# ITD DIST. BLDG. IMPROVEME

### 8150 WEST CHINDEN BLVD

### ABBREVIATIONS

HVAC

MECH

MFT

MFR.

MIN.

MISC.

MT'D

N.I.C.

N.S.

NO.

O.A.

O.C.

O.D.

O.H.

O/H

OFF.

OPP.

P.LAM.

P.T.D.

OZ.

P/L

PART.

PLUMB.

PLYWD.

PRE-ENG.

PVMT.

QT.

R.D.

R.O.

RE:

REINF.

REQ'D.

RM.

S.C.

S.D.

S.F.

S.I.D.A.

S.N.D.

S.N.R.

S.S. SCHED.

SECT.

SHR. SHT.

SPECS.

SIM.

SQ.

STD.

STRUC.

SUSP.

SYM. T & G

T.B.

T.D.

T.O. T.O.C.

T.O.M.

T.O.P.

T.O.S.

T.O.W. T.P.D.

TEL. THK.

TYP.

U.B.C.

U.O.N. V.C.T.

V.I.F.

VENT.

VERT.

VEST.

W.

W.B

W.C.

W.G.

W.GL.

W.P.

W.R.

W/

W/O

W.W.F.

THRES.

S.C.D.

R.W.L.

PL.

OPNG.

O.T.S.

N.T.S.

NOM.

A.B. A.D.A.A.G. A.F.F. A.O.A. A/C ACOUST. ADJ. AGG. ALT. ALUM. APPROX ARCH. AUTO. AVE. B.O.C B.U. BD. BLDG. BLK. BM. BOT C.B. C.C. C.I. C.I.P. C.M.U. C.O. C.T. C.W. CAB. CEM. CFM CLG. CLR. CNTRSK COL CONC. CONT. CORR. CW/ D.B.A. D.F. D.S. D.S.P. DET DIA. DIAG. DIM. DN. DWC E.B. E.I.F.S. E.J. E.P. E.W.C. EA. ELEC ELEV. EQ. EQUIP. EXH. EXP. EXT. F.A. F.B. F.D. F.E. F.E.C F.H.C F.O. F.O.C. F.O.F. F.O.M. F.O.S. F.O.T. F.S. FDN. FIN. FLASH. FTG. FTW. FURR. G.B. GA. GALV. GYP H.A.S. H.A.S. H.B. H.C H.M. H.P.

CENTERLINE PERPENDICULAR SQUARE DIAMETER NUMBER EXISTING FUTURE NEW RENOVATE OR RELOCATED AIR CONDITIONING AMERICAN'S WITH DISABILITIES ACT ABOVE FINISH FLOOR AIRLINES OPERATION AREA AIR CONDITIONING ACOUSTICAL ADJUSTABLE AGGREGATE ALTERNATIVE ALUMINUM APPROXIMATE ARCHITECTURAL AUTOMATIC AVENUE BOTTOM OF BASE OF CURB BUILT-UP BOARD BUILDING BLOCK BEAM BOTTOM CATCH BASIN CENTER TO CENTER CAST IRON CAST IN PLACE CONCRETE MASONRY UNIT CONCRETE OPENING OR CLEAN-OUT CERAMIC TILE COLD WATER CABINET CEMENT CUBIC FEET/MINUTE CEILING CLEAR COUNTERSUNK COLUMN CONCRETE CONTINUOUS CORRIDOR COORDINATE WITH DEEP DEFORMED BAR ANCHOR DRINKING FOUNTAIN DOWNSPOUT DRY STANDPIPE DETAIL DIAMETER DIAGONAL DIMENSION DOWN DRAWING EXPANSION BOLT EXTERIOR INSULATION & FINISHING SYSTEM EXPANSION JOINT ELECTRICAL PANELBOARD ELECTRIC WATER COOLER EACH ELEVATION ELECTRICAL ELEVATOR EQUAL EQUIPMENT EXHAUST EXPANSION EXTERIOR FIRE ALARM FLAT BAR FLOOR DRAIN FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FIRE HOSE CABINET FACE OF FACE OF CURB/CONCRETE FACE OF FINISH FACE OF MASONRY FACE OF STUDS FACE OF TREAD FAR SIDE FOUNDATION FINISH FLOOR(ING) FLASHING FOOT OR FEET FOOTING FIRE TREATED WOOD FURRING GAS GRAB BAR GAUGE OR GAGE GALVANIZED GYPSUM HIGH HEADED ANCHOR STUD HEADED CONCRETE ANCHOR HOSE BIBB HANDICAPPED - A.D.A.A.G HOLLOW METAL HIGH POINT HOT WATER HORIZONTAL HOUR

HEIGHT HEATING VENTILATING AND AIR CONDITIONIN INSIDE DIAMETER INSULATION INTERIOR JANITOR JOINT KNOCKOUT KITCHEN LINEAL FEET OR FOOT LOW POINT LAMINATE LAVATORY POUNDS MACHINE BOLT MANHOLE MASONRY OPENING MAXIMUM MECHANICAL METAL MANUFACTURER MINIMUM MISCELLANEOUS MOUNTED NORTH NOT IN CONTRACT NEAR SIDE NOT TO SCALE NUMBER NOMINAL OVER ALL ON CENTER OUTSIDE DIAMETER OPPOSITE HAND OPEN TO STRUCTURE OVER OVERHEAD OFFICE OPENING OPPOSITE OUNCE PLASTIC LAMINATE PAPER TOWEL DISPENSER PROPERTY LINE PARTICLE PLATE PLUMBING PLYWOOD PRE-ENGINEERED POINT PAVEMENT QUARRY TILE RADIUS OR RISER ROOF DRAIN ROUGH OPENING RAIN WATER LEADER REFERENCE (CW/) REINFORCE(D) REQUIRED ROOM SOLID CORE SEAT COVER DISPENSER SOAP DISPENSER SQUARE FEET OR FOOT SECURITY IDENTIFICATION DISPLAY AREA SANITARY NAPKIN DISPENSER SANITARY NAPKIN RECEPTACLE STAINLESS STEEL SCHEDULE SECTION SHOWER SHEET SIMILAR OR SIMILAR TO SPECIFICATIONS SQUARE STREET OR STEEL STANDARD STRUCTURAL SUSPENDED SYMMETRICAL TONGUE & GROOVE TREAD TOWEL BAR TOP OF DRAIN TOP OF TOP OF CURB/CONCRETE TOP OF MASONRY TOP OF PARAPET TOP OF SLAB TOP OF WALL TOILET PAPER DISPENSER TELEPHONE THICKNESS THRESHOLD TYPICAL UNIFORM BUILDING CODE UNLESS OTHERWISE NOTED VINYL COMPOSITION TILE VERIFY IN FIELD VENTILATION VERTICAL VESTIBULE WIDE WALL BEYOND WATER CLOSET OR WALL COVERING WIRE GLASS WIRE GLASS WORK POINT WASTE RECEPTACLE WELDED WIRE FABRIC WITH WITHOUT WOOD

