

### Feasibility Analysis III: Financing and Investment Potential

**Objective:** The goal of this assignment is pencil out the construction financing for the project and the anticipated investment performance using ARGUS once the project has been completed. This case is a continuation of Feasibility Analysis II: Supply and Demand Analysis.

**Background:** The Bayrock group is currently re-designing their plans for a slimmed down condominium hotel located at the southeast corner of 26th Street and Camelback Road. The new design will give the condo-hotel a strong Southwest appearance with the use of either light-colored limestone or sandstone and much less glass. One planned focal point of the new design is a wide, five-story-high archway to invite the community into the building while encouraging hotel and visitors to walk across the street to the Esplanade's offices, retailers and restaurants. The luxury condominium hotel tower will provide expansive panoramic views of the city and the surrounding mountains. The development site is situated in the heart of the prestigious Biltmore Corridor in Phoenix, Arizona. Not only is it contiguous to the Esplanade, Ritz Carlton Hotel, Esplanade Place and across from the exclusive Biltmore Fashion Park but it is within walking distance to over 20 high quality restaurants. The Phoenician Resort, The Royal Palms Hotel, Scottsdale Fashion Square and Old Town Scottsdale are located just east of the property. The property is within 15 minutes drive is Phoenix International Airport.

Although as of March 5, 2008, there has been no news about the project which has been put on hold, according to the FLP Group website (<http://www.flgroup.is/investments/>) which established a strategic partnership with the Bayrock Group in 2007 through an investment of \$50 million in four projects including the Camelback project, construction on the 5-star hotel and residential condominium in Phoenix is anticipated to start in the second quarter of 2008<sup>1</sup>.



The site was formerly a retail center which opened in 1995. The landlord, Camelback Plaza Development LLC, and its major tenants, Just for Feet and Marco Polo Supper Club (Hard Rock Café), had been involved in five lawsuits, mostly over rent and common-area maintenance charges, which cover everything from landscaping to preventive maintenance charges. The tenants were unhappy because of limited parking at the center and construction issues.

**Note:** Please do not call Bayrock regarding this case. Our continuing assumptions and new assumptions are as follows:

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<sup>1</sup>In addition to the Camelback project, the FLP group has invested in three other property development projects with Bayrock. These projects include Trump Soho (46 floor, 5-star hotel condominium in Soho, New York. Completion expected Q4 2008), Trump Fort Lauderdale (5-star hotel condominium on Fort Lauderdale beach. Completion expected Q4 2008), and Whitestone New York (development of 13 acres of land located along the East River in Whitestone, Queens). FL Group and Bayrock Group have also established a 50/50 joint venture for further investments in worldwide real estate development projects. The FLP investment will be funded with own funds and loans. Alfa Investment Consulting was a facilitator to the transaction and advisor to the Bayrock Group.

Category	Assumption																		
Construction costs	Remains the same as in our last case.																		
Financing	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 35%; text-align: center;"><u>Construction Loan</u></th> <th style="width: 35%; text-align: center;"><u>Permanent (Take Out)</u></th> </tr> </thead> <tbody> <tr> <td>Loan Fee (paid by developer)</td> <td style="text-align: center;">2.5%</td> <td style="text-align: center;">2.5%</td> </tr> <tr> <td>Interest Rate<sup>2</sup></td> <td style="text-align: center;">Prime + 2%</td> <td style="text-align: center;">6.5%</td> </tr> <tr> <td>Amortization</td> <td style="text-align: center;">Interest Only</td> <td style="text-align: center;">30 years</td> </tr> <tr> <td>Term of Loan</td> <td style="text-align: center;">18 months</td> <td style="text-align: center;">10 years (balloon)</td> </tr> <tr> <td>Loan to Value Ratio</td> <td></td> <td style="text-align: center;">70%</td> </tr> </tbody> </table>		<u>Construction Loan</u>	<u>Permanent (Take Out)</u>	Loan Fee (paid by developer)	2.5%	2.5%	Interest Rate <sup>2</sup>	Prime + 2%	6.5%	Amortization	Interest Only	30 years	Term of Loan	18 months	10 years (balloon)	Loan to Value Ratio		70%
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Depreciation	Straight line method; Since a portion of the hotel is sold off as condo units, the developer won't be able to take depreciation on that portion. The individual condo owners take the depreciation on their rented condos.																		
Useful Life	39 years																		
Depreciable Basis	Use "5. Depreciable Basis" worksheet.																		
Construction Interest	Amortize Construction Interest: Interest incurred during the construction of commercial real estate must be capitalized, and deducted over its depreciable life beginning when the property is ready to be placed in service or sold. In the year of sale, deduct the remaining (unamortized) construction period interest left, if any. Use "2a. Int Carry (Hotel -Mean)" and "2b. Int Carry (Hotel-Median)" to calculate construction interest. Construction interest is in cell F28.																		
Investor's tax rate	Ordinary income tax rate is 35%, capital gains tax rate is 20%, and the depreciation recapture tax rate is 25%																		
Number of Units (Keys)	Developer will retain all Resort Deluxe (studio) units (260 units) and will sell all remaining units (180 units) as condos. Owners of Grande Suites will put their units (135 units) back into the rental pool. Owners of Casa Suites and Presidential Suites will not join the rental pool. Please see "Proposed Condotel" worksheet.																		
Management Fee	Developer will charge condo owners who put their property into the rental pool a 20% management fee <sup>3</sup> .																		
Growth rates	Room revenue for luxury hotels is expected to grow at 4.7% per year (see "Hotel Forecast" worksheet). Retail revenues are expected to grow at 2% per year while operating expenses on retail property are anticipated to grow slightly faster at 2.5% per year.																		

