

**BROADWAY CENTER THEATERS**  
**Mechanical & Electrical Systems Assessments**

**MECHANICAL & ELECTRICAL SYSTEMS DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or imminent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

- **PANTAGES THEATER ITEMS:** Estimated cost for high priority corrections; **\$26,695**
- **RIALTO THEATER ITEMS:** Estimated cost for m high priority corrections; **\$5,200**
- **THEATER ON THE SQUARE ITEMS:** Estimated cost for high priority corrections;; **\$20,000**

**Estimated cost to correct high priority M & E deficiencies; \$51,895**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

- **PANTAGES THEATER ITEMS:** Estimated cost for medium priority corrections; **\$68,435**
- **RIALTO THEATER ITEMS:** Estimated cost for medium priority corrections; **\$10,680**
- **THEATER ON THE SQUARE ITEMS:** Estimated cost for medium priority corrections;; **\$21,345**

**Estimated cost to correct medium priority M & E deficiencies; \$100,460**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

- **PANTAGES THEATER ITEMS:** Estimated cost for low priority corrections; **\$7,335**
- **RIALTO THEATER ITEMS:** Estimated cost for low priority corrections; **\$3,900**
- **THEATER ON THE SQUARE ITEMS:** Estimated cost for low priority corrections;; **\$2,250**

**Estimated cost to correct low priority M & E deficiencies; \$13,485**

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**Grand total of costs to correct deficiencies found by the M & E assessment; \$165,840**

Reports on Individual Theaters:

**PANTAGES THEATER**  
**Mechanical & Electrical Systems Assessment**

**Pantages Theater and Jones Building Constructed in 1918, Renovated 1982:**

Estimated costs to correct mechanical & electrical system reported deficiencies:

- **High priority items;** **\$26,695**
- **Medium priority items;** **\$68,435**
- **Low priority items;** **\$7,335**

**Total estimated M & E correction costs: \$102,465**

**HVAC SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

AHU-1 UNIT:

- FAN BEARINGS: Lubricate the dry bearings and follow through to keep lubricated; **\$125**

AHU-2 UNIT:

- FAN BELT: Replace the worn out fan belt; \$180
- CLEANING: Remove dirt from clogged cooling coil to restore performance; \$150
- Estimated cost for high priority corrections: **\$330**

RAF-1 UNIT:

- FAN BELT: Replace the worn out fan belt; \$180
- FAN BEARINGS: Lubricate the dry bearings and follow through to keep lubricated; \$125
- MOTOR BEARINGS: Lubricate the dry bearings and follow through to keep lubricated; \$150
- Estimated cost for high priority corrections: **\$455**

RAF-2 UNIT:

- FAN BELT: Replace the worn out fan belt; \$180
- FAN MOTOR: Replace the seized and inoperative motor; \$600
- MOTOR CONTACTORS: Replace the pitted contactors to restore full operation; \$250
- LOOSE WIRES: Troubleshoot for loose and corroded wiring. Tighten all loose connections and replace all corroded wires; \$450
- FUSES: Replace the improperly sized fuses with correct ones for the application; \$725
- Estimated cost for high priority corrections: **\$2,205**

EF-4 UNIT:

- FAN BELT: Replace the broken fan belt; \$180
- FAN MOTOR: Trouble shoot why the motor is not running and make repairs to fix the situation; \$600
- Estimated cost for high priority corrections: **\$780**

EF-5 UNIT:

- FAN BELT: Replace the worn and cracked fan belt; **\$180**

EF-8 UNIT:

- FAN BELT: Replace the missing fan belt; \$180
- ELECTRICAL DISCONNECT: Troubleshoot why the unit is shut off and resolve the situation; \$1,200
- CLEANING: Remove roosting pigeons and vacuum the compartment to restore performance; \$225
- Estimated cost for high priority corrections: **\$1,425**

EF-9 UNIT:

- FAN BELT: Replace the worn and cracked fan belt; \$180
- BEARINGS: Remove and clean the dry bearings then lubricate and follow through to keep lubricated; \$275
- Estimated cost for high priority corrections: **\$455**

EF-10 UNIT:

- FAN BELT: Replace the worn out fan belt; \$180
- BEARINGS: Lubricate the dry bearings and follow through to keep lubricated; \$125
- Estimated cost for high priority corrections: **\$305**

EF-12 UNIT:

- FAN MOTOR: Replace the worn out fan belt; **\$600**

SF-1 UNIT:

- FAN UNIT: Troubleshoot the unit to find why it does not operate and correct the situation; **\$600**

SF-B UNIT:

- CLEANING: Remove roosting pigeons and vacuum the compartment to restore performance; \$225
  - FAN UNIT: Troubleshoot the unit to find why it does not operate and correct the situation; \$600
- Estimated cost for high priority corrections: **\$825**

RF-1 UNIT:

- BEARINGS: Lubricate the dry bearings and follow through to keep lubricated; **\$125**

DH-6 UNIT:

- HEAT: Replace the defective heat contactor; **\$360**

DH-7 UNIT:

- HEAT: Replace the defective heater coil; **\$420**

CH-01 UNIT:

- CHILLER: Troubleshoot the unit to explain why the chiller trips off from time to time. Check out why the condenser loop runs too warm for the unit to stay on line; **\$2,170**

BLR-01 UNIT:

- WIRING: Troubleshoot why Boiler #1 has charred wiring and replace all defective wire. Tighten the wiring connections to the electric heat elements to restore safe operation; \$525
  - ELECTRICAL ELEMENT: Replace this open and non-functioning element; \$450
  - FUSES: Replace the burned or missing fuses to restore safe operation; \$200
  - HEAT CONTACTOR: Replace the pitted contacts to restore efficient operation; \$350
- Estimated cost for high priority corrections: **\$1,525**

BLR-02 UNIT:

- ELECTRICAL ELEMENT: Replace this open and non-functioning element; **\$450**

**Estimated cost to correct high priority HVAC assessment deficiencies; \$13,515**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

AHU-1 UNIT:

- FILTERS: Change the dirty filters; \$120
  - FLEX-DUCT: Secure and patch the duct connection which is ripped and leaking; \$100
- Estimated cost for medium priority corrections: **\$220**

AHU-2 UNIT:

- FILTERS: Change the dirty filters; **\$120**

RAF-1 UNIT:

- CONTROL PANEL: Securely mount the control enclosure box; \$100
  - COVER PLATES: Provide and install missing cover plates as required; \$225
  - ACCESS PANELS: Re-attach the loose panels to secure and protect the equipment; \$550
- Estimated cost for medium priority corrections: **\$875**

SF-1 UNIT:

- FILTERS: Replace the missing filter; \$120
  - COUNTDOWN TIMER: Replace the defective timer unit; \$280
- Estimated cost for medium priority corrections: **\$400**

SF-A UNIT:

- FILTERS: Clean the aluminum filters; \$100

• CONTROLS: Troubleshoot to trace and locate the controls;	\$200
• STARTER BOX: Replace the starter unit because the hinge is rusted and inoperable;	<u>\$380</u>
Estimated cost for medium priority corrections:	<b>\$680</b>
<u>UH-1 UNIT:</u>	
• CLEANING: Vacuum the dirty heating coil clean before operating the shut down unit;	<b>\$100</b>
<u>UH-2 UNIT:</u>	
• CLEANING: Vacuum the dirty heating coil clean;	<b>\$100</b>
<u>UH-3 UNIT:</u>	
• CLEANING: Vacuum the dirty heating coil clean;	<b>\$100</b>
<u>DH-3 UNIT:</u>	
• RELOCATION: Access to this unit is blocked by structure. Relocation will improve serviceability;	<b>\$880</b>
<u>DH-8 UNIT:</u>	
• UNIT TIMER: Replace the defective timer;	<b>\$280</b>
<u>DH-9 UNIT:</u>	
• UNIT TIMER: Replace the defective timer;	<b>\$280</b>
<b>Estimated cost to correct <u>medium priority</u> HVAC assessment deficiencies;</b>	<hr/> <b>\$4,035</b>

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

<u>HEAT COILS #1 TO #8:</u>	
• CLEANING: Blow out to clean the slightly dirty heating coils;	<b>\$300</b>
<u>UH-1 UNIT:</u>	
• ABANDONED: Investigate the reason this unit is disabled with the wiring disconnected;	<b>\$100</b>
<u>UH-2 UNIT:</u>	
• THERMOSTAT: Install a thermostat for automatic control of the unit;	<b>\$280</b>
<b>Estimated cost to correct <u>low priority</u> HVAC assessment deficiencies;</b>	<hr/> <b>\$680</b>

**Total estimated cost to correct deficiencies found by the HVAC assessment; \$18,230**

**PLUMBING SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

• BOILER BACKFLOW: Repair the leak on the inlet side of the swing check valve. Re-secure the support frame to the wall for the check valve assembly. Perform a test at the back flow check valve to correct for no record of the last annual test;	\$700
• CHILLED WATER BACKFLOW: Reroute the air gap drainage to a floor drain rather than the current hard piped connection by male adaptor into a 2" ABS plastic coupling. Perform a test at the back flow check valve to correct for no record of the last annual test;	\$900
• COOLING TOWER BACKFLOW: Install a required air gap and route the drainage to a floor drain. Perform a test at the back flow check valve to correct for no record of the last annual test;	\$600
• DOMESTIC WATER BACKFLOW: Re-support the trap primer piping to hold it securely. Perform a test at the back flow check valve to correct for no record of the last annual test;	\$250

- SUB-BASEMENT WATER HEATER: Reset the hot water temperature for 120 F to reduce the current setting of 136 F; \$50
- BACKSTAGE JANITOR HOT WATER: Reset the hot water temperature for 120 F to reduce the current setting of 136 F; \$50
- IRRIGATION BACKFLOW: Perform a test at the back flow check valve to correct for no record of the last annual test; \$100

**Estimated cost to correct high priority Plumbing assessment deficiencies; \$2,650**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

PROP STORAGE:

- CAST IRON PIPING: Add more hangers to a 60-ft section of 4” pipe to ensure adequate support and proper drainage; \$1,300

BASEMENT:

- PUBLIC MEN’S RESTROOM: Rebuild the second from left faucet to stop its dripping. Rebuild the 5 flushometers that are leaking at the handle. Install angle stop caps at all 10 urinals. Replace the cracked vacuum breaker at the second urinal from the right. Replace the aerator at the far right hand sink; \$1,300
- PUBLIC WOMEN’S RESTROOM: Rebuild the 6 flushometers that are leaking at the handle or require new diaphragm assemblies. Replace the badly scratched toilet second from left on the west wall. Replace the aerator at the Delta faucet; \$1,300

