Elevator Modernization Proposal

February 12, 2024

Submitted To: **Douglas County Justice Center**
4000 Justice Way
Castle Rock, CO 80109

Property Location: **Douglas County Justice Center**
Elevator J – K – L - M
4000 Justice Way
Castle Rock, CO 80109

Existing Conditions: Type: Hydraulic
CP#: CP09-002778,79,80,81
Capacity: 3,500#
Speed: 150 Feet Per Minute

Submitted By: Sandoval Elevator Company
2171 South Trenton Way
Suite: 208
Denver, CO 80231

sandoval elevator company
RISING TO NEW LEVELS

This proposal covers the complete modernization of FOUR (4) hydraulic elevators (SIMPLEX CONTROL) located at 4000 Justice Way, Castle Rock, CO. All work will be performed in a workman like manner and will include all labor and material as specified herein.

All work will be performed in accordance with the most applicable edition of the National Safety Code for elevators (ASME A17.1) as pertaining to Passenger Elevators, the Americans with Disabilities Act (ADA), the National Electrical Code, and or such State and local elevator codes as may be applicable.

Please note: This proposal includes a scope of work that will be required for your building as a result of these elevator upgrades. Sandoval Elevator will assist other trades as needed throughout the completion of this building work.

CONTROL SYSTEM

A. Controller: Provide NEW microprocessor based elevator control system. Control of the elevator shall be automatic in operation by means of push buttons in the car numbered to correspond to floors served, for registering car stops, and by "up-down" push buttons at each intermediate landing and "call" push buttons at terminal landings.

B. Provide a **battery backup system** to safely lower the car to the lowest landing and open the doors in case of a power loss on the line side of the mainline disconnect switch. Code required disconnect shall be provided by others and must be installed prior to start.

POWER UNIT

A. Hydraulic Power Unit: Provide NEW self-contained, hydraulic elevator power unit, including electric motor, non-pulsating constant-displacement type pump, piping, control valve assembly (as manufactured by MEI or an approved equal). Provide auxiliary devices and fittings required for performance as specified or required by code, including manual valve for return of car to lowest landing and manual shut off valves in machine room and in the elevator pit.

B. Motor: Provide NEW high-starting-torque, single speed, A.C. motor, sized for continuous elevator operation at full rated capacity and speed.

C. Control Valves: Solenoid-operated, designed for slow opening and closing, as required for controlled acceleration and deceleration and for smooth stopping and starting of car, both for “up” and “down” travel (automatic two-way leveling).

D. Oil: Provide full supply of NEW hydraulic oil, of the type and grade recommended by the manufacturer.

E. Muffler: Provide NEW in discharge oil line near pump unit. Design shall dampen and absorb pulsation and noise in the flow of hydraulic fluid.

HOISTWAY EQUIPMENT

A. Platform: Reuse
B. Sling: Reuse
C. Guide Rails: Reuse
D. Guide Shoes: Replace any worn components to be provided as like new condition.
E. Buffers: Reuse. Clean and paint with rust proof paint.
F. Hydraulic In-Ground Cylinders & Pistons: Reuse.
G. Repack Jack Assembly as necessary
H. Landing System: Provide NEW Solid-State type. Provide elevator car with a self-leveling feature to automatically bring the car to the landings and correct for over-travel or under-travel. Self-leveling shall, within its zone, be automatic and independent of the operating device. The car shall be maintained approximately level with the landing irrespective of its load.
I. Pit Devices: Provide NEW pit stop switch per code requirements.
J. Pit Ladder: Replace existing pit ladder with NEW per code requirements.
K. Wiring, Piping, and Oil: Provide all NEW hoistway wiring in accordance with the National Electrical Code. All necessary code compliant pipe and fittings shall be provided to connect the power unit to the jack unit.

HOISTWAY ENTRANCES

A. Doors: Reuse.
B. Frames: Reuse.
C. Door Gibs: Replace all Gib assemblies with NEW.
D. Interlocks: Equip each hoistway entrance with NEW interlock tested as required by code. Provide NEW door restriction devices as required by code.
E. Door Hanger and Tracks: Provide NEW polymer tire hanger rollers for the existing sheave type two-point suspension hangers, and provide new tracks for each hoistway horizontal sliding door.
F. Hoistway Sills: Clean and reuse.

CAR ENCLOSURE

A. Car Interior
    1. Car Door Panel: Provide NEW in #4 stainless steel finish.
    2. Car Sill: Clean and reuse
    3. Ceiling: Reuse. (See Alternate)
    4. Elevator Interior Cab Panels: Reuse. (See Alternate)
    5. Elevator Fronts, Transom, Strike Jamb and Return: Reuse
    5. Ceiling fan: Provide NEW cab fan.
    6. Provide NEW car top hand rail to meet code requirements as necessary.

DOOR OPERATOR

A. Door Operation: Provide NEW Front Heavy-Duty, Harmonic Door Operator.
B. Door Protection Device: Provide NEW Front 3D Infrared reopening device.
C. Door Clutch: Provide NEW Front Heavy-Duty clutch, linkage arms, drive blocks and pickup rollers or cams to provide positive, smooth quiet door operation.
D. Car Door Hanger and Tracks: Replace with New Front Car Door Tracks, Hangers and Rollers
E. Top of car run box: Provide NEW. Shall have an inspection switch which overrides all other inspection switches, with up and down push buttons and a stop switch. The top of the car shall be properly lighted and the light should be properly guarded.

