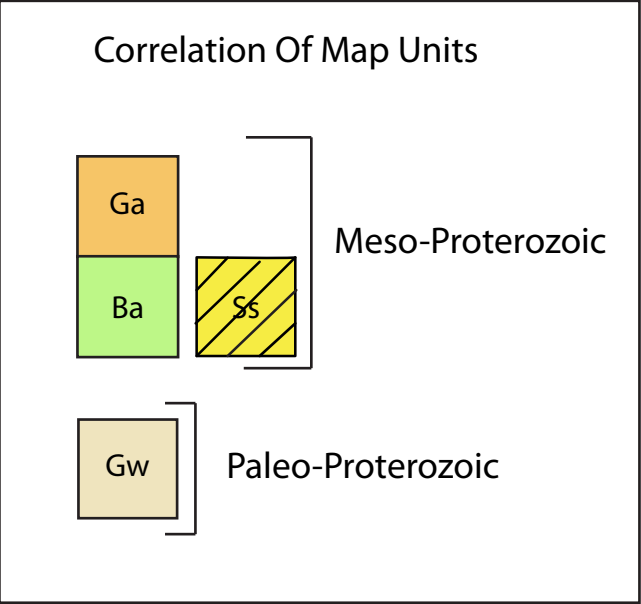
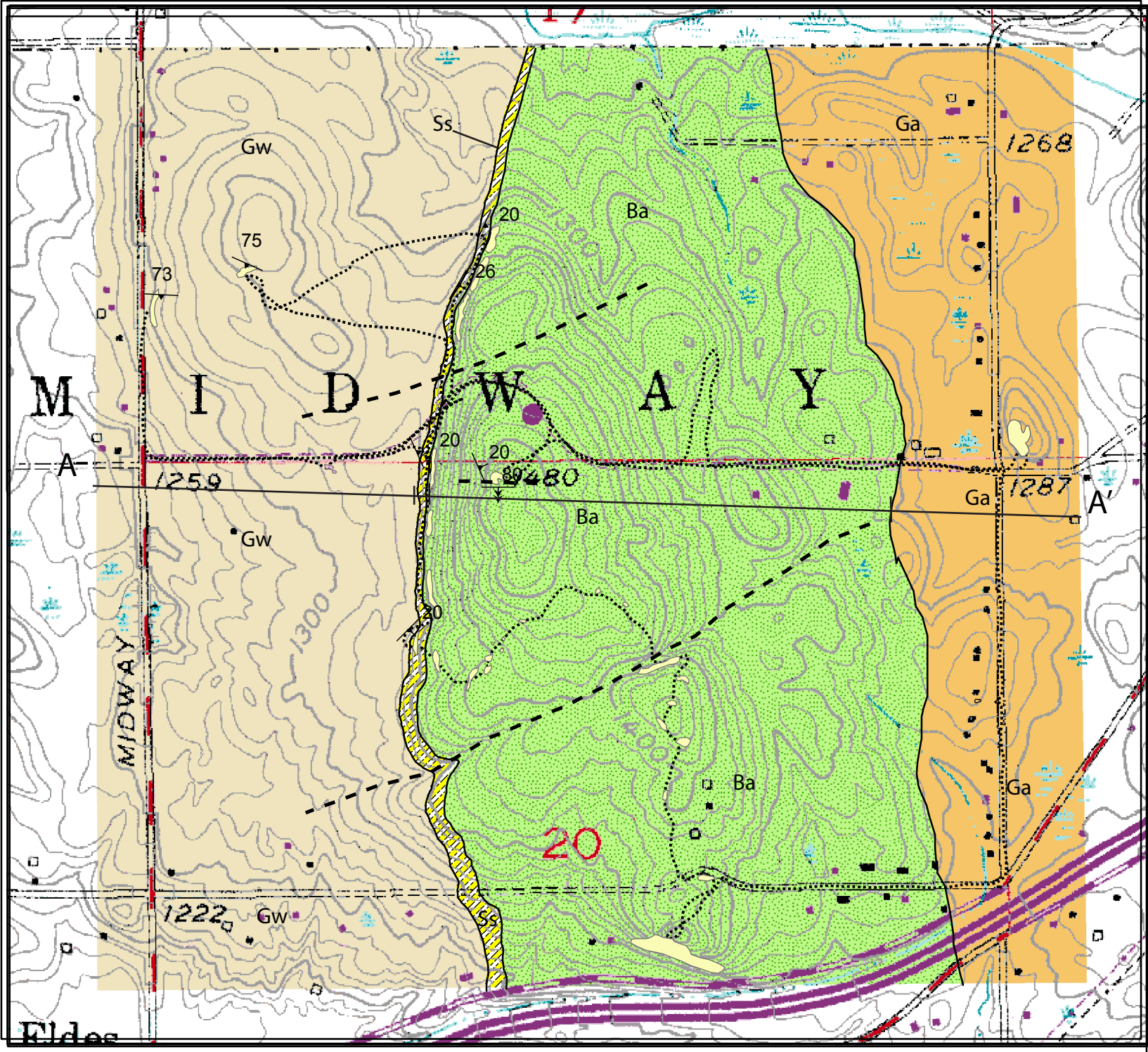


