THE CREATION OF A MEGA-PROJECT
Merger of MGM Mirage and Mandalay Bay Resorts

- Due Diligence—energy, environmental and litigation
- Legal Impediments to Development of site between Bellagio and Monte Carlo
- Memorandum to the Board of Directors pre-closing
Las Vegas Strip Real Estate

MGM MIRAGE

150 Undeveloped Acres
200 Underutilized Acres
350 Acres For Future Development

Other Land

Sloan  85 Acres
Jean   60 Acres
Primm  573 Acres
Las Vegas Strip Real Estate

*MGM MIRAGE*

CityCenter

Gensler
## Design Architect

- **Design**
  - Start Design: 06/30/05
  - Design Completed: 02/24/06
- **FAA**
  - Submit to FAA: 06/30/05
- **Zoning**
  - Submit for Zoning: 12/31/05
  - Zoning Approval: 01/29/06

## Architect

- **Foundation**
- **Construction Documents**
- **Permit**
- **Interiors**
  - Start Interior Design: 06/30/05

## Construction

- **Construction**
  - Construction Start: 01/01/07
  - Construction Complete: 10/30/09

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**Task Name**

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**TASK NAME**

| 01/05 | 04/05 | 07/05 | 10/05 | 01/06 | 04/06 | 07/06 | 10/06 | 01/07 | 04/07 | 07/07 | 10/07 | 01/08 | 04/08 | 07/08 | 10/08 | 01/09 | 04/09 | 07/09 | 10/09 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Design | FAA | Zoning | | | | | | | | | | | | | | | | | | | |
Major Legal Challenges

• Clean Air Act
  A. Title V
  B. History of Clark County Air Permit Regulations
  C. Hotel Zone Prohibitions

• Public Utility and Statutory
Clean Air Act – Title V

- Monte Carlo as a buffer zone
- Consolidation as a single emission source
- Major Source Status—offset requirements without emission trading
History of Clark County Air Permit Regulations

- History of past failures: understaffing, litigation, federal highway funds, non-attainment to serious non-attainment for CO, EPA threat of seizing permits control, grand jury and legislative investigations of emission trading activities, etc.

- Resolution between Clark County and EPA: new agency, employee veto, staff size and budget oversight, regular visits from EPA official from Region 9 out of San Francisco.
Clark County Air Regulations for Major Source

- Section 12.2.6.2: “A STATIONARY SOURCE with a CO POTENTIAL TO EMIT exceeding fifty (50) tons per year shall not be authorized for construction within the area bounded by....”

- Section 12.2.7.2: “A MAJOR CO STATIONARY SOURCE shall not be authorized for construction within the area bounded.....”
Program Management Plan

- Project Start up
- Project Organization
- Project Controls
- Communications
- Design Management
- Contracts and Procurement
- QA / QC
Project Start-up

First 90 days activities

• Contracts
• Set up Organization and Staffing
• Outline Communications Protocols and Tools
• Project Controls
• Cost Controls
• Design Management Structure
• Standards and Guidelines
• Budgets and Schedules
Project Organization

- Leadership Team
- Owner / Gensler
- Gensler Team
- Consultant Team(s)
- Project(s) Delivery Teams
Project Organization

- Identify and formalize key decision makers
- Define roles and responsibilities
- Define reporting structures
- Define contractual relationships
- Streamline communications
The Creation of a Mega-Project
Project Controls

• Functional and Technical Controls
  – Document Storage
  – Naming conventions
  – File sharing

• Work Breakdown Structure (WBS)

• Change Management

• Schedule Management

• Progress Reporting

• Document Control
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**Gensler**

**Brownstein | Hyatt Farber | Shreck**
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Communications

- Identify and define protocols
- Identify methodologies
- External and internal
- Standards and guidelines
- Web based communications
  - Website / social media
  - Document management systems
Communications

### Schematic Design - Decision Matrix

**Block C - Infrastructure, APM, Amenities, Surroundings**

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<th>Block C - Infrastructure, APM, Amenities, Surroundings</th>
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**April 24, 2005**

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**NAIOP DENVER | OCTOBER BREAKFAST**

**The Creation of a Mega-Project**

*Gensler*
The Creation of a Mega-Project

Gensler

Brownstein | Hyatt Farber | Shreck

The Casino Hotel Tower

Square Footage
Total SF Building Footprint
745,529

Acreage and Distances
Distance from Front Desk to Guest Tower Elevators
415'
Distance from Guest Tower Elevators to Main Ballroom
1,255'
Distance from Las Vegas Blvd. to Frank Sinatra Drive
1,949'-6"

LEED
LEED Rating Goal
Silver

TOWER
Square Footage
Hotel Tower SF
3,797,515
Exterior Curtain Wall (3rd floor and above)
1,300,000

