

VT01 GENERAL ELEVATOR INFORMATION
VT02 PLANS AND HOISTWAY SECTION ELEVATOR 1

1 INDEX OF DRAWINGS
SCALE: NTS

ELEVATOR 1 3500# @ 150 FPM

2 SUMMARY OF ELEVATORS
SCALE: NTS

AFF ABOVE FINISH FLOOR	DIM. DIMENSION	HP HORSEPOWER	O.A. OVERALL
A.P. ACCESS PANEL	DC DIRECT CURRENT	HYDR. HYDRAULIC	OPP. OPPOSITE
A/C AIR CONDITIONING	DISC. DISCONNECT	IN. INCH (INCHES)	OVHD OVERHEAD
ALT. ALTERNATE	DBG. DISTANCE BETWEEN	IGBT INSULATED GATE	PL PLATE
AC ALTERNATING CURRENT	DN DOWN	J/S J/SECOND	PLTFM PLATFORM
ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS	DN DOWN	J/S J/SECOND	PLTFM PLATFORM
AMP AMPERE	DWG. DRAWING	KCAL KILOCALORIE	PSI POUNDS PER SQUARE INCH
APPROX. APPROXIMATE	E. ELECTRICAL	KG KILOGRAMS	PRELIM. PRELIMINARY
ARCH. ARCHITECTURAL	EL. ELEVATION	KN KILONEWTONS	RAD. RADIUS
AUX. AUXILIARY	ELEV. ELEVATOR	KVA KILOVOLT-AMPERE	R/O REAR OPENING
BSMT BASEMENT	ETS EMERGENCY TERMINAL	KW KILOWATTS	REQ. REQUIRED
BOT. BOTTOM	EQ. EQUAL	KIPS KIPS	REV. REVISION
BTUH BRITISH THERMAL UNITS PER HOUR	EQ. EQUIPMENT	LT LIGHT	RM ROOM
BM BEAM	ESCAL. ESCALATOR	MPS METERS PER SECOND	MACH. MACHINE
BOCA BUILDING OFFICIALS AND CODE ADMINISTRATION	ESC. ESCALATOR	MRL MACHINE-ROOM-LESS	R.O. ROUGH OPENING
CLG CEILING	F. FINISH FLOOR	MAX. MAXIMUM	REVISION
C. CELSIUS	F.F. FINISH FLOOR	MEZZ. MEZZANINE	SHT. SHEET
CM CENTERLINE	FLR. FLOOR	M. METER	SCR SILICON CONTROLLED RECTIFIER
COL. COLUMN	FT. FOOT (FEET)	MM MILLIMETERS	SIM. SIMILAR
CLR CLEAR	FLUOR. FLUORESCENT	MIN. MINIMUM	SPEC. SPECIFICATION
CONC. CONCRETE	F/O FRONT OPENING	MISC. MISCELLANEOUS	SF SQUARE FEET
CMU CONCRETE MASONRY UNITS	FUT. FUTURE	MTD MOUNTED	SM SQUARE METERS
CONT. CONTINUOUS	G. GRAVITY	NEC NATIONAL ELECTRICAL CODE	STD STANDARD BUILDING CODE
CONTR. CONTRACTOR	GFCI GROUND FAULT CIRCUIT INTERRUPTER	NFPA NATIONAL FIRE PROTECTION ASSOCIATION	STL. STEEL
COORD. COORDINATE	GOV. GOVERNOR	(N) NEW	STRUCT. STRUCTURAL
CONTR. CONTROLLER	GA. GAUGE	(NOM.) NOMINAL	SW. SWITCH
CWT COUNTERWEIGHT	GYP. BD. GYPSUM BOARD	N/A NOT APPLICABLE	TBD TO BE DETERMINED
CYL. CYLINDER	HT. HEIGHT	(NIEC) NOT IN ELEVATOR CONTRACT	T.O. TOP OF
DEH DEAD END HITCH	HZ. HERTZ	NTS NOT TO SCALE	(TYP) TYPICAL
D. DEEP	H. HIGH	NO. NUMBER	UNO UNLESS NOTED OTHERWISE
D. DEGREES	HSTWY HOISTWAY	O.C. ON CENTER	UBC UNIFORM BUILDING CODE
DTL DETAIL	HORIZ. HORIZONTAL	OPNG OPENING	VERT. VERTICAL
Ø DIAMETER	HR. HOUR		V. VOLT
			W. WIDE
			WITH
			WP WORKPOINT

