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GENERAL ELEVATOR INFORMATION PLANS AND HOISTWAY SECTION ELEVATOR

INDEX OF DRAWINGS SCALE: NTS

ELEVATOR 1 3500# @ 150 FPM

VT02

SUMMARY OF ELEVATORS SCALE: NTS

AFF A.P. A/C ALT.	ABOVE FINISH FLOOR ACCESS PANEL AIR CONDITIONING ALTERNATE	DIM. DC DISC. DBG	DIMENSION DIRECT CURRENT DISCONNECT DISTANCE BETWEEN	HP HYDR. IN. IGBT	HORSEPOWER HYDRAULIC INCH (INCHES) INSULATED GATE	O.A. OPP. OVHD PL	OVERALL OPPOSITE OVERHEAD PLATE
AC ASME	ALTERNATING CURRENT AMERICAN SOCIETY OF	DN	GUIDE RAILS DOWN	J/S	BIPOLAR TRANSDUCER JOULES PER SECOND	PLTFM #	PLATFORM POUNDS
	MECHANICAL ENGINEERS	DŴG	DRÁWING	KCAL	KILOCALORIE	# PSI	POUNDS PER
AMP	AMPERE	EÄ.	EACH	KG	KILOGRAMS		SQUARE INCH
APPROX.	APPROXIMATE	ELEC.	ELECTRICAL	ΚŅ	KILONEWTONS	PRELIM.	PRELIMINARY
ARCH.	ARCHITECTURAL	EL.	ELEVATION	KVA	KILOVOLT-AMPERE	RAD.	RADIUS
AUX. BSMT	AUXILIARY	ELEV.	ELEVATOR	ΚŴ	KILOWATTS	R/O REQ.	REAR OPENING
BSMT	BASEMENT	ETS	EMERGENCY TERMINAL	K	KIPS	RÉQ.	REQUIRED
BOT.	воттом		SLOWDOWN	LT	LIGHT	REV.	REVISION
BTUH	BRITISH THERMAL UNITS	EQ.	EQUAL	MPS	METERS PER SECOND	RM	ROOM
	PER HOUR	EQUIP.	EQUIPMENT	MACH.	MACHINE	R.O.	ROUGH OPENING
вМ	BEAM	ESCL.	ESCALATOR	MRL	MACHINE-ROOM-LESS	SEC.	SECONDARY
BOCA	BUILDING OFFICIALS AND	(E) •F	EXISTING	MAX.	MAXIMUM	SECT.	SECTION
	CODE ADMINISTRATION	• F	FAHRENHEIT	MEZZ.	MEZZANINE	SHT	SHEET
CLG	CEILING	FPM	FEET PER MINUTE	M	METER	SCR	SILICON CONTROLLED
,C	CELSIUS	F.V.	FIELD VERIFY	ММ	MILLIMETERS		RECTIFIER
© CM	CENTERLINE	F.F.	FINISH FLOOR	MIN.	MINIMUM	SIM.	SIMILAR
CM	CENTIMETERS	FLR	FLOOR	MISC.	MISCELLANEOUS	SPEC.	SPECIFICATION
COL.	COLUMN	FT	FOOT (FEET)	MG	MOTOR-GENERATOR	SF SM	SQUARE FEET
CLŖ	CLEAR	FLUOR,	FLUORÈSCENT	MTD	MOUNTED	SM	SQUARE METERS
CONC.	CONCRETE	F/0	FRONT OPENING	NEC	NATIONAL ELECTRICAL	STD	STANDARD
CMU	CONCRETE MASONRY	FÚΤ. G	FUTURE	N	CODE	SBC	STANDARD BUILDING CODE
	UNITS		GRAVITY	NFPA	NATIONAL FIRE	STL	STEEL
CONT.	CONTINUOUS	GFCI	GROUND FAULT CIRCUIT		PROTECTION	STRUCT.	STRUCTURAL
CONTR.	CONTRACTOR		INTERRUPTER	0.0	ASSOCIATION	S₩.	SWITCH
COORD	COORDINATE	GOV.	GOVERNOR	(N) NOM.	NEW	TBD	TO BE DETERMINED
CNTRL	CONTROLLER	GA.	GUAGE	NOM.	NOMINAL	T.O.	TOP OF
CWT	COUNTERWEIGHT		GYPSUM BOARD	N/A (NIEC)	NOT APPLICABLE	(TYP)	TYPICAL
CYL.	CYLINDER	HT	HEIGHT	(NIEC)	NOT IN ELEVATOR	ÙNO	UNLESS NOTED OTHERWISI
DEH	DEAD END HITCH	HZ	HERTZ	\ ITO	CONTRACT	UBC	UNIFORM BUILDING CODE
D.	DEEP	H.	HIGH	NTS	NOT TO SCALE	VERT.	VERTICAL
DTI	DEGREES	HST\\Y	HOISTWAY	NO.	NUMBER	V.	VOLT
DTL •	DETAIL	HORIZ.	HORIZONTAL	O.C.	ON CENTER	W .,	WIDE
ø	DIAMETER	HR	HOUR	OPNG	OPENING	₩/ WP	WITH
						ууР	WORKPOINT

ABBREVIATIONS VT01 SCALE: NTS

- THESE DRAWINGS FOR GENERAL INFORMATION ONLY. REQUIREMENTS OF INDIVIDUAL VENDORS MAY VARY.
- 2. THESE DRAWINGS TO BE DISTRIBUTED TO APPROPRIATE CONSULTING AND ENGINEERING FIRMS, INCLUDING ARCHITECT, STRUCTURAL, ELECTRICAL AND MECHANICAL ENGINEERS.
- 3. FIELD VERIFY ALL EXISTING DIMENSIONS.
- 4. ROUGH OPENING DIMENSIONS FOR ELEVATOR ENTRANCES APPLY ONLY IN THE CASE OF MASONRY OR CONCRETE CONSTRUCTION.
- 5. VERTICAL STRUCTURAL SUPPORT FOR RAIL BRACKETING IS PROVIDED BY HOISTWAY WALLS IN THE CASE OF REINFORCED CONCRETE HOISTWAY CONSTRUCTION.