BACKSTAGE:

- WOMEN’S RESTROOM: Rebuild the 2 flushometers that are leaking at the handle. Replace the hot water faucet valve stem at the right-hand lavatory; \$250
- STORAGE ROOM SINK: Repair the leak at the cold water side of the Chicago faucet. Remove and reconfigure new waste piping to code under the three compartment sink. Reconfigure the ice maker drain system to comply with code requirements; \$1,600
- DRESSING ROOM #4: Install a new hand sink pop-up stopper in lieu of the rusted piece without a stopper; \$600
- DRESSING ROOM #5: Install a new aerator at the Eljer faucet; \$100
- HAND SINK: Replace the valve stem at the leaking cold water faucet; \$150

MAIN FLOOR:

- UNISEX ACCESSIBLE RESTROOM: Replace the valve stems and aerator at the hand sink faucet; \$250

BALCONY LEVEL:

- MEN’S RESTROOM: Replace the flushometer vacuum breaker at the toilet and rebuild the hand sink faucet; \$400
- WEST JANITORIAL ROOM: Replace the cold water faucet stem valve; \$150
- EAST JANITORIAL ROOM: Rebuild the sink cold water faucet, which is turned off at the angle stop; \$200

JONES BLDG 3<sup>RD</sup> FLOOR:

- MEN’S RESTROOM: Replace the valve stems and aerators of the two American Standard faucets. Replace the ballcock valve at the toilet tank; \$750

JONES BLDG 4<sup>TH</sup> FLOOR:

- MEN’S RESTROOM: Replace the left hand faucet aerator; \$150

JONES BLDG 5<sup>th</sup> FLOOR:

- WOMEN’S RESTROOM: Replace the valve stems and aerators of the two American Standard faucets. Replace the sink pop-up stopper assembly. Restore water service to the drinking fountain; \$850

JONES BLDG 6<sup>th</sup> FLOOR:

- MEN’S RESTROOM: Replace the valve stems and aerators of the two American Standard faucets. Replace the sink pop-up stopper assembly; \$650

JONES BLDG 7<sup>th</sup> FLOOR:

- WOMEN’S RESTROOM: Replace the valve stems and aerators of the two American Standard faucets. Replace the tank lever and flapper at one toilet and the ballcock on the other toilet; \$700

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**Estimated cost to correct medium priority Plumbing assessment deficiencies; \$10,700**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

SUB-BASEMENT:

- HOT WATER RE-CIRCULATION PUMP: Lubricate the pump and keep it lubricated; \$80

BASEMENT:

- PUBLIC MEN’S RESTROOM: Tighten the loose handle on the mop sink faucet; \$50
- PUBLIC WOMEN’S RESTROOM: Tighten the loose seat at the left-hand toilet; \$50

BACKSTAGE:

- WOMEN’S RESTROOM: Tighten the loose seat at the third from left toilet on the east wall; \$280
- JANITORIAL ROOM: Clean sink strainer so that the sink will drain efficiently; \$100

BALCONY LEVEL:

- WOMEN’S RESTROOM: Tighten 3 toilet seats; \$150
- EAST JANITORIAL ROOM: Replace the missing handle at the hot water angle stop. Clean up and restore operation of the old toilet and hand sink. Investigate the source of the water leak at the ceiling; \$600

JONES BLDG 3<sup>RD</sup> FLOOR:

- MEN’S RESTROOM: Snake the drain of the drinking fountain and replace the missing handle; \$150

JONES BLDG 6<sup>th</sup> FLOOR:

- MEN’S RESTROOM: Replace the toilet tank lever; \$80

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**Estimated cost to correct low priority Plumbing assessment deficiencies; \$1,540**

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**Total estimated cost to correct deficiencies found by the Plumbing assessment; \$14,890**

**FIRE SPRINKLER SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or imminent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

SUB-BASEMENT:

- FIRE PROTECTION BACKFLOW: Perform a test at the Fire Protection back flow check valve to correct for no record of the last annual test; \$100
- SPRINKLER HEADS: Replace about 150 old 1917 sprinkler heads with new NFPA compliant heads; \$7,500

JONES BLDG 3<sup>RD</sup> FLOOR:

- SPRINKLER HEAD: Add a sprinkler head in front of room 306 to provide proper coverage protection for the corridor; \$500

JONES BLDG 5<sup>th</sup> FLOOR:

- SPRINKLER HEAD: Add another sprinkler head at the end of the corridor to provide proper coverage protection; \$500

JONES BLDG 6<sup>th</sup> FLOOR:

- SPRINKLER HEADS: Relocate the existing sprinkler head and add another one to give the corridor proper coverage protection; \$500
- SPRINKLER HEAD: Add another sprinkler head in the last office on the right to provide proper protection coverage; \$500

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**Estimated cost to correct high priority Fire Sprinkler assessment deficiencies; \$9,600**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

JONES BLDG 3<sup>RD</sup> FLOOR:

- SPRINKLER HEADS: Relocate two sprinkler heads away from the wall in front of room 304 to provide proper coverage protection for the corridor; \$400
- SPRINKLER HEADS: Relocate two sprinkler heads in room 304 to provide proper coverage protection for the office; \$400

JONES BLDG 5<sup>th</sup> FLOOR:

- SPRINKLER HEADS: Plug one of the two sprinkler heads in the Youth Symphony room that are just 2-ft apart; \$150

