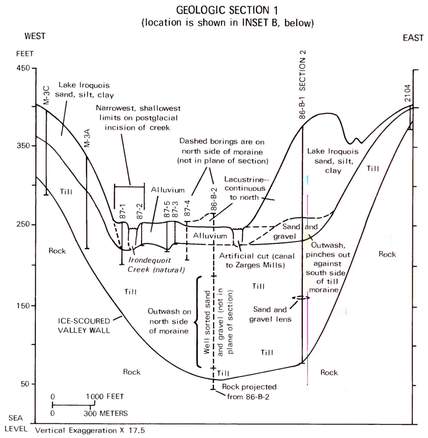
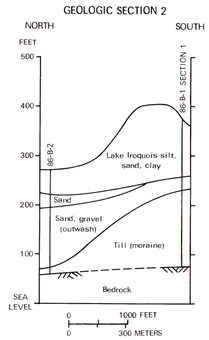
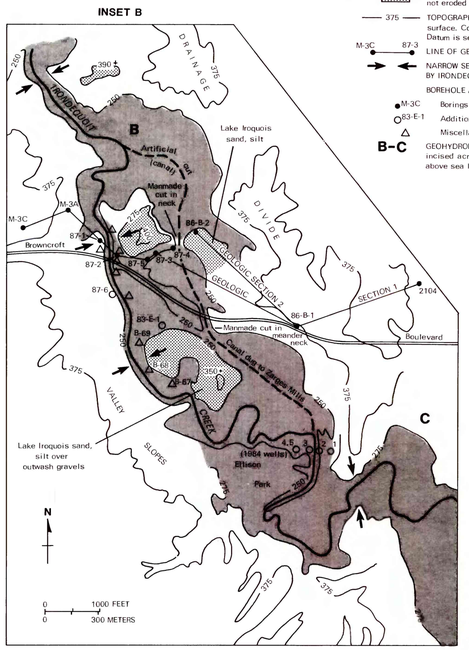
PREPARED IN COOPERATION WITH THE
MONROE COUNTY ENVIRONMENTAL HEALTH LABORATORY
MONROE COUNTY DEPARTMENT OF ENGINEERING



East-West section along axial crest of buried moraine near Browncroft Boulevard (with facies changes immediately north and south indicated). Compare with section 3A, plate 2





