



October 9, 2024

City of Santa Cruz, CA Public Works
809 Center Street, Room 201
Santa Cruz, California 95060

Attn: BJ Dericco, Engineering Associate
831-420-5519
rdericco@santacruzca.gov

Re: Santa Cruz CA City Garages – Passenger Elevators
601 Front Street (State #101233) & 1050 Cedar Street (State #102545)

Dear BJ,

Attached is the survey report for the elevators at the subject parking garages. This report includes a description of the existing equipment, recommendations for modernization, building and non-elevator work required, budget costs, and preliminary scheduling information.

Please review this information and let me know of a good day/time to review.

Sincerely,
JE SELLEN CONSULTING, LLC

Edwin J. Essary, IAEC, CSI, CDT
Principal



Elevator Modernization Report

CITY PARKING GARAGES – SANTA CRUZ, CA 601 FRONT STREET & 1050 CEDAR STREET ELEVATOR MODERNIZATION REPORT

EXECUTIVE SUMMARY

This report is an evaluation of two hydraulic passenger elevators, one in each of two city-owned parking garages at 601 Front Street and 1050 Cedar Street in Santa Cruz CA. The report includes existing conditions, recommendations for scope, cost and schedule of modernization. The 601 elevator was assembled from common, third-party industry suppliers and installed by Republic Elevator in 2000. The 1050 elevator was originally manufactured and installed by Otis Elevator in 1992, and subsequently its controller, fixtures and door operator were modernized by KONE. Both elevators, now maintained by Otis, were surveyed on 9-25-24. The elevators had both been disabled for some time and unable to run automatically.

Overall, the elevators are both in very poor condition, as much from hoistway water intrusion and consequent corrosion as from their age. There is little evidence of cleaning and preventive maintenance having been performed, but the manufacturers/installer have long since discontinued parts and technical support, and technicians' familiarity with that equipment shrinks by the day, making these elevators excellent candidates for modernization.

Based on the results of the survey and these equipment and site conditions, the recommended scope of work includes replacement of the following components:

- controller
- door operators
- signal fixtures
- hydraulic power units
- guide shoes
- hoistway switches and selector
- hoistway door interlocks and all door hardware
- cab enclosures

The balance of the elevator equipment, including in-ground cylinder/plunger, car frame, platform, buffers and guide rails are in salvageable condition and can be refurbished and retained.

Non-elevator work required includes;

- repair to slab edges at elevator openings
- diversion of precipitation and surface flow away from openings
- sealing of pit walls and floors against groundwater intrusion
- new mainline and lighting disconnect switches
- additional lighting in machine room and pit
- all new lights, switches and GFCI outlets in the machine room and pit



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The preliminary budget cost for the recommended scope of elevator work is \$250,000 each (includes \$40K allowance each for new cab enclosures of resilient design). This does not include non-elevator work including architectural, concrete, electrical and any fire/life safety work. In a typical modernization, these costs are approximately 15-25% of the cost of the elevator work and may be more here, due to water damage repairs. It is recommended that the non-elevator work be included in the project scope of work by a general contractor to provide a single source of broader responsibility over all work.

The preliminary schedule includes pre-construction and fabrication periods, concurrent with securing labor availability, of up to forty-two weeks for both, followed by six weeks each for the on-site elevator modernization work and up to three weeks per elevator for state inspections, successively, for a total schedule of about sixty weeks.

Pre-construction activities include; preparation of bidding documents and specifications, bidding, bid leveling and interviews, contract negotiations, engineering, submittal and review of shop drawings, and manufacturing and delivery of equipment.

Due to current construction market conditions and the shortage of available installation crews, the actual start date may vary widely among contractors. The contractors' varied construction backlogs and schedules may also be a significant determinant of the most attractive bid.

