

## AMENDED ELEVATOR & ESCALATOR MAINTENANCE 2022-2024

**WHEREAS**, Otis Elevator Company (hereinafter called Contractor) and The City of Reno, (hereinafter called Owner) entered into the Contract on or about December 27, 2021 effective January 1, 2022;

**WHEREAS**, the Contract needs to be amended to add to the scope of work to modernize the elevator at McKinley;

**WHEREAS**, the Contract needs to be amended to increase the Contract amount; and

**WHEREAS**, Contractor and Owner agree to amend the Contract as follows:

- I. Scope of Work is amended to add the work as describe in Attachment A in the not to exceed amount of \$175,000 which includes a contingency amount of \$20,543.45.

All other terms and provisions of the Contract of December 27, 2021 effective January 1, 2022 remain in full force and effect.

This amendment is effective the date approved by the Owner.

OWNER:  
City of Reno

CONTRACTOR:  
Otis Elevator Company

\_\_\_\_\_  
Hillary L. Schieve, Mayor

\_\_\_\_\_  
Matt Angulo

ATTEST:

\_\_\_\_\_  
Mikki Huntsman, City Clerk

APPROVED:

\_\_\_\_\_  
Susan Ball Rothe, Deputy City Attorney

# ATTACHMENT A

# Otis Service and Repair Order

2/16/2024

## CUSTOMER NAME

CITY OF RENO  
55 E. FIRST STREET  
RENO, NV 89505

## OTIS ELEVATOR COMPANY

725 Trademark Dr. Suite 102  
RENO, NV 89521

## OTIS CONTACT

Jacob O'Rourke  
Phone: +1 (775) 870-0380  
Email: Jacob.ORourke@otis.com

## PROJECT LOCATION

MCKINLEY  
925 RIVERSIDE DR  
RENO, NV 89503

## PROPOSAL NUMBER

QTE-001839595

We propose to furnish the necessary material and labor on the following units:

Unit	Customer Designation
G17808	MA1

## SCOPE OF WORK

### Otis' HYDRO ACCEL ELEVATOR MODERNIZATION - BUDGET PRICING

We propose to furnish labor and material to provide a hydraulic microprocessor-based control system. It is specifically designed to meet the particular needs of modernizing hydraulic elevators. The system is integrated by communications over serial links and discrete wiring.

#### DUTY

The present capacity will be retained.

#### STOPS AND OPENINGS

Present stops and openings will be retained.

#### SOFT STARTER (NEW)

A new solid-state starter will be provided. It will be of the same power requirement and starting configuration as presently exists.

#### POWER UNIT (NEW)

The existing power unit will be replaced with a new power unit. The new power unit consists of a positive displacement pump, motor, integral 4-coil control valve, oil tank and muffler.

The pump and motor are submerged and are mounted to the tank with rubber isolators to reduce vibration and noise. A muffler is provided to dissipate pulsations and noise from the flow of hydraulic fluid. The valve consists of up, up leveling, down and down leveling controls along with manual lowering and a pressure relief valve.

#### AUTOMATIC SELF-LEVELING (WITH NEW HOISTWAY LEVELING DEVICE)

The elevator shall be provided with automatic self-leveling that shall bring the elevator car level with the floor landings, no more than +/- 1/2" assuming proper loading. The automatic self-leveling shall correct for over travel or under travel.

#### CONTROLLER

A microprocessor-based control system shall be provided to perform all the functions of safe elevator motion and elevator door control. This shall include all the hardware required to connect, transfer and

interrupt power, and protect the motor against overloading. The system shall also perform group operational control.

Each controller cabinet containing memory equipment shall be properly shielded from line pollution. The microcomputer system shall be designed to accept reprogramming with minimum system downtime.

**OPERATION - ONE CAR**

Operation shall be automatic by means of the car and landing buttons. Stops registered by momentary actuation of the car or landing buttons shall be made in the order in which the landings are reached in each direction of travel after the buttons have been actuated. All stops shall be subject to the respective car or landing button being actuated sufficiently in advance of the arrival of the car at that landing to enable the stop to be made. The direction of travel for an idle car shall be established by the first car or landing button actuated.

"UP" landing, calls shall be answered while the car is traveling in the up direction and "DOWN" landing, calls shall be answered while the car is traveling down. The car shall reverse after the uppermost or lowermost car or landing call has been answered, then proceed to answer car calls and landing calls registered in the opposite direction of travel.

If the car without registered calls arrives at a floor where both up and down hall calls are registered, it shall initially respond to the hall call in the direction that the car was traveling. If no car call or hall call is registered for further travel in that direction, the car shall close its doors and immediately reopen them in response to the hall call in the opposite directions. Direction lanterns, if furnished, shall indicate the change of direction when the doors reopen.

An independent service switch shall be provided in the car operating panel which, when actuated, shall cancel previously registered car calls, disconnect the elevator from the hall buttons and allow operation from the car buttons only.