GENERAL NOTES VT01 SCALE: NTS

POWER FEEDER REQUIREMENTS (MAIN POWER SUPPLY: 480—3—60 ASSUMED)											
ELEVATOR NUMBER				LIVDDO	HYDRO STARTING AMPS			FULL LOAD AMPS		HEAT RELEASE	
		SPEED TRACTION HP RATING	HYDRO MOTOR HP	LOCKED ROTOR	SOLID STATE	WYE DELTA	RUNNING	ACCELERATING	Machine Space Btuh Per Car	CONTROLLER SPACE BTUH PER CAR	
1	3500	150	30	N/A	N/A	N/A	N/A	35	78	3030	9085
									•		

DOWED FEEDED DEOLUDE LEVITO

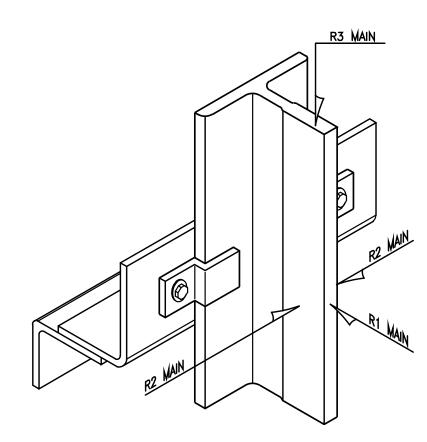
- 1. ELECTRIC POWER AND CURRENT ARE BASED ON THREE (3) PHASE A.C. POWER SUPPLY.
- 2. MAIN POWER TO BE PROVIDED AT EACH CONTROLLER THROUGH DISCONNECTING MEANS MEETING NEC REQUIREMENTS.
- 3. MAIN POWER SUPPLY FEEDERS TO LIMIT VOLTAGE DROP TO LESS THAN 5%. 4. USE COPPER CONDUCTORS ONLY.
- 5. FEEDER DEMAND FACTORS (NEC SECTION 430-26 AND 620-14)=
- (2) CARS= 95% (3) CARS= 90% (4) CARS= 85% (5) CARS= 82% (6) CARS= 79% (7) CARS= 77%
- (8) CARS= 75% (9) CARS= 73% (10) CARS= 72% 6. MACHINE SPACE TEMPERATURE TO BE MIN. 13° C (55° F.), MAX. 32° C (90° F).
- TO BE MEASURED 1838 MM (6'-0") ABOVE FINISH FLOOR AT APPROX. CENTER OF ROOM.
- 7. RELATIVE HUMIDITY MAX. 80% NON—CONDENSING.
- 8. THE SELECTION OF MAIN POWER SUPPLY DISCONNECTING MEANS OVERCURRENT PROTECTION TO BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, SECTIONS 620-51 AND 430-52.
- 9. PROVIDE LOCAL TELEPHONE SERVICE LINE TO EACH CAR CONTROLLER (IF APPLICABLE).
- 10. PROVIDE GFCI CONVENIENCE OUTLETS PIT, MACHINE ROOM AND MACHINERY SPACES. IN PIT, PROVIDE ONE NON-GFCI OUTLET FOR SUMP PUMP AND/OR OIL RETURN PUMP.
- 11. PROVIDE HOIST MACHINE WITH VOLTAGE TO MATCH SUPPLY VOLTAGE INDICATED, U.N.O.

AUXILIARY SYSTEM	SUPPLY TERMINAL	SUPPLY VOLTAGE	CIRCUIT CAPACITY
CAR LIGHT AND FAN VITH LOCKABLE DISCONNECT	EACH CONTROLLER	120-1-60	(25 AMP PER CAR)
INTERCOM SYSTEM (IF APPLICABLE)	AT AMPLIFIER	120-1-60	1600 WATTS (15 AMP PER CAR)
AIR CONDITIONING AND			

ADDITIONAL POWER AND DISCONNECT REQUIREMENTS IN MACHINE ROOM

AUXILIARY SYSTEM	SUPPLY TERMINAL	SUPPLY VOLTAGE	CIRCUIT CAPACITY
CAR LIGHT AND FAN WITH LOCKABLE DISCONNECT	EACH CONTROLLER	120-1-60	(25 AMP PER CAR)
INTERCOM SYSTEM (IF APPLICABLE)	AT AMPLIFIER	120-1-60	1600 WATTS (15 AMP PER CAR)
AIR CONDITIONING AND HEATING SOURCE (IF APPLICABLE)	EACH CONTROLLER	120-1-60	(20 AMP PER CAR)
CONDENSATE EVAPORATOR UNIT FOR AIR CONDITIONING (IF APPLICABLE)	EACH CONTROLLER	120-1-60	(30 AMP PER CAR)

ELEVATOR ELECTRICAL AND MECHANICAL REQUIREMENTS SCALE: NTS



RAIL FORCES MAXIMUM ON EACH GUIDE RAIL

(FORCES ARE IN KIPS)

	(101/020 / 1/2 1/1 / 1/1 0)					
	ELEVATOR NUMBER	1	OCCURING ON			
ES	CAR R1	1.1	CAR NORMAL FACE OF MAIN RAIL			
FORCES	CAR R2	0.7	CAR NORMAL SIDE OF MAIN RAIL — LOADING OR RUNNING			
NORMAL	CAR R3	29.0	FORCE TRANSMITTED TO PIT STRUCTURE AT CAR SAFETY APPLICATION*			
N N	CWT R3	N/A	FORCE TRANSMITTED TO PIT STRUCTURE AT CWT SAFETY APPLICATION*			

FOR SOME MACHINE ROOM-LESS (MRL) MODELS. PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE. DEFLECTOR SHEAVE. AND DEAD END HITCH LOADS (NORMAL FORCES R1 AND R2 CAN BE OVER 13.3 KN [3.0 K] FOR SOME APPLICATIONS). COORDINATE LOADING AND SUPPORT LOCATIONS WITH ELEVATOR CONTRACTOR (NIEC).

