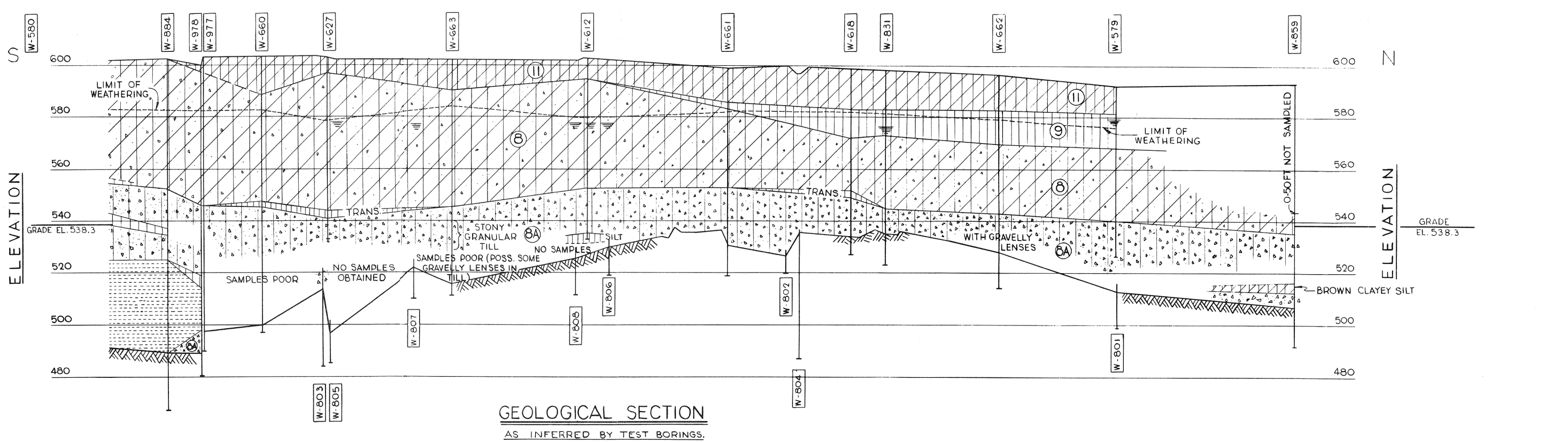
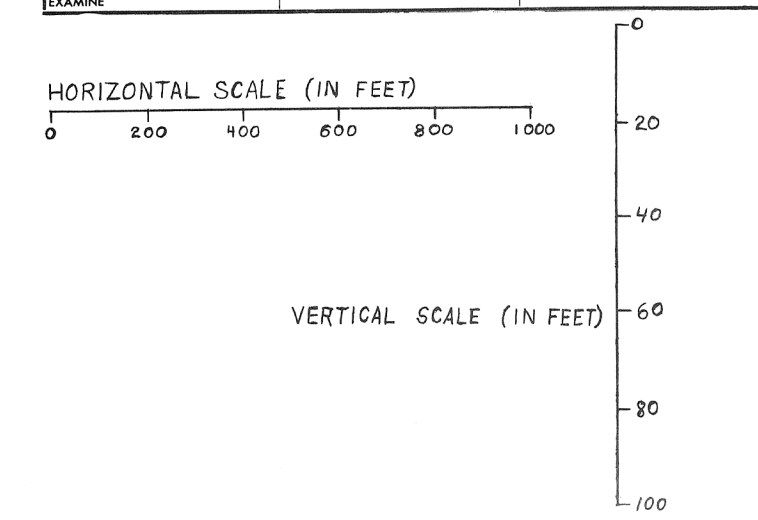
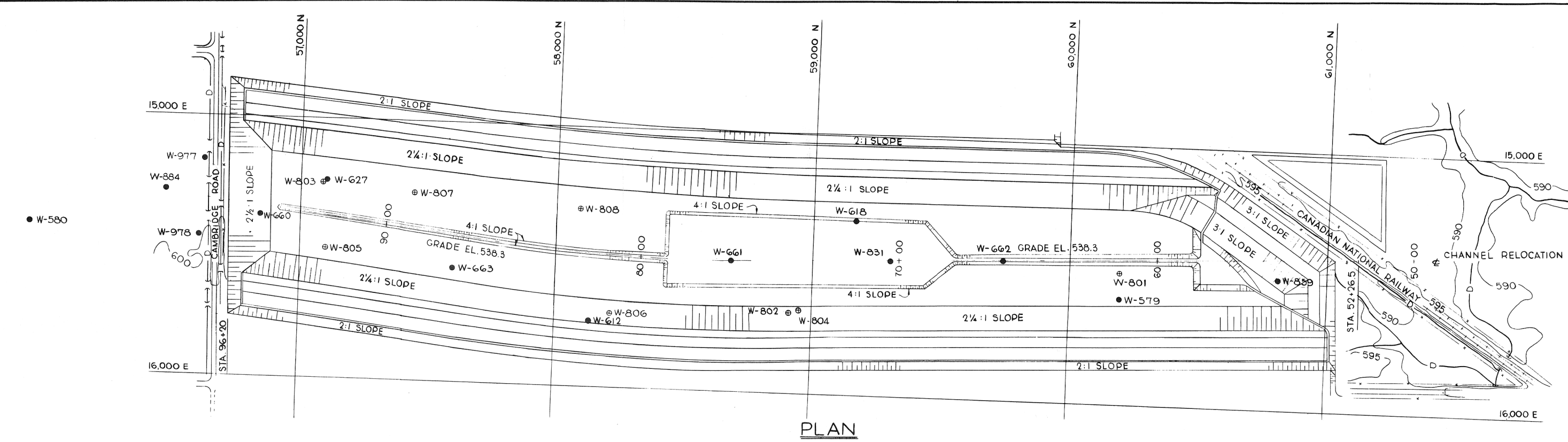