<sup>2</sup>Although the interest rate on the construction loan in practice will vary each period since it floats at a spread above prime, we assume for purposes of our calculations that the prime rate remains constant over our construction period.

<sup>3</sup>This assumption is based Hotel Valley Ho, the first condotel which charges a 20% management fee.

Category	Assumption
Revenues	Room Revenue (Hotel) as a percent of total sales for hotel is as calculated in the previous case (see "3. Hotel Industry Income Stmt" worksheet, cell F6). Non-Room Revenues (Hotel) as a percent of total sales for hotel is as calculated in the previous case (see "3. Hotel Industry Income Stmt" worksheet, cell F7+ cell F8+ cell F9). Annual Room Revenue per Unit for Year 2008 is from "6. Backdoor (Condotel)" worksheet in previous case, cell G8 (Mean) and cell F8 (Median). Asking Rent per Square Foot (Retail) is \$14.94.
Vacancy rate	Vacancy rate for retail is 5%. Vacancy rate for hotels is included in the revpar and is assumed to remain constant. Please see previous case.
Operating Expenses	Operating expenses per square foot for retail (no tenant improvement or leasing costs) for Year 2008 is \$5. Operating expenses as a percent of total sales for hotel is as calculated in the previous case (see "3. Hotel Industry Income Stmt" worksheet, cell F20).
Sale Price	Sale Price of the Hotel or Retail in Year 10 is based on "capping out" expected NOI in Year 11 e.g. $Price_{10} = NOI_{11}/\text{going-out cap rate}$ . The sale price of condo units is \$1,250 per square foot.
Going Out (Terminal) Cap Rate	Hotel: 9% Retail: 7%
Discount Rate (Hotels)	Equity Yield (IRR) for Hotels = 18%; use to calculate NPV
Selling expenses	Selling expenses are 6% of the sale price
Holding Period	10 years

**Assignment:** Please prepare your report as a formal presentation to your boss complete with maps and charts using a Wall Street format. This is an individual project. You will need to use the assumptions given on the previous page together with the information provided in various worksheets of the workbook that you downloaded with this case.

1. Building Costs: Using the “1. Hotel Bldg Cost (Case2)” worksheet template, calculate the total development costs as you did in the previous case. The only difference between this spreadsheet and the worksheet that you used in the previous case is the calculation of the construction interest rate.

2. Draw Schedule: Using the “2a. Int Carry (Hotel -Mean)” worksheet template, calculate the loan balance at the end of each month (EOM), interest accrual (interest carry), loan draw (EOM), cash flow to the bank (EOM), and cash flow savings to the developer (EOM). The columns in the template are as follows:

Percent of Construction cost (Pct of Constr Cost): This is the percent of construction cost that is "put in place" in each month. The total of this column is equal to 100%.

Construction Cost (Low): This is the dollar amount of building cost or construction cost that is “put in place” in each month. It is calculated as Construction Cost (Low) = Building Cost (Low)\*Pct of Construction Cost.

