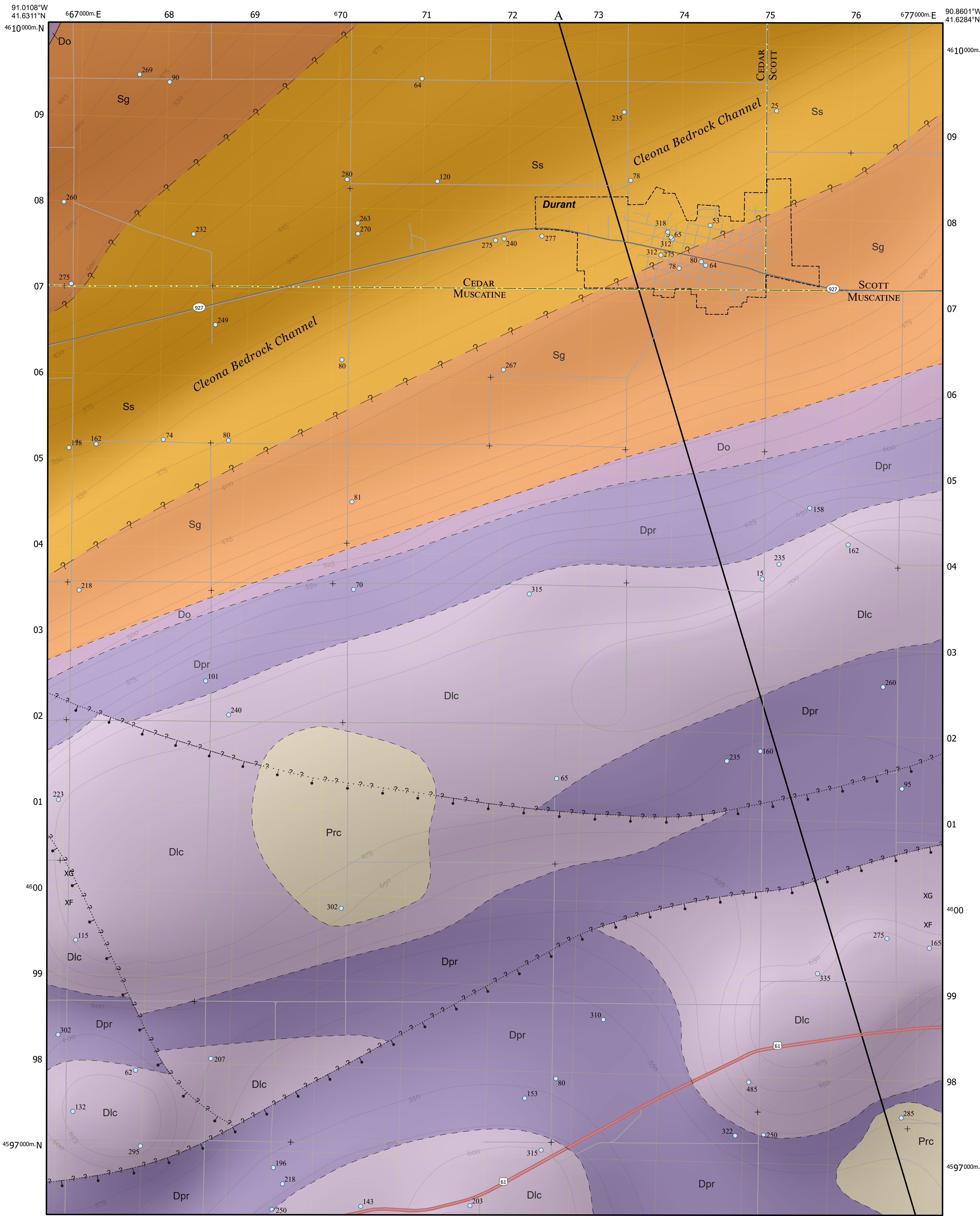


# BEDROCK GEOLOGIC MAP OF THE DURANT 7.5' QUADRANGLE, MUSCATINE, CEDAR, AND SCOTT COUNTIES, IOWA

Alyssa Bancroft and Phil Kerr  
Iowa Geological Survey, IHR-Hydroscience & Engineering, University of Iowa, Iowa City, Iowa

