

CAPE BRETON COUNTY**Sample Number**

CP-94

TOPOGRAPHICAL SHEET: 11K/01**LOCATION:** Victoria Mines, along the eastern side of Sydney Harbour at Petries Point (Fig. 12).**UTM:** 718810 E
5125200 N**GEOLOGICAL UNIT:** Morien Series, Pennsylvanian age**DESCRIPTION:** Medium to dark grey, fissile shale showing iron carbonate stains. Overlying and underlying the shale is a grey sandstone. The outcrop extends for a length of 15 m.**ATTITUDE OF BEDDING:** 250° /34° NW**SAMPLE INTERVAL:** Grab sample**TYPE OF MATERIAL:** Shale**UNFIRED CHARACTERISTICS:** Light grey, slightly calcareous shale. Good workability. Plastic. Water of plasticity 18.8%. Safe drying. Air shrinkage 4.4%. Modulus of rupture 114 p.s.i. Benzidine test positive.**P.C.E.:** 9-**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	2.62	9.73	Light moderate reddish brown	Very hard
04	4.37	6.65	Moderate reddish brown	Very hard to steel hard
02	6.10	4.19	Moderate reddish brown	Steel hard

POTENTIAL USES: Structural products

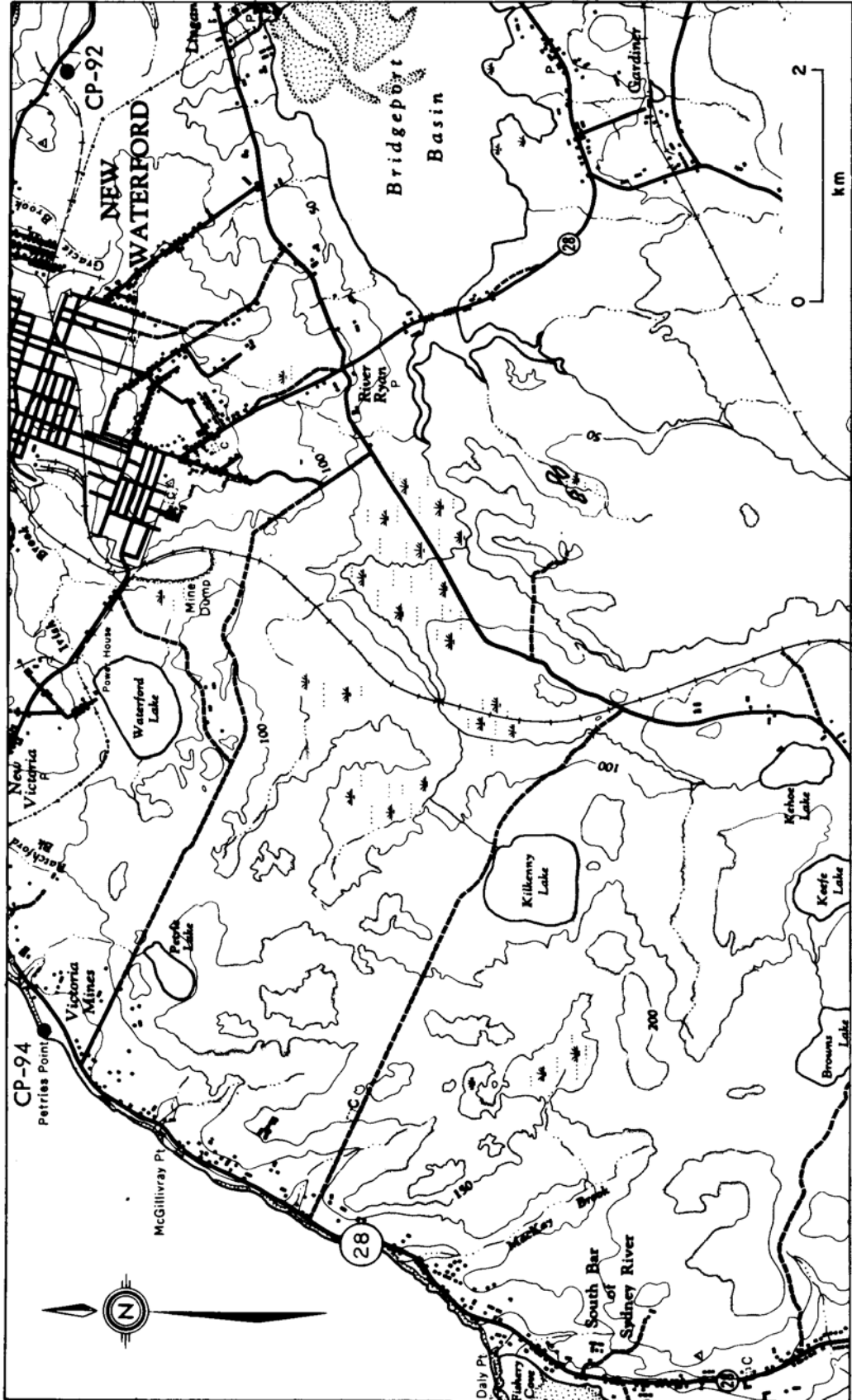


Figure 12. Location map for samples CP-92, 94 (New Waterford)

