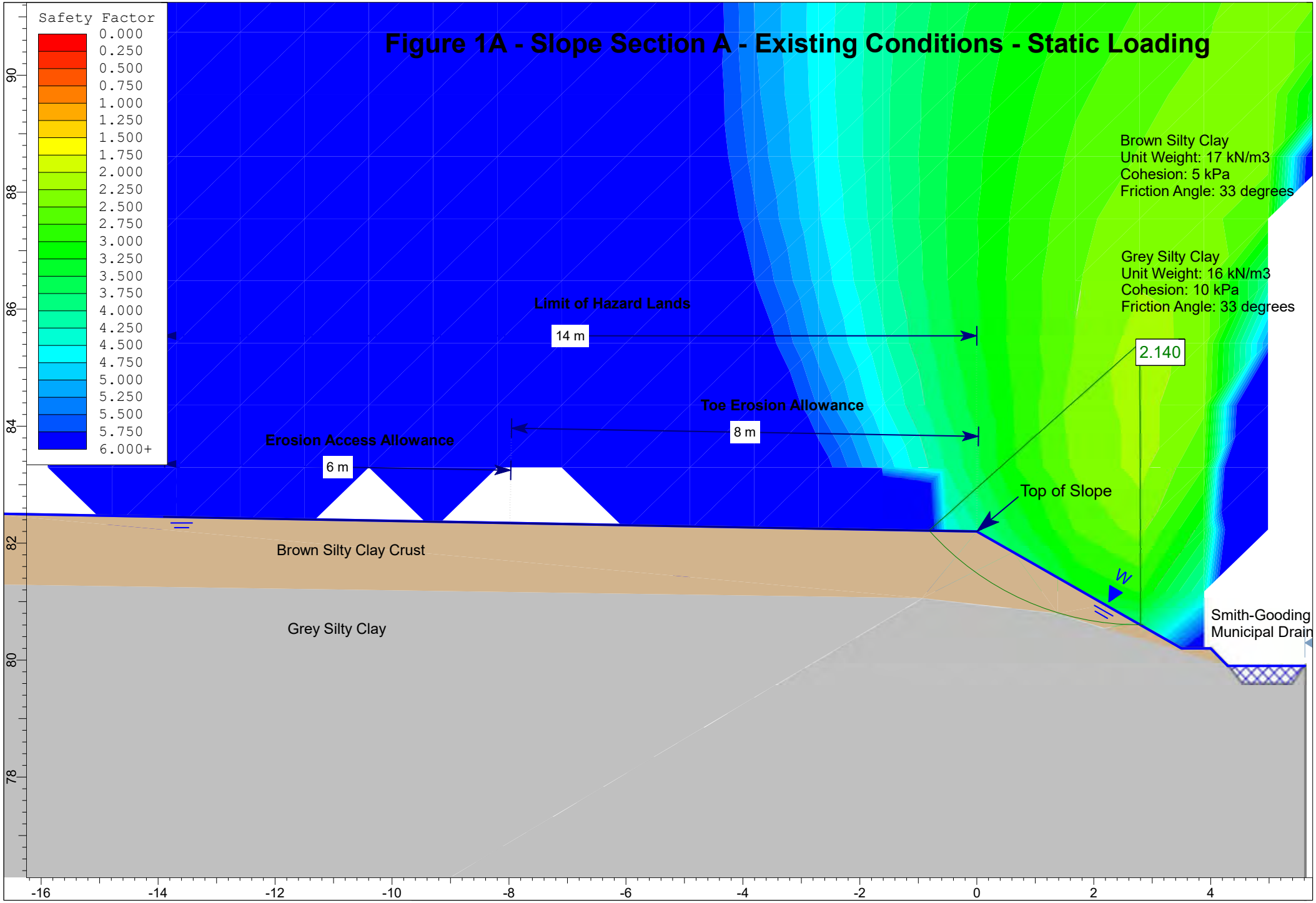


Figure 1A - Slope Section A - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
2.140
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

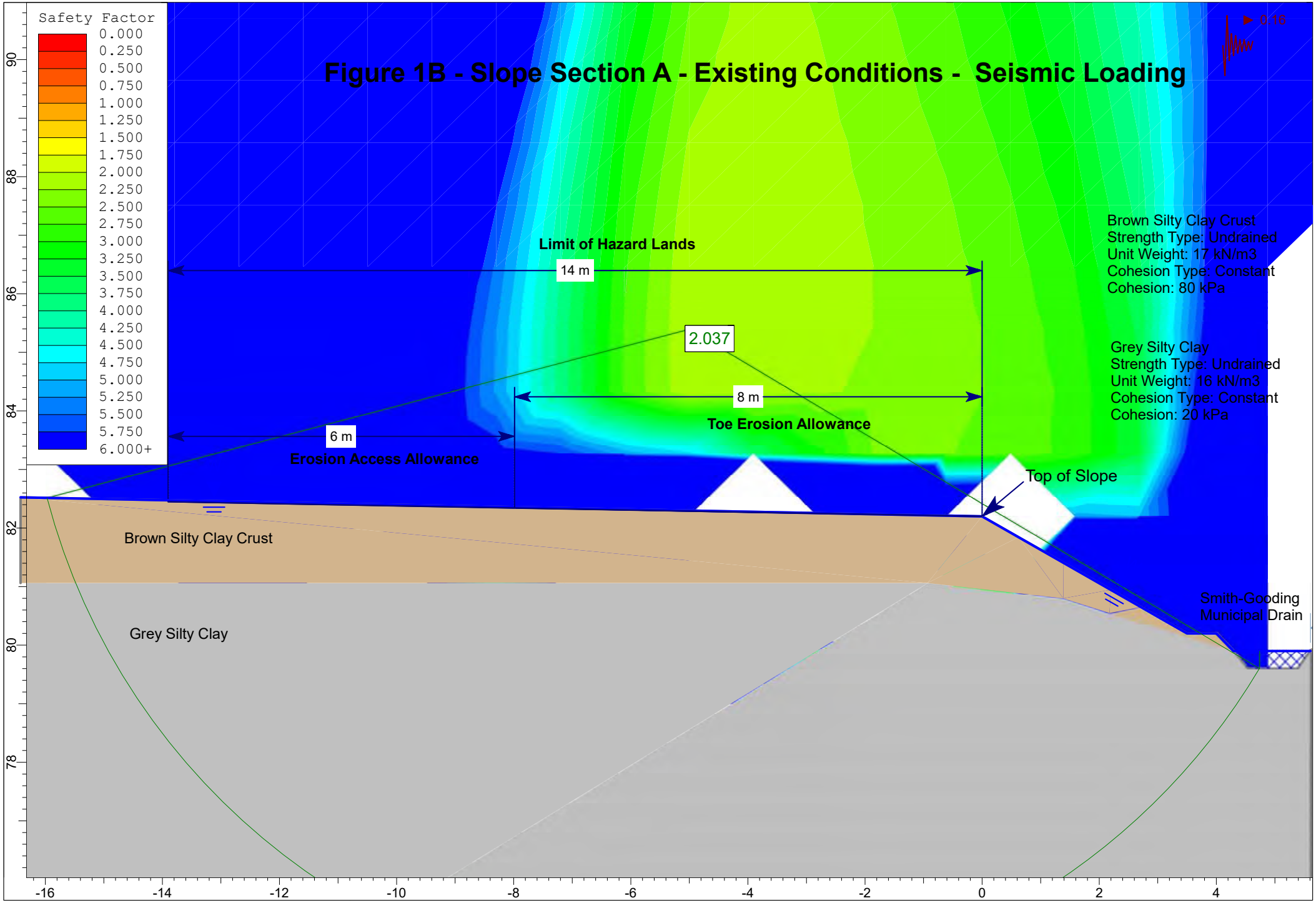


Figure 1B - Slope Section A - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Limit of Hazard Lands
14 m
2.037
8 m
Toe Erosion Allowance
6 m
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

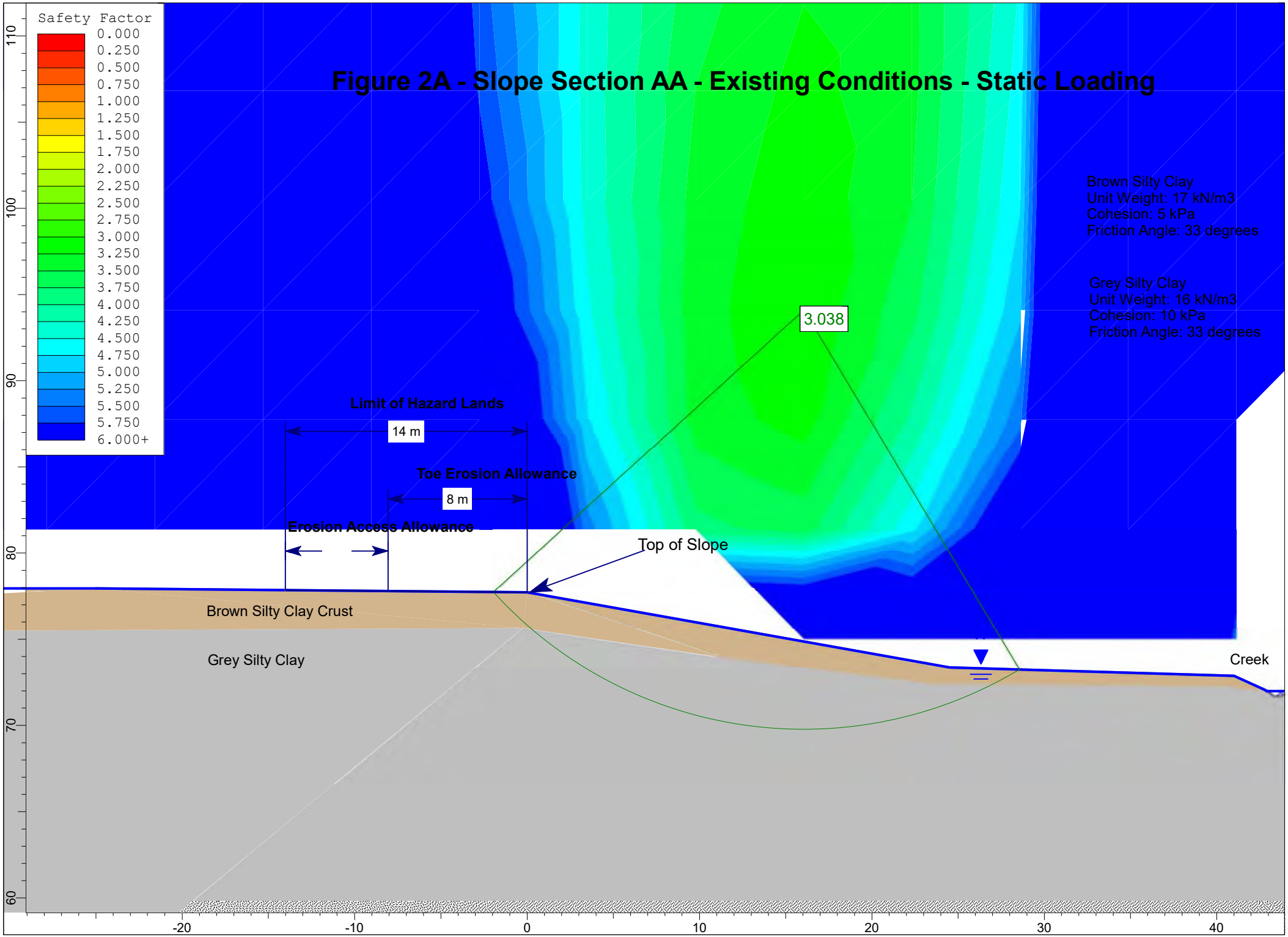
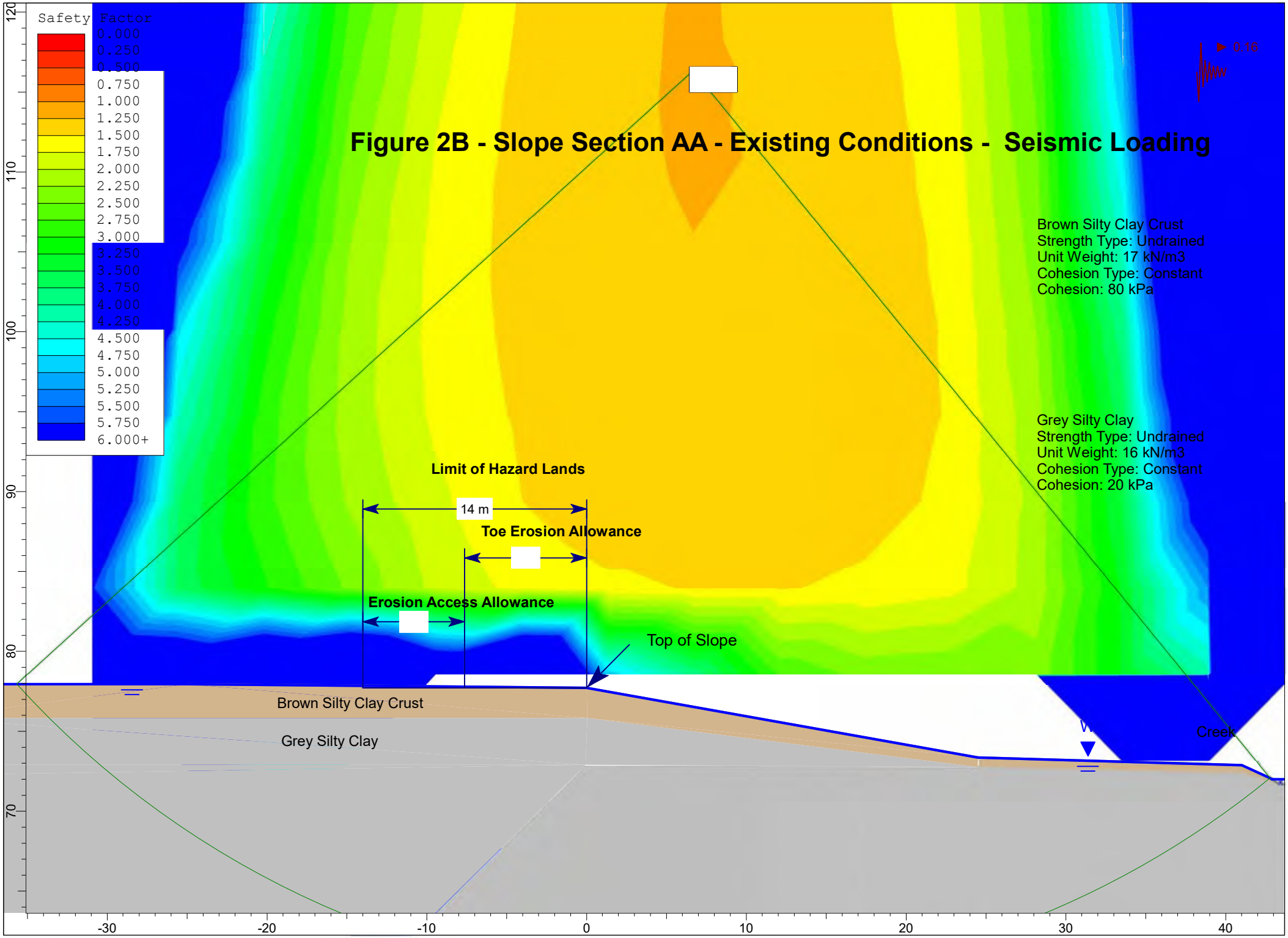


Figure 2A - Slope Section AA - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
3.038
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
110
100
90
80
70
60
-20
-10
0
10
20
30
40


Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Figure 2B - Slope Section AA - Existing Conditions - Seismic Loading
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
120
110
100
90
80
70
-30
-20
-10
0
10
20
30
40

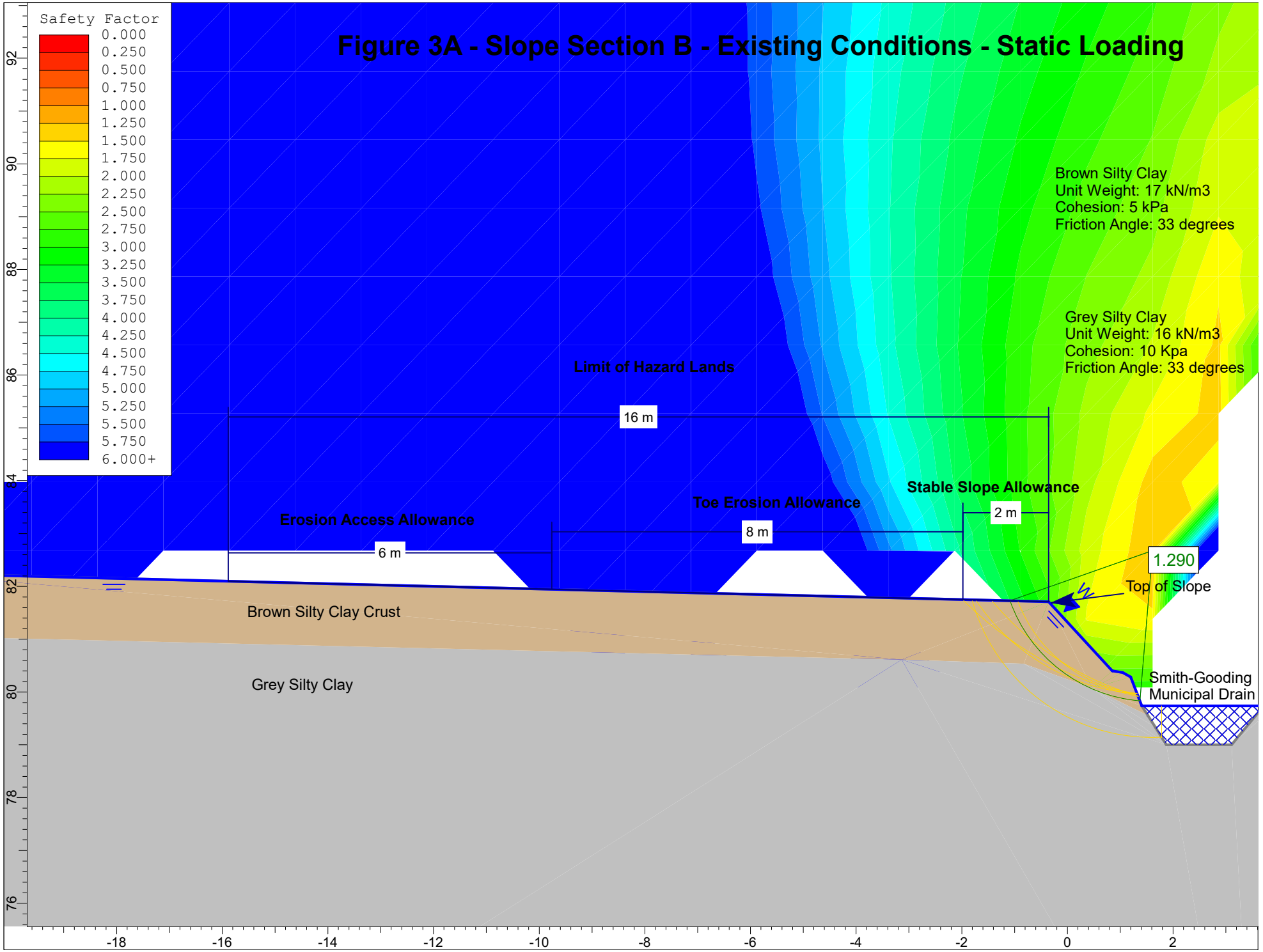


Figure 3A - Slope Section B - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 Kpa
Friction Angle: 33 degrees
Limit of Hazard Lands
16 m
Stable Slope Allowance
2 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
1.290
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
92
90
88
86
84
82
80
78
76
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2

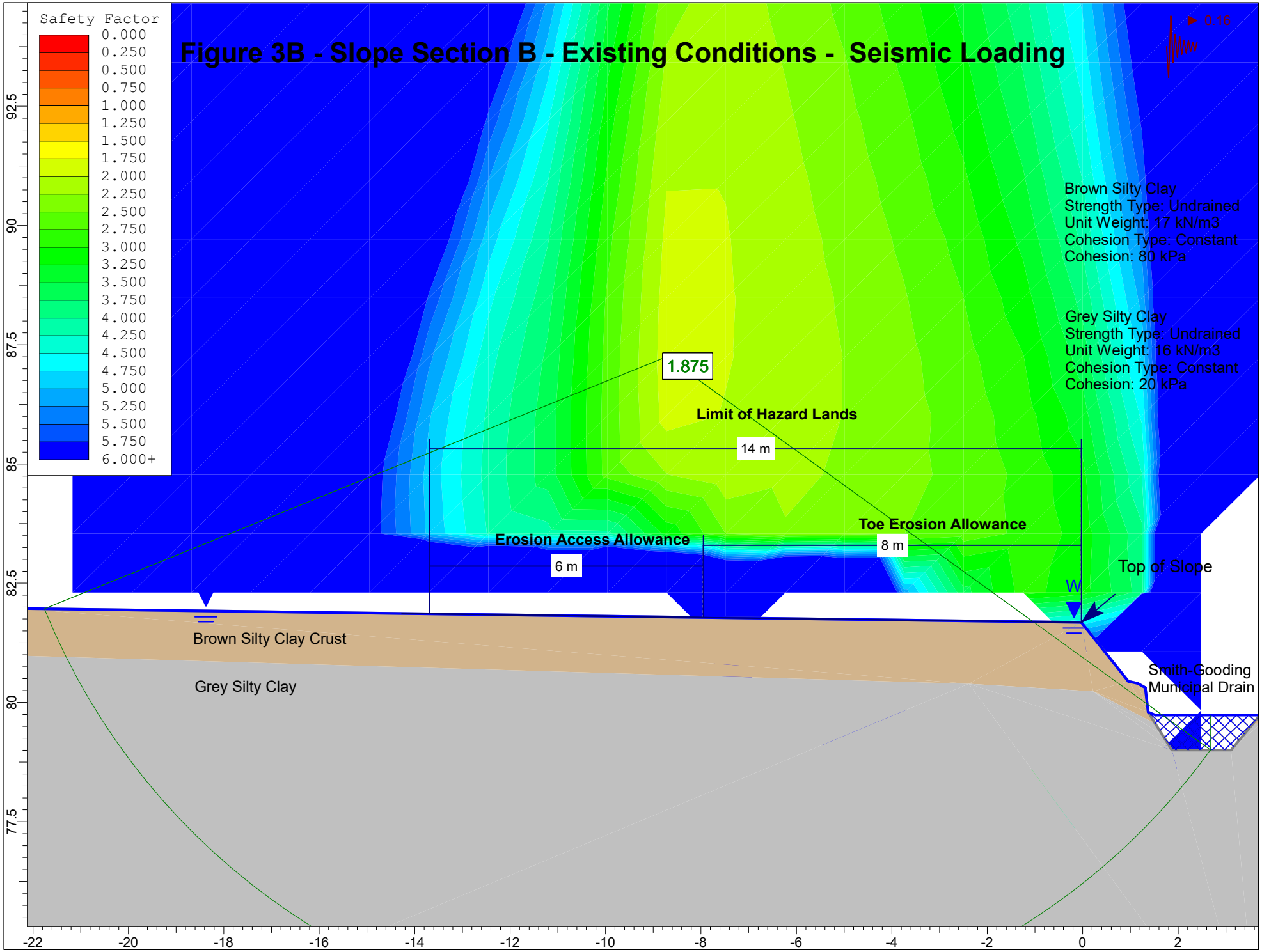


Figure 3B - Slope Section B - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
1.875
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
W
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
92.5
90
87.5
85
82.5
80
77.5
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2

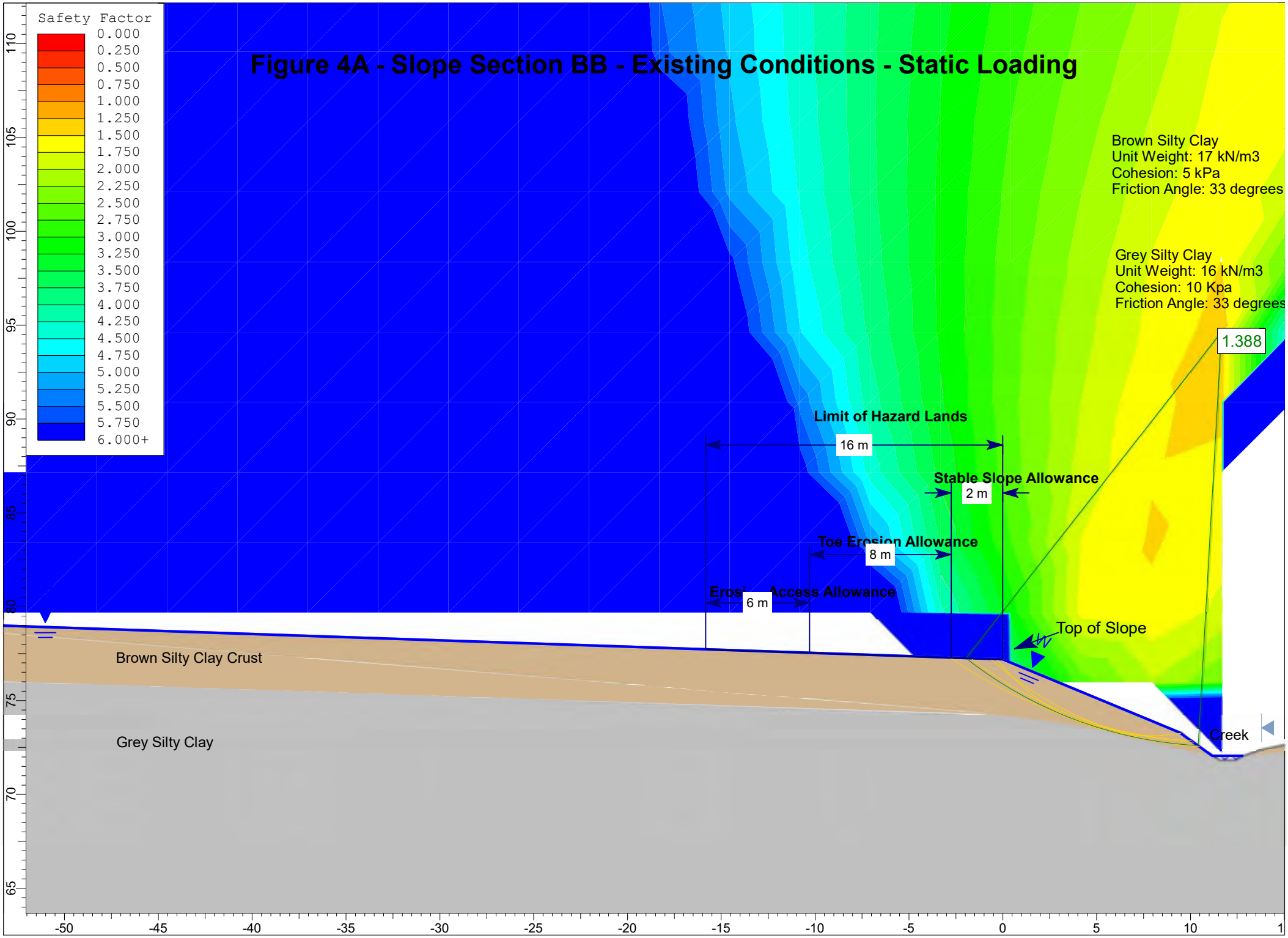


Figure 4A - Slope Section BB - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 Kpa
Friction Angle: 33 degrees
1.388
Limit of Hazard Lands
16 m
Stable Slope Allowance
2 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
110
105
100
95
90
85
80
75
70
65
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10

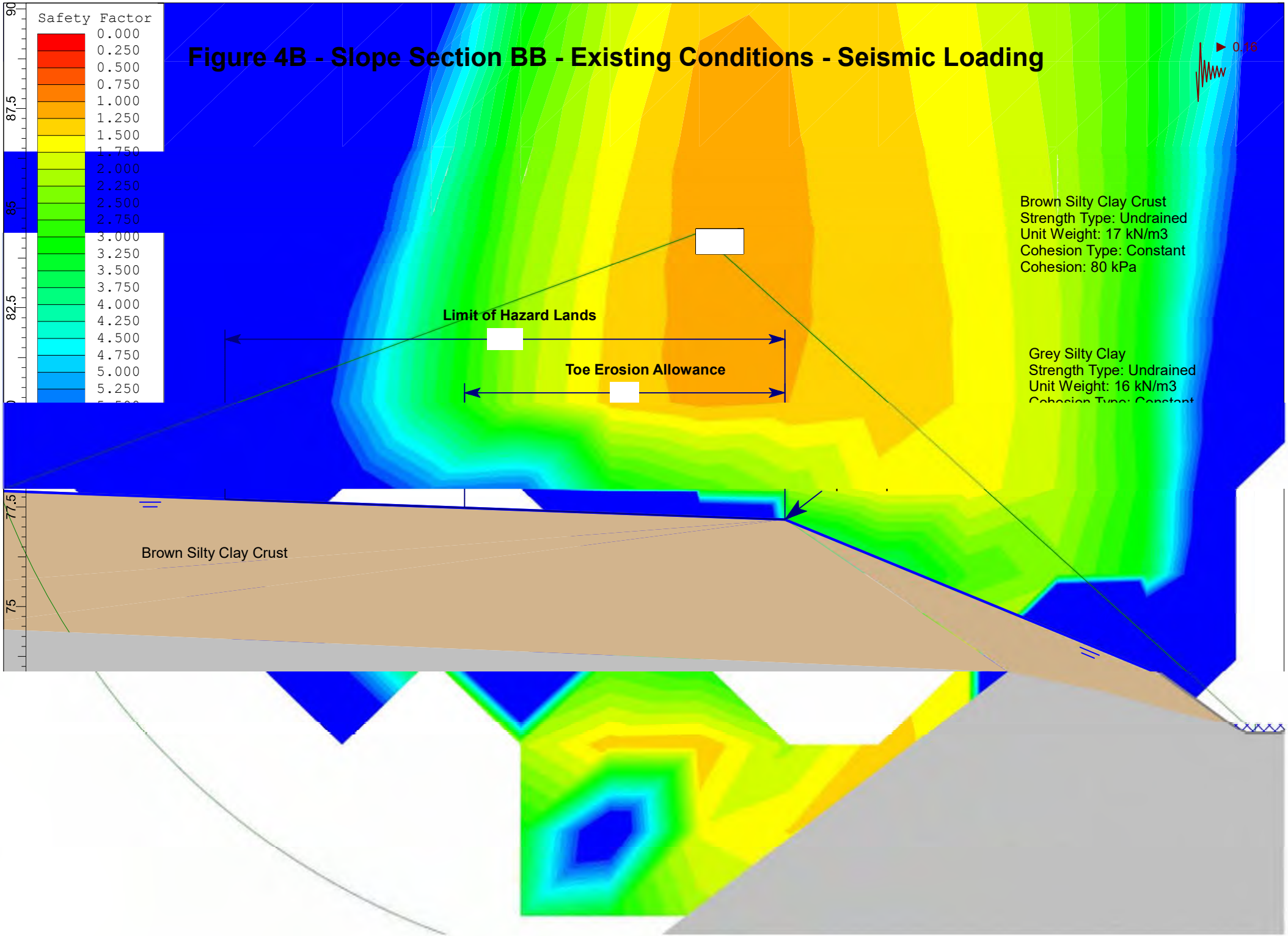


Figure 4B - Slope Section BB - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
90
87.5
85
82.5
77.5
75
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Limit of Hazard Lands
Toe Erosion Allowance
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Brown Silty Clay Crust

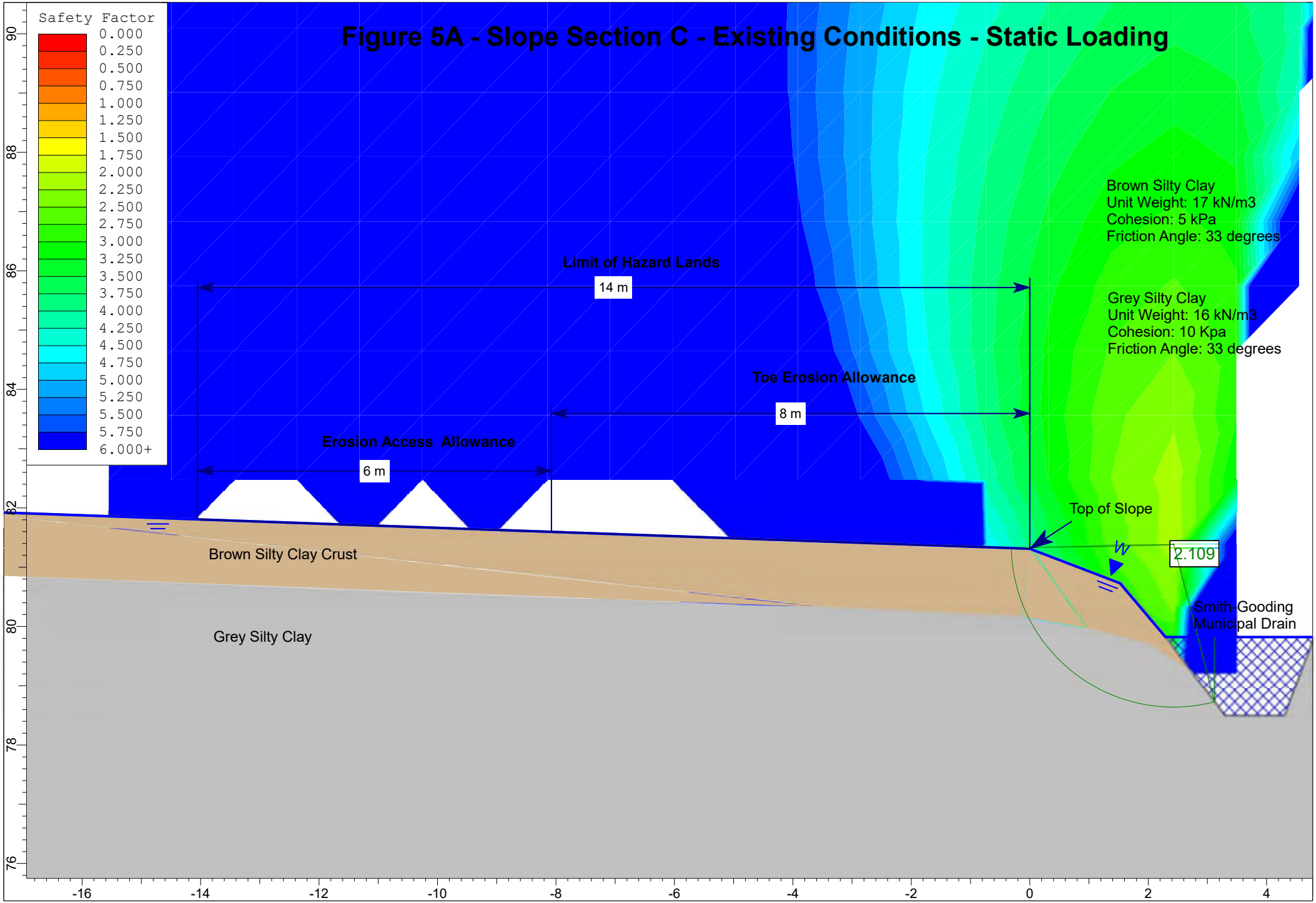


Figure 5A - Slope Section C - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 Kpa
Friction Angle: 33 degrees
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
2.109
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
76
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

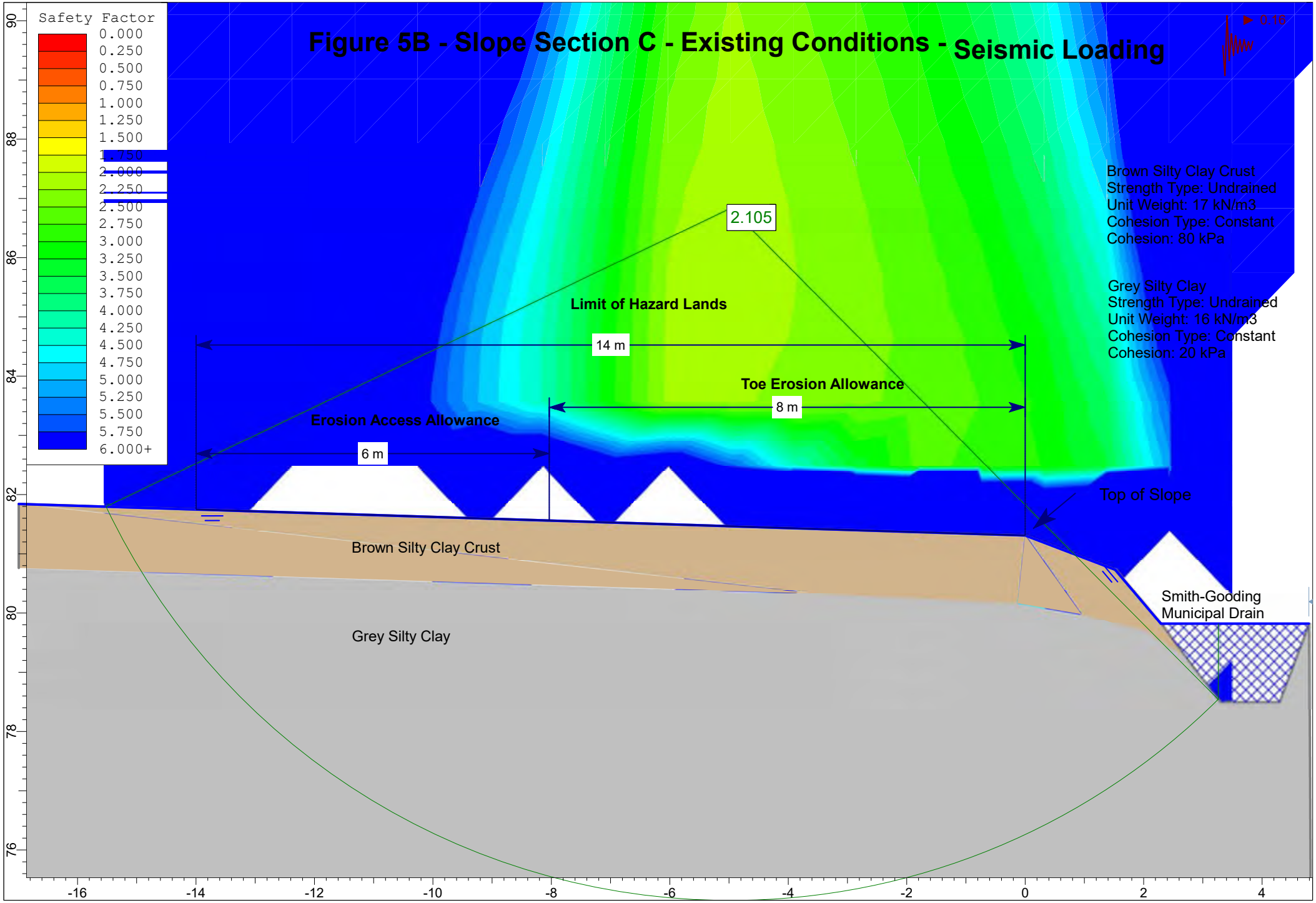


Figure 5B - Slope Section C - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
2.105
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
76
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