ASME A17.1

BUILDING SUPPORTS TO RESIST HORIZONTAL FORCES WITH A TOTAL DEFLECTION AT POINT OF SUPPORT NOT IN EXCESS OF 3MM (1/8") DURING NORMAL CONDITIONS.

* THESE REACTIONS DO NOT OCCUR SIMULTANEOUSLY WITH PIT BUFFER REACTIONS A17.1/UBC VARIABLES USED FOR SEISMIC CALCULATIONS: SEISMIC ZONE = 0 OR 1 (NON-SEISMIC FOR ELEVATORS)

*** BUILDING SUPPORTS FOR GUIDE RAIL ATTACHMENT SHALL RESIST HORIZONTAL FORCES DURING SEISMIC CONDITIONS.

IBC VARIABLES USED FOR SEISMIC CALCULATIONS: SEISMIC DESIGN CATEGORY = PENDING ELEVATOR IMPORTANCE FACTOR (Ip) = PENDING (ALL ELEVATORS) HORIZONTAL ACCELERATION EQUIVALENT = PENDING G (FOR REF ONLY)

RAIL FORCES SCALE: NTS

LEGAL HOISTWAY AND PIT

THE HOIST MACHINE.

HOISTWAY STEEL FRAMING.

AT EACH FLOOR, PIT AND OVERHEAD.

(1/8") UNDER NORMAL CONDITIONS.

OF THE SPAN UNDER STATIC LOAD.

AREAS ARE ADJACENT.

OCCUR SIMULTANEOUSLY.

SYSTEMS).

STANDBY POWER PROVISIONS

SPEED AND CAPACITY.

SIGNAL IN EITHER DIRECTION.

ROOM VENTILATION OR AIR CONDITIONING.

ELEVATOR CONTRACTOR'S SHOP DRAWINGS.

7. CUTTING AND PATCHING WALLS, BEAMS AND FLOORS.

SIGNAL FIXTURE BOXES WHICH PENETRATE WALLS.

ELEVATOR ENTRANCE FRAMES HAVE BEEN INSTALLED.

1. HOISTWAY, CLEAR, PLUMB, SUBSTANTIALLY FLUSH WITH VARIATIONS

NOT TO EXCEED 25 MM (1") WITHIN 30 M (100') VERTICALLY AT

2. HOISTWAY VENTILATION, HEATING AND/OR COOLING WHERE THE HOIST

MACHINE IS LOCATED WITHIN THE HOISTWAY, MAINTAIN TEMPERATURE

BETWEEN 13° C. (55° F.) AND 32° C. (90° F.) AT THE LOCATION OF

3. BEVEL CANTS NOT LESS THAN 75° FROM THE HORIZONTAL ON ANY REAR OR SIDE WALL LEDGES AND BEAMS, INCLUDING BUILDING

SUPPORT FOR TRACTION MACHINE BEAMS, THAT PROJECT OR RECESS

100 MM (4") OR MORE INTO THE HOISTWAY PER ASME A17.1 2000+

ATTACHMENT OF ELEVATOR CAR AND/OR COUNTERWEIGHT GUIDE RAILS

FASTENING, AND INTERMEDIATE SUPPORTS WHERE FLOOR HEIGHTS

6. GUIDE RAIL BRACKET SUPPORTS IN CONCRETE. INSERTS OR IMBEDS,

8. WALL BLOCK-OUTS AND FIRE-RATED CLOSURE FOR CONTROL AND

9. STEEL BEAMS, CONCRETE WALL/BEAMS, OR STRUCTURAL SLAB FOR

SUPPORT OF HOIST MACHINE, ROPE SHEAVES, AND DEAD-END HITCH

BEAMS. SUPPORT BEAMS SHALL NOT EXCEED DEFLECTION OF L/1666

10. <u>ERECT FRONT HOISTWAY</u> WALL FOR SHAFTWALL CONSTRUCTION AFTER

11. ROUGH OPENINGS, IF FRONT HOISTWAY WALLS ARE CONCRETE OR MASONRY, FOR TRACTION APPLICATIONS, FORM ROUGH OPENINGS 380

THAN CLEAR OPENING. FOR MRL AND HYDRAULIC APPLICATIONS,

12. HOIST BEAM AT TOP OF EACH HOISTWAY FOR HYDRAULIC OR MRL

IN LB SECTION DRAWINGS. BOTTOM OF BEAM SHALL MEET THE MINIMUM CLEAR DIMENSION. MAKE HOIST BEAM REMOVABLE IF NECESSARY TO MEET MIN CLEAR DIMENSION. VERIFY HOIST BEAM

LOCATION AND LOAD REQUIREMENTS WITH ELEVATOR CONTRACTOR.