Interest Rate: This is the construction interest rate = prime rate + spread (2%)

Loan Balance at End of the Month (EOM): Loan Balance at end of Month 1 is equal to Construction Cost (Low) in Month 1 e.g. cell C4. After Month 1, the Loan Balance at the end of Month T =  $LoanBal_{T-1} + LoanBal_{T-1} * Monthly\ Interest\ Rate + Construction\ Cost(Low)_T = (1 + Interest\ Rate/12) * LoanBal_{T-1} + Construction\ Cost(Low)_T$  where T-1 represents the previous month and T is the current month. Intuition: the ending loan balance is the beginning loan balance (ending loan balance in the previous month), monthly interest based on the previous loan balance and the construction cost “put in place” in the current month.

Interest Accrual (also known as Interest Carry): Interest accrual in Month 1 is zero (leave the cell blank). Interest accrual in month T e.g.  $Interest\ accrual_T = (Interest\ Rate/12) * LoanBal_{T-1}$ .

Loan Draw (End of Month): The loan draw at the end of the first month is equal to Construction Cost (Low) in Month 1 e.g. cell C4. Starting in the second month,  $Loan\ Draw_T = Construction\ Cost\ (Low)_T + (Interest\ Rate/12) * LoanBal_{T-1}$ .

Payments (End of Month): This refers to the “payment” that the developer makes. The developer will make 2 payments. The first payment which the developer pays in first month is the construction loan fee (Loan fee\*Total Construction Loan = cell G2\* cell E21). The developer makes the second payment in month 18. This payment is the Total Construction Loan = total Building Cost including the total Interest Carry. This is the amount that will be “taken out” by permanent financing e.g. the permanent lender will pay the construction lender the total construction loan thereby “taking-out” the construction lender.

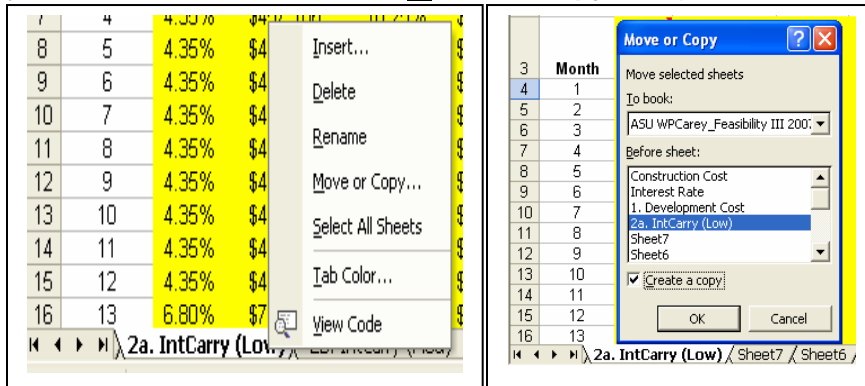
Bank CF (End of Month): This is the cash flow that the bank receives at the end of each month.  $Bank\ CF_T = -1 * Construction\ Cost\ (Low)_T + Payments\ (End\ of\ Month)_T$ .

Developer CF Savings vs. All Equity (EOM): The cash flow savings to the developer,  $Developer\ CF\ Savings_T = -1 * Bank\ CF_T$ .

Bank's Expected Yield (BankExptdYld): Is the annualized internal rate of return (IRR) e.g., monthly IRR \* 12 calculated using the cash flow that the bank receives at the end of each month (Bank CF(EOM)).

Developer's Effective Cost of Funds (DevlprEffectiveCostofFunds): This is the true "borrowing cost" of the developer and is annualized IRR on the cash flow savings to the developer.

Once you have completed the "2a. Int Carry (Hotel-Mean)" worksheet make a copy of it. To make a copy, move your cursor to the "2a. IntCarry (Hotel-Mean)" tab and then right-click on your mouse. Next, select the **Move or Copy ...** option. When the Move selected sheets box appears, click on 2a. IntCarry(Low) -> click on the box **Create a copy** -> then click on the **OK** button. This will result in a copy of the worksheet. To put a new label on the copied worksheet, simply double click on the tab associated with the copied worksheet and then type in a new label. Name the



newly copied worksheet **2b. Int Carry (Hotel-Median)**. For the new **2b. Int Carry (Hotel-Median)** worksheet, recalculate the loan balance at the end of each month (EOM), interest accrual (interest carry), loan draw (EOM), cash flow to the bank (EOM), and cash flow savings to the developer (EOM). This will be a fairly simple procedure since you have to merely change the building cost in the new worksheet.