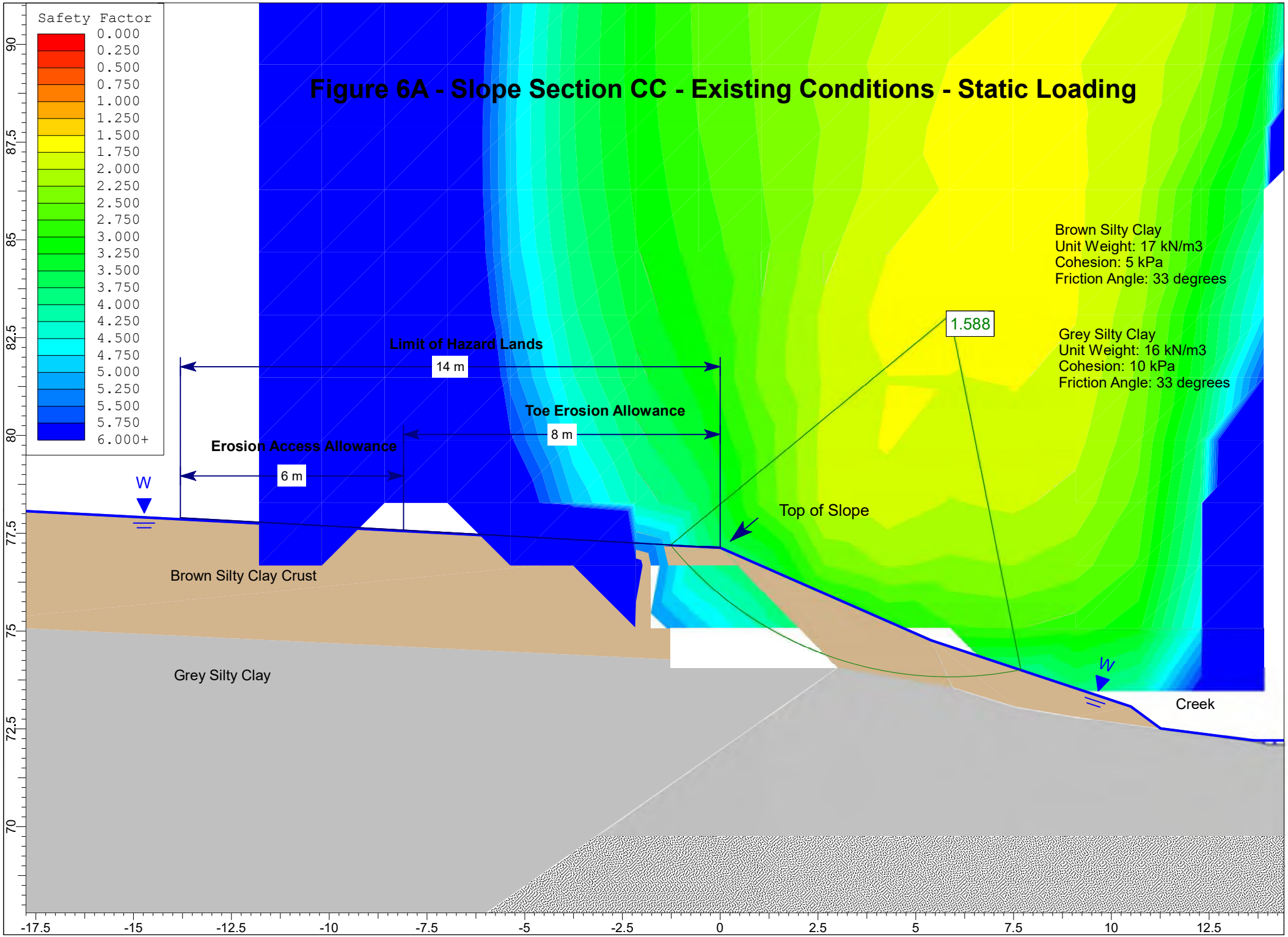
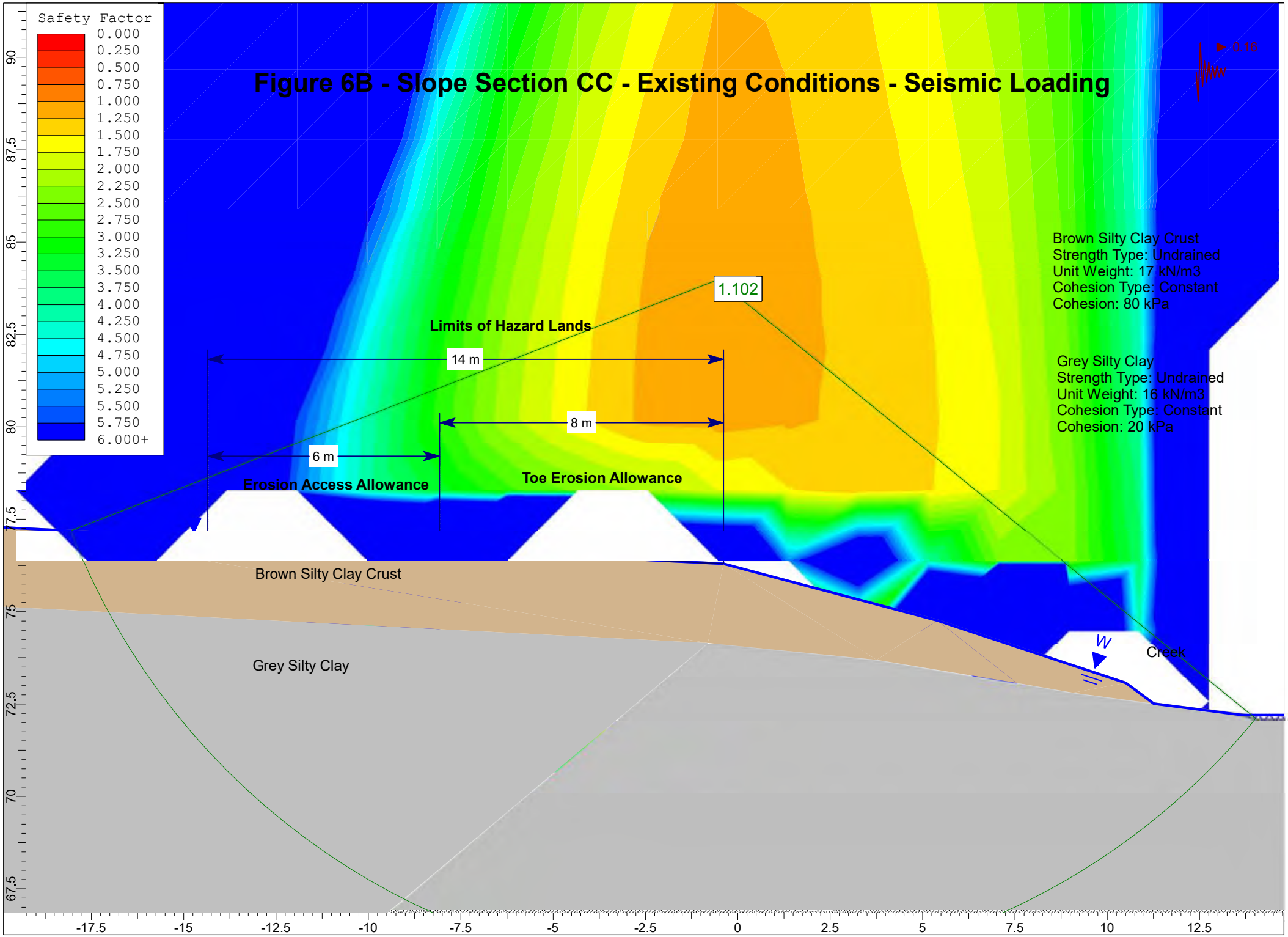


Figure 6A - Slope Section CC - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
1.588
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
W
Creek
90
87.5
85
82.5
80
77.5
75
72.5
70
-17.5
-15
-12.5
-10
-7.5
-5
-2.5
0
2.5
5
7.5
10
12.5


Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Figure 6B - Slope Section CC - Existing Conditions - Seismic Loading
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
1.102
Limits of Hazard Lands
14 m
8 m
6 m
Erosion Access Allowance
Toe Erosion Allowance
Brown Silty Clay Crust
Grey Silty Clay
Creek
90
87.5
85
82.5
80
77.5
75
72.5
70
67.5
-17.5
-15
-12.5
-10
-7.5
-5
-2.5
0
2.5
5
7.5
10
12.5

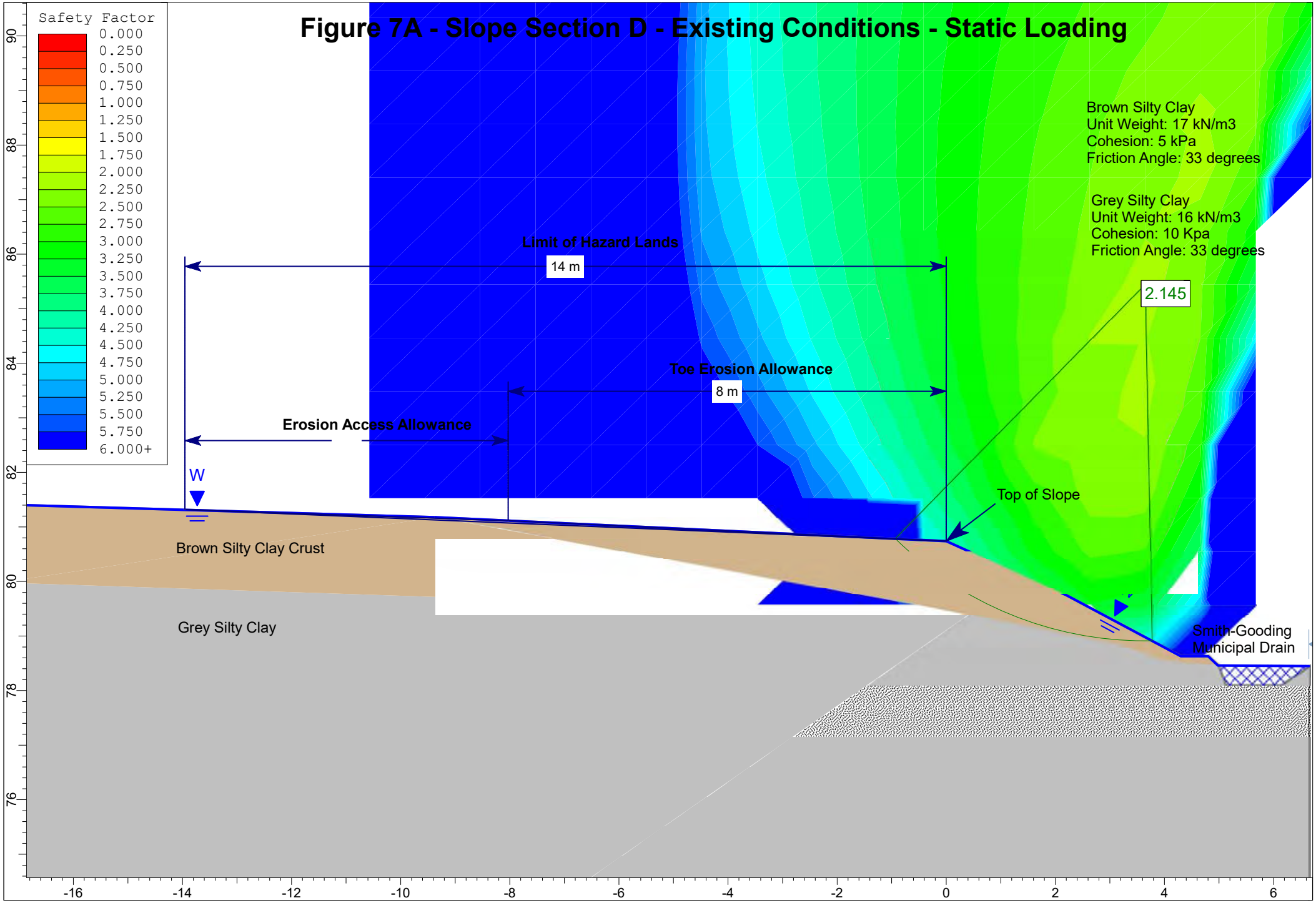


Figure 7A - Slope Section D - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 Kpa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
2.145
Toe Erosion Allowance
8 m
Erosion Access Allowance
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
76
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

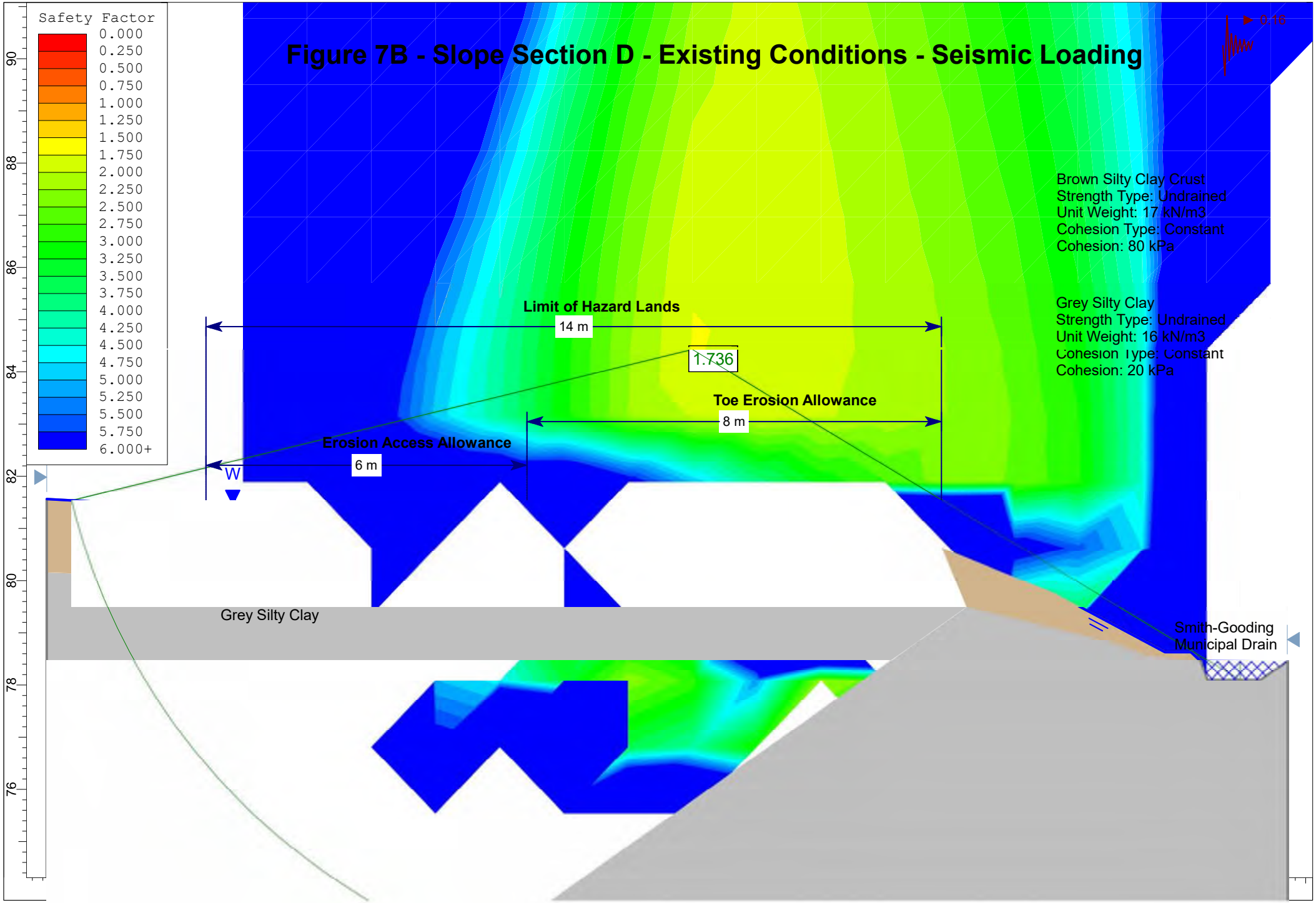


Figure 7B - Slope Section D - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
90
88
86
84
82
80
78
76
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
1.736
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Grey Silty Clay
Smith-Gooding
Municipal Drain

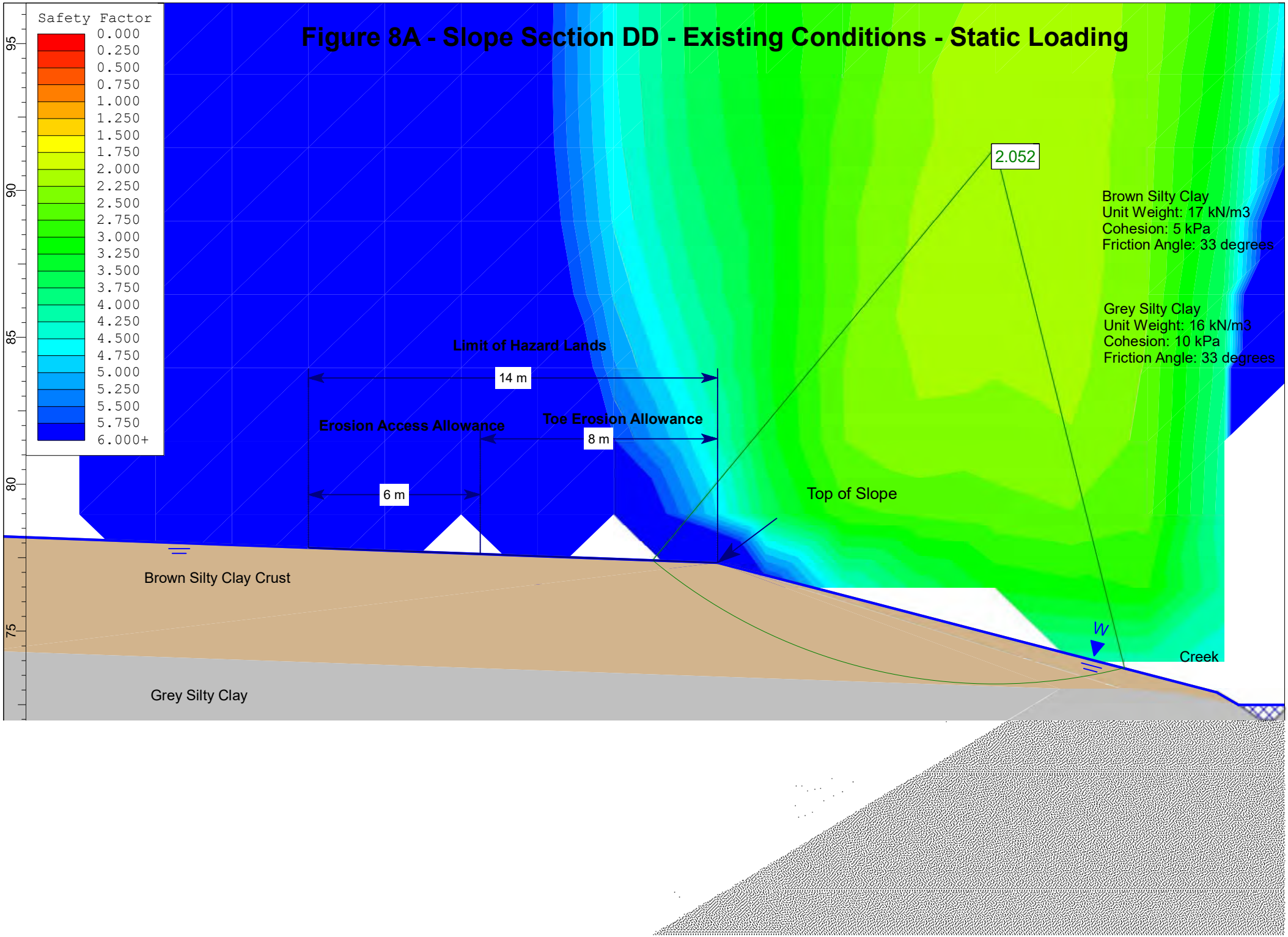
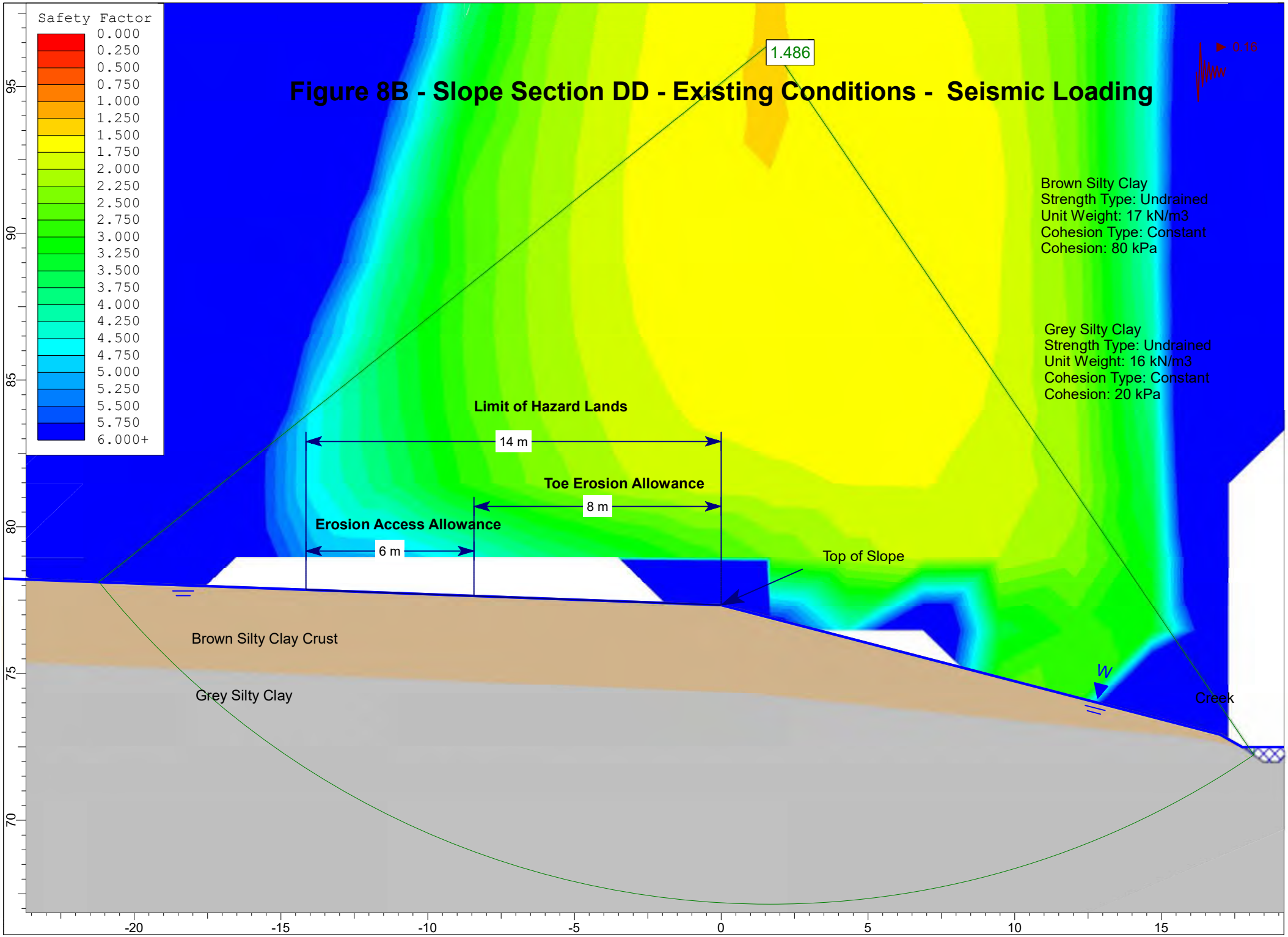


Figure 8A - Slope Section DD - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
95
90
85
80
75
2.052
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Erosion Access Allowance
Toe Erosion Allowance
8 m
6 m
Top of Slope
Brown Silty Clay Crust
W
Creek
Grey Silty Clay


Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.486
Figure 8B - Slope Section DD - Existing Conditions - Seismic Loading
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
95
90
85
80
75
70
-20
-15
-10
-5
0
5
10
15

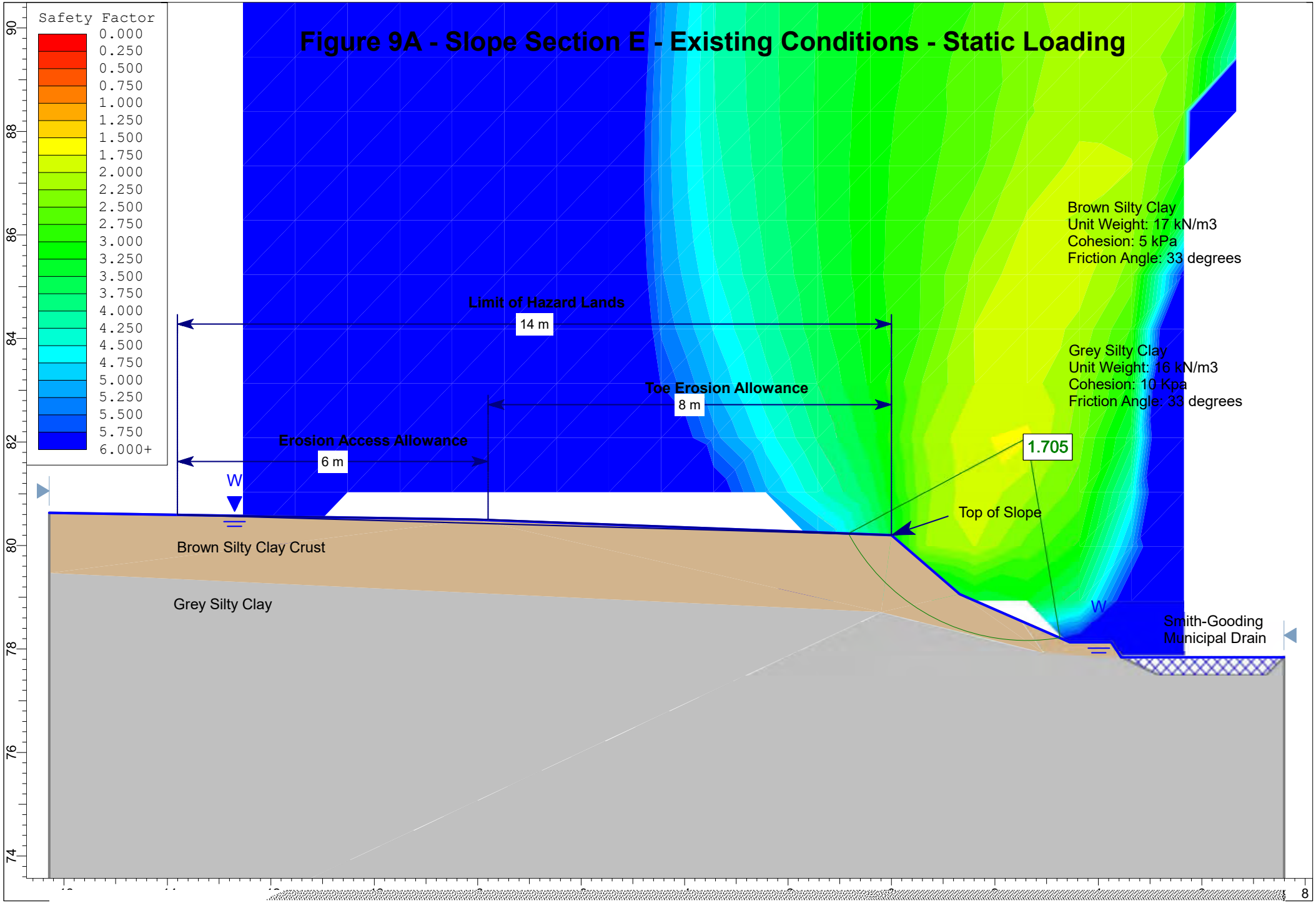


Figure 9A - Slope Section E - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 Kpa
Friction Angle: 33 degrees
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
1.705
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
W
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
76
74
8

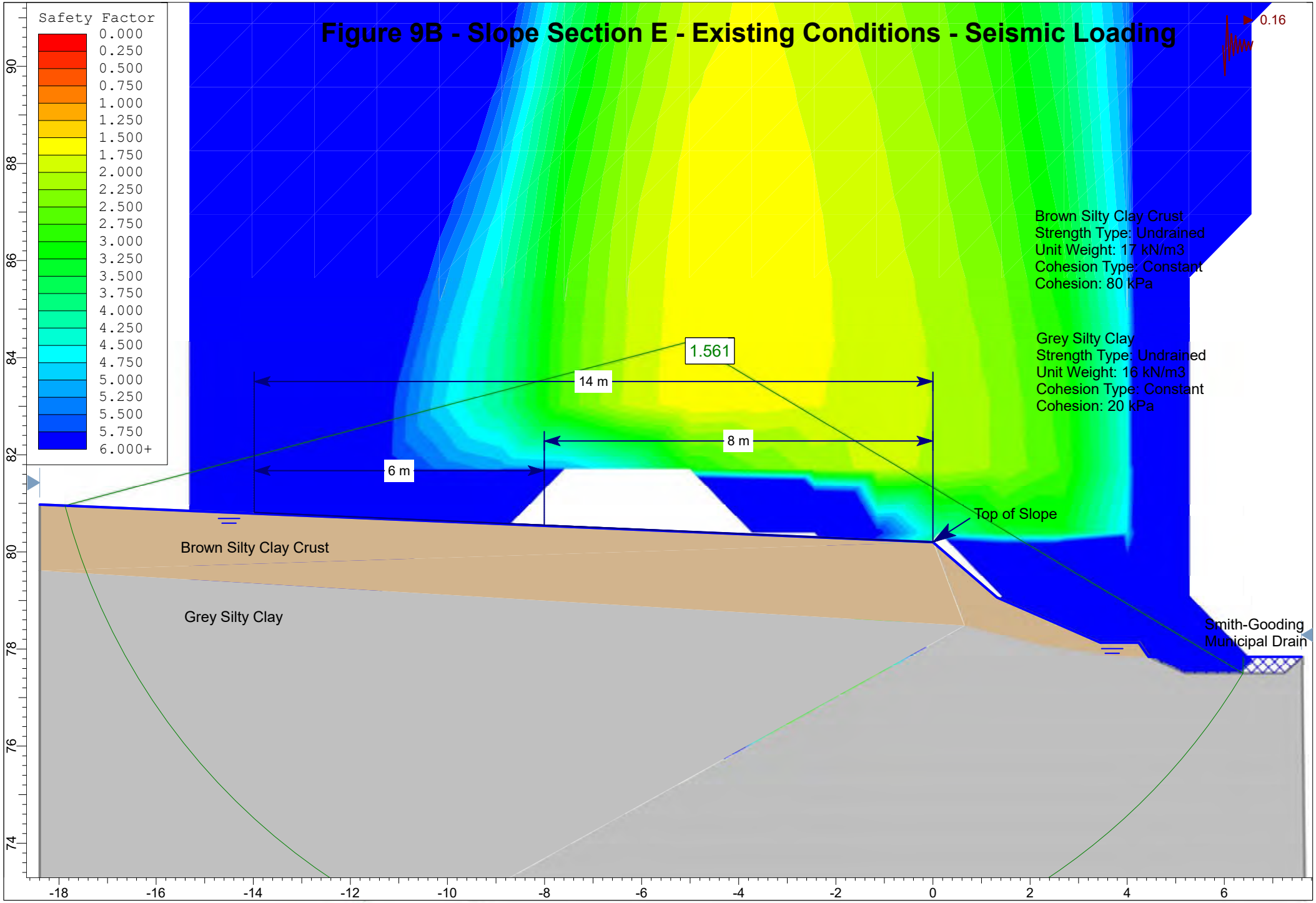


Figure 9B - Slope Section E - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
1.561
14 m
8 m
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
76
74
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

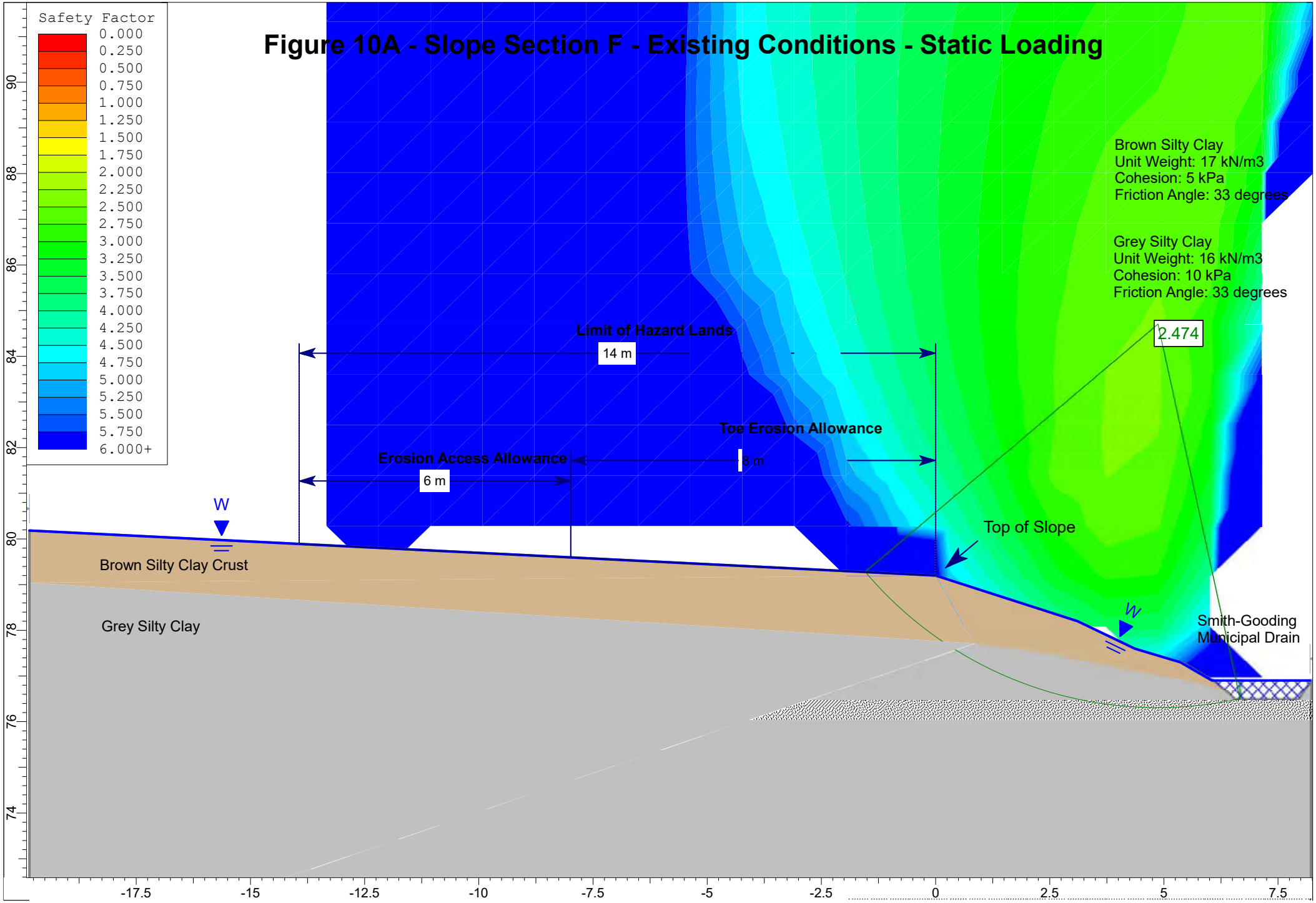


Figure 10A - Slope Section F - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
2.474
Limit of Hazard Lands
14 m
Toe Erosion Allowance
3 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
W
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
76
74
-17.5
-15
-12.5
-10
-7.5
-5
-2.5
0
2.5
5
7.5

