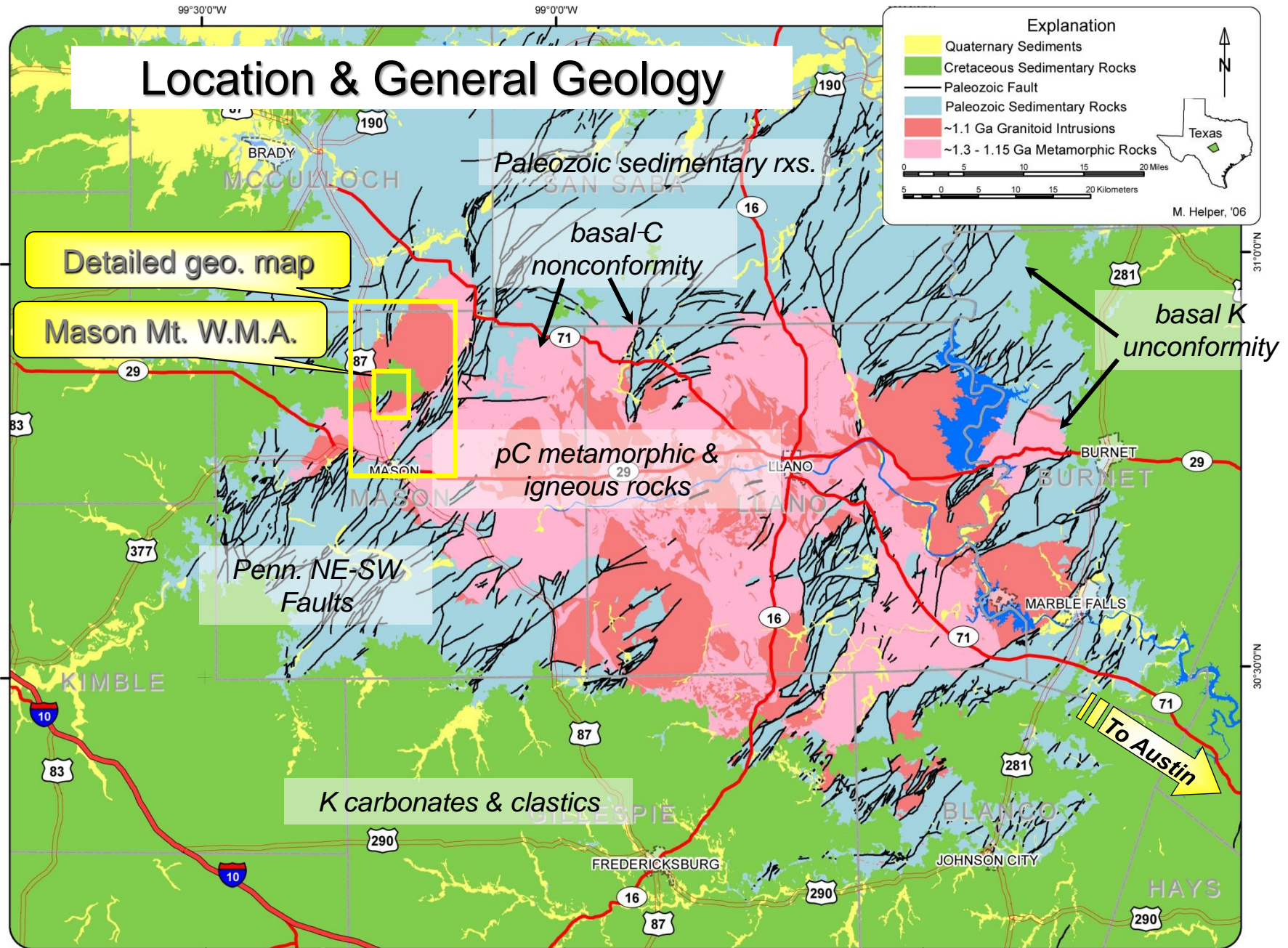


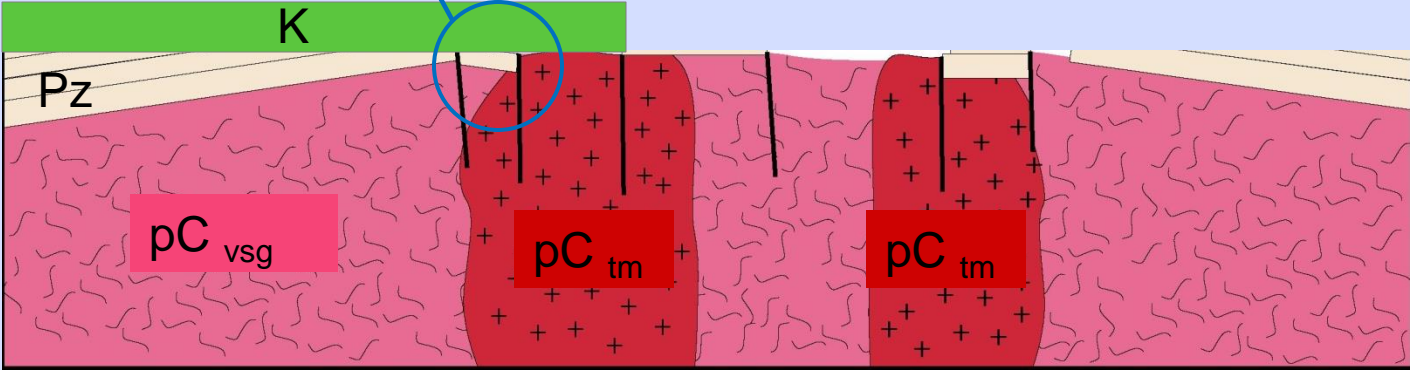
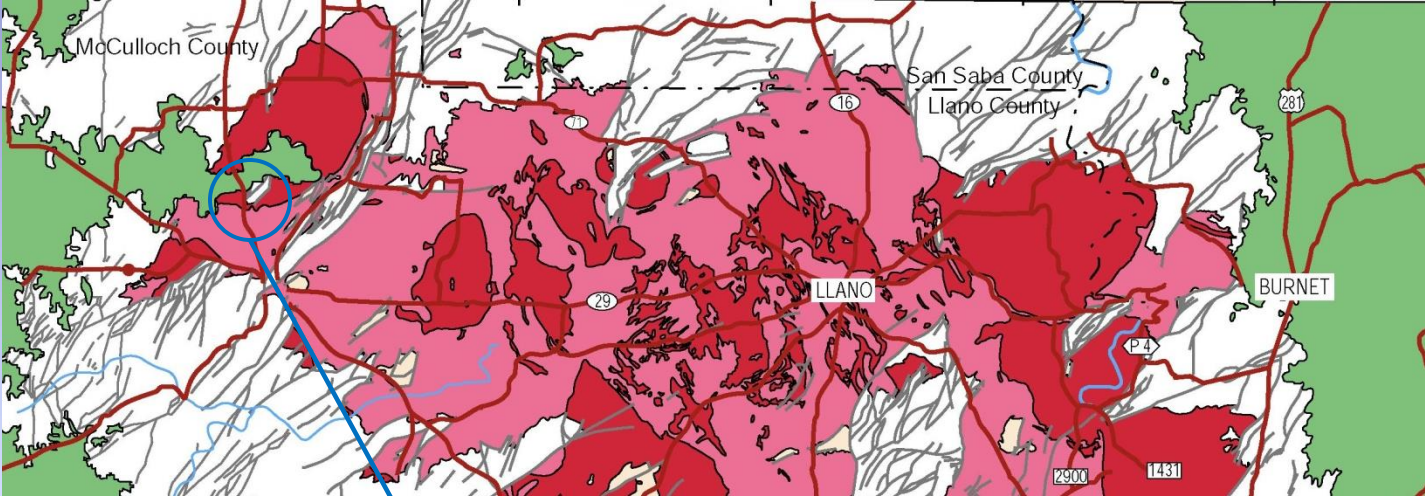
420k Field Trip 4, '14