**3. Capital Structure:** Using the "3. Capital Structure" worksheet, calculate the developer's equity contribution and the amount that has to be financed both prior to the sale of condo units and also after the sale of condo units with respect to mean and median construction costs. Will the developer be able to meet the LTV on the permanent loan of 70%? Is the equity that the developer receives from the sale of condo units enough to significantly offset the loan amount and the developer's equity if the developer chooses to do so? In other words, can the developer use the sale of the condo units to help finance the deal? Please discuss.

In our analysis thus far, we have assumed that Bayrock will be able to obtain \$1,250 per square foot for their condo units based on the pricing of their other luxury condotels and average HVS estimates. However, potential buyers have the option of purchasing condominiums in nearby projects including Optima Biltmore Towers, Esplanade Place, and The Residences at 2211 Camelback for lower prices per square foot because they lack the amenities and the level of services associated with a high end hotel<sup>4</sup>. The "Camelback CondoDev" and "Camelback Condo Listings" worksheets contain information on these projects including the proposed price per square foot and current list price per square foot. The price per square foot ranges from \$340 to \$650 per square foot. In addition to this, there are other projects under development for the area such as the loft style condos known as Aura at

<sup>4</sup>Most condo hotels being built are of four- to five-star quality. One reason is that there is demand for the types of services provided by four- and five-star properties.

Camelback, from Catalyst Communities (<http://www.auraatcamelback.com/>) located on the northeast corner of Campbell and 25th Street<sup>5</sup> and two projects – The Fairway Lodge at the Biltmore Estates and Two Biltmore Estates - developed by GK Biltmore LLC<sup>6</sup>. As such, use the Sensitivity Analysis section of the “3. Capital Structure” template to calculate the equity that Bayrock will receive from selling condo units at different pricing points (sale price per square foot). You will need to use the Data Table command in Excel to perform your sensitivity analysis. At what sale price per square foot does it **not** make economic sense to use the condo option to finance the project? When should the condo option be used to finance the project e.g., what is the required pricing point to make this financing alternative meaningful? Please explain.

4. Amortization Table: Using the “4. Amortization Table” worksheet template, calculate the amortization table as well as the Annual Percentage Rate (APR) for the permanent loan for the 2 different construction cost scenarios (Mean and Median). Recall that the APR represents the borrower’s “true” borrowing cost. Notice that in our case, the loan amount for the permanent loan is not equal to the construction loan balance at the end of the construction period (18<sup>th</sup> month) since the developer will try to finance furniture, fixtures and equipment as well.

5. Depreciable Basis: Using the “5. Depreciable Basis” worksheet, calculate the depreciable basis for our project. We use the depreciable basis together with a building’s economic life to calculate the straight line depreciation per period. Observe that we are not using the cost of the project excluding land but rather the **value** of the building (recall that land is not depreciable for tax purposes although if a leasehold interest is created, the lease payments can be deducted as if land were “depreciable”). This recognizes that once the project is completed, the value that the project can be sold at might differ from the cost of the project.

6. Financial Performance: Calculate the before tax cash flow (BTCF), after tax cash flow (ATCF), before tax equity reversion (BTER) and the after tax equity reversion using the worksheet labeled “6a. CashFlow (Mean)”. Also, partition the IRR and calculate the various measures of performance including before tax cash on cash, IRR, NPV, Profitability Index, operating expense ratio, debt coverage ratio, cash on cash, and breakeven occupancy. Next, make a copy of your completed worksheet and label it **6a. CashFlow (Median)**. Redo your analysis with the median building costs, mortgage amounts, debt service payments etc.

Next, using your ARGUS software, calculate the anticipated financial performance for the proposed hotel condo for the two scenarios. Please printout all applicable output including the assumptions page. Based on the additional output from your ARGUS analysis, please discuss the profitability of this venture.

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<sup>5</sup>Aura will feature 36 townhomes ranging from 2,469 to 3,147 square feet, in six different layouts. These layouts are truly unique and one-of-a-kind, each featuring four or five levels and a private elevator. Prices range from \$900,000 to approximately \$1.3 million, which equates to an approximate average of \$385 per square foot. The units consist of two, three and four bedrooms with at least two baths and a powder room.

<sup>6</sup>The Fairway Lodge will feature 75 luxury condominiums having 1,780 – 3087 square feet with prices ranging from \$750,000 - \$1,600,000. The other community to be added to the Biltmore in over a decade is Two Biltmore Estates which will consist of 21 luxury condominiums located on the Adobe Golf Course. These condos will feature larger units ranging from 3,550 - 4,800 square feet and higher prices (\$1,600,000 - \$3,200,000).