Ref. Map 11-K-1

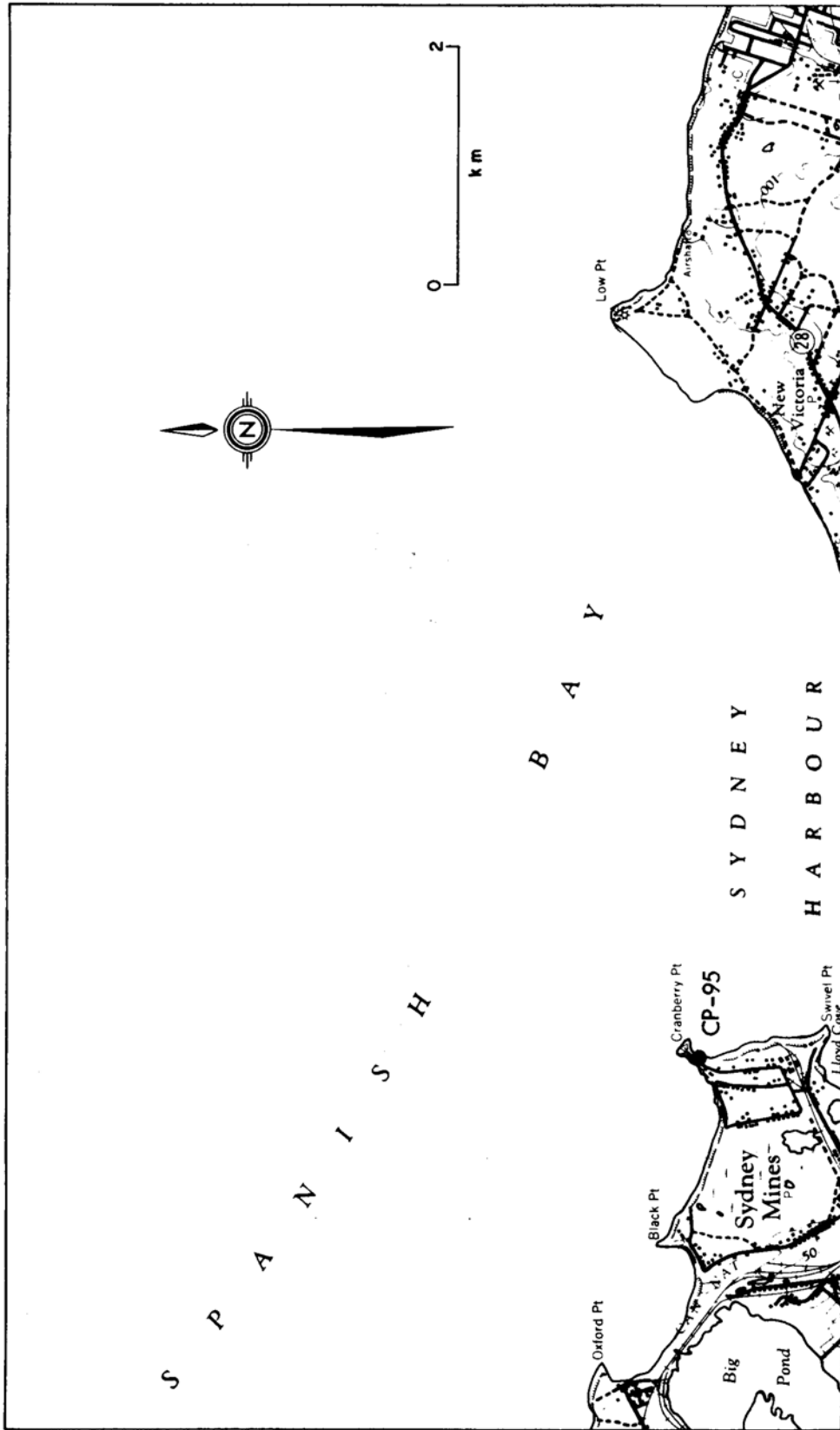
CAPE BRETON COUNTY**Sample Number**

CP-95

TOPOGRAPHICAL SHEET: 11K/08**LOCATION:** Exposure approximately 15 m from shore on the eastern side of Cranberry Point (Fig. 13).**UTM:** 715100 E
5126680 N**GEOLOGICAL UNIT:** Pleistocene clay, Quaternary age**DESCRIPTION:** Mottled, reddish-grey clay containing carbonaceous material. The clay exhibits extensive iron carbonate stains, and has a minimum thickness of 30 cm.**ATTITUDE OF BEDDING:** Essentially horizontal**SAMPLE INTERVAL:** Grab sample**TYPE OF MATERIAL:** Clay**UNFIRED CHARACTERISTICS:** Greyish-orange, noncalcareous clay. Very good workability. Very plastic. Water of plasticity 25.6%. Safe drying. Air shrinkage 6.7%. Modulus of rupture 341 p.s.i. Benzidine test negative.**P.C.E.:** 4-**FIRED CHARACTERISTICS:**

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
06	4.85	6.01	Moderate reddish orange	Steel hard
04	7.08	1.05	Moderate reddish brown	Steel hard
02	8.60	0.01	Dark reddish brown	Steel hard

POTENTIAL USES: Earthenware, artware and structural products



Ref. Map II-K-8

Figure 13. Location map for sample CP-95 (Sydney Mines)

CAPE BRETON COUNTY

Sample Number
CP-97

TOPOGRAPHICAL SHEET: 11K/O2

LOCATION: Big Beach, in the bed of a small stream flowing through the property of Mr. Daniel Murray, approximately 760 m southwest of Longbeach Point (Fig. 14).

UTM: 678480 E
5096950 N

GEOLOGICAL UNIT: Clay, Quaternary age

DESCRIPTION: Brown clay containing extensive carbonaceous material.