**SPECIAL EMERGENCY SERVICE -FIRE SERVICE**

Special Emergency Service operation shall be provided in compliance with the revision of the ASME/ANSI A17.1 Code. Special Emergency Service Phase I to return the elevator (s) non-stop to a designated floor shall be initiated by an elevator smoke detector system or a keyswitch provided in a lobby fixture. If required, the smoke detector system is to be furnished by others. The elevator contractor shall provide input connections on the elevator controller to receive signals from the smoke detector system. A keyswitch in the car shall be provided for in-car control of each elevator when on Phase II of Special Emergency Service. If an elevator is on independent service when the elevators are recalled on Phase I operation, a buzzer shall sound in the car and a jewel shall be illuminated, subject to applicable codes.

**INSPECTION OPERATION**

For inspection purposes, an enabling keyswitch shall be provided in the car operating panel to permit operation of the elevator from on top of the car and to make car and hall buttons inoperative

On top of the car an operating fixture shall be provided containing continuous pressure "UP" and "DOWN" buttons, an emergency stop button, and an inspection-initiating switch. This switch makes the fixture operable and, at the same time, makes the door operator and car and hall buttons inoperable

**ACCESSALERT HOISTWAY SAFETY DEVICE**

Included in this scope of work we will furnish and install all of the necessary components, circuitry and wiring for a new AccessAlert system, which will operate on the elevator car top and pit. AccessAlert will be installed so the elevator can be controlled in a safe manner when an authorized person accesses the elevator hoistway.

**APPLIED CAR OPERATING PANEL (NEW)**

An applied car-operating panel shall be furnished. The panel shall contain a bank of illuminated buttons marked to correspond with the landings served, an emergency call button, emergency stop button or

switch, door open and door close buttons, and a light switch. The emergency call button shall be connected to a bell that serves as an emergency signal. A fan switch, if optional fan is provided, shall also be located in the car-operating panel. All car operating panel lamps shall be the low-voltage long life lamps.

#### OTIS HANDSOFF® PHONE (NEW)

We propose to furnish and install the Otis HANDSOFF® phone. The HANDSOFF phone is a telephone that enables communication between persons in the elevator and a 24-hour answering service.

The HANDSOFF phone will be mounted in a telephone box or surface mounted in the elevator cab. It will automatically dial a preprogrammed number and will inform the answering service of the elevator location via prerecorded digital voice communication. After disclosing the elevator location, the phone will allow two-way voice communication. The HANDSOFF phone contains two light-emitting diodes -- one that indicates the call is in progress and another that indicates the call has been acknowledged. After receiving acknowledgment of the call from the answering service, a deaf/mute person can signal the answering service by reactivating the call button. The phone can be easily programmed and allows incoming calls to be received. The telephone will be furnished and installed in accordance with the ASME A17.1 Safety Code for Elevators and Escalators and is registered with the FCC.

#### CAR POSITION INDICATOR

A digital position indicator shall be provided and installed in car operation panel.

#### AUDIBLE SIGNAL (INDICATES PASSING OR STOPPING AT A LANDING) (NEW)

An audible signal shall sound in the car to tell passengers that the car is either stopping or passing a landing served by the elevator.

#### EMERGENCY CAR LIGHTING (NEW)

An emergency power unit employing a 12-volt sealed rechargeable battery and a totally static circuit shall be provided. The power unit shall illuminate the elevator car and provide current to the alarm bell in the event of normal power failure. The equipment shall comply with the requirements of the latest revision of the ASME/ANSI A17.1 Code.

#### HALL BUTTONS (NEW)

New hall buttons shall be installed at each landing, an up and a down button at each intermediate landing and a single button at each terminal landing.

When a call is registered by momentary pressure on a landing button, that button shall become illuminated and remain illuminated until the call is answered. Hall button lamps shall be low-voltage, long life lamps.

#### HOISTWAY OPERATING DEVICES (NEW)

Normal terminal stopping devices shall be provided to slow down and stop the car automatically at the terminal landings and to automatically cut off the power and apply the brake, should the car travel beyond the terminal landings.

#### CAR GUIDES (RETAINED)

The existing car guides shall be retained. They shall be thoroughly inspected. Any worn parts will be replaced by the original manufacture parts or equal.

#### CAR FRAME (RETAINED)

The existing car frame shall be retained.

#### DOOR OPERATOR (NEW)

A new door operator shall be installed.

Doors on the car and at the hoistway entrances shall be power operated by means of the new door operator mounted on top of the car. The door operator is a closed-loop system designed to provide consistent door performance despite changes in temperature or wind and despite the presence of minor debris in the door track. The system continuously monitors door speed and position and adjusts them to match the predefined profile.

Door operation shall be automatic at each landing, with door opening initiated as the car arrives at the landing. Closing will take place after an adjustable time interval expires. An electric car door contact shall prevent the elevator from operating unless the car door is in the closed position.

Door close shall be arranged to start after a minimal time, consistent with ADA requirements. Doors shall be arranged to remain open for an adjustable time period sufficient to meet ADA requirements.

