

# **PROPERTY CONDITION ASSESSMENT**

**Commercial Building**

**City, ST Zip**

*Prepared for:*

Client

*Prepared by:*

**CRITERIUM ENGINEERS**

Date

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## 1.0 EXECUTIVE SUMMARY

### 1.1 General Description

A Property Condition Assessment (PCA) of the Commercial Building B (WMC-B), a high-rise commercial building, located at 123 Parkway, Las Vegas, Nevada, was performed on November 1 and 2, 2007, by Charles E. McWilliam, P.E., M.E., Master Inspector, John M. McGrail, P.E., C.E., Ray K. Thom, P.E., E.E., and David Taylor, E.I.T., of Criterium Engineers, LLC, on behalf of the Client. The report that follows is based on this inspection.

WMC-B is a 16-story commercial building completed in 2007. The property is located in the City of Las Vegas, Nevada, at the southeast corner of S. Grand Central Parkway and W. Bonneville Avenue. The site is adjacent to the I-15 freeway. The surrounding area has commercial and government properties. The site is accessible from S. Grand Central Parkway on the east and from Martin L. King Boulevard to the west via Discovery Drive.

The site consists of approximately 7.21 acres. WMC-B is reported to enclose a total of 1,431,167 square feet. It was completed in 2007 with a final Certificate of Completion issued on January 24, 2007.

This building is part of a larger complex. The total complex consists of four separate parcels, totaling approximately 35.72 acres. Building A is adjacent to WMC-B at the southwest corner of the site and was completed in 2006. Building C is currently under construction to the north of Building B at the west side of the site. A planned 3600 space multi-level parking garage is also under construction to the north of Building C. Future plans were reported to include 3 or 4 additional buildings to the north of WMC-A.

WMC-B and Building A currently share a common on-site parking lot. When the parking garage is complete, this parking lot will mostly be removed and the land used for additional buildings.

WMC-B is a steel framed building with a concrete slab foundation. The flat roof is a composite corrugated steel pan and concrete slab covered with a reported 8 inches of rigid foam insulation and surfaced with a polymeric membrane. The exterior of the building is a combination of metal and glass curtain walls and storefront, decorative metal siding, and synthetic stucco or exterior insulated finish system (EIFS).

Heating and cooling for most of this building is provided by packaged water source heat pumps mounted above the ceilings located throughout the building, in conjunction with cooling towers and boilers located on the 16<sup>th</sup> floor of the building and in the mechanical room, respectively. A packaged heat pump consists of a compressor/condensing system, an evaporator coil, and an air handler, all "packaged" into one unit.

Unlike a standard air conditioning system a heat pump is used for both heating and cooling. The compressor/condensing system, in conjunction with

## 1.2 Property Profile

the evaporator coil, transfers or pumps heat into or out of a building depending on the season. The air handler circulates the heated or cooled air through the building.

WMC-B is serviced by dual 12.47KV utility feeds rated at 1200 amperes each. A total of twelve interior substations rated between 2500 and 3000 amperes each provide electrical service to each floor.

**Location:** 123 Parkway, Las Vegas, Nevada.

**Lot Size:** 7.21 acres

**Area of Building(s):** 1,431,167 square feet

**Number of Stories:** 16

**Number of Tenant Spaces:** 293

**Percent Occupied:** ~100

**Year Built:** 2007

**Building Code:** IBC – as adopted by City of Las Vegas

**Zoned:** PD (Planned Development District)

**Parking:** 478 (394 public, 60 valet, and 24 at loading dock)

**Loading Docks:** One

**Structure:** Steel frame and concrete slab foundation

**Exterior:** Metal, glass, and synthetic stucco (EIFS)

**Roof:** 40 mil polymeric membrane

**Plumbing:** Municipal water and sewer with copper water piping cast iron drain piping

**HVAC:** Packaged water source heat pumps mounted above the ceilings located throughout the building, in conjunction with cooling towers, boilers and common area air handlers located on the 16<sup>th</sup> floor of the building and in the mechanical room, respectively.

**Electric:** Dual 3-phase, 1200 ampere services rated at 12.47KV. Underground service with a total of twelve, 2500 to 3000 ampere substations providing 3-phase, 480/277VAC service to each floor

**Vertical Transportation:** 12 elevators, escalators, and various stairwells

**Fire Protection:** Fully sprinkled including attic spaces

**Americans with Disabilities Act (ADA) Compliance:** In general compliance. Eleven handicap parking spaces.

**Regulatory Compliance:** No violations open on record

**Budget:**     \$ 3,000.00 Immediate  
                  \$ 17,000.00 Short-Term  
                  \$139,00.00 Long-Term

**1.3 General Condition**

WMC-B is in very good to excellent condition. Overall, construction appears to meet generally accepted standards for material and workmanship with some minor deficiencies associated with ongoing construction or maintenance issues.

**1.4 Material Deficiencies**

Immediate and short-term costs are estimated at \$25,000 and long-term costs are estimated at \$139.00 for a total of \$164,000.