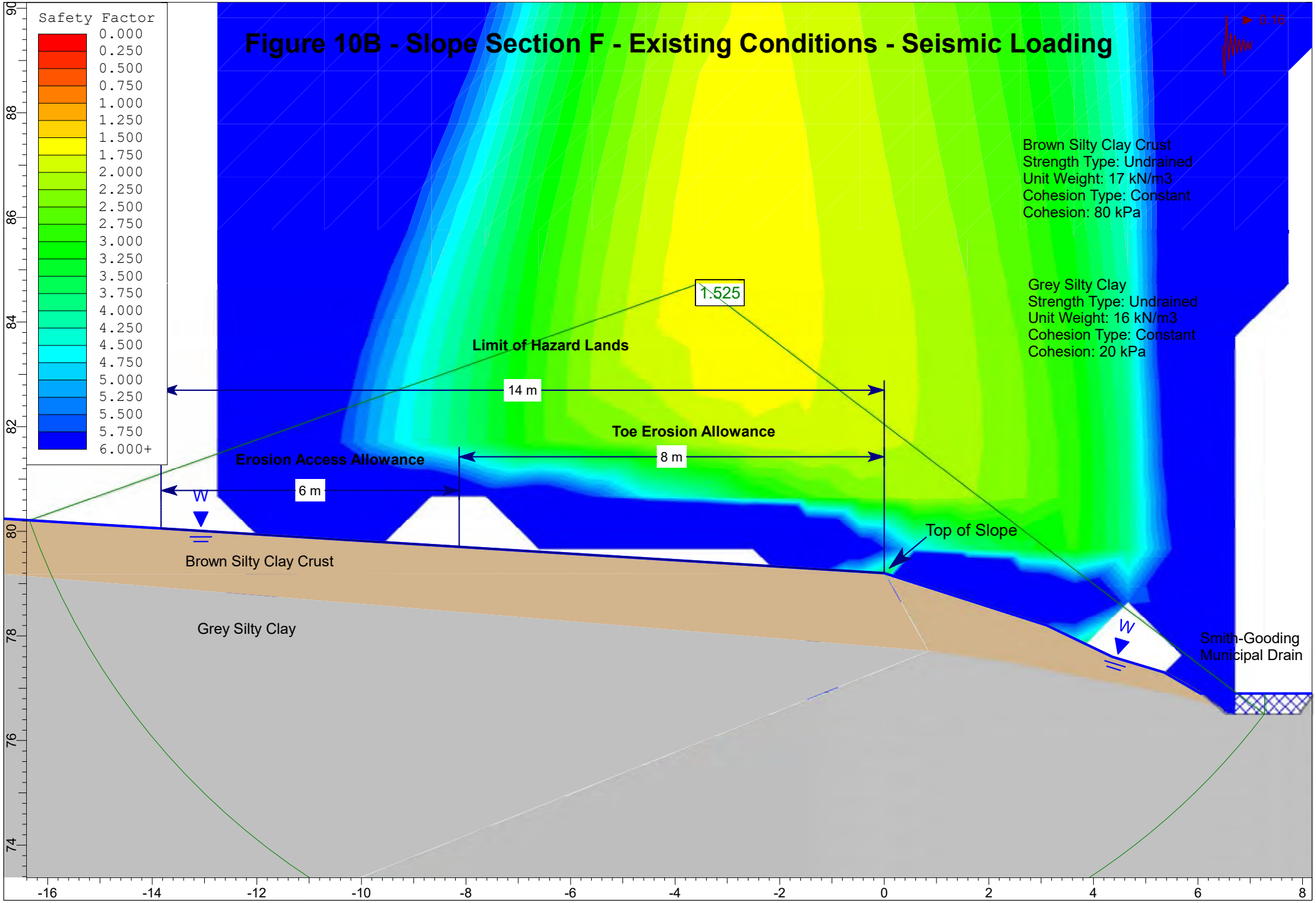


Figure 10B - Slope Section F - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
1.525
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
90
88
86
84
82
80
78
76
74
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8

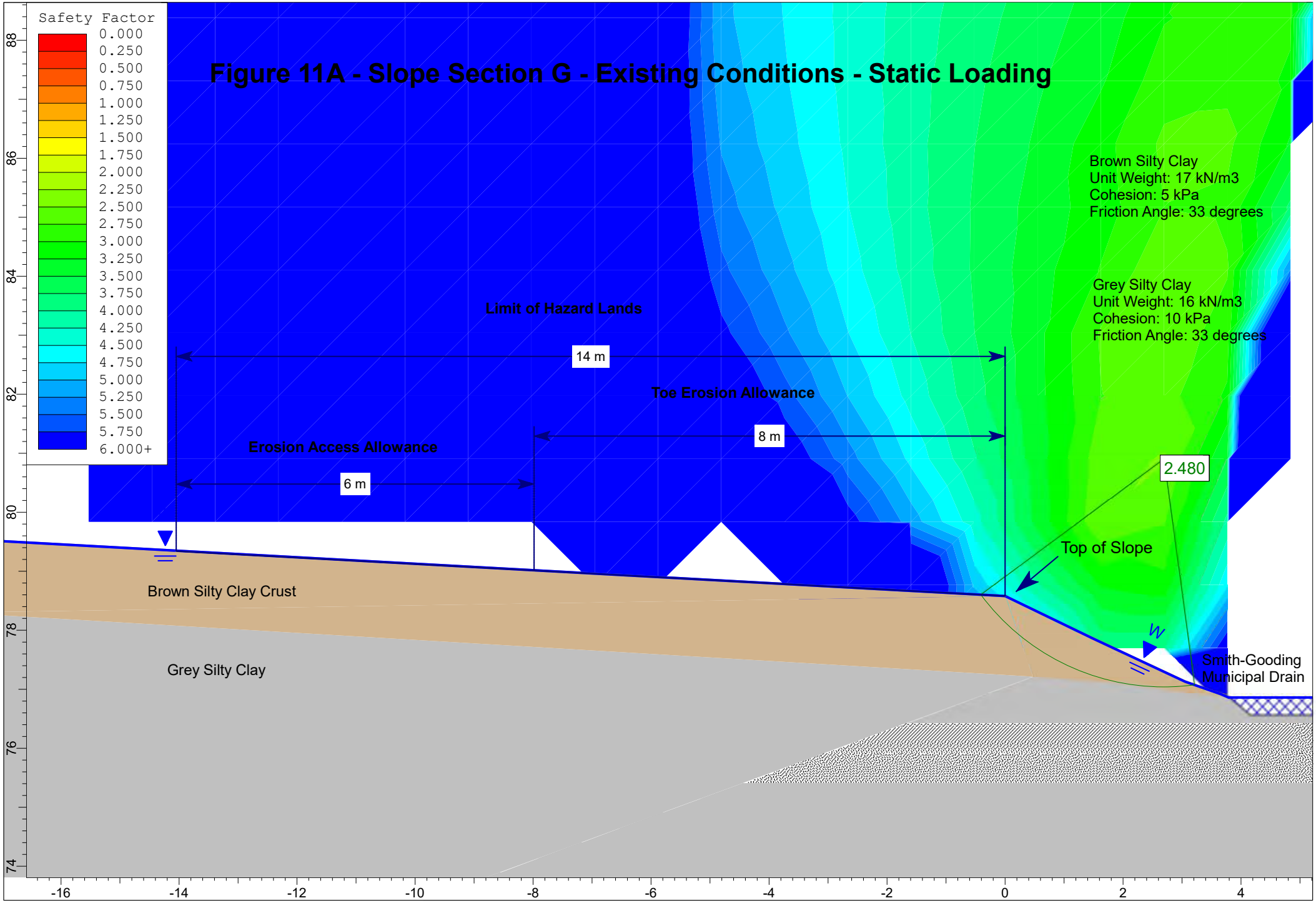


Figure 11A - Slope Section G - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
2.480
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
88
86
84
82
80
78
76
74
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

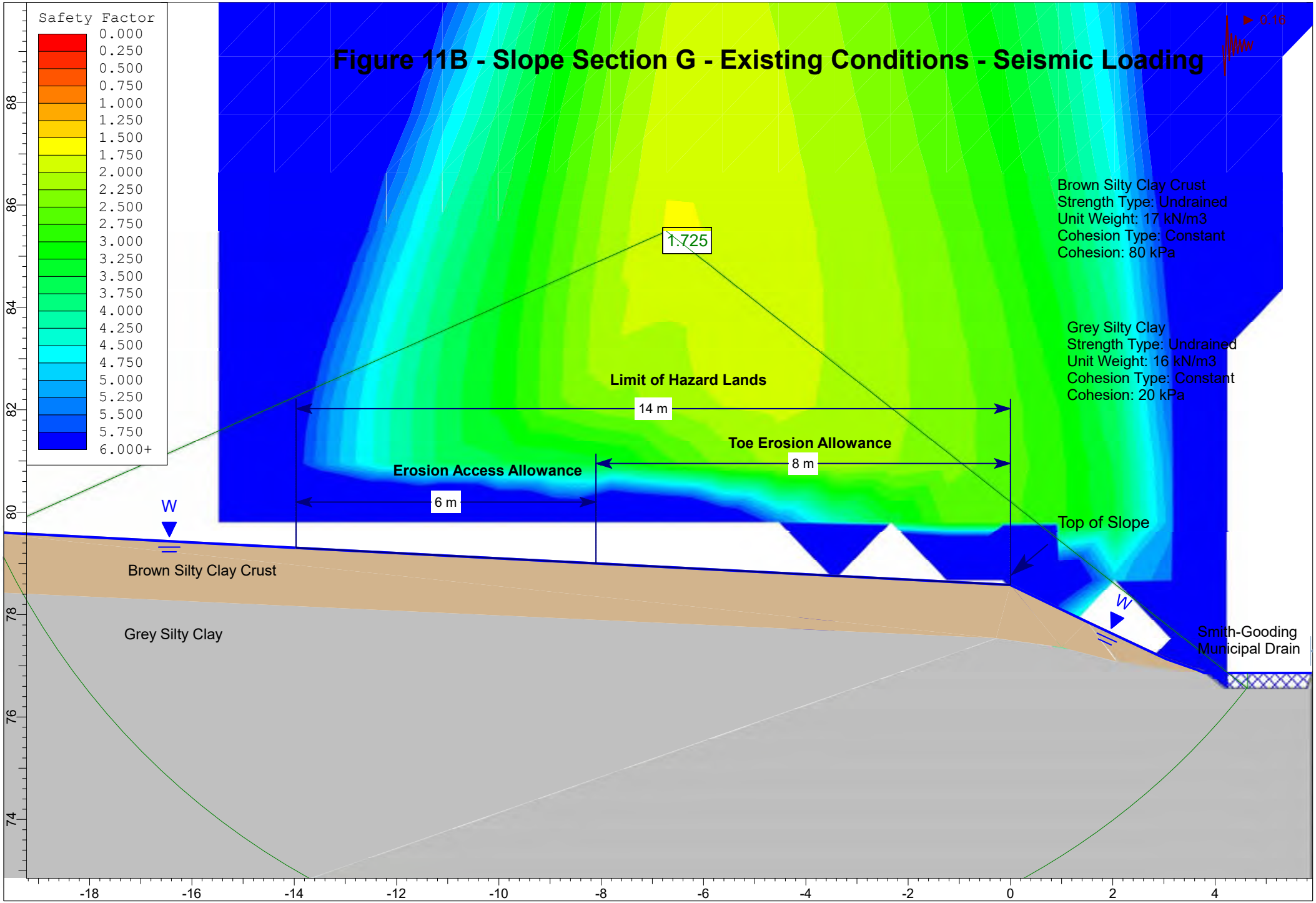


Figure 11B - Slope Section G - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.725
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
88
86
84
82
80
78
76
74
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

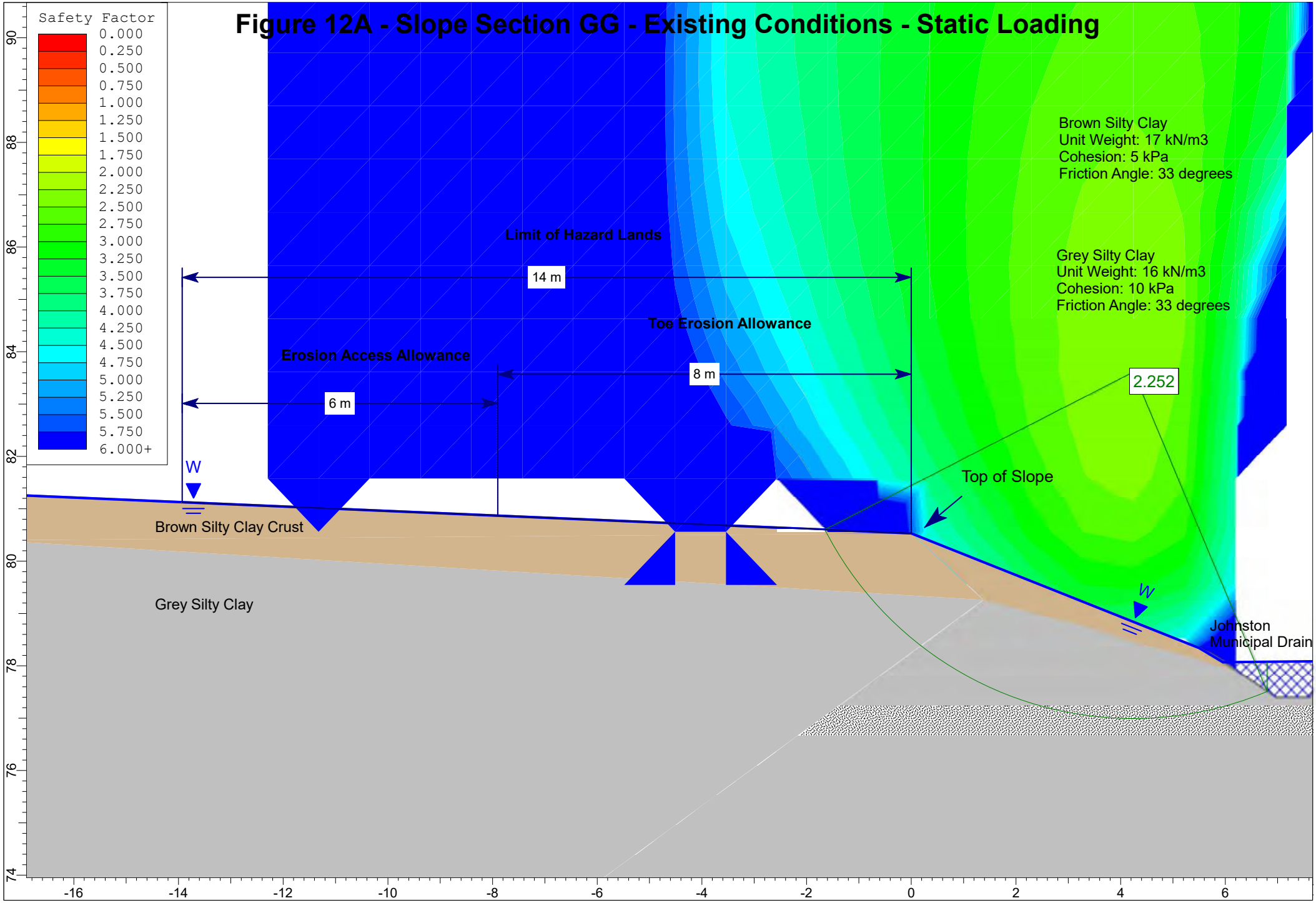


Figure 12A - Slope Section GG - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
2.252
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
W
Johnston
Municipal Drain
90
88
86
84
82
80
78
76
74
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

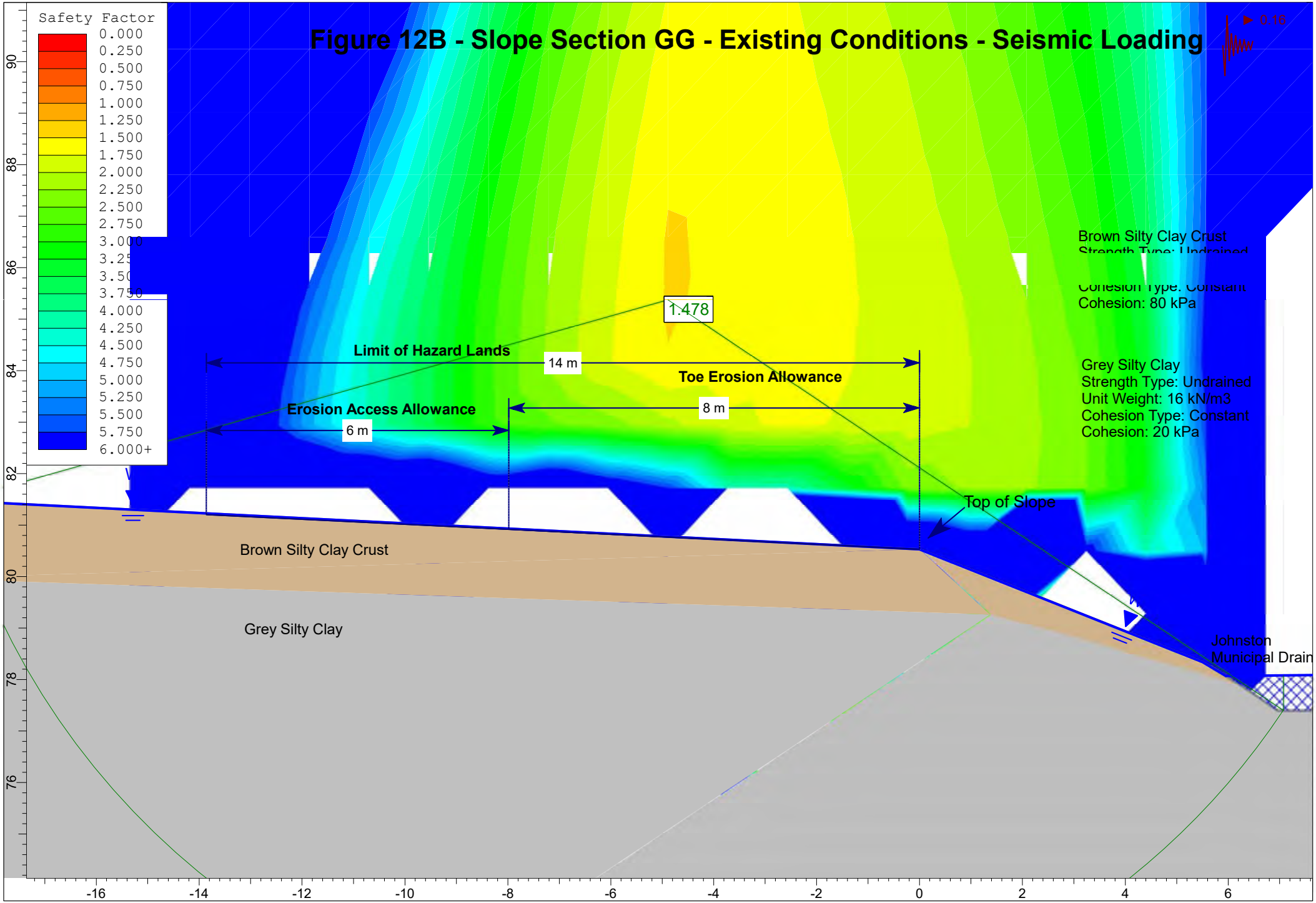


Figure 12B - Slope Section GG - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.478
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Brown Silty Clay Crust
Grey Silty Clay
Johnston
Municipal Drain
90
88
86
84
82
80
78
76
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

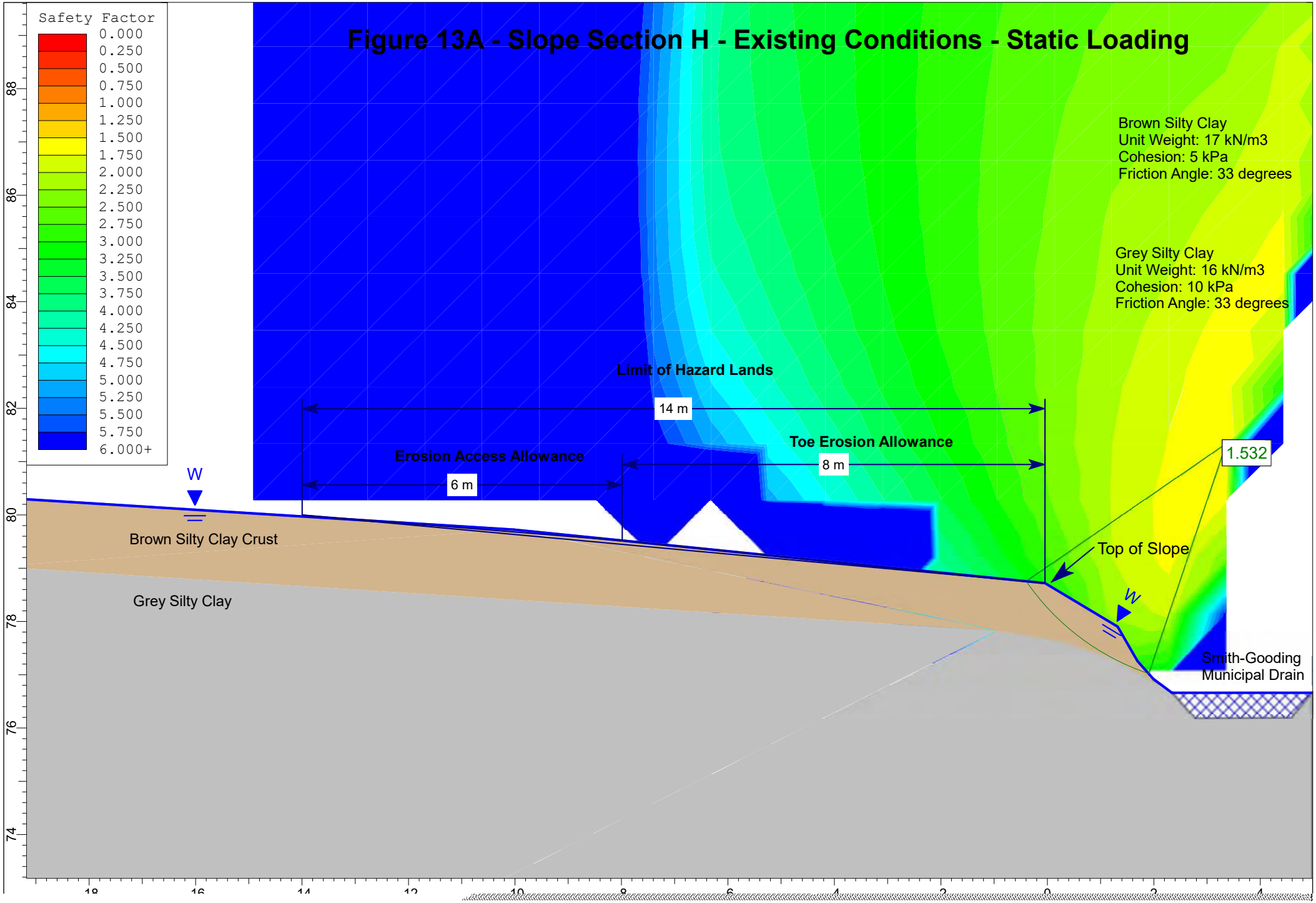


Figure 13A - Slope Section H - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
1.532
W
Brown Silty Clay Crust
Grey Silty Clay
Top of Slope
W
Smith-Gooding
Municipal Drain
88
86
84
82
80
78
76
74
18
16
14
12
10
8
6
4
2
0
2
4

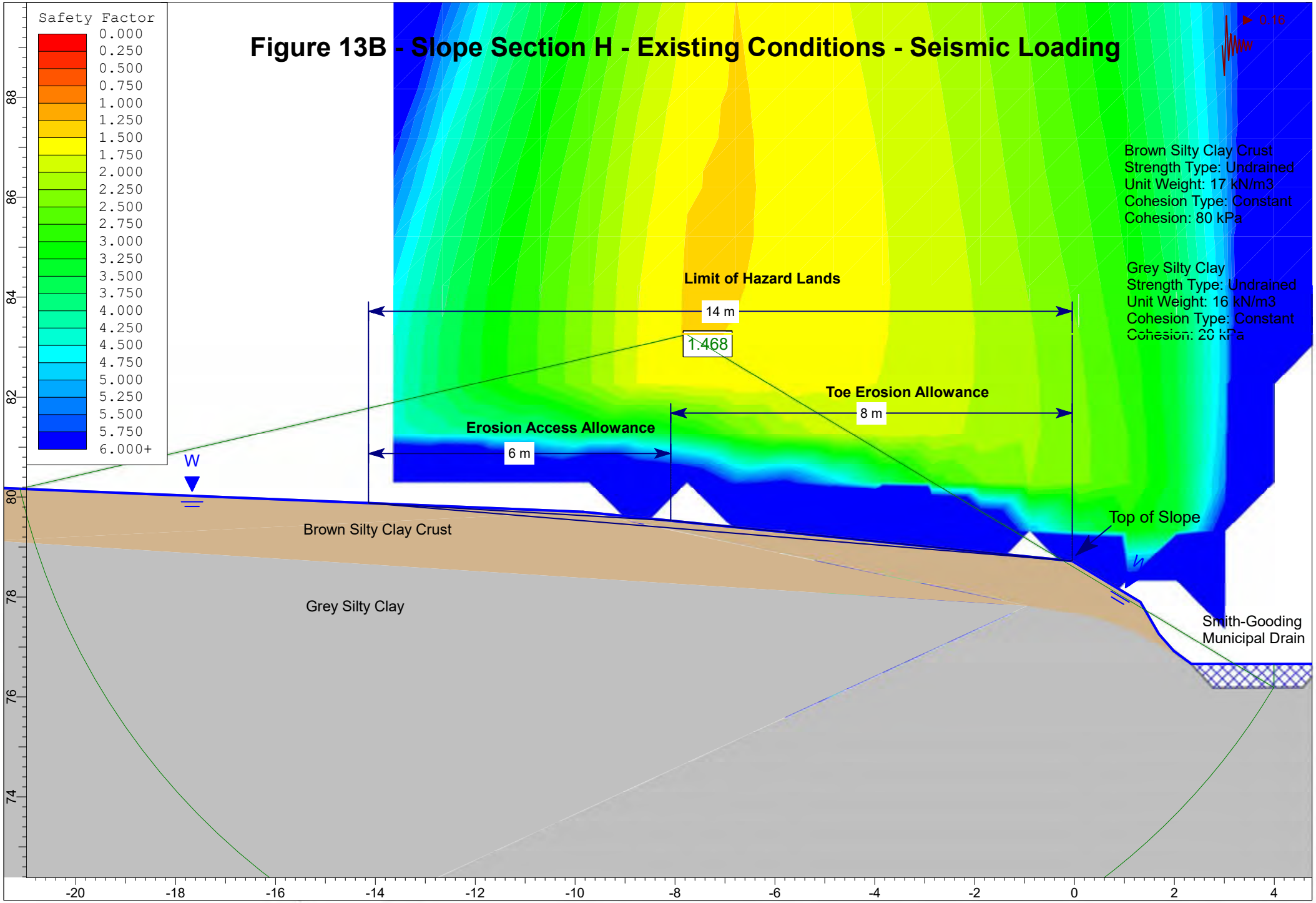


Figure 13B - Slope Section H - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
1.468
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Brown Silty Clay Crust
Grey Silty Clay
Top of Slope
Smith-Gooding
Municipal Drain
88
86
84
82
80
78
76
74
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

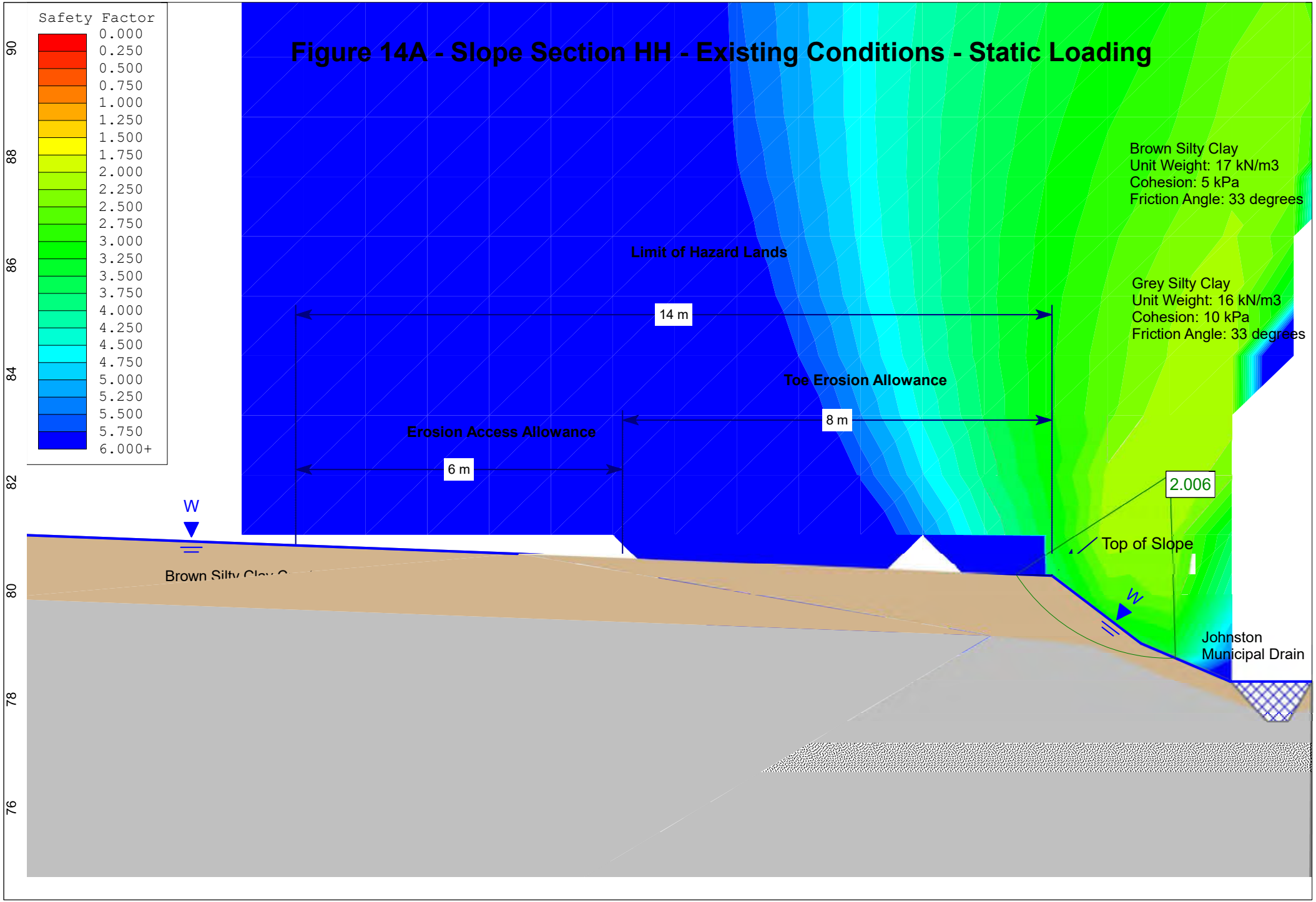


Figure 14A - Slope Section HH - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
90
88
86
84
82
80
78
76
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
2.006
W
Top of Slope
W
Johnston
Municipal Drain

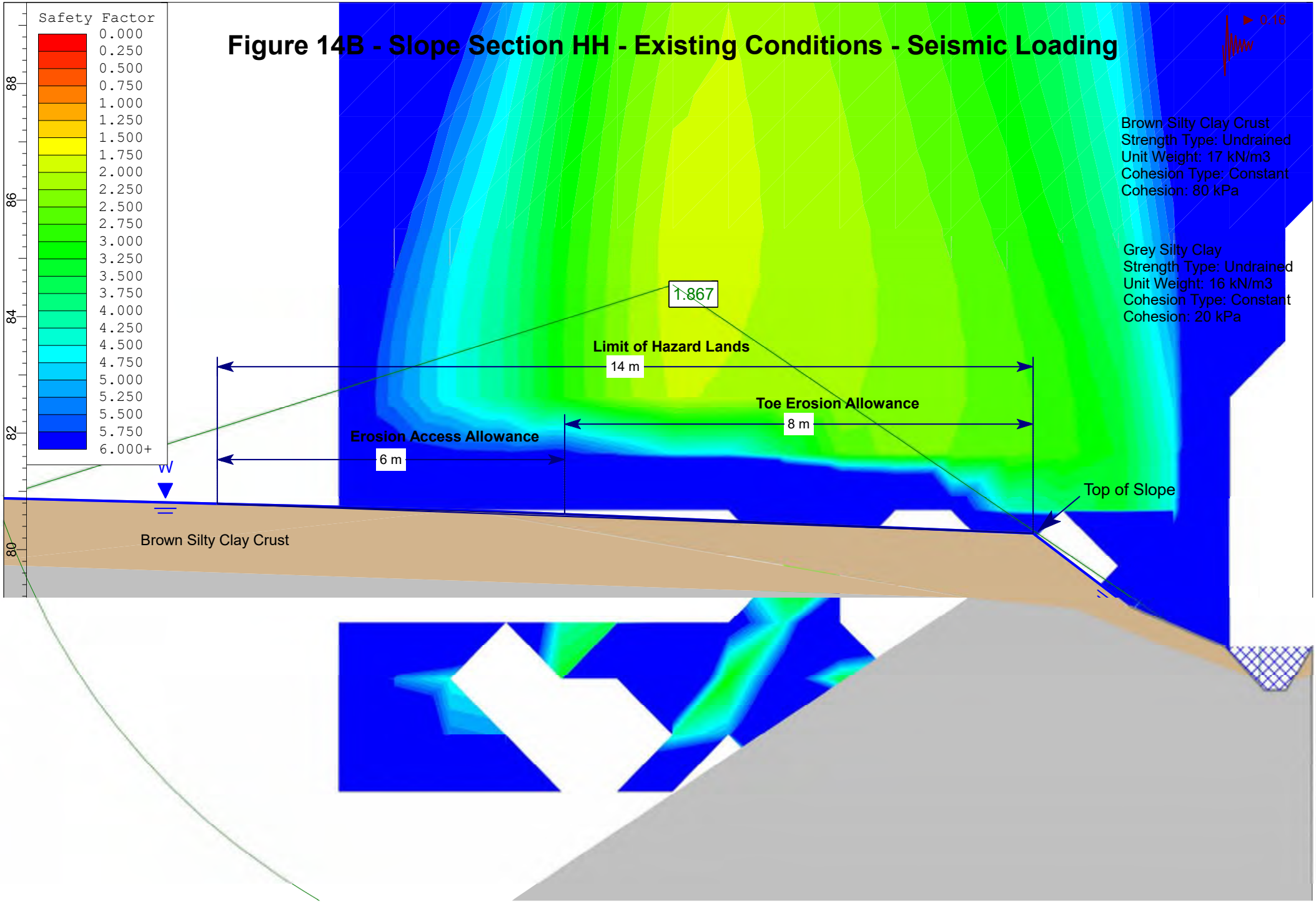


Figure 14B - Slope Section HH - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
88
86
84
82
80
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
1.867
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust

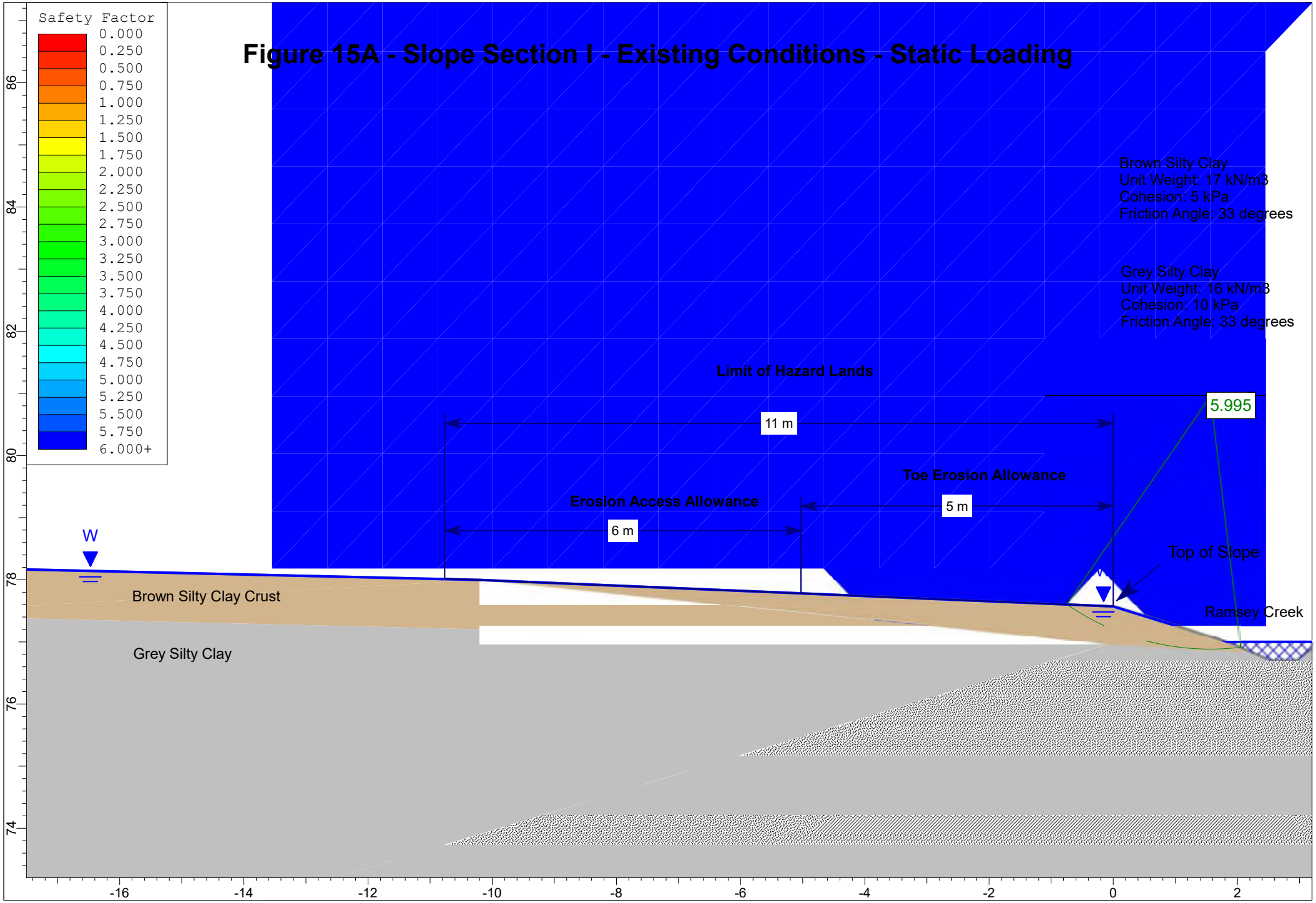


Figure 15A - Slope Section I - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
11 m
5.995
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Ramsey Creek
86
84
82
80
78
76
74
-16
-14
-12
-10
-8
-6
-4
-2
0
2