Elevator cars' door-open time intervals, when the car is at a landing, shall be adjustable independently for the cars' responses to car and hall calls.

INTERLOCKS  
OTIS 6940

OPTIGUARD ENTRANCE-PROTECTION DEVICE (NEW)

A solid-state, infrared passenger protection device shall be installed on the car door. This system uses 154 infrared emitters and detectors to create an invisible "net" across the elevator entrance.

The OPTIGUARD system continuously scans for interrupted beams. If any beam in the curtain is interrupted; the OPTIGUARD system will reopen the elevator door instantly.

OPTIGUARD helps reduce potential injury to passengers as they enter and exit the elevator. The OPTIGUARD systems infrared beams will also detect approaching objects which reduces potential for damage to elevator doors caused by mail carts, stretchers or other moving equipment.

If these beams strike an object in the middle of the entryway, light reflects off the object into special photo-diode receivers mounted on the opposite side of the entrance, which scan into the entryway. If the receivers detect enough light, a reversal signal is generated to open the doors.

If any curtain beam is interrupted, a door-reversal signal will cause the elevator doors to reopen without touching the passenger. After a car stop is made, the door shall remain open for a predetermined interval before closing. If, while the door is closing, the matrix of invisible light beams is interrupted by a passenger entering or leaving the car, the door shall stop and reopen, after which the door shall again start closing.

HOISTWAY ENTRANCES (RETAINED)

The present hoistway entrances will be retained.

PIT SWITCH (NEW)

An emergency stop switch shall be located in the pit accessible from the pit access door.

SPRING BUFFERS (RETAINED)

The existing spring buffers shall be retained.

FLOORING

New Flooring to be installed.

WIRING

All new wiring and electrical interconnections shall comply with governing codes. Insulated wiring shall have flame-retardant and moisture-proof outer covering and shall be run in conduit, flexible tubing or

electrical wire ways. Traveling cables shall be flexible and suitably suspended to relieve strain on individual conductors.

#### ENGINEERING DESIGN

All new material furnished will be specifically designed to operate with original elevator equipment being retained, to maximum performance and eliminate any divided responsibility.

#### SUPERSEDED MATERIAL

All material removed or unused, not required in the modification will become the property of Otis and we reserve the right to remove and retain it.

#### PERMITS AND INSPECTIONS

The elevator contractor shall furnish all licenses and permits and shall arrange for and make all required inspections and tests.

#### CODE

The elevator equipment shall be furnished and installed in accordance with the ASME/ANSI A17.1 Safety Code for Elevators and Escalators, An American National Standard, including the latest Supplement, and the Americans with Disabilities Act.

#### CODE (LOCAL)

The elevator equipment shall comply with all applicable local codes.

#### WORK BY OTHERS

The following items must be performed by others at no costs to us, and you agree to:

Provide suitable ventilation and cooling equipment, if required, to maintain the machine room ambient temperature between 32oF and 113oF. The relative humidity should not exceed 95 percent non-condensing.

Provide electrical power for light, tools, hoists, etc. during installation as well as electrical current for starting, testing and adjusting the elevator.

Provide a smoke detector system, located as required with wiring from the sensing devices to each elevator controller.

Do any required cutting, including cutouts to accommodate hall signal fixtures, patching and painting of walls, floors or partitions.

Provide a dedicated (non-PBX) touch-tone business telephone line terminated in the machine room.

Provide a fused disconnect switch or circuit breaker for each elevator per the applicable National Electrical Code with feeder or branch wiring to controller. Size to suit elevator contractor.

Provide a 120-volt AC, 20 amp, single-phase power supply with fused SPST disconnect switch for each elevator with feeder wiring to each controller for car lights.

Provide a separate 120-volt AC, 15 amp, single-phase power supply with fused SPST disconnect switch with duplex outlets in the machine room and lobby or other applicable location, for power to each elevator video display panel and controller when display system is provided.

Provide a 120-volt AC, 15 amp, single-phase power supply with fused SPST disconnect switch with duplex outlets in the machine room or other locations as required for information display terminal and controller of information display when provided. Also, provide one (1) pair of shielded/twisted conductors between the terminal and the machine room.

Provide a safe and dry on-site storage area for elevator material.

Any modification or installation of lights and/or electrical outlets in the machine room and/or pit to be performed by others.

#### LIMITATIONS

Under no circumstances shall Otis be liable for indirect, consequential, or special damages resulting from the installation or use of this product.

We will include all engineering, wiring, print, software, and control changes.

Material provided shall be installed in accordance with the ASME A17.1 Safety Code for Elevators and Escalators.

The customer will be responsible for paying local inspection fees if applicable.

A representative will contact you to schedule the work. All work will be performed during regular working days and hours of the Elevator Trade unless otherwise specified above.

#### PRICE

\$154,456.55

One hundred fifty-four thousand four hundred fifty-six and 55/100 dollars