SCHEDULE OF ELEVATOR EQUIPMENT

	601 Front Street	1050 Cedar Street
Installer	Republic	KONE
Install Date	2000	1992
CA ID No.	121233	102545
Capacity	2,500 lbs.	3,500 lbs.
Speed	125	150 fpm
Stops/Openings	4 / 4	5 / 5
Power Unit	Generic	KONE
Hydraulic Jack	In-Ground	In-Ground
MR Location	20' Remote at 1	20' Remote at G
Control	Microprocessor	Microprocessor
Operation	Collective	Collective
Door Type	Single-Speed, Side-Opening	Single-Speed, Center-Opening
Door Size	42" w. x 84" h.	42" w. x 84" h.
Clear Inside	6' 8" x 4' 3"	6' 7" x 5' 5"

ELEVATOR EQUIPMENT DISPOSITION

Hydraulic Power Unit: The hydraulic power units have surpassed their expected service life. Given obsolescence and the related scope, concurrent replacement of the power unit is recommended.



Elevator Modernization Report

Hydraulic Jack, Buffers: The hydraulic jacks (cylinder/plunger assemblies) are original as installed. Both elevators have a conventional in-ground jack, are assumed to be of code-compliant, double-bottom design, and will be mildly reconditioned as needed, receive new seals, and be retained. New hydraulic earthquake rupture valves will be installed. Buffers will be cleaned, reconditioned, tested and inspected.

Controller: The first-generation microprocessor controllers are obsolete technology. New microprocessor controllers are recommended which will include firefighters' operation per current code requirements and retain the existing emergency battery lowering to prevent passenger entrapment in the event of a power failure. The machines room appear to have no prohibited, non-elevator materials.

Signal Fixtures: Replacement of car and hall signal fixtures is required to fully comply with current ADA and CA Title 24 accessibility requirements, and to provide devices required for serial communication with the controller and door operator. New fixtures will include long-life LED indicator lights.

Door Operator: Door operators are the hardest working components in the elevator system and typically take the most abuse over years of service. These door operators were installed new, have exceeded their expected service life, and have also experienced water damage and should be replaced. Car gate switches, interlocks, clutches and door restrictors will be replaced. Car door panels, hanger rollers and other hardware will be replaced. Given the environment and their use, we recommend both door operators be replaced with more robust harmonic operators with closed loop control, providing constant communication with the logic controller and fixtures, ensuring more frequent monitoring and automatic adjustment of door performance. We also recommend shrouding the door operator system in stainless steel as a barrier from falling water.

Car Frames, Platforms, Guide Rails: These components are typically retained in a modernization if they have not been exposed to unusual conditions and deterioration. This equipment needs cleaning and painting but is in serviceable condition and eligible to be retained.

Cab Enclosures: The cab enclosures both show extensive corrosion on canopies and their retention would require extensive labor and adaptation, likely costing more than demo and replacement. The interior finishes – primarily brushed or textured stainless – are in good repair, but new stainless enclosures designed around new door components will expedite installation at comparable cost.

Hoistway Entrances: Entrance frames are typically retained in a modernization if they have not deteriorated due to excessive exposure to weather or other environmental conditions. The existing entrance doors and frames are painted steel, showing significant corrosion. Frames can be cleaned, repaired and repainted. Entrance door panels, tracks, hangers, hanger and pickup rollers and hardware will be replaced with new corrosion-resistant components. New NEMA4 (water resistant) interlocks will be provided to address precipitation blown or flowing into the hoistway.

Other Hoistway Components: There are many electrical elevator components in the hoistway, all susceptible to aberrant operation and/or failure if exposed to water. The selector tape, fascia, toeguards, door tracks, door panels, hangers and relating cable should all be stainless steel. Other mild steel components such as guide rails, rail brackets, stiles, brace rods, crosshead, bolster, platform, hoistway switches, vanes should be cleaned free of corrosion and receive two coats of corrosion resistant paint.



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NON-ELEVATOR WORK

The following related work, performed by other trades, needs to be completed in conjunction with the elevator modernization work for a complete and code-compliant installation.