**1.5 Recommendations**

In general the costliest concerns over the next 12 years will be expected maintenance and upgrading costs with replacement of interior carpeting and painting in common areas, and exterior painting of synthetic stucco.

This building is unusual in its usage. For the most part, the building is occupied and used for only two one-week periods a year. During these two weeks, up to 100,000 visitors will attend a large furniture and interior decorating trade show held throughout the building. For the remainder of the year, only the two lowest floors are open to the public for retail sales. Due to this low usage and the time available for upkeep, the Building B appeared to be in an almost “like-new” condition.

PROPERTY SUMMARY				
General Condition E, G, F, P	DEFICIENCIES	COSTS		
		Immediate	Short-Term	Long-Term
<b>G</b>	<b>SITE</b> Repair/upgrade west section of parking lot			\$10,000
<b>G</b>	<b>STRUCTURE AND EXTERIOR</b> Maintain exterior metal and EIFS Correct exterior deficiencies Clean water stains from metal siding Repaint EIFS Clean roof (stains and debris) Repair/complete roof drains and areas at popping fasteners and other damage		\$3,000 \$3,000 \$5,000 Warranty	\$120,000
<b>G</b>	<b>MECHANICAL SYSTEMS</b> Replace water heaters at 2 per year starting in year 4 Repair plumbing system Correct leaks in cooling tower & equipment		\$3,000 Warranty	\$9,000
<b>G</b>	<b>ELECTRICAL SYSTEMS</b> Make electrical repairs	<\$3000	\$3,000	
<b>NA</b>	<b>SPECIAL SYSTEMS</b> Repair/complete riser supports Re-install stairwell reflective tape Repair firewalls in electrical rooms		Warranty Warranty \$2,000	
<b>G</b>	<b>MISCELLANEOUS</b> Improve window washing system		Warranty	
<b>TOTALS</b>		<\$3,000	\$22,000	\$139,000

**Table 1: Summary of Anticipated Immediate, Short-Term, and Reserve Requirements**

## 2.0 PURPOSE & SCOPE

### 2.1 Purpose

The purpose of this PCA is to determine the current condition of the building envelopes, systems, paved areas, utilities, and site improvements and to establish a preliminary capital reserve for the future in connection with a re-financing. These preliminary reserve estimates should not be considered a “reserve study,” and are for budget planning only.

### 2.2 Scope & Methodology

This PCA has been performed according to the scope as generally defined by Client, and is in compliance with Archon Master Services Agreement and ASTM 2018. The survey is based on interviews with facilities management and local agencies, a review of available documents, and an examination of the buildings and site, in particular, the slab-on-grade

foundations, the roofs, the exterior walls, the steel framing, mechanical and electrical systems, exterior doors and windows, interior finishes, landscape and handicap areas, and site utilities. The shared common parking lot was also evaluated. Buildings A, C, and the parking garage were excluded from this PCA.

The report contains the following:

- A description of buildings, components, and systems and the conditions that may limit their expected useful life.
- Information about significant deficiencies, deferred maintenance items, and material code violations based on a visual survey of the buildings and grounds, research of documents, and conversations with people who have knowledge about the facility.

The statements in the report are opinions about the present condition of the subject property. They are based on visual evidence available during a diligent inspection of all reasonably accessible areas. We did not remove any surface materials, perform any destructive testing, or move any furnishings. The study is not an exhaustive technical evaluation. Such an evaluation would entail a significantly larger scope than this effort. For additional limitations, see Section 11.0.

The following people were interviewed during our survey:

- Ms. Katherine Venezia, Commercial
- Ms. Julia Jesinger, Director of Human Resources
- Mr. William Van Bibber, Director of Facilities
- Mr. Dennis Holden, Building Engineer
- Mr. Jeff Ryan, Assistant Building Engineer
- Numerous security personnel
- Las Vegas Building Department
- Las Vegas Planning/Zoning Department
- Las Vegas Fire Department

The following documents were made available to us and reviewed:

- Clark County Nevada On-Line Records ([www.accessclarkcounty.com](http://www.accessclarkcounty.com))
- Floor plans
- Electrical One-line Construction Drawings (Harris Engineering)
- Service contracts (see attached list)
- Google Maps

For your reference, the following definitions may be helpful:

## 2.3 Sources of Information

## 2.4 Standards of Reference

*Excellent:* Component or system is in “as new” condition, requiring no rehabilitation and should perform in accordance with expected performance.

*Good:* Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.

*Fair:* Component or system falls into one or more of the following categories: a) Evidence of previous repairs not in compliance with commonly accepted practice, b) Workmanship not in compliance with commonly accepted standards, c) Component or system is obsolete, d) Component or system approaching end of expected performance. Repair or replacement is required to prevent further deterioration or to prolong expected life.

*Poor:* Component or system has either failed or cannot be relied upon to continue performing its original function as a result of having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. Present condition could contribute to or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

*Adequate:* A component or system is of a capacity that is defined as enough for what is required, sufficient, suitable, and/or conforms to standard construction practices.