	GE
1. 2.	THE APPLICABLE BUILDING CODE IS THE <b>2018</b> INT THE DRAWINGS INDICATE LOCATION, DIMENSION NOT INDICATE EVERY CONDITION, WORK NOT PA
3. 4.	ARE DETAILED. DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE OVER
5. 6.	REPORTED TO ARCHITECT FOR RESOLUTION. DETAILED DRAWINGS AND LARGER SCALE DRAW CONCRETE AND BRICK DIMENSIONS ARE GIVEN TO OPENINGS
7. 8. 9.	PARTITION DIMENSIONS ARE GIVEN TO THE FACE DOOR OPENING LOCATIONS ARE DIMENSIONED T WHERE NO MATERIAL NOTES OCCUR, THE GRAP
10.	SYMBOL AND MATERIALS LIST ON THIS SHEET. THE U. S. ENVIRONMENTAL PROTECTION AGENC' THAT DISTURB 260 L.F. /160 SQ. FT. /35 CU. FT. OF
11. 12	ALL NEW CONSTRUCTION TO COMPLY WITH THE ICC/ANSI A117.1-2010 (2018 IBC SECTION 1101). PROVIDE LANDINGS AND FLOOR LEVELS AT DOO
13.	UNLESS OTHERWISE INDICATED ALL DRAWINGS, "BY OTHERS" SHALL INDICATE NEW WORK WHICH ALL MATERIALS SHALL BE INSTALLED IN ACCORD
15.	THE CONTRACTOR(S) SHALL KEEP ALL AREAS OF COMPLETE, THE GENERAL CONTRACTOR SHALL THE CONTRACTOR SHALL VERIEX ALL EXISTING (
17.	THE WORK. ANY DISCREPANCY SHALL BE BROUG PENETRATIONS THROUGH RATED ASSEMBLIES S
	PROVIDED AT ALL EXPOSED AREAS. PROVIDE CO PROJECT AT PENETRATIONS OF ONE-HOUR WAL INSPECTION USE BY THE FIRE AND STRUCTURAL
18. 19.	METHOD OF INSTALLATION TO PROVIDE THE REC THIS SPACE MAY NOT BE OCCUPIED UNTIL IT REC CONTRACTOR SHALL NOT CORE DRILL WITHOUT
20. 21.	THE CONTRACTOR IS RESPONSIBLE FOR ALL PER CONSTRUCTION DOCUMENTS. EXIT SIGNAGE SHALL BE EXTERNALLY OR INTERN
22. 23.	COMPLIANCE WITH <b>2018 IBC SECTION 1013</b> . PROVIDE BLOCKING AS REQUIRED FOR ALL AREA ALL EXITS SHALL BE OPENABLE FROM THE INSIDE
24.	IBC, SECTION 1010.1.9. EXIT WAYS SHALL BE ILLUMINATED. THE POWER PREMISES' WIRING SYSTEM, 2018 IBC SECTION 10
25. 26.	COORDINATE MECHANICAL AND ELECTRICAL REC WHERE NEW CONSTRUCTION JOINS WITH EXISTI EXISTING CONSTRUCTION
27. 28	PROVIDE COPY OF FIRE-RESISTANCE RATING AS TESTING/LISTING COMPLIANCE AND TO INSPECT
29.	FIRE SPRINKLER AND ALARM MODIFICATIONS RE WORK. ALL LIFE-SAFETY FEATURES SHALL BE AP
30.	ALL CONSTRUCTION ADDENDA, CHANGE ORDER MUST BE SUBMITTED TO THE FIELD INSPECTOR F PROPOSED WORK RELATED TO THE PROPOSED
31. 32.	636. ALL INSULATION MATERIALS SHALL COMPLY WITH
33.	HANDLES, PULLS, LATCHES, LOCKS, AND OTHER TO GRASP WITH ONE HAND AND DOES NOT REQU SUCH HARDWARE SHALL BE AT 34" MINIMUM AND
34. 35.	COMBUSTIBLE MATERIALS SHALL NOT BE USED IN SECTION 717.5 IS PROVIDED TO THE STRUCTURA DECORATIVE MATERIALS AND TRIM SHALL BE RE
	CRITERIA OF NFPA 701, IN ACCORDANCE WITH 20 FOR DECORATIVE MATERIALS AND TRIM, INDICAT AVAILABLE AT PROJECT SITE.
36.	CONTRACTOR SHALL HAVE AVAILABLE AT THE JC FINISH MATERIALS AT CONSTRUCTION SITE FOR 2018 IBC SECTION 803 AND TABLE 803 13
37.	ACCESS TO MECHANICAL APPLIANCES INSTALLE STRUCTURES SHALL BE IN ACCORDANCE WITH T
39.	THAT CONTROLS, OPERATING MECHANISMS AND HARL THAT CONTROL LIGHTING AND ACCESSIBLE. VENTILATION AND EXHAUST SYSTEMS SHALL BE INTERNATIONAL FIRE CODE.
Plan Thes found verifi	Review Note e plans have been reviewed for code compliance bas d, to be, substantially code compliant, all other code c cations, and approvals by the field building inspector.
See l are p Idaho	Plan Review notes: The plan review notes shall alway part of the plans and shall be a permanent record with o Division of Occupational and Professional Licenses
Cons Cons Requ durin All ap cons	struction Safeguards struction safeguards shall be required for any and all our uired exits, existing structural elements, fire protection g alterations, repairs or additions to any building or st oplicable construction safeguards from chapter 31 and truction activities are being undertaken.

H.W.