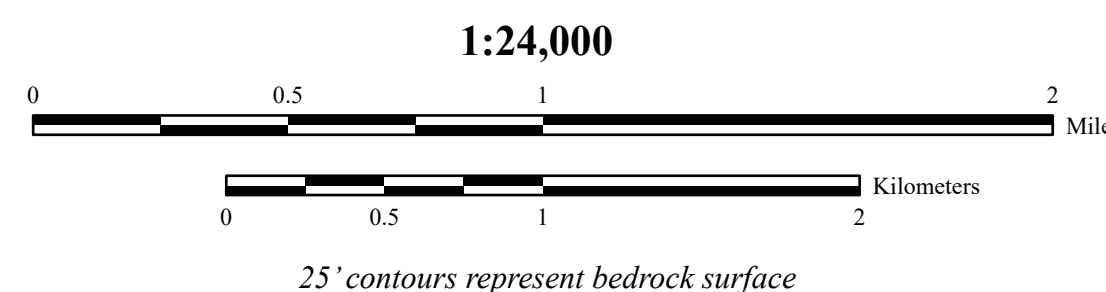
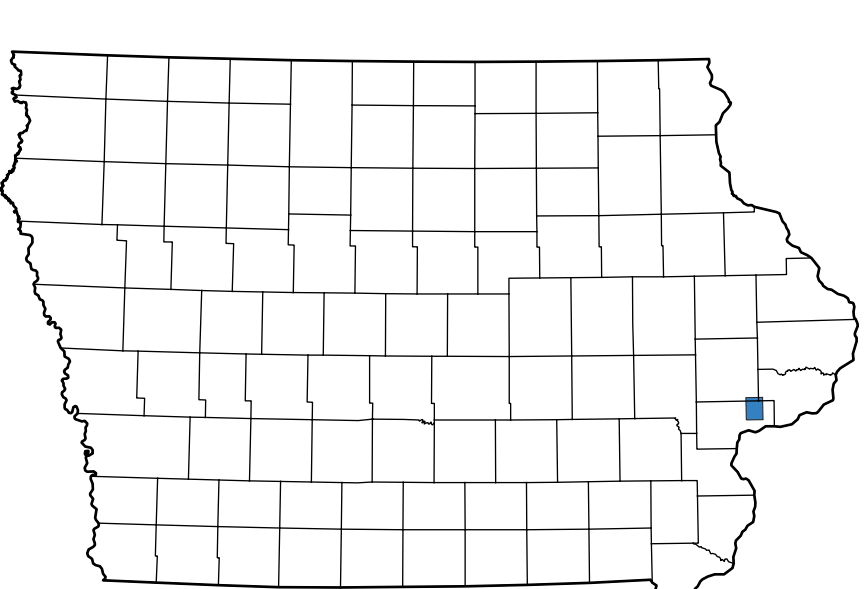
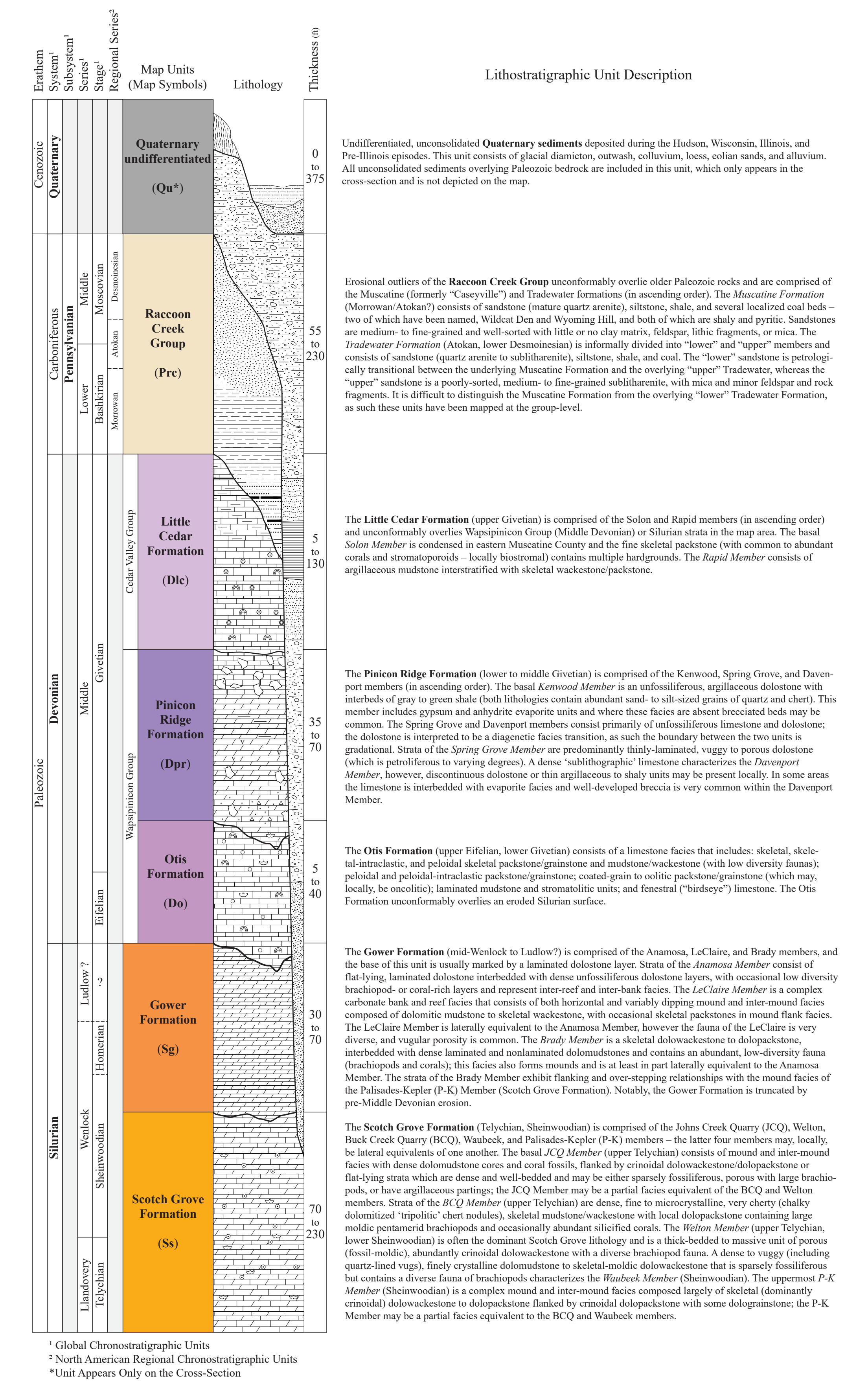