13. SOUND-ATTENUATING ASSEMBLIES FOR WALLS OF MACHINE ROOM,

CONTROLLER SPACE AND/OR HOISTWAY WHERE SOUND-SENSITIVE

14. PIT ACCESS LADDER FOR EACH ELEVATOR THAT DOES NOT HAVE A

15. <u>STRUCTURAL PIT FLOOR</u> FOR MACHINE-ROOM-LESS CAR AND COUNTERWEIGHT BUFFER AND GUIDE RAIL IMPACT LOADS. ELEVATOR

16. <u>WATERPROOF PIT</u>. INDIRECT WASTE DRAIN OR SUMP WITH FLUSH GRATE AND PUMP. FOR A17.1 2007+, PROVIDE MINIMUM SUMP

PUMP/DRAIN CAPACITY OF 3000 GALLONS/HOUR PER ELEVATOR.

17. PROTECT OPEN HOISTWAYS AND ELEVATOR ENTRANCES DURING

18. PROTECT CAR ENCLOSURE, ELEVATOR ENTRANCES AND SPECIAL

19. <u>SMOKE VENTING</u>. IF HOISTWAYS OF ELEVATORS AND DUMBWAITERS PENETRATE MORE THAN THREE STORIES, SMOKE VENTING WITH AN

THAN 0.3 SM (3 SF) FOR EACH ELEVATOR, AND NOT LESS THAN

3.5% NOR LESS THAN 0.05 SM (0.5 SF) FOR EACH DUMBWAITER

THE DETECTION OF SMOKE FROM ANY OF THE ELEVATOR LOBBY

AREA NOT LESS THAN 3.5% OF THE TOTAL HOISTWAY AREA NOR LESS

(WHICHEVER IS GREATER). OF THE TOTAL VENT AREA, NOT LESS THAN

1/3 SHALL BE PERMANENTLY OPEN UNLESS ALL VENTS ACTIVATE ON

SMOKE DETECTORS. RECOMMEND NORMALLY OPEN DAMPER. POWERED CLOSED WITH SMOKE DETECTOR ACTIVATED MOTORIZED DAMPER.

PROVIDE ACCESS TO DAMPER MOTOR FROM OUTSIDE THE BOUNDS OF

THE HOISTWAY AND ELEVATOR MACHINE/CONTROL ROOM. (REFER TO

CODE EXCEPTIONS FOR BUILDINGS WITH AUTOMATIC SPRINKLER

1, <u>STANDBY POWER</u> OF NORMAL VOLTAGE CHARACTERISTICS VIA NORMAL ELECTRICAL FEEDERS TO RUN ONE ELEVATOR AT A TIME IN EACH

CONDUCTOR FROM AUXILIARY FORM "C" DRY CONTACTS, LOCATED IN

THE STANDBY POWER TRANSFER SWITCH TO A DESIGNATED ELEVATOR

CONTROL PANEL IN EACH ELEVATOR GROUP AND/OR SINGLE ELEVATOR

UNIT, PROVIDE TIME DELAY OF 30-45 SECONDS FOR PRE-TRANSFER

STANDBY SINGLE-PHASE POWER TO GROUP CONTROLLER, AND EACH

EMERGENCY SIGNALING DEVICE, INTERCOM AMPLIFIER, HOIST MACHINE

COOLING FAN, CAR HEATING AND AIR CONDITIONING UNIT, AND MACHINE

NOTE: ELEVATOR DRIVES MAY EMPLOY IGBT POWER CONVERSION UNITS.

NOTE: ELEVATORS REQUIRED FOR USE DURING CONSTRUCTION MUST

ELEVATOR CONTROLLER FOR CAR LIGHTING, EXHAUST BLOWER,

2. MEANS FOR ABSORBING REGENERATIVE POWER DURING AN

COMPLY WITH ALL ELEVATOR AND FIRE/LIFE SAFETY CODES.

OVERHAULING LOAD (SUCH AS FULL LOAD DOWN).

ELEVATOR GROUP AND/OR SINGLE ELEVATOR UNIT AT FULL RATED CAR

METAL FINISHES FROM DAMAGE AFTER INSTALLATION,

CONSTRUCTION PER O.S.H.A. REGULATIONS.

GUIDE RAIL IMPACT AND INDIVIDUAL BUFFER IMPACT LOADS DO NOT

ELEVATOR EQUIPMENT INSTALLATION AND MAINTENANCE AS INDICATED

FORM ROUGH OPENINGS 500 MM (20") GREATER IN WIDTH AND 380

MM (15") GREATER IN HEIGHT THAN CLEAR OPENING. GROUT ROUGH

OPENINGS AFTER ELEVATOR ENTRANCE FRAMES HAVE BEEN INSTALLED.

MM (15") GREATER IN WIDTH AND 380 MM (15") GREATER IN HEIGHT

IF USED, WILL BE PROVIDED BY ELEVATOR CONTRACTOR AND

INSTALLED BY GENERAL CONTRACTOR. VERIFY LOCATION ON

EXCEED SPACING REQUIREMENTS SHOWN ON LERCH BATES DRAWINGS. BUILDING SUPPORTS NOT TO DEFLECT IN EXCESS OF 3.175 MM

CODE, CANTS NOT REQUIRED ON DIVIDER BEAMS, ENCLOSE WEB OF

4. GUIDE RAIL SUPPORT, ADEQUATE STRUCTURAL SUPPORT FOR

5. SUPPORTS AT EACH FLOOR FOR CAR AND CWT GUIDE RAIL

- 1. REINFORCED MACHINE ROOM FLOOR CAPABLE OF SUPPORTING STATIC LOADS IMPOSED BY ELEVATOR EQUIPMENT, WITH THE EXCEPTION OF TRACTION ELEVATOR HOIST MACHINES. FLOORS SHALL SUSTAIN CONCENTRATED LOAD OF 1000 N (225 LBF) ON ANY 2000 SQUARE MM (3 SQUARE INCH) AREA.
- 2. WALL ENCLOSURES ERECTED AT MACHINE ROOM LEVEL AFTER MACHINE OR PUMP UNIT IS SET IN PLACE, SOUND-ATTENUATION FOR WALLS ADJACENT TO TENANT SPACE.

