

Spectrum of Opportunities	
<b>Raw Land</b> <ul style="list-style-type: none"><li>Unimproved land with no approvals from any regulatory agencies, jurisdictions, or other authorities</li></ul>	ENTITLEMENT
<b>Preliminary Approved Land</b> <ul style="list-style-type: none"><li>Property which has received a preliminary level of approval from authorities</li></ul>	
<b>Subdivided Land</b> <ul style="list-style-type: none"><li>Final plat of subdivision has been approved and recorded</li><li>Subdividing a larger property into smaller unimproved lots</li></ul>	
<b>Developed Lots</b> <ul style="list-style-type: none"><li>Necessary improvements such as streets, water, and sanitary sewer are installed</li><li>No construction has taken place</li></ul>	DEVELOPMENT
<b>Improved Land</b> <ul style="list-style-type: none"><li>Distressed condition</li><li>Good condition</li></ul>	BUILDING/ INVESTING



## Benefits of Land Development



- Potential rewards
- Leverage
- Relatively easy

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## QUICK QUIZ: Creating Value



>



10 acres

<

1 ac.	1 ac.	1 ac.	1 ac.	1 ac.
1 ac.	1 ac.	1 ac.	1 ac.	1 ac.

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## Record Plat



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## Benefits of Land Development



- **Potential rewards**
- **Leverage**
- **Relatively easy**

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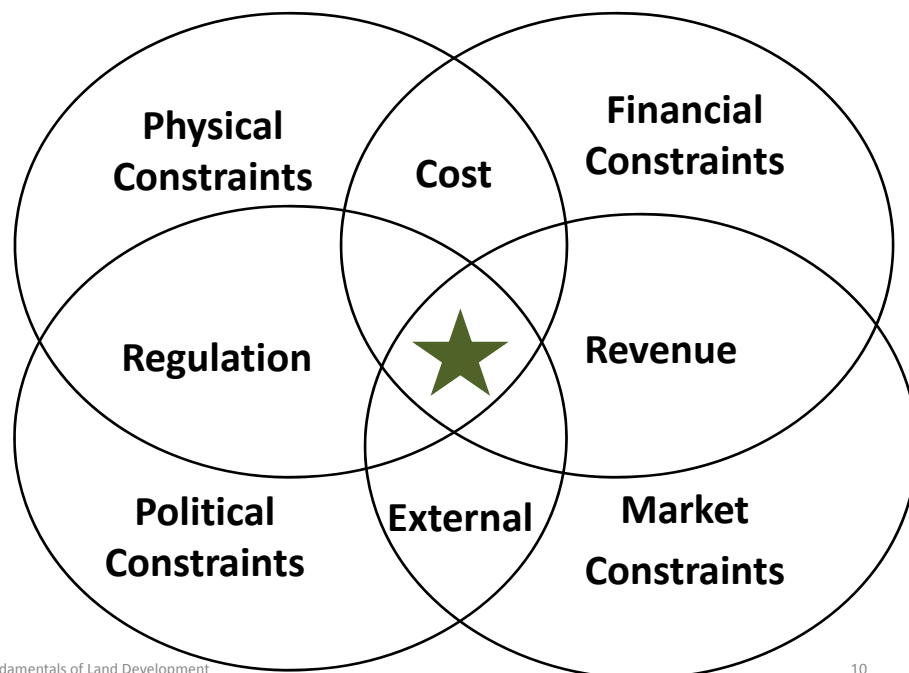
## Managing Risks