HR

HORIZ

	C	ОNT	AC	T INFORMAT	ION		Sľ	TEI
3 STR ENT GARDEN CITY, ID	HITECTURI CSHQA 200 BR( BOISE, (208) 34 FAX (2 CONTA EMAIL: www.cs UCTURAL AXIOM 121 N. § BOISE I (208)-63 CONTA EMAIL: www.ax CTRICAL MUSGF 234 S V BOISE, (208) 38 FAX (2) CONTA EMAIL: https://n	E OAD ST. IDAHO 83 43-4635 208) 343-18 ACT: JAME james.mar hqa.com 9TH ST. #4 ID 83702 39-4520 ACT: JAREI jbrandau@ ciompilc.co ROVE ENG VHISPERV ID 83709 34-0585 08) 384-07 ACT: KURT kurtl@mus nusgrovepa	702 358 S A. MA sh@CS i01, D BRAN axiomp m GINEERI VOOD V 765 LECHT sgrovepa a.com/	OWNER IDAHO TRANS 11331 WEST O BOISE, IDAHO (208) 334-8600 FAX (208) 334- RSH, AIA CONTACT: TO HQA.com EMAIL: tony.pir itd.idaho.gov MECHANICAL MUSGROVE E 234 S WHISPE BOISE, ID 837 (208) 384-0585 IDAU, PE, SE IC.com CONTACT: TO EMAIL: toddn@ https://musgrov	PORTATION DE CHINDEN BLVD. 9 83714 9 -3858 NY PIRC rc@itd.idaho.gov ENGINEERING, I RWOOD WAY, 09 5 -0765 DD NELSON musgrovepa.co repa.com	EPT.	ST Verset	
ENERAL NOTES				MAT	FERIA	LS & SY	́МВ(	DLS
ERNATIONAL BUILDING CODE ( <b>2018 IBC</b> ). IS, REFERENCE, AND TYPICAL DETAILS OF CONSTRUCTION. THE DRAWINGS DO	0			EARTH		Â	WINDOW	V TYPE, F
		5	<u> </u>	POROUS FILL - GRAVEL		(101)	DOOR N	UMBER, I
/INGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS. TO THE FACE OF CONCRETE OR MASONRY AND TO THE FACE OF ROUGH		\ - y = - k (\	- 7 - , 7 x x - x - x - x y - 2 - x - x - x - x - x - x - x - x - x - x	SAND FILL		A-1	MATERIA	AL FINISH
E OF STUD UNLESS OTHERWISE NOTED. FO ROUGH OPENING OR CENTERLINE OF OPENING.			4.4	CONCRETE			- RELATEI - RELATEI	D SPECIF D SPECIF
HIC MATERIAL INDICATION SHALL INDICATE MATERIAL TYPES AND ITEMS. SEE Y MUST BE NOTIFIED 10 WORKING DAYS IN ADVANCE FOR ALL RENOVATIONS	•			CONCRETE MASONRY		(## ##-##)	SHEET N ON CUR	JOTE, RE RENT PA
ASBESTOS CONTAINING MATERIALS. AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (A.D.A.A.G.),						W01	WALL TY	(PE. RE: /
RS THAT COMPLY WITH THE <b>2018 IBC SECTION 1003.5/1010.1.6/1010.1.7</b> . NOTES WHICH DO NOT READ "N.I.C.", "EXISTING", OR "EXISTING TO REMAIN", C H SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED.	)R			SINGLE GLAZING		T.O.W. XXX'-XX"	FOR WA	LL TYPES ? OF WAL
ANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATION F CONSTRUCTION CLEAN AND FREE OF DEBRIS. AFTER CONSTRUCTION IS PROVIDE FINAL CLEAN UP.	5.			INSULATED GLAZING			ACCESS	ORY/FIXT
CONDITIONS AND DIMENSIONS FOR ACCURACT PRIOR TO COMMENCING WITH GHT TO THE ATTENTION OF THE ARCHITECT. GHALL BE FIRE STOPPED IN ACCORDANCE WITH <b>2018 IBC SECTION 714.4.1 AND</b> PROPRIATE FOR THE WORK BEING PERFORMED PAINTABLE SEALANT SHALL F	3F			METAL, (LARGE SCALE DRAWING	G)		REVISIO BLOCK (	n key re Df curri
DPIES OF THE SPECIFIC FIRE-STOP SYSTEMS PROPOSED FOR USE IN THIS LS OR TWO-HOUR SHAFTS AND FLOOR ASSEMBLIES, FOR APPROVAL AND INSPECTORS, ASSEMBLIES SHALL SHOW ALL REQUIRED COMPONENTS AND				METAL, (SMALL SCALE DRAWING	G)		PROPER	TY LINE
QUIRED FIRE-STOP RATINGS AS SYSTEM BEING PENETRATED. CEIVES A CERTIFICATE OF OCCUPANCY AND FIRE DEPARTMENT APPROVAL. VERIFYING LOCATION OF CONCRETE REINFORCING.			$\leq$	FRAMING LUMBER			SWALE/F	ELOW LIN
RMITS AND FEES NECESSARY TO EXECUTE THE INTENT OF THESE NALLY ILLUMINATED BY THE PREMISES' WIRING, STORAGE BATTERIES AND, BE	IN			PLYWOOD			TRENCH	I DRAIN
AS TO RECEIVE MILLWORK AND WALL-ATTACHED ITEMS AS SHOWN IN PLANS. E WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. <b>201</b>	8			PARTICLE BOARD			AREA DF	RAIN / CA
SUPPLY FOR EXIT ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE 008.				FINISH LUMBER		—_z—	FLUSH S	SURFACE
QUIREMENTS, ROUTING, AND FIELD VERIFICATION. NG CONSTRUCTION, ALIGN FINISHED SURFACE OF NEW CONSTRUCTION WITH	4						BUILDIN	g grid li
ASSEMBLY CONSTRUCTION THEREWITH. DWNER. OUTRE SEPARATE APPLICATION AND PLAN SUBMITTALS PRIOR TO PERFORMIN				GYPSUM BOARD			STRUCT	URE CEN
PROVED BY THE FIRE AND STRUCTURAL INSPECTORS PRIOR TO OCCUPANCY S, OR DESIGN CLARIFICATIONS TO THOSE ITEMS REGULATED BY THE CODES FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WITH ANY OF THE				ACOUSTIC TILE/PANEL		118'-0"	FI FVATI	
FIELD CHANGE. ) IN ACCORDANCE WITH <b>2018 IBC SECTION 808.1.1.1</b> AND ASTM C 635 AND AST	мс			BATT INSULATION		<b>•</b>		
H <b>2018 IBC SECTION 720</b> . OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EAS JIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE.	3Y			SEMI-RIGID INSULATION			DRAWIN	GMATCH
0 48" MAXIMUM ABOVE THE FLOOR OR GROUND. <b>2018 IBC SECTION 1010.1.9</b> . N CONCEALED SPACES UNLESS EVIDENCE OF COMPLIANCE WITH <b>2018</b> IBC LL INSPECTOR FOR REVIEW AND APPROVAL.	_			RIGID INSULATION		A61		BUILDI (SEE D
ISTRICTED BY COMBUSTIBILITY AND THE FLAME PROPAGATION PERFORMANC 18 IBC SECTION 806. CONTRACTOR SHALL HAVE CERTIFICATE OF COMPLIANC ING COMPLIANCE WITH THIS CODE SECTION AS APPLICABLE TO THIS PROJEC	Е Е Л						AOT	
DB SITE EVIDENCE OF CODE COMPLIANCE OF RATING OF WALL AND CEILING REVIEW BY FIRE AND STRUCTURAL FIELD INSPECTORS IN ACCORDANCE WITH	4					$\frac{1}{\sqrt{63}}$ —		WALL S (SEE D\
D IN UNDER-FLOOR AREAS, IN ATTIC SPACES AND ON ROOFS OR ELEVATED THE INTERNATIONAL MECHANICAL CODE. DWARE INTENDED FOR OPERATION BY THE OCCUPANT INCLUDING SWITCHES	3			ASPHALT PAVING				
PROVIDED AS REQUIRED BY THE INTERNATIONAL MECHANICAL CODE AND TH	E				 		AXX- X	DETAIL (SEE D\
sed on the submitted documents and plan sheets, and have been						 AX.XX-X	1	DETAIL
compliance requirements shall be completed through field inspections,							INTERIOR	
the plans. Inspection shall not take place without a complete set of the (IDOPL) plan review notes and approved, stamped plans on site.						$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array}$	SEE DWG	. #1 @ SH
demolition and or construction to ensure public safety. I devices and sanitary safeguards shall be maintained at all times						Room name	ROOM NA ROOM NU	.ME JMBER
tructure. d 33 shall be in place and maintained while any demolition or					NUMBER OF OCCUPANTS	X *	ACCESSO AREA OF	RY USE
					FACTOR	100 SF		

### LOCATION



RE: A82 WINDOW TYPES

- RE: A82 DOOR SCHEDULE
- I, RE: A81 & I81 FINISH SCHEDULE

FICATION DIVISION FICATION SECTION E: SHEET NOTES LIST AGE

A21 ES WITH VARIABLE HEIGHT, LL ELEVATION

TURE TYPE, RE: A42

E: REVISED BOX IN TITLE ENT PAGE

NE

ATCH BASIN

E MEETING

INE

NTERLINE

H LINE

ING SECTION MARK REF. DWG. #1 @ SHT. A61)

