



- Y-3** Flat ground; borrow materials available; materials easily excavated; high water table and looseness of sediments make excavations unstable; flooding hazards; compressible organic materials in places; materials are susceptible to possible frost heaving and shrinking or swelling.
- Y-2A** Moderate to steep slopes in places; high bearing strengths in underlying bedrock; excavations may encounter shallow bedrock; bedrock aquifers exposed during construction may become contaminated; suitable borrow material is probably available nearby; in places, areas are poorly drained and periodically flooded; in small areas, surficial deposits derived from altered limestone bedrock may be susceptible to shrinking or swelling.
- Y-2B** Moderate to thick cover of surficial deposits; upland areas are well drained; bedrock provides a stable foundation; bedrock aquifers exposed during construction may become contaminated; excavations may encounter shallow bedrock; in places, cavernous rock may be unstable; temporary ponding may cause local flooding of partly filled depressions; in places, materials may be susceptible to frost heaving and shrinking or swelling; creep and sliding may occur on steep slopes.
- Y-1A** Steep slopes susceptible to soil creep or sliding; excavations may encounter shallow bedrock; in places, silts and clays susceptible to frost heaving and shrinking or swelling.
- Y-1B** Materials may have to be redistributed to meet specifications of construction projects; steep slopes of spoil piles may be unstable; large quantities of borrow material are available; loose material can be easily excavated; large boulders may be encountered; differential settlement may occur in uncompacted spoil piles.
- G-3** Gentle to moderate slopes in places; other conditions similar to those in Y-2B.
- G-2B** Well drained deposits have adequate bearing strengths; generally, higher areas can be easily drained; in places, slumping and creep occur on steep slopes; materials can be easily excavated; deposits are suitable as borrow materials; each area covers less than 40 acres.
- G-2** High bearing strengths are encountered below loess; in places, loss of stability of silts results from additional water; materials can be easily excavated; silts can be used as light-weight borrow materials and as soil for embankments; gully erosion occurs in unprotected areas; in places, silts and clays are susceptible to frost heaving and shrinking or swelling; near bluffs, where loess is thick, shallow silts have high bearing strengths and silts may slump in excavations.
- G-1** Construction conditions are similar to those in G-2A, but each area covers more than 40 acres.
- Underground mined-out area.**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**TOWNSHIP  
SHOWING SECTION NUMBERS**

Map was compiled for county-wide studies for use at the scale 1:125,000.

## GEOLOGIC CONDITIONS AFFECTING CONSTRUCTION IN ST. CLAIR COUNTY, ILLINOIS

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