Electrical: New disconnect switches with auxiliary contacts for emergency battery control will be required. Fused and lockable disconnect switches for car lighting will be required. Receptacles in the machine rooms and pits will be replaced with GFCI devices. Machine room and pit lighting will be upgraded to LED fixtures to achieve higher illumination requirements.

Sprinklers: There are sprinklers in the existing elevator spaces as was previously required of new installations. In the machine room, there must be a heat detector and shunt trip to ensure removal of power from controls prior to the application of water. Some new disconnect switches have this shunt trip and the auxiliary contact needed for the battery lowering feature. A sprinkler is already present in the pit, located below 24" above the floor, avoiding a shunt trip for that location. There is also a sprinkler in the upper hoistway that the local fire AHJ may allow or require removed, averting the need for another heat detector accessible from outside the hoistway. Local fire authorities have made varying requirements regarding this equipment and should be consulted prior to execution to ensure compliance.

Smoke Detectors/Life Safety: A smoke detector is required for the elevator machine room. One may also still be required for the hoistway, accessible from outside the hoistway, whether or not that sprinkler isn't removed. Because Life Safety systems are both proprietary and unique, evolving with the building, if the system is currently under maintenance by a qualified contractor, they should be consulted about related and required updates to the existing systems and potentially be engaged to perform any required system additions or revisions.

HVAC: In compliance with code and equipment warranty, elevator machine rooms need to be maintained within the temperature and humidity range recommended by the equipment manufacturer, typically between 50° and 90° F with no more than 95% condensing humidity. There are currently both supply and return HVAC vents that need thorough cleaning. Equipment heating loads will be provided by the elevator contractor and should be evaluated by a mechanical engineer to determine what, if any, equipment is necessary to provide adequate climate control.

General Construction: Except for the potential installation of machine room exhaust fans, the larger general design and construction work to be considered would be restoration of entryway concrete and protection of the elevator lobbies and entrances from wind-borne precipitation, surface flow and debris. Any minor patching of the hoistway and elevator lobbies where hall fixtures are replaced can be included in the elevator contractor's scope of work.

The work can be specified as a turnkey project, requiring a general contractor to provide, coordinate and supervise multiple other trades as required for a complete and code-compliant installation. This approach provides a single source of responsibility for all work.

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Elevator Modernization Report

BUDGET PRICING

The following table provides a breakdown of the budget costs for the recommended scope of elevator work only. Please note that these prices are proportional components of the whole, not independent choices.

Component	Pricing
Hydraulic Power Unit	\$35,000
Controller & MR Wiring	\$60,000
Door Operator	\$45,000
Signal Fixtures	\$35,000
Cab Enclosure	\$40,000
Inspection, Adjusting, Misc.	\$35,000
Total Budget Cost	\$250,000

The non-elevator work needs to be verified and budgeted separately by other consultants or contractors. Assuming that no major upgrades are required to the existing fire alarm system, the approximate cost for these items is typically 15-25% of the cost of the elevator work.

SCHEDULE

The proposed schedule for the recommended scope of work is as follows:

Activity	Duration
Bid documents	4 weeks
Bidding period	8 weeks
Bid Review and Contract award	4 weeks
Engineering and shop drawing submittal	8 weeks
Manufacturing and delivery	20 weeks
Modernize both elevators	12 weeks
Slack/Holiday/Illness	3 weeks
Last State Inspection	3 weeks
Total Project	60 weeks

This schedule is based on the recommended scope of elevator work and does not address the work by other trades, much of which can be performed prior to or within this time frame. Final schedule will be determined after contract award and negotiated with the successful elevator contractor. Due to current market conditions in the Bay Area, the actual start of on-site elevator modernization work could be as much as eight months after the work is awarded, depending on the availability of crews.