SECTION MARK REF. WG. #1 @ SHT. A63)

REFERENCE WG. #1 @ SHT. A71)

SECTION MARK

TIONS HT. 151, 152, 153

### **DRAWING INDEX**

GENERAL G00 TITLE SHEET

DEMO - ARCHITECTURAL AS21 DEMO PLAN ARCHITECTURE LEVEL 1 AS22 DEMO PLAN ARCHITECTURE LEVEL 2

- ARCHITECTURAL A10 OVERALL PLANS
- A51 EXTERIOR ELEVATIONS A71 STAIR & CANOPY
- A72 ELEVATOR DETAILS A79 STAIR DETAILS
- A82 DOOR & WINDOW SCHEDULES
- STRUCTURAL S0.01 STRUCTURAL COVER SHEET S0.02 GENERAL NOTES S0.03 GENERAL NOTES
- S0.04 GENERAL NOTES S0.05 GENERAL NOTES
- S1.01 FOUNDATION PLAN S1.02 LEVEL 2 FRAMING PLAN
- S1.03 ROOF FRAMING PLAN S1.04 SECTIONS
- S1.04 SECTIONS S1.05 CONCRETE DETAILS
- S1.06ROOF DETAILSS1.07ROOF DETAILSS1.08ROOF DETAILS

S1.09 STEEL DETAILS

MECHANICAL

- MECHANICAL M00.1 MECHANICAL COVER SHEET M11.1 HVAC FIRST FLOOR PLAN M12.1 HVAC NEW FLOOR AND ROOF PLANS
- M20.1 HVAC DETAILS AND SCHEDULES

ELECTRICAL

- E00.1 ELECTRICAL COVERSHEET E01.1 LIGHTING COMPLIANCE
- E10.1 ELECTRICAL OVERALL PLAN E21.1 ELECTRICAL DEMO FLOOR PLANS
- E31.1 ELECTRICAL FLOOR PLANS E80.1 ELECTRICAL DETAILS AND SCHEDULES

### PROJECT DESCRIPTION

SCOPE OF WORK INCLUDES BUILDING IMPROVEMENTS AND NEW ELEVATOR SHAFT AT THE EXISTING SHOP BUILDING ON THE DISTRICT 3 CAMPUS. THE PURPOSE IS TO PREPARE THE BUILDING TO HAVE ACCESS TO THE SECOND FLOOR FOR POSSIBLE TENANT IMPROVEMENTS IN THE FUTURE.

THE WORK INCLUDES:

•

•

- RELOCATION OF AN EXISTING STAIRWAY
   NEW EXTERIOR DOOR AND LANDING INFILL TO
- ACCOMMODATE RELOCATED STAIRWAY
   NEW STAIRWAY AT BUILDING ENTRY
- NEW CANOPY AT BUILDING ENTRY
- REPLACE EXISTING CONVEYING SYSTEM WITH NEW ELEVATOR. THIS INCLUDES DEMOLITION OF EXISTING SLAB AND ROOF TO ACCOMMODATE ELEVATOR SHAFT REQUIREMENTS PER MFG.
- NEW DOOR AT EXITING FIRST LEVEL LOBBY
- PRIOR TO OCCUPANCY, A FIRE SPRINKLER SYSTEM WILL BE INSTALLED.

### CODE DATA

CODE REFERENCES ARE THOSE CURRENTLY ADOPTED BY CITY OF BOISE. 2018 INTERNATIONAL BUILDING CODE (IBC) 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2017 UNIFORM PLUMBING CODE (UPC) 2018 INTERNATIONAL MECHANICAL CODE (IMC) 2018 INTERNATIONAL FUEL GAS CODE (IFGC) 2018 INTÉRNATIONAL EXISTING BUILDING CODE (IEBC) 2018 IEBC COMPLIANCE PATH: OPTION 2: WORK FOR ALTERATION, CHANGE OF OCCUPANCY OR ADDITION OF ALL EXISTING BUILDINGS SHALL BE DONE IN ACCORDANCE WITH THE WORK AREA COMPLIANCE METHOD GIVEN IN CHAPTERS 6 THROUGH 12.  $\sim$ PROJECT ADDRESS: 8150 WEST CHINDEN BOULEVARD VEHICLE MAINTENANCE AND BUILDING USE: REPAIR (NO CHANGE) CONSTRUCTION TYPE: III- B (NO CHANGE) OCCUPANCY GROUP: F1 (EXISTING) NUMBER OF STORIES: 2 (NO CHANGE) BUILDING AREA:

34.165 SF (NO CHANGE) NO (FUTURE WITH TENANT IMPROVEMENT)

110 (NO CHANGE) /1

FIRE SPRINKLER:

OCCUPANCY LOADING:

mm

AMES MARSH, ARCHITECT	BROAD STREET     ARCHITECT     ORIGINAL DOCUMENT SIGNED BY     AR-984113     ARCHITECT ON FILE WITH THE     AR-984113     ARCHITECT ON FILE WITH THE     OWNER     OWNER     OWNER     OWNER     OWNER     AMARCH     A	SE DRAWINGS AND SPECIFICATIONS, AS IRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PERTY OF THE ARCHITECT / ENGINEER WHETHER I PROJECT FOR WHICH THEY ARE MADE IS EXECUTED NOT: THESE DRAWINGS AND SPECIFICATIONS SHALL DE USED BY ANY PERSON OR ENTITY ON OTHER DIECTS, FOR ADDITIONS TO THIS PROJECT, OR WRETTON OF THIS PROJECT. WE WRITTEN CONSENT OF CSHQA OR ITS AFFILIATES. WRITTEN CONSENT OF CSHQA OR ITS AFFILIATES.
	GARDEN CITY, ID	200 BROAD STREET BOISE, ID 83702 00 (208) 343-4635 • FAX (208) 343-1858 http://www.cshqa.com
	8150 WEST CHINDEN BLVD	<b>Aghes</b>
IN	BUIL IPRO\ PEF SI	.DING /EMENT RMIT ET
PRO 23 DR/ SS REV 1 E	DJECT 6002 AWN S /ISED _BACK CHECł	DATE 10-30-23 CHECKED LB
SHE SHE		SHEET

24" x 36"









See Plan Review notes: The plan review notes shall always be attached to the stamped approved plans and documents. These are part of the plans and shall be a permanent record with the plans. Inspection shall not take place without a complete set of the Idaho Division of Occupational and Professional Licenses (IDOPL) plan review notes and approved, stamped plans on site.



### LEGEND:

SCREENED LINES INDICATE EXISTING ASSEMBLIES/SYSTEMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION.