Mapping a Basal Cretaceous
Nonconformity, Mason Mt.
W.M.A., Mason Co., TX

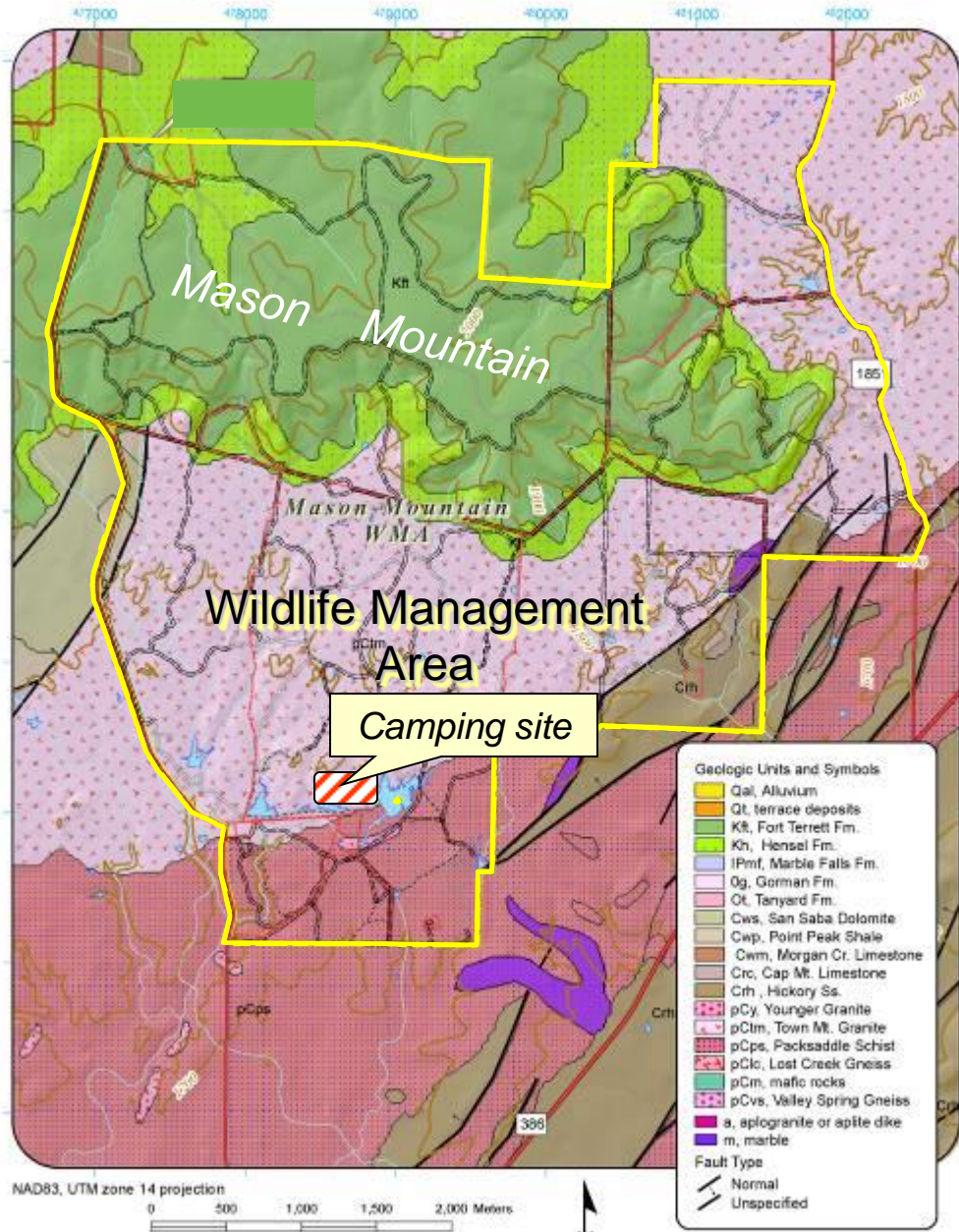
Location & General Geology



Schematic Cross Section

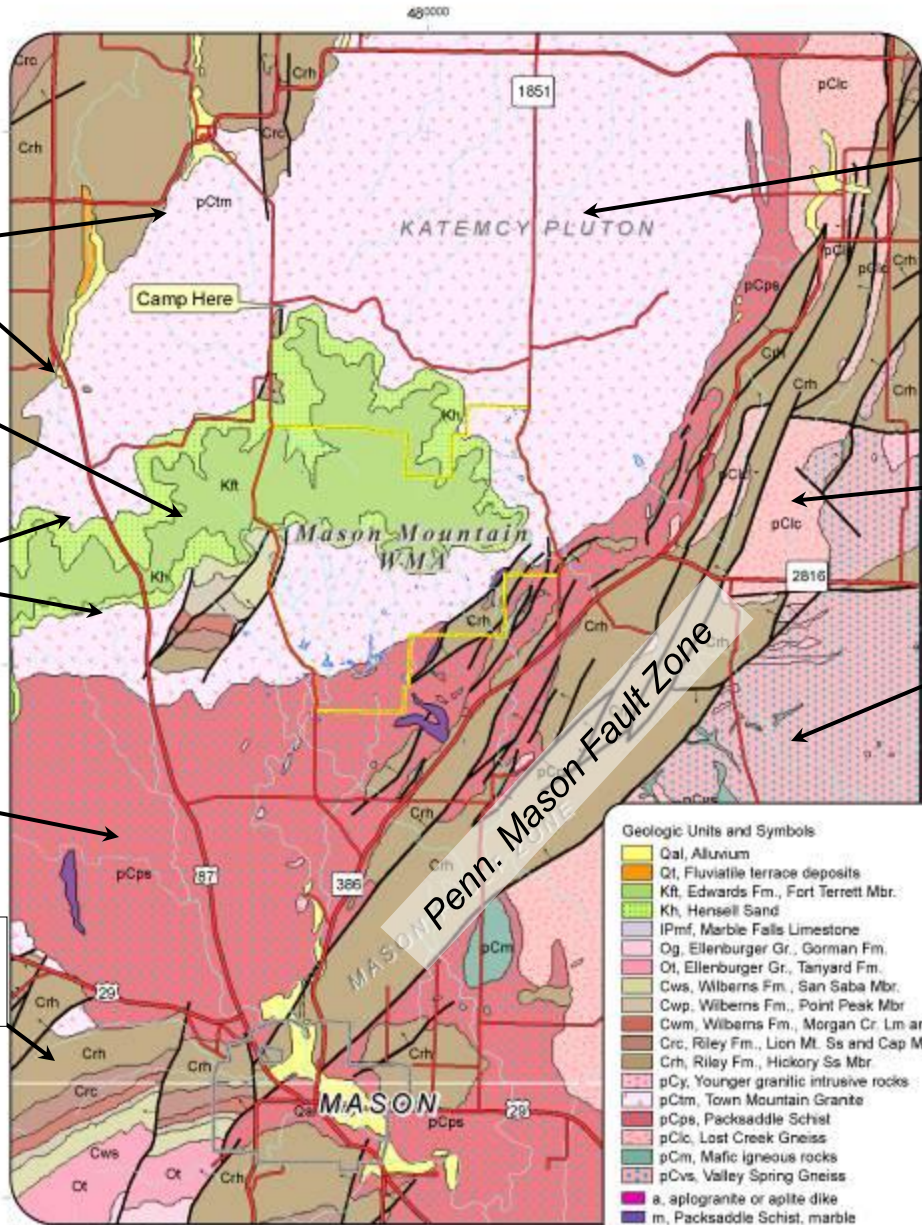


Geologic Map of the Mason Mountain W.M.A., Mason Co., TX



M. Helper, Feb. '06

1:100k ("Detailed") Geology, Mason Area



basal-C
nonconformity

K Carbonates &
Clastics

basal K
nonconformity

pC Packsaddle
Schist
~1.25 Ga

GO Sediments
(e.g. Riley, Ellenburger)

pC Katemcy
Pluton
~ 1.1 Ga

pC Lost Creek Gneiss
~1.25 Ga

pC Valley Spring
Gneiss
~1.3 Ga

Geologic Units and Symbols

- Qal, Alluvium
- Ot, Fluvial/terrace deposits
- Kft, Edwards Fm., Fort Terrett Mbr.
- Kh, Hensell Sand
- IPmf, Marble Falls Limestone
- Og, Ellenburger Gr., Gorman Fm.
- Ot, Ellenburger Gr., Tanyard Fm.
- Cws, Wilberns Fm., San Saba Mbr.
- Cwp, Wilberns Fm., Point Peak Mbr.
- Cwm, Wilberns Fm., Morgan Cr. Lm and Welge Ss
- Crc, Riley Fm., Lion Mt. Ss and Cap Mt. Lm Mbrs.
- Crh, Riley Fm., Hickory Ss Mbr.
- pCy, Younger granitic intrusive rocks
- pCtm, Town Mountain Granite
- pCps, Packsaddle Schist
- pCic, Lost Creek Gneiss
- pCm, Mafic igneous rocks
- pCvs, Valley Spring Gneiss
- a, aplite or aplite dike
- m, Packsaddle Schist, marble