Quantities
Total Number of Building Floors North Tower
43
Total Number of Building Floors South Tower
48
Total Number of Guestroom Floors North Tower
41
Total Number of Guestroom Floors South Tower
46
Total Keys
4,000
Total Standard Guestrooms
3,457
Total Suites
545
Total Presidential Suites + Entourage
4
Total Super Presidential Suites (Super Penthouse)
8
Total Sky Villas
4
Total Passenger Elevators
37
Service Elevators (Baggage, Room, House, Freight)
24
Total Public Corridors
176
FF&E Standard Guestrooms
3,443
FF&E Typical Suites
547
FF&E Presidential Suites + Entourage
8
FF&E Super Presidential Suites
4
FF&E Sky Villas
41/24
FF&E Public Corridors
23
FF&E Suites Corridors
TBD
Total Number of Pay Phones and House Phones
TBD
Total Number of Tower Loading Docks
7
Gensler

NAIOP DENVER | OCTOBER BREAKFAST
The Creation of a Mega-Project

Brownstein | Hyatt Farber | Shreck
PUC and Statutory Challenges

- **Statute:** No power generation units in hotel zone.  
  **Solution:** declaratory ruling by PUC.

- **PUC jurisdictional:** Avoiding becoming a public utility—condos and other owners within the project site.  
  **Solution:** declaratory ruling by PUC.

- Nevada Power substation $100 million extra.  
  **Solution:** litigated resolution at PUC.
Arrival of LEED

• Consolidated power costs reach radar screen
• Nevada Power est. addtl. 100-140 MW needed
• Never be without minimal power—reliability and Bellagio experience
• Climate change and sustainability
• Environmental stewardship
• Cost saving via power and water reductions
• Prestige and corporate branding
• National security and balance of payment
Challenges for LEED

- No Existing LEED certified building in Nevada
- No experience in Clark County
- No recycling industry available
- Timing…..cost of money
- ROI for casino vs. recovery over time from energy savings
- Almost 20 million square feet
- Over 700 subcontractors—thousands of workers
Challenges for LEED

- LEED rating system undervalued CHP
- Smoking in Casino
- Complexity of project, numerous different architects designing independently, anti-trust, documentation, China imports, etc.
- Development agreement
- Fire and police
- Pre-sale of condo
- Leased space
Projected 20% reduction in energy use

- Displacement ventilation in casino improves indoor air quality and optimizes HVAC performance
- Centralized Cogeneration Plant recovers waste heat (Combined heat and power)
- State-of-the-art Building Management Systems and Controls for optimized energy performance

Projected 30% reduction in potable water use

- Water conserving plumbing fixtures
- Use of greywater and/or reclaimed water for make up water in the cooling towers

Goal to use no potable water for landscape irrigation

- Selection of plant types that require low amounts of water, appropriate for desert climate
- Use of reclaimed water for irrigation
World’s Largest LEED Registered Project

- Project includes *first* casino attempting LEED certification
- Using LEED Campus Application Guide
- Several LEED projects in one:
  - Hotel/Casino Tower
  - Multiple Hotel/Condo Towers
  - Convention Center
  - Retail District
- LEED requirements built into project-wide specifications
Return on Investment (ROI) Preliminary Estimate

(0) Many strategies were going to be pursued regardless of LEED rating and therefore had no incremental cost (= approx. 16 LEED credits)

+ Initial capital cost premiums:
  - certain materials
  - water technologies
  - indoor air quality technologies

(-) Nevada State Tax incentives:
  - Property Tax abatement (up to 50% for up to 10 years, depending on LEED rating level)
  - Sales Tax reduction (on construction materials purchased for project)

= Yields a less than 2-year ROI for Project CityCenter

(ROI above does not include increased property value, community benefits, increased guests stays and improved employee health and retention)
Contracts and Procurement

• Responsibilities
• Changes and Amendments
• In-country
• Global
• Consultants
• Contractors
• Vendor Selection
• Global Sourcing
Contracts and Procurement

Contracts Flow Chart

Entity

Submit scope of services to Gensler

Negotiate prime language

Gensler

Return with comments for revision

MMDG

Approval/sign off

For signatures

Tishman

Distribute to all parties

Legal
QA / QC

• QA / QC Processes
  – Checklist

• Training and Documentation

• Cross discipline coordination

• Review.......and re-review
CityCenter Fun Facts

- Largest private construction project in North America
- Approximately 76 acres
- Approximately 20 million SF
- $8.4 Billion in Total Costs
- World’s largest LEED-certified project
- More than 260 consultants
- More than 5% of Gensler employees have worked on CityCenter at some time
NAIOP DENVER | OCTOBER BREAKFAST
The Creation of a Mega-Project
Gensler

Brownstein | Hyatt
Farber | Shreck