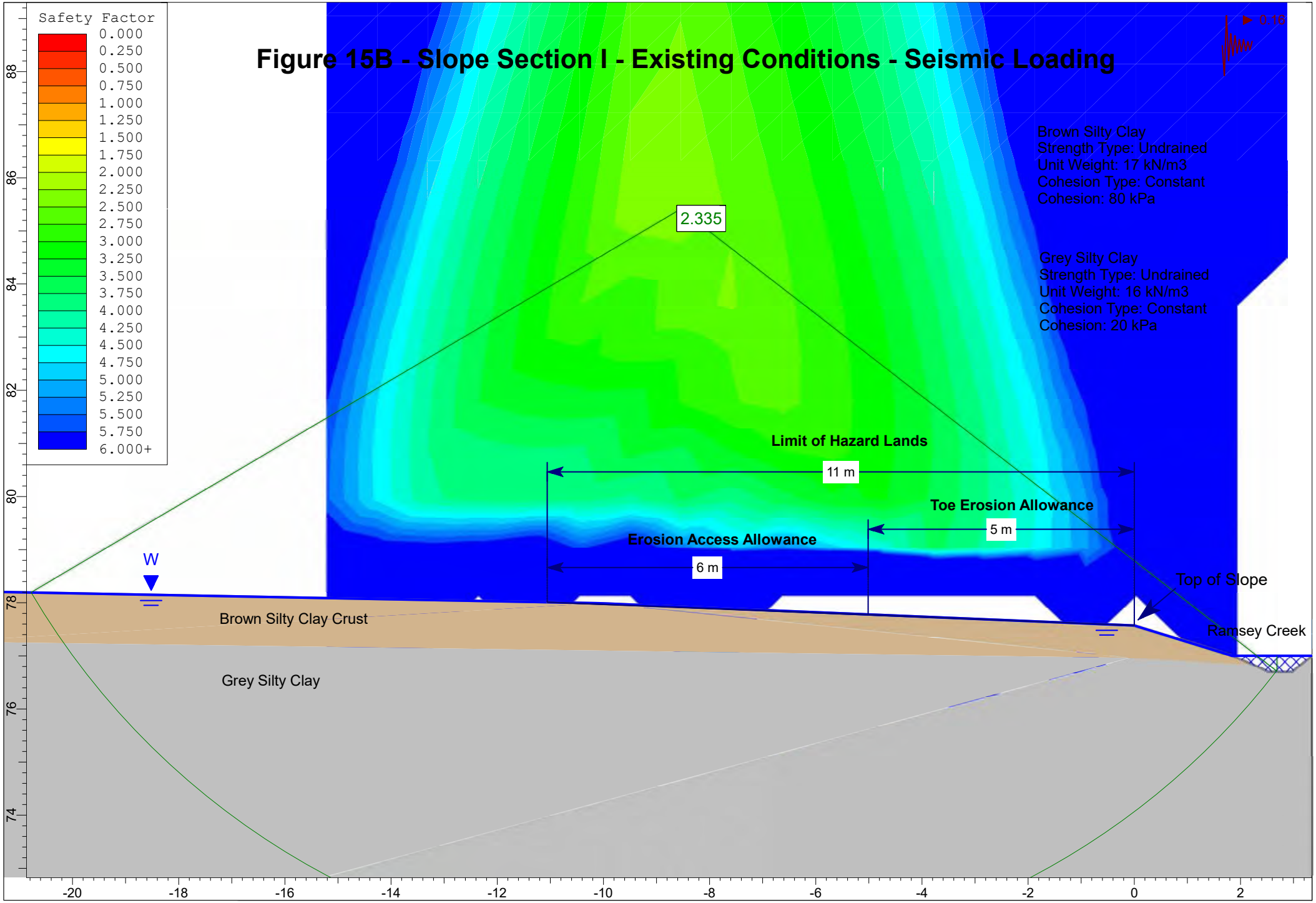


Figure 15B - Slope Section I - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
2.335
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
W
Top of Slope
Ramsey Creek
Brown Silty Clay Crust
Grey Silty Clay
88
86
84
82
80
78
76
74
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2

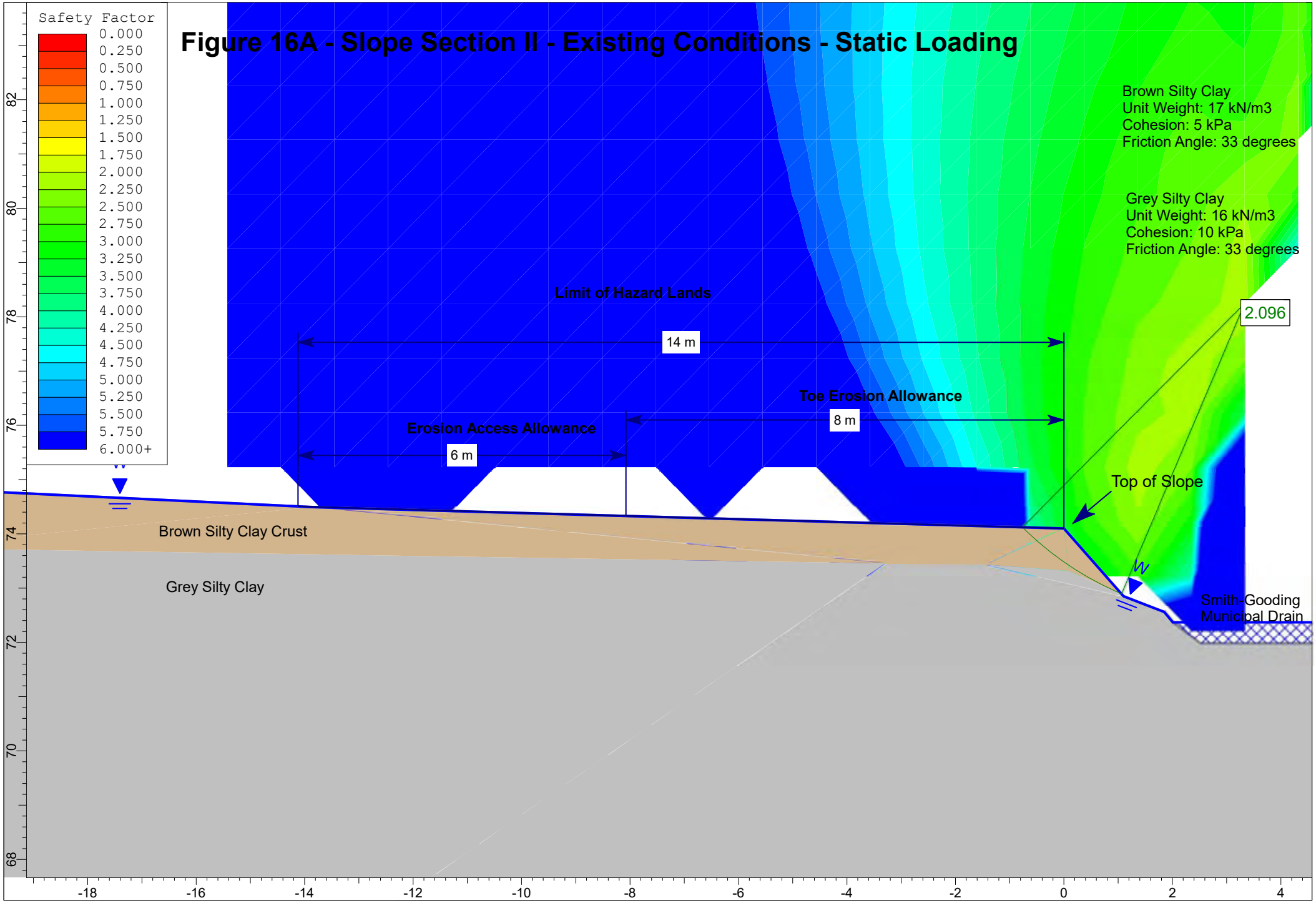


Figure 16A - Slope Section II - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
2.096
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
82
80
78
76
74
72
70
68
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

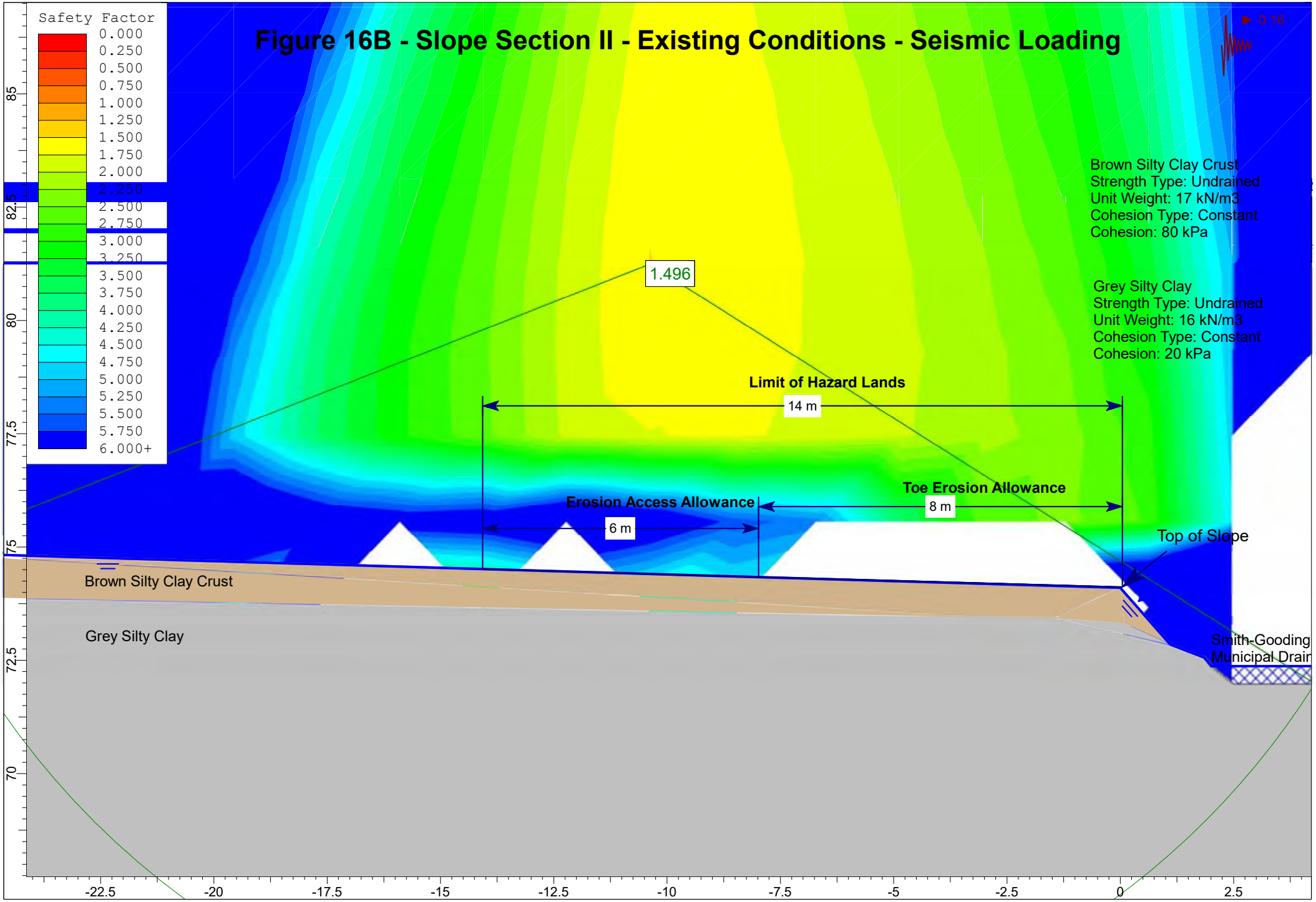


Figure 16B - Slope Section II - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
1.496
Limit of Hazard Lands
14 m
Erosion Access Allowance
6 m
Toe Erosion Allowance
8 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
85
82.5
80
77.5
75
72.5
70
-22.5
-20
-17.5
-15
-12.5
-10
-7.5
-5
-2.5
0
2.5

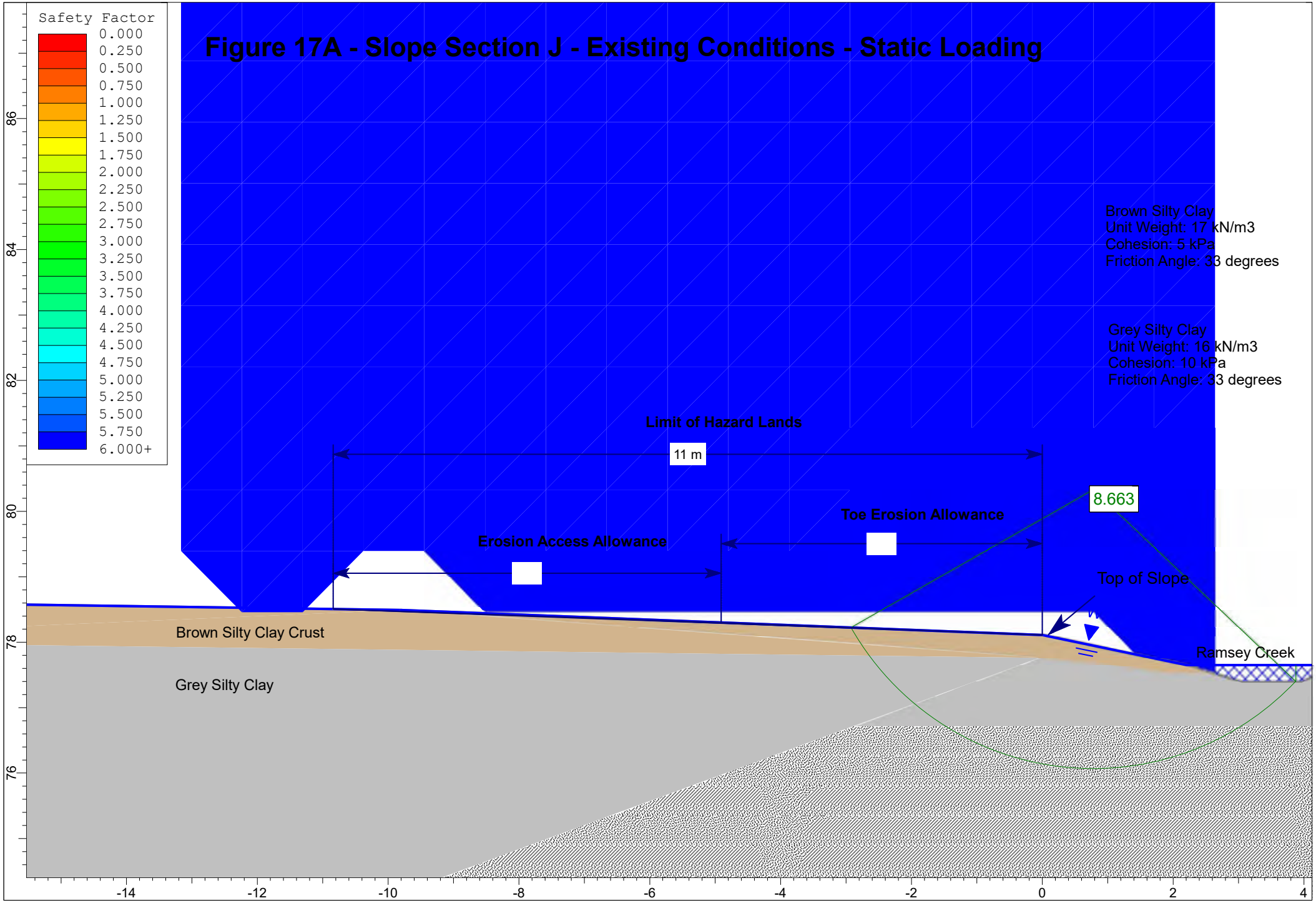


Figure 17A - Slope Section J - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
11 m
8.663
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Ramsey Creek
86
84
82
80
78
76
-14
-12
-10
-8
-6
-4
-2
0
2
4

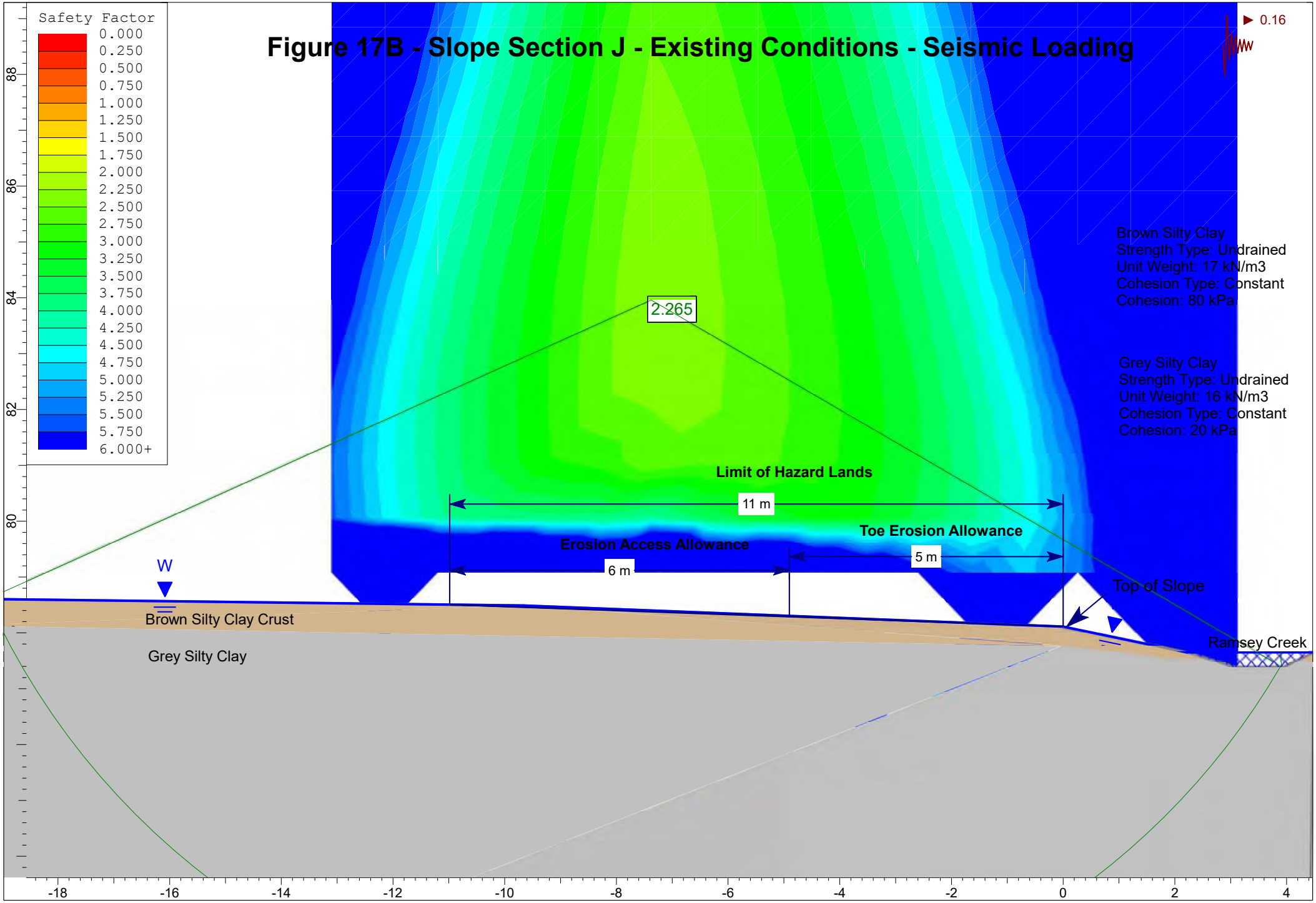


Figure 17B - Slope Section J - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
2.265
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Ramsey Creek
88
86
84
82
80
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

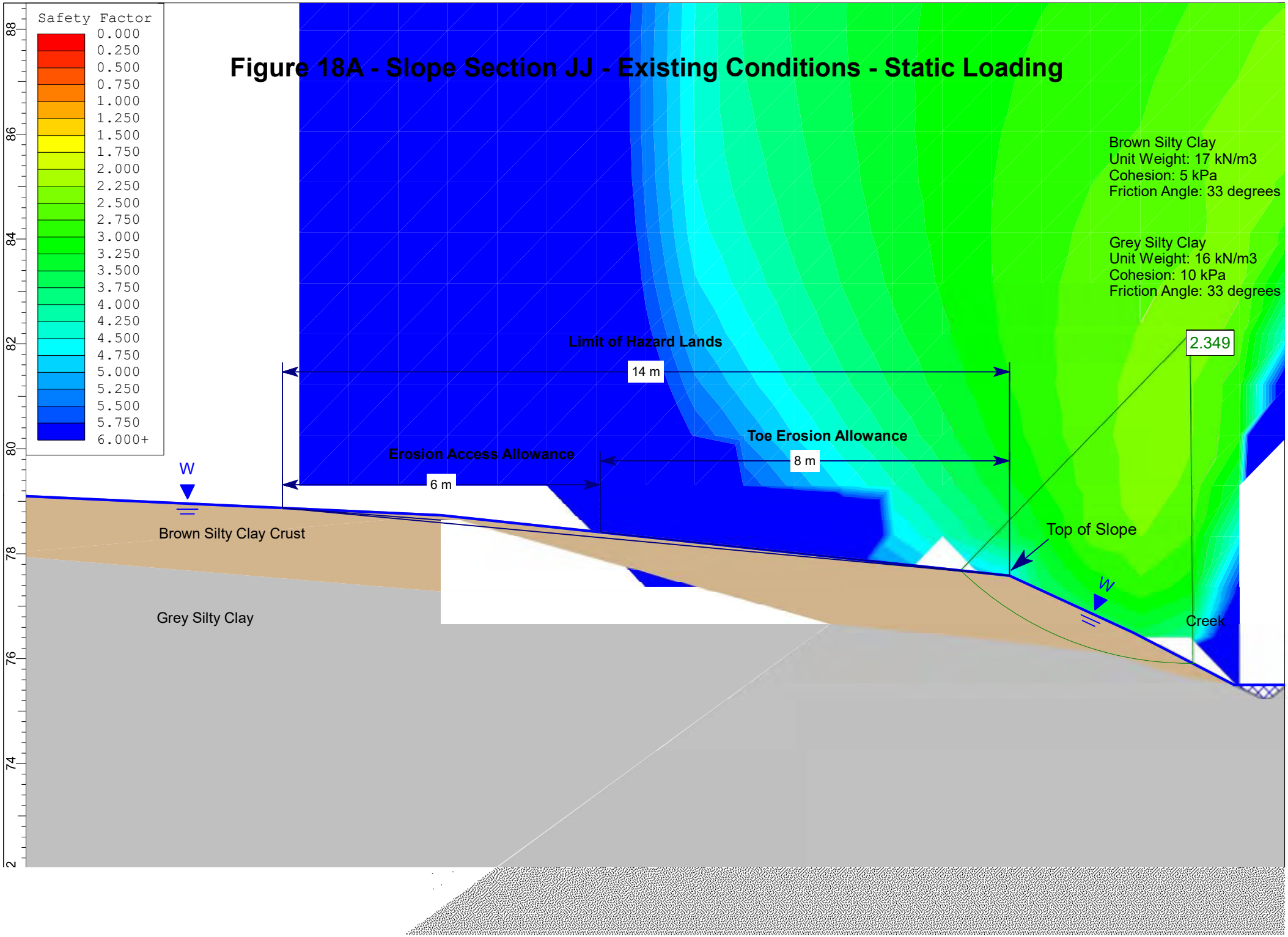


Figure 18A - Slope Section JJ - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
88
86
84
82
80
78
76
74
2
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
2.349
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
W
Brown Silty Clay Crust
Grey Silty Clay
Top of Slope
Creek

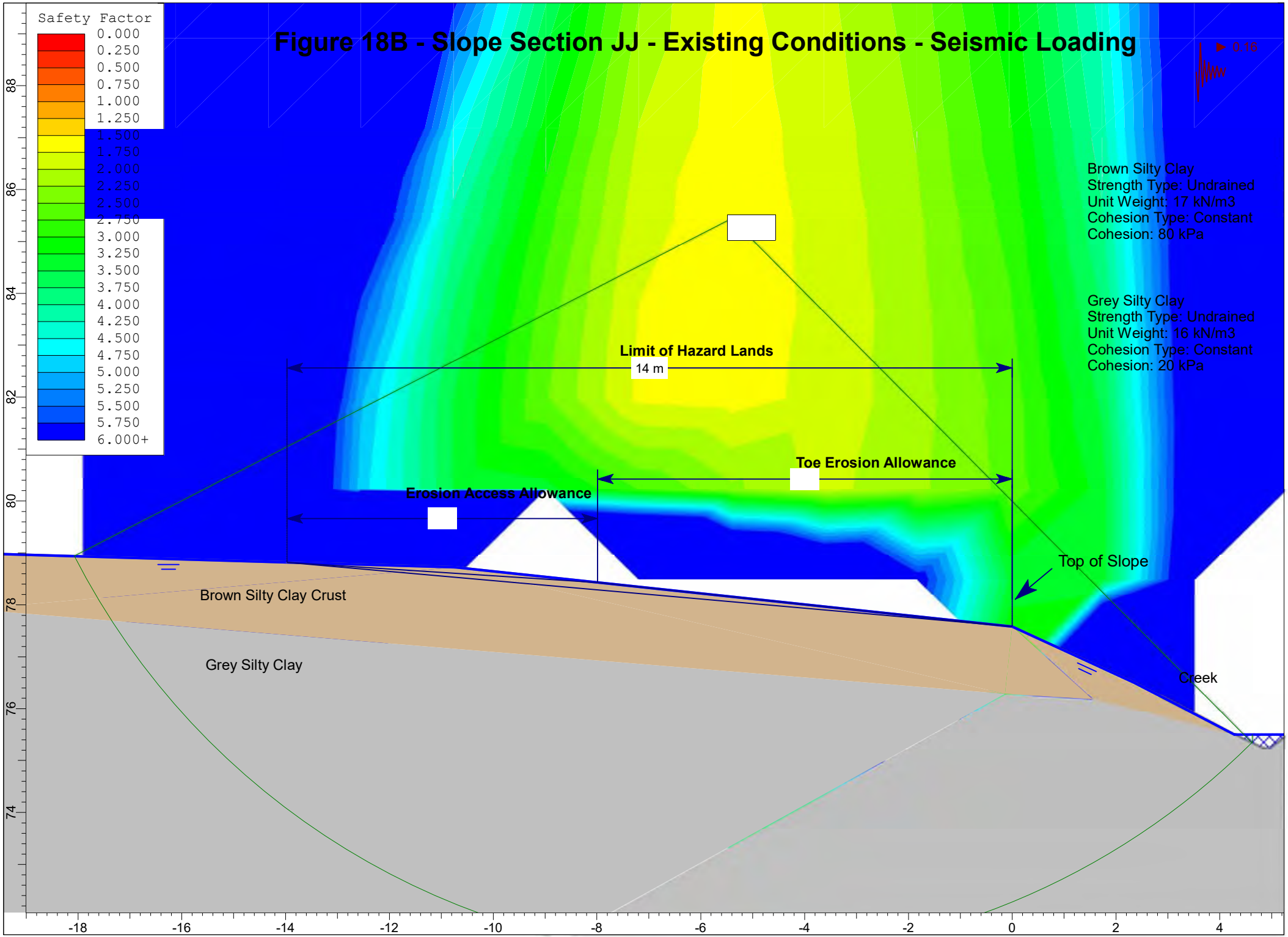


Figure 18B - Slope Section JJ - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
88
86
84
82
80
78
76
74
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

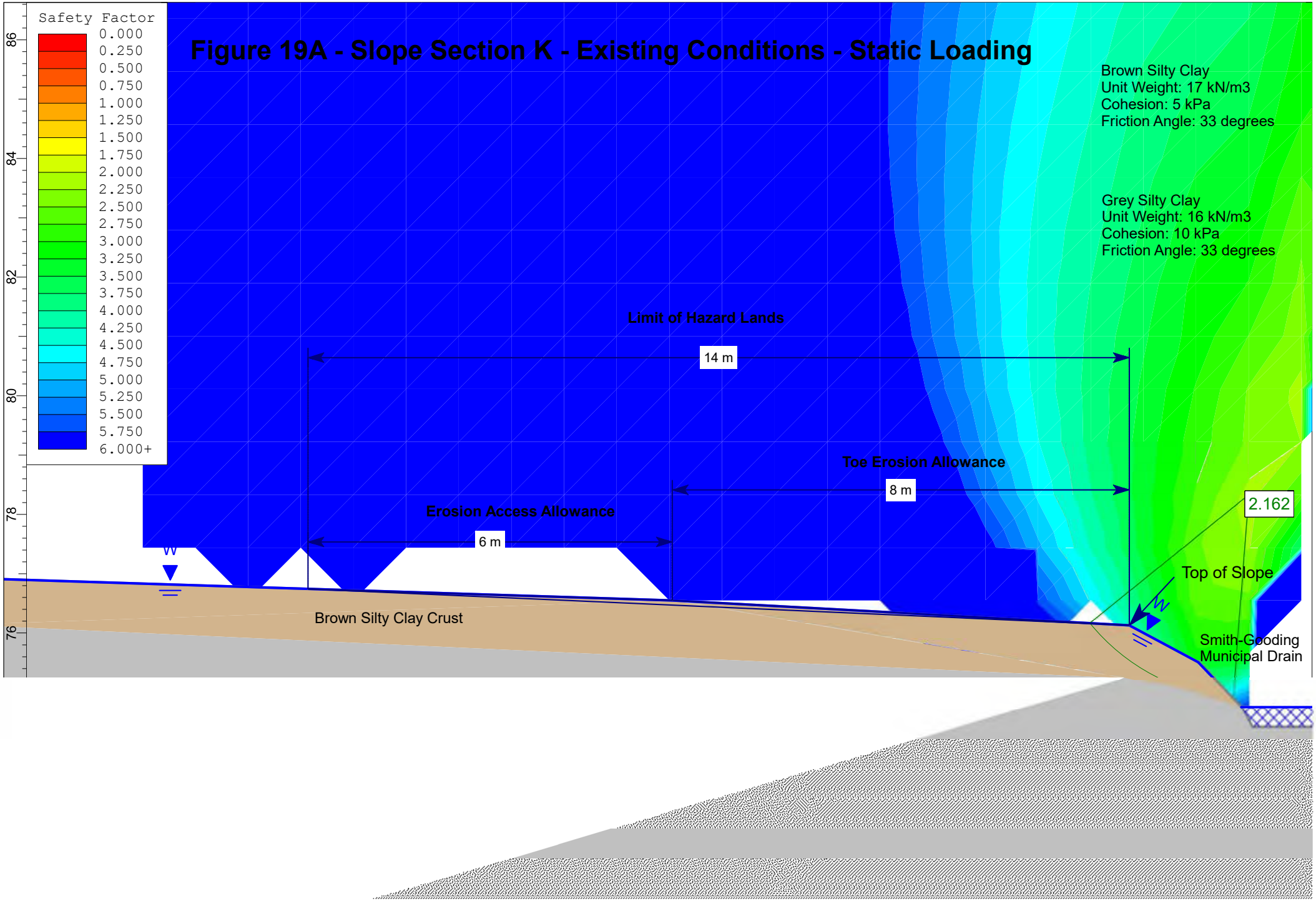


Figure 19A - Slope Section K - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
86
84
82
80
78
76
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
2.162
Top of Slope
Brown Silty Clay Crust
Smith-Gooding
Municipal Drain

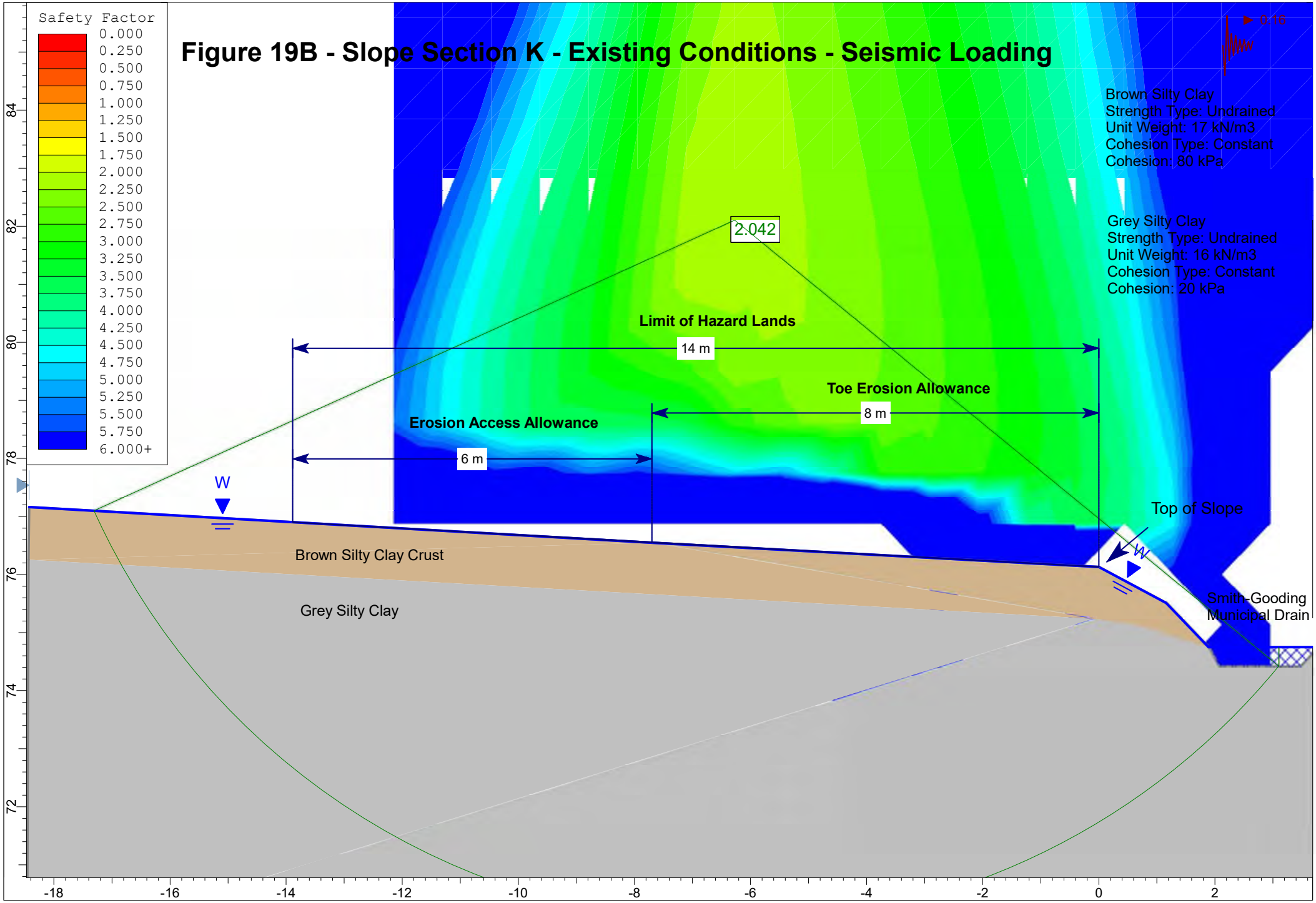


Figure 19B - Slope Section K - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
2.042
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
84
82
80
78
76
74
72
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2

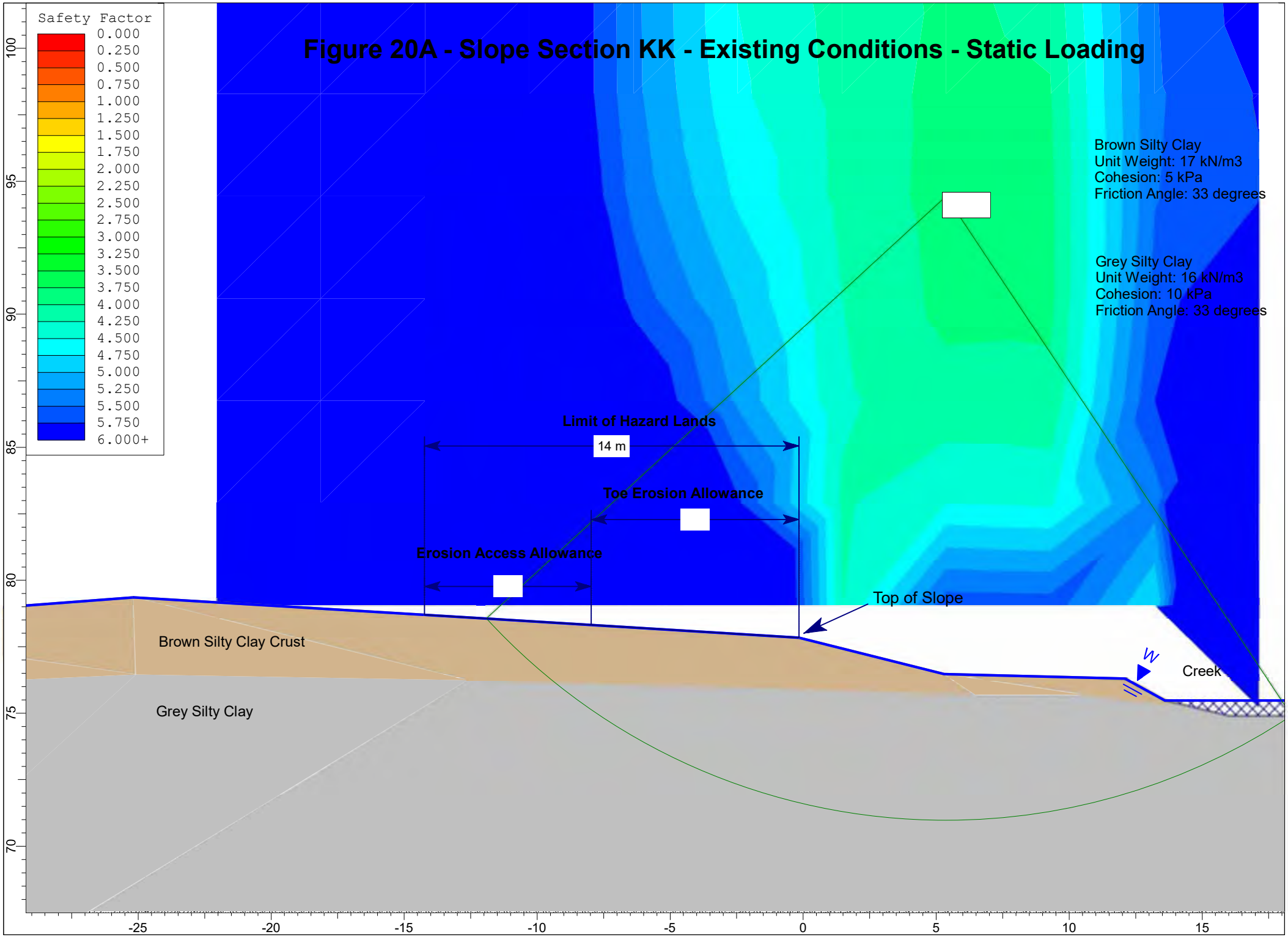


Figure 20A - Slope Section KK - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
100
95
90
85
80
75
70
-25
-20
-15
-10
-5
0
5
10
15

