

***SURVEYING ENGINEERING DEPARTMENT
FERRIS STATE UNIVERSITY***

**CENG 485 – Sustainable Land Use
LAB #2**

Spring 2007/08

PURPOSE: The objective of lab #2 is to acquaint the student with P.A. 288 and P.A. 132 requirements. The student must review site topography and create the maximum parcels that can be developed. The parcels will provide an inventory for the developer to market. The student must study the entire site considering the further develop of a Preliminary plat to be completed later.

- PROCEDURE:**
1. Consider the entire development as a project that will be completed in phases. You need to sketch proposed roads, drainage retention or detention areas, lots, and recreational facilities. Phase I will be the maximum number of parcel that will be taken out of the proposed development and sold as parcels.
 2. The parcels must be mapped to scale on a Certificate of Survey. P.A. 132 requires a standard sheet size of 8½”x14” legal size. The parcel maps can be on more than one sheet
 3. Sheets must be number consecutively with match lines. (Example match line Sheet 2 of 4)
 4. Setup project settings. Scale, Units, Precision, Node Styles, etc., before you do any work on this project. The software always returns to the default settings when you start a new project. **REMEMBER TO USE LAYERS.**
 5. Submit a map drawn to scale on 8½” x 14” paper.
 6. Refer to your copy of the P.A. 288 and P.A. 132 use the check sheet as a guide standard.

TRACT DESCRIPTION:

Situated in the Township of Peninsula, County of Mullet, State of Michigan, being part of the South ½ of the Southeast ¼ of Section 5,

Town 3 North, Range 3 East, described as following: Commencing at the North $\frac{1}{4}$ corner of said Section 5, T3N, R3E; thence S $00^{\circ} 09' 17''$ W along the N-S $\frac{1}{4}$ line 3959.11 feet to the Point of Beginning; thence continuing S $00^{\circ} 09' 17''$ W 1312.25 feet to the South $\frac{1}{4}$ corner of said Section 5, T3N, R3E; thence S $89^{\circ} 10' 19''$ E 2307.39 feet to a point which is 328.80 feet N $89^{\circ} 10' 19''$ W from the Southeast corner of said Section 5, T3N, R3E; thence N $00^{\circ} 16' 29''$ E 1324.97 feet to the South line of STUART HALL SUBDIVISION, recorded in Liber 7 of plats, Page 17, Mullet County records; thence N $89^{\circ} 29' 17''$ W along the South line of said subdivision 2310.05 feet to the Point of Beginning, containing 69.89 acres more or less.

Subject To: A County Road right-of-way over the Southerly and Westerly sides thereof.

Further Subject to: Restrictions, reservations, agreements, and easements, if any

GIVEN DATA: The topographical data and base map provided by Aerial Photography and mapping by Advanced Mapping Technologies. Horizontal and Vertical control provided by local survey firm. A digital copy of this map may be accessed as noted above.

Municipal zoning requirements:

- Minimum Lot size - 43560 Sq. Ft.
- Minimum Lot Width - 100 Ft. at building setback line.
- Depth to width ratio 4 to 1 Maximum. Width is defined as the shortest distance measured at the building setback line between the side lot line (On curvilinear lots this is a chord distance. The distance must be a minimum of 100 feet.)
- 1 acre of Recreational Development for each 20 Acres of residential lot development must be created within the project boundaries.
- Preliminary plat must be submitted to planning committee 30 days before submitting to township board for approval of tentative preliminary plat.

Health department requirements:

- Due to an unprotected Aquifer, wells must be at a depth of 150+ feet.

- Well isolation from any source of contamination 75 feet minimum.
- Onsite waste disposal must have adequate space for 1 primary and 1 secondary system minimum. A system will have as a minimum: A dual chambered septic tank or 2 tanks at contractor's option connected to a 40 x 60 typical drainfield with a secondary drainfield available for use.

Road Commission Right of Way width must be 66 feet minimum see standard specifications for street design. See attached Standard Specifications for street design.