- Know the rules
- Feasibility study
- Proper team
- Option contract



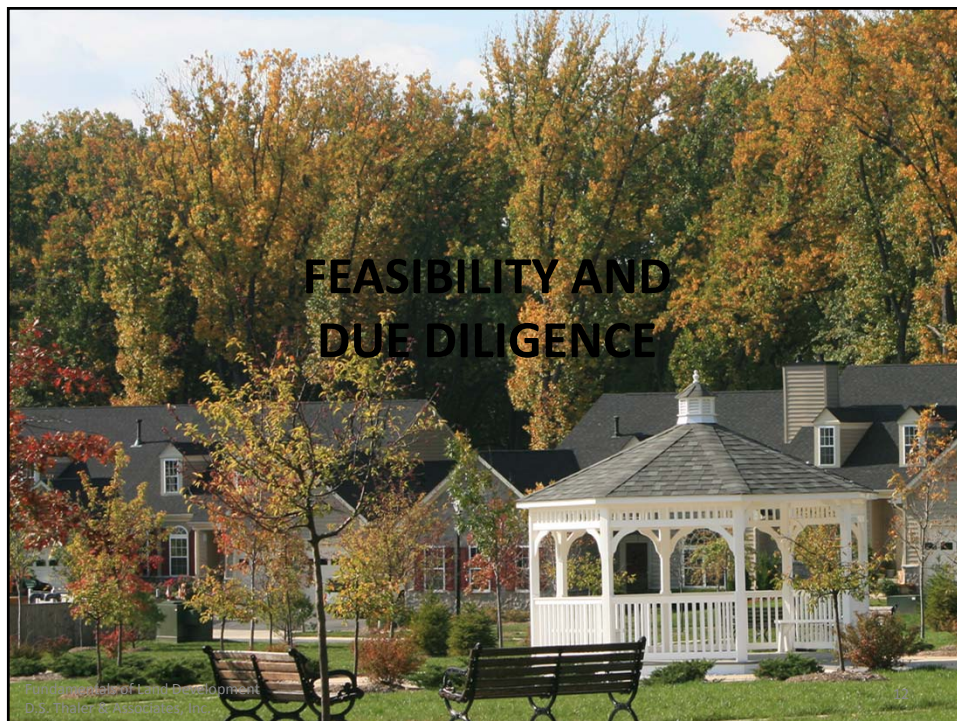
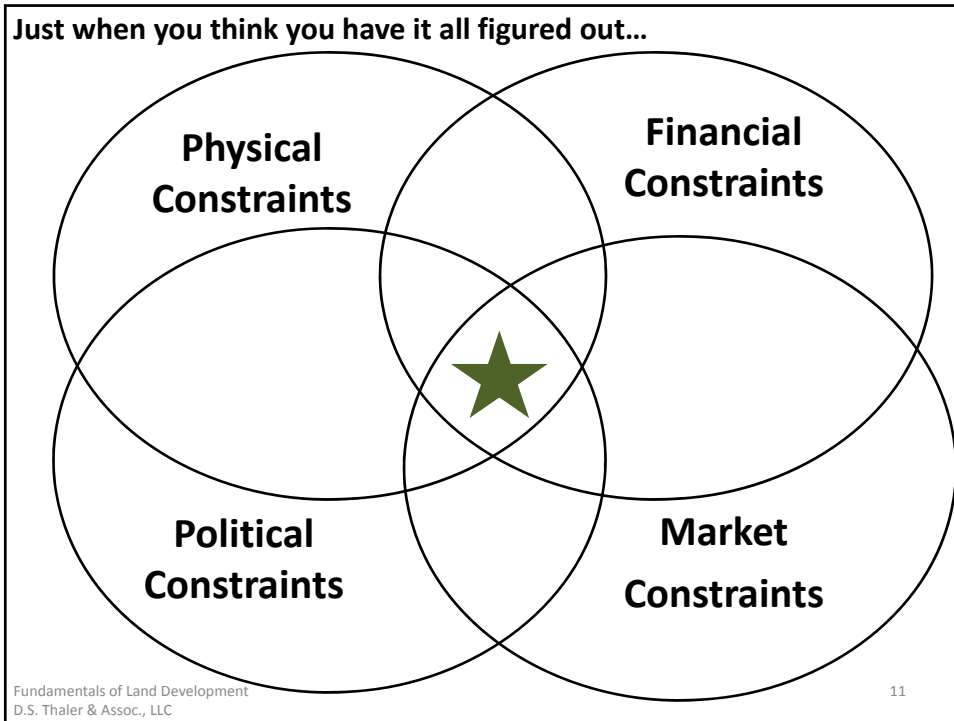
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## Physical Features