JONES BLDG 6<sup>th</sup> FLOOR:

- SPRINKLER HEAD: Relocate the sprinkler head in the second office on the right to get it closer to the opposite wall for proper protection coverage; \$400
- SPRINKLER HEAD: Add another sprinkler head in the first enclosed office on the right to provide proper protection coverage; \$400
- SPRINKLER HEADS: Relocate the two sprinkler heads over the first two open offices on the right for proper protection coverage; \$600
- SPRINKLER HEAD: Add another sprinkler head in the conference room on the left to provide proper protection coverage; \$500
- SPRINKLER HEAD: Change out the sprinkler head in the stair well between the 6<sup>th</sup> and 7<sup>th</sup> floors to be either pendant or low profile; \$250

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**Estimated cost to correct medium priority Fire Sprinkler deficiencies; \$3,100**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

- There is nothing in this category; \$0

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**Total estimated cost to correct deficiencies found by the Fire Sprinkler assessment; \$12,700**

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**Grand total estimated cost to correct Mechanical Systems deficiencies; \$45,820**

**ELECTRICAL SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

MAIN FLOOR:

- PANELS “H” & “HL”: Revise wire grounding conductors to comply with NEC 250.142; \$350
- LOW VOLTAGE CABLES: Provide fire rated sleeves for exposed low voltage cables in the Green Room per NEC 300.11; \$350

JONES BLDG 4<sup>th</sup> FLOOR:

- EXPOSED CONDUCTORS: Install a J-box at the end of un-used conduit to enclose exposed conductors per NEC 314.25; \$50

JONES BLDG 5<sup>th</sup> FLOOR:

- NON-RATED CABLES: Remove all NM type cable from above the ceiling and replace it with MC type cable per NEC 300.16; \$180

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**Estimated cost to correct high priority Electrical assessment deficiencies; \$930**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

SUB-BASEMENT:

- LIGHT FIXTURE WIRING: Replace SO cord at fixtures with hard wired raceways or an outlet and plug per NEC 410.30 C; \$1,650
- AHU-1 CONDUIT: Provide proper conduit support per NEC 358.30; \$200

BOILER ROOM:

- J-BOXES: Ensure that proper support is given to J-boxes per NEC 314.23; \$80
- FLEX-CONDUIT: Properly support the flex-conduit to the boiler pump per NEC 348.30 A; \$100

BACK OF STAGE:

- UH-2 WIRING: Change out the SO cord at the heater with hard wiring in conduit controlled by a switch to comply with NEC 400.8; \$400
- UH-1 WIRING: Install a disconnect switch for the heater to comply with NEC 424.19 and provide a cover for the open J-box per NEC 314.25; \$300
- CONDUIT: Ensure that all conduits are supported per NEC 358.30; \$400
- EXTENSION CORD: Replace the extension cord run through a wall with hard wired conduit and a outlet per NEC 400.8; \$400

GREEN ROOM:

- CAN LIGHTS: Provide proper support for can lights per NEC 410.6; \$300
- LOW VOLTAGE CABLES: Provide proper support for the low voltage cables above the ceiling per NEC 300.11; \$300
- EXTENSION CORD: Replace the extension cord run through the ceiling to power a light fixture with hard wired conduit and a outlet per NEC 400.8; \$400
- EXIT SIGN: Provide proper support for the exit sign per NEC 410.16; \$150

JONES BLDG 3<sup>RD</sup> FLOOR:

- CONDUIT: Ensure that all conduits are supported per NEC 358.30; \$700
- LOW VOLTAGE CABLES: Provide proper support for the low voltage cables per NEC 300.11; \$420
- J-BOXES: Ensure that proper support is given to J-boxes per NEC 314.23; \$190

- LIGHT FIXTURES: Ensure that all units are supported per NEC 410.16; \$1,550
- ABANDONED CONDUCTORS: Remove all unused conductors per the 2002 NEC \$600

JONES BLDG 4<sup>th</sup> FLOOR:

- CONDUIT: Ensure that all conduits are supported per NEC 358.30; \$700
- LOW VOLTAGE CABLES: Provide proper support for the low voltage cables per NEC 300.11; \$420
- LIGHT FIXTURES: Ensure that all units are supported and attached to the ceiling grid per NEC 410.16; \$1,850
- ABANDONED CONDUCTORS: Remove all unused conductors per the 2002 NEC \$600

JONES BLDG 5<sup>th</sup> FLOOR:

- CONDUIT: Ensure that all conduits are supported per NEC 358.30; \$1,000
- LOW VOLTAGE CABLES: Provide proper support for the low voltage cables per NEC 300.11; \$880
- J-BOXES: Ensure that proper support is given to J-boxes per NEC 314.23; \$550
- ILLEGAL SPLICES: Demolish and run new wiring in conduits and J-boxes in accordance with NEC 300.16; \$1,300
- LIGHT FIXTURES: Ensure that all units are supported and attached to the ceiling grid per NEC 410.16; \$2,520
- ABANDONED CONDUCTORS: Remove all unused conductors per the 2002 NEC \$600

JONES BLDG 6<sup>th</sup> FLOOR:

- CONDUIT: Ensure that all conduits are supported per NEC 358.30, including conduits laid on fire sprinkler piping; \$1,800
- LOW VOLTAGE CABLES: Provide proper support for the low voltage cables per NEC 300.11; \$420
- J-BOXES: Ensure that proper support is given to J-boxes per NEC 314.23; \$550
- LIGHT FIXTURES: Ensure that all units are supported and attached to the ceiling grid per NEC 410.16; \$2,450
- ABANDONED CONDUCTORS: Remove all unused conductors per the 2002 NEC \$600