 $\equiv$   $\equiv$   $\equiv$   $\equiv$  INDICATES ASSEMBLIES/SYSTEMS TO BE DEMOLISHED

00 00-01

SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE

### **GENERAL NOTES:**

- PROTECT IN PLACE ALL EXISTING ELEMENTS TO REMAIN. PATCH AND Α. REPAIR ALL ITEMS TO MEET NEW CONSTRUCTION. COORDINATE WITH OWNER ITEMS TO BE SALVAGED AND STORAGE В. LOCATIONS. ALL DEMOLISHED MATERIALS ARE TO BE REMOVED FROM THE SITE BY C. THE CONTRACTOR, UNLESS NOTED OTHERWISE OR DIRECTED BY THE OWNER OR ARCHITECT. TYPE AND LOCATION OF EXISTING UTILITIES IS BASED ON BEST AVAILABLE D. INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND LOCATE ALL EXISTING CONDITIONS PRIOR TO DEMOLITION. COORDINATE WITH OWNER FOR SCHEDULING OF DISCONNECTION OF SERVICES. THIS PLAN SHOWS GENERAL DEMOLITION WORK TO BE PERFORMED AND E. DOES NOT RELIEVE THE CONTRACTOR FROM OTHER DEMOLITION WORK REQUIRED TO PRODUCE THE BUILDING MODIFICATIONS SHOWN ON THE REMAINING CONTRACT DOCUMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE F. LOCALLY ADOPTED CODES. PROVIDE A TEMPORARY DUST PARTITION TO PREVENT DUST AND DEBRIS G. FROM SETTLING ON ADJACENT AREAS NOT UNDER CONSTRUCTION AND AS DIRECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE. DESIGN IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR Н. SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS IT RELATES TO THE SCOPE OF WORK SHOWN ON THESE PLANS. ADJACENT EXISTING SHOP AND OFFICE AREAS ARE TO REMAIN OPEN. COORDINATE ALL DISRUPTIONS WITH UTILITY SERVICES WITH ITD3 DAYS PRIOR TO SCHEDULED DISRUPTION. DEMOLITION CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY TO COMPLETE HIS WORK. IN ADDITION, DEMOLITION CONTRACTOR SHALL OBTAIN ALL CERTIFICATES OF SEVERANCE OF ALL UTILITY SERVICES AS PART OF HIS WORK, AND SHALL SUBMIT TO THE ARCHITECT AND OWNER HIS DEMOLITION PROCEDURES AND OPERATIONAL SEQUENCE FOR APPROVAL. FOR ELECTRICAL, MECHANICAL, AND PLUMBING ATTACHED TO FIXTURES K. THAT ARE TO BE DEMOLISHED, DETACH AND CAP TO COMPLY WITH UTILITY PROVIDER AND APPLICABLE CODE. MAINTAIN ALL EGRESS COMPONENTS FOR EXISTING TENANTS AND PROVIDE REQUIRED ACCESSIBLE PATH TO THE PUBLIC RIGHT OF WAY.
- M. CONTRACTOR SHALL PREVENT EROSION AND SEDIMENTATION DUE TO STORMWATER, LEAVING THE SITE PRECAUTIONS SHALL CONFORM TO THE CITY OF BOISE'S BEST MANAGEMENT PRACTICES, (BMPS). EXISTING DRAIN INLETS SHALL BE PROTECTED FROM DAMAGE, DEBRIS AND SEDIMENT DURING CONSTRUCTION.
- N. PROVIDE OVERHEAD DEMO PROTECTION, FOR RIGHT OF WAY PEDESTRIANS.

(## ##-##)

### SHEET NOTES:

02 41-01	REMOVE EXISTING PORTION OF SLAB FOR NEW ELEVATOR, SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION	
02 41-03	EXISTING BUILDING EXTERIOR WALL, FLOOR ASSEMBLY AND OPENINGS TO REMAIN, TYP.	
02 41-04	REMOVE EXISTING STAIR FOR RELOCATION PER FLOOR PLAN, SEE SHEET A10	
02 41-05	REMOVE EXISTING ELEVATOR AND ELEVATOR SUPPORTS TO CLEAR SHAFT OPENING	
02 41-17	REMOVE PORTION OF EXISTING WALL TO ACCOMMODATE NEW DOOR	
02 41-18	REMOVE EXISTING OVERHEAD DOOR	
02 42 10	REMOVE EXISTING DOORS AND FRAME	

	NT SIGNED BY .E WITH THE ?	NED BY: ARSH	SIGNED:	2024		
	ORIGINAL DOCUMEN ARCHITECT ON FIL OWNER	ORIGINAL SIGN JAMES A M/	ORIGINAL DATE	MARCH 27,		
LICENSED	ARCHITECT AR-984113	2 2	5	JAMES A MARSH	MARCH 27, 2024	
		28	IAIN THE THER	S SHALL		
ARCHITECT		5 • FAX: 208-343-18	SPECIFICATIONS, AS CE, ARE AND SHALL REM HITECT / ENGINEER WHE	H THEY ARE MADE IS EX GS AND SPECIFICATIONS RSON OR ENTITY ON OT	NS TO THIS PROJECT, O COJECT-WHEN PHASED-1 OF CSHQA OR ITS AFFIL	
JAMES MARSH,	200 BROAD STREET BOISE, IDAHO	PHONE: 208-343-463	THESE DRAWINGS AND : INSTRUMENTS OF SERVI PROPERTY OF THE ARCI	THE PROJECT FOR WHIC OR NOT. THESE DRAWIN NOT BE USED BY ANY PE	PROJECTS, FOR ADDITIC COMPLETION OF THIS PF THE WRITTEN CONSENT	
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Division part BLD PA# BLD PA# BLD Date: 04/K Date: 04/K

# Α (02 41-06)-1 2 3 **4** 5 6

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### LEGEND:

SCREENED LINES INDICATE EXISTING ASSEMBLIES/SYSTEMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION.

 $\equiv$   $\equiv$   $\equiv$   $\equiv$  INDICATES ASSEMBLIES/SYSTEMS TO BE DEMOLISHED

(00 00-01)

SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE

### GENERAL NOTES: PROTECT IN PLACE ALL EXISTING ELEMENTS TO REMAIN. PATCH AND Α. REPAIR ALL ITEMS TO MEET NEW CONSTRUCTION. COORDINATE WITH OWNER ITEMS TO BE SALVAGED AND STORAGE В. LOCATIONS. ALL DEMOLISHED MATERIALS ARE TO BE REMOVED FROM THE SITE BY C. THE CONTRACTOR, UNLESS NOTED OTHERWISE OR DIRECTED BY THE OWNER OR ARCHITECT. TYPE AND LOCATION OF EXISTING UTILITIES IS BASED ON BEST AVAILABLE D. INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND LOCATE ALL EXISTING CONDITIONS PRIOR TO DEMOLITION. COORDINATE WITH OWNER FOR SCHEDULING OF DISCONNECTION OF SERVICES. THIS PLAN SHOWS GENERAL DEMOLITION WORK TO BE PERFORMED AND E. DOES NOT RELIEVE THE CONTRACTOR FROM OTHER DEMOLITION WORK REQUIRED TO PRODUCE THE BUILDING MODIFICATIONS SHOWN ON THE REMAINING CONTRACT DOCUMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE F. LOCALLY ADOPTED CODES. G. PROVIDE A TEMPORARY DUST PARTITION TO PREVENT DUST AND DEBRIS FROM SETTLING ON ADJACENT AREAS NOT UNDER CONSTRUCTION AND AS DIRECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE. DESIGN IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR Η. SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS IT RELATES TO THE SCOPE OF WORK SHOWN ON THESE PLANS. ADJACENT EXISTING SHOP AND OFFICE AREAS ARE TO REMAIN OPEN. COORDINATE ALL DISRUPTIONS WITH UTILITY SERVICES WITH ITD3 DAYS PRIOR TO SCHEDULED DISRUPTION. DEMOLITION CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY TO COMPLETE HIS WORK. IN ADDITION, DEMOLITION CONTRACTOR SHALL OBTAIN ALL CERTIFICATES OF SEVERANCE OF ALL UTILITY SERVICES AS PART OF HIS WORK, AND SHALL SUBMIT TO THE ARCHITECT AND OWNER HIS DEMOLITION PROCEDURES AND OPERATIONAL SEQUENCE FOR APPROVAL. FOR ELECTRICAL, MECHANICAL, AND PLUMBING ATTACHED TO FIXTURES K. THAT ARE TO BE DEMOLISHED, DETACH AND CAP TO COMPLY WITH UTILITY PROVIDER AND APPLICABLE CODE. MAINTAIN ALL EGRESS COMPONENTS FOR EXISTING TENANTS AND PROVIDE REQUIRED ACCESSIBLE PATH TO THE PUBLIC RIGHT OF WAY. CONTRACTOR SHALL PREVENT EROSION AND SEDIMENTATION DUE TO М. STORMWATER, LEAVING THE SITE PRECAUTIONS SHALL CONFORM TO THE CITY OF BOISE'S BEST MANAGEMENT PRACTICES, (BMPS). EXISTING DRAIN INLETS SHALL BE PROTECTED FROM DAMAGE, DEBRIS AND SEDIMENT DURING CONSTRUCTION.

