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# FAULTING HAZARD ZONATION OF MAPLETON CITY, UTAH COUNTY



BRUCE N. KALISER  
UTAH GEOLOGICAL AND MINERAL SURVEY

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The two fault hazard zones shown superimposed on the City of Mapleton's Official Zone Map (scale 1" = 2500') are defined for the purpose of earthquake fault hazard disclosure and building regulation. The zonation has been done by the Utah Geological and Mineral Survey at the request of the City of Mapleton.

Zone II represents the zone of greatest hazard from ground surface rupture, deformation and slope movement along faults with surface expression ("fault scarps"). A site investigation should be required for any occupied structure or public facility built within Zone II (including single family dwellings) to assure its safety. Probability of encountering disturbed ground is high in this zone; therefore, it is likely that most of this zone is suited only for single family dwellings in rather low density distribution.

Zone II extends over an area of 150 feet to 4,400 feet west of the National Forest Boundary, eastward to the city limit, for the entire length of the city (3¼ miles).

Zone I represents a zone of somewhat lesser hazard from ground surface rupture, deformation and slope movement. Individual fault traces within this zone are not as well-defined as in Zone II; therefore more interpretation has had to be used in the delimitation of this

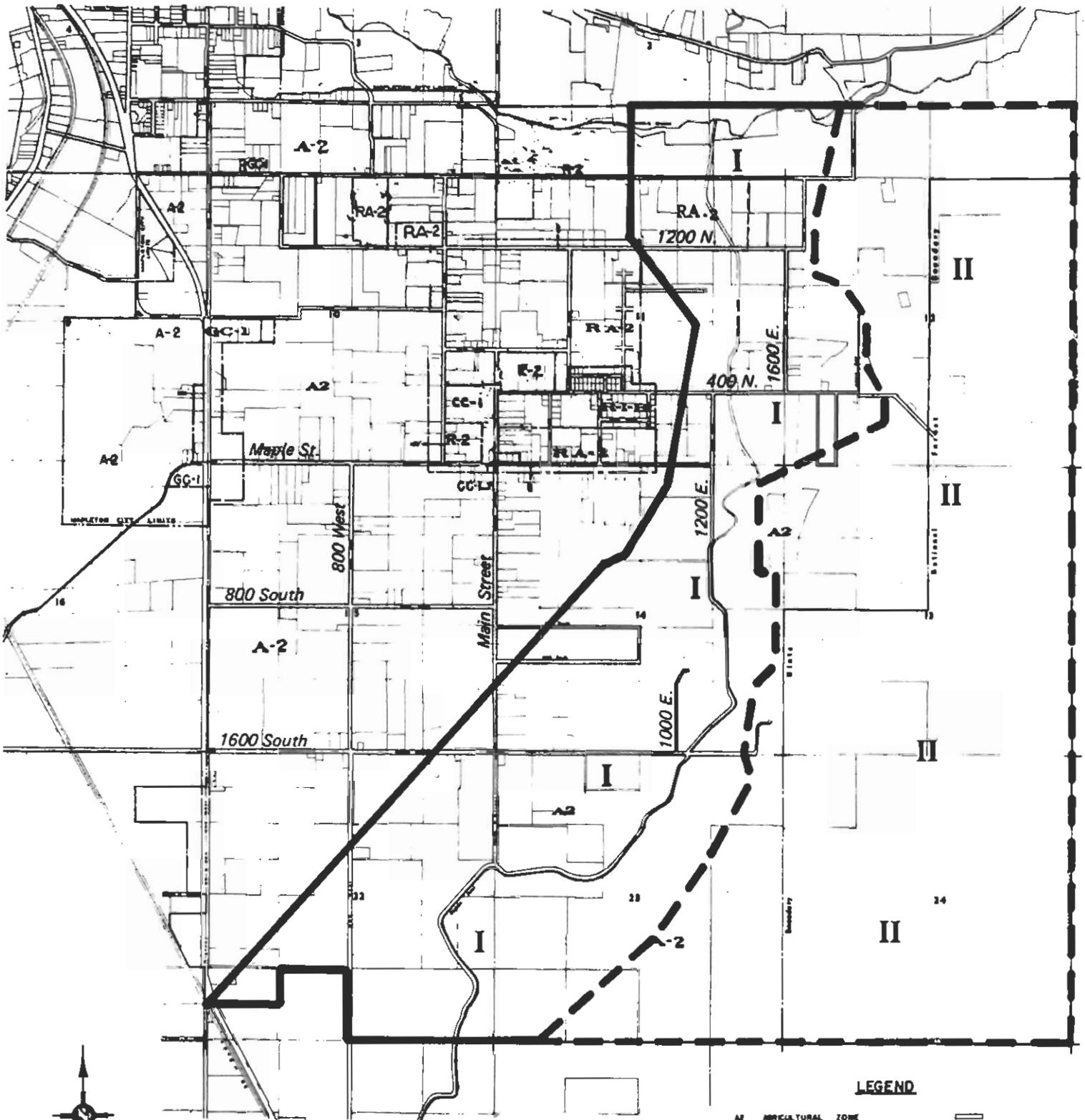
zone. No high occupancy building, multiple dwelling or critical facility should be permitted within this zone without a site investigation. Deformation may be found to be absent from portions of this zone upon further exploration and on-site investigation.

Zone I extends west from Zone II, over an area of 1700' to 6800' feet wide for the entire length of the city.

No surface faults were identified in the portion of Mapleton City west of Zone I, but this area is not without geologic hazards. Earthquake-related geologic hazards in this area include failure of the south bluff of Hobble Creek, intense ground shaking, liquefaction and inundation resulting from canal bank failures.

Geologic hazards related to earthquakes that affect portions of the city include shallow groundwater, frost susceptible soils, surface and underground erosion, landslide and snow avalanche induced flooding, cloud-burst flooding, slope instability, rock fall and collapsible soils.

Any new critical facility within the City of Mapleton should have a site investigation because of the possibility of being subjected to one or more geologic hazards.



**OFFICIAL ZONE MAP  
of  
MAPLETON CITY, UTAH**

ADOPTED BY THE CITY COUNCIL OF MAPLETON CITY, UTAH  
THIS 5 DAY OF FEBRUARY 1980

ATTEST: *[Signature]* city recorder      *[Signature]* mayor

**LEGEND**

- A-2 AGRICULTURAL ZONE
- RA-2 RESIDENTIAL AGRICULTURAL ZONE
- R-1-A RESIDENTIAL ZONE
- R-1-B RESIDENTIAL ZONE
- R-2 RESIDENTIAL ZONE
- R-3 RESIDENTIAL ZONE
- GC-1 NEIGHBORHOOD SHOPPING CENTER ZONE
- CC-1 CENTRAL COMMERCIAL ZONE
- GC-2 GENERAL COMMERCIAL ZONE
- RBD-1 RESEARCH & DEVELOPMENT ZONE
- I&M-1 INDUSTRIAL & MANUFACTURING ZONE
- I&D INTERMEDIATE DEVELOPMENT ZONE

 Limit of Zone I  
 Limit of Zone II