Bedrock Geology Of Midway Area
Esko Quadrangle

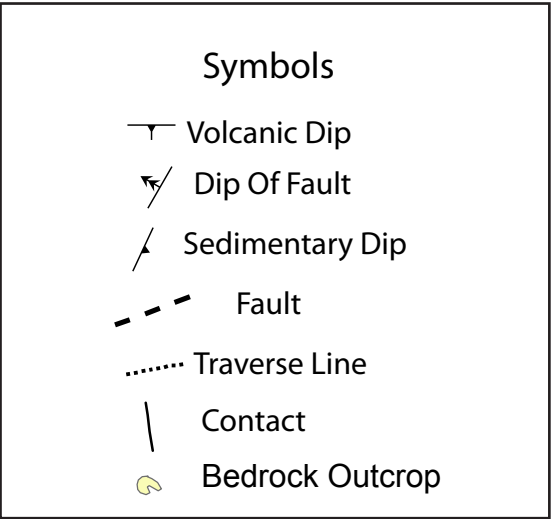
By

Wesley R. Lueck
University Of Minnesota Duluth
5/8/2010

Description Of Units



- Ga** **Duluth Complex:** Gabbro - Medium to coarse grain, Olivine, Pyroxene, Plagioclase Feldspar, Magnetite in Pyroxene. Large Pyroxene Crystals Indicating water in magma during crystalization, which also means near a contact zone.
- Ba** **Ely's Peak Basalt:** Basalt - Pyroxene rich basalt with vesicle columns throughout . Fine grain basalt dominates the southern half of the Ely's Peak Basalt and coarse grain basalt in the north half. Some areas are Amygdaloidal. Some Porphyritic zones scattered through formation.
- Ss** **Nopeming Sandstone:** Interbedded meta-siltstone and meta-quartzite, lying unconformably on top of Thompson Formation. Deposited through alluvial deposits or possibly lakes.
- Gw** **Thompson Formation:** Interbedded slate and greywacke with concretions throughout the bed. Also Quartz veins are present throughout the bed. The outcrops exhibit cleavage parallel/sub-parallel to the bedding plane. The bed is dipping steeply throughout, about 70 to 80 degrees.



References

Miller, J.D., Jr., and Green, J.C., 2008, Bedrock Geology of Duluth Heights and Eastern Portions of the Adolph Quadrangles, St. Louis County, Minnesota. Minnesota Geological Survey Miscellaneous Map M-181, Scale 1:24,000.

Miller, J.D., Jr., and Green, J.C., 2008, Bedrock Geology of West Duluth and Eastern Portion of Esko Quadrangles, St. Louis County, Minnesota. Minnesota Geological Survey Miscellaneous Map M-183, Scale 1:24,000.

Cross Section