JONES BLDG 7<sup>th</sup> FLOOR:

- CONDUIT: Ensure that all conduits are supported per NEC 358.30, including conduits left hanging when the false ceiling was removed; \$2,200
- LOW VOLTAGE CABLES: Provide proper support for the low voltage cables per NEC 300.11, including cables left hanging when the false ceiling was removed; \$840
- J-BOXES: Ensure that proper support is given to J-boxes per NEC 314.23, including boxes left hanging when the false ceiling was removed; \$550
- LIGHT FIXTURES: Ensure that all units are supported and attached to the ceiling grid per NEC 410.16, including fixtures left hanging when the false ceiling was removed; \$1,650
- ABANDONED CONDUCTORS: Remove all unused conductors per the 2002 NEC \$600

THEATER ATTIC:

- CONDUIT: Ensure that all conduits are supported per NEC 358.30; \$1,000
- LOW VOLTAGE CABLES: Provide proper support for the low voltage cables per NEC 300.11; \$4,350
- J-BOXES: Ensure that proper support is given to J-boxes per NEC 314.23; \$550
- ABANDONED CONDUCTORS: Remove all unused conductors per the 2002 NEC \$600

- **PATHWAY LIGHTING:** Demolish existing pathway lighting that has exposed connectors and install a new hard wired lighting network in raceways per NEC 300.8 & 300.16; \$13,880

**Estimated cost to correct medium priority Electrical assessment deficiencies; \$50,600**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

SUB-BASEMENT:

- **J-BOXES:** Ensure that the fire sprinkler J-box is covered per NEC 314.25; \$50

BOILER ROOM:

- **J-BOXES:** Ensure that the open J-box is covered per NEC 314.25; \$50

BACK OF STAGE:

- **J-BOXES:** Ensure that all boxes are covered per NEC 314.25; \$125

STAGE:

- **J-BOXES:** Ensure that the J-box behind the rigging arbor gets a covered and replace the damaged J-box cover at the “LB” conduit body per NEC 314.25; \$100

CARPENTER SHOP:

- **PANELS DC, DCPD & EDC:** Remove all items blocking the fronts of these panels per NEC 110.26. Vacuum out sawdust from within these panels; \$250

GREEN ROOM:

- **J-BOXES:** Ensure that all boxes above the ceiling are covered per NEC 314.25; \$100

MAIN FLOOR:

- **PANELS “H” & “HL”:** Remove things from in front of these panels to comply with NEC 110.26; \$50

BALCONY, RIGHT:

- **LOW VOLTAGE CABLES:** Rework the cables to be organized in a workman like manner and provide a Panduit raceway per NEC 110.12; \$3,250

JONES BLDG 3<sup>RD</sup> FLOOR:

- **J-BOXES:** Ensure that two J-boxes are covered per NEC 314.25; \$50

JONES BLDG 4<sup>TH</sup> FLOOR:

- **J-BOXES:** Ensure that two J-boxes are covered per NEC 314.25; \$50

JONES BLDG 5<sup>TH</sup> FLOOR:

- **J-BOXES:** Ensure that all J-boxes are covered per NEC 314.25; \$300
- **FLEX-CONDUIT:** Raise can light whips up off the ceiling tile and secure per NEC 300.11; \$120

JONES BLDG 6<sup>TH</sup> FLOOR:

- **J-BOXES:** Ensure that all J-boxes are covered per NEC 314.25; \$300
- **FLEX-CONDUIT:** Raise can light whips up off the ceiling tile and secure per NEC 300.11; \$120

JONES BLDG 7<sup>th</sup> FLOOR:

- J-BOXES: Ensure that all un-used openings in J-boxes are covered per NEC 314.25; \$200

**Estimated cost to correct low priority Electrical assessment deficiencies; \$5,115**

**Grand total estimated cost to correct Electrical Systems deficiencies; \$56,645**

Reports on Individual Theaters:

**RIALTO THEATER**  
**Mechanical & Electrical Systems Assessment**

**Historic Rialto Theater Constructed in 1918, Renovated 1992:**

Estimated costs to correct mechanical & electrical system reported deficiencies:

- **High priority items;** **\$5,200**
- **Medium priority items;** **\$10,680**
- **Low priority items;** **\$3,900**

**Total estimated M & E correction costs: \$19,780**

**HVAC SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

AHU-1 UNIT:

- FILTERS: Replace missing or dirty filters with new ones; \$200
  - DUCTWORK: Repair or replace collapsed ductwork that collects standing water; \$3,500
- Estimated cost for high priority corrections: **\$3,700**

EF-1 UNIT:

- OPERATION: Trouble-shoot and make repairs to this inoperable unit; \$400
  - DUCTWORK: Install proper ductwork to replace the temporary cardboard patch; \$500
  - ELECTRICAL: Reattach the loose flex connection securely to the J-box; \$200
- Estimated cost for high priority corrections: **\$1,100**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

- AHU-1: Replace the fan belt and ensure proper alignment; **\$200**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

- AHU-1: Vacuum out the very dirty interior of the unit and keep it clean; **\$200**