END OF NARRATIVE



Elevator Modernization Report

601 Front Street

Building Name		Santa Cruz Garage	City		Santa Cruz, CA
Address		601 Front Street	Bldg. Elevator No.		1
State ID No.		121233	Permit Expiration Date		Not Observed
Manufacturer		Republic	Installation Date		2000
Modernization Date		No	Load Test Date		No tag
Date of Survey		9/25/2024	Code / Group #		III
Notes: Car has been out of service extended period.					
Description & Parameters					
Elevator Type		Hydro / Pass	Machine Type		Power Unit
Capacity (lbs.)		2500	Speed (FPM)		125
Stops / Openings		4 / 4	Openings Front/Rear		4 / 0
Entrance Size		42" x 84"	Entrance Type		SSSS
Operation Type		Simplex	Control Type		Micro
Standby / Rescue Pwr		No / Yes	Earthquake Control		None
Firefighters' Service		Phase I & II	Security Features		None
Notes: Garage is open-air but elevator is covered and protected					
Cab Enclosure			Overall Evaluation:		Fair
Station / Swing Front		Stationary	Front Return Finish		Textured SS
Transom Finish		Textured SS	Doors Finish		Paint
Shell Mat'l / Finish		Textured SS	Interior Design		Textured SS
Handrail Type		Cylindrical	1 ½-in. From Wall		Yes
1 ¼- 1 ½-in. Dia.		Yes	Rear Sides		Rear Only
Ceiling		Not Observed	Lighting Type / Level (FC)		Not Observed
Sill Material		Aluminum	Flooring		Not Observed
Condition		Poor	Interior Dimensions		6' 8" x 4' 3"
Notes: Cab interior visually in better condition than other equipment.					
Signal Fixtures			Overall Evaluation:		Fair
Car Operating Panel		Applied	Finish		Textured SS
COP Position		Front Return	Full / Partial Swing COP		Neither
Car PI Type		Dig. In COP	Hall P.I. Location		Above open at G
Car/Hall Dir Lanterns		No	Security Provisions		None
Emergency Light		In COP	Hoistway Access		Yes
Run-Stop COP/SC		Yes / No	Alarm Bell Operable		Not Observed
Notes: Limited access; most appear in good shape.					



Elevator Modernization Report

601 Front Street

Machine/Control Room Equipment			Overall Evaluation:	
Supply Voltage		208	Disconnect Switch	Yes
Electrical Clearances		Yes	Self-Closing/Locking Door	Yes
Control Manufacturer		ERM	Model	6006
Technology		Micro	Serial	
Wiring, Gutter & Duct		Good	Doors & Covers in place	Yes
Location		25' Remote @ 1	Housekeeping	Fair
Manuals		Yes	Wiring Diagrams	Some
Check Charts		Off-Site	Service Records	Off-Site
F.S. Test Log		Off-Site	110V Light Circuit Disc	No
Fire Extinguisher		Yes	Smoke Detectors	Yes
Sprinkler		Yes	Heat Detector / Shunt	Yes / Unknown
Ventilation		Window AC	Lighting Level (FC)	Fair
Room/Control Temps		Cool	Foreign Material	Fascia
Notes: Mainline is located immediately below AC unit.				

Hydraulic				
Power Unit Type		Submersible	Oil Leaks	No
Power Unit Mfg.		Generic	Model	None
Valve Mfr.		Maxton	Model	UC4
Oil Color/Clarity		Good / Good	Oil Level / Temperature	Cold
Starter Type		Wye-Delta	Battery Lowering	Yes; R&R
Power Unit Temp		Cold	Pressure Test Tag	None
Notes: Unit has been non-operational extended period of time.				
Hoistway Equipment			Overall Evaluation:	
Wall Construction		CMU	Ledges / Recesses	Unknown
MRL		No	Ventilation	Fixed louver
Door Operator Mfr.		GAL	Door Operator Model	Std
Condition		Fair	Car Top Condition	Poor
Hardware Condition		Poor	Protector Condition	NA
Door Protection Type		IR	Restrictors	No
Closer Type		Spirator	Detectors	Unknown
Car Guide Rails		15# T	Car Guides	Sliding Shoe
Sprinkler in Ovhd		Unknown	Housekeeping	Poor
Notes:				