THE ST. LAWRENCE SEAWAY AUTHORITY
ADMINISTRATION DE LA VOIE MARITIME DU SAINT-LAURENT

WELLAND CHANNEL RELOCATION

CONTRACT 743
STA. 52+26.5 TO STA. 96+20
GEOLOGICAL PROFILES

DESIGNED CONÇU	AA	SUBMITTED PRÉSENTÉ	SCALE ÉCHELLE
DRAWN Dessiné	AA	RECOMMENDED RECOMMANDÉ	DATE
CHECKED VÉRIFIÉ	AA	APPROVED APPROUVÉ	
EXAMINED EXAMINÉ			F - 2074

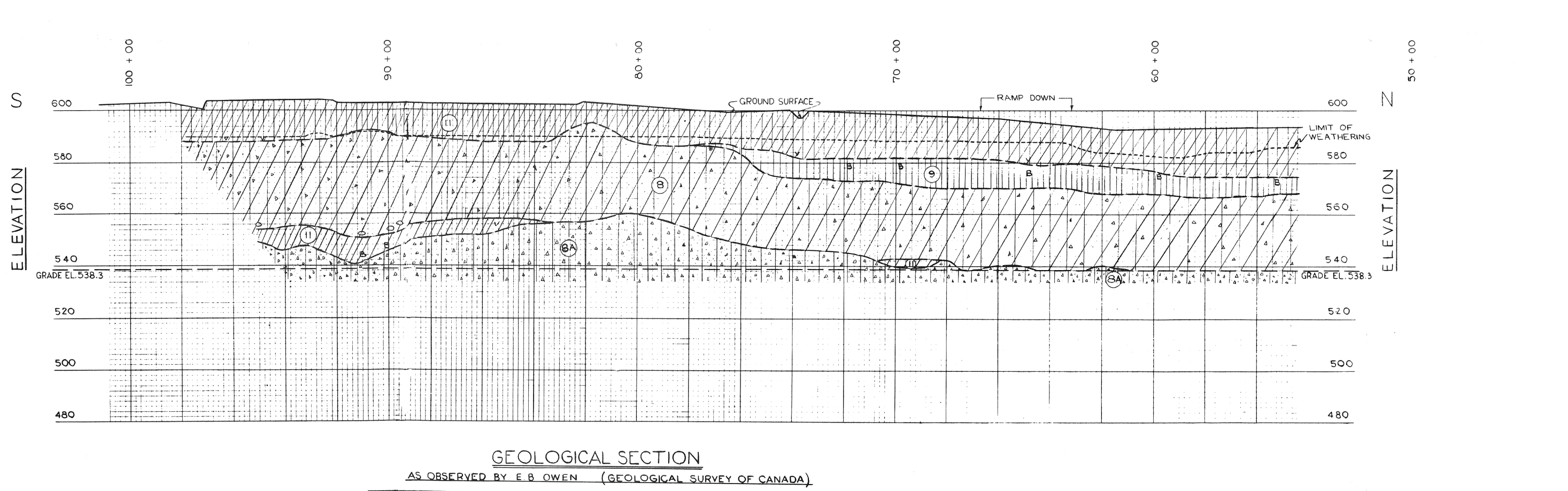


LEGEND

- ① LACUSTRINE SILTY-CLAY WITH VARVED CLAY ZONES; WEATHERED THROUGHOUT.
- ② LAYERED GREY SILT, CLAYEY SILT, SANDY SILT.
- ③ BROWN CLAYEY-SILT TILL; FINE GRAINED.
- ④ BROWN SILTY GRANULAR TILL (EITHER A SEPARATE TILL OR FACIES OF ③).
- ⑤ VARVED CLAY UPPER PART DISTORTED.
- ⑥ LACUSTRINE BROWN SILTY-CLAY.
- ⑦ REDDISH-BROWN CLAYEY-SILT, FEW STONES (RIVER DEPOSIT OR FINE-GRAINED TILL).
- ⑧ VARVED CLAY, LOWER PART NONVARVED CLAY.
- ⑨ TRANSITION/OUTWASH, BROWN SILT & CLAY WITH SOME SMALL INCLUSIONS OF TILL.
- ⑩ STREAM DEPOSITS: SAND, SOME ROUNDED GRAVEL.
- ⑪ COMPACT, STONY REDDISH BROWN GRANULAR TILL WITH FEW SMALL SILT-SAND-GRAVEL LENSES; LOWERMOST PART MAY HAVE LOOSE BEDROCK MATERIAL.
- BOTTOM LIMIT OF WEATHERING.
- FILL
- BEDROCK
- APPROXIMATE GROUND WATER LEVEL.