**Total estimated costs to correct HVAC assessment deficiencies; \$5,200**

**PLUMBING SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

- MEN'S DRESSING: Trouble shoot the reason water is turned off for the urinal flushometer; **\$400**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

- WOMEN’S RESTROOM: Replace the toilet with cracked base; \$600
  - MAIN LEVEL JANITOR’S: Monitor the water heater base pan to look a water leak source; \$300
  - BASEMENT DRINKING FOUNTAIN: Replace the missing handle; \$80
- Estimated cost for medium priority corrections: **\$980**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

- There is nothing in this category; **\$0**

**Total estimated costs to correct Plumbing assessment deficiencies; \$1,380**

**FIRE SPRINKLER SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or imminent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

- There is nothing in this category; **\$0**

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

- There is nothing in this category; **\$0**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

- MAIN AUDITORIUM: Replace missing (1) Reliable model G-4 sprinkler head trim; **\$200**

**Total estimated costs to correct Fire Sprinkler assessment deficiencies; \$200**

**Grand total of estimated costs to correct Mechanical System assessment deficiencies; \$6,780**

**ELECTRICAL SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or imminent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

- There is nothing in this category

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

- Attic Lighting: Install a permanent lighting system with proper wiring in conduit; **\$9,500**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

- Stage: Properly support low voltage cabling; \$1,500
  - Back of House: Properly support low voltage cabling; \$1,500
  - Lighting Booth: Properly support low voltage cabling; \$500
- Estimated cost for low priority corrections: **\$3,500**

**Grand total of costs to correct deficiencies found by the Electrical assessment; \$13,000**

Reports on Individual Theaters:

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**THEATER ON THE SQUARE**  
**Mechanical & Electrical Systems Assessment**

**Theater on the Square Constructed in 1992:**

Estimated costs to correct mechanical & electrical system reported deficiencies:

• <b>High priority items;</b>	<b>\$20,000</b>
• <b>Medium priority items;</b>	<b>\$21,345</b>
• <b>Low priority items;</b>	<b><u>\$2,250</u></b>
<b>Total estimated M &amp; E correction costs:</b>	<b>\$43,595</b>

**HVAC SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

RACU-1 UNIT:

• <b>CLEANING:</b> Remove dirt from clogged condenser and evaporator coils to restore performance. Vacuum the indoor fan motor compartment to remove built-up dirt;	\$850
• <b>INDOOR FAN:</b> Replace the worn out motor sheave. Lubricate the motor and fan bearings and follow through to keep lubricated;	\$400
• <b>RELIEF FAN:</b> Troubleshoot the cause of charred wiring and defective relay and make repairs;	<u>\$400</u>
Estimated cost for high priority corrections:	<b>\$1,650</b>

RACU-2 UNIT:

• <b>CLEANING:</b> Remove dirt from clogged condenser and evaporator coils to restore performance. Vacuum the indoor fan motor and compressor compartments to remove built-up dirt;	\$1,050
• <b>INDOOR FAN:</b> Replace the worn out support bearings and keep lubricated;	<u>\$400</u>
Estimated cost for high priority corrections:	<b>\$1,450</b>

RACU-3 UNIT:

• <b>CLEANING:</b> Remove dirt from clogged condenser and evaporator coils to restore performance;	\$650
• <b>CONDENSOR FAN:</b> Replace the defective #2 fan motor;	\$225
• <b>HIGH PRESSURE SAFETY SWITCHS:</b> Rewire the switches for both condensers to restore safety function operation;	\$200
• <b>COMPRESSOR CONTACTORS:</b> Troubleshoot the removed wiring at the contactors and re-wire to restore operation of the compressors;	\$200
• <b>INDOOR FAN:</b> Install zerk fittings at prepared holes for lubrication of dry motor bearings and keep lubricated. Replace the worn out motor sheave;	\$520
• <b>HEATING SECTION:</b> Replace the defective combustion fan motor;	<u>\$725</u>
Estimated cost for high priority corrections:	<b>\$2,520</b>

RACU-4 UNIT:

• <b>CLEANING:</b> Remove dirt from clogged condenser coil to restore performance;	\$300
• <b>COMPRESSOR CONTACTORS:</b> Troubleshoot the removed wiring at contactors #1 and re-wire to restore operation of the compressor;	\$250
• <b>INDOOR FAN:</b> Replace the worn out motor sheave. Install zerk fittings at prepared holes for lubrication of dry motor bearings and keep lubricated;	<u>\$500</u>
Estimated cost for high priority corrections:	<b>\$1,050</b>

RACU-5 UNIT:

- **CLEANING:** Remove dirt from clogged condenser and evaporator coils to restore performance. Vacuum the indoor fan motor compartment to remove built-up dirt; \$525
  - **INDOOR FAN:** Troubleshoot the reason water is collecting in the fan compartment and repair the situation; \$200
- Estimated cost for high priority corrections: **\$725**

RACU-6 UNIT:

- **CLEANING:** Remove dirt from clogged condenser coil to restore performance. Vacuum the condenser fan and indoor fan sections to remove built up dirt; \$725
  - **REFRIGERANT PRESSURE:** Trouble shoot low pressure cause and correct the situation; \$1,500
  - **INDOOR FAN:** Replace the worn out motor sheave; \$250
- Estimated cost for high priority corrections: **\$2,520**

RACU-7 UNIT:

- **CLEANING:** Remove dirt from clogged condenser and evaporator coils to restore performance; \$650
  - **INDOOR FAN:** Replace the worn out motor sheave, the pitted and worn our fan contactor, and the deteriorated fan belt; \$750
- Estimated cost for high priority corrections: **\$1,400**

RACU-8 UNIT:

- **CLEANING:** Remove dirt from clogged condenser and evaporator coils to restore performance; \$650
  - **REFRIGERANT PRESSURE:** Trouble shoot low pressure cause and correct the situation; \$1,300
- Estimated cost for high priority corrections: **\$1,950**

AHU-1 UNIT:

- **CLEANING:** Remove dirt from clogged evaporator coil to restore performance; \$300
  - **INDOOR FAN:** Replace the deteriorated fan belt; \$125
- Estimated cost for high priority corrections: **\$1,950**

RF-1 UNIT:

- **BEARINGS:** Lubricate the dry bearings and follow through to keep lubricated; **\$125**

REF-1 UNIT:

- **FAN BELT:** Replace the missing fan belt; **\$180**

REF-3 UNIT:

- **MOTOR:** Replace the seized or burnt out motor **\$600**

REF-5 UNIT:

- **FAN BELT:** Replace the missing fan belt; **\$170**

REF-6 UNIT:

- **MOTOR:** Troubleshoot the inoperable motor and get it running; \$225
  - **FAN BELT:** Replace the missing fan belt; \$170
- Estimated cost for high priority corrections: **\$395**

REF-7 UNIT:

- **MOTOR:** Troubleshoot the inoperable motor and get it running; \$225
  - **FAN BELT:** Replace the missing fan belt; \$170
- Estimated cost for high priority corrections: **\$395**

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**Estimated cost to correct high priority HVAC assessment deficiencies; **\$17,080****

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

RACU-1 UNIT:

- CONDENSOR FAN #2: Raise the fan higher on its shaft. Replace the broken rain shield; \$375
  - CONDENSATE DRAIN: Clean out the drain “P” trap and add a treatment tab to the drain pan; \$100
  - AIR SCREENS: Replace the missing screens; \$100
- Estimated cost for medium priority corrections: **\$575**

RACU-2 UNIT:

- SUPPLY FAN: Replace the existing 2-hp motor with the proper size of 1-hp; \$925
  - AIR RETURN: Troubleshoot the air over pressure that blows filters out of place and correct the situation; \$250
- Estimated cost for medium priority corrections: **\$1,175**

RACU-3 UNIT:

- CONDENSOR FAN #2: Replace the broken rain shield; \$150
  - INDOOR FAN SECTION: Replace the insulation missing from the access panel; \$275
  - HEATER SECTION: Replace the marginally effective burner assembly igniter and the significantly rusted access panel; \$550
- Estimated cost for medium priority corrections: **\$975**

RACU-4 UNIT:

- CONDENSATE DRAIN: Add a second drain line with “P” trap at the low side of the drain pan to improve drainage of condensate; \$275
  - HEATER SECTION: Replace the significantly rusted lower access panel. Vacuum out the dirty chamber; \$425
- Estimated cost for medium priority corrections: **\$700**

RACU-5 UNIT:

- CONDENSATE DRAIN: Remove the existing drain line with “P” trap that is clogged. Install a new drain line with “P” trap and provide accessibility for cleaning in the future; \$275
  - THERMOSTAT: Replace the thermostat to correct for the broken cooling adjustment slider for avoiding a simultaneous call for cooling and heating; \$425
- Estimated cost for medium priority corrections: **\$700**

RACU-6 UNIT:

- CONDENSATE DRAIN: Remove the existing drain line with “P” trap that is clogged. Install a new drain line with “P” trap and provide accessibility for cleaning in the future; **\$175**

RACU-7 UNIT:

- CONDENSATE DRAIN: Remove the existing drain line with “P” trap that is clogged. Install a new drain line with “P” trap and provide accessibility for cleaning in the future. Add a treatment tab to the drain pan; **\$300**

RACU-8 UNIT:

- CONDENSATE DRAIN: Remove the existing drain line with “P” trap that is clogged. Install a new drain line with “P” trap and provide accessibility for cleaning in the future; **\$175**

AHU-1 UNIT:

- FILTERS: Replace the very dirty filters; **\$120**

REF-2 UNIT:

- CONTROL BOX: Re-mount the improperly mounted box; **\$225**

REF-4 UNIT:

- FAN BELT: Replace the deteriorating fan belt; **\$170**

**Estimated cost to correct medium priority HVAC assessment deficiencies; \$5,290**

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

RACU-2 UNIT:

- HEATER SECTION: Adjust the outlet combustion grille to fit in place without rattling noisily; **\$150**

RACU-5 UNIT:

- HEATER SECTION: Adjust the outlet combustion grille to fit in place without rattling noisily; **\$200**

**Estimated cost to correct low priority HVAC assessment deficiencies; **\$350****

**Total estimated cost to correct deficiencies found by the HVAC assessment; **\$22,720****

**PLUMBING SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

- DOMESTIC WATER BACKFLOW: Perform a test at the main back flow check valve to correct for no record of the last annual test; **\$100**
- HUMIDIFIER BACKFLOW: Perform a test at the back flow check valve to correct for no record of the last annual test; **\$100**
- CONNCESSION STAND BACKFLOW: Perform a test at the back flow check valve to correct for no record of the last annual test; **\$100**
- FIRST FLOOR HOT WATER RE-CIRCULATION: Troubleshoot the unusually noisy pump. Check bearings for lubrication. May have to rebuild the pump; **\$1,200**
- BACK STAGE JANITOR’S SINK BACKFLOW: Correct direct connection of chemical feed at the sink faucet by inserting a Reduced Pressure Backflow Assembly; **\$1,200**