3 ABBREVIATIONS
SCALE: NTS

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

4 GENERAL NOTES
SCALE: NTS

POWER FEEDER REQUIREMENTS (MAIN POWER SUPPLY: 480-3-60 ASSUMED)											
ELEVATOR NUMBER	CAPACITY (POUNDS)	SPEED (FPM)	TRACTION HP RATING	HYDRO MOTOR HP	HYDRO STARTING AMPS			FULL LOAD AMPS		HEAT RELEASE	
					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
NOTES:											
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.											
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)							

5 ELEVATOR ELECTRICAL AND MECHANICAL REQUIREMENTS
SCALE: NTS

RAIL FORCES MAXIMUM ON EACH GUIDE RAIL (FORCES ARE IN KIPS)			
NORMAL FORCES	ELEVATOR NUMBER	1	OCCURRING ON
		CAR R1	1.1
	CAR R2	0.7	CAR NORMAL SIDE OF MAIN RAIL - LOADING OR RUNNING
	CAR R3	29.0	FORCE TRANSMITTED TO PIT STRUCTURE AT CAR SAFETY APPLICATION*
	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

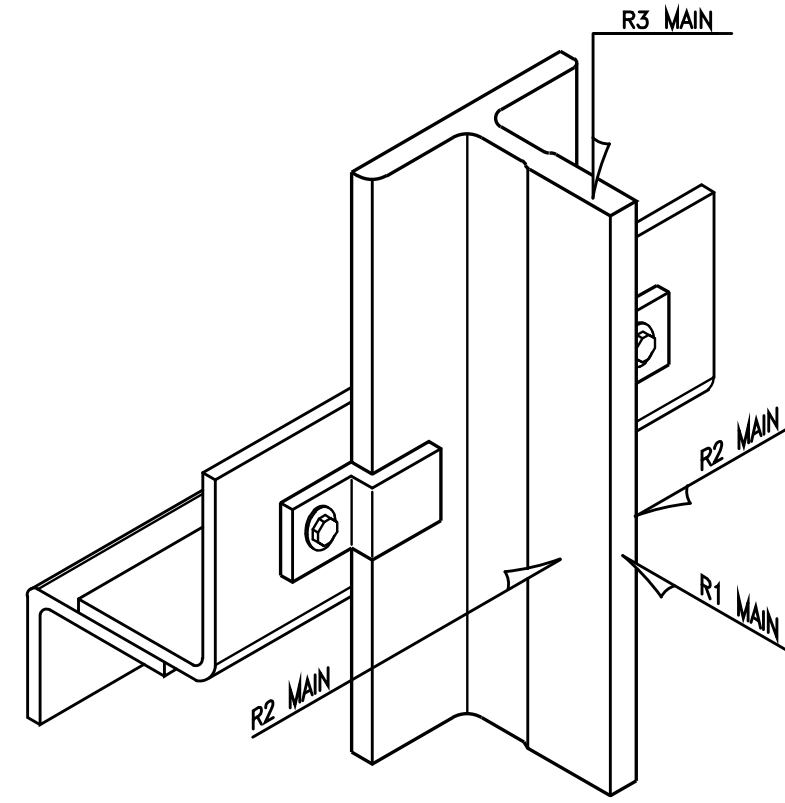
A17.1/UBC VARIABLES USED FOR SEISMIC CALCULATIONS:
SEISMIC ZONE = 0 OR 1 (NON-SEISMIC FOR ELEVATORS)

IBC

*** 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)
SDS = PENDING
HORIZONTAL ACCELERATION EQUIVALENT = PENDING G (FOR REF ONLY)