Fault Type

- Normal
- Unspecified

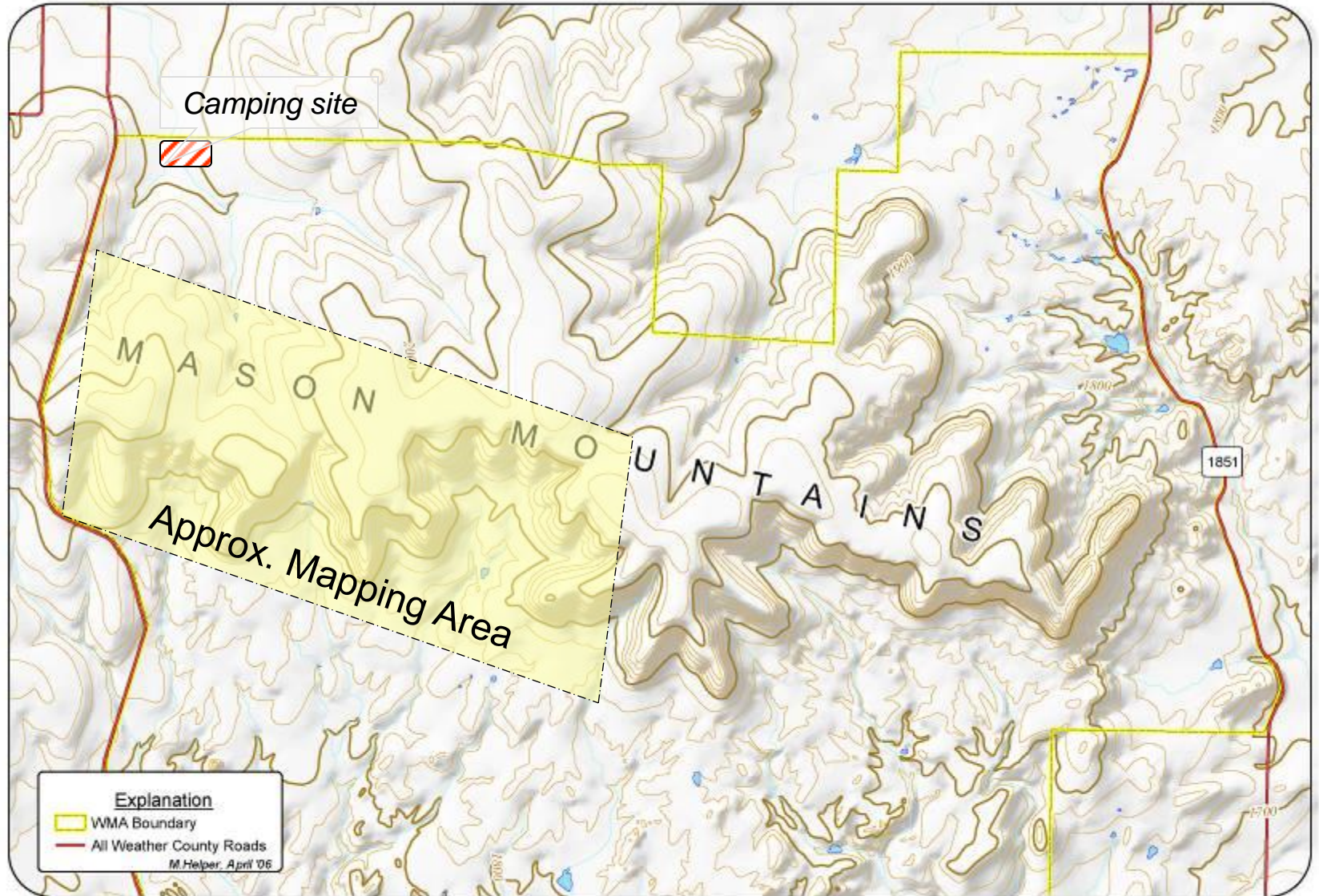
M. Helper, Jan. '06

UTM Zone 14N projection
NAD83 datum

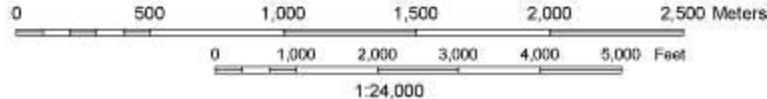
0 1 2 3 4 5 Km

1:100,000

1:24,000 Topography, Mason Mt.