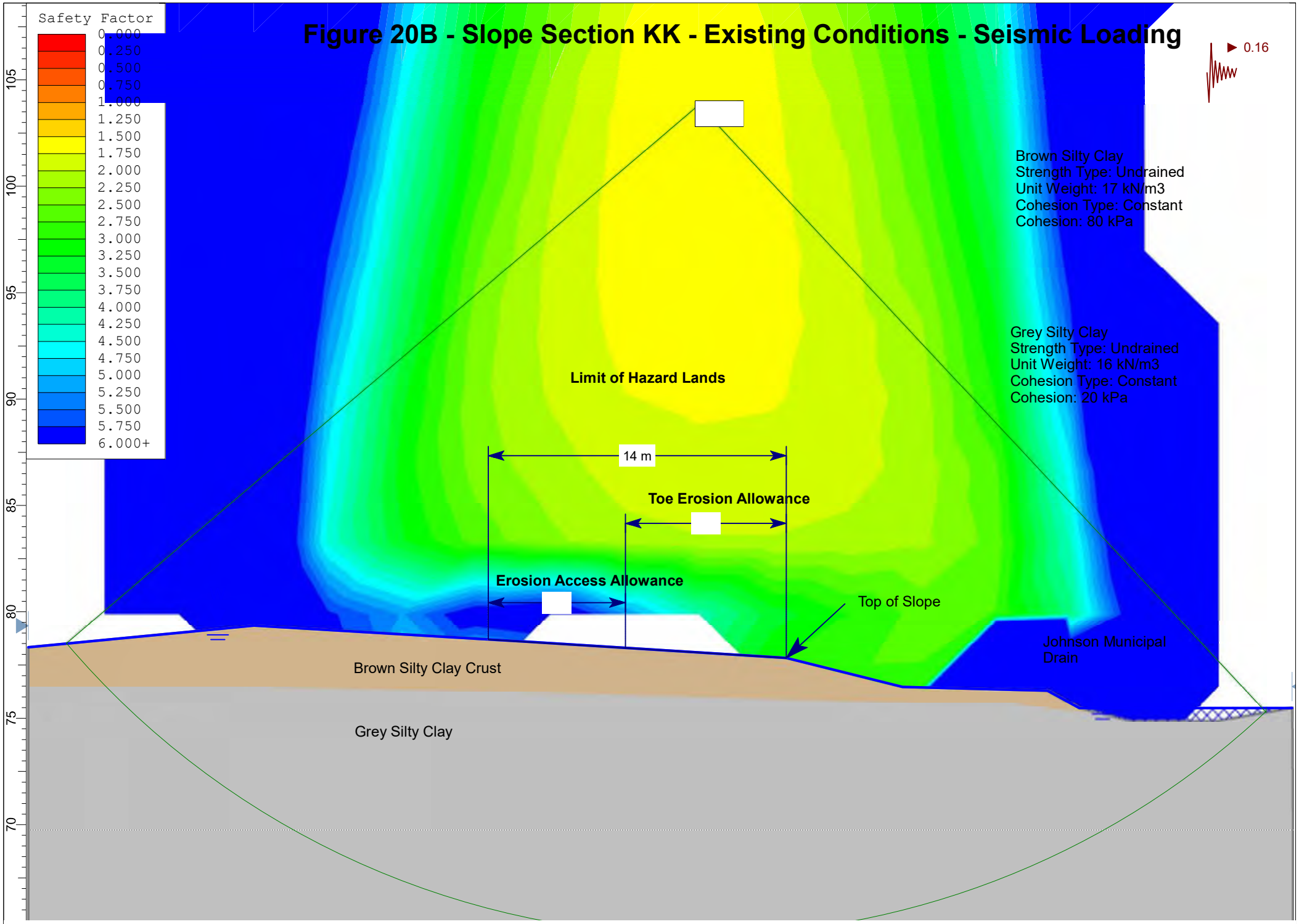


Figure 20B - Slope Section KK - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
105
100
95
90
85
80
75
70
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Johnson Municipal Drain
Brown Silty Clay Crust
Grey Silty Clay

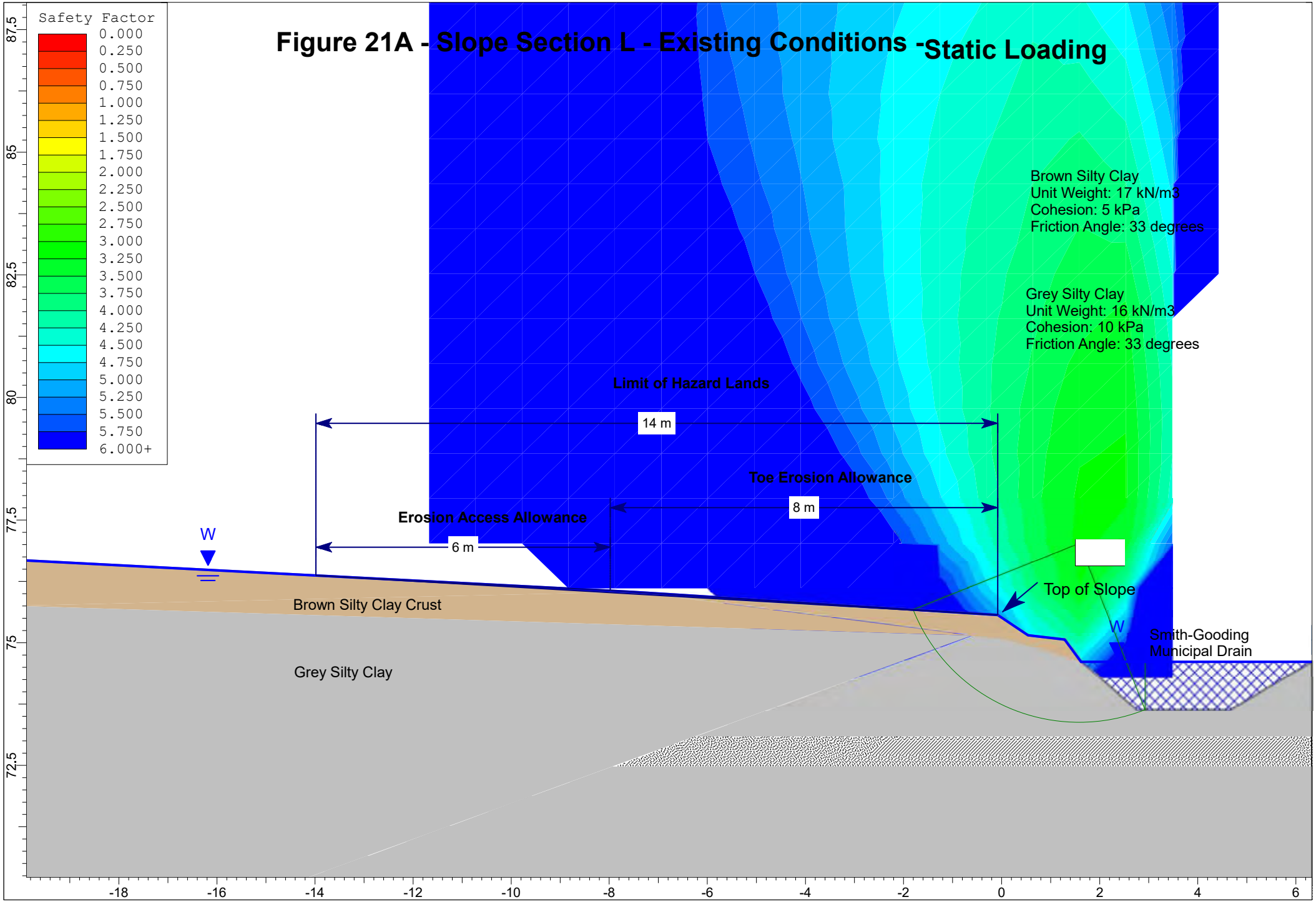


Figure 21A - Slope Section L - Existing Conditions -Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Top of Slope
W
Smith-Gooding
Municipal Drain
Brown Silty Clay Crust
Grey Silty Clay
87.5
85
82.5
80
77.5
75
72.5
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

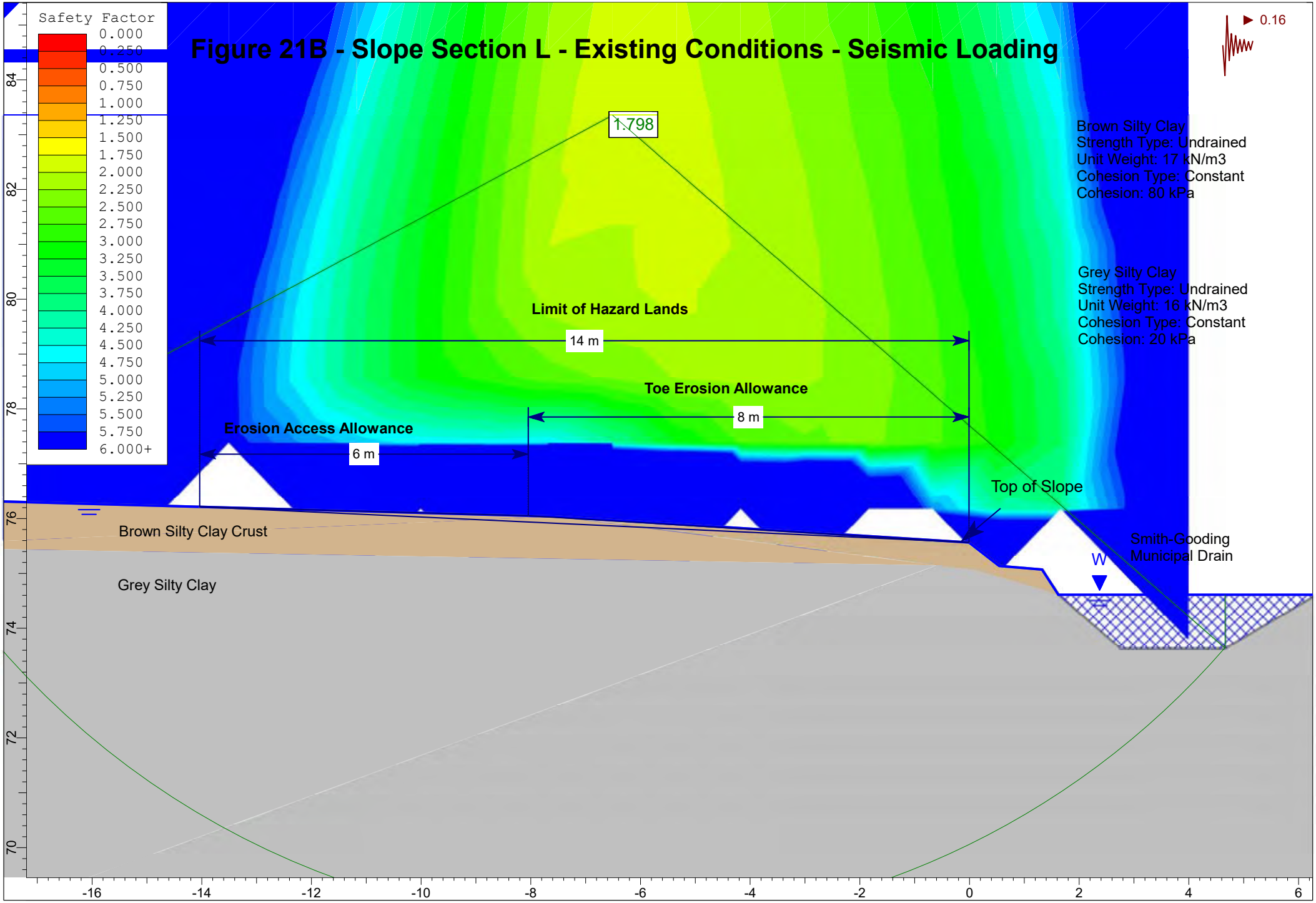


Figure 21B - Slope Section L - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.798
0.16
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
W
84
82
80
78
76
74
72
70
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

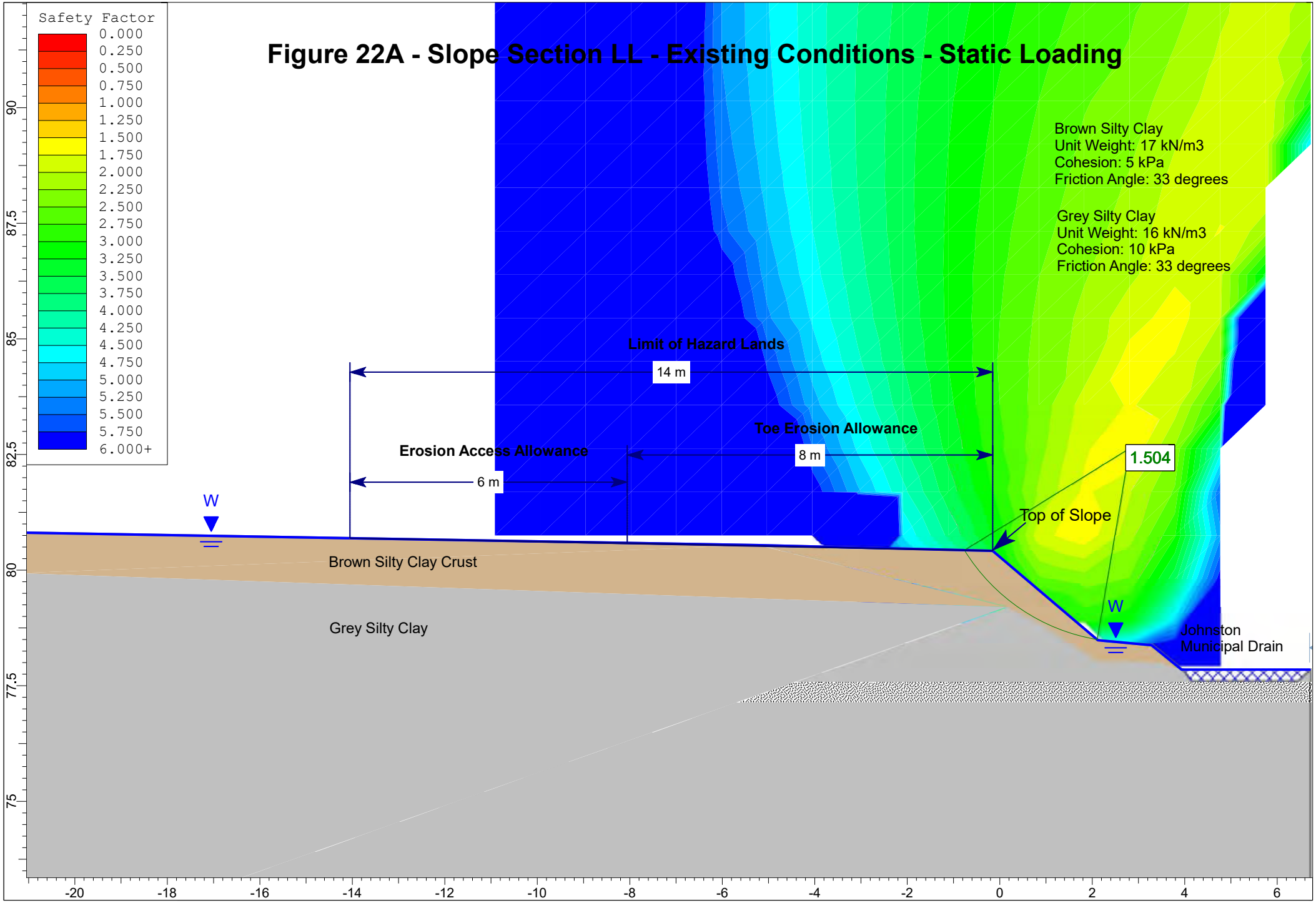


Figure 22A - Slope Section LL - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
1.504
Top of Slope
W
W
Brown Silty Clay Crust
Grey Silty Clay
Johnston
Municipal Drain
90
87.5
85
82.5
80
77.5
75
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

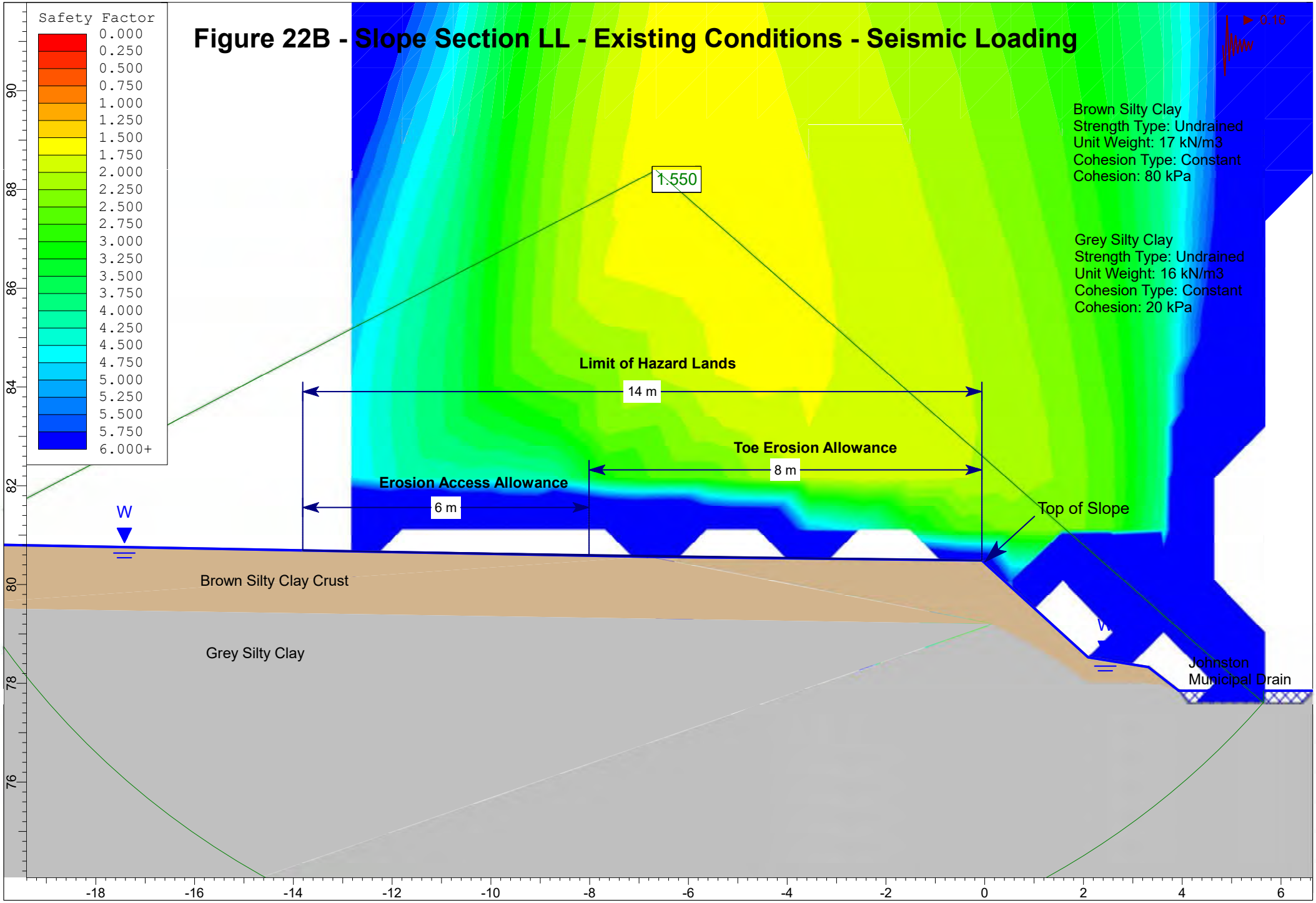


Figure 22B - Slope Section LL - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.550
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
W
Brown Silty Clay Crust
Grey Silty Clay
Johnston
Municipal Drain
90
88
86
84
82
80
78
76
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6

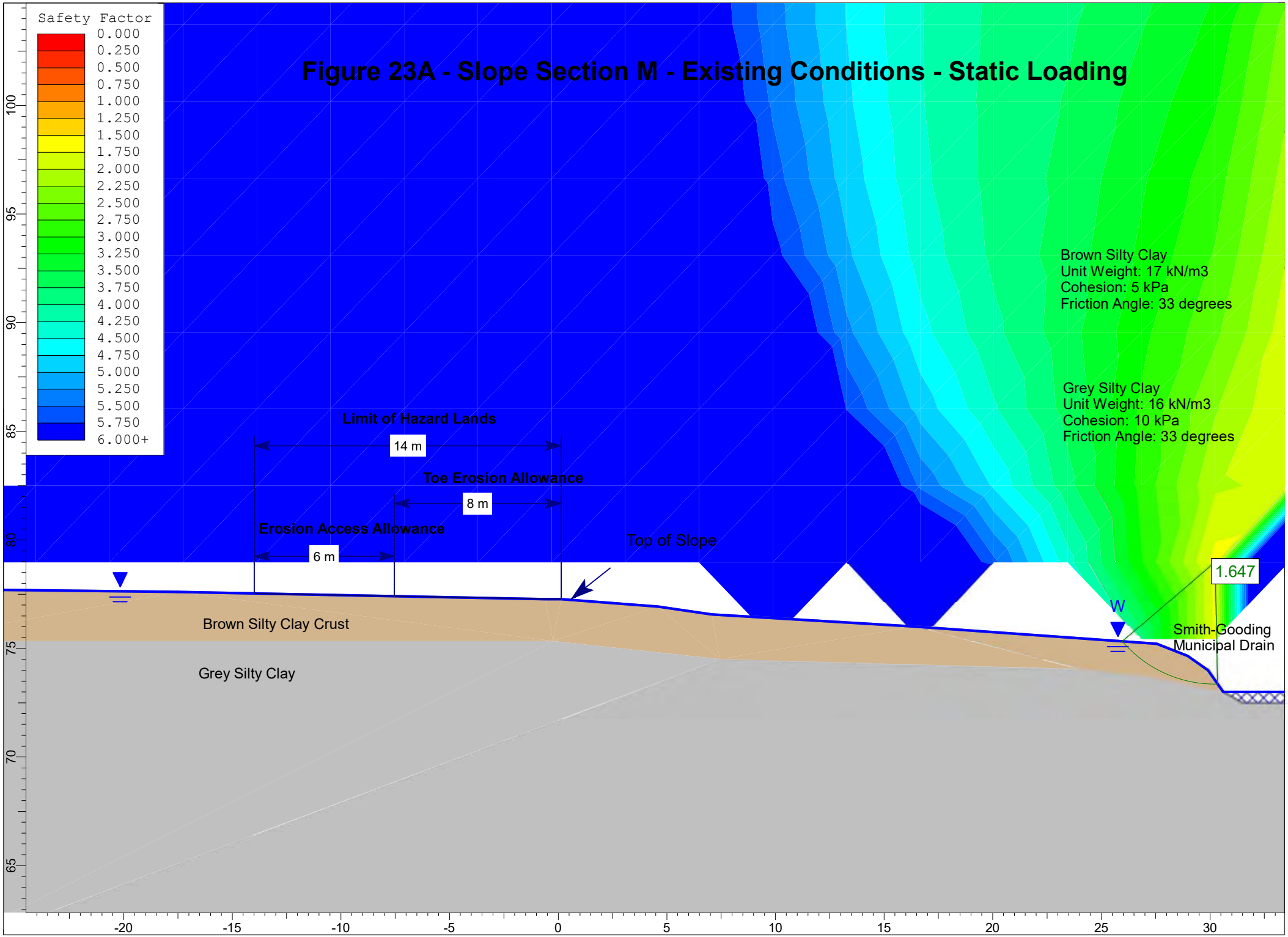


Figure 23A - Slope Section M - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
1.647
W
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
100
95
90
85
80
75
70
65
-20
-15
-10
-5
0
5
10
15
20
25
30

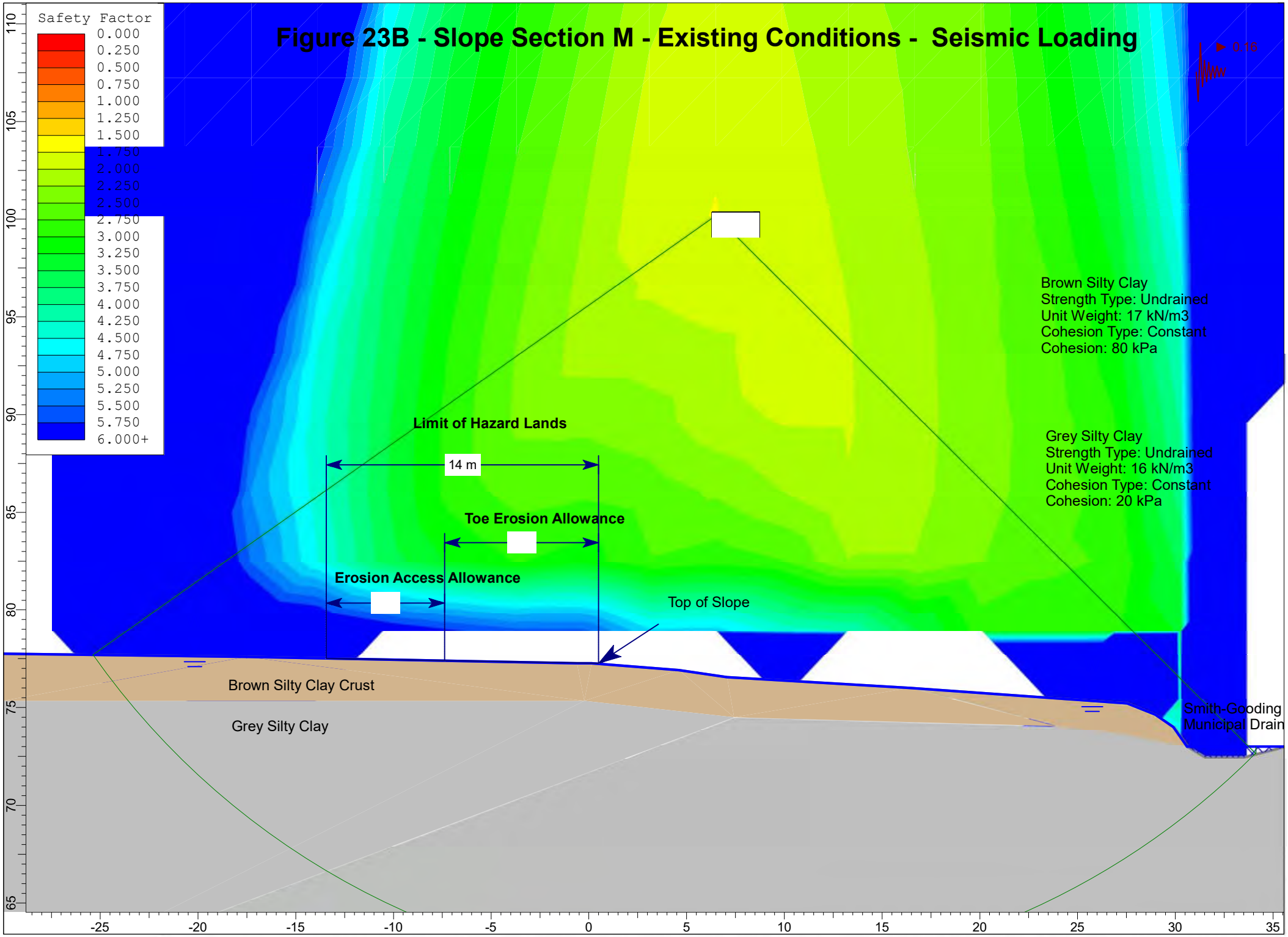


Figure 23B - Slope Section M - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding Municipal Drain
110
105
100
95
90
85
80
75
70
65
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35

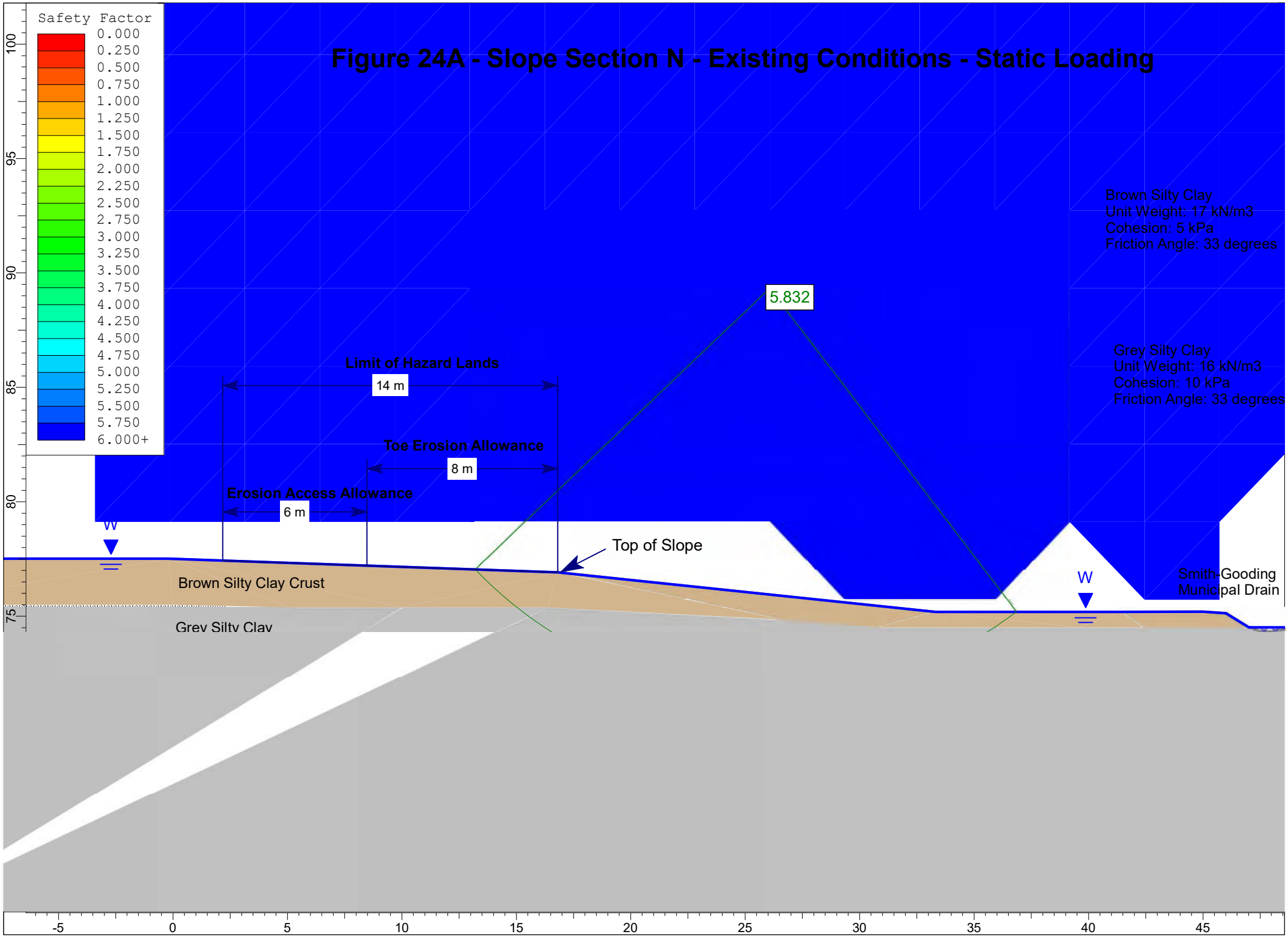


Figure 24A - Slope Section N - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
5.832
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
100
95
90
85
80
75
-5
0
5
10
15
20
25
30
35
40
45

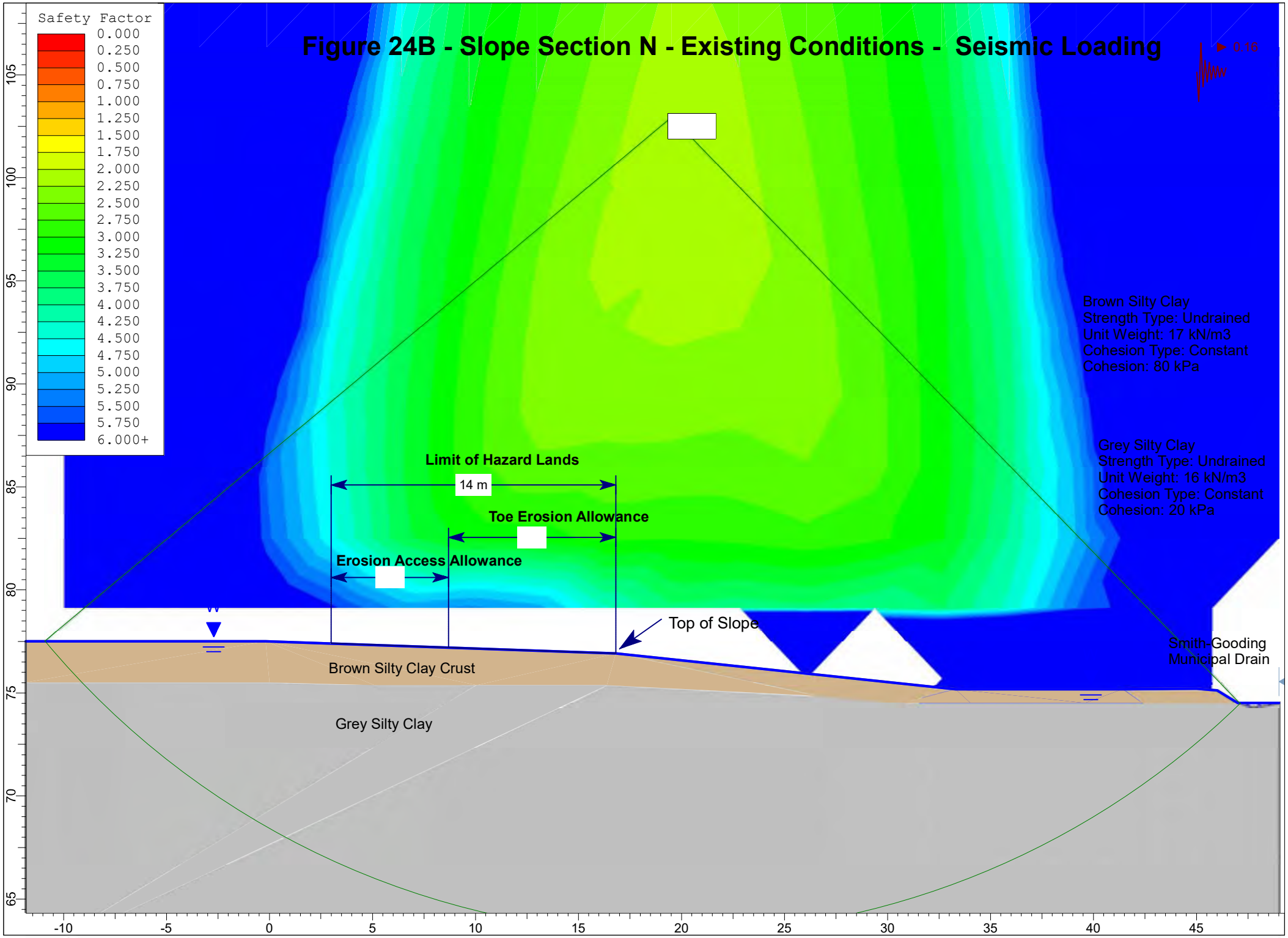


Figure 24B - Slope Section N - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Smith-Gooding
Municipal Drain
Brown Silty Clay Crust
Grey Silty Clay
105
100
95
90
85
80
75
70
65
-10
-5
0
5
10
15
20
25
30
35
40
45

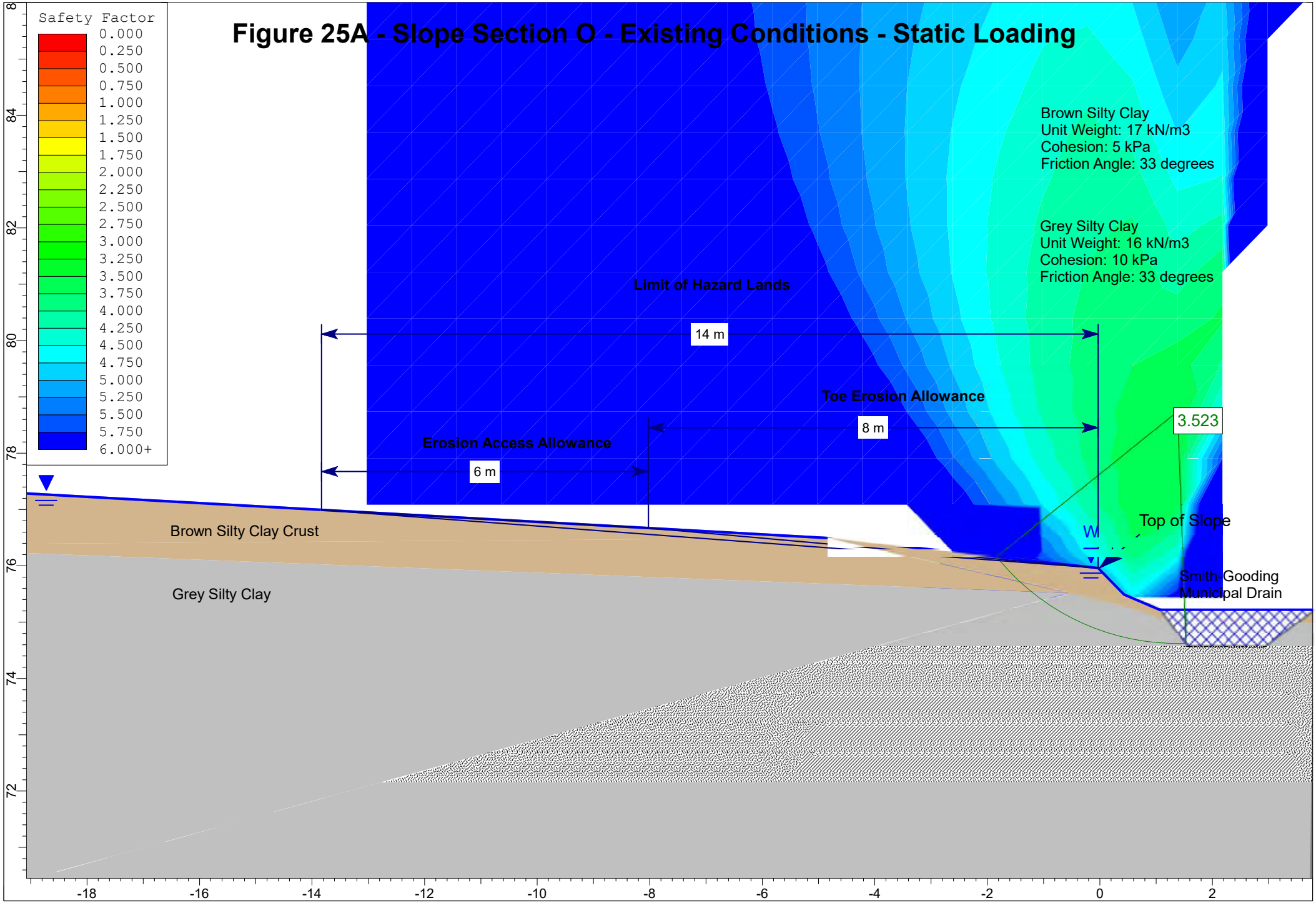


Figure 25A - Slope Section O - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
3.523
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
84
82
80
78
76
74
72
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2