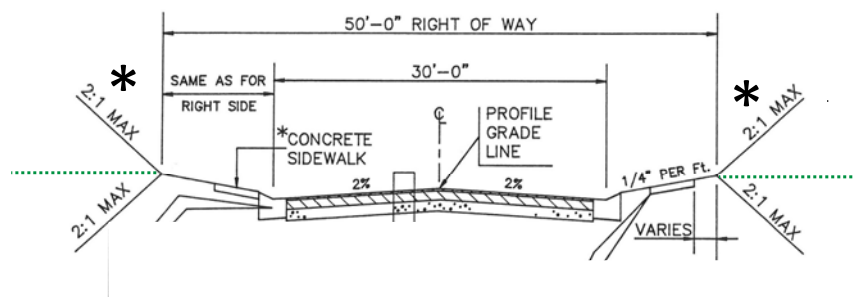
- Accessibility
- Topography
- Public water and sewer
- Well and septic
- Floodplains
- Suitable outfall
- Subsurface conditions
- Adequate public facilities
- Overlay districts



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## Development Assessment: Access



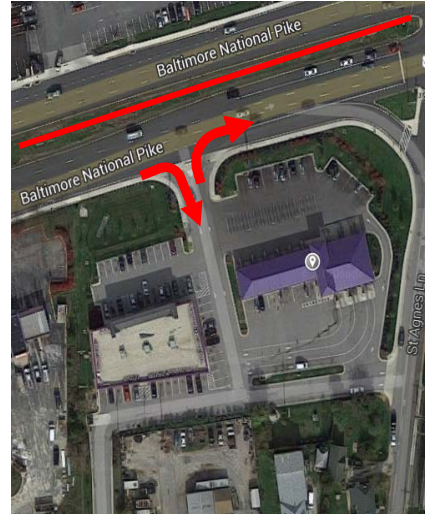
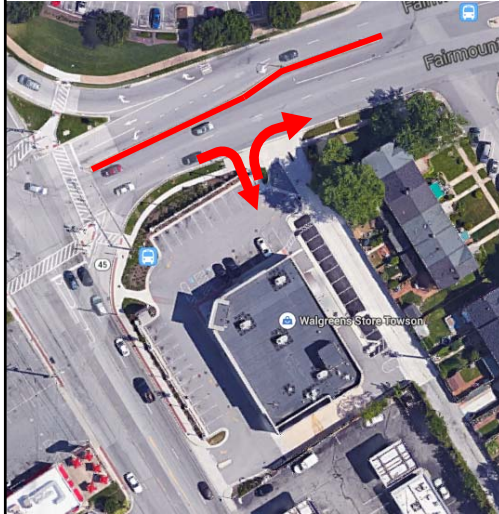
\* Offsite property may be required for grading supporting slopes

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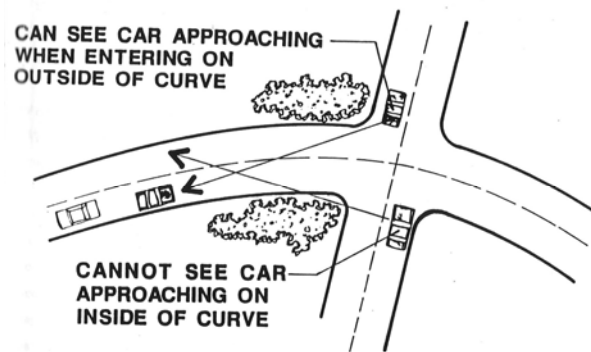
## Development Assessment: Access



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## Development Assessment: Access



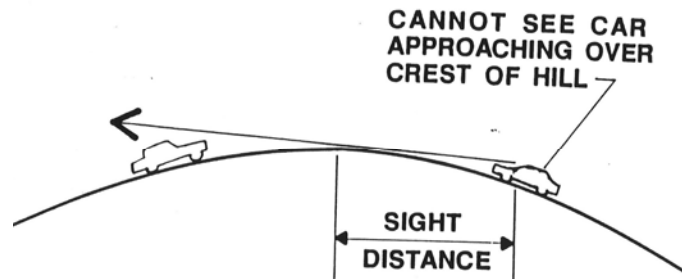
Horizontal Sight Distance

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## Development Assessment: Access



Vertical Sight Distance

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## Development Assessment: Topography

### Steep Slope

- Close contour lines
- +20% (Balt. Co.)