Elevator Modernization Report

601 Front Street

Entrance Finishes		Overall Evaluation:		Poor
Main Floor Doors		Paint	Typ. Floor Doors	Paint
Main Floor Frames		Paint	Typ. Floor Frames	Paint
Main Floor Sill		Aluminum	Typ. Floor Sill	Aluminum
Jamb Plates Compliant		Missing	2" Wh/Blk @ 60" Both	No
Hall Buttons Compl.		Yes	ADA:@ 42" CBC: 15-48" AFF	Yes
Exit Stairs Signage		Yes	Noise level	Not Running
Condition		Poor	Corridor Light (FC) @ Sill	Fair
Notes: Water present at street level landing sill; rust on jambs and doors.				
Pit Equipment		Overall Evaluation:		Poor
Housekeeping		Poor	Pit Ladder	Yes
Sump / Pump		Yes / Yes	Pit Can / Scavenger	Yes / No
Sprinkler		Yes	Pit Light & Guard (FC)	Yes
Wet / Standing Water		No / No	Leak / Diapers	? / Yes
Notes:				
Accessibility		Code:	Fully Compliant:	No
Automatic Operation		Yes	Door Close	Not Powered
Gurney Accessible		No	Wheelchair Accessible	Yes
Car Buttons Compliant		Yes	Voiced (over 200 fpm)	Not Powered
35-in. to alarm		Yes	48-in. max. to top	Not Observed
Car PI Compliant		Yes	Floor Passing Signal	Not Running
Car PI Location		In COP	Characters ½-in. Min.	Not Powered
Direction Lant. Compl.		No	2.5" SQ / 72-in.AFF	No
Audible UP (single)		Not Running	Audible Dn (double)	Not Running
Dir Lantern Location		Street level only	Phone Compliant	Not Observed
Location ID		Not Observed	Visual Indicator	Not Observed
Rings to:		Not Observed	Video/Text Comm	No
Notes:				

Elevator out of service at time of survey so no performance data collected.

END OF 601 FRONT STREET



Elevator Modernization Report

1050 Cedar Street

Building Name		Santa Cruz Garage	City		Santa Cruz, CA
Address		1050 Cedar St *	Bldg. Elevator No.		1
State ID No.		102545	Permit Expiration Date		Not Observed
Manufacturer		KONE	Installation Date		1992
Modernization Date		No	Load Test Date		2/21/2023
Date of Survey		9/25/2024	Code / Group #		II / IV

Notes: Car has been out of service extended period. * Address doesn't align with state record (124 Locust St.)

Description & Parameters					
Elevator Type		Hydro / Pass	Machine Type		Power Unit
Capacity (lbs.)		3500	Speed (FPM)		150
Stops / Openings		5 / 5	Openings Front/Rear		5 / 0
Entrance Size		42" x 84"	Entrance Type		SSCO
Operation Type		Simplex	Control Type		Micro
Standby / Rescue Pwr		No / Yes	Earthquake Control		None
Firefighters' Service		Phase I & II	Security Features		None

Notes: Garage is open-air but elevator is covered and protected

Cab Enclosure			Overall Evaluation:		Fair
Station / Swing Front		Stationary	Front Return Finish		Brushed SS
Transom Finish		Brushed SS	Doors Finish		Paint
Shell Mat'l / Finish		Not Observed	Interior Design		AP Textured SS
Handrail Type		Cylindrical	1 ½-in. From Wall		Yes
1 ¼- 1 ½-in. Dia.		Yes	Rear Sides		Rear Only
Ceiling		Island	Lighting Type / Level (FC)		Perimeter / Good
Sill Material		Aluminum	Flooring		Not Observed
Condition		Poor	Interior Dimensions		6' 7" x 5' 5"

Notes: Cab interior visually in better condition than other equipment but lots of graffiti

Signal Fixtures			Overall Evaluation:		Fair
Car Operating Panel		Applied	Finish		Brushed SS
COP Position		Front Return	Full / Partial Swing COP		Neither
Car PI Type		Dig. In COP	Hall P.I. Location		Above open at G
Car/Hall Dir Lanterns		Hall All Floors	Security Provisions		None
Emergency Light		In COP	Hoistway Access		Yes
Run-Stop COP/SC		Yes / No	Alarm Bell Operable		Not Observed

Notes: Limited access; most appear in good shape.