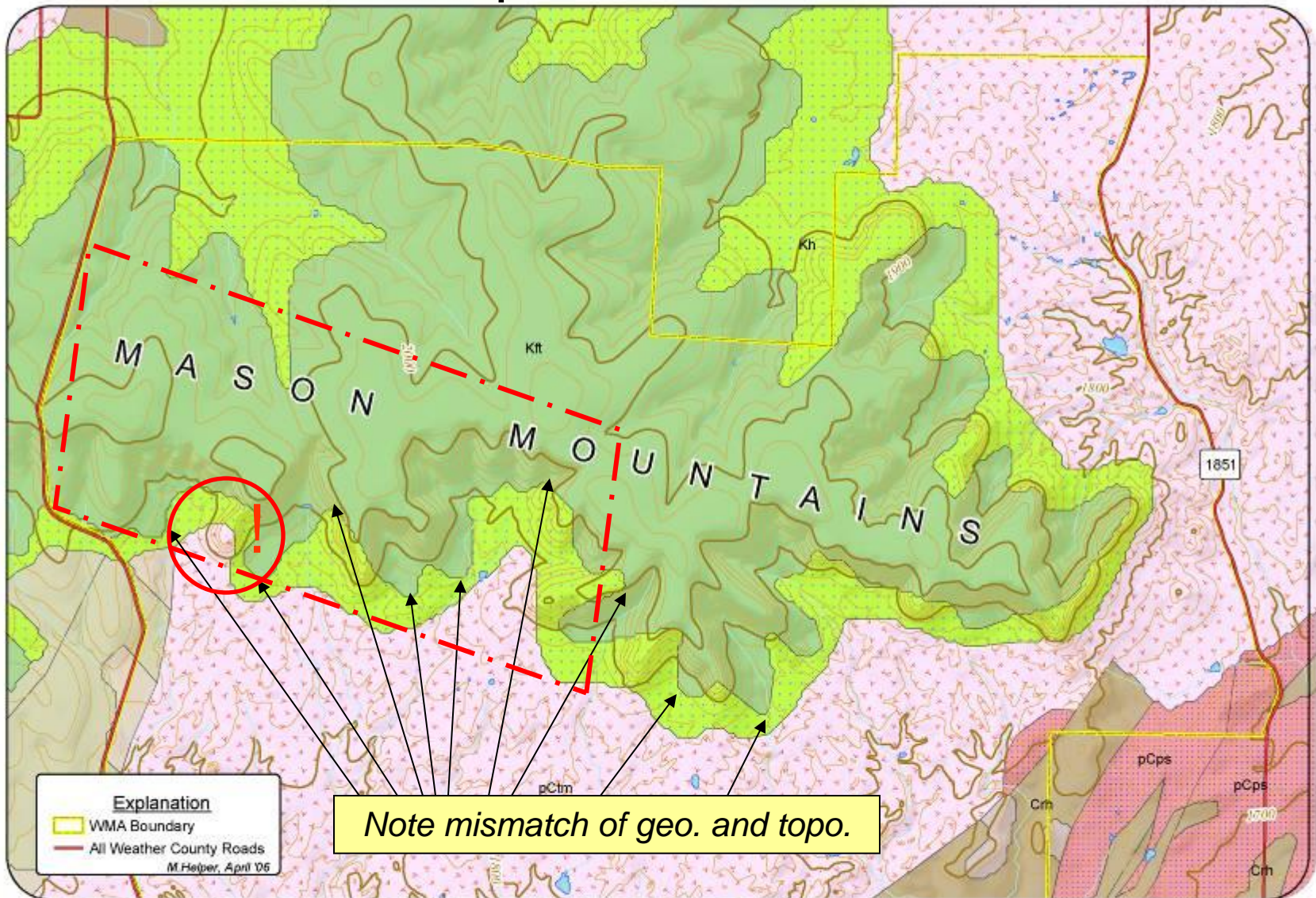


NAD83, UTM zone 14N projection
Contour interval equals 20 feet

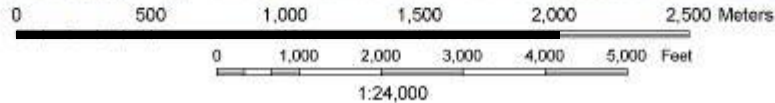


3/20/2014

1:24k Topo. & Geo., Mason Mt.



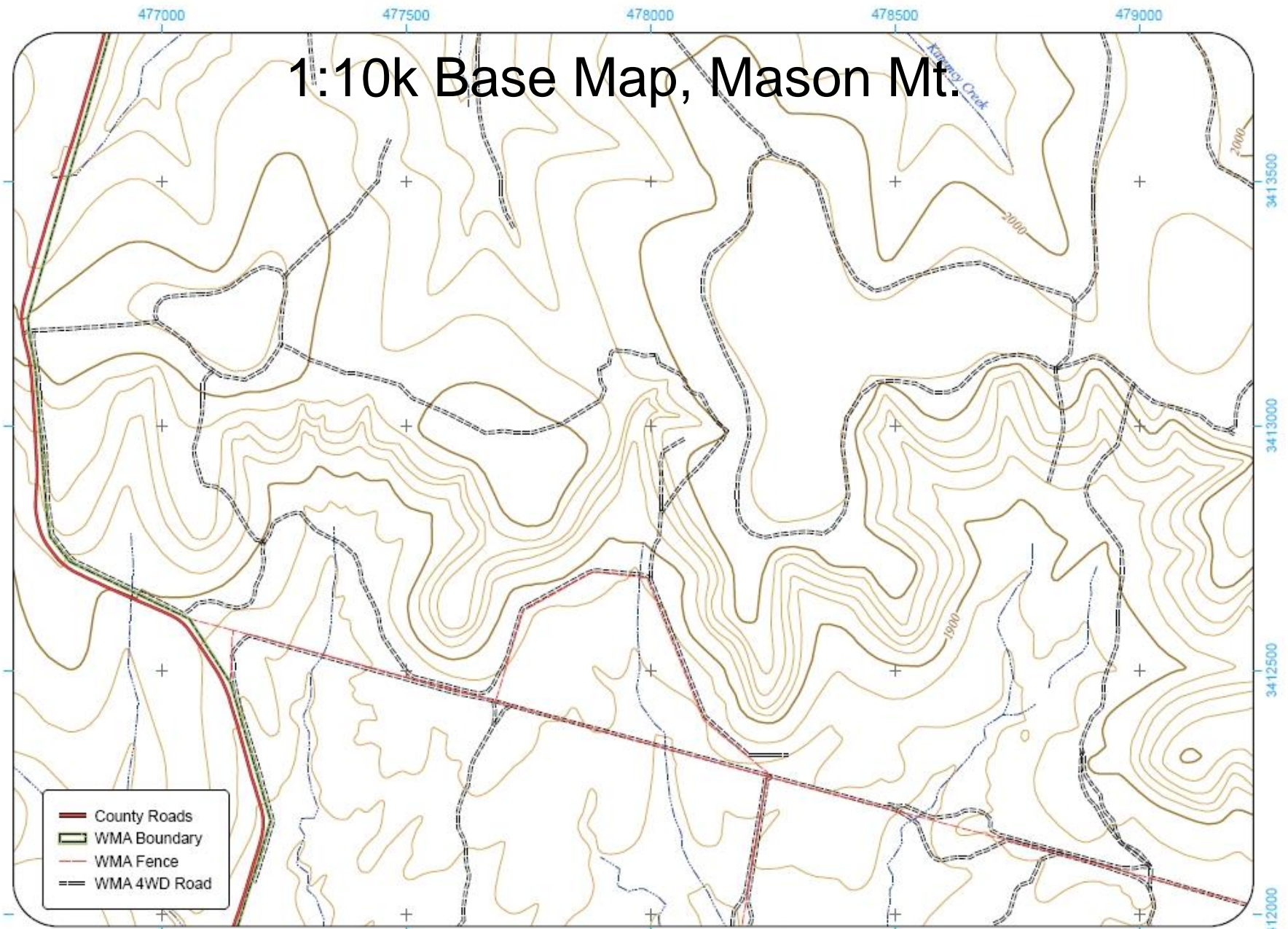
NAD83, UTM zone 14N projection
Contour interval equals 20 feet