LEGAL MACHINE ROOMS AND CONTROLLER SPACES

- 3. BLOCK-OUTS THROUGH MACHINE ROOM FLOOR, SECONDARY FLOOR AND/OR WALLS FOR HOIST ROPES, HYDRAULIC OIL LINE, AND ELECTRICAL WIRING DUCTS. VERIFY LOCATION ON ELEVATOR CONTRACTOR SHOP DRAWINGS.
- 4. SELF-CLOSING, SELF-LOCKING ACCESS DOOR OR GATE FOR MACHINE ROOM, CONTROLLER SPACE, AND MACHINERY SPACE, KEYING MUST BE INDEPENDENT OF ANY OTHER BUILDING LOCKS, DOOR OR GATE SHALL BE OPENABLE FROM INSIDE WITHOUT KEY. SOUND-ATTENUATING DOORS WHERE ACCESS IS FROM ADJACENT TENANT SPACE. RECOMMEND MINIMUM 1070 MM X 2130 MM (3'-6" X 7'-0") DOOR.
- 5, LEGAL ACCESS TO MACHINE ROOMS / CONTROLLER SPACES BY MEANS OF A STAIR WITH 60 DEGREE MAXIMUM ANGLE FROM THE HORIZONTAL. FOR PASSAGE ACROSS ROOFS, A STAIRWAY WITH A SWINGING DOOR AND PLATFORM AT THE TOP LEVEL SHALL BE PROVIDED FROM THE TOP FLOOR OF THE BUILDING TO THE ROOF
- 6. MACHINE AND CONTROLLER SPACE VENTILATION AND HEATING, FOR IBC. INDEPENDENT VENTILATION OR AIR-CONDITIONING SYSTEM TO PREVENT OVERHEATING OF SOLID-STATE ELECTRICAL EQUIPMENT. MAINTAIN MINIMUM TEMPERATURE OF 13°C (55°F), MAXIMUM 32°C (90°F). MAINTAIN MAXIMUM 80% RELATIVE HUMIDITY, NON-CONDENSING. HVAC UNIT MAY BE LOCATED WITHIN THE BOUNDS OF THE MACHINE/CONTROLLER ROOM IF SOLELY FOR THE HEATING OR COOLING OF THAT MACHINE/CONTROLLER ROOM.
- 7. MINIMUM HEADROOM CLEARANCES: 2400 MM (8'-0") RECOMMENDED UNDER MACHINE ROOM / CONTROLLER SPACE CEILING AND 2275 MM (7'-6") UNDER ENCROACHING BEAMS (INCLUDING FIREPROOFING). CLEARANCE ABOVE HOIST MACHINE AS SHOWN ON LERCH BATES DRAWINGS, CODE MINIMUM CLEARANCE: 2130 MM (7'-0").
- 8. MACHINE ROOM AND CONTROLLER SPACE FIRE SPRINKLER RUNS MUST TERMINATE WITHIN THE BOUNDS OF THE MACHINE ROOM CONTROLLER SPACE. SHUT OFF VALVES SHALL BE LOCATED OUTSIDE THE BOUNDS OF THE MACHINE ROOM / CONTROLLER SPACE. MAINTAIN MINIMUM 2130 MM (7'-0") CLEAR HEADROOM UNDER PIPE
- 9. CLASS "ABC" FIRE EXTINGUISHER IN EACH ELEVATOR MACHINE ROOM / CONTROLLER SPACE.
- 10. MACHINE ROOM / CONTROLLER SPACE ENCLOSURES AND ACCESS DOORS SHALL HAVE A FIRE ENDURANCE AT LEAST EQUAL TO THAT REQUIRED FOR THE HOISTWAY ENCLOSURE AND THE HOISTWAY DOORS, RESPECTIVELY.
- 11. ONLY EQUIPMENT USED IN CONJUNCTION WITH THE FUNCTION OF THE ELEVATOR SHALL BE PERMITTED IN THE ELEVATOR MACHINE ROOM AND CONTROLLER SPACE. ACCESS THROUGH ELEVATOR MACHINE/CONTROLLER SPACES TO ADJACENT ROOMS OR AREAS SHALL NOT BE PERMITTED, PERMANENT AND UNOBSTRUCTED ACCESS TO MACHINE/CONTROLLER SPACES SHALL BE PROVIDED FOR AUTHORIZED PERSONNEL.