PROVIDE OVERHEAD DEMO PROTECTION, FOR RIGHT OF WAY N. PEDESTRIANS.

(## ##-##

### SHEET NOTES:

02 41-04 REMOVE EXISTING STAIR FOR RELOCATION PER FLOOR PLAN, SEE SHEET A10 02 41-05 REMOVE EXISTING ELEVATOR AND ELEVATOR SUPPORTS TO CLEAR SHAFT OPENING 02 41-06 REMOVE EXISTING WINDOW AND SAW-CUT OPENING IN WALL FOR NEW DOOR 02 41-08 REMOVE EXISTING AWNING, PATCH EXTERIOR WALL TO MATCH EXISTING PAINT AS NEEDED 02 41-14 REMOVE EXISTING DOOR FOR RELOCATION PER FLOOR PLAN, SEE SHEET A10

LICENSED	ARCHITECT ORIGINAL DOCUMENT SIGNED BY AR-984113 ARCHITECT ON FILE WITH THE OWNER ORIGINAL SIGNED BY: JAMFS A MARSH	Mach ORIGINAL DATE SIGNED: S A MARSH E OF IDAHO H 27, 2024
ES MARSH, ARCHITECT	OAD STREET IDAHO :: 208-343-4635 • FAX: 208-343-1858	RAWINGS AND SPECIFICATIONS, AS TO FTHE ARCHITECT / ENGINEER WHETHER TY OF THE ARCHITECT / ENGINEER WHETHER UECT FOR WHICH THEY ARE MADE IS EXECUTED THESE DRAWINGS AND SPECIFICATIONS SHALL SEED BY ANY PERSON OR ENTITY ON OTHER USED BY ANY PERSON OR ENTITY ON OTHER USED BY ANY PERSON OR ENTITY ON OTHER USED BY ANY PERSON OR ENTITY ON OTHER THEN CONSENT OF CSHQA OR ITS AFFILIATES. © 2022
	GARDEN CITY, ID PHONE	200 BROAD STREET BOISE, ID 83702 REPROPER BOISE, ID 83702 REPRO ORNOT Nttp://www.cshqa.com The WIE Proves Prepris Proves Prepris Prep
	8150 WEST CHINDEN BLVD	<b>VOR</b>
	BUIL IPRO\ PEF SI	DING /EMENT RMIT ET
PRC 23 DRA SS REV 1 E	DJECT 002 WN S /ISED BACK CHECK	DA FE 10-30-23 CHECKED LB
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### LEGEND:

SCREENED LINES INDICATE EXISTING ASSEMBLIES/SYSTEMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION.

= = = = INDICATES ASSEMBLIES/SYSTEMS TO BE DEMOLISHED

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SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE

### GENERAL NOTES: PROTECT IN PLACE ALL EXISTING ELEMENTS TO REMAIN. PATCH AND Α. REPAIR ALL ITEMS TO MEET NEW CONSTRUCTION. COORDINATE WITH OWNER ITEMS TO BE SALVAGED AND STORAGE В. LOCATIONS. ALL DEMOLISHED MATERIALS ARE TO BE REMOVED FROM THE SITE BY C. THE CONTRACTOR, UNLESS NOTED OTHERWISE OR DIRECTED BY THE OWNER OR ARCHITECT. TYPE AND LOCATION OF EXISTING UTILITIES IS BASED ON BEST AVAILABLE D. INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND LOCATE ALL EXISTING CONDITIONS PRIOR TO DEMOLITION. COORDINATE WITH OWNER FOR SCHEDULING OF DISCONNECTION OF SERVICES. THIS PLAN SHOWS GENERAL DEMOLITION WORK TO BE PERFORMED AND DOES NOT RELIEVE THE CONTRACTOR FROM OTHER DEMOLITION WORK E. REQUIRED TO PRODUCE THE BUILDING MODIFICATIONS SHOWN ON THE REMAINING CONTRACT DOCUMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE F. LOCALLY ADOPTED CODES. PROVIDE A TEMPORARY DUST PARTITION TO PREVENT DUST AND DEBRIS G. FROM SETTLING ON ADJACENT AREAS NOT UNDER CONSTRUCTION AND AS DIRECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE. DESIGN IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR Η. SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS IT RELATES TO THE SCOPE OF WORK SHOWN ON THESE PLANS. ADJACENT EXISTING SHOP AND OFFICE AREAS ARE TO REMAIN OPEN. COORDINATE ALL DISRUPTIONS WITH UTILITY SERVICES WITH ITD3 DAYS PRIOR TO SCHEDULED DISRUPTION. DEMOLITION CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY TO J. COMPLETE HIS WORK. IN ADDITION, DEMOLITION CONTRACTOR SHALL OBTAIN ALL CERTIFICATES OF SEVERANCE OF ALL UTILITY SERVICES AS PART OF HIS WORK, AND SHALL SUBMIT TO THE ARCHITECT AND OWNER HIS DEMOLITION PROCEDURES AND OPERATIONAL SEQUENCE FOR APPROVAL. FOR ELECTRICAL, MECHANICAL, AND PLUMBING ATTACHED TO FIXTURES K. THAT ARE TO BE DEMOLISHED, DETACH AND CAP TO COMPLY WITH UTILITY PROVIDER AND APPLICABLE CODE. MAINTAIN ALL EGRESS COMPONENTS FOR EXISTING TENANTS AND PROVIDE REQUIRED ACCESSIBLE PATH TO THE PUBLIC RIGHT OF WAY. CONTRACTOR SHALL PREVENT EROSION AND SEDIMENTATION DUE TO M. STORMWATER, LEAVING THE SITE PRECAUTIONS SHALL CONFORM TO THE CITY OF BOISE'S BEST MANAGEMENT PRACTICES, (BMPS). EXISTING DRAIN INLETS SHALL BE PROTECTED FROM DAMAGE, DEBRIS AND SEDIMENT DURING CONSTRUCTION. PROVIDE OVERHEAD DEMO PROTECTION, FOR RIGHT OF WAY N. PEDESTRIANS.