6 RAIL FORCES
SCALE: NTS



LEGAL HOISTWAY AND PIT

- HOISTWAY CLEAR, PLUMB, SUBSTANTIALLY FLUSH WITH VARIATIONS NOT TO EXCEED 25 MM (1") WITHIN 30 M (100') VERTICALLY AT ANY POINT.
- 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 THE HOIST MACHINE.
- 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 2004+ CODE. CANTS NOT REQUIRED ON DIVIDER BEAMS. ENCLOSE WEB OF HOISTWAY STEEL FRAMING.
- GUIDE RAIL SUPPORT, ADEQUATE STRUCTURAL SUPPORT FOR ATTACHMENT OF ELEVATOR CAR AND/OR COUNTERWEIGHT GUIDE RAILS AT EACH FLOOR, PIT AND OVERHEAD.
- SUPPORTS AT EACH FLOOR FOR CAR AND CWT GUIDE RAIL FASTENING, AND INTERMEDIATE SUPPORTS WHERE FLOOR HEIGHTS EXCEED SPACING REQUIREMENTS SHOWN ON LERCH BATES DRAWINGS. BUILDING SUPPORTS NOT TO DEFLECT IN EXCESS OF 3.175 MM (1/8") UNDER NORMAL CONDITIONS.
- GUIDE RAIL BRACKET SUPPORTS IN CONCRETE. INSERTS OR IMBEDS, IF USED, WILL BE PROVIDED BY ELEVATOR CONTRACTOR AND INSTALLED BY GENERAL CONTRACTOR. VERIFY LOCATION ON ELEVATOR CONTRACTOR'S SHOP DRAWINGS.
- CUTTING AND PATCHING WALLS, BEAMS AND FLOORS.
- WALL FLOOR-OUTS AND FIRE-RATED CLOSURE FOR CONTROL AND SIGNAL FIXTURE BOXES WHICH PENETRATE WALLS.
- 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 OF THE SPAN UNDER STATIC LOAD.
- ERECT FRONT HOISTWAY WALL FOR SHAFTWALL CONSTRUCTION AFTER ELEVATOR ENTRANCE FRAMES HAVE BEEN INSTALLED.
- ROUGH OPENINGS. IF FRONT HOISTWAY WALLS ARE CONCRETE OR MASONRY, FOR TRACTION APPLICATIONS, FORM ROUGH OPENINGS 380 MM (15") GREATER IN WIDTH AND 380 MM (15") GREATER IN HEIGHT THAN CLEAR OPENING. FOR MRL AND HYDRAULIC APPLICATIONS, 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.
- HOIST BEAM AT TOP OF EACH HOISTWAY FOR HYDRAULIC OR MRL ELEVATOR EQUIPMENT INSTALLATION AND MAINTENANCE AS INDICATED 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.
- SOUND-ATTENUATING ASSEMBLIES FOR WALLS OF MACHINE ROOM, CONTROLLER SPACE AND/OR HOISTWAY WHERE SOUND-SENSITIVE AREAS ARE ADJACENT.
- PIT ACCESS LADDER FOR EACH ELEVATOR THAT DOES NOT HAVE A WALK-IN PIT.
- STRUCTURAL PIT FLOOR FOR MACHINE-ROOM-LESS CAR AND COUNTERWEIGHT BUFFER AND GUIDE RAIL IMPACT LOADS. ELEVATOR GUIDE RAIL IMPACT AND INDIVIDUAL BUFFER IMPACT LOADS DO NOT OCCUR SIMULTANEOUSLY.
- WATERPROOF PIT, INDIRECT WASTE DRAIN OR SUMP WITH FLUSH GRATE AND PUMP. FOR A17.1 2007+, PROVIDE MINIMUM SUMP PUMP/RAIN CAPACITY OF 3000 GALLONS/HOUR PER ELEVATOR.
- PROTECT OPEN HOISTWAYS AND ELEVATOR ENTRANCES DURING CONSTRUCTION PER O.S.H.A. REGULATIONS.
- PROTECT CAR ENCLOSURE, ELEVATOR ENTRANCES AND SPECIAL METAL FINISHES FROM DAMAGE AFTER INSTALLATION.

STANDBY POWER PROVISIONS

1. STANDBY POWER OF NORMAL VOLTAGE CHARACTERISTICS VIA NORMAL ELECTRICAL FEEDERS TO RUN ONE ELEVATOR AT A TIME IN EACH ELEVATOR GROUP AND/OR SINGLE ELEVATOR UNIT AT FULL RATED CAR SPEED AND CAPACITY.
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 SIGNAL IN EITHER DIRECTION.

STANDBY SINGLE-PHASE POWER TO GROUP CONTROLLER, AND EACH ELEVATOR CONTROLLER FOR CAR LIGHTING, EXHAUST BLOWER, EMERGENCY SIGNALING DEVICE, INTERCOM AMPLIFIER, HOIST MACHINE COOLING FAN, CAR HEATING AND AIR CONDITIONING UNIT, AND MACHINE ROOM VENTILATION OR AIR CONDITIONING.