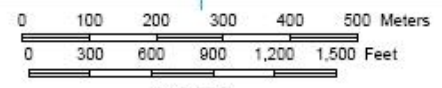
3/20/2014

M. Helper, UT Austin, Geo420k

1:10k Base Map, Mason Mt.

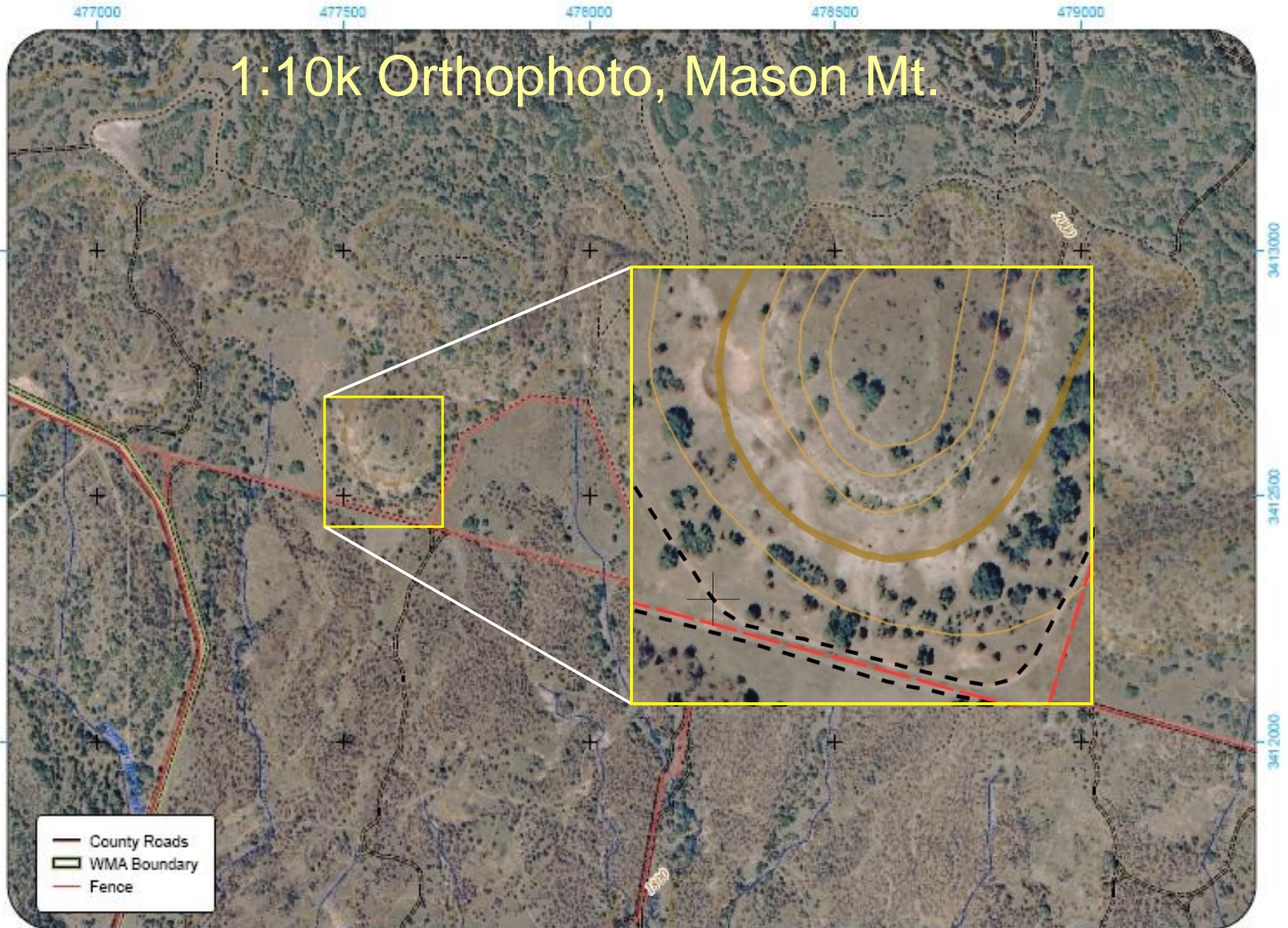


Purdy Hill Quad. base contours from TNRS
500 m UTM zone 14 NAD83 grid
M.Helper, Jan. '09

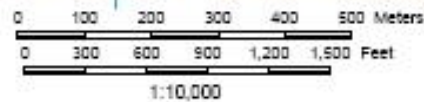


Contour Interval 20 feet

1:10k Orthophoto, Mason Mt.