All ratings are determined by comparison to other buildings of similar age and construction type.

All directions (left, right, rear, etc.) are taken from the viewpoint of an observer standing in front of the Building B and facing it.

The budget cost estimate is divided into three categories: Immediate Costs, Short-Term Costs, and Repair/Replacement Reserves.

*Immediate Costs* - Physical deficiencies that require immediate action as a result of existing or potentially unsafe conditions, building code violations, poor or deteriorated conditions of a critical element or system, or a condition that if left “as is” would result in a critical element or system failure.

*Short-Term Costs (0-1 years)* - Physical deficiencies, including deferred maintenance that may not warrant immediate attention but require repairs or replacements that should be undertaken on a priority basis, taking precedence over routine preventive maintenance work within a zero to one-year time frame. Included are physical deficiencies resulting from improper design, faulty installation, and/or substandard quality of original systems or materials. Components or systems that have exceeded their expected useful life that may require replacement to be implemented within a zero to one-year time frame are also included.

**3.0 DESCRIPTION**

*Repair/Replacement Reserves* - Non-routine maintenance items that will require significant expenditure over the life of the mortgage. Included are items that will reach the end of their estimated useful life during the term of the mortgage or in the opinion of the engineer will require attention during that time.

A PCA of WMC-B, located at 123 Parkway, Las Vegas, Nevada, was performed on November 1 and 2, 2007, by Charles E. McWilliam, P.E., M.E., Master Inspector, John M. McGrail, P.E., C.E. Ray K. Thom, P.E., E.E., and David Taylor, E.I.T., of Criterium Engineers, LLC. The weather at the time of the inspection was fair with temperatures in the 80's.

This project can be described as a 16-story, high-rise commercial building. There are 41 tenant spaces on the first two floors that are generally open to the public. There are 252 tenant spaces on floors 3 through 16 that are only utilized during two trade shows per year which last about one week each. WMC-B encloses approximately 1,431,167 square feet.

WMC-B is constructed with steel framing; metal, glass and synthetic stucco on the exterior walls; and a polymeric membrane roof surface.

For purposes of this report, WMC-B is assumed to face north.

The building is surrounded by typical commercial drought tolerant landscaping, hardscaping, concrete sidewalks, and paved parking areas and driveways.

The site can be accessed by the public from driveways into the on-site parking lot from S. Grand Central Parkway to the east and Martin L. King Boulevard to the west via Discovery Drive. The loading dock at the south side of the building can be accessed by commercial and service vehicles through an automatic gate from a driveway on W. Bonneville Avenue to the south. There were a total of 478 shared and dedicated parking spaces.

KEY TENANTS	
FLOOR	KEY TENANTS
1-2	Various year-round retail
3-16	Various limited use wholesale; convention

**Table 2: Key Building Tenants**

The site is served by municipal water and municipal sewer. There was no indication of water distribution or sewer problems within the boundaries of this site. This site is also served by public utilities for electricity, natural gas, and telephone. There was no evidence of any deficiencies or other concerns with the services provided by public utilities.

The property is served by the following utilities and providers:

UTILITIES AND PROVIDERS	
Potable Water	City of Las Vegas
Sewer	City of Las Vegas
Storm Sewer	City of Las Vegas
Electricity	Nevada Power Company
Gas	Southwest Gas Corporation
Oil	Not applicable
Phone	Embarq
Trash	Republic Services, Inc.

**Table 3: Utilities and Providers**

**4.0 SITE IMPROVEMENTS**

**4.1 Topography  
Description**

**Observations & Comments**

The topographical area of the Las Vegas Valley is a relatively flat alluvial basin typical of southern Nevada in the basin and range geological area of the southwest United States.

The overall topography consists of a minimally sloped site. The area of the site around WMC-B generally slopes from west to east, with an approximately 1 % to 2% slope. The landscaped and hardscaped areas around the buildings are sloped to move water away from the building to the paved driveways and parking lot along S. Grand Central Parkway, and loading dock to public drainage facilities. In addition, there is a limited amount of water flow off the west side of the lot to a drainage front line along the I-15 right-of-way.

Drainage of the property and surrounding area was relatively good. We mention this because poor drainage is a frequent contributor to the differential movement in the Las Vegas area.

**4.2 Storm Drainage  
Description**

Water sheet flows in the driveways and parking lots to the gutters and channels. There is a channel drain and grate that removes water from the lower elevation of loading dock that appears to be functioning as intended. There is a storm water discharge point at the northeast corner of the parking lot near the intersection of Discovery Drive and S. Grand Central Parkway that is screened with mesh and hay bales to minimize silt leaving the site. This is required due to ongoing construction on site. There is also

**Observations & Comments**

**4.3 Paving & Curbing**

**Description**

a drainage channel that discharges water under the sidewalk onto S. Grand Central Parkway near the southeast corner of the parking lot.