2. MEANS FOR ABSORBING REGENERATIVE POWER DURING AN OVERHAULING LOAD (SUCH AS FULL LOAD DOWN).

NOTE: ELEVATOR DRIVES MAY EMPLOY IGBT POWER CONVERSION UNITS.

NOTE: ELEVATORS REQUIRED FOR USE DURING CONSTRUCTION MUST COMPLY WITH ALL ELEVATOR AND FIRE/LIFE SAFETY CODES.

7 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.)

LEGAL MACHINE ROOMS AND CONTROLLER SPACES

- 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.
 - WALL ENCLOSURES ERECTED AT MACHINE ROOM LEVEL AFTER MACHINE OR PUMP UNIT IS SET IN PLACE. SOUND-ATTENUATION FOR WALLS ADJACENT TO TENANT SPACE.
 - 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.
 - 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.
 - 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 LEVEL.
 - 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.
 - MINIMUM HEADROOM CLEARANCES: 2400 MM (8'-0") RECOMMENDED UNDER MACHINE ROOM / CONTROLLER SPACE CEILING AND 2275 MM (7'-6") UNDER ENCRANCHING BEAMS (INCLUDING FIREPROOFING). CLEARANCE ABOVE HOIST MACHINE AS SHOWN ON LERCH BATES DRAWINGS. CODE MINIMUM CLEARANCE: 2130 MM (7'-0").
 - 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 RUNS.
 - CLASS "ABC" FIRE EXTINGUISHER IN EACH ELEVATOR MACHINE ROOM / CONTROLLER SPACE.
 - 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.
 - 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**
- LIGHTING AND GFCI CONVENIENCE OUTLETS 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.
 - 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.
 - SINGLE-PHASE COPPER POWER FEEDER 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.
 - 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.
 - 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 HOISTWAY OVERHEAD FIRE SPRINKLER SYSTEMS. MANUAL SHUT-OFF MEANS SHALL BE LOCATED OUTSIDE THE BOUNDS OF THE MACHINE/CONTROLLER ROOM.
 - TEMPORARY POWER AND ILLUMINATION TO INSTALL, TEST AND ADJUST ELEVATOR EQUIPMENT.
 - EMERGENCY TELEPHONE LINE TO EACH INDIVIDUAL OR DESIGNATED ELEVATOR CONTROL PANEL IN ELEVATOR MACHINE/CONTROLLER ROOM.
 - SINGLE-PHASE POWER FEEDERS TO MACHINE ROOM / CONTROLLER SPACE ELEVATOR MONITORING PANEL/DISPLAY UNIT WITH SINGLE-PHASE, PROTECTED, LOCKABLE "OPEN", DISCONNECTING MEANS MEETING NEC REQUIREMENTS.
 - SINGLE-PHASE POWER FEEDERS TO CONTROLLER(S) FOR CCTV WITH LOCKABLE "OPEN", DISCONNECTING MEANS MEETING NEC REQUIREMENTS.

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INTERIOR RENOVATION
102 NORTH MAIN STREET, INDEPENDENCE, MISSOURI 64050

ISSUED FOR CONSTRUCTION

PROJECT NO.	10-19-2012
DATE	10-19-2012
DRAWN BY	JB
CHECKED BY	LB
REVISED DATE	DESCRIPTION
11-05-2012	ADDENDUM 2

SHEET TITLE & NUMBER

GENERAL ELEVATOR INFORMATION

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VT01

FIELD VERIFY ALL DIMENSIONS - REFER TO SPECIFICATION FOR DISPOSITION OF EQUIPMENT.

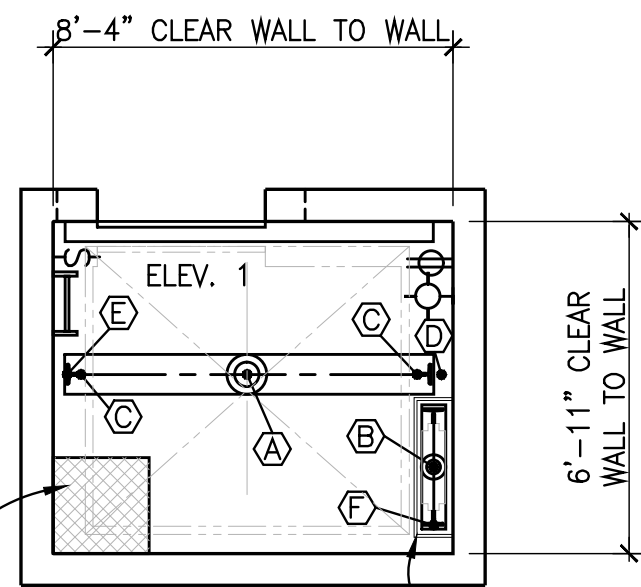
CHECKER: SUB
DESIGNER: JB
DATE: 06/25/12