ELECTRICAL SERVICES

- 1. <u>LIGHTING AND GFCI CONVENIENCE OUTLETS</u> IN PIT, MACHINE ROOM, CONTROLLER SPACE, AND OVERHEAD MACHINERY SPACE. ADEQUATE LIGHTING TO MAINTAIN 100 LUX (10 FC) MINIMUM ILLUMINATION AT THE PIT FLOOR, AND 200 LUX (19 FC) AT THE MACHINE ROOM FLOOR, CONTROL ROOM FLOOR, AND OVERHEAD AND SECONDARY MACHINERY SPACES.
- 2. THREE-PHASE MAINLINE COPPER POWER FEEDER TO TERMINALS OF EACH ELEVATOR CONTROLLER WITH PROTECTED, LOCKABLE "OPEN", DISCONNECTING MEANS MEETING NEC REQUIREMENTS, LOCATE DISCONNECTING MEANS IN THE MACHINE ROOM / CONTROLLER SPACE, VERIFY CONTROLLER LOCATION ON ELEVATOR SHOP DRAWINGS. PROVIDE CLEARANCES AROUND DISCONNECTING MEANS AS REQUIRED BY CODE. AUXILIARY FEEDERS AND DISCONNECTING MEANS FOR MACHINE/CONTROLLER ROOMS WITH MULTIPLE LEVELS. AUXILIARY CONTACTS FOR HYDRAULIC ELEVATORS FOR BATTERY LOWERING DEVICE ELECTRICAL INTERLOCK.
- 3. <u>SINGLE-PHASE COPPER POWER FEEDER</u> TO EACH CONTROLLER FOR CAR LIGHTING, EXHAUST BLOWER AND CONVENIENCE OUTLET WITH PROTECTED, LOCKABLE "OPEN", DISCONNECTING MEANS MEETING NEC REQUIREMENTS. LOCATE DISCONNECTING MEANS IN THE MACHINE/CONTROLLER ROOM. VERIFY CONTROLLER LOCATION ON ELEVATOR SHOP DRAWINGS.
- 4. FIRE ALARM INITIATING DEVICES IN EACH ELEVATOR LOBBY, FOR EACH MULTIPLE HOISTWAY OR SINGLE HOISTWAY AND EACH MACHINE ROOM / CONTROLLER SPACE, TO INITIATE FIREFIGHTER'S RETURN FEATURE. DEVICE AT TOP OF HOISTWAY IF SPRINKLERED, PROVIDE A DISCRETE SIGNAL FROM EACH OF THE FOLLOWING ZONES OR DETECTORS: MAIN LOBBY, ALL OTHER LOBBIES, EACH HOISTWAY, AND EACH MACHINE ROOM / CONTROLLER SPACE, WHERE A GROUP OF ELEVATORS INCLUDES MULTIPLE HOISTWAYS, PROVIDE A DISCRETE SIGNAL FROM EACH HOISTWAY. SUPPLY TWO DRY CONTACTS AND DETECTOR WIRES TO EACH ELEVATOR GROUP CONTROLLER IN EACH ELEVATOR MACHINE ROOM / CONTROLLER SPACE.
- 5. MEANS TO AUTOMATICALLY DISCONNECT POWER TO AFFECTED ELEVATOR DRIVE UNIT AND CONTROLLER PRIOR TO ACTIVATION OF MACHINE ROOM / CONTROLLER SPACE, OVERHEAD FIRE SPRINKLER SYSTEMS, AND/OR OF HOISTWAY OVERHEAD FIRE SPRINKLER SYSTEMS, MANUAL SHUT-OFF MEANS SHALL BE LOCATED OUTSIDE THE BOUNDS OF THE MACHINE/CONTROLLER ROOM.
- 6. TEMPORARY POWER AND ILLUMINATION TO INSTALL, TEST AND ADJUST ELEVATOR EQUIPMENT.
- 7. <u>EMERGENCY TELEPHONE LINE</u> TO EACH INDIVIDUAL OR DESIGNATED ELEVATOR CONTROL PANEL IN ELEVATOR MACHINE/CONTROLLER ROOM.
- 8. <u>SINGLE-PHASE POWER FEEDERS</u> TO MACHINE ROOM / CONTROLLER SPACE ELEVATOR MONITORING PANEL/DISPLAY UNIT WITH SINGLE-PHASE, PROTECTED, LOCKABLE "OPEN", DISCONNECTING MEANS MEETING NEC REQUIREMENTS.
- 9. SINGLE-PHASE POWER FEEDERS TO CONTROLLER(S) FOR CCTV WITH LOCKABLE "OPEN", DISCONNECTING MEANS MEETING NEC REQUIREMENTS.

RELATED WORK NOT PROVIDED IN ELEVATOR CONTRACT SCALE: NTS

(BASED ON ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS. CONSULT LOCAL CODES FOR ADDITIONAL REQUIREMENTS.)

ELEVATOR CONSULTANT

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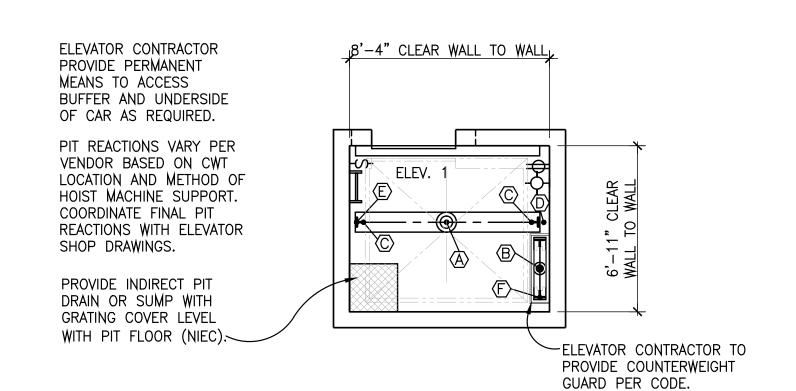
ISSUED FOR CONSTRUCTION

10-19-2012 DRAWN BY CHECKED B' CHECKED BY REVISED DATE DESCRIPTION SHEET TITLE & NUMBER GENERAL **ELEVATOR**

INFORMATION

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PIT REACTION TABLE DUTY: 3500# @ 150 FPM DESCRIPTION KEY REACTION 50.0 K CAR BUFFER 47.0 K CWT BUFFER 29.0 K EACH CAR SAFETY DRIVE MACHINE LOAD ON CAR RAIL *25.0 K COMBINED WITH CWT DEH LOAD ON CWT RAIL DYNAMIC LOAD ON CAR RAIL *18.0 K *7.8 K DYNAMIC LOAD ON CWT RAIL

* THESE REACTIONS CAN OCCUR SIMULTANEOUSLY. OTHERWISE, REACTIONS DO NOT OCCUR SIMULTANEOUSLY.