Drainage of the paved and landscaped areas appears to be functioning as intended. However, the drainage channel under the sidewalk at the southeast corner of the parking lot needs some maintenance to clear muck and construction debris, and we recommend that it be screened similar to the discharge point at the northeast corner of the lot to keep it clear in the future.

PAVING & CURBING	
Type of Paving	Asphalt
Type of Curbing	Cast-in-place concrete
Number of Parking Spaces	478 (394 public, 60 valet, and 24 loading dock)
Parking Spaces/Unit	N/A

**Table 4: Parking Area**

Public access to the site is through driveways on grade from Discovery Drive to the north and S. Grand Central Parkway to the east to a paved parking lot to the north of Building A. There is also restricted access for commercial and service vehicles to the loading dock at the south side of the building through a secure gate along Bonneville Avenue.

The public parking lot is split by a common driveway into an east and west section. The west section is for public parking and contains 394 spaces for automobiles, busses, and light trucks. These spaces are currently shared with Building B. We understand that this west section will be eliminated and used as a future building site when the parking garage structure is completed and opened to the public.

The east section has been striped for parking large vehicles such as busses or tractor trailers. However, it is currently used as a valet parking lot for about 60 vehicles at the south end and a construction storage/layout yard at the north end. It is our understanding that this lot will remain for its original purpose of parking large vehicles after the parking garage is operational.

In addition to several loading dock stations at the south side of the building, there are striped parking spaces for 24 additional vehicles in the loading dock lot. Use of this lot is restricted to delivery, service, and facilities vehicles. There is also a parking lot containing about 24 handicapped spaces directly adjacent to the north wall of Building A, but this lot has been closed for ongoing construction and is not open to the public. The future status of this lot is unknown.

The driveways and parking areas are paved with asphaltic concrete. The

**Observations & Comments**

thickness of the asphalt and sub-grade and load bearing capacity of the driveways are unknown, but appear to be suitable for automobiles and light trucks. Curbing around the perimeter of the access roads and parking areas is cast-in-place concrete.

The public lot contains 394 spaces. There should be at least 12 (3%) marked handicap parking spaces, but there are only 11 (2.8%). In addition, one of the striped handicap spaces is missing its pole sign. It should be relatively easy to add one handicap space and replace the missing sign.

The parking lot is in fair condition. Under normal circumstances, approximately \$20,000 in maintenance related work would be recommended. Work needed includes correction of settled and depressed areas, sealing various saw cuts, replacing damaged pavement, repairing damaged curbing and walkways, sealcoating the asphalt, and re-stripping all spaces. However, since most of this lot is scheduled to be eliminated upon completion of the parking garage in 2008, all such work can be logically deferred until the exact extent of the future lot is known. A total reserve of \$20,000 to upgrade and repair the west lot intended for large vehicles section is recommended for use in the future when the scope can be better defined. Half of this recommended reserve (\$10,000) is assigned to WMC-B.

There has been some minor damage to the asphalt pavement in the loading dock lot that should be repaired.

**4.4 Flatwork  
Description**

Cast-in-place concrete sidewalks are provided at the south property line along the public right-of-way. Concrete and stone tile covered concrete walkways are provided throughout the site to the various buildings.

**Observations & Comments**

Concrete sidewalks, walkways, curbs, and gutters are in generally good condition. As noted previously, there is some construction-related damage to the curbs and walkways at the north parking lot. These repairs can be deferred until after the parking garage is operational.

There are adequate curb cuts and ramps installed to provide acceptable accessibility. All ramps appeared to be sloped at less than 1 to 12 with one exception. There is a short curb ramp from the loading dock lot of Building A to the walkway at the southeast corner of WMC-B that is steeper than the recommended slope of 1:12.

**4.5 Landscaping & Appurtenances  
Description**

There were limited areas of landscaping around WMC-B to the east and south along the public rights-of-way. In general, landscaping appears to be drought tolerant "desert landscaping." We did not evaluate the health and condition of any plantings, but appearance was very good. The landscaping was equipped with an automatic irrigation system.

**Observations & Comments**

Fences and gates around the loading dock lot are in generally good condition.

This site is provided with area lighting for convenience, safety, and security by exterior flood lights attached to the exterior walls of the Building B and free-standing light standards. These light circuits are controlled by photo-cells or timers; therefore, they were not checked.

The underground irrigation system appeared to be operational.

**5.0 STRUCTURE & EXTERIOR**

**5.1 Substructure  
Description**

The basic construction of WMC-B is of the concrete slab foundation type. The upper level floors and roof are supported by steel framed columns and beams. This is a standard method of high-rise building construction. We inspected the building for any indication that there was movement ongoing with respect to the foundation. No movement was noted.

**Observations & Comments**

Where visible, the concrete footings and first floor slab are generally in good condition.

There were no indications of settlement or heaving. We made no observations that would indicate that any structural component is not performing as intended.

When floor coverings are changed in first floor units, expect to find minor cracking of the concrete floor slab. This is common and not considered structurally significant.