Elevator Modernization Report

1050 Cedar Street

Machine/Control Room Equipment			Overall Evaluation:	
Supply Voltage		208	Disconnect Switch	Yes
Electrical Clearances		Yes	Self-Closing/Locking Door	Yes
Control Manufacturer		Cetek	Model	Flex-H
Technology		Micro	Serial	
Wiring, Gutter & Duct		Good	Doors & Covers in place	Yes
Location		20' Remote @ G	Housekeeping	Poor
Manuals		Yes	Wiring Diagrams	Some
Check Charts		Off-Site	Service Records	Off-Site
F.S. Test Log		Off-Site	110V Light Circuit Disc	Yes
Fire Extinguisher		Yes	Smoke Detectors	Yes
Sprinkler		No	Heat Detector / Shunt	No / No
Ventilation		Not Observed	Lighting Level (FC)	Good
Room/Control Temps		Cool	Foreign Material	Not Observed
Notes: Mainline is located immediately below AC unit.				

Hydraulic				
Power Unit Type		Dry - 50HP	Oil Leaks	Not Observed
Power Unit Mfg.		KONE	Model	Not Observed
Valve Mfr.		Maxton	Model	UC4
Oil Color/Clarity		Not Observed	Oil Level / Temperature	Cold
Starter Type		Not Observed	Battery Lowering	Yes; R&R
Power Unit Temp		Cold	Pressure Test Tag	Not Observed
Notes: Unit has been non-operational extended period of time.				

Hoistway Equipment			Overall Evaluation:	
Wall Construction		CMU	Ledges / Recesses	Unknown
MRL		No	Ventilation	Fixed louver
Door Operator Mfr.		KONE	Door Operator Model	Linear
Condition		Fair	Car Top Condition	Poor
Hardware Condition		Poor	Protector Condition	NA
Door Protection Type		IR	Restrictors	No
Closer Type		Spirator	Detectors	Unknown
Car Guide Rails		15# T	Car Guides	Fixed Axle Roller
Sprinkler in Ovhd		Unknown	Housekeeping	Poor
Notes: Door operator control circuits fully uncovered and exposed.				



Elevator Modernization Report

1050 Cedar Street

Entrance Finishes			Overall Evaluation:		Poor
Main Floor Doors		Paint	Typ. Floor Doors		Paint
Main Floor Frames		Paint	Typ. Floor Frames		Paint
Main Floor Sill		Aluminum	Typ. Floor Sill		Aluminum
Jamb Plates Compliant		Missing	2" Wh/Blk @ 60" Both		No
Hall Buttons Compl.		Yes	ADA:@ 42" CBC: 15-48" AFF		Yes
Exit Stairs Signage		Yes	Noise level		Not Running
Condition		Poor	Corridor Light (FC) @ Sill		Poor
Notes: Water present at street level landing sill; rust on jambs and doors.					

Pit Equipment			Overall Evaluation:		Poor
Housekeeping		Poor	Pit Ladder		Yes
Sump / Pump		Not Observed	Pit Can / Scavenger		Not Observed
Sprinkler		Not Observed	Pit Light & Guard (FC)		Not Observed
Wet / Standing Water		Not Observed	Leak / Diapers		Not Observed
Notes:					

Accessibility		Code:	Fully Compliant:		No
Automatic Operation		Yes	Door Close		Not Powered
Gurney Accessible		Pre-2008	Wheelchair Accessible		Yes
Car Buttons Compliant		Yes	Voiced (over 200 fpm)		No
35-in. to alarm		Yes	48-in. max. to top		Not Observed
Car PI Compliant		Yes	Floor Passing Signal		Not Running
Car PI Location		In COP	Characters ½-in. Min.		Yes
Direction Lant. Compl.		Yes *	2.5" SQ / 72-in.AFF		Yes
Audible UP (single)		Not Running	Audible Dn (double)		Not Running
Dir Lantern Location		Hall All Floors	Phone Compliant		Not Observed
Location ID		Not Observed	Visual Indicator		Not Observed
Rings to:		Not Observed	Video/Text Comm		No
Notes: Combination Lantern/PI at G; other floors lantern only.					