FIELD VERIFY ALL DIMENSIONS - REFER TO SPECIFICATION FOR DISPOSITION OF EQUIPMENT.

ELEVATOR CONTRACTOR PROVIDE PERMANENT MEANS TO ACCESS BUFFER AND UNDERSIDE OF CAR AS REQUIRED.

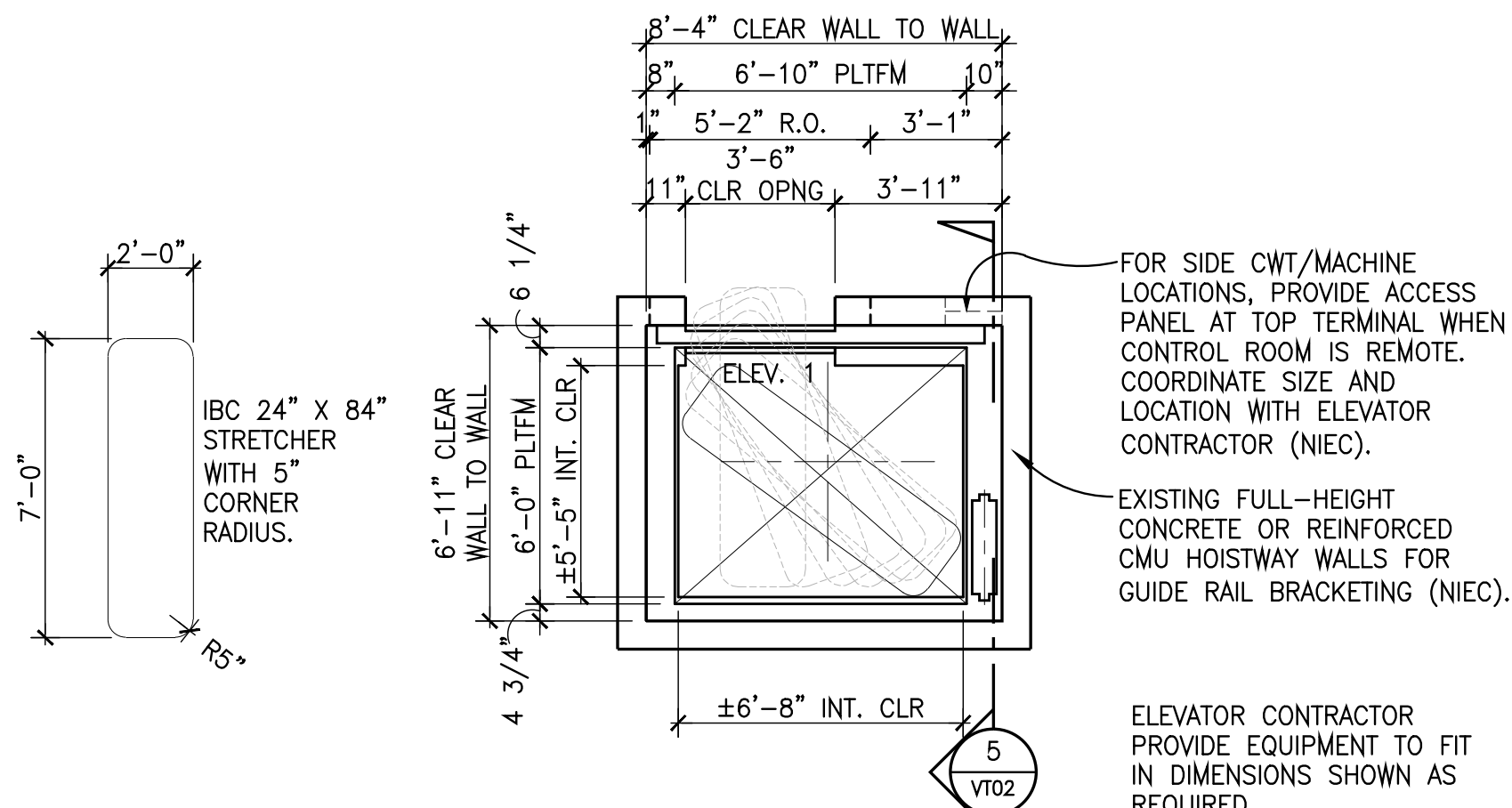
PIT REACTIONS VARY PER VENDOR BASED ON CWT LOCATION AND METHOD OF HOIST MACHINE SUPPORT. COORDINATE FINAL PIT REACTIONS WITH ELEVATOR SHOP DRAWINGS.