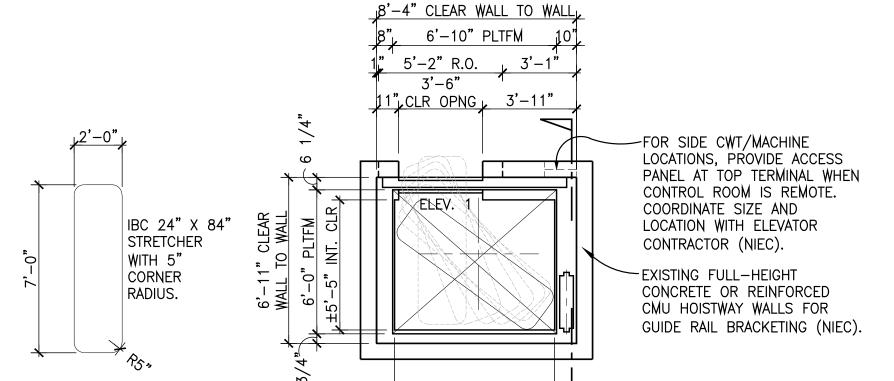
PIT NOTES:

PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 100 LUX (10 FC) ILLUMINATION AT PIT FLOOR (NIEC).

PROVIDE PIT ACCESS LADDERS, LIGHT SWITCHES, LIGHTS, AND GFCI-PROTECTED UTILITY OUTLETS (NIEC).

PROVIDE ONE PIT LADDER, LIGHT SWITCH, LIGHT FIXTURE, AND OUTLET PER ELEVATOR.

PROVIDE ADEQUATE STRUCTURAL SUPPORT REQUIRED FOR BUFFER AND RAIL FORCE REACTIONS (NIEC).



 $\pm 6'-8"$ INT. CLR

HOISTWAY PLAN

ELEVATOR

SCALE: 1/4" = 1'-0"

DUTY: 3500# @ 150 FPM

FOR MOST VENDORS, CONTROLLER MUST BE

WITHIN 150' WIRE RUN LENGTH FROM THE

CORRESPONDING MACHINE AT THE TOP OF

THE HOISTWAY.

REMOTE

7'-0" MIN

CONTROL ROOM

CAR CONTROLLER

VT02

ELEVATOR CONTRACTOR

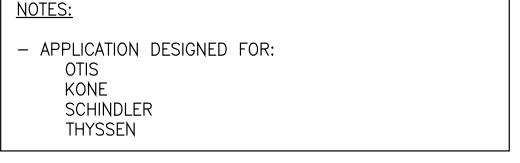
REQUIRED.

PROVIDE EQUIPMENT TO FIT

IN DIMENSIONS SHOWN AS

 APPLICATION DESIGNED FOR: OTIS KONE SCHINDLER THYSSEN

PIT AND OVERHEAD PLANS INDICATE REACTIONS FOR | MACHINE ROOM—LESS EQUIPMENT OF VARIOUS ELEVATOR VENDORS. WHERE REACTIONS OF DIFFERENT VENDORS OVERLAP, THE HIGHER REACTION IS INDICATED. REACTIONS FOR ONE VENDOR DO NOT OCCUR WITH THE REACTIONS OF OTHER VENDORS. OVERHEAD PLANS ARE NOT SHOWN FOR VENDORS WITH NO REACTIONS IN THE OVERHEAD.



PROVIDE 3-PHASE MAINLINE POWER FEEDER WITH DISCONNECTING MEANS FOR EACH ELEVATOR CONTROLLER. PROVIDE 1-PHASE FEEDER WITH DISCONNECTING MEANS FOR CAR LIGHTING, VENTILATION SYSTEM AND RECEPTACLE FOR EACH ELEVATOR, THESE DISCONNECTING MEANS SHALL INCLUDE OVERCURRENT PROTECTION, SHALL BE LOCATED IN THE MACHINE ROOM, AND SHALL MEET N.E.C. REQUIREMENTS (NIEC).

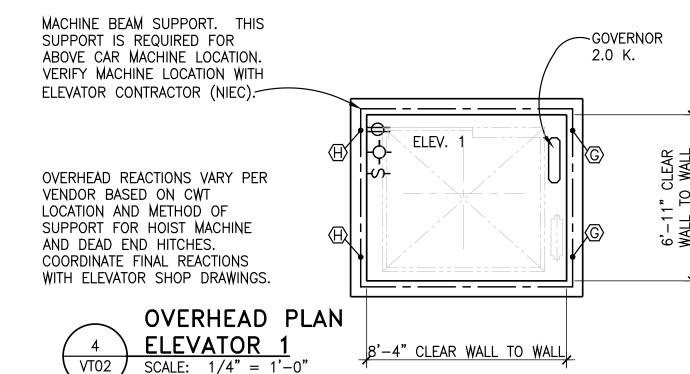
CONTROL ROOM NOTES:

PROVIDE SELF-CLOSING, SELF-LOCKING CONTROL ROOM ACCESS DOOR (NIEC).

PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT CONTROL ROOM FLOOR

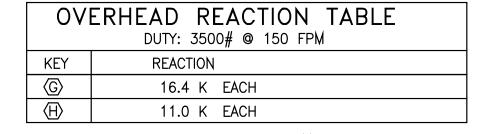
PROVIDE LIGHT(S), LIGHT SWITCH(ES) AND GFCI-PROTECTED UTILITY OUTLET(S). COORDINATE LOCATIONS WITH ELEVATOR CONTRACTOR (NIEC).