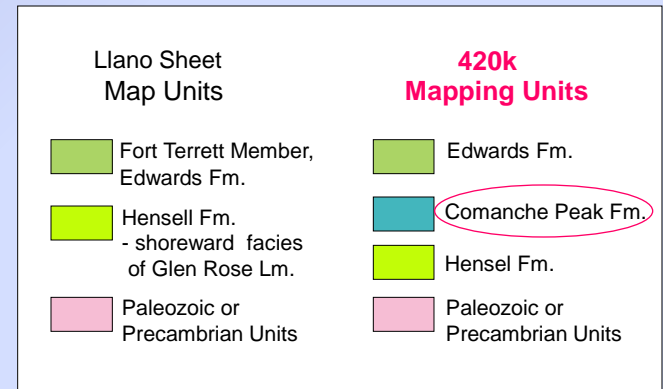
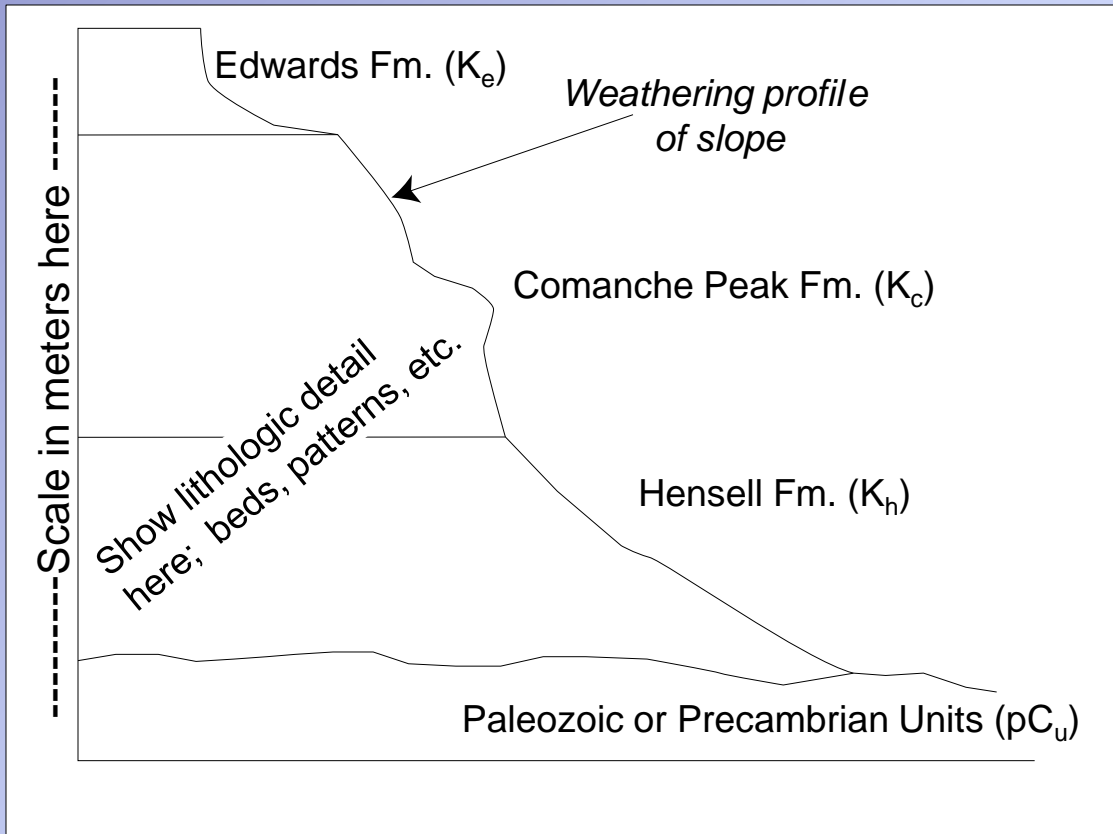
2006 2 foot DOQ from CAPCOG
500 m UTM zone 14 NAD83 grid
M. Helper, March, '09