**5.2 Superstructure  
Description**

WMC-B is a conventional internal steel framed structure. Structural steel columns and beams support the floors and roof. External walls and internal dividing walls are generally not load bearing, and are metal and glass curtain walls or constructed of steel studs finished with decorative metal siding or synthetic stucco (EIFS) if exterior or drywall if interior.

The floors are composite reinforced corrugated metal pan and concrete that span across steel framing beams. The roof is similar in construction to the floors with an additional layer of rigid foam insulation.

**Observations & Comments**

The structural elements are generally not visible. Where visible, they were in good condition.

Although generally not visible, the structural elements show no indication of structural movement or distress.

**5.3 Exterior  
Description**

The exterior walls of these buildings are light gauge galvanized steel

## Observations & Comments

framing members covered with decorative metal siding or synthetic stucco, as well as metal and glass curtain walls and store front.

The synthetic stucco finish was generally in good condition and appeared to be well maintained. There were a few small holes and other mechanical damage in the exterior finish that should be repaired as part of a routine preventative maintenance program. There was some minor damage to some metal trim and metal siding that should also be repaired or refinished.

A good quality caulking should also be periodically applied at all joints, gaps, penetrations, and other areas needed.

The paint on WMC-B was in good condition but needed to be touched up in places. It appears that the synthetic stucco on this building has not been painted since original construction and will be due for routine painting in the next 8 to 12 years.

The following specific exterior repairs are needed:

- There are water stains on the east side of the building under the 16<sup>th</sup> floor patio deck discharge piping. This piping arrangement will result in increased maintenance costs for frequent cleaning. The source of the water and why the primary roof drains are not draining the water should be investigated.
- The metal store front door from the 16<sup>th</sup> floor to the north end of the exterior deck does not fit and close properly.
- There are a few damaged drop-in concrete floor tiles on the 16<sup>th</sup> floor exterior deck.
- The loose metal trim or flashing under the entry store front window wall should be secured.

## 5.4 Roofing Description

The roof of WMC-B is covered with a 40 mil polymeric membrane roof manufactured by Carlyle.

## Observations & Comments

The roof was examined directly by going onto the roof.

The polymeric roofing is in good condition, but some maintenance is needed. It is about 1 year old and, with proper completion and routine preventative maintenance, should have a remaining economic life of about 25 years.

These types of membrane roofs serve very well if intact. The material is very susceptible to mechanical damage if mistreated or not maintained. It is very important that they be routinely inspected and any damage repaired when found. This roof will need considerable work to repair and reseal damage caused by fasteners for the rigid insulation boards popping up

through their membrane and from the window washing equipment. The cost to do this should be covered by the roof warranty and modifications to the window washing procedures.

Water is drained from the flat roof of WMC-B by interior roof drains. These roof drains should be kept very well maintained since a leak around one of the roof drains could lead to serious water damage within the building.

Movable window washing stanchions and davits are installed on the roof. The system appears to be difficult to use and is damaging the roof surface on movement. The window washer contractors appear to have abandoned the system and have developed their own system which is damaging the roof surface.

The following specific roof deficiencies were noted:

- All popping insulation fasteners need to be reset and all damaged caused by them repaired and sealed.
- A few areas of ponding water were noted. This may lead to accelerated deterioration and a reduced economic life in these areas. If not corrected, more frequent maintenance of these areas will be necessary. At the west roof drains there is evidence of considerable ponding. The roof drains in this area should be checked to be clear and the roof should be cleaned to prevent accelerated deterioration.
- There were a few iron stanchions that are unpainted iron. Rust from the iron is staining the roof and may lead to deterioration. We recommend that all exposed iron fittings and connections be painted or coated to prevent corrosion.
- The joints between parapet flashing cap ends should be counter-flashed and sealed to prevent water penetration.
- All debris should be removed from the roof. All roof drains partially plugged by debris should be cleared and the caps on the center back of roof drains removed.
- Equipment room door thresholds should be sealed
- Incomplete and plugged roof drains should be completed/repaired.

## **6.0 MECHANICAL SYSTEMS**

### **6.1 Plumbing Systems**

#### **Description**

Water to the property is supplied by the Las Vegas Valley Water District. The plumbing supply lines appear to be all copper. The waste lines are ductile iron with chrome-plated brass drain traps. The plumbing system was in operating condition at the time of our inspection.

Hot water is provided by individual 30 gallon electric water heaters for the restrooms and are located inside janitor closets on each floor. These water heaters provide domestic potable hot water. In addition, the 16<sup>th</sup> floor

**Observations & Comments**

kitchen has two 70 gallon gas-fired, 70,000 BTUH water heaters.

The plumbing water supply and waste drain and vent systems are in good condition.

The water heaters are about 2 years old. They have an expected life of 5 to 10 years. Replacement of all units should be planned for in the next 3 to 8 years, and 20% of the units annually thereafter.