### Saddle Point

- Concentric circles
- Drainage divide

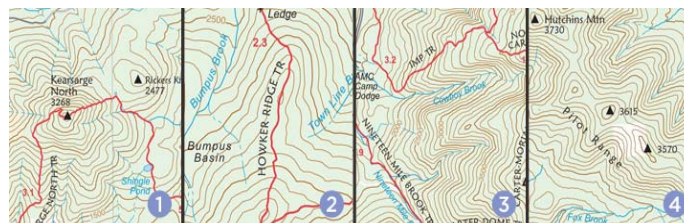
### Stream

- Long, meandering V-shape
- Flows from point to mouth of V-shape

### Ridge

- U-shape
- Belly of U-shape points downhill

Contour interval  
Index lines  
Intermediate lines  
Northing



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## Development Assessment: Topography



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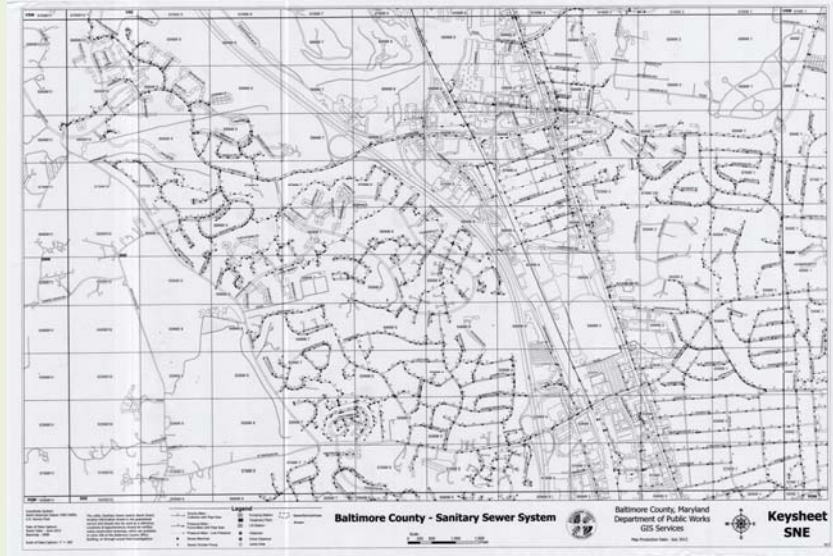
## Development Assessment: Water and Sewer



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## Development Assessment: Water and Sewer



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**And then this inevitably happens...**



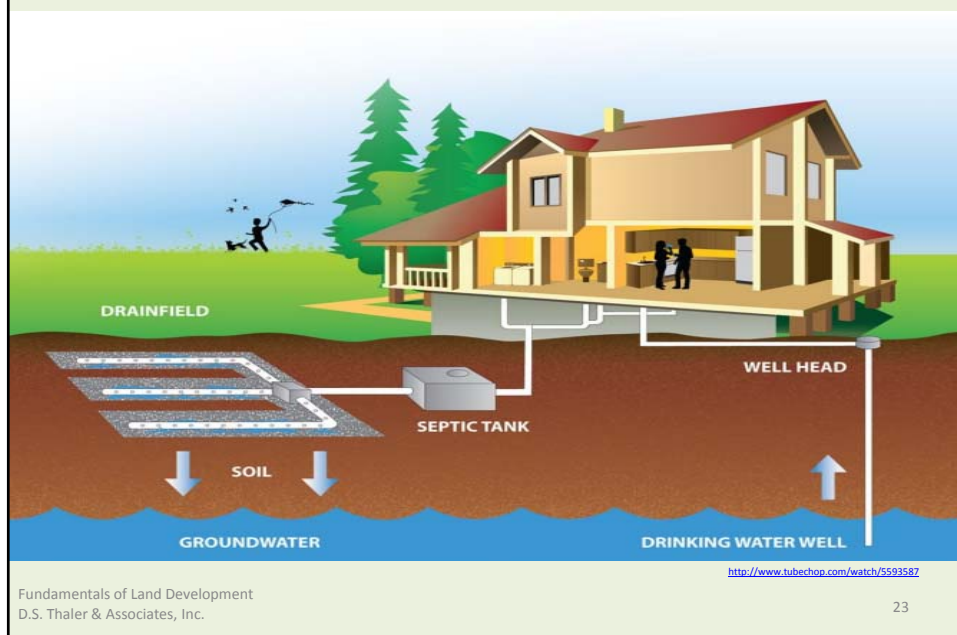
**Tuberculation in the water main system**  
City of Rockville