END OF 1050 CEDAR STREET

Modernization Scope Review

W = Water damaged

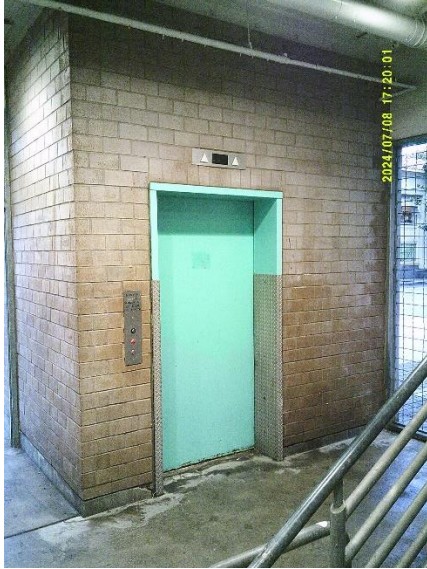
N = New R = Retain/refurbish

Survey Date: 9/25/24

Area	Item / Feature	601 Front	1050 Cedar	Area	Item / Feature	601 Front	1050 Cedar
Car	Car Doors	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Lobby	Hall Pos Indicator <input checked="" type="checkbox"/> Combo	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Car Enclosure Lighting	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Lobby	Hoistway Access Sw <input checked="" type="checkbox"/> Wall <input type="checkbox"/> Jamb	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Car Enclosure & Rear Wall Glass	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Lobby	Hoistway Door Interlocks	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Car Enclosure Shell incl. Canopy	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Lobby	Lobby Lighting	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Car Fixtures	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Lobby	Phase I Switch <input type="checkbox"/> Jewel	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Car Sill	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Lobby	Standby Power Selector <input type="checkbox"/> Jewel	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Car Sling	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	Lobby	Direction Lanterns/Tones	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Car Station	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Access Doors	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Car Top Inspection Station	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Clearances and Dimensions	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Car	Car Top Lighting	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Controller	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Car Top Safety Railing	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Drive Machine / Power Unit	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Door Re-Opening Device	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Drive Machine Motor	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Emergency Battery Lighting	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Drive Sheave	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Emergency Phone	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Electrical Raceways & Conduit	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Car	Fan	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Emergency Power?	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Finished Flooring	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Governor	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Hoisting For 30	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	MR	Governor Rope	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Handrails <input type="checkbox"/> Rear <input type="checkbox"/> Sides	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	MR	Hoisting / Machine Beams (Or provide)	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Car	Overhead Jamb & Door	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	MR	Machine Mounting	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Car	Sub-Flooring - Existing?	W <input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	MR	Machine Room	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Car	Suspended Ceiling	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	MR	Machine Room Floor	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Hwy	Cab Height	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	MR	Machine Room Lighting	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Car Balance & Weight Frame	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	MR	Rope Gripper	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Hwy	Car Door Clutch & Linkage	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Selector (incl. tape, reader, vanes, etc.)	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Car Door Restrictors	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	MR	Supply Voltage	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Hwy	Car Guides <input type="checkbox"/> Slide <input checked="" type="checkbox"/> Roller	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Pit	Buffers <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Spring <input type="checkbox"/> Poly	W <input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Hwy	Car Rails, Joints, Brackets	W <input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	Pit	Governor Tension Frame	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Hwy	Cross Head Data Tag	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	Pit	Counterweight Guard / Pit Screen	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Hwy	Cwt Frame & Filler	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	Pit	Pit Channels - Cwt & Car	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Hwy	Cwt Guides <input type="checkbox"/> Slide <input type="checkbox"/> Roller	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	Pit	Pit Ladder Size & Position	W <input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Hwy	Cwt Rails, Joints, Brackets	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	Pit	Pit Light, Switch, GFCI Recep	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Cwt Screening	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	Pit	Cylinder Head/Packing Seal	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Detector Sheaves	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	Pit	Plunger Surface	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R
Hwy	Depth & Run-By	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	Pit	Scavenger Pump/Return Line	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Electrical Raceways & Conduit	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Pit	Seismic Rupture Valve	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Fascia, Toeguards & Dust Covers	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Pit	Oil Line & Fittings / Leaks	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Hoist Ropes <input type="checkbox"/> 3 / 4" <input type="checkbox"/> 5/8"	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R			<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Hwy	Hoistway Walls, Ledges, Bevels,	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R			<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Hwy	Hoistway Door Pickup Rollers	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	Note		<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Hwy	Hoistway Level & Limit Switches	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	1	Divert precipitation and flow away	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Hoistway Sills	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	2	Remove all rust; prepare and paint	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Overhead Clearance	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	3	Repair landing concrete at openings	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Overhead Machinery Space	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	4	Replace mild steel with stainless	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Platform <input type="checkbox"/> Isolated	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	5	Exposed devices NEMA 4 watertight	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Switches <input type="checkbox"/> Car <input type="checkbox"/> Cwt	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	6	Inspect platform & sling for damage	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Selector	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	7	Relocate mainline disconnect (AC)	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Hwy	Sheaves	<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R	8	Seal pit walls/floor against groundwater	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Hwy	Traveling Cable	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	9	Add visible security camera inside cab	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Land	Door Operator	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	10	Shroud over door operator equipment	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R
Lobby	Emergency Exit Path/Size/Sw/Lock	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	11		<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Lobby	Entrance Door Hardware	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	12		<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Lobby	Entrance Doors	W <input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	13		<input type="checkbox"/> N <input type="checkbox"/> R	<input type="checkbox"/> N <input type="checkbox"/> R
Lobby	Entrance Frames	W <input type="checkbox"/> N <input checked="" type="checkbox"/> R	<input type="checkbox"/> N <input checked="" type="checkbox"/> R	Re-use existing hall fixture boxes where present			
Lobby	Hall Call Stations	<input checked="" type="checkbox"/> N <input type="checkbox"/> R	<input checked="" type="checkbox"/> N <input type="checkbox"/> R				