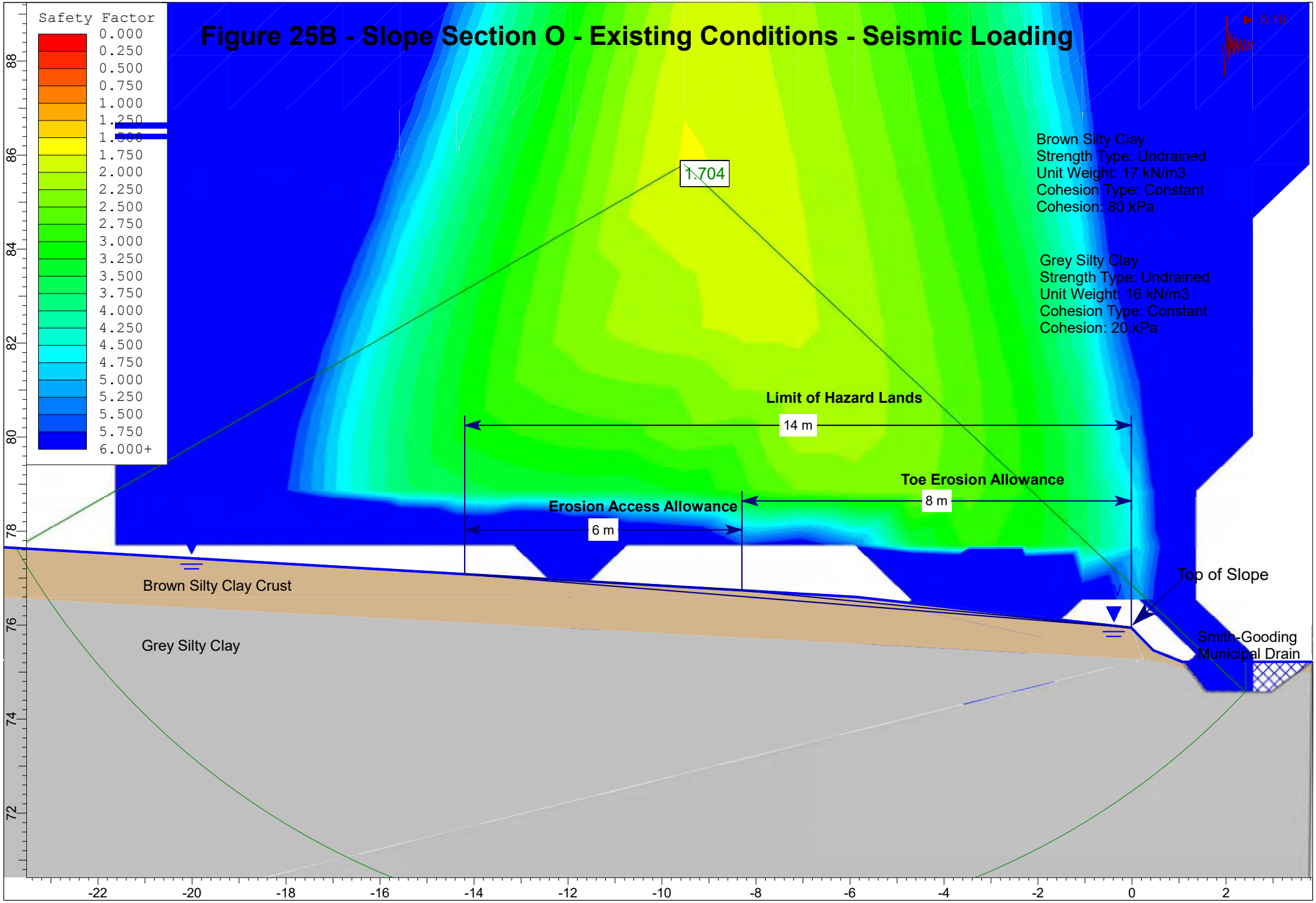


Figure 25B - Slope Section O - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.704
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Brown Silty Clay Crust
Grey Silty Clay
Top of Slope
Smith-Gooding
Municipal Drain
88
86
84
82
80
78
76
74
72
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2

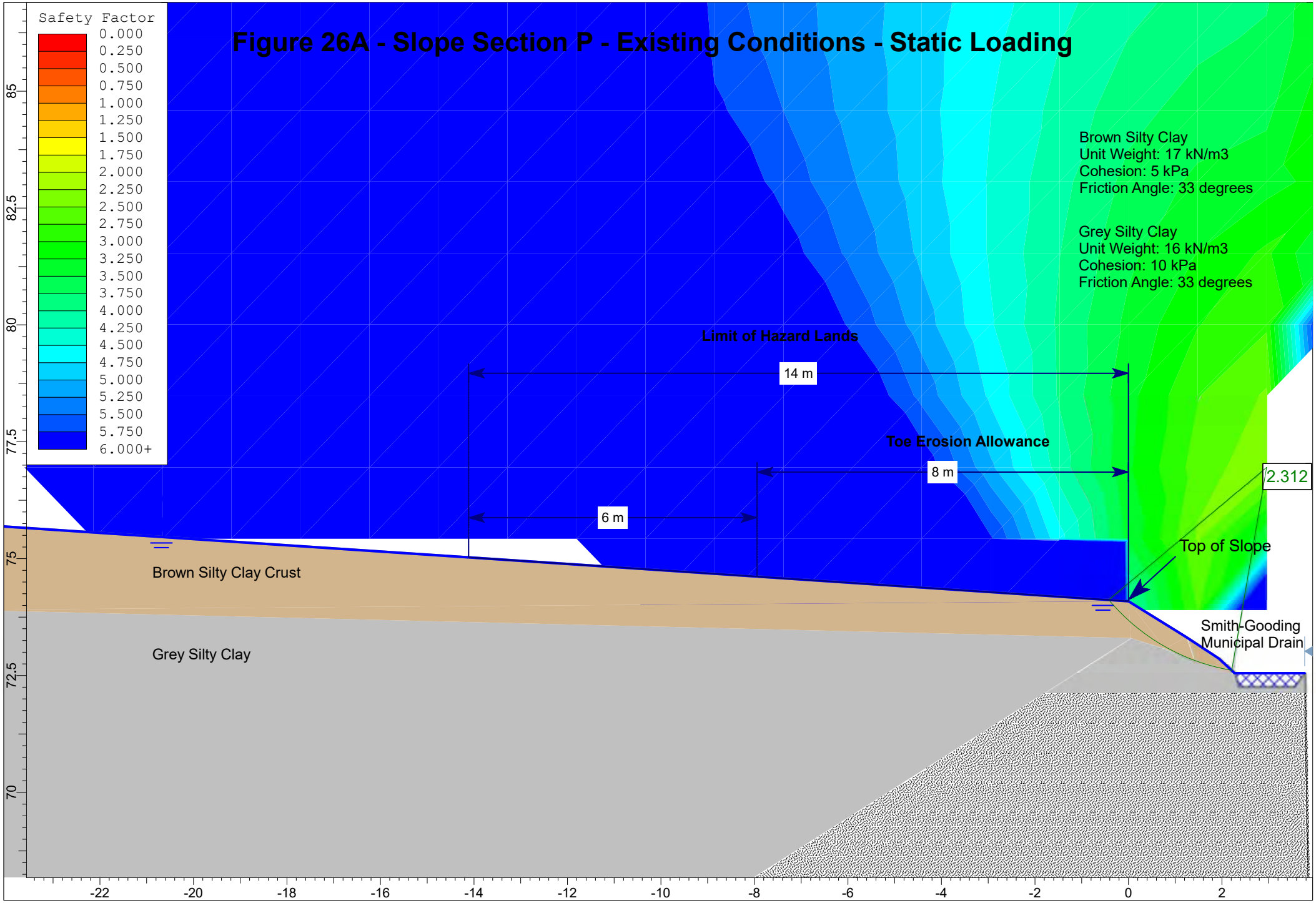


Figure 26A - Slope Section P - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
6 m
2.312
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
85
82.5
80
77.5
75
72.5
70
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2

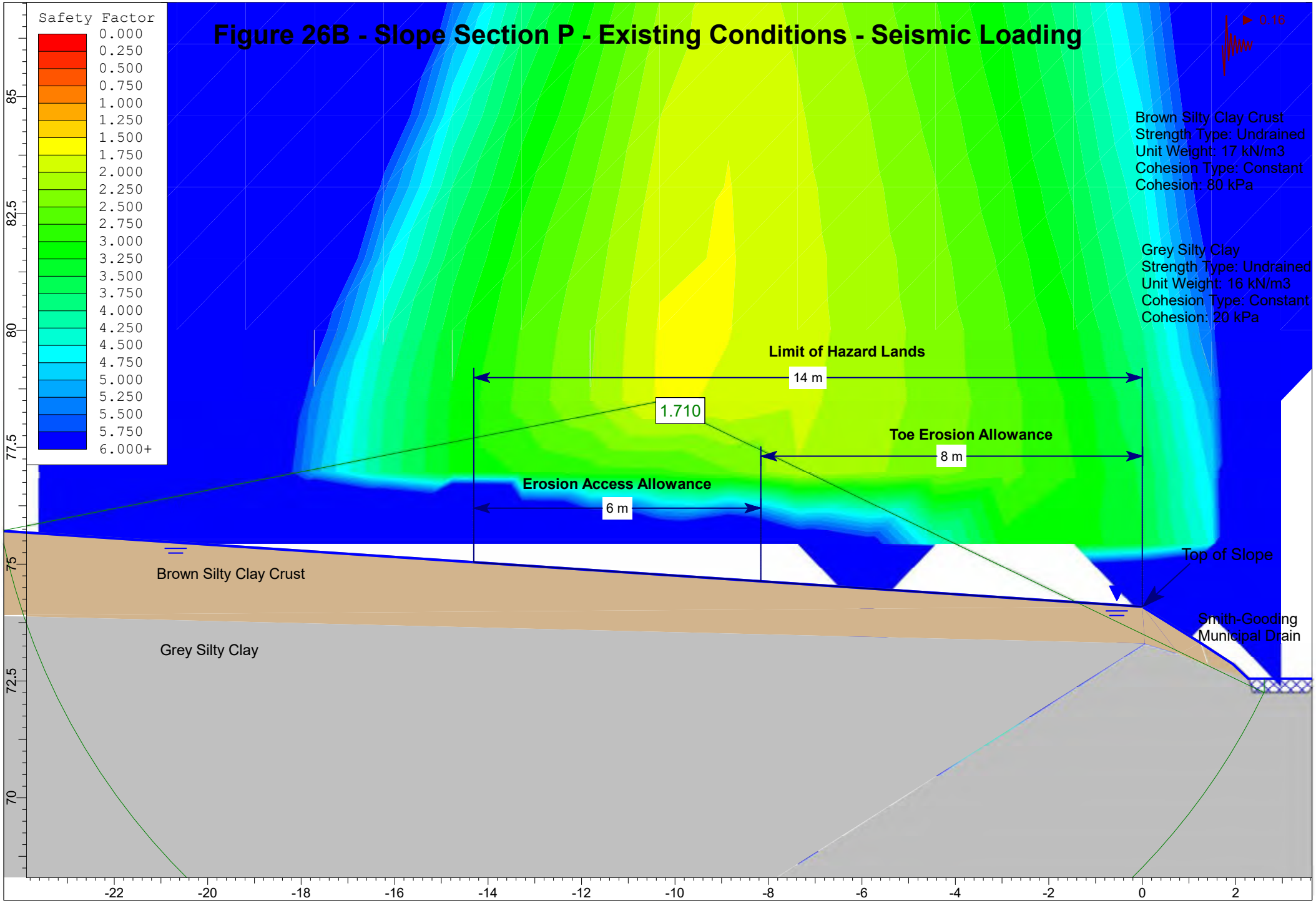
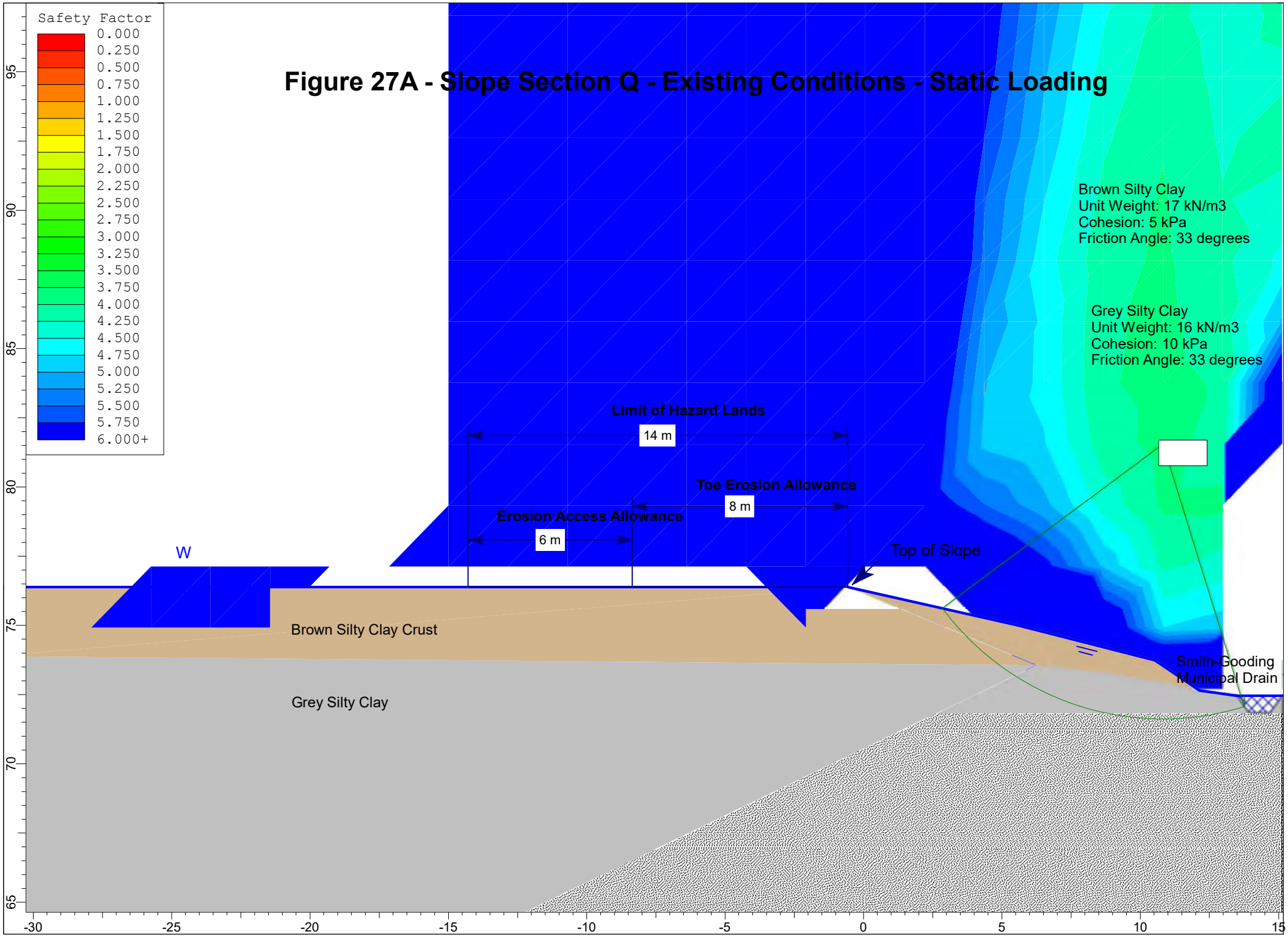


Figure 26B - Slope Section P - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
1.710
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
85
82.5
80
77.5
75
72.5
70
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2


Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Figure 27A - Slope Section Q - Existing Conditions - Static Loading
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
95
90
85
80
75
70
65
-30
-25
-20
-15
-10
-5
0
5
10
15

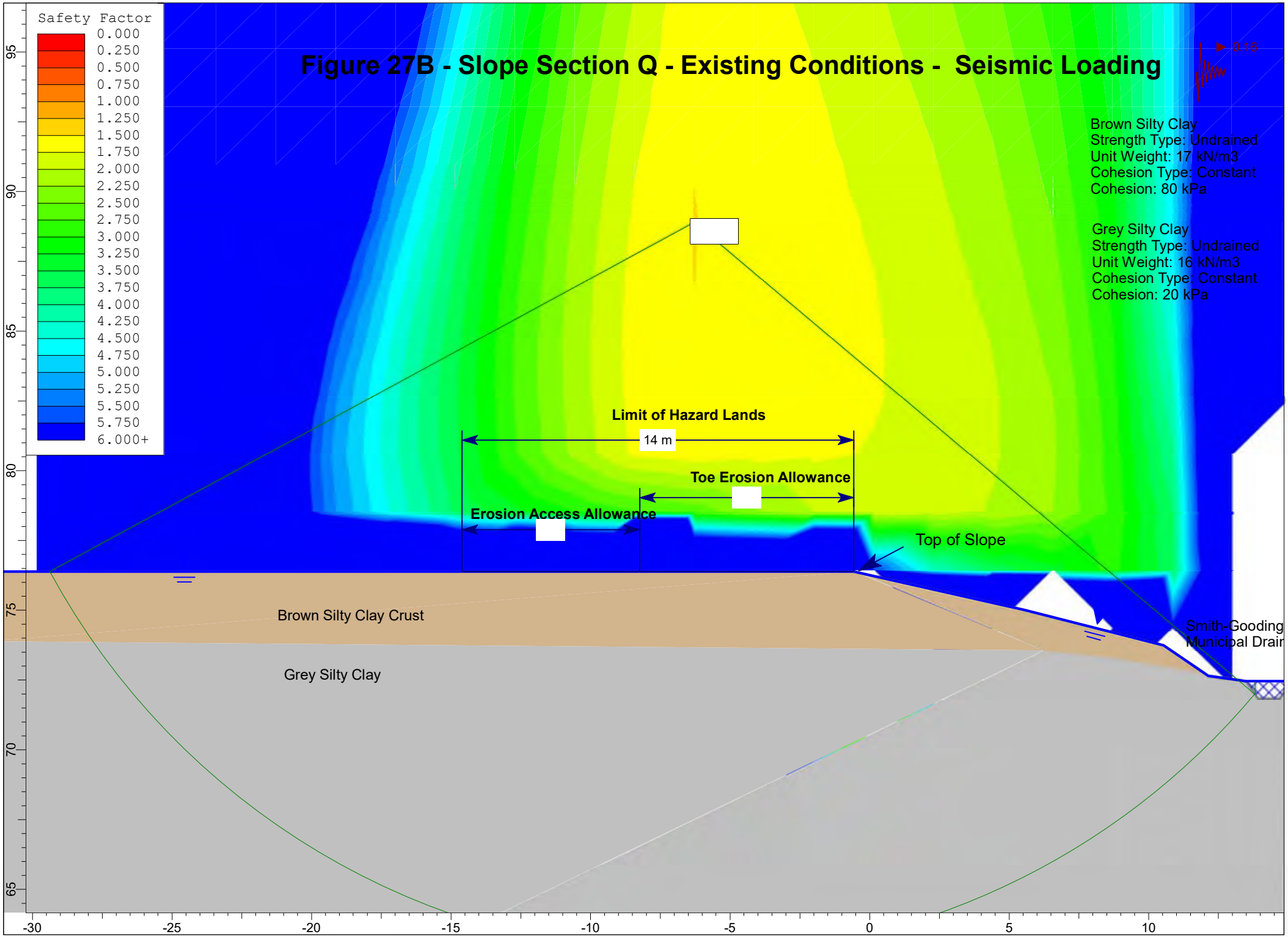


Figure 27B - Slope Section Q - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Smith-Gooding
Municipal Drain
95
90
85
80
75
70
65
-30
-25
-20
-15
-10
-5
0
5
10

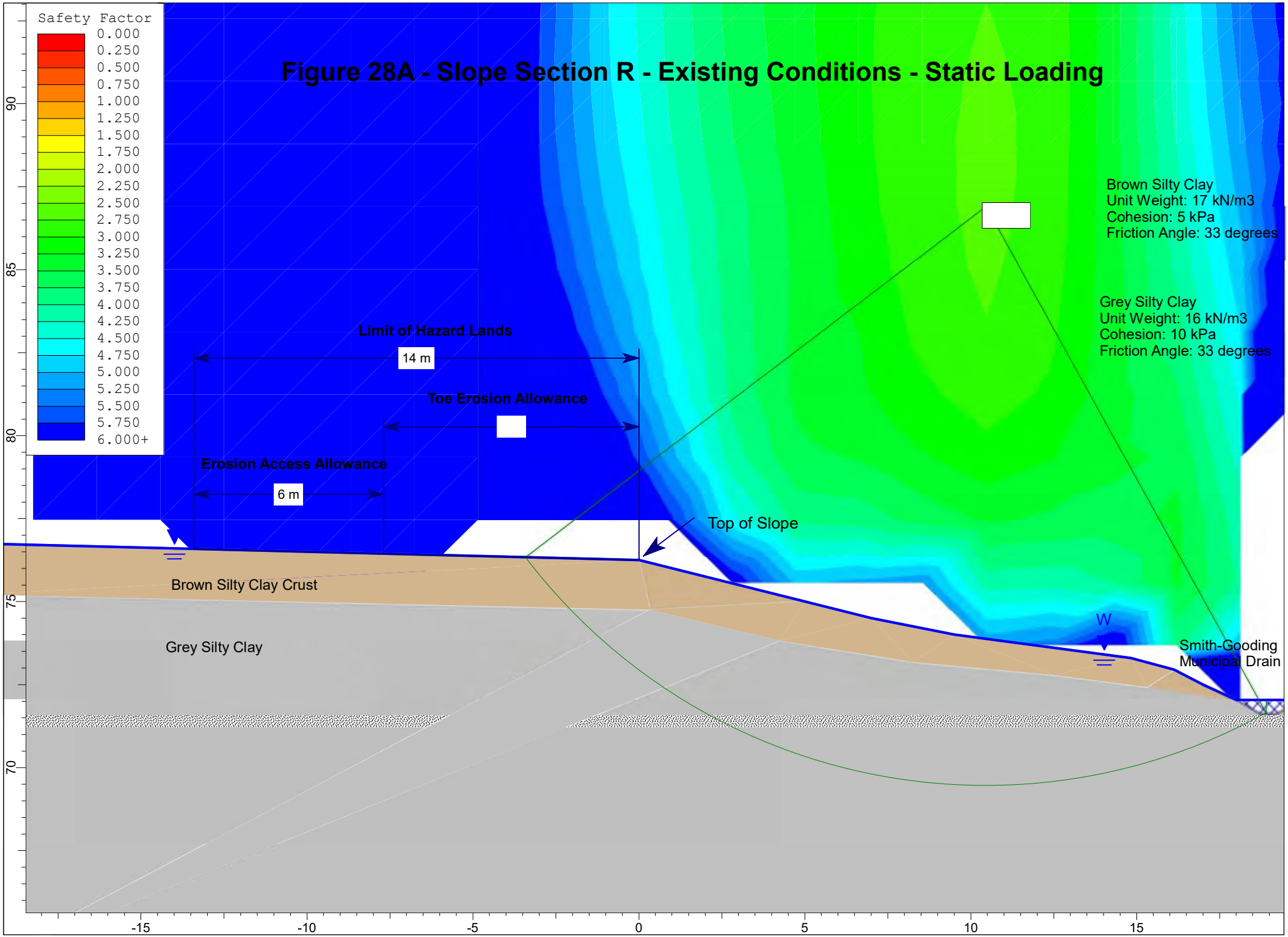


Figure 28A - Slope Section R - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
W
Smith-Gooding
Municipal Drain
90
85
80
75
70
-15
-10
-5
0
5
10
15

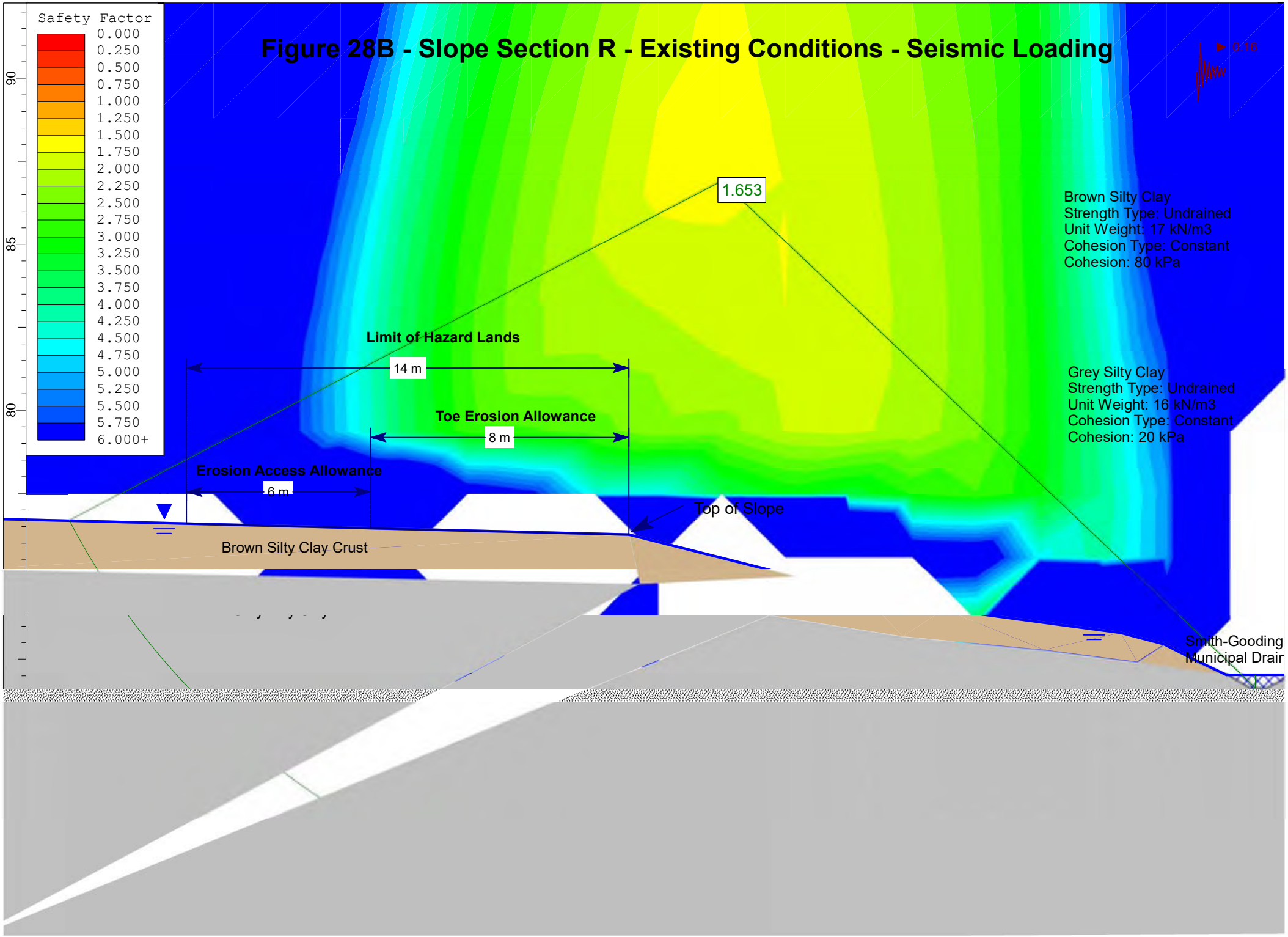


Figure 28B - Slope Section R - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
90
85
80
0.16
1.653
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Top of Slope
Brown Silty Clay Crust
Smith-Gooding
Municipal Drain

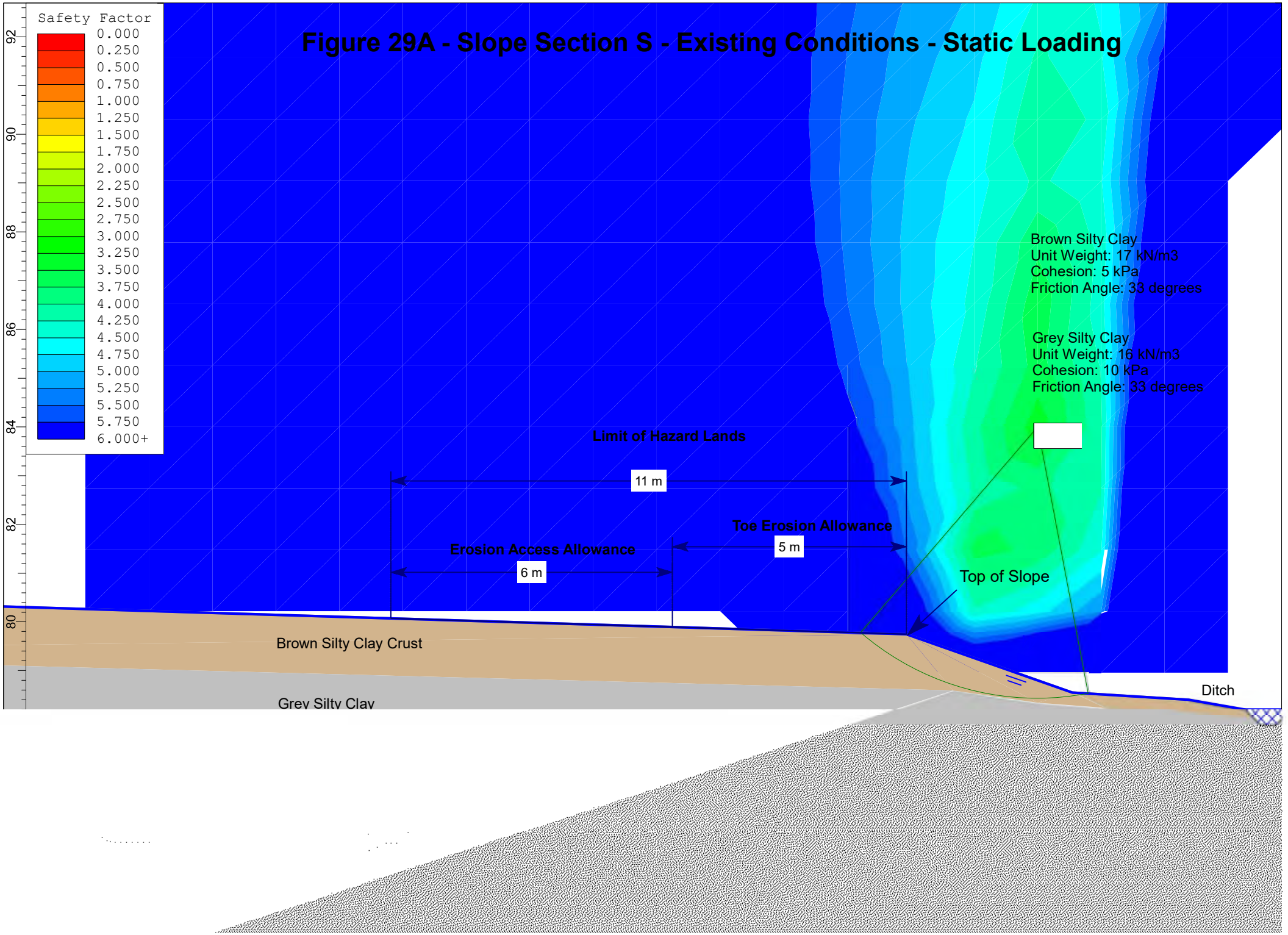


Figure 29A - Slope Section S - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
92
90
88
86
84
82
80
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Ditch

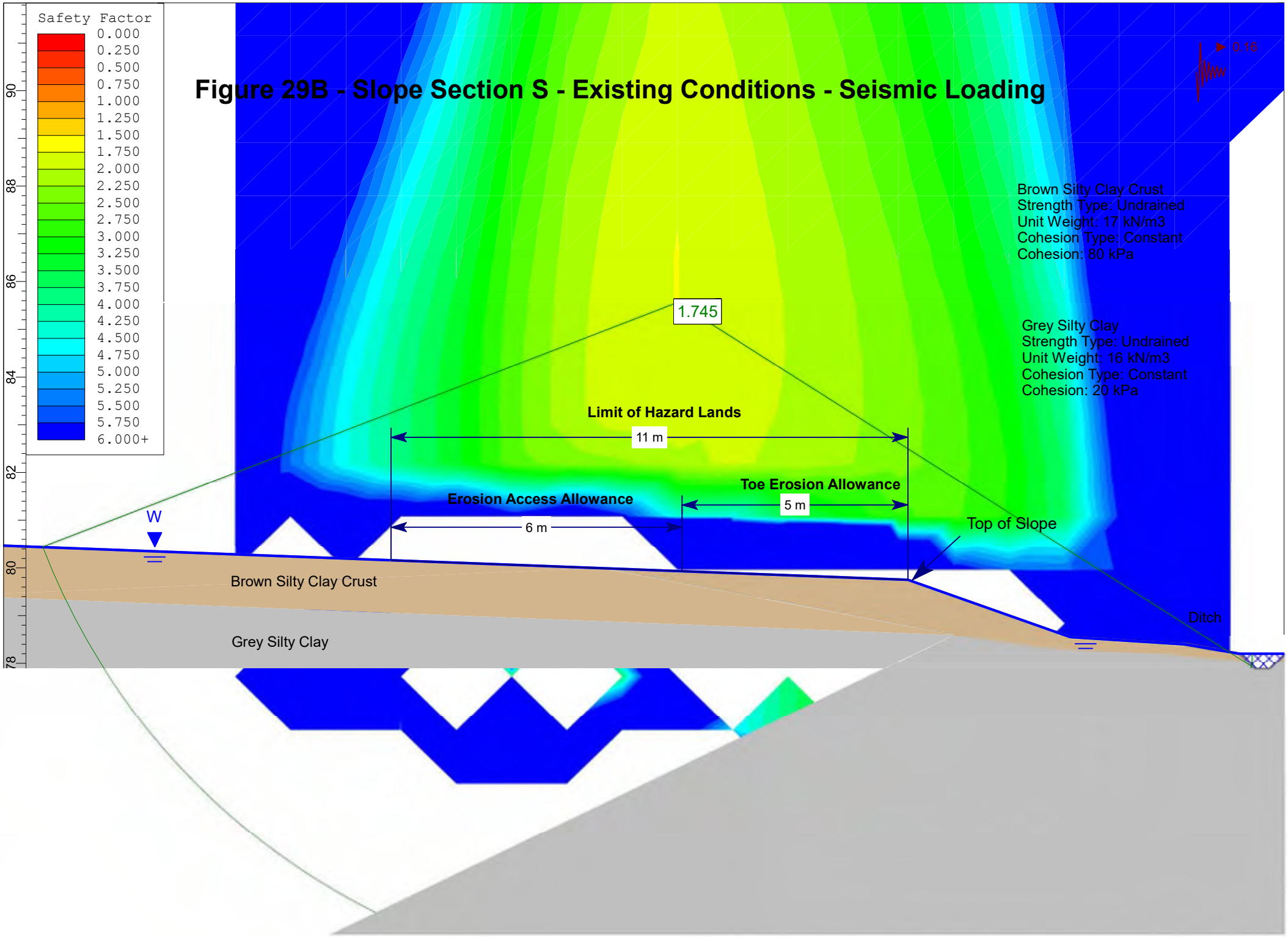


Figure 29B - Slope Section S - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
1.745
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Ditch
90
88
86
84
82
80
78

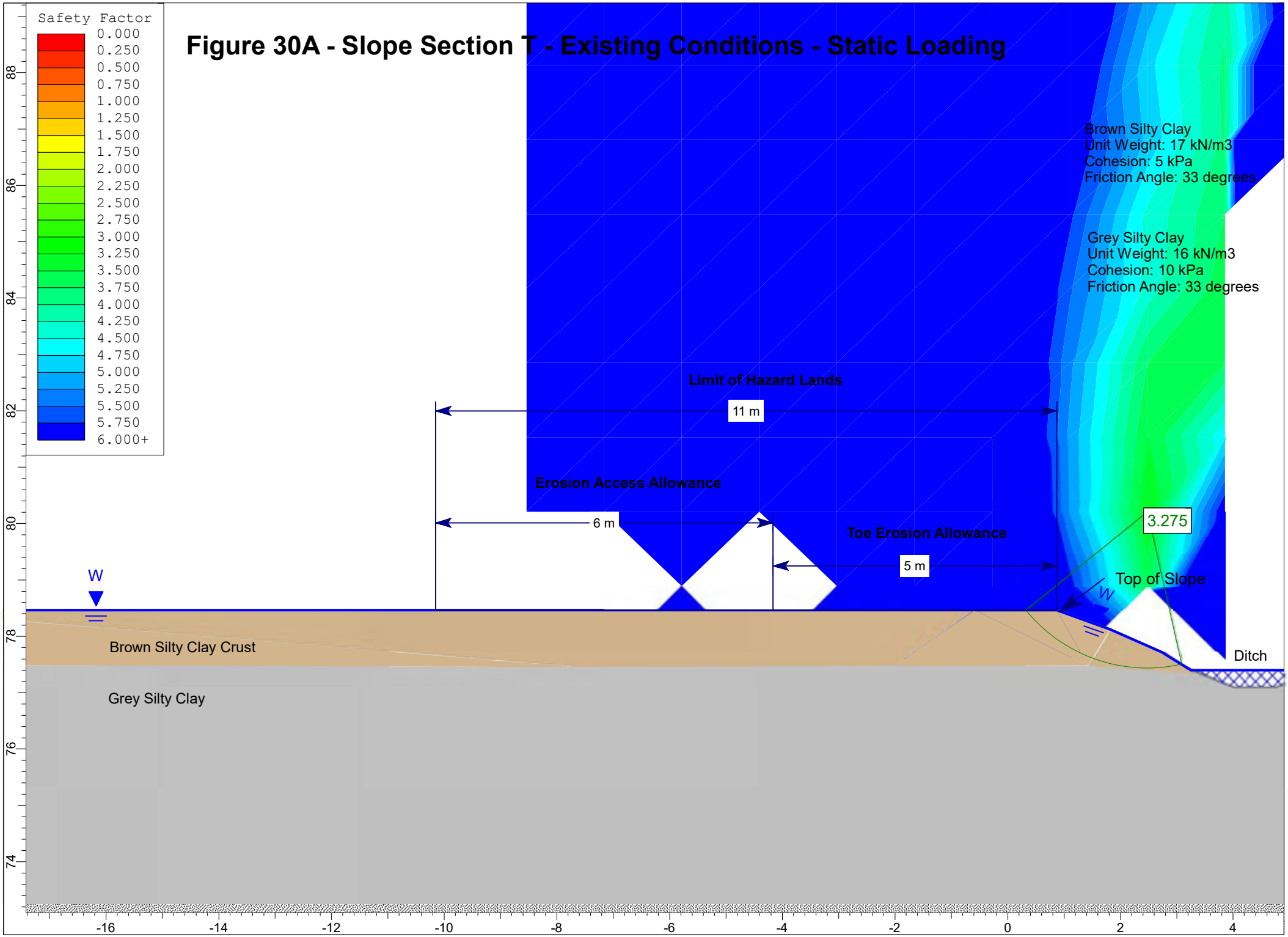


Figure 30A - Slope Section T - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
11 m
Erosion Access Allowance
6 m
Toe Erosion Allowance
5 m
3.275
W
W
Top of Slope
Ditch
Brown Silty Clay Crust
Grey Silty Clay
88
86
84
82
80
78
76
74
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4