ATTITUDE OF BEDDING: Horizontal

SAMPLE INTERVAL: Grab sample

TYPE OF MATERIAL: Clay

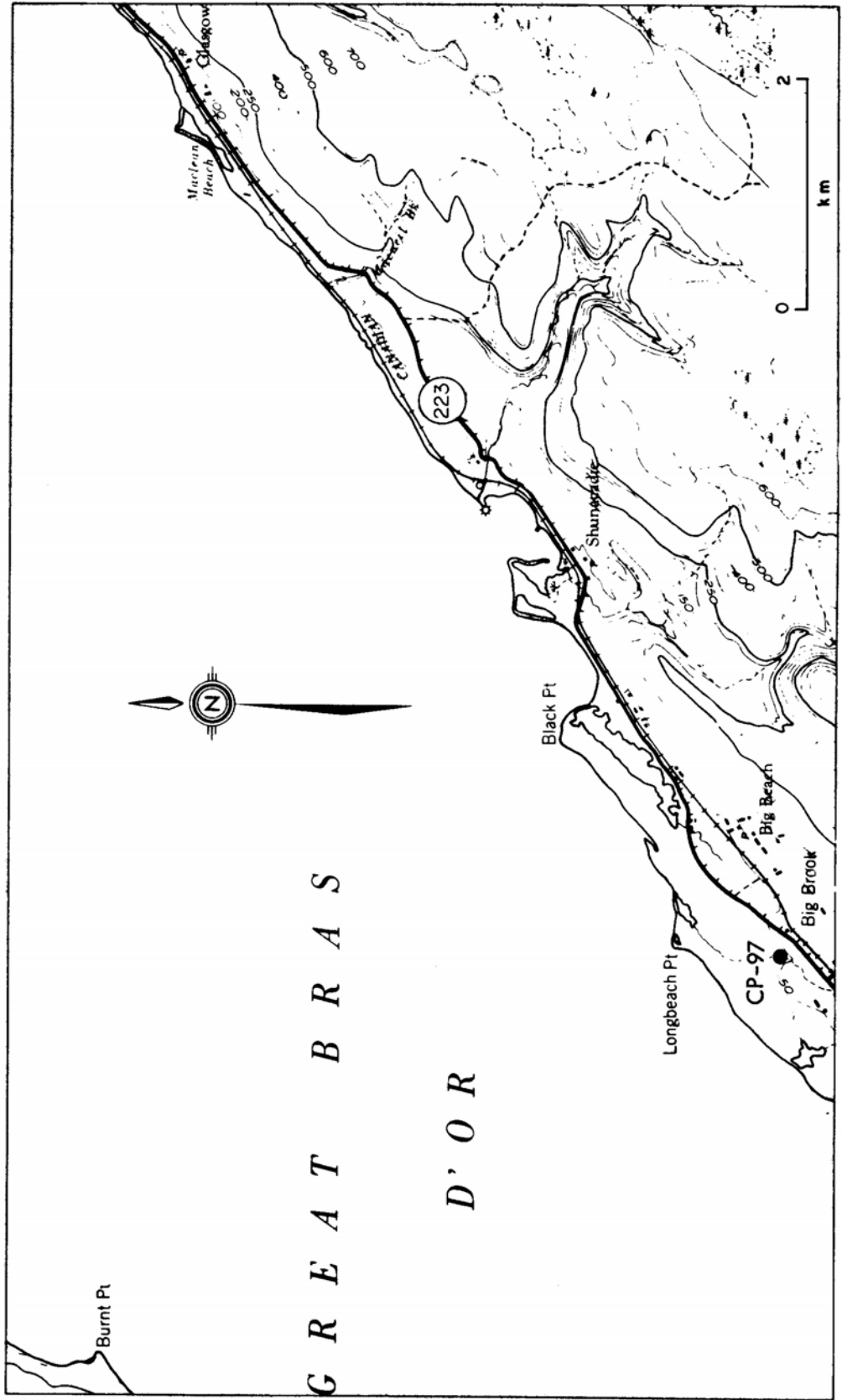
UNFIRED CHARACTERISTICS: Pale reddish-brown, noncalcareous, sandy clay. Poor workability. Poorly plastic. Water of plasticity 31.2%. Safe drying. Air shrinkage 5.1%. Benzidine test negative.

P.C.E.: 5-6

FIRED CHARACTERISTICS:

Cone No.	Fired Shrinkage %	Absorption %	Colour	Hardness
02	2.72	13.14	Pale reddish brown	Hard
1	4.93	13.31	Pale reddish brown	Hard
3	6.16	11.09	Moderate red	Hard

POTENTIAL USES: None



Ref. Map 11-K-2

Figure 14. Location map for sample CP-97 (Big Beach)