PROVIDE INDIRECT PIT DRAIN OR SUMP WITH GRATING COVER LEVEL WITH PIT FLOOR (NIEC).



ELEVATOR CONTRACTOR TO PROVIDE COUNTERWEIGHT GUARD PER CODE.

1
VT02
PIT PLAN ELEVATOR 1
SCALE: 1/4" = 1'-0"
DUTY: 3500# @ 150 FPM

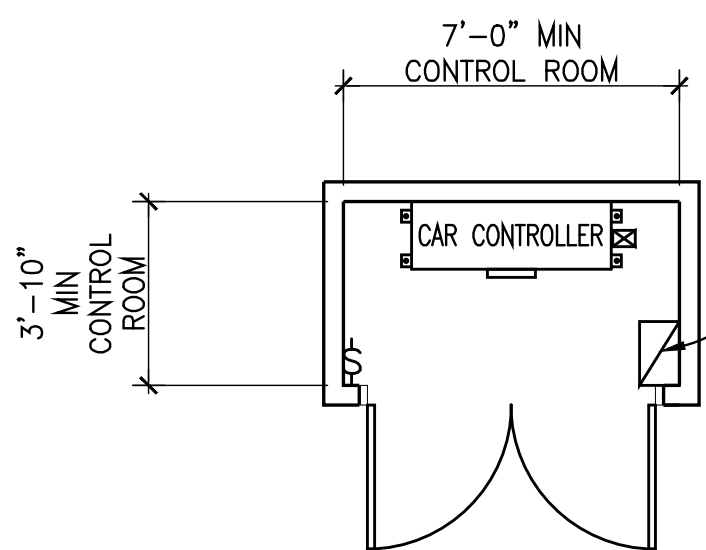


FOR SIDE CWT/MACHINE LOCATIONS, PROVIDE ACCESS PANEL AT TOP TERMINAL WHEN CONTROL ROOM IS REMOTE. COORDINATE SIZE AND LOCATION WITH ELEVATOR CONTRACTOR (NIEC).

EXISTING FULL-HEIGHT CONCRETE OR REINFORCED CMU HOISTWAY WALLS FOR GUIDE RAIL BRACKETING (NIEC).

ELEVATOR CONTRACTOR PROVIDE EQUIPMENT TO FIT IN DIMENSIONS SHOWN AS REQUIRED.

2
VT02
HOISTWAY PLAN ELEVATOR 1
SCALE: 1/4" = 1'-0"
DUTY: 3500# @ 150 FPM



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).

FOR MOST VENDORS, CONTROLLER MUST BE WITHIN 150' WIRE RUN LENGTH FROM THE CORRESPONDING MACHINE AT THE TOP OF THE HOISTWAY.

3
VT02
REMOTE CONTROL ROOM PLAN ELEVATOR 1
SCALE: 1/4" = 1'-0"
DUTY: 3500# @ 150 FPM

PIT REACTION TABLE		
DUTY: 3500# @ 150 FPM		
KEY	REACTION	DESCRIPTION
(A)	50.0 K	CAR BUFFER
(B)	47.0 K	CWT BUFFER
(C)	29.0 K EACH	CAR SAFETY (SEE CAR R3 RAIL FORCE)
(D)	*25.0 K	DRIVE MACHINE LOAD ON CAR RAIL COMBINED WITH CWT DEH LOAD ON CWT RAIL
(E)	*18.0 K	DYNAMIC LOAD ON CAR RAIL
(F)	*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).

NOTES:

- 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.

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 (NIEC).

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.