HEAT EMISSION PER ELEVATOR CAR CONTROLLER 9,085 **BTUH.**



SCALE: 1/4" = 1'-0"

DUTY: 3500# @ 150 FPM



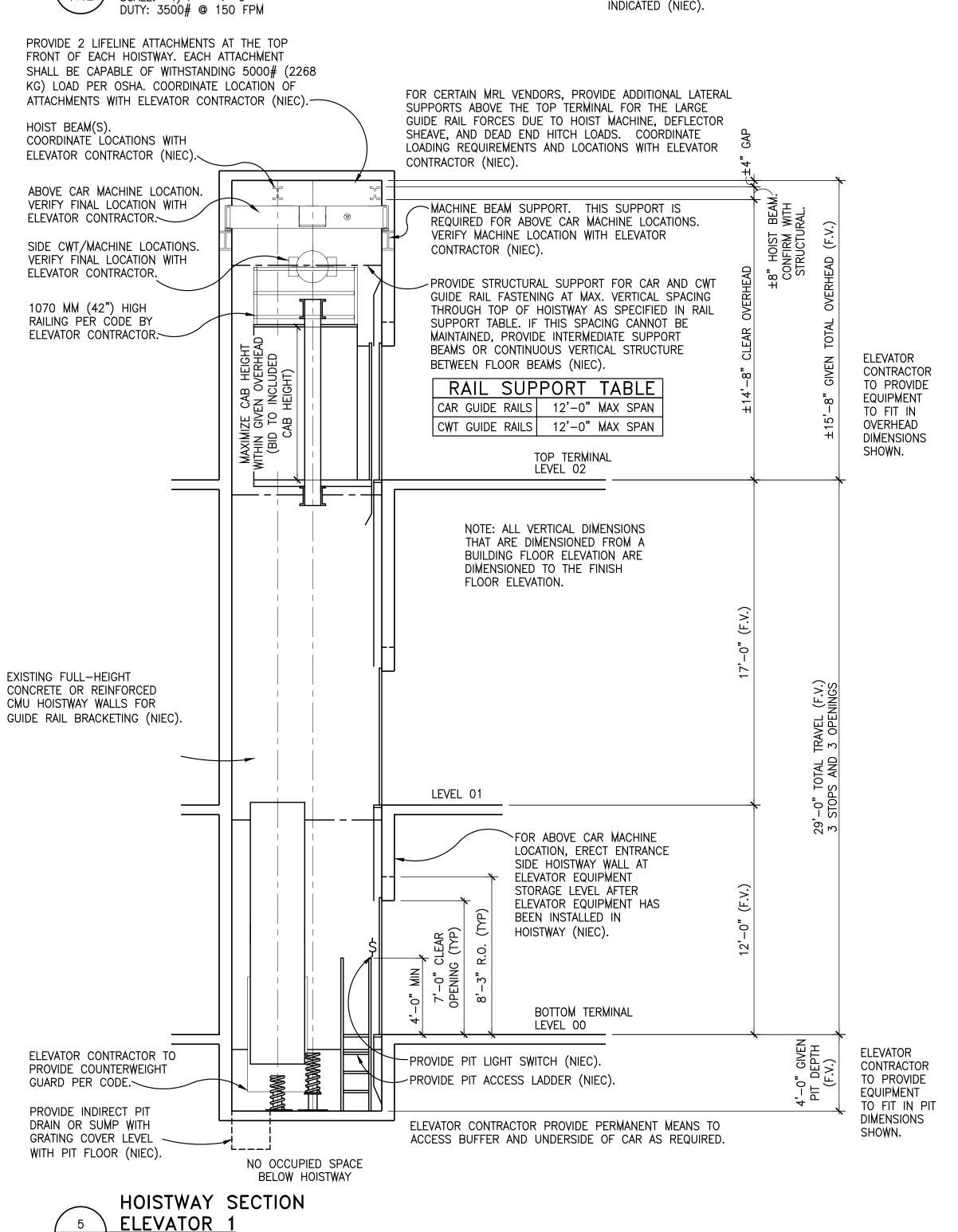
REACTIONS HAVE BEEN DOUBLED FOR IMPACT.

OVERHEAD NOTES:

PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT TOP OF HOISTWAY (NIEC).

PROVIDE LIGHTS, LIGHT SWITCHES AND GFCI-PROTECTED UTILITY OUTLETS. COORDINATE LOCATIONS WITH ELEVATOR CONTRACTOR (NIEC).

PROVIDE STRUCTURAL SUPPORT TO SUSTAIN REACTIONS INDICATED (NIEC).



ELEVATOR CONSULTANT

LERCH BATES

8089 SOUTH LINCOLN STREET, SUITE 205 LITTLETON, COLORADO 80122 TEL. (303) 723-7978 FAX. (303) 723-7982

RE ERIOR

ISSUED FOR CONSTRUCTION

PROJECT NO.							
DATE	10-19-2012						
DRAWN BY							
CHECKED BY							
CHECKED BY							
REVISED DATE	DESCRIPTION						
SHEET TITLE	SHEET TITLE & NUMBER						
PLANS	SAND						
HOISTWA	Y SECTIO						
ELEVA	TOR 1						

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PIPER-WIND ARCHITECTS, INC.

VT02

CONTROL ROOM PLAN **ELEVATOR 1** SCALE: 1/4" = 1'-0"DUTY: 3500# @ 150 FPM

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