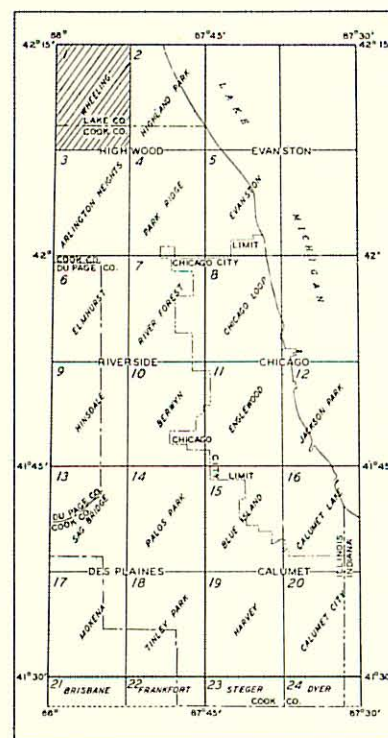


- LEGEND**
- Qm  
Made land  
(Artificial fills, spoil banks, dumps, etc.)
  - Qex  
Excavations in unconsolidated material
  - Qp  
Peat and muck deposits
  - Qf  
Basin fills of surface wash
  - Qal  
Alluvium  
(Silt, sand, and gravel deposited by present streams)
  - Qbs  
Glacial river bars  
(Low mounds and hillocks of gravel deposited by glacial streams)
  - Qvt  
Valley-train  
(Mainly well-sorted sand and gravel deposited by glacial streams in open valleys)
  - Qke  
Kames, eskers, and similar deposits  
(Poorly sorted sand and gravel deposited in close relation to glacial ice)
  - Qbs  
Lake border ground-moraine
  - Qbs  
Lake border moraines:  
b—Highland Park moraine  
h—Hillcrest moraine  
d—Deerfield moraine  
p—Park Ridge moraine
  - Qts  
Tinley ground-moraine
  - Qt  
Tinley moraine
  - Qvs  
Valparaiso ground-moraine
  - Definitely determined boundary between deposits
  - Indefinite boundary between deposits
  - Sand or gravel pit



Topographic base surveyed in cooperation  
with the U. S. Geological Survey, 1926

**SURFICIAL GEOLOGY OF THE WHEELING QUADRANGLE**

BY  
J HARLEN BRETZ

Geologically surveyed in 1930-1932.  
In connection with other  
quadrangles of the Chicago area.

TIME  
MAGNETIC  
DECLINATION  
APPROXIMATE MEAN  
DECLINATION, 1930