The following deficiencies were noted in the plumbing system:

- Failed caulk joints at back of toilets and wall
- ADA valve covers under sinks missing or out-of-place
- Hand wash faucets not operating at multiple locations
- Toilets and urinals were not functional in multiple locations
- Low water pressure/flow at several drinking fountains

**6.2 HVAC Systems**

HVAC SYSTEMS		
H E A T	Type	Boilers and air handlers for common areas and water source heat pumps for leased space; split system heat pump for equipment rooms
	Fuel	Gas and electric
	Rated Capacity	45,918 BTUH
	Distribution	Individual water source heat pump
	Controls	Thermostat
C O O L	Type	VAV, split system water source heat pumps and split-system heat pumps for electric equipment room
	Fuel	Electric
	Rated Capacity	~2,300 tons ; 622.2 ft <sup>2</sup> /ton
	Distribution	Individual water source heat pumps
	Controls	Thermostat

**Table 5: HVAC System Summary**

**Description**

Heating and cooling for most of this building is provided by packaged water source heat pumps mounted above the ceilings located throughout the building, in conjunction with cooling towers, boilers, and common area air handlers located on the 16<sup>th</sup> floor of the building and in the mechanical room, respectively. A packaged heat pump consists of a compressor/condensing system, an evaporator coil, and an air handler, all "packaged" into one unit.

Unlike a standard air conditioning system a heat pump is used for both heating and cooling. The compressor/condensing system, in conjunction with the evaporator coil, transfers or pumps heat into or out of a building depending on the season. The air handler circulates the heated or cooled air

**Observations & Comments**

**6.3 Electrical Systems**

**Description**

through the building.

During the cooling season, the heat pumps transfer heat from the building to cool water that is circulated to the heat pumps from the cooling towers outside. The warmer water is then re-circulated back to the cooling towers where the heat from the water is rejected to the outside air, thus cooling the water for another cycle.

During the heating season, hot water is supplied to the heat pumps from the boilers. The heat pumps transfer heat from the water to the interior of the building. The cooler water is then re-circulated back to the boiler where it is re-heated.

The common areas are cooled and heated directly by four air handlers on the 16<sup>th</sup> floor. There is 100% make-up air for the common areas.

The following deficiencies were noted:

- Repair door self-closures to equipment room
- Remove items/supplies stored in the equipment rooms
- Minor leakage repair of cooling towers & equipment is needed

ELECTRICAL SYSTEMS	
Amperage	2,400 amperes
Voltage/Phase	12.47KV, .3 phase-3 wire
Service Entrance	Underground
Branch Wiring	Copper

**Table 6: Electrical System Summary**

Power comes to the site underground to two exterior main service switchgear panels. The switchgear panels are located on the south side of the building. Each switchgear service panel is rated to provide 1200 amperes at 12.47KV to the various interior substations in the building.

There are a total of twelve interior substations located on various floors inside the building that are fed by the main service switchgear. Each interior substation is rated at 2500 to 3000 amperes at 480/277VAC. Each interior substation supplies the various equipment and general use panels located throughout each floor.

In general, the three-phase 480/277VAC power panels are used to feed the primary equipment and lighting, while the three-phase 208/120VAC panels are used for small equipment and general use outlets.

The facility has two 2145KW diesel generators that are used to provide emergency power to exit lighting, elevators, and other critical facility

## Observations & Comments

equipment in the event of facility power loss. They are located on the south side of the building respectively.

Power is apparently billed individually to the tenants (separate meters for each tenant space).

The electrical system is in good condition. Service capacity to each floor and showroom appears to be adequate.

The following minor electrical deficiencies were noted:

- The GFCI outlets in the 3<sup>rd</sup> floor men's restroom, 4<sup>th</sup> floor unisex restroom, and 8<sup>th</sup> floor women's restroom were not operating.
- The GFCI outlet in the janitor's closet was not mounted flush with the wall.
- A single mast lightning protection system is being utilized to protect the facility from voltage surges caused by lightning strikes. While the mast system itself appears in good condition, it does not appear the system would provide the adequate protection needed for the facility especially with the installation of several cranes on the southwest side of the roof. It is recommended that you obtain the design calculations and associated documentation to verify that the system's zone of protection covers the roof area including the crane installations.
- No nameplates or descriptive labeling was seen on any of the main distribution panels or switchgear throughout the building.
- The outlet mounted next to the roof exhaust fan SPF-5 is loose and has an open neutral wiring configuration. It should be secured and repaired.
- The GFCI outlet on the exterior of elevator room 17401 is not operational and should be replaced.
- There is an open junction box on the wall in elevator room 17401,
- The overhead conduits in elevator rooms 17401 and 17402 need to be properly supported. All conduit needs to be supported within 36 inches of any junction boxes.
- Cable tray covers were missing in two locations in elevator room 17402.
- Two junction boxes covers need to be secured in elevator room 17402.
- All open fire alarm junction boxes should be covered in elevator room 17402.
- A faceplate cover is missing from one of the wall outlets in elevator room 17402.
- One of the fan coil units in electrical room 2555 is excessively noisy and both fan coil units are missing their control panel covers.
- There are flexible conduit lines that require proper supporting in most of electrical equipment rooms that end in xxx15. (i.e., 2515, 3515, 4515, etc.).