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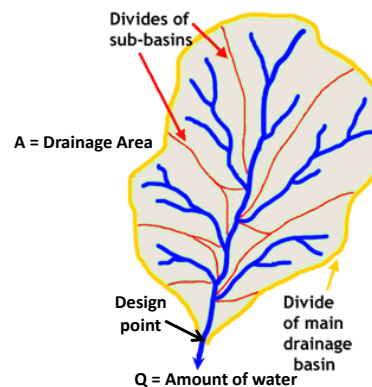


## Development Assessment: Well and Septic

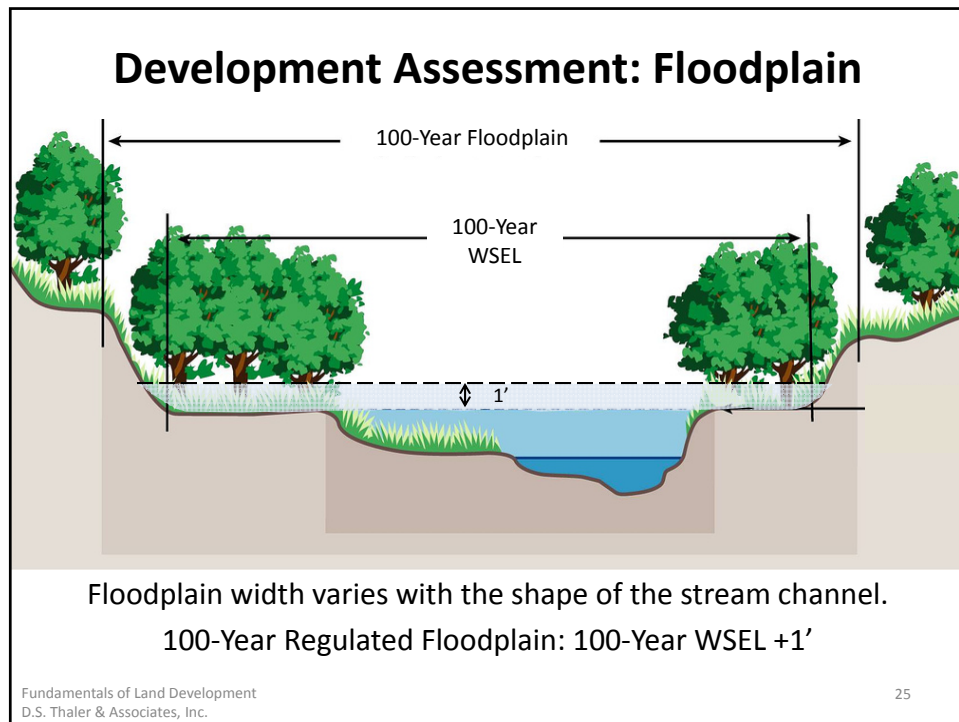


## Development Assessment: Floodplain

- Slope/ topography
- Cover
- Conditions
- Characteristics of flow path
- Time of concentration







## Development Assessment: Subsurface Conditions



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## Feasibility: Adequate Public Facilities