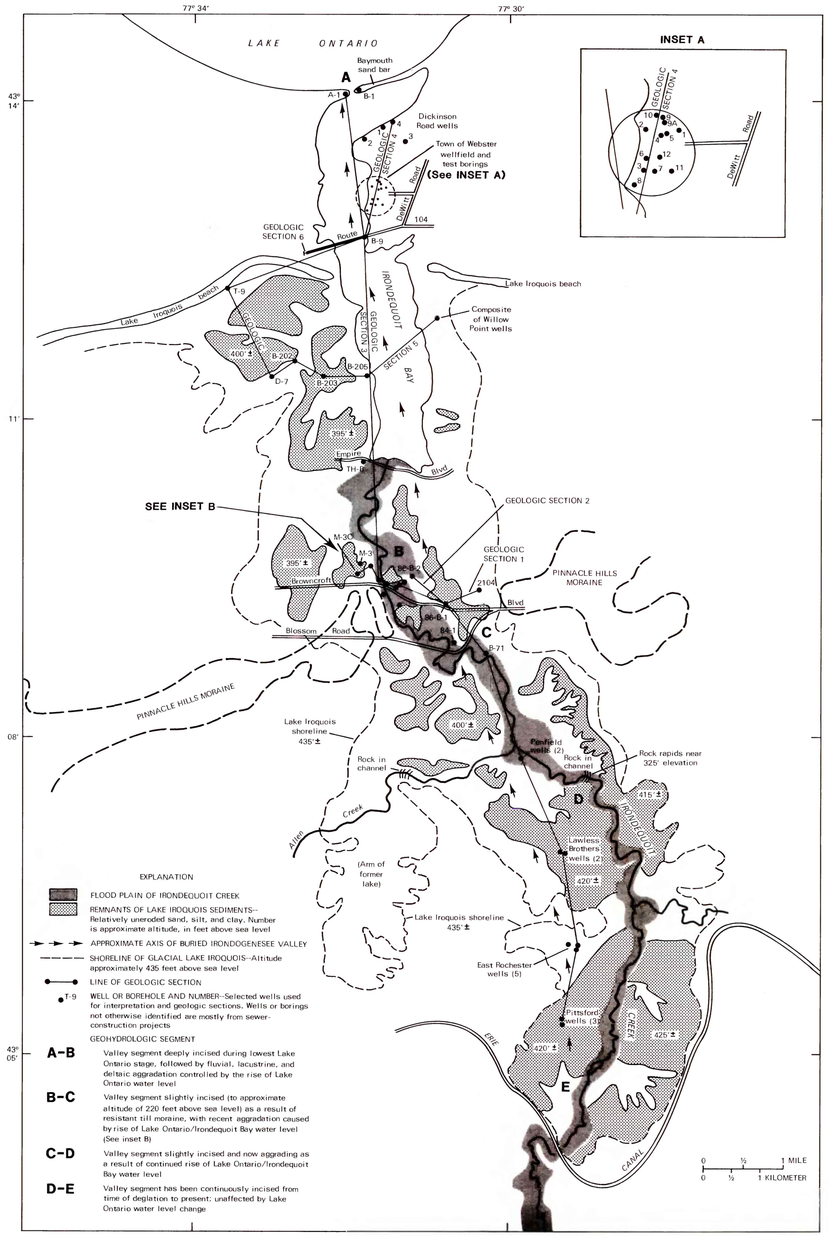
EXPLANATION TO INSET B

- FLOOD PLAIN OF IRONDEQUOIT CREEK
- REMNANTS OF LAKE IROQUOIS SEDIMENTS--Sediment not eroded during creek incision of flood-plain area
- 375 — TOPOGRAPHIC CONTOUR--Shows altitude of land surface. Contour interval, in feet, is variable. Datum is sea level
- M-3C — 87-3 LINE OF GEOLOGIC SECTION
- NARROW SECTIONS OF RESTRICTED LATERAL EROSION BY IRONDEQUOIT CREEK

BOREHOLE AND NUMBER

- M-3C Borings shown in geologic sections 1 and 2
- 83-E-1 Additional U.S. Geological Survey borings
- Miscellaneous borings with limited information

B-C GEOHYDROLOGIC SEGMENT--This valley segment incised across till moraine to approximately 220 feet above sea level, then aggraded with rising lake level



