Subdivision Design

Purpose: To consider a different approach to how land is developed and its implications for sustainable place.
Today’s Questions

• Historically, what is the primary development pattern in America?
• What implications does the pattern have for sustainability?
• Are there ways to think differently about development patterns?
• Why do people live on golf courses?
Conservation Design for Subdivisions

- an example of site design
- an alternative to the golf course subdivision

(Based on work by Randall Arendt)
City of College Station, Texas
Change in City Limits and Development
1938 – 2003 (65 years)
82 Acres of farmland - Growth of nearby city has led to sale for development.
Traditional Rural Subdivision

• Ordinances often require minimum lot size of roughly 2 acres. Sometimes has to do with the need for a septic system.
• 82 Acres subdivided into 32 lots at 2.3 acres (74 acres) leaving about 8 acres for roads.
• The entire site is divided and owned individually by residents.
Which lot would you want?

Traditional layout of the 32 lots
Figure 7A-1. Site A: Before Development
The 82 acre site with 32 lots at an average of 2.3 acres each
Considering a Different Style of Development - A Different Design

• Inventory & Analyze
  – physical characteristics
  – cultural/social characteristics

• Synthesize
  – areas for development & lots laid out
  – roads and trails laid out
Inventory/Analyze key land/soil characteristics

Figure 7A-4. Site A: Identifying Primary Conservation Areas
Inventory/Analyze cultural and experience characteristics
Synthesis – Select areas for development

Figure 7A-6. Site A: Identifying Potential Development Areas
Select likely arrangement of homes

Figure 7A-7. Site A: Locating Potential House Sites
Synthesis - Layout roads and trails

Figure 7A-8. Site A: Designing Road Alignments and Trails
Synthesis - Decide on lot boundaries

Figure 7A-9. Site A: Drawing in the Lot Lines
Conservation Design Results

- 32 lots at .7 acres (22 acres), roads 8 acres (30 acres “developed”) leaving 52 acres of open space
- May require a “package plant” for sewer
- Example of cluster development - concentrates developed area in favor of a commons or “public space” for amenity value
32 lots at 2.3 acres each

32 lots at .7 acre each

Potential Benefits

• Economic (for the developer) 1. smoother review process  2. costs less to build roads and utilities
• Environmentally sensitive areas conserved and some of the cultural meaning retained
• Marketing and sales aided (selling a different type of place)
• Community can be enhanced through better visual and recreational connections
• Provides “public” parkland
• Greenway/green infrastructure connectivity if adjacent properties are developed in a similar way
Summary

• A major reason people enjoy living in golf course subdivisions is for their access to open space (park like environment)

• Conservation subdivisions provide a different type of open space
  – More flexible use for residents
  – Usually more ecologically friendly
  – Can help retain cultural sense of place

• A possible down side - these subdivisions still contribute to sprawl…