ELEVATOR REPORT PHOTOS



1. Street level hoistway entrance



2. Evidence of water pooling at the opening

601 Front Street



3. Front left of hoistway taken from outside at street.



4. Front right of hoistway taken from outside at street.



ELEVATOR REPORT PHOTOS



5. AC unit mounted directly above mainline power.



6. Second floor at hoistway entrance.

601 Front Street



7. Third floor at hoistway entrance.



8. Fourth floor at hoistway entrance.



ELEVATOR REPORT PHOTOS



9. Original controller cabinet, cover removed.



10. Original power unit and supply pipe.

601 Front Street



11. Pit as seen from lowest landing opening.



12. Top of car seen from opening at upper level.



ELEVATOR REPORT PHOTOS



13. Street/Ground level entrance with evidence of pooled water.



14. Ground level elevator lobby at building entry.

1050 Cedar Street



15. Second floor elevator lobby.



16. Car canopy rusted, as seen from upper landing.



ELEVATOR REPORT PHOTOS



17. Left side of hoistway and canopy from landing.



18. Entrance/landing elevator door panel rusted.

1050 Cedar Street



19. Linear door operator with control circuit boards exposed.



20. Car doors, detector strips and door clutch as seen from landing with car slightly below level.



ELEVATOR REPORT PHOTOS



21.



22.

1050 Cedar Street



23. Car top, roller guide, guide rail and cartop inspection station as seen from landing with car lowered.



24. Current controller cabinet.

END OF SURVEY PHOTOS