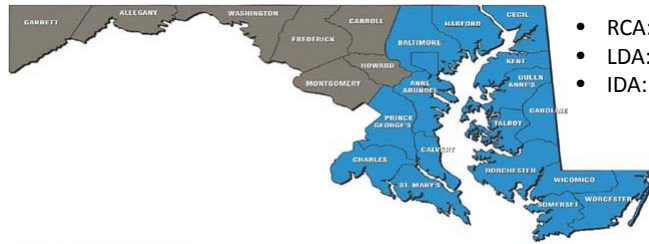
- Water
- Sewer
- Traffic
- Schools
- Police & Fire
- Libraries



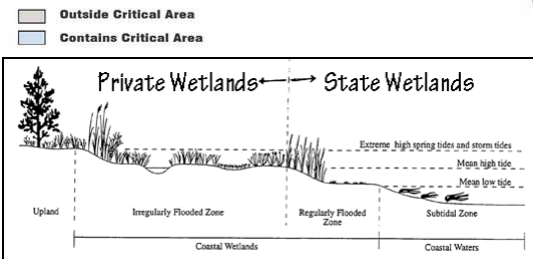
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## Feasibility: Critical Area



- RCA: Resource Conservation Area
- LDA: Limited Development Area
- IDA: Intensely Developed Area



- Growth Allocation
- Critical Area Buffer

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## Feasibility: Environmental Site Assessments

### Phase I

- Identifies potential contaminants
- Review/ research site records and adjacent property records
- Visual site inspection
- Preliminary sampling and laboratory analysis

### Phase II

- Confirms presence of hazardous materials
- Sampling and laboratory analysis
- Soil and water samples
- Soil borings
- Groundwater monitoring
- Geophysical testing

### Phase III

- Clean-up
- Remediation

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## Feasibility: Forest Conservation

(o) *Forest*. "Forest" includes:

- (1) Areas that have at least 100 live trees per acre with at least 50% of those trees having a 2-inch or greater diameter at 4.5 feet above the ground and larger;
- (2) Areas with mature trees that provide a contiguous canopy over unimproved land; and
- (3) Areas that have been cut but not cleared.

(p) *Forest buffer*. "Forest buffer" has the meaning stated in Title 5 of this article.

(q) *Forest conservation*. "Forest conservation" means the retention of existing forest or the creation of new forest at the levels set by the state or the Department.

(r) *Forest conservation and management agreement*. "Forest conservation and management agreement" means an agreement as stated in § 8-211 of the Tax-Property Article of the Annotated Code of Maryland.

(s) *Forest conservation plan*. "Forest conservation plan" means a plan approved in accordance with this title.



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## Wetlands Diagnostic Parameters



- Hydrology
- Hydrophitic Vegetation
- Hydric soils

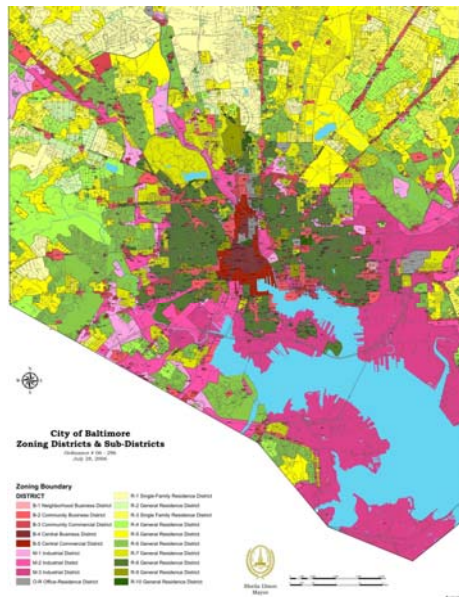


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## Regulatory Issues



## Title Issues

- Covenants
- Old Roads
- Easements/ Rights-Of-Way
- ALTA surveys



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## Political Analysis and Community Relations