MACHINE BEAM SUPPORT. THIS SUPPORT IS REQUIRED FOR ABOVE CAR MACHINE LOCATION. VERIFY MACHINE LOCATION WITH ELEVATOR CONTRACTOR (NIEC).

OVERHEAD REACTIONS VARY PER VENDOR BASED ON CWT LOCATION AND METHOD OF SUPPORT FOR HOIST MACHINE AND DEAD END HITCHES. COORDINATE FINAL REACTIONS WITH ELEVATOR SHOP DRAWINGS.

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VT02
OVERHEAD PLAN ELEVATOR 1
SCALE: 1/4" = 1'-0"
DUTY: 3500# @ 150 FPM

PROVIDE 2 LIFELINE ATTACHMENTS AT THE TOP FRONT OF EACH HOISTWAY. EACH ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING 5000# (2268 KG) LOAD PER OSHA. COORDINATE LOCATION OF ATTACHMENTS WITH ELEVATOR CONTRACTOR (NIEC).

HOIST BEAM(S). COORDINATE LOCATIONS WITH ELEVATOR CONTRACTOR (NIEC).

ABOVE CAR MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.

SIDE CWT/MACHINE LOCATIONS. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.

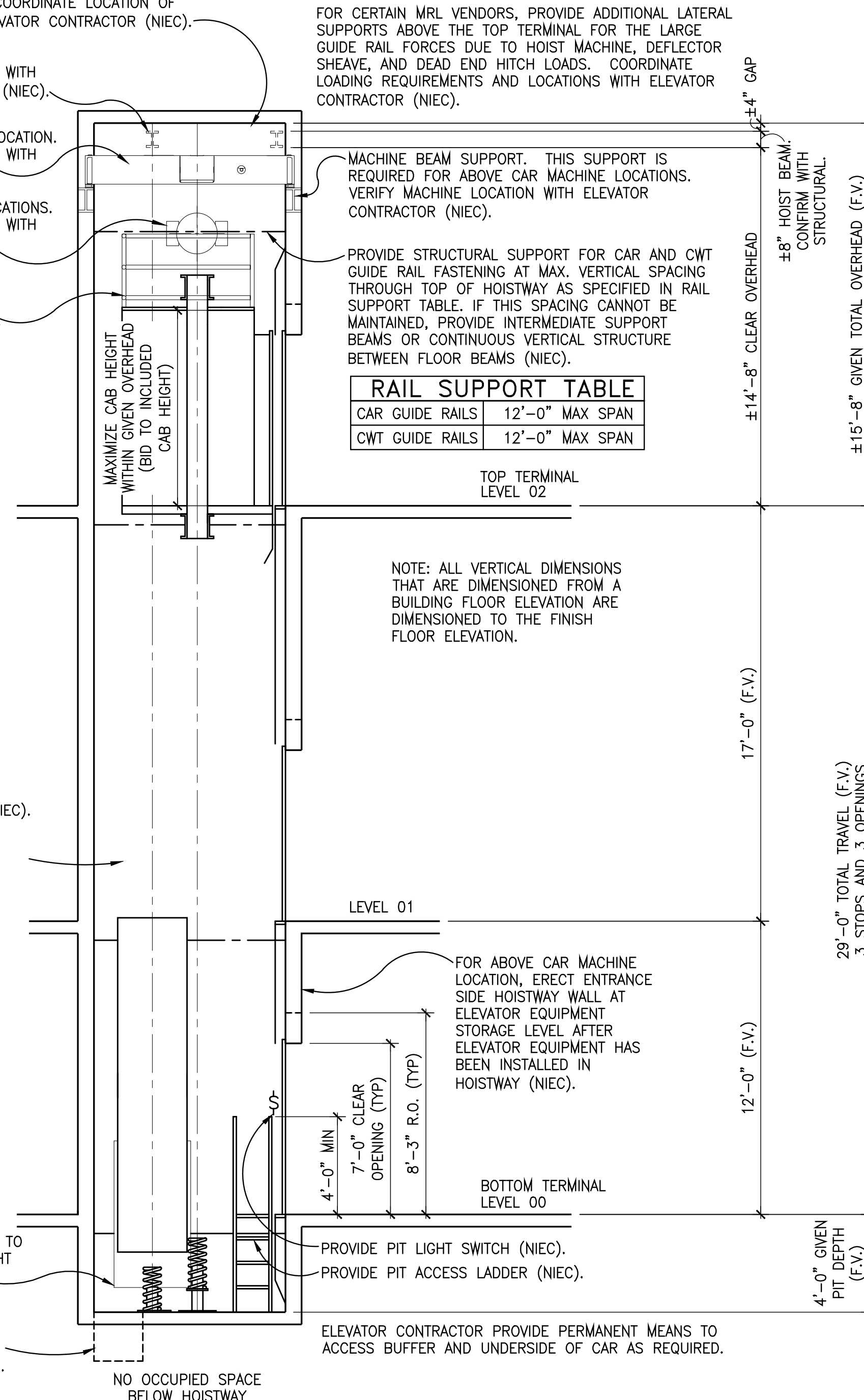
1070 MM (42") HIGH RAILING PER CODE BY ELEVATOR CONTRACTOR.