CAR OPERATION STATION

A. Car Operating Station: Provide NEW Vandal Resistant Car Operating Station by Innovation Industries using #25 “Bruiser Series” push buttons.
B. Emergency VOICE Communications System: Integral Push-to-Talk ADA-compliant telephone mounted behind a drilled speaker panel. Note: Monitoring of the emergency phone system shall be by others and requires either a wireless or hard-wired active phone line installed prior to system final inspection.
C. Emergency two-way VIDEO and TEXT Communications System: Flush mount 2-way camera and display panel capable of transmitting both video and text communication. Note: Monitoring of the emergency video and text communication system shall be by others and requires either a wireless or hard-wired internet access in the elevator machine room prior to system final inspection.
D. Digital Car Position Indicator: Provide NEW car position indicators with indications corresponding to floor designations with matching directions arrows.
E. Integral Locked Service Cabinet with recessed flush door. Door material and finish will match operating panel.
F. Independent Service Operation: Provide keyed switch in service cabinet.
G. Emergency Light: Provide NEW in car panel.
H. Lanterns: Provide NEW lanterns as needed.

HALL STATIONS

A. Hall Stations: Provide NEW surface mount, Vandal Resistant Hall stations by Innovation Industries using #25 “Bruiser Series” push buttons.

B. Phase-1 firefighter’s service key switch, with instructions, shall be incorporated into the hall station at the designated level.

C. Floor Identification Pads: Provide NEW door jamb pads at each floor. Jamb pads shall comply with Americans with Disabilities Act (ADA) requirements and, when required by local code: Section 407 in ICC A117.1.

BUILDING CODE WORK: Three areas will be required to meet the current building code at the completion of the elevator modernization. This work will be completed as part of this turnkey project as follows:

Mechanical – Ensure the elevator control system has adequate air conditioning to meet existing code required ambient temperatures.

Fire Alarm Panel – Installation of code required addressable devices and modules. Ensure FACP communicates to each addressable device to engage code required fire recall. Includes permitting and testing of the new system as needed. Excludes any additional building devices or panels not associated with the elevator.

Electrical – Installation of code compliant main line disconnect with auxiliary contacts. Installation of new 110V disconnect to control cab lighting, pipe and wire in elevator machine room from new disconnects to elevator controller, addition of GFCI outlets as needed and installation of 4' fluorescent light in pit.

Management/Coordination of building Trades – Provide necessary management and coordination of all required building work including scope of work and necessary permitting.

SITE CONDITION SURVEY

A. Before starting elevator installation, Sandoval Elevator will inspect hoistway, hoistway openings, pits and machine rooms/control space, as constructed and verify all critical dimensions, and examine supporting structures and all other conditions under which elevator work is to be installed. Elevator installation will not proceed until unsatisfactory conditions have been corrected by the owner in a manner acceptable to the installer.

FIELD QUALITY CONTROL

A. Acceptance testing: Upon completion of the elevator installation and before permitting use of elevator, Sandoval Elevator will perform acceptance tests as required by A17.1 Code and local authorities having jurisdiction.

B. Building Work: All electrical, fire safety and mechanical work that are part of the building structure but relates to the modernization of the elevator equipment (including any code required upgrades) shall be completed by other trades and managed to completion by Sandoval Elevator. In an effort to define the required scope of work. Sandoval Elevator will coordinate elevator work with the work of other trades as needed, for proper time and sequence to avoid construction delays.

C. Sandoval Elevator will advise owner in advance of dates and times tests are to be performed on the elevator.

D. At completion of elevator work, Sandoval Elevator will remove tools, equipment, and surplus materials from site. Clean equipment rooms and hoistway. Remove trash and debris.

DEMONSTRATION

A. Instruct Owner's personnel in proper use, operations of elevators. Review emergency provisions, including emergency access and procedures to be followed at time of failure in operation and other building emergencies.
B. Make a final check of each elevator operation, with Owner's personnel present, immediately before date of substantial completion. Determine that control systems and operating devices are functioning properly.

END OF SECTION

SCHEDULE & PRICING

Modernization Schedule: Sandoval Elevator will submit a separate schedule of proposed modernization work to owner upon acceptance of this agreement using the following assumptions.

Approval of submittals by Owner:	**1 – 2 Weeks**
Lead-Time for Material once submittals approved:	**13 - 15 Weeks**
Completion of Modernization Scope of Work:	**4 – Weeks/Elevator**

TOTAL Elevator/Building Work:	**$525,000.00**
Add Alternate Cab Interior J & M Only Includes laminate panels, handrails, LED Down light ceiling.	**$ 38,325.00**
GRAND TOTAL:	**$563,325.00**

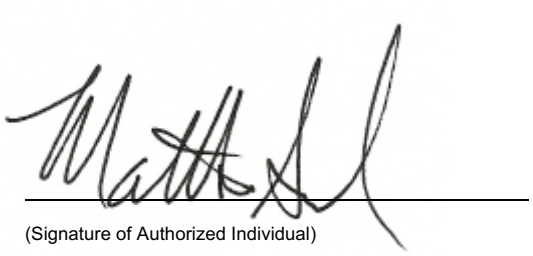
Unless otherwise stated, you agree to pay as follows: 50% upon signed acceptance, 25% progress billing during elevator installation and final 25% due upon completion and final turnover. All prices include taxes and fees. This modernization proposal is submitted for acceptance within 90 days from the date executed by Sandoval Elevator Company. Pricing based on work being completed in 2023 planning period. Pricing subject to increase every January until project completed.

ACCEPTANCE

OWNER:

Sandoval Elevator Company
2171 South Trenton Way, #208
Denver, CO 80231

By: _____
(Signature of Authorized Individual)

By: 
(Signature of Authorized Individual)

Matthew Sandoval

(602) 820 - 4992

Date: _____

Date: 2/12/2024