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SHEET NOTES:

LICENSED ARCHITECT ORIGINAL DOCUMENT SIGNED BY AR-384113 ARCHITECT ON FILE WITH THE OWNER	CRIGINAL SIGNED BY: JAMES A MARSH	Manuel March 27, 2024 JAMES A MARSH STATE OF IDAHO MARCH 27, 2024
JAMES MARSH, ARCHITECT 200 BROAD STREET BOISE. IDAHO	Y, ID PHONE: 208-343-4635 • FAX: 208-343-1858	<ul> <li>D STREET INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT. OR CShqa.COM</li> <li>343-1858 Copyright © 2022</li> </ul>
IMPROVEME.	VD GARDEN CIT	200 BROA BOISE BOISE • FAX (208 http://www.
ITD DIST. 3 BLDG	8150 WEST CHINDEN BLV	<b>SHQA</b>
BL IMPR P	JIL O\ PER SI	DING /EMENT RMIT ET
PROJECT 23002 DRAWN SS REVISED 1 E_BACK 0	CHECK	DATE 10-30-23 CHECKED LB
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		SHEET SIZE





### LEGEND:

SCREENED LINES INDICATE EXISTING ASSEMBLIES/SYSTEMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. INDICATES ASSEMBLIES/SYSTEMS TO BE CONSTRUCTED

(101)

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Α. В.

EXISTING CONSTRUCTION. NO WORK SCHEDULED. FOR REFERENCE ONLY.

DOOR NUMBER, RE: A82 DOOR SCHEDULE

### GENERAL NOTES:

FINISH FLOOR ELEVATION (100.00) IS FOR REFERENCE ONLY. GC TO VERIFY ALL AS-BUILT DIMENSION ON SITE THE HINGE SIDE OF ALL DOOR FRAMES SHALL BE MOUNTED 4" FROM ADJACENT PERPENDICULAR WALL UNLESS NOTED OTHERWISE. C.

ITD DIST. 3 BLDG. IMPROVEMENT       JAMES MARSH, ARCHITECT         8150 WEST CHINDEN BLVD       GARDEN CITY, ID         8150 WEST CHINDEN BLVD       GOBROAD STREE         8150 WEST CHINDEN BLVD       GOBROAD STREE         8100 Kenter       GOBROAD STREE         8100 Kenter       GOBROAD STREE         8100 Kenter       GOBROAD STREE         8100 Kenter	LICENSED ARCHITECT ORIGINAL DOCUMENT SIGNED AR-984113 ARCHITECT ON FILE WITH TH	OWNER ORIGINAL SIGNED BY: JAMES A MARSH	March 27, 2024 March 27, 2024 March 27, 2024
ITD DIST. 3 BLDG. IMPROVEMEN8150 WEST CHINDEN BLVDGARDEN CITY,200 BROAD ST200 BROAD STB018E, ID8018E, IDCSSHQQ343-4635http://www.cshqs1208) 343-4635	JAMES MARSH, ARCHITECT 200 BROAD STREET	BOISE, IDAHO PHONE: 208-343-4635 • FAX: 208-343-1858	REET       THESE DRAWINGS AND SPECIFICATIONS, AS         INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT / ENGINEER WHETHER         33702       THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR ON THE COMPLETION OF THIS PROJECT. WHEN PHASED-WITHOUT THE WRITTEN CONSENT OF CSHQA OR ITS AFFILIATES.
ITD DIST. 3 BLDG. IN 8150 WEST CHINDEN BLVD <b>CSHQA</b>	<b>IPROVEMEN</b>	<b>GARDEN CITY</b> ,	200 BROAD ST BOISE, ID { (208) 343-4635 • FAX (208) 343 http://www.cshq
	ITD DIST. 3 BLDG. IN	<b>8150 WEST CHINDEN BLVD</b>	<b>Aghod</b>
	PROJEC 23002 DRAWN SS REVISEI 1 E_BACH	CHECK	DATE 10-30-23 CHECKED LB
PROJECTDATE2300210-30-23DRAWNCHECKEDSSLBREVISED1E_BACK CHECK 103/27/24	SHEET T	VEI PL/	RALL
PROJECT       DATE         23002       10-30-23         DRAWN       CHECKED         SS       LB         REVISED       1         1       E_BACK CHECK 1       03/27/24         SHEET TITLE         OVERALL       PLANS         SHEET       SHEET		۰Δ	10

Approved State of Idaho Division of Building Safety PAR Bu2311-0062 Date Groups and notes applied. These Documents are approved contingent on the compliance with mark-ups and notes applied. This approval shall not be construed to an approval to this project.

> ( **Α** ) 2 3 (02 42 03)-02 42 02 (4) 5 3' - 2" 6 - - 4 9 .; <del>\</del> Α



**1** ENLARGED ROOF PLAN 1/8" = 1'-0"

## LEGEND:



SCREENED LINES INDICATE EXISTING ASSEMBLIES/SYSTEMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. INDICATES ASSEMBLIES/SYSTEMS TO BE CONSTRUCTED

NEW SKYLIGHT ON NEW OR EXISTING CURBED OPENING

00 00-01

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ROOF SLOPE

SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE

### GENERAL NOTES:

CONTRACTOR TO VERIFY & COORDINATE DUCT LAYOUT WITH CURB AND Α. ROOF PENETRATION LOCATIONS, REFER ALSO TO REFRIGERATION DRAWINGS FOR REFRIGERATION PIPING REQUIREMENTS AND COORDINATION. SEE STRUCTURAL FRAMING PLAN FOR ROOF DECK HEIGHTS TO В. ESTABLISH ROOF SLOPES AND ROOF MEMBER LOCATIONS. C. MAINTAIN ALL ROOF PENETRATIONS 3'-0" OR GREATER FROM FLOW LINES PREFABRICATED CURBS (FOR ROOF TOP MECHANICAL & REFRIGERATION D. EQUIPMENT SHALL BE INSTALLED BY GENERAL CONTRACTOR AND SET LEVEL. ALL DIMENSIONS ARE FOR GENERAL ARRANGEMENT & LOCATION ONLY. E. ACTUAL REQUIREMENTS & DIMENSIONS SHOULD BE VERIFIED AND COORDINATED WITH EQUIPMENT, SHOP DRAWING SUBMITTALS AND STRUCTURAL FRAMING. ALL PLANES OF ROOF SHALL SLOPE MIN. 1/4 "/L.F. TO DRAINS OR GUTTER, F. CW/ STRUCTURAL DRAWINGS NO PLUMBING VENTS OR EXHAUST UNITS WITHIN 10'-0" OF INTAKE OR G. 10'-0" OF EXTERIOR WALL. FABRICATE SHEET METAL CURB CAPS TO ALLOW FOR THICKNESS OF ROOFING PLY EXTENDING UP CURB FACE, RE: \_\_\_\_ Н. SCUPPER SILLS AND OVERFLOW DRAIN RIMS SHALL BE 2" ABOVE PRIMARY ROOF DRAIN RIMS. COORDINATE AND VERIFY INSTALLATIONS. Ι. COORDINATE ROOF CURBS WITH HVAC EQUIPMENT. J. K. PROVIDE 1/2" WIDE GAP IN 2 x PARAPET NAILER AT ROOF CONTROL JOINT. ALL ROOF OPENINGS GREATER THAN 12"X12" SHALL BE FRAMED WITH STEEL ANGLES, RE: STRUCTURAL DRAWINGS. L.