EXISTING FULL-HEIGHT CONCRETE OR REINFORCED CMU HOISTWAY WALLS FOR GUIDE RAIL BRACKETING (NIEC).

ELEVATOR CONTRACTOR TO PROVIDE COUNTERWEIGHT GUARD PER CODE.

PROVIDE INDIRECT PIT DRAIN OR SUMP WITH GRATING COVER LEVEL WITH PIT FLOOR (NIEC).

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VT02
HOISTWAY SECTION ELEVATOR 1
SCALE: 1/4" = 1'-0"
DUTY: 3500# @ 150 FPM



FOR CERTAIN MRL VENDORS, PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR THE LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE, DEFLECTOR SHEAVE, AND DEAD END HITCH LOADS. COORDINATE LOADING REQUIREMENTS AND LOCATIONS WITH ELEVATOR CONTRACTOR (NIEC).

MACHINE BEAM SUPPORT. THIS SUPPORT IS REQUIRED FOR ABOVE CAR MACHINE LOCATIONS. VERIFY MACHINE LOCATION WITH ELEVATOR CONTRACTOR (NIEC).

PROVIDE STRUCTURAL SUPPORT FOR CAR AND CWT GUIDE RAIL FASTENING AT MAX. VERTICAL SPACING THROUGH TOP OF HOISTWAY AS SPECIFIED IN RAIL SUPPORT TABLE. IF THIS SPACING CANNOT BE MAINTAINED, PROVIDE INTERMEDIATE SUPPORT BEAMS OR CONTINUOUS VERTICAL STRUCTURE BETWEEN FLOOR BEAMS (NIEC).

RAIL SUPPORT TABLE	
CAR GUIDE RAILS	12'-0" MAX SPAN
CWT GUIDE RAILS	12'-0" MAX SPAN

TOP TERMINAL LEVEL 02

NOTE: ALL VERTICAL DIMENSIONS THAT ARE DIMENSIONED FROM A BUILDING FLOOR ELEVATION ARE DIMENSIONED TO THE FINISH FLOOR ELEVATION.

LEVEL 01

FOR ABOVE CAR MACHINE LOCATION, ERECT ENTRANCE SIDE HOISTWAY WALL AT ELEVATOR EQUIPMENT STORAGE LEVEL AFTER ELEVATOR EQUIPMENT HAS BEEN INSTALLED IN HOISTWAY (NIEC).

BOTTOM TERMINAL LEVEL 00

PROVIDE PIT LIGHT SWITCH (NIEC).
PROVIDE PIT ACCESS LADDER (NIEC).

ELEVATOR CONTRACTOR PROVIDE PERMANENT MEANS TO ACCESS BUFFER AND UNDERSIDE OF CAR AS REQUIRED.

OVERHEAD REACTION TABLE

OVERHEAD REACTION TABLE	
DUTY: 3500# @ 150 FPM	
KEY	REACTION
(G)	16.4 K EACH
(H)	11.0 K EACH

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:
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HISTORIC TRUMAN COURTHOUSE
INTERIOR RENOVATION

102 NORTH MAIN STREET, INDEPENDENCE, MISSOURI 64050

ISSUED FOR CONSTRUCTION

PROJECT NO.	
DATE	10-19-2012
DRAWN BY	JB
CHECKED BY	LB
REVISED DATE	DESCRIPTION

SHEET TITLE & NUMBER
PLANS AND HOISTWAY SECTION ELEVATOR 1

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VT02

CHECKER: SJJ
DESIGNER: JB
DATE: 06/25/12