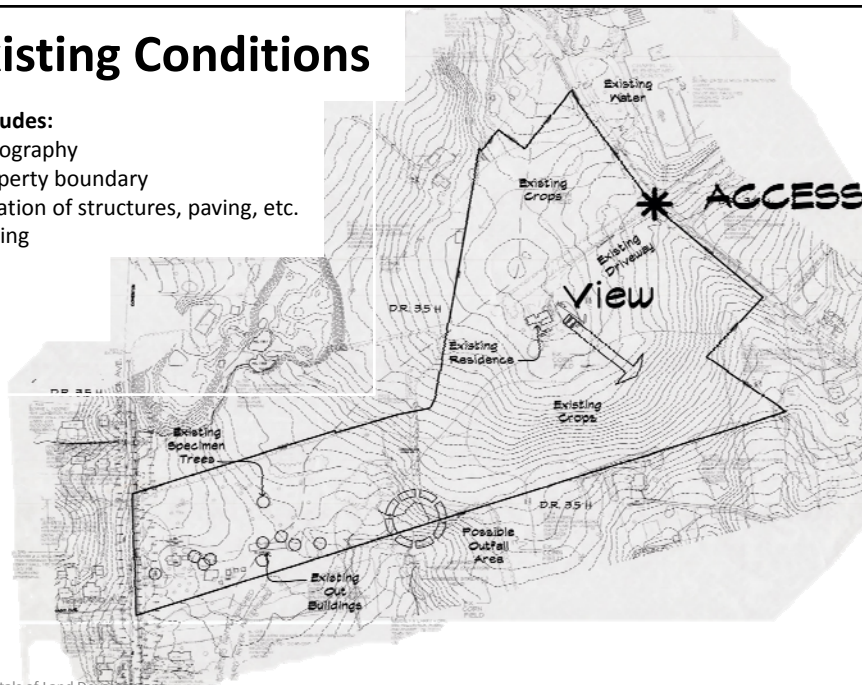


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## Existing Conditions

**Includes:**  
Topography  
Property boundary  
Location of structures, paving, etc.  
Zoning



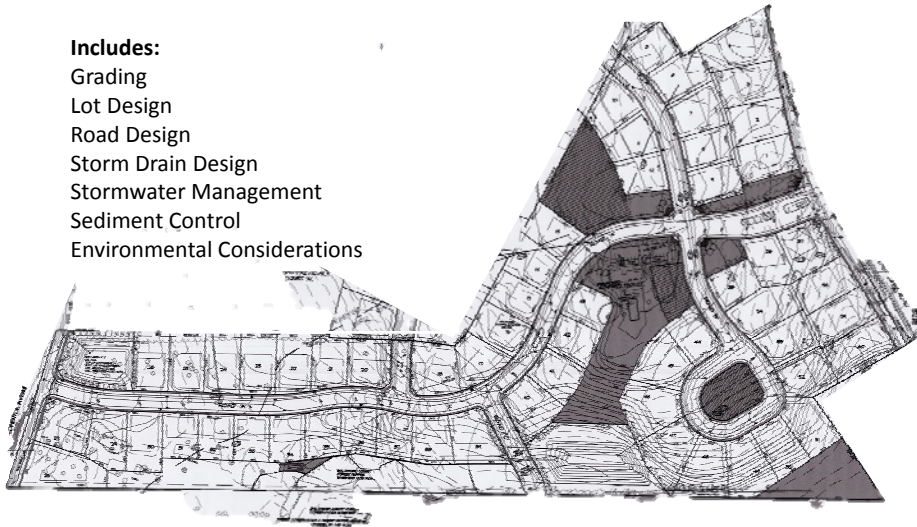
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## Proposed Conditions