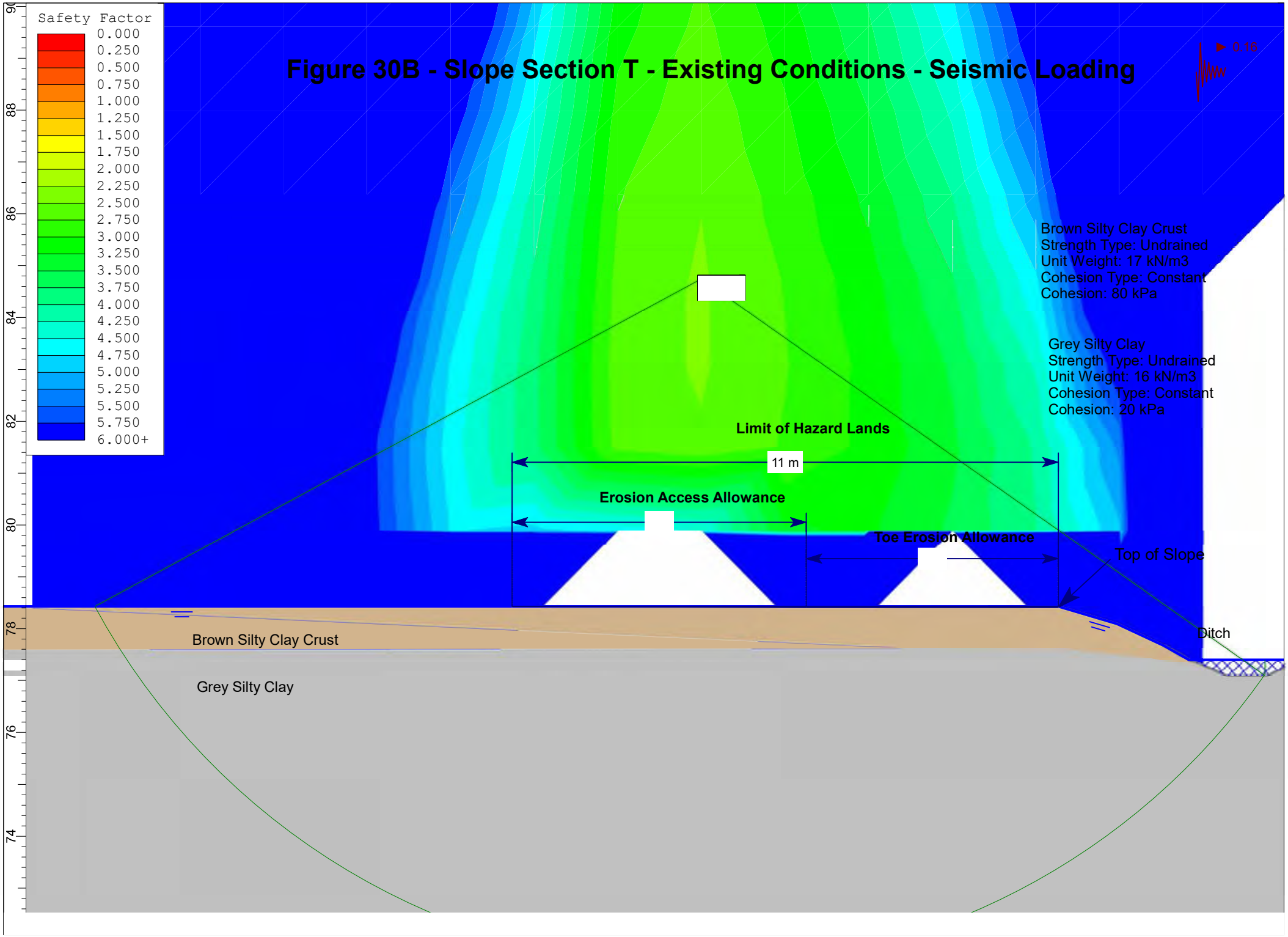


Figure 30B - Slope Section T - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
11 m
Erosion Access Allowance
Toe Erosion Allowance
Top of Slope
Ditch
Brown Silty Clay Crust
Grey Silty Clay
90
88
86
84
82
80
78
76
74

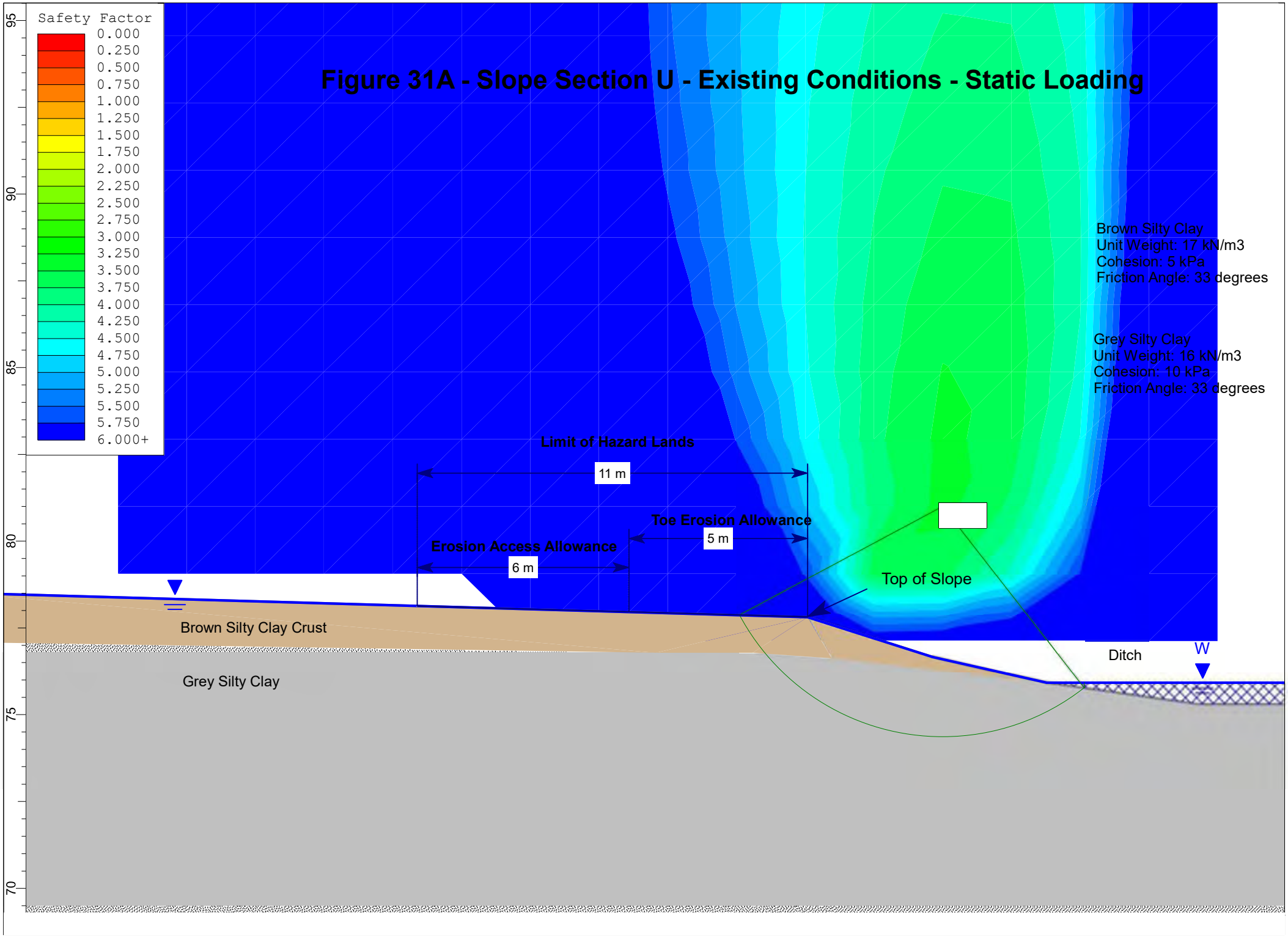


Figure 31A - Slope Section U - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
95
90
85
80
75
70
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Ditch
W

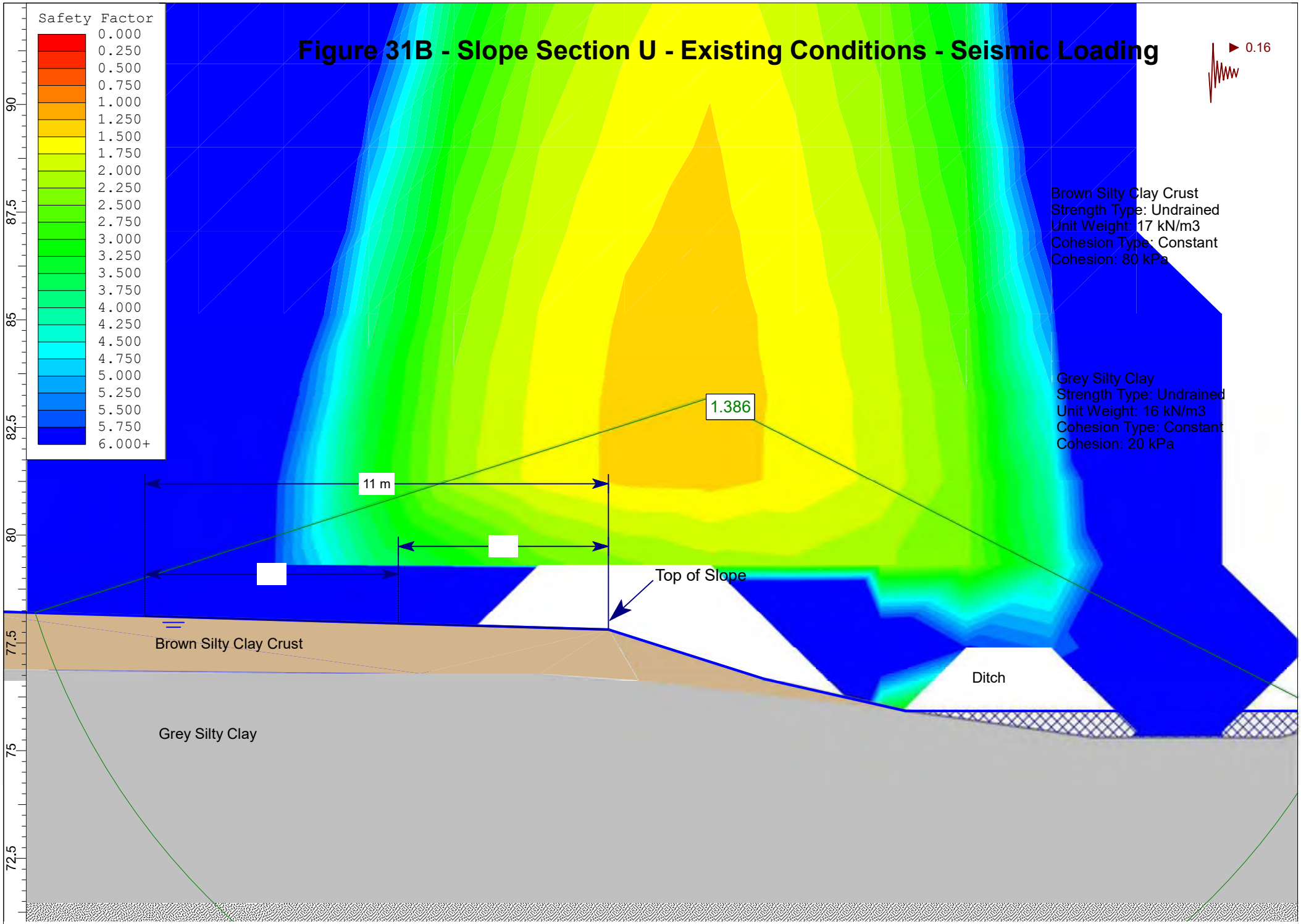


Figure 31B - Slope Section U - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
1.386
11 m
Top of Slope
Brown Silty Clay Crust
Ditch
Grey Silty Clay
90
87.5
85
82.5
80
77.5
75
72.5

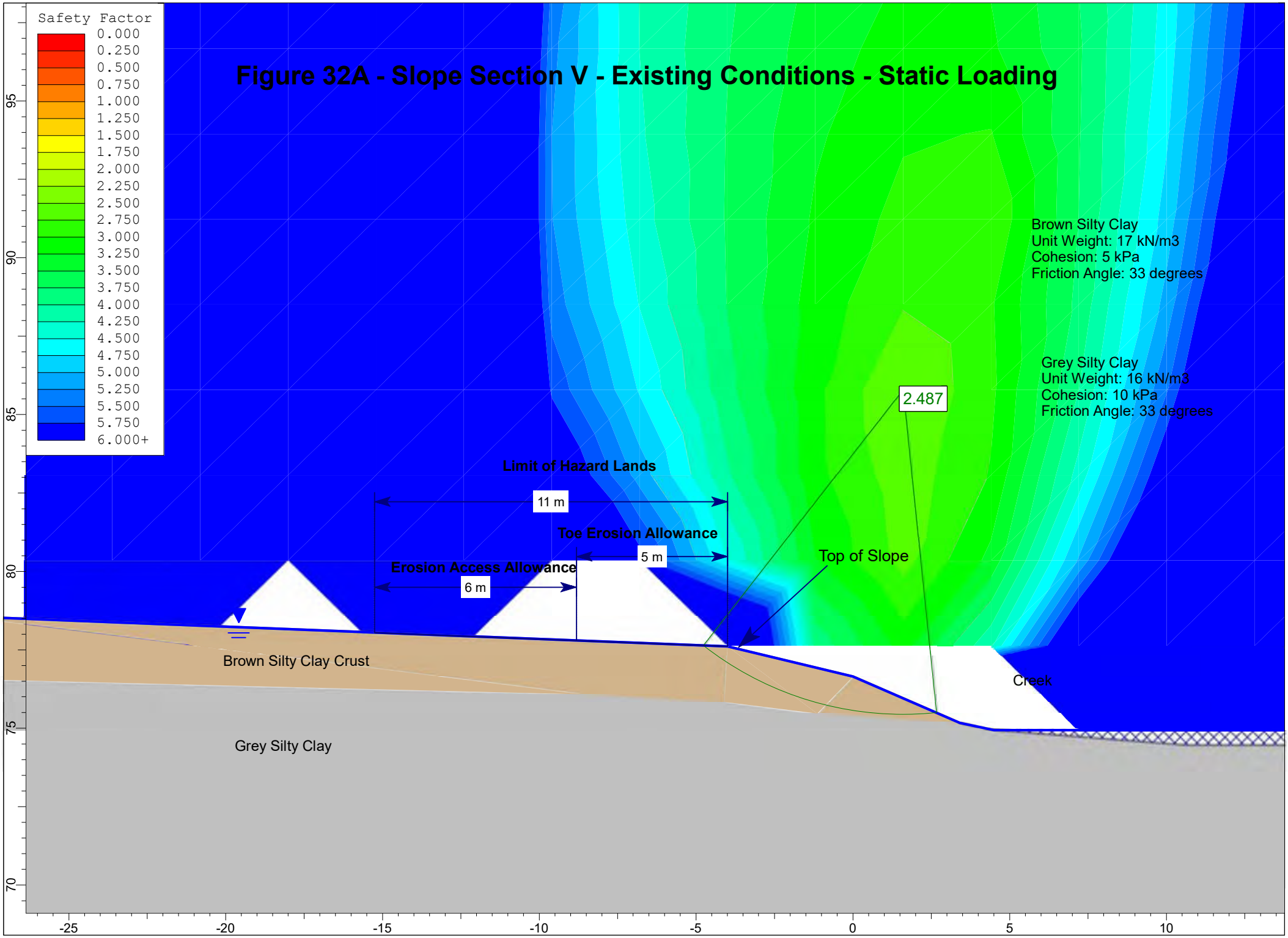


Figure 32A - Slope Section V - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
2.487
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Creek
Grey Silty Clay
95
90
85
80
75
70
-25
-20
-15
-10
-5
0
5
10

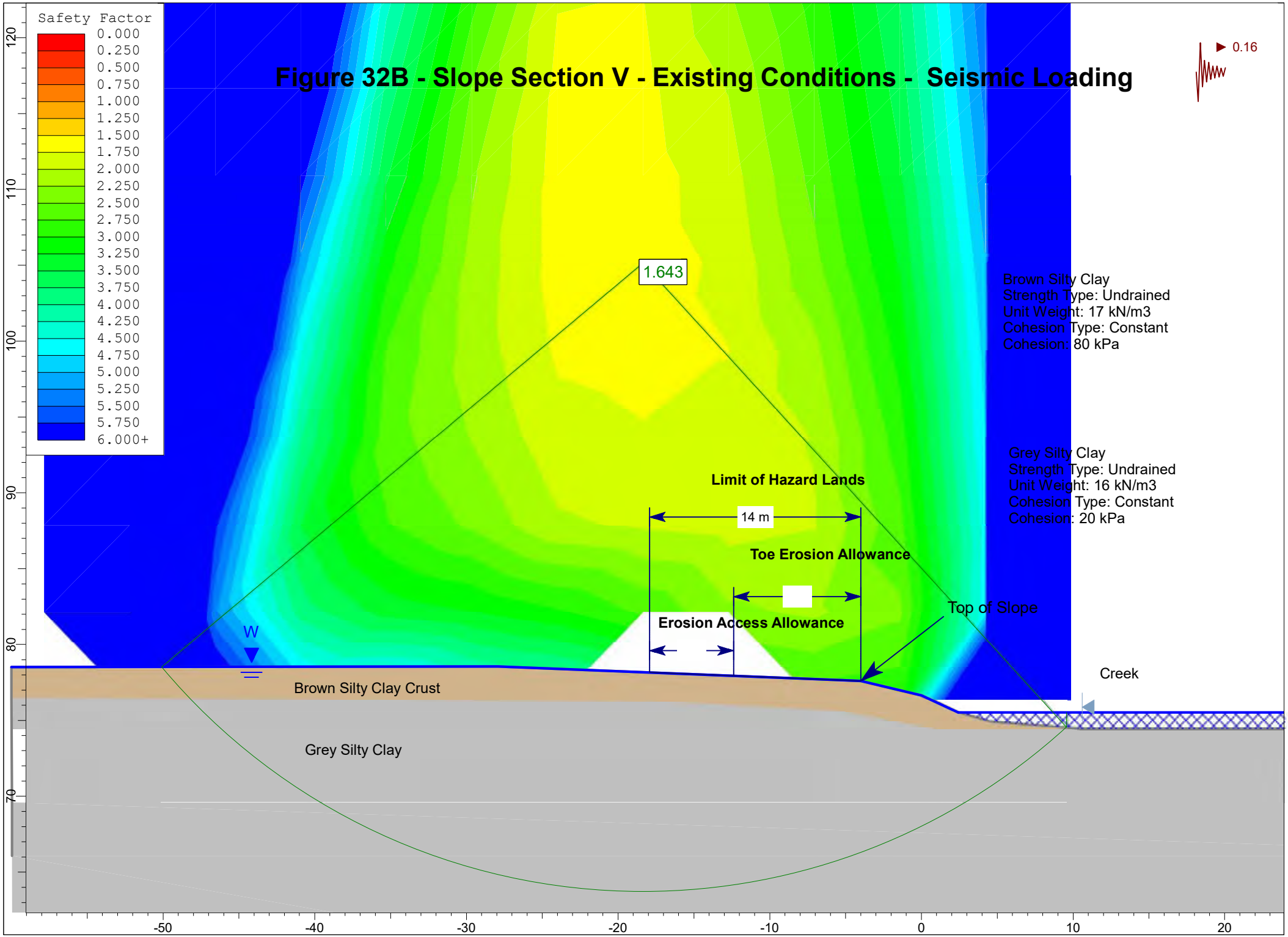


Figure 32B - Slope Section V - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
1.643
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Top of Slope
W
Creek
Brown Silty Clay Crust
Grey Silty Clay
120
110
100
90
80
70
-50
-40
-30
-20
-10
0
10
20

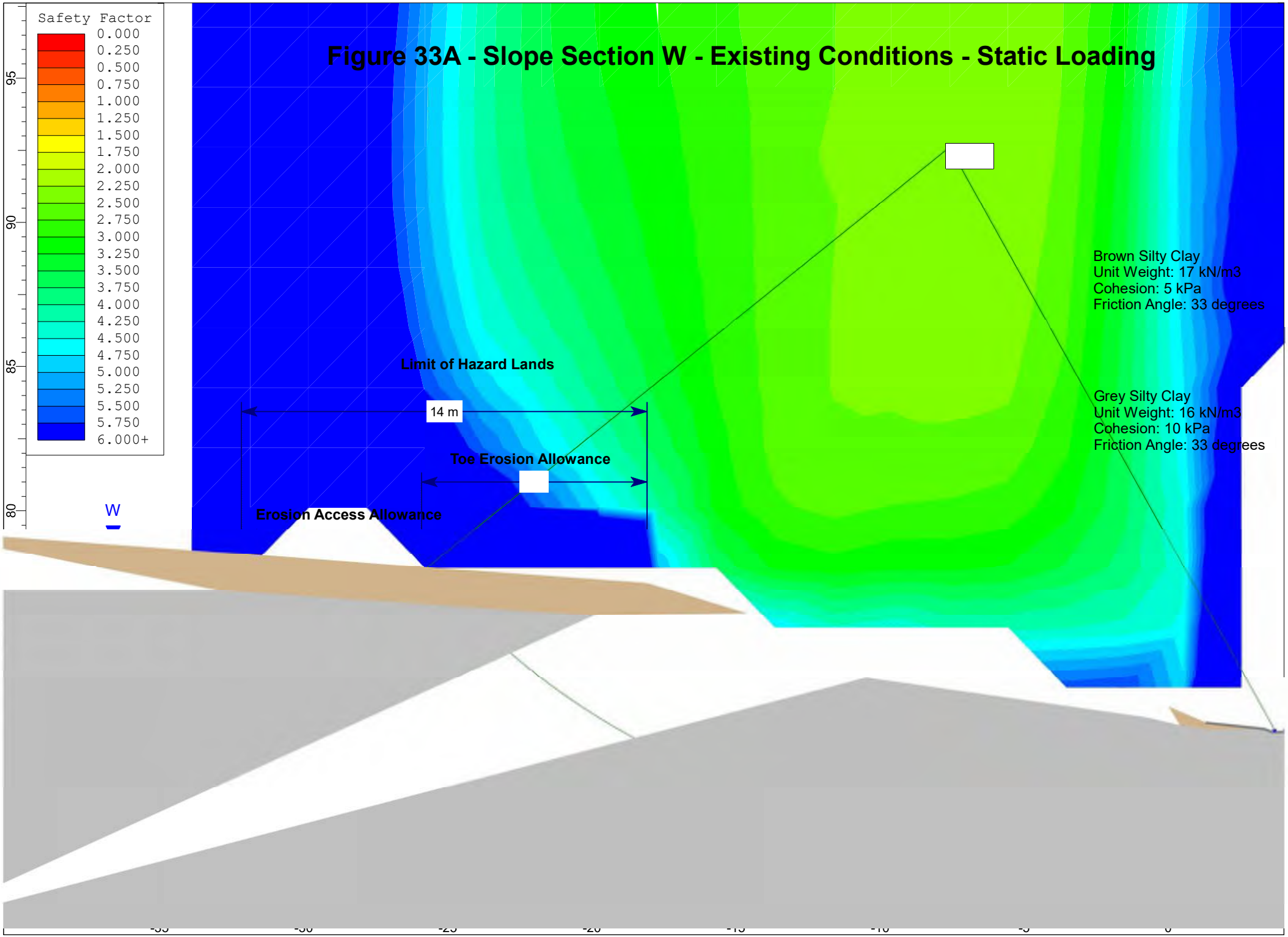


Figure 33A - Slope Section W - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
95
90
85
80
W
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees

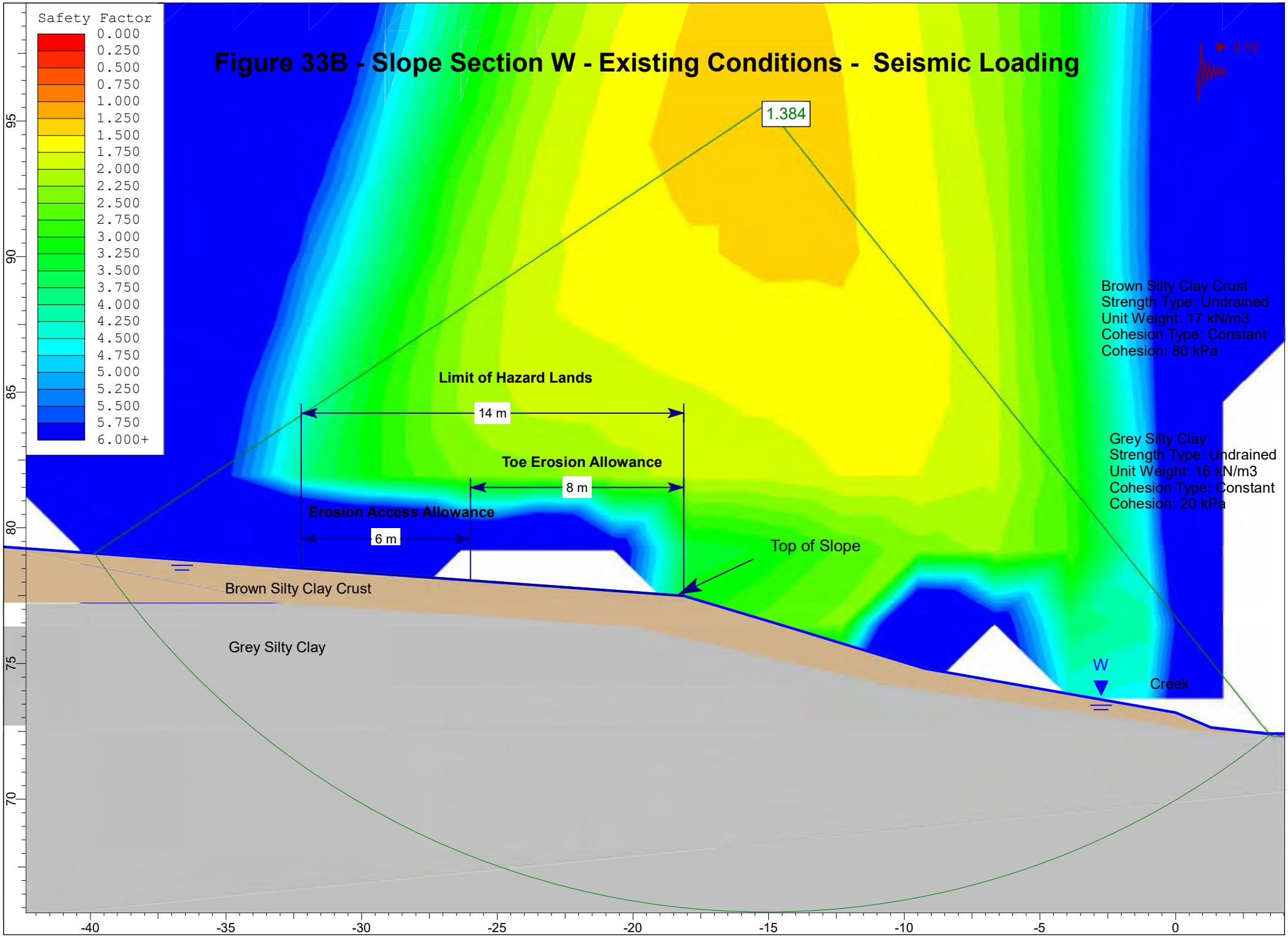


Figure 33B - Slope Section W - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.384
0.16
Limit of Hazard Lands
14 m
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Brown Silty Clay Crust
Grey Silty Clay
W
Creek
95
90
85
80
75
70
-40
-35
-30
-25
-20
-15
-10
-5
0

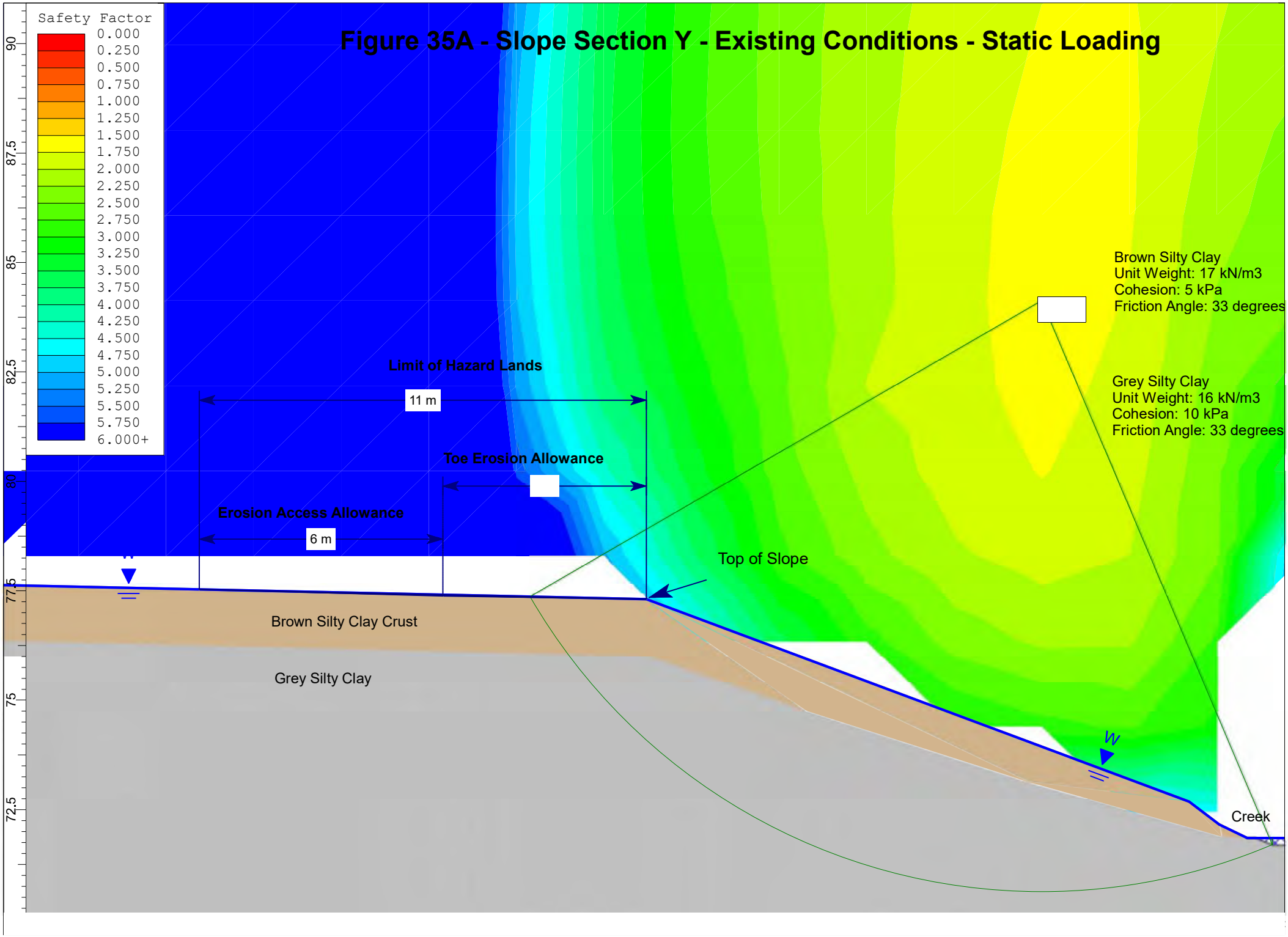


Figure 35A - Slope Section Y - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
90
87.5
85
82.5
80
77.5
75
72.5
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
11 m
Toe Erosion Allowance
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek

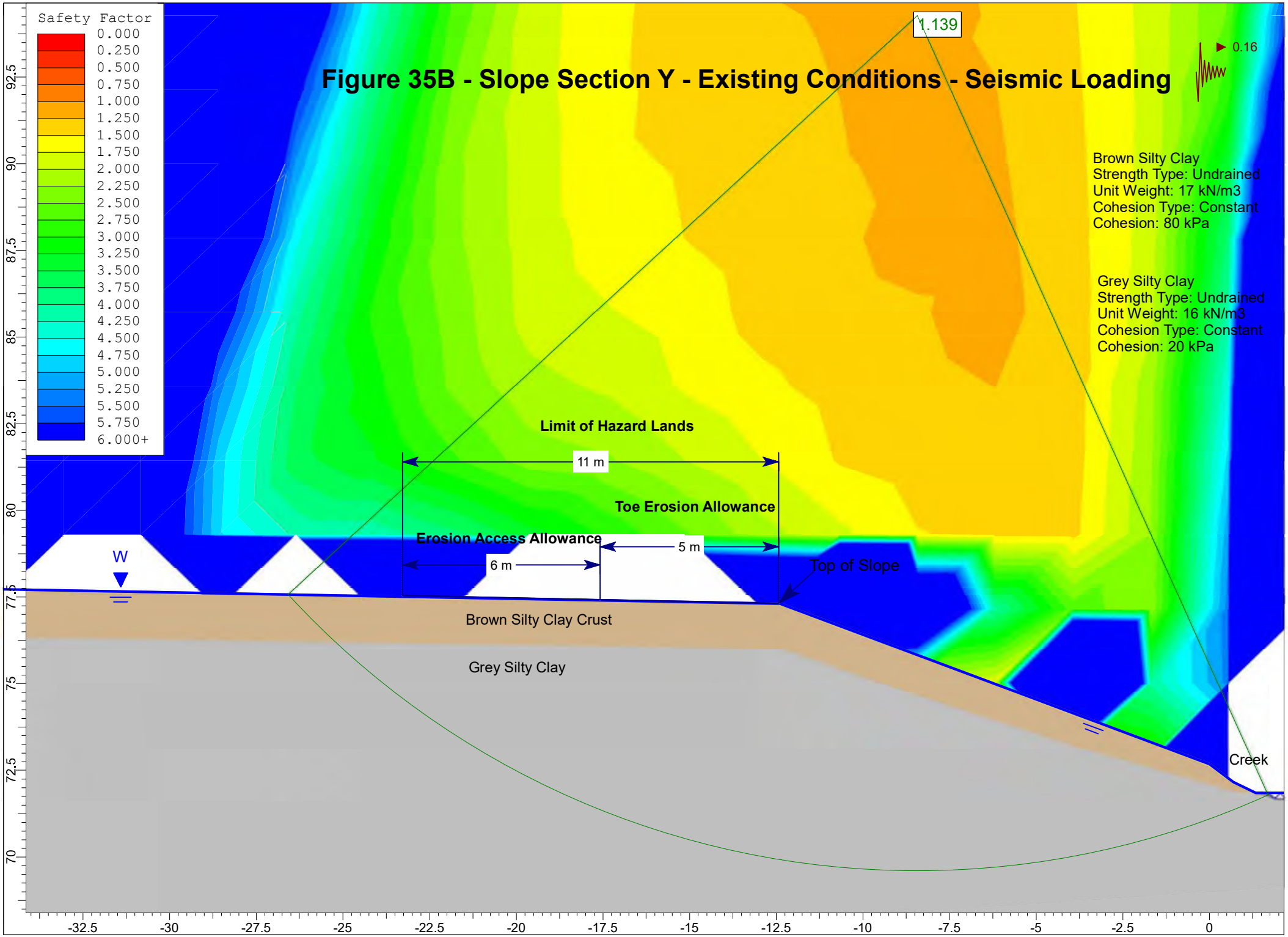


Figure 35B - Slope Section Y - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
1.139
0.16
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
11 m
Toe Erosion Allowance
Erosion Access Allowance
5 m
6 m
Top of Slope
W
Brown Silty Clay Crust
Grey Silty Clay
Creek
92.5
90
87.5
85
82.5
80
77.5
75
72.5
70
-32.5
-30
-27.5
-25
-22.5
-20
-17.5
-15
-12.5
-10
-7.5
-5
-2.5
0

