Feasibility, Underwriting, and Due Diligence

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MSRE 510
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Feasibility Defined

• capable of being done or carried out <a feasible plan
• capable of being used or dealt with successfully :
  suitable, reasonable, likely
• Kohlhepp: When the benefits exceed the costs.

• Starts with Market Data
  – Prices
  – Rents
  – Cap Rates
  – Development Costs
Feasibility Analysis
(Can you do it in your head?)

– What’s the Spread Between Cap Rates?
  Return on Total Costs (Going In)
  Selling Cap Rate (Going out) Also Called Market Cap Rate

– Direct Capitalization
  • Value = Income/Cap Rate
  • Property Value = NOI/Overall Cap Rate
  • Land Value = Land Income/Land Cap Rate

– BOTE
  • Examples Please

– Threshold Returns (On What?)
  • Stabilized Returns
  • Annual Returns
  • Time Weighted Returns
    – Traditional IRRs
    – IRR with Specified Reinvestment Rate
Underwriting Defined

– to write under or at the end of something else

– to set one's name to (an insurance policy) for the purpose of thereby becoming answerable for a designated loss or damage on consideration of receiving a premium percent: to insure on life or property; also: to assume liability for (a sum or risk) as an insurer

– to subscribe to: agree to

– to agree to purchase (as security issue) usually on a fixed date at a fixed price with a view to public distribution b: to guarantee financial support of

– Kohlhepp: To bet your assets that this deal will work
Underwriting Analysis

- Sensitivity
- Robustness
- Back Door
- Critical Assumptions
- Conditions to Fund
Due Diligence Defined

• the care that a reasonable person exercises under the circumstances to avoid harm to other persons or their property
  – Prudent Man Principle
  – Prudent Expert Principle
  – Prudent Woman Principle

• Kohlhepp Seller’s Due Diligence:
  – What do we have
  – What is it worth?
  – Who wants to buy it?
  – How do we affect a sale?
Buyer’s Due Diligence

– Kohlhepp Buyer’s Due Diligence:
  • All things considered, is there a reasonable possibility that this investment will meet or exceed the buyer’s investment objectives?
  • No limiting assumptions (unlike appraisals or accounting projections).
  • No excuses, e.g. not my field
  • Use appropriate experts
  • Use a “second set of eyes”

– Know thyself:
  • What price can be paid and what risks can be assumed for the specified investment opportunity to achieve the buyer’s objectives?
  • If you don’t know where you are going, any road will get you there.
Potomac Yard Example

• What the Seller Represented
• Crescent’s Critical Issues
• Crescent’s Quantification
• The Deal
• Actual vs Predicted (Errors of Estimation)
Aerial of Potomac Yard Arlington
Before Construction
Aerial of Potomac Yard Alexandria Before Construction
North Tract Transfer
Arlington Necessary Condition

Potomac Yard Development Process
April 12, 2007
Land Bays at Potomac Yard Arlington
Land Bays at Potomac Yard Alexandria
What the Seller Said

• Physical Conditions
  – 369 acres
  – Former RF&P Rail Yard
  – Partially developed

• Environmental conditions
  – Remediation Underway at former Central Operations area
  – “No further action” letter expected
  – 16 boxes of studies
  – http:\:\:loggerhead.epa.gov\arweb\public\advanced_search.jsp
Seller Said

• Entitlements
  » Coordinated Development District approved in Alexandria in September 1999.
    • Development conditions
    • Urban Design Guidelines
  » Phased Development Site Plan Zoning being negotiated in Arlington
    • Development Conditions
    • Urban Design Guidelines
  » Smith Litigation is baseless
### Seller Said:

<table>
<thead>
<tr>
<th></th>
<th>Arlington South Tract PDSP</th>
<th>Alexandria CDD</th>
<th>Existing Retail Center</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Office</strong></td>
<td>2,880,000</td>
<td>1,900,000</td>
<td>0</td>
<td>4,780,000</td>
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<tr>
<td><strong>Residential</strong></td>
<td>1,000,000</td>
<td>2,953,000</td>
<td>0</td>
<td>3,953,000</td>
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<tr>
<td><strong>Neighborhood Retail</strong></td>
<td>60,000</td>
<td>135,000</td>
<td>0</td>
<td>195,000</td>
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<tr>
<td><strong>Hotel</strong></td>
<td>468,750</td>
<td>468,750</td>
<td>0</td>
<td>937,500</td>
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<tr>
<td><strong>Retail Center</strong></td>
<td>0</td>
<td>0</td>
<td>600,000</td>
<td>600,000</td>
</tr>
<tr>
<td><strong>Total Building Area</strong></td>
<td>4,408,750</td>
<td>5,456,750</td>
<td>600,000</td>
<td>10,465,500</td>
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</tbody>
</table>
Crescent Critical Issues

• Real estate market forecasts in 1999 and 2000
  – Office -- Strong
  – Retail -- Weak
  – Residential -- Weak
  – Hotel -- Strong

• Infrastructure
  – Off-site
  – Onsite
Crescent Critical Issues

• Environmental Risks
  – Reviewed Documents
    » Duke Scientists
    » Third-party Consultants
    » Environmental Attorneys
  – Phase II Analysis (tests)
  – Phase III Remediation
  – Insurance

• Entitlements and Municipal Conditions
  – Alexandria Necessary Condition - Trunk sewer completion
  – Arlington necessary Condition - North Tract Transfer
  – Existing Litigation over alleged NEPA violations
Crescent Critical Issues

• Neighbors
  – CSX Railroad
  – WMAA (Reagan National Airport)
  – WAMTA (metro)
  – VDDOT
  – Army Corps of Engineers
  – National Park Service
  – Neighborhood Associations
Crescent Critical Issues

• Political Conditions
  – Arlington
  – Alexandria

• Capital Requirements
  – Return Expectations
  – Acceptable Risks
  – 1031 Trade Dollars
    » Closing date is important
    » Use of Trade Dollars is critical
Crescent Quantifications

- Land Sales Projections
- Interim Income and Holding Costs
- Infrastructure
- Time –Weighted Measures for Evaluation
  - Land Residual Analysis: How much can we pay for the land and still achieve a target rate of return?
  - Internal Rate of Return: If we pay this much for the land, what will our rate of return be?
The Deal

– **Negotiations:** Three Rounds of Bidding
  - Everything, Real Estate Only, Undeveloped Land Only

– **Approvals**
  - Duke Updates (2), Crescent Resources, Lazard Feres, Duke

– **Transaction**
  - Retail Option and ROFO Agreement
  - Title, Survey, and Cost Allocations
  - 1031 Trade
    - Buyer had 16 trades into the deal
    - Seller had 4 trades out of the deal
## Predicted versus Actual

<table>
<thead>
<tr>
<th></th>
<th>Pre Arlington</th>
<th>Pre Alexandria</th>
<th>Pre Total</th>
<th>Act Arlington</th>
<th>Act Alexandria</th>
<th>Act Total</th>
<th>% Diff Arlington</th>
<th>% Diff Alexandria</th>
<th>% Diff Total</th>
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<tbody>
<tr>
<td>Sales</td>
<td>170.7</td>
<td>295.3</td>
<td>466.0</td>
<td>150.2</td>
<td>140.9</td>
<td>291.1</td>
<td>-12.0</td>
<td>-52.3</td>
<td>-37.5</td>
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<td>Infrastructure</td>
<td>30.9</td>
<td>84.2</td>
<td>115.1</td>
<td>34.3</td>
<td>13.0</td>
<td>47.3</td>
<td>11.0</td>
<td>-84.6</td>
<td>-58.9</td>
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<tr>
<td>Land</td>
<td>73.1</td>
<td>49.7</td>
<td>122.8</td>
<td>78.6</td>
<td>51.2</td>
<td>127.8</td>
<td>7.5</td>
<td>3.0</td>
<td>4.1</td>
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<tr>
<td>Cash Flow</td>
<td>66.7</td>
<td>131.4</td>
<td>198.1</td>
<td>39.3</td>
<td>78.6</td>
<td>115.9</td>
<td>-41.1</td>
<td>-40.2</td>
<td>-41.5</td>
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<tr>
<td>Time (years)</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>4.5</td>
<td>3.25</td>
<td>4.5</td>
<td>-62.5</td>
<td>-75.0</td>
<td>-65.4</td>
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