## INTRODUCTION

The Durant 7.5' Quadrangle in Muscatine, Cedar, and Scott counties, Iowa, is located mostly on the Illinoian till plain. There are no bedrock exposures in the map area due to burial by Quaternary materials, and this unconsolidated package is dominated by glacial diamictites. Further detail about the Quaternary geology can be found on the Surficial Geologic Map of the Durant 7.5' Quadrangle (IGS Open File Map OFM-25-02). The Quaternary package fills a buried bedrock valley, the Cleona Channel. This feature trends northeast-southwest across the northern portion of the map area and can have a depth up to 350 feet below the modern surface.

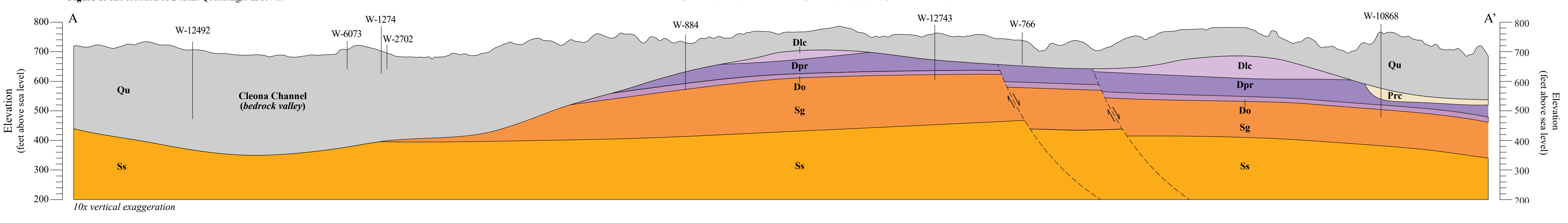
Although entirely buried by Quaternary deposits, the bedrock surface of the Durant 7.5' Quadrangle is dominated by Middle Devonian (Givetian) strata of the Little Cedar Formation (Cedar Valley Group) and the Pinicon Ridge and Otis formations (Wapsipicon Group). Silurian strata of the Gower and Scotch Grove formations make up the bedrock surface of the Cleona Channel. Just to the west of the mapping area these Paleozoic stratigraphic units are exposed in the Moscow Quarry (Wending Quarries Inc., in the Wilton 7.5' Quadrangle; IGS

## STRATIGRAPHIC COLUMN AND LEGEND



ADJOINING QUADRANGLES		
1	2	3
4	5	6
7	8	

## GEOLOGIC CROSS-SECTION A-A'



Geology based on work done by A. Bancroft 2022-2025. Digital cartography by P. Kerr. Base map generated using data from the Iowa Geospatial Data Clearinghouse. Map projection and coordinate system based on Universal Transverse Mercator (UTM) Zone 15N, Datum NAD83.

The map and cross-section are based on interpretations of the best available information at the time of mapping. Map interpretations are not a substitute for detailed site-specific studies. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.

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