### Includes:

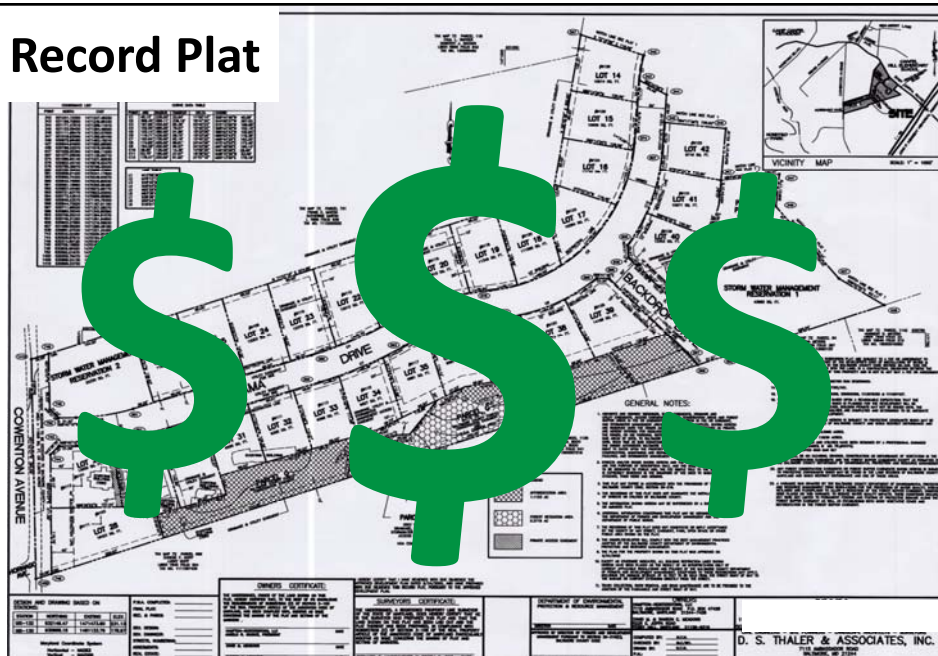
- Grading
- Lot Design
- Road Design
- Storm Drain Design
- Stormwater Management
- Sediment Control
- Environmental Considerations



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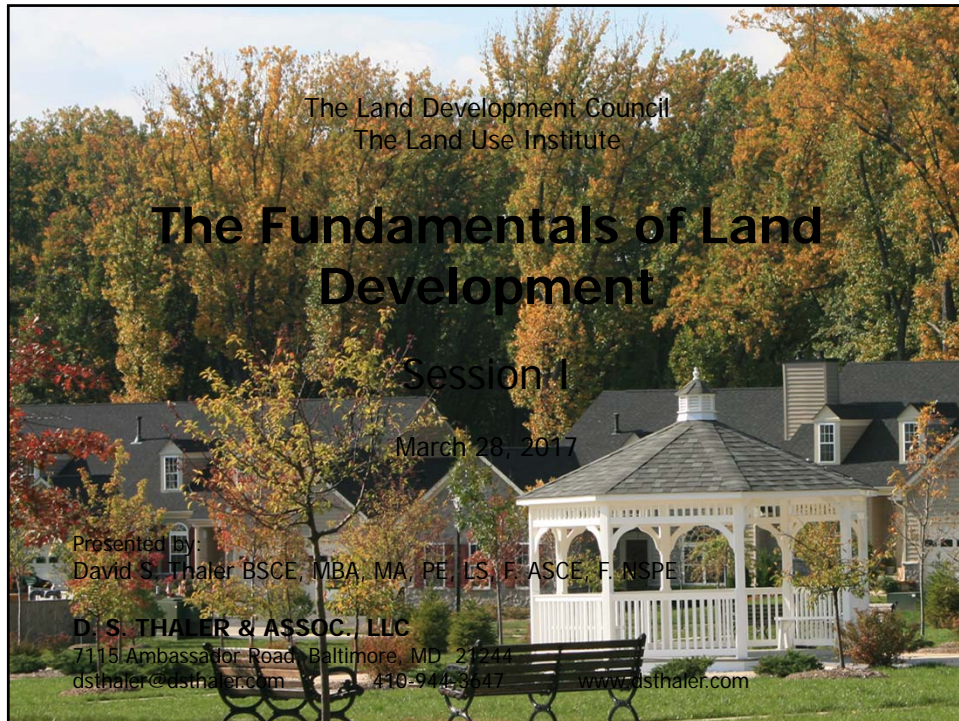
## Record Plat



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The Land Development Council  
The Land Use Institute

# The Fundamentals of Land Development

## Session I

March 28, 2017

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