- A general use outlet is missing in electrical room 3535.
- One of the ceiling lighting banks was not operational in electrical room 5535.
- A general use outlet is missing in electrical room 6535.
- One of the ceiling lighting banks was not operational in electrical room 8535.
- There is form wood left around the conduits in electrical room 9545. The wood should be removed.
- There is an open fire alarm junction box in electrical room 13535.
- There is an open junction box in electrical room 13545.
- One of the ceiling lighting banks was not operational in electrical room 14555.
- The cover for the electrical control to the fan coil in electrical room 14555 is missing and should be replaced.
- The lights were not operational in electrical room 16410.
- Electrical room 16550 is being used for storage. All storage materials should be removed to provide unobstructed access to all electrical equipment.
- There are loose and unprotected conductors coming out of both control panels for the emergency generators. This condition requires further investigation.
- The missing exterior weather cover on the loading dock outlet should be replaced.

The following deficiency requires immediate attention:

- Several open conduits were noted under various exhaust fans on the roof. They should be capped to prevent moisture and debris from entering the facility.

## 7.0 SPECIAL SYSTEMS

### 7.1 Vertical Transportation

#### Description

There were twelve Schindler cable operated elevators installed for the building. Three elevators serve as freight elevators, three serve as service elevators, and six serve as normal personnel elevators. In addition, escalator service is provided up to the 15th floor. Various stairs are also provided.

#### Observations & Comments

Elevator equipment rooms were clean and well maintained. Elevator annual certifications were current. All elevators were operational. Elevators appear to be ADA compliant.

It is our understanding that a separate evaluation of escalators and elevators was performed by BOCA Group.

**7.2 Security Systems  
Description**

**Observations & Comments**

**7.3 Fire Protection & Life Safety  
Description**

**Observations & Comments**

We recommend the following elevator repairs :

- Replace missing equipment and electrical control covers
- Repair equipment oil leaks

The building is controlled by a sizable security force and state of the art security system including a security camera system.

The security system was not tested as part of this inspection.

However, during the inspection, we noted that numerous security cameras and/or display screens were not operational in the centralized monitoring room of Building A.

The building is equipped with a fire protection sprinkler system, including the attics. Annual certification of the system was current. Three sprinkler risers are located on each floor. There is one electric and one diesel powered fire pump for the building, along with a water storage tank.

There were fire extinguishers mounted in the common areas. A spot check of inspection tags indicated most recent inspection for those in the common areas was more than 12 months ago.

The common areas are appropriately equipped with ADA compliant exit signs and emergency lighting.

There was apparently a battery hydrogen explosion of the starting batteries for the diesel fire pump on a start-up. This should be further investigated and repaired as needed.

The following deficiencies were noted:

- Damaged electric room drywall should be repaired.
  - Conduit penetrations need to be fire sealed in many of the electrical equipment rooms throughout the facility.
  - Repair leaking sprinkler riser valves
  - Complete/repair sprinkler riser supports
  - Investigate why some fire valve boxes say "fire hose"
  - The stairs pressurization fans have homemade air flow reducers installed. This should be further investigated and repaired as
-

needed.

- The stairs loose/missing reflective/tape should be replaced.
- Remove stored items from fire escape stairwell

**8.0 INTERIOR ELEMENTS**

TYPICAL INTERIOR FINISHES		
TENANT	Walls	Various
	Floors	Various
	Ceilings	Various
	Doors	Various
COMMON	Walls	Gypsum wallboard with paint and other finishes
	Floors	Carpet and tile
	Ceilings	Painted gypsum wallboard, open, or decorative
	Doors	Various

**Table 7: Interior Finishes Summary**

More than 10% of the common areas and tenant spaces were examined. Interior finishes of the lobby and reception area and the public commercial areas of the first two floors were well appointed Class A quality finishes.

Common areas of floors 3 through 16 varied from Class A at the central core to Class B (painted gypsum wall board and commercial grade carpet) in some of the corridors. Tenant improvements for most spaces were impressive, professional, and appropriate for the furniture and interior decorating industry.

It is our understanding the Landlord does almost all Tenant Improvement Work, and that the Tenant is only responsible for deficiencies caused by the Tenant.

The interior of the public and common areas provides an impressive and welcoming atmosphere for tenants and the public. The finishes are all in excellent condition with no significant problems noted.

All public restrooms and food service areas were inspected. They were generally in good condition with the following deficiencies noted:

- Missing/removed baseboard in the 16<sup>th</sup> floor kitchen service corridors should be replaced.
- Cracked tile and holes in 3<sup>rd</sup> floor men’s restroom should be repaired.
- Tripping hazard in stairwell 3, 7<sup>th</sup> floor landing should be removed/repared.
- Wall damage in 10<sup>th</sup> floor women’s restroom should be repaired.
- Missing vanity covers for sprinkler ceiling holes should be replaced.