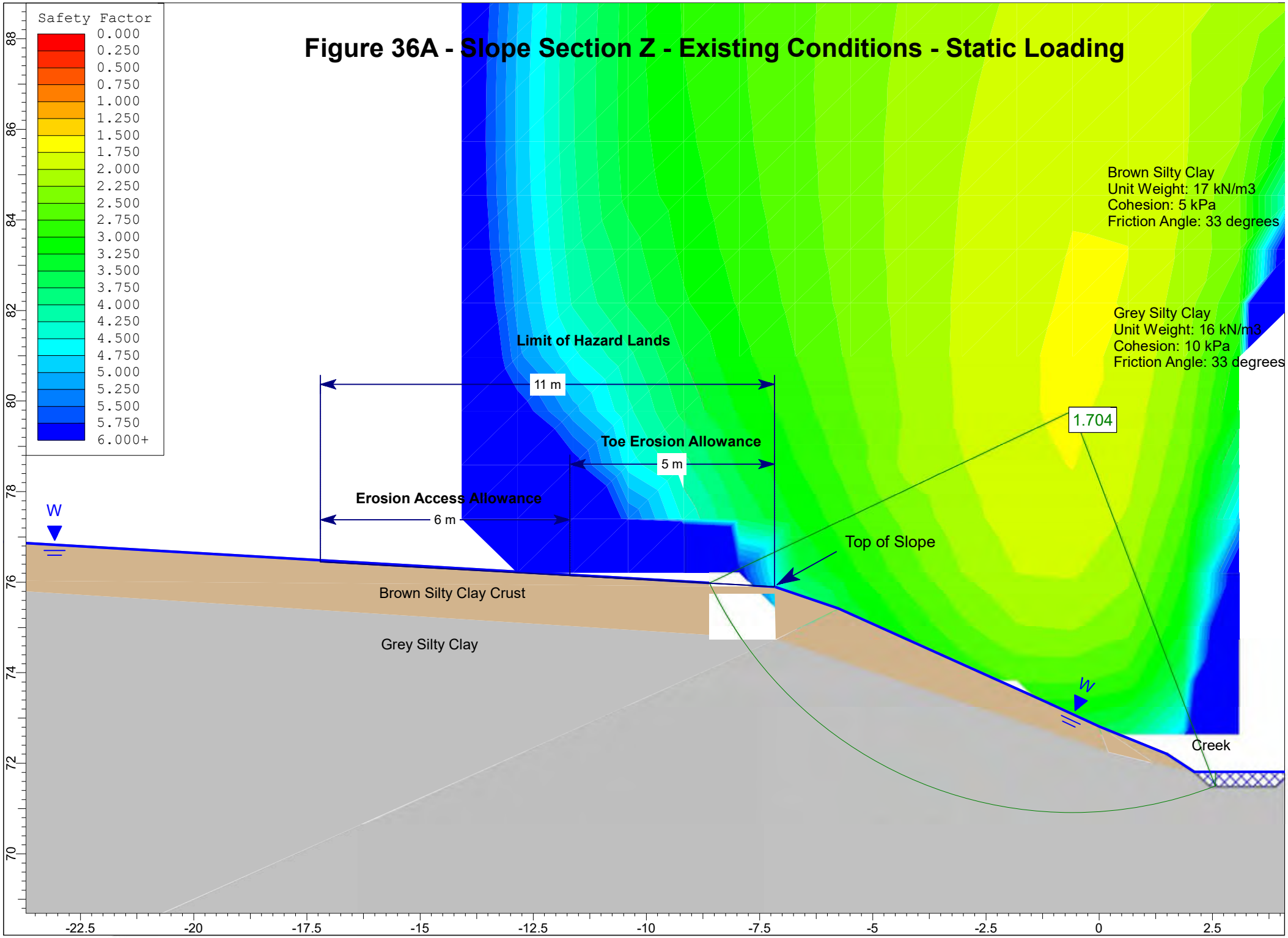


Figure 36A - Slope Section Z - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
1.704
W
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
W
Creek
88
86
84
82
80
78
76
74
72
70
-22.5
-20
-17.5
-15
-12.5
-10
-7.5
-5
-2.5
0
2.5

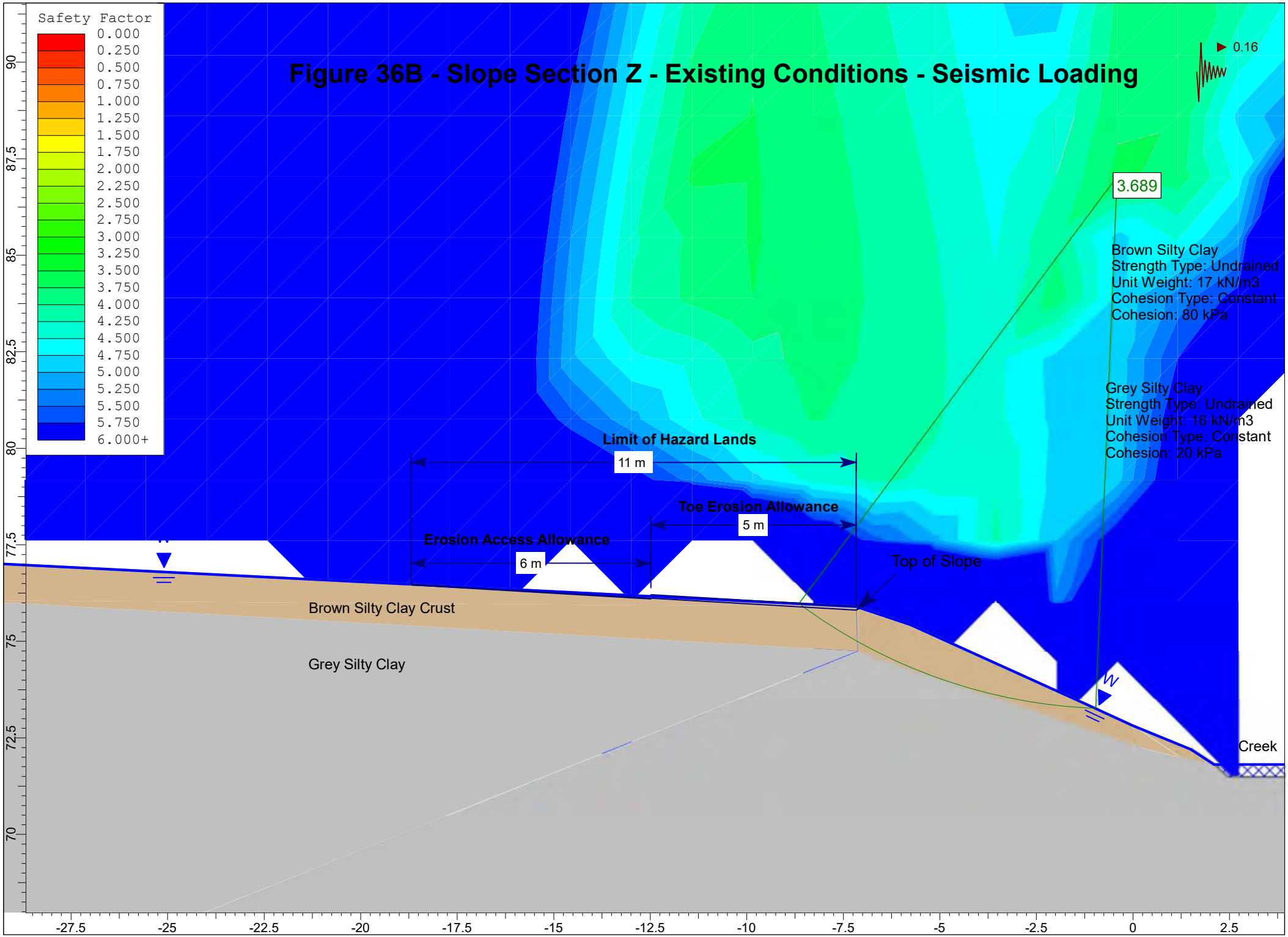


Figure 36B - Slope Section Z - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
3.689
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Limit of Hazard Lands
11 m
Toe Erosion Allowance
5 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
90
87.5
85
82.5
80
77.5
75
72.5
70
-27.5
-25
-22.5
-20
-17.5
-15
-12.5
-10
-7.5
-5
-2.5
0
2.5

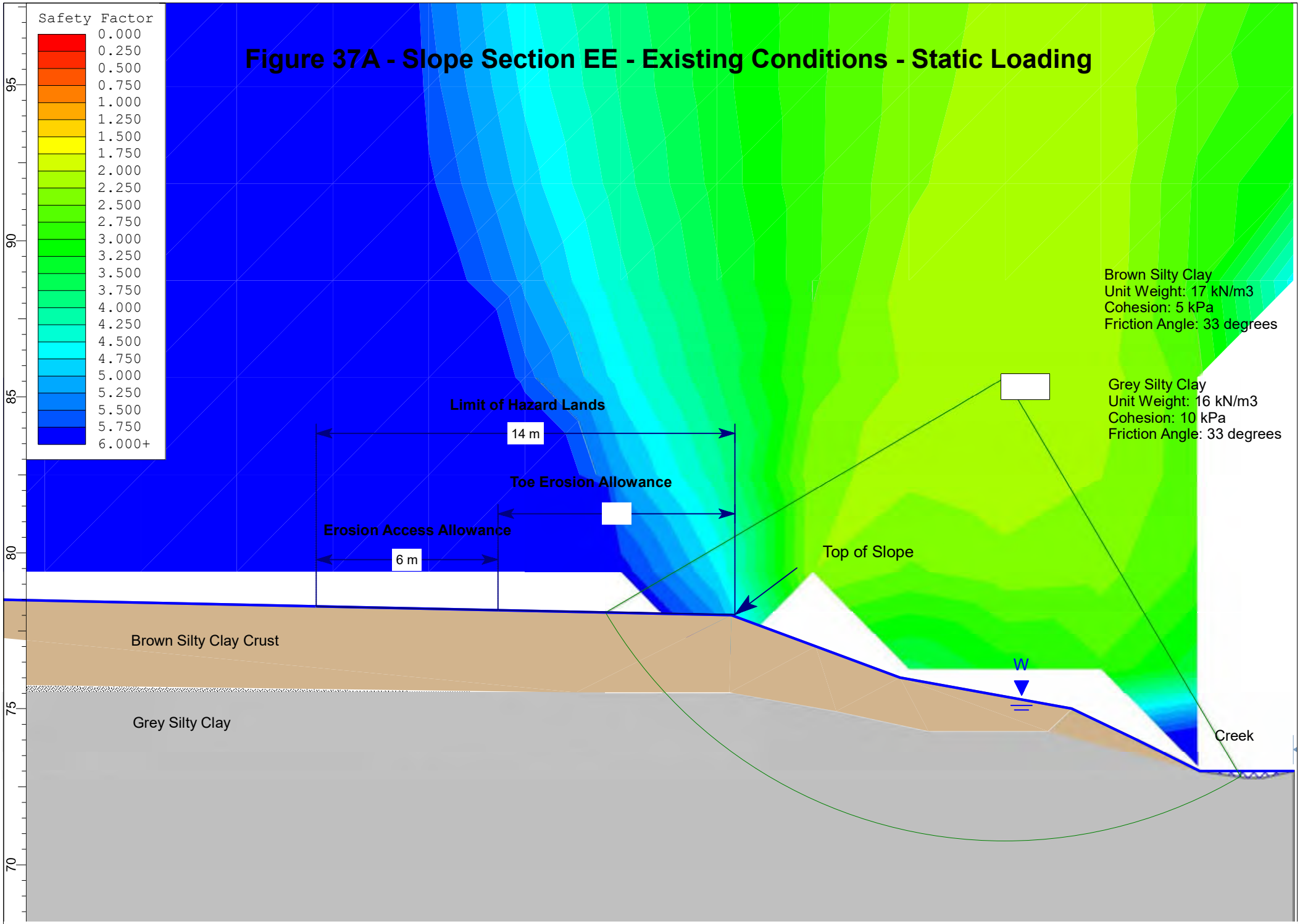


Figure 37A - Slope Section EE - Existing Conditions - Static Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
95
90
85
80
75
70
Brown Silty Clay
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
Limit of Hazard Lands
14 m
Toe Erosion Allowance
Erosion Access Allowance
6 m
Top of Slope
W
Brown Silty Clay Crust
Grey Silty Clay
Creek

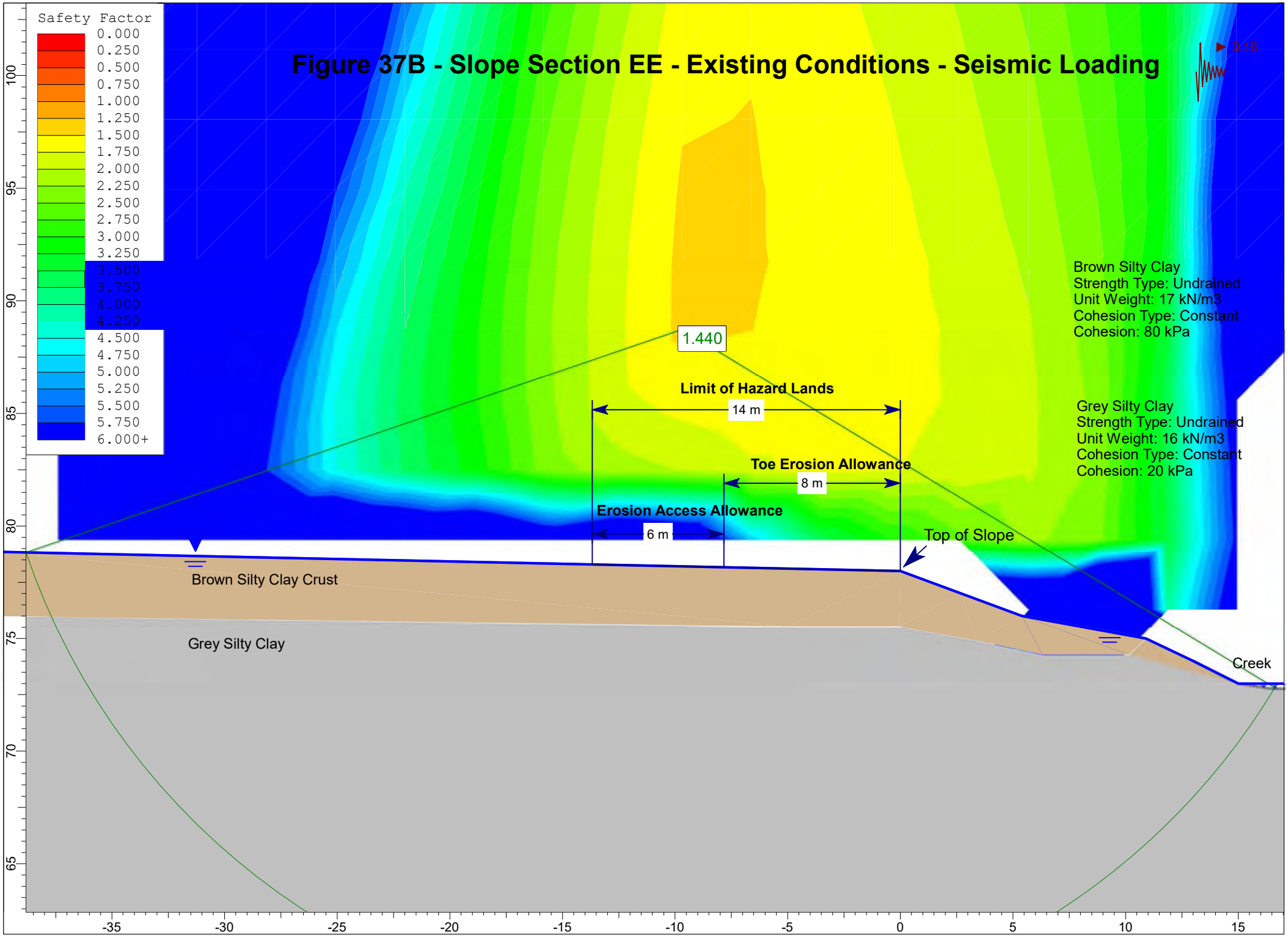


Figure 37B - Slope Section EE - Existing Conditions - Seismic Loading
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
1.440
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion Type: Constant
Cohesion: 80 kPa
Limit of Hazard Lands
14 m
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion Type: Constant
Cohesion: 20 kPa
Toe Erosion Allowance
8 m
Erosion Access Allowance
6 m
Top of Slope
Brown Silty Clay Crust
Grey Silty Clay
Creek
100
95
90
85
80
75
70
65
-35
-30
-25
-20
-15
-10
-5
0
5
10
15

Photos from Site Visits – June to August 2022

Photo 1: Area of Section A facing west and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees. No notable erosion was observed in this area. The area of Section A was further observed to have a slope height of 2 m and an approximate steepness of 2.1H:1V.

Photo 2: Area of Section B and facing east. The slope face was observed to be heavily vegetated with brush and mature trees. Some minor erosion was observed along the toe of the slope consisting of exposed bare soil at the water level surface.

Photo 3: Area of Section E and facing south and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush, small and mature trees. Some portions of the slope face near the water surface were observed to lack mature vegetation and consist of almost bare soil. The area of Section E was further observed to have a slope height of 2.1 m and an approximate steepness of 1.7H:1V.

Photo 4: Area of Section F facing north and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees on the abutting table lands. No notable erosion was observed in this area. The area of Section F was further observed to have a slope height of 1.6 m and an approximate steepness of 2.7H:1V.

Photo 5: Area of Section H facing east and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush. Signs of previous slip surfaces assumed to have been caused by erosion were observed in this area, however, vegetation appeared established in the affected slope face. The area of Section H was further observed to have a slope height of 1.5 m and an approximate steepness of 1.1H:1V.

Photo 6: Area of Section K facing west and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees located on the slope and the adjacent golf course. No notable erosion was observed in this area.

Photo 7: Area of Section L facing east and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush, mature trees, with agricultural land on the abutting table lands. No notable erosion was observed in this area. The area of Section L was further observed to have a slope height of 0.5 m and an approximate steepness of 1.0H:1V.

Photo 8: Area of Section N facing northwest and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees. No notable erosion was observed in this area. The area of Section N was further observed to have a slope height of 0.5 m and an approximate steepness of 1.3H:1V.

Photo 9: Area of Section O, facing west and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees. The toe of the slope, which generally consisted of the banks edge, was observed to consist of bare soil which indicated some erosion was present throughout this area. The area of Section O was further observed to have a slope height of 0.5 m and an approximate steepness of 0.8H:1V.

Photo 10: Area of Section P and facing east. The slope face was observed to be heavily vegetated with brush and some mature trees on the slope face and abutting table lands, respectively. Signs of erosion consisting of bare soil with lack of mature vegetation was observed along some portions of the toe of the slope.

Photo 11: Area of Section Q, facing east and located along the Smith-Gooding municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees. The toe of slope for some portions of the channel appeared to consist of a bare soil surface at the observed water level. Further, previous slip surface slough was observed at the toe of slope, however, the remaining slope face was observed to be covered in mature vegetation. The area of Section P was further observed to have a slope height of 3.0 m and an approximate steepness of 3.5H:1V.

Photo 12: Area of Section R and facing. The slope face was observed to be heavily vegetated with brush and mature trees. No notable erosion was observed in this area. The area of Section O was further observed to have a slope height of 0.9 m and an approximate steepness of 0.9H:1V.

Photo 13: Area of Section U facing south and located along a small ditch northeast of the Johnston municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees. No erosion or water was observed throughout this area at the time of our site visit.

Photo 14: Area of Section Z and facing south. The slope face was observed to be heavily vegetated with brush and mature trees. Signs of recent active erosion consisting of bare soil along slope surfaces near the water surface were observed Sloughing or movement within the slope surfaces were not observed. The water level appeared to be stagnant at the time of our site visit.

Photo 15: Area between Section Y and Section BB and facing southwest. The slope face was observed to be heavily vegetated with brush and mature trees. The toe of slope in contact with the water level was observed to bare from recent active erosion. However, the remainder of the slope face appeared to be covered with vegetation.

Photo 16: Area of Section AA and facing southwest. The slope face was observed to be heavily vegetated with brush and mature trees. Some minor erosion was noted along the toe of the slope along bends in the watercourse alignment.

Photo 17: Area of Section DD and facing north. The slope face was observed to be heavily vegetated with brush and mature trees. Some portions of the toe of slope were observed to consist of bare soil with no mature vegetation, along with some undercutting below vegetated and unaffected portions of the watercourse alignment.

Photo 18: Area of Section EE, facing south and located along the Johnston municipal drain. The slope face was observed to be vegetated with brush, and heavily covered with mature trees. Undercutting and erosion was observed along the watercourse alignment. The undercutting and erosion generally resulted in the exposure of some tree roots and may have contributed to several trees to have fallen. The remaining slope surface appeared to be stable, however, did not have mature vegetation intact at the time of our visit.

Photo 19: Area of Section GG facing northwest and located along the Johnston municipal drain. The slope face was observed to be heavily vegetated with brush and mature trees. No notable erosion was observed in this area. The area of Section GG was further observed to have a slope height of 2.4 m and an approximate steepness of 2.4H:1V.

Photo 20: Area of Section CC and facing north. The slope face was observed to be slightly covered in vegetation and tree roots. Signs of erosion consisting of bare soil with lack of mature vegetation and undercutting along the channels edge was observed along some portions of the toe of the slope. The area of Section CC was further observed to have a slope height of 4.1 m and an approximate steepness of 6.6H:1V. (Photo taken October 2022)

Photo 21: Area south of Section W and facing south. The slope face was observed to be covered with brush and mature trees. Signs of erosion consisting of bare soil with lack of mature vegetation and undercutting along the channels edge was observed along some portions of the toe of the slope. (Photo taken October 2022)

Photo 22: Area west of Section BB and facing southwest. The slope face was observed to be surfaced with vegetation consisting of brush and mature trees. Small slip surfaces were observed in proximity to the watercourse. Further, the toe of slope in proximity to the slip surfaces were observed to consist of bare soil lacking mature vegetation. The remainder of the slope surface appeared to be stable and be surfaced with mature vegetation (Photo taken October 2022).

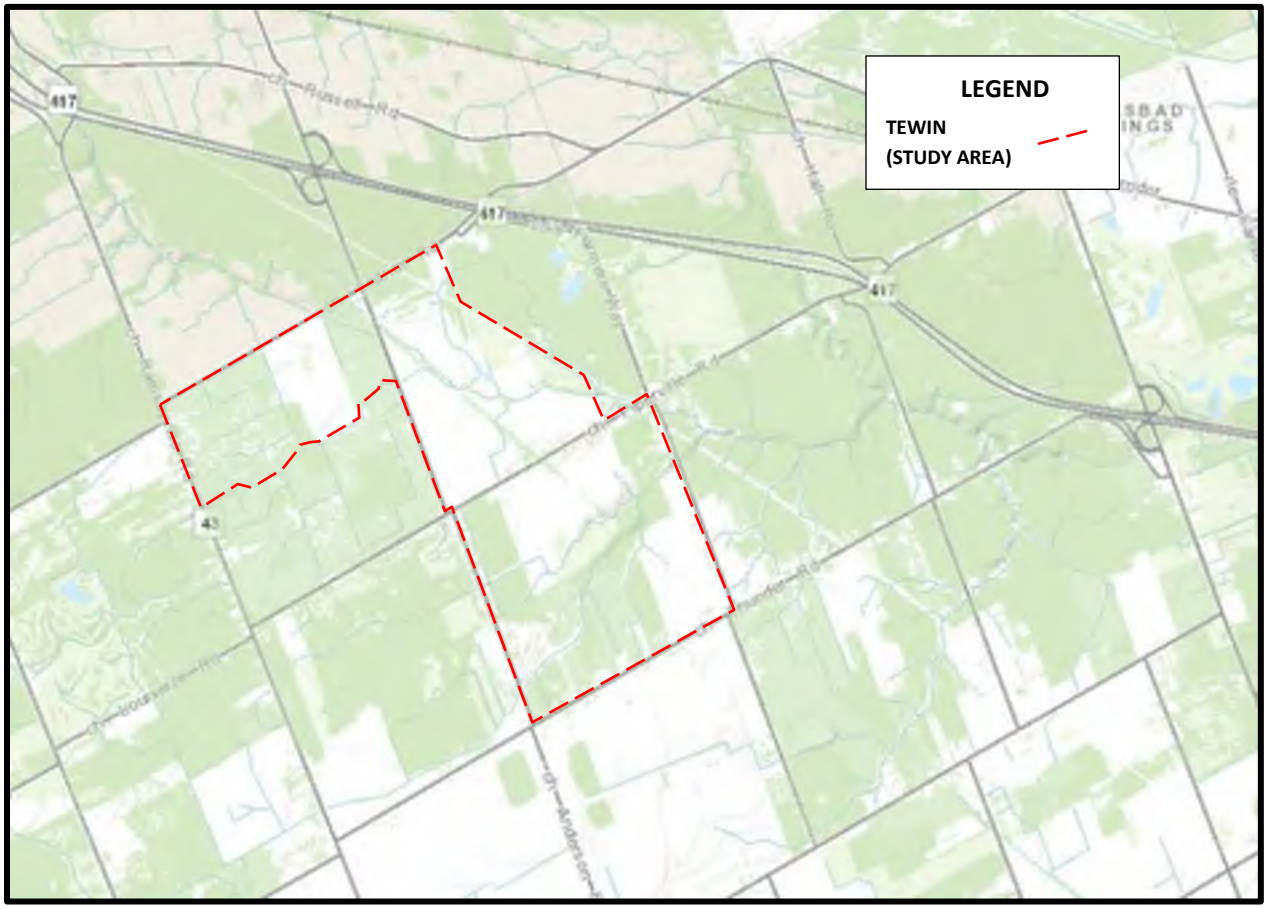


FIGURE 38

KEY PLAN

PATERSON GROUP

LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION (PREVIOUS INVESTIGATION, PATERSON REPORT PG2466)
- CONE PENETRATION TEST LOCATION
- 75.71 GROUND SURFACE ELEVATION(m)
- (62.23) PRACTICAL REFUSAL TO AUGERING/DCPT ELEVATION(m)
- {59.97} PRACTICAL REFUSAL TO PUSHING DCPT ELEVATION(m)
- [27.41] BEDROCK SURFACE ELEVATION
- SITE BOUNDARY - SECONDARY PLAN DEVELOPABLE AREA

CONTOURS AND TOPOGRAPHIC MAPPING WAS PROVIDED BY DAVID SCHAEFFER ENGINEERING LTD.

ELEVATIONS AT TEST HOLES ARE REFERENCED TO A GEODETIC DATUM.

0 250 500 750 1000 1250 1500m

PG5827-5

PG5827-6

PG5827-7

PG5827-8

PG5827-9

NO.	REVISIONS	DATE	INITIAL
1	BH25-22, BH70-22, BH73-22 TO BH77-22 ADDED	05/12/2022	DP

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7S9
TEL: (613) 226-7381

TAGGART INVESTMENTS AND ALGONQUINS OF ONTARIO

TEWIN LANDS

OTTAWA, ONTARIO

Title:

TEST HOLE LOCATION PLAN

Scale:	1:20000
Drawn by:	RCG
Checked by:	DP
Approved by:	DJG
Date:	07/2022
Report No.:	PG5827-1
Dwg. No.:	PG5827-1
Revision No.:	1

p:\autocad drawings\geotechnical\pg58xx\pg5827\pg5827-1 tlhp latest (jan 2023).dwg

LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION (PREVIOUS INVESTIGATION, PATERSON REPORT PG2466)
- 75.71 — GROUND SURFACE ELEVATION(m)
- <<0.44>> — INTERMEDIATE SAND LAYER THICKNESS(m)
- ((0.75)) — SURFICIAL SAND LAYER THICKNESS(m)
- 0.75 — SAND LAYER THICKNESS CONTOUR(m)
- TEWIN LANDS (STUDY AREA)

CONTOURS AND TOPOGRAPHIC MAPPING WAS PROVIDED BY DAVID SCHAEFFER ENGINEERING LTD.

ELEVATIONS AT TEST HOLES ARE REFERENCED TO A GEODETIC DATUM.

0 250 500 750 1000 1250 1500m

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7S9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

TAGGART INVESTMENTS AND ALGONQUINS OF ONTARIO

TEWIN LANDS

OTTAWA, ONTARIO

Title:

SURFICIAL SAND LAYER THICKNESS CONTOUR PLAN

Scale: 1:20000	Date: 07/2022
Drawn by: RCG	Report No.: PG5827-1
Checked by: DP	PG5827-3
Approved by: DJG	Revision No.:

p:\autocad drawings\geotechnical\pg58xx\pg5827\drawing for nick\pg5827-1 thlp latest (jan 2023).dwg

LEITRIM ROAD

ANDERSON ROAD

BH 9-22
79.24

BH 12-22
80.02
{66.52}

BH 1-22
79.73

BH 8-22
80.51

BH 7-22
81.49

BH 13-22
80.97

BH 14-22
81.61

BH 15-22
81.28

BH 16-22
81.30

BH 2
79.62

BH 4-22
78.95

BH 20-22
78.65

BH 3-22
79.60

BH 2-22
79.64

BH 21-22
79.17

BH 22-22
78.70

BH 31-22
78.48

BH 32-22
77.94
{66.92}

BH 4
79.97

BH 4A
79.97

BH 23-22
79.74
[27.41]

MEANDER BELT WIDTH
(GEO-MORPHIX)

TOP OF SLOPE

LIMIT OF HAZARD LANDS

A

B

C

D

E

F

G

H

LL

1

2

3

4

5

LOT 20

LOT 19

LOT 18

LOT 17

LOT 16

CONCESSION

LIMIT OF HAZARD LANDS DEPICTED CROSSING ACROSS EXISTING DITCH BASED ON ASSUMPTION DITCH WOULD BE IN-FILLED AS PART OF FUTURE DEVELOPMENT CONSIDERATIONS. DITCH IN-FILL WORKS CONSIDERED AT THAT TIME TO BE REVIEWED AND APPROVED BY PATERSON WITH RESPECT TO RECOMMENDATIONS PROVIDED AS PART OF THE CURRENT GEOTECHNICAL REPORT AND WITH RESPECT TO OUR RECOMMENDED LIMIT OF HAZARD LANDS SETBACK.

LEGEND:

HH	SLOPE STABILITY CROSS SECTION
19	PHOTO LOCATION
	BOREHOLE WITH MONITORING WELL LOCATION
	BOREHOLE LOCATION (PREVIOUS INVESTIGATION, PATERSON REPORT PG2466)
75.71	GROUND SURFACE ELEVATION(m)
(62.23)	PRACTICAL REFUSAL TO AUGERING/DCPT ELEVATION(m)
{59.97}	PRACTICAL REFUSAL TO PUSHING DCPT ELEVATION(m)
[27.41]	BEDROCK SURFACE ELEVATION(m)
	SITE BOUNDARY - SECONDARY PLAN DEVELOPABLE AREA

BH 5
80.39

NOTE:

SETBACK LINES IDENTIFIED WITH DASHED PATTERN ARE CONSIDERED APPLICABLE FROM THEIR RESPECTIVE PERSPECTIVE, HOWEVER, ARE EXCEEDED BY A GREATER SETBACK IDENTIFIED BY A SOLID LINE.

SCALE: 1:3000

0 25 50 75 100 125 150 200m

9 AURIGA DRIVE
OTTAWA, ON
K2E 7S9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
1	ADDED MEANDER BELT WIDTH BY GEO-MORPHIX	27/09/2024	DP

TAGGART INVESTMENTS AND ALGONQUINS OF ONTARIO

TEWIN LANDS

Title:

LIMIT OF HAZARD LANDS PLAN

Stamp:

Scale:	1:3000
Drawn by:	NFRV
Checked by:	OM
Approved by:	DJG
Date:	09/2022
Report No.:	PG5827-1
Drawing No.:	PG5827-5
Revision No.:	1

LEITRIM ROAD

LIMIT OF HAZARD LANDS

TOP OF SLOPE

I

BH 18-22
78.15
{64.31}

MEANDER BELT WIDTH
(GEO-MORPHIX)

MEANDER BELT WIDTH
(GEO-MORPHIX)

LIMIT OF HAZARD LANDS

TOP OF SLOPE

J

BH 19-22
78.46

80.35
80.24
80.69
80.26
80.30
80.79
80.35

9 AURIGA DRIVE
OTTAWA, ON
K2E 7S9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
1	ADDED MEANDER BELT WIDTH BY GEO-MORPHIX	27/09/2024	DP

TAGGART INVESTMENTS AND ALGONQUINS OF ONTARIO

TEWIN LANDS

Title:

LIMIT OF HAZARD LANDS PLAN

Stamp:

Scale:	1:750
Drawn by:	NFRV
Checked by:	OM
Approved by:	DJG
Date:	09/2022
Report No.:	PG5827-1
Drawing No.:	PG5827-6
Revision No.:	1

p:\autocad drawings\geotechnical\pg5827\pg5827-6 rev 01.dwg

LIMIT OF HAZARD LANDS DEPICTED CROSSING ACROSS EXISTING DITCH BASED ON ASSUMPTION DITCH WOULD BE IN-FILLED AS PART OF FUTURE DEVELOPMENT CONSIDERATIONS. DITCH IN-FILL WORKS CONSIDERED AT THAT TIME TO BE REVIEWED AND APPROVED BY PATERSON WITH RESPECT TO RECOMMENDATIONS PROVIDED AS PART OF THE CURRENT GEOTECHNICAL REPORT AND WITH RESPECT TO OUR RECOMMENDED LIMIT OF HAZARD LANDS SETBACK.

LEGEND:

- HH — SLOPE STABILITY CROSS SECTION
- 19 — PHOTO LOCATION
- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION (PREVIOUS INVESTIGATION, PATERSON REPORT PG2466)
- 75.71 — GROUND SURFACE ELEVATION(m)
- (62.23) — PRACTICAL REFUSAL TO AUGERING/DCPT ELEVATION(m)
- {59.97} — PRACTICAL REFUSAL TO PUSHING DCPT ELEVATION(m)
- [27.41] — BEDROCK SURFACE ELEVATION(m)
- SITE BOUNDARY - SECONDARY PLAN DEVELOPABLE AREA

NOTE:

SETBACK LINES IDENTIFIED WITH DASHED PATTERN ARE CONSIDERED APPLICABLE FROM THEIR RESPECTIVE PERSPECTIVE, HOWEVER, ARE EXCEEDED BY A GREATER SETBACK IDENTIFIED BY A SOLID LINE.

SCALE: 1:2000

9 AURIGA DRIVE
OTTAWA, ON
K2E 7S9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
1	ADDED MEANDER BELT WIDTH BY GEO-MORPHIX	27/09/2024	DP

TAGGART INVESTMENTS AND ALGONQUINS OF ONTARIO

TEWIN LANDS

Title:

LIMIT OF HAZARD LANDS PLAN

Stamp:

Scale:	1:2000
Drawn by:	NFRV
Checked by:	OM
Approved by:	DJG
Date:	09/2022
Report No.:	PG5827-1
Drawing No.:	PG5827-7
Revision No.:	1

BH 63-22
78.66

BH 71-22
78.48
(<48.23)

BH 14
78.76
(44.88)

BH 62-22
78.98
{67.98}

BH 64-22
78.83

BH 61-22
79.20

BH 65-22
79.14
{59.23}

BH 49-22
79.26
(68.29)

BH 59-22
79.31

BH 48-22
78.81

BH 53-22
79.48
{62.41}

BH 42-22
77.61

BH 44-22
79.37

BH 47-22
78.99
(60.70)

LIMIT OF HAZARD LANDS

TOP OF SLOPE

MEANDER BELT WIDTH (GEO-MORPHIX)

FARMERS WAY

LOT 13 CONCESSION 1 FRONT

LOT 12

LOT 14

LIMIT OF HAZARD LANDS DEPICTED CROSSING ACROSS EXISTING DITCH BASED ON ASSUMPTION DITCH WOULD BE IN-FILLED AS PART OF FUTURE DEVELOPMENT CONSIDERATIONS. DITCH IN-FILL WORKS CONSIDERED AT THAT TIME TO BE REVIEWED AND APPROVED BY PATERSON WITH RESPECT TO RECOMMENDATIONS PROVIDED AS PART OF THE CURRENT GEOTECHNICAL REPORT AND WITH RESPECT TO OUR RECOMMENDED LIMIT OF HAZARD LANDS SETBACK.

LEGEND:

HH	SLOPE STABILITY CROSS SECTION
19	PHOTO LOCATION
	BOREHOLE WITH MONITORING WELL LOCATION
75.71	GROUND SURFACE ELEVATION(m)
(62.23)	PRACTICAL REFUSAL TO AUGERING/DCPT ELEVATION(m)
{59.97}	PRACTICAL REFUSAL TO PUSHING DCPT ELEVATION(m)
[27.41]	BEDROCK SURFACE ELEVATION(m)
	SITE BOUNDARY - SECONDARY PLAN DEVELOPABLE AREA

NOTE:

SETBACK LINES IDENTIFIED WITH DASHED PATTERN ARE CONSIDERED APPLICABLE FROM THEIR RESPECTIVE PERSPECTIVE, HOWEVER, ARE EXCEEDED BY A GREATER SETBACK IDENTIFIED BY A SOLID LINE.

SCALE: 1:2000

0 25 50 75 100 125 150m

9 AURIGA DRIVE
OTTAWA, ON
K2E 7Z9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
1	ADDED MEANDER BELT WIDTH BY GEO-MORPHIX	27/09/2024	DP

TAGGART INVESTMENTS AND ALGONQUINS OF ONTARIO

TEWIN LANDS

Title:

LIMIT OF HAZARD LANDS PLAN

Stamp:

Scale:	1:2000
Drawn by:	NFRV
Checked by:	OM
Approved by:	DJG
Date:	09/2022
Report No.:	PG5827-1
Drawing No.:	PG5827-8
Revision No.:	1

p:\autocad drawings\geotechnical\pg5xxx\pg5827\pg5827-5 sht (rev 01).dwg

BH 58-22
80.92
{66.42}

BH 55-22
80.24

BH 43-22
79.91

BH 54-22
80.18

BH 46-22
80.18

BH 45-22
80.19

BH 69-22
80.47
(69.50)

LIMIT OF HAZARD LANDS

MEANDER BELT WIDTH
(GEO-MORPHIX)

TOP OF SLOPE

ANDERSON ROAD

THUNDER ROAD

GG

HH

19

9 AURIGA DRIVE
OTTAWA, ON
K2E 7S9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
1	ADDED MEANDER BELT WIDTH BY GEO-MORPHIX	27/09/2024	DP

TAGGART INVESTMENTS AND ALGONQUINS OF ONTARIO

TEWIN LANDS

Title:

LIMIT OF HAZARD LANDS PLAN

Stamp:

Scale:	1:2000
Drawn by:	NFRV
Checked by:	OM
Approved by:	DJG
Date:	09/2022
Report No.:	PG5827-1
Drawing No.:	PG5827-9
Revision No.:	1

p:\autocad drawings\geotechnical\pg5827\pg5827-9 (rev 1).dwg