NOTE

THE ABOVE LEGEND INCLUDES ALL MATERIALS ENCOUNTERED IN THE ENTIRE WELLAND BY-PASS PROJECT AREA. UNITS 1 TO 7 DO NOT OCCUR IN THE AREA OF CONTRACT 743.



LEGEND

BY E.B. OWEN

- ① LACUSTRINE: CLAYEY SILT, BROWNISH-GREY, FREQUENTLY STRATIFIED, SCATTERED VARVED CLAY ZONES CONTAINS A FEW SMALL SCATTERED STONES; UPPER DEPOSIT IS RELATIVELY HARD EXCEPT CLOSE TO THE UNDERLYING TILL, WAS REMOVED BY SCRAPERS; LOWER DEPOSIT WAS SOFT, WAS REMOVED BY DRAGLINE.
- ② LACUSTRINE: GREY TO BUFF SANDY SILT GRADING SOUTH TO A SILTY SAND, NORTH AND UPWARDS INTO A CLAYEY SILT, PARTLY STRATIFIED, NO STONES, DIFFICULT TO EXCAVATE WITH SCRAPERS PARTLY REMOVED BY DRAGLINE.
- ③ TILL: CLAYEY SILT, DARK BROWN, MASSIVE, FEW STONES, LARGE BOULDERS OCCUR IN LOWER PART SINGLY OR IN NESTS, DIFFICULT TO EXCAVATE WITH SCRAPERS, MOSTLY REMOVED BY DRAGLINE.
- ④ TILL: SILTY DARK REDDISH-BROWN, DENSE, STONEY, BOULDERS TO 12 INCHES, COULD BE EXCAVATED WITH SCRAPERS, REMOVED BY DRAGLINE.

V---VARVES

B---BEDDING

○---LARGE BOULDERS-SINGLE OR IN NESTS UP TO 5 FEET IN DIAMETER

Figure 2. Seaway Authority plan of Contract 743, and inferred and observed geological profiles.