02 42 02 EXISTING ROOF STRUCTURE TO REMAIN
02 42 03 EXISTING CHIMNEY TO REMAIN
02 42 06 EXISTING MECHANICAL
02 42 07 EXISTING ROOF SCUTTLE
07 30-46 BUILT-UP ASPHALT ROOFING

**SHEET NOTES:** 

	JIJI . J DLUG. IMITK	<b>OVEMENT</b> JAMES MARSH, ARCHITECT 200 BROAD STREET	LICENSED ARCHITECT ORIGINAL DOCUMENT SIGNED BY AR-2004113 ARCHITECT ON FILE WITH THE
	est Chinden Boulevard	BOISE, ID PHONE: 208-343-4635 • FAX: 208-343-	58 OWNER
		200 BROAD STREET PROPERTY OF THE ARCHITECT / ENGINEER W BROPERTY OF THE ARCHITECT / ENGINEER W BOISF ID 8.3702 THE PROJECT FOR WHICH THEY ARE MADE IS	ANN THE ORIGINAL DATE SIGNED:
D-23 KED	T T T T T	08) 343-4635 • FAX (208) 343-1858 NOT BE USED BY ANY PERSON OR ENTITY ON PRICED PROJECT, FOR ADDITIONS TO THIS PROJECT OF ADDITIONS TO THIS PROJECT WHEN PHASE IT HE WRITTEN CONSENT OF CSHOA OR IT'S AFRICE OF ADDITIONS TO THIS PROJECT.	S SHALL JAMES A MARSH HER STATE OF IDAHO WITHOUT NOVEMBER 09. 2023







2 SOUTH ELEVATION



3 EAST ELEVATION



LEGEND:	T SIGNED BY E WITH THE ED BY: RSH SIGNED: 2024
DOOR NUMBER, RE: A82 DOOR SCHEDULE	DOCUMEN CT ON FILL OWNER MES A MA MES A MA MES A MA
00 00-01 SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE	ARCHITEC ARCHITEC ORIG JA
	ARSH AHO
	LICEN AR-96 AR-96 AR-96 AMES A M STATE OF ID
	343-1858 343-1858 AS ALL REMAIN ALL REMAIN ASTONS SH CON OTHER HASED-WIT HASED-WIT S AFFILIATE
	HITECT AX: 208-3 AX: 208-3 AX: 208-3 AX: 208-3 AX: 208-1 CATIONS,
	H, ARCI EET 4635 • F 4635 • F 4635 • F 4635 • F 4635 • F 4635 • F ARCHTECT
	S MARS S MARS S MARS DAD STRI DAHO IDAHO : 208-343- S ENT OF S S S FOR S S S S OF S
GENERAL NOTES:	JAME JAME 200 BRO BOISE, PHONE INSTRUM PRORAT INSTRUM PRORAT OR NOT COMPLET COMPLET THE WRIT
	T 1858 33702 3.3702 a.com
<ul> <li>FINISHES ARE ALSO REQUIRED AT PORTIONS OF UNDERSIDE, INSIDE FACE</li> <li>OF PARAPETS, AND SOFEITS EXPOSED TO PUBLIC VIEW</li> </ul>	ND STI B) 343.
C. THE REFERENCE ELEVATION MARKED WITH - REPRESENTS VERTICAL HEIGHTS RELATIVE TO INTERIOR FLOOR DATUM ASSUMED AT 100'-0". CW/	
<ul><li>CIVIL FOR ACTUAL FLOOR ELEVATION.</li><li>D. ALL MATERIAL SYMBOLS ARE FOR REPRESENTATION ONLY. CONTRACTOR</li></ul>	5 - FA
IS RESPONSIBLE FOR DETERMINING PROPER COURSING, ETC. E. LOCATION FOR ADDRESS SIGNAGE TO BE INSTALLED AS REQUIRED AND	3-4635
APPROVEDBY THE CITY OF BOISE, ID. F. ALL ROOFTOP EQUIPMENT TO BE SCREENED BY WALLS OR EQUIPMENT	
G. COORDINATE LOCATION OF KNOXBOX WITH FIRE MARSHALL.	
H. ALL EXISTING EXTERIOR ELEMENTS TO REMAIN U.O.N.	
#### SHEET NOTES:	
02 41-07 EXISTING RELOCATED STAIRS, GC TO VERIFY SIZE, COORDINATE W/STRUCTURE AND CONFORMATION WITH CODE	
02 42 12 EXISTING DOWNSPOUT, DO NOT DISTURB 03 01-52 INFILL/PATCH CONCRETE WHERE DEMOLISHED AND PAINT EXTERIOR TO MATCH EXISTING	
05 51-01 FABRICATED PAINTED METAL STAIR, PAINT BLACK 07 01-03 PATCH AND REPAIR WHERE CANOPY AND STAIR DEMOLITION OCCURRED. PAINT TO MATCH ADJACENT SURFACES.	
07 30-41 NEW ENTRY CANOPY ASSEMBLY: STANDING SEAM METAL ROOF PANELS O/ STRUCTURAL STEEL FRAMING. STANDING SEAM METAL ROOF PANELS: AEPSPAN DESIGN SPAN HP PANELS OR APPROVED	
EQUIVALENT, 18" PANEL SIZE, 24 GA., PREFINISHED COLOR TBD. ATTACH PANELS DIRECTLY TO OPEN FRAMING. PAINT CANOPY STEEL STRUCTURE TO MATCH EXISTING GREEN PAINT COLOR.	
09 91-13 PAINT EXISTING STAIR BLACK	
	IMPROVEMENT
	PERMIT SET
	PROJECT         DATE           23002         10-30-23
	DRAWN CHECKED SS LB
	REVISED 1 E_BACK CHECK 1 03/27/24



A51

# **3**CANOPY AND STAIR 2 ELEVATION



OF RISERS





6

EXISTING





8 CANOPY EDGE - EXISTING WALL

\_\_\_\_\_

(101)

A

W01

T.O.W.

XXX'-XX"

00 00-01

32 00-03

### LEGEND:

### SCREENED LINES INDICATE EXISTING ASSEMBLIES/SYSTEMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION.

INDICATES ASSEMBLIES/SYSTEMS TO BE CONSTRUCTED

DOOR NUMBER, RE: A82 DOOR SCHEDULE

WINDOW TYPE, RE: A82 WINDOW TYPES

WALL TYPE, RE: A21 FOR WALL TYPES WITH VARIABLE HEIGHT, SEE TOP OF WALL ELEVATION

SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE

INTERIOR ELEVATIONS SEE DWG. #1 @ SHT. 151, 152, 153

### **GENERAL NOTES**:

### DIMENSION IS NOT SHOWN ON INTERIOR SHEETS UNLESS INTERIOR Α. SPECIFIC. REFER ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION / ORDERING C. PRIME AND PAINT ALL EXPOSED STEEL INCLUDING UNDERSIDE OF CANOPY ROOFING.

SHEET NOTES: (## ##-##)

02 41-07 EXISTING RELOCATED STAIRS, GC TO VERIFY SIZE, COORDINATE W/STRUCTURE AND CONFORMATION WITH CODE 02