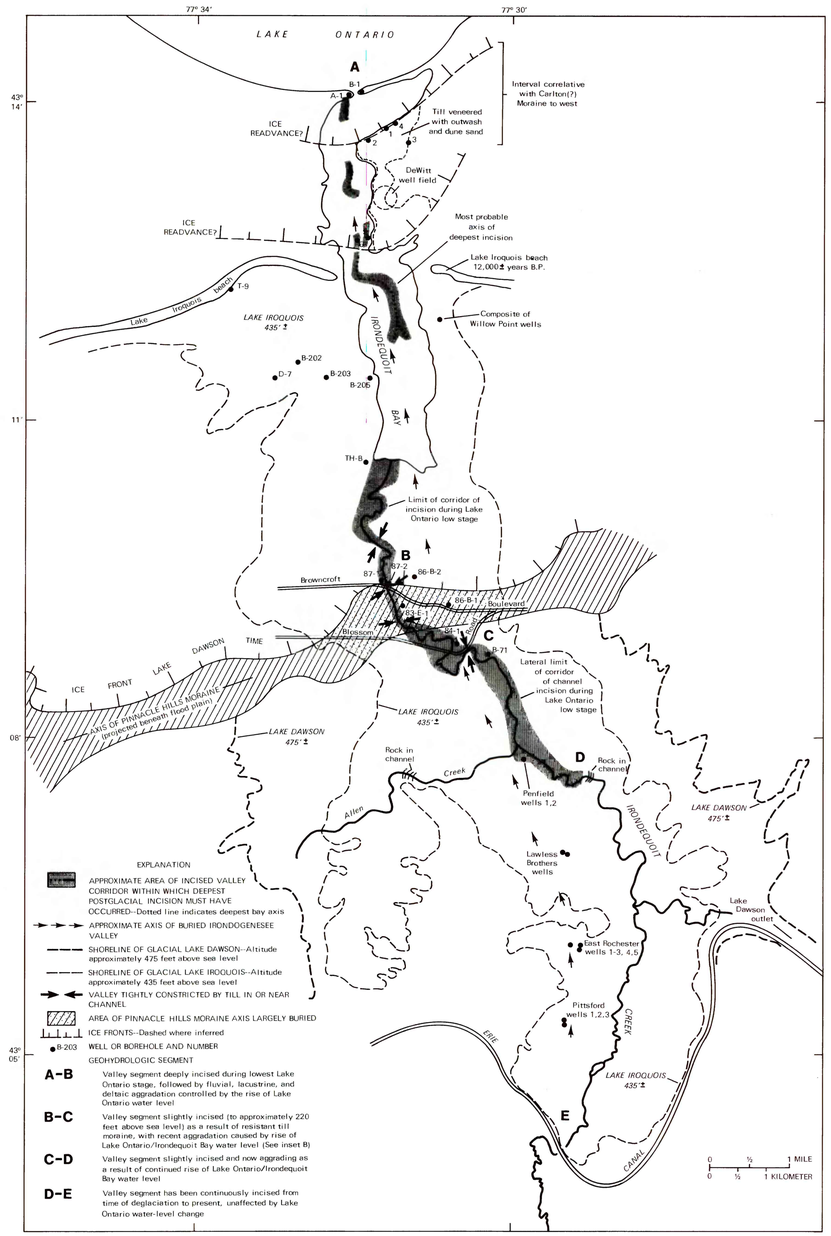
EXPLANATION

- FLOOD PLAIN OF IRONDEQUOIT CREEK
- REMNANTS OF LAKE IROQUOIS SEDIMENTS--Relatively uneroded sand, silt, and clay. Number is approximate altitude, in feet above sea level
- APPROXIMATE AXIS OF BURIED IRONDOGENESEE VALLEY
- SHORELINE OF GLACIAL LAKE IROQUOIS--Altitude approximately 435 feet above sea level
- LINE OF GEOLOGIC SECTION
- T-9 WELL OR BOREHOLE AND NUMBER--Selected wells used for interpretation and geologic sections. Wells or borings not otherwise identified are mostly from sewer-construction projects

GEOHYDROLOGIC SEGMENT

- **A-B** Valley segment deeply incised during lowest Lake Ontario stage, followed by fluvial, lacustrine, and deltaic aggradation controlled by the rise of Lake Ontario water level
- **B-C** Valley segment slightly incised (to approximate altitude of 220 feet above sea level) as a result of resistant till moraine, with recent aggradation caused by rise of Lake Ontario/Irondequoit Bay water level (See inset B)
- **C-D** Valley segment slightly incised and now aggrading as a result of continued rise of Lake Ontario/Irondequoit Bay water level
- **D-E** Valley segment has been continuously incised from time of deglation to present; unaffected by Lake Ontario water level change

Plate 1A



EXPLANATION

- APPROXIMATE AREA OF INCISED VALLEY CORRIDOR WITHIN WHICH DEEPEST POSTGLACIAL INCISION MUST HAVE OCCURRED--Dotted line indicates deepest bay axis
- APPROXIMATE AXIS OF BURIED IRONDOGENESEE VALLEY
- SHORELINE OF GLACIAL LAKE DAWSON--Altitude approximately 475 feet above sea level
- SHORELINE OF GLACIAL LAKE IROQUOIS--Altitude approximately 435 feet above sea level
- VALLEY TIGHTLY CONSTRICTED BY TILL IN OR NEAR CHANNEL
- AREA OF PINNACLE HILLS MORAINE AXIS LARGELY BURIED
- ICE FRONTS--Dashed where inferred
- B-203 WELL OR BOREHOLE AND NUMBER

GEOHYDROLOGIC SEGMENT

- **A-B** Valley segment deeply incised during lowest Lake Ontario stage, followed by fluvial, lacustrine, and deltaic aggradation controlled by the rise of Lake Ontario water level
- **B-C** Valley segment slightly incised (to approximately 220 feet above sea level) as a result of resistant till moraine, with recent aggradation caused by rise of Lake Ontario/Irondequoit Bay water level (See inset B)
- **C-D** Valley segment slightly incised and now aggrading as a result of continued rise of Lake Ontario/Irondequoit Bay water level
- **D-E** Valley segment has been continuously incised from time of deglaciation to present, unaffected by Lake Ontario water-level change

Plate 1B

Geology by R. A. Young, 1988

GLACIAL HISTORY AND GEOHYDROLOGY OF THE IRONDEQUOIT CREEK VALLEY, MONROE COUNTY, NEW YORK

By
William M. Kappel and Richard A. Young

PLATES 1A AND 1B. LOCATION MAPS, GEOLOGIC SECTION 1, AND GEOLOGIC SECTION 2