**Estimated cost to correct high priority Plumbing assessment deficiencies; **\$2,700****

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

FIRST FLOOR:

- WATER HEATER: Fix the leak at the thermometer on the hot water re-circulation return line. Install proper support for the expansion tank; **\$800**
- MEN’S DRESSING RESTROOM: Repair loose spout at left lavatory and the broken hand-held shower bracket. Remove all toilets and carriers then properly reset the assemblies plus repair seats as needed; **\$2,100**
- BACKSTAGE PROP ROOM: Remove toilet and carrier then properly reset the assembly plus repair the loose seat; **\$800**
- DRESSING ROOM #1: Repair loose faucet handle and rebuild the valve; **\$300**
- PUBLIC WOMEN’S RESTROOM: Rebuild the left-hand faucet to correct broken blade handles. Rebuild the flushometers at the left and sixth from left toilets. Remove 4 toilets and carriers then properly reset the assemblies plus repair seats as needed; **\$3,000**

**Estimated cost to correct medium priority Plumbing assessment deficiencies; **\$7,000****

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

FIRST FLOOR:

- WOMEN’S DRESSING RESTROOM: Tighten the left-hand toilet seat; **\$80**

- BACKSTAGE PROP ROOM: Clean the drain separator and continue to clean regularly \$250
- PUBLIC MEN’S RESTROOM: Tighten the center toilet seat; \$150

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**Estimated cost to correct low priority Plumbing assessment deficiencies; \$480**

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**Total estimated cost to correct deficiencies found by the Plumbing assessment; \$10,180**

**FIRE SPRINKLER SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

- FIRE PROTECTION BACKFLOW: Perform a test at the Fire Protection back flow check valve to correct for no record of the last annual test; \$100

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

- TAG SCENE SHOP: Evaluate why there is no fire sprinkler coverage in this room. Determine whether current use would require sprinkler coverage. Follow through to ensure proper fire sprinkler protection is provided at the room; \$2,100

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

- THEATER SEATING UNDER SOFFIT: Remove painted cover plates that are non-compliant to code and install new code compliant cover plates to restore reliable operation; \$800

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**Total estimated cost to correct deficiencies found by the Fire Sprinkler assessment; \$3,000**

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**Grand total estimated cost to correct Mechanical Systems deficiencies; \$35,900**

**ELECTRICAL SYSTEM DEFICIENCIES REPORTED**

**High Priority Items:** Representing the potential or immanent equipment failure that would cause loss of function resulting in discomfort or inconvenience for the facility users.

- BASEMENT COMPANY OFFICE: Repair the flexible conduit that has broken loose form the connector so that the wires are exposed per NEC 300.12; \$120

**Medium Priority Items:** Representing equipment requiring continual attention until replacement or repair can be accomplished as a planned operation.

**BASEMENT:**

- NINE ROOMS: Provide proper support for 14 ceiling light fixtures per NEC 410.6; \$2,260
- DRESSING ROOM #8: Provide proper support for the conduits above the ceiling per NEC 358.30; \$240

**FIRST FLOOR:**

- BOX OFFICE: Provide proper support for can lights per NEC 410.6. Provide proper support for the conduits above the ceiling per NEC 358.30. Properly support the loose J-box per NEC 314.23. Correct the installation of the emergency can light test light, which is lying on a ceiling tile per NEC 314.25; \$550
- DRESSING ROOM #3: Provide support for loose J-boxes in the ceiling per NEC 314.23. Properly support loose MC-cable in the ceiling per NEC 330.30; \$120

CATWALK:

- FLUORESCENT FIXTURE: Troubleshoot several fluorescent light fixtures that do not operate properly and make repairs to restore full functioning to all; \$2,800

ROOF TOP:

- EF-6 DISCONNECT: Remove improper NEMA 1 (indoor) disconnect and replace it with a new NEMA 3R (rain proof) disconnect; \$710
- PANEL MA: Remove the miss fitting field fabricated “dead front” and install a properly fitting factory fabricated “dead front” that meets NEC 408.18. Replace the dysfunctional relay in a J-box behind the panel; \$275

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**Estimated cost to correct medium priority Electrical assessment deficiencies; **\$6,955****

**Low Priority Items:** Representing equipment for which operational improvement can result from a planned periodic maintenance program.

BASEMENT:

- DRESSING ROOM #5: Provide missing covers at open J-boxes and plug one unused opening per NEC 314.25; \$150
- DRESSING ROOM #9: Raise can light whips up off the ceiling tile and secure per NEC 300.11; \$120

FIRST FLOOR:

- WATER ROOM: Provide a bond between the hot and cold water lines at the water heater per WAC 296-46B-250-090-4. Plug one unused opening in the J-box for the hot water tank disconnect per NEC 314.25; \$170

CATWALK:

- OPEN FLUORESCENT FIXTURE: Provide a cover to conceal exposed wiring per NEC 300.8 & 300.16; \$180

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**Estimated cost to correct low priority Electrical assessment deficiencies; **\$620****

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**Grand total estimated cost to correct Electrical Systems deficiencies; **\$7,695****