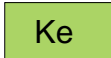




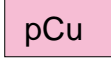
Contour interval 20 feet

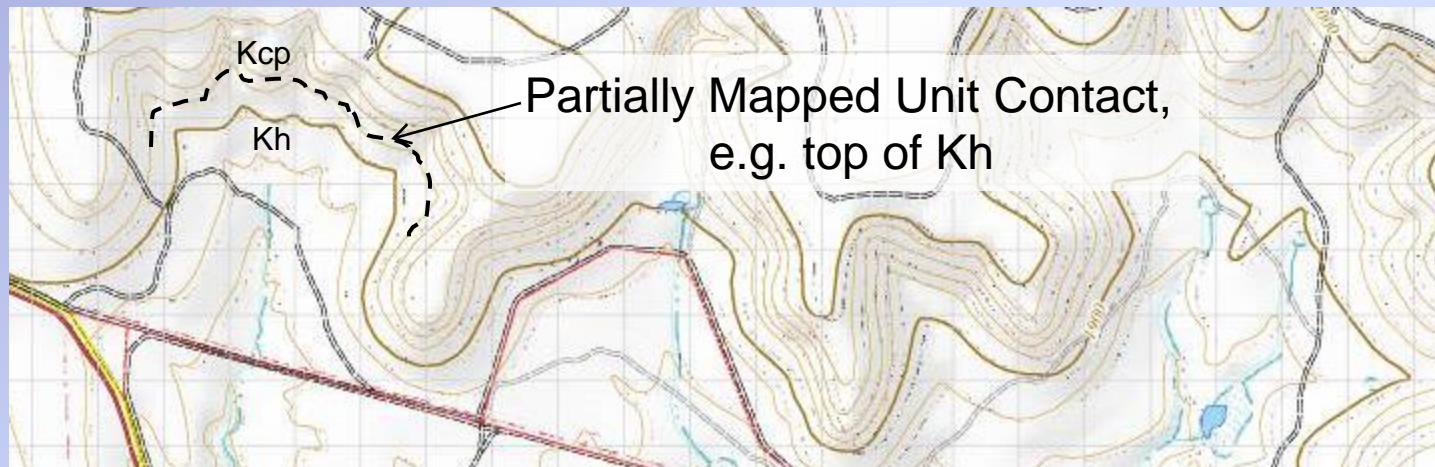
Day 1: 1st Task – Measure a Section

Example Template for Weathering Profile, S. Slope of Mason Mt.

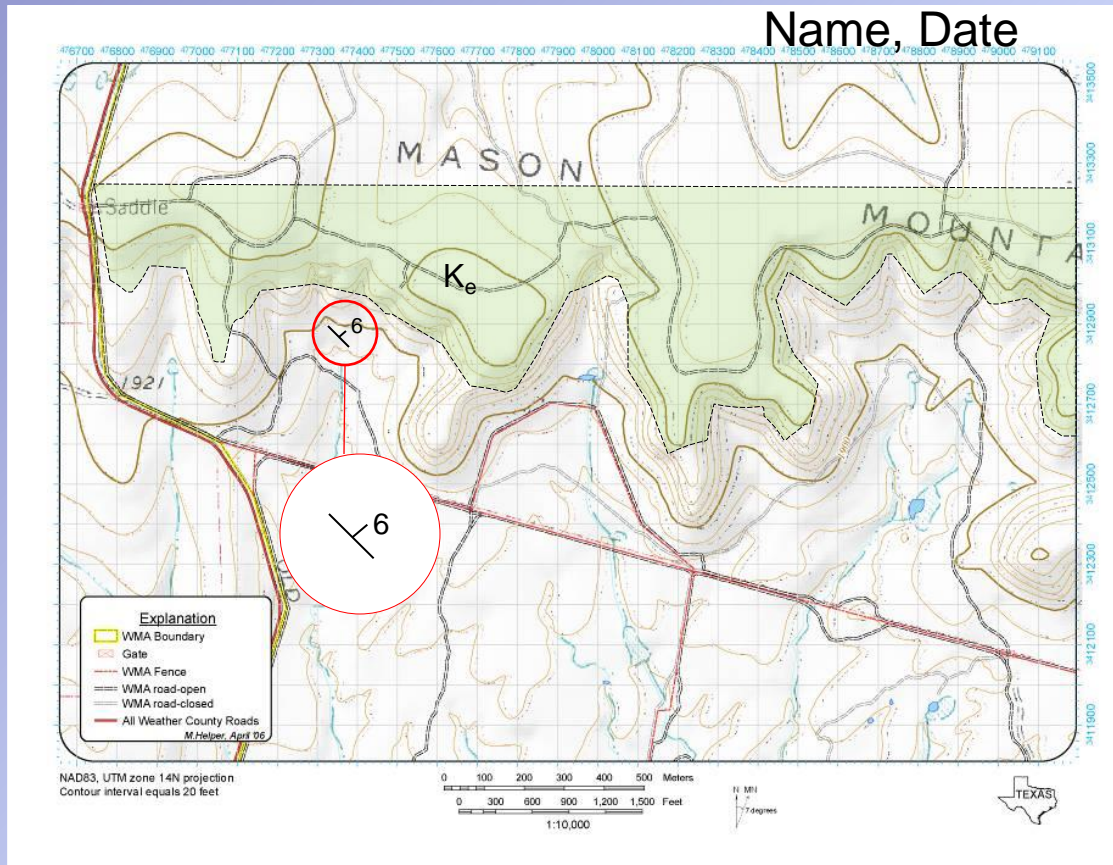


Day 1: 2nd Task – Map Unit Contacts

Llano Sheet Map Units	420k Mapping Units
 Kft Fort Terrett Member Edwards Fm.	 Ke Edwards Fm.
 Kh Hensell Fm. (shoreward facies of Glen Rose Fm.)	 Kc Comanche Peak Fm.
 pCtm Paleozoic or Precambrian Units	 Kh Hensell Fm.
	 pCu Paleozoic or Precambrian Units



Day 2: Half-day – Finish and turn in map



MAP IS FINISHED WHEN:

1. All contacts are in ink, (dashed or solid lines)
2. All units are LIGHTLY colored
3. All units are labeled – e.g. “K_e”
4. All strike and dips are plotted
5. Name in date is in UPPER RIGHT corner

Your weekend mapping goals:

- Is the digital Geologic Atlas of Texas, Llano sheet, correct?
- If not, what are the true geometric relationships and how do they map out?

Deliverables (before returning to Austin):

1. Geologic Map: showing nonconformity, K-unit contacts, and strikes/dips
2. Weathering Profile/"Measured Section"