**Description**

**Observations & Comments**

**9.0 MISCELLANEOUS**

**9.1 Amenities**

**Description**

- Exposed unfinished concrete at floor drain in janitor’s closet should be finished.
- Some doors require adjustment to open and close easily.
- Replace loose out-of-place ceiling tile.

**Observations & Comments**

This property is equipped with an exterior recycling center area located on the south side of building B. The exterior recycling center consists of three separate recycling devices: cardboard, styrofoam, and general trash.

The electric power for the equipment is supplied by temporary G-type cable that is surface run along the ground and surrounding walls. There is a fence surrounding the recycling area. The purpose of this fence is to prevent unwanted or accidental entry into the recycling area.

All temporary G-cord power connections should be removed and replaced with permanent power sources.

**9.2 ADA Compliance**

**Description**

The property has 11 (2.8%) ADA parking spaces in the lot shared with Building B on the north side of the building. Two of these parking spaces (18%) are marked van accessible.

Appropriate ramps are installed to provide access from the ADA parking spaces to the buildings and common areas.

The common areas and administrative areas also appear to be constructed to comply with ADA guidelines. Accessible facilities are provided in common area rest rooms.

**Observations & Comments**

While some references to handicap accessibility may be made, our report is *not* intended to be a complete investigation for conformance to the ADA or any other state or federal handicap accessibility standards. Such an investigation is beyond the scope of this inspection.

One additional handicap parking space is recommended. The missing handicap parking sign should be replaced.

Due to ongoing construction, most of the pedestrian walkway from the parking lot has been re-directed through the construction area. Appropriate rails, fences, and protection appear to have been provided, but no specific pedestrian markings or signages were evident.

**9.3 Regulatory Compliance**

**Description**

We contacted the local agencies as identified in Section 2.3. The individuals contacted indicated that there are no outstanding fire code violations with the property.

The Certificate of Completion was issued for Building B on January 24, 2007.

According to the Las Vegas Building Department a new Certificate of Occupancy is require if the ownership of the building changes. This is called a non-working Certificate of Occupancy and is applied for at the Permit Department.

The site is zoned commercial PD (Planned Development District). Current land use is as commercial wholesale and retail sales, which is an approved use for this zoning.

#### **Observations & Comments**

According to Earl Russell, Deputy Director of Building Permits, there is no requirement for follow-up inspections of any part of the building after the final sign-off is complete. Inspection would be required for any changes to the façade.

#### **9.4 Maintenance Description**

Maintenance of the property is by in-house staff of 3 with various subcontractors on an as-needed basis. A list of maintenance contracts currently in place is enclosed.

#### **Observations & Comments**

The property appears to be very well maintained. However, this seems to be due to the relatively infrequent use. Under normal circumstances such a limited number of full-time maintenance staff would not be able to maintain such a large facility without a considerable amount of subcontracted labor. It is our understanding that increases in the maintenance staff are planned for.

#### **10.0 REPAIR/REPLACEMENT RESERVES**

See Appendix B.

#### **11.0 LIMITATIONS**

The observations described in this report are valid on the dates of the investigation under the conditions noted in the report. We prepared this report for the exclusive use of Client and their successors and assignees. Criterium Engineers, LLC does not intend any other individual or party to rely upon the report without our express written consent. If another individual or party relies on the report, they shall indemnify and hold Criterium Engineers, LLC harmless for any damages, losses, or expenses they may incur as a result of its use.

The report is limited to the visual observations made during our inspection. We did not remove surface materials, conduct any destructive or invasive testing, move furnishings or equipment, or undertake any digging or excavation. Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of inspection. We did not undertake to

completely assess the stability of the buildings or the underlying foundation soil since this effort would require excavation and destructive testing. Likewise, this is not a seismic assessment.

We did not inspect the following:

- Components covered by interior and exterior finishes or otherwise not visible.
- Only a sampling (10 percent) of tenant units was inspected.
- Television, telephone, sound/entertainment, security, and fire alarm systems were not tested.
- Office equipment and kitchen appliances were not operated.

We do not render an opinion on uninspected portions of the facility.

We did not perform any computations or other engineering analysis as part of this evaluation, nor did we conduct a comprehensive code compliance investigation. The report is not to be considered a warranty of condition, and no warranty is implied. The photographs are an integral part of this report and must be included in any review.

If cost estimates are presented, they are estimates only. The estimates are based on our general knowledge of building systems and the contracting/construction industry. When appropriate, we have relied on standard sources, such as Means Building Construction Cost Data, to develop cost estimates. However, for items for which we have developed cost estimates (e.g., structural repairs), no standard guide for developing such estimates exists.

We have performed no design work as part of the study, nor have we obtained competitive quotations or estimates from contractors as this also is beyond the scope of the project. The actual cost to remedy deficiencies and deferred maintenance items that we have identified may vary significantly from estimates and competitive quotations from contractors.

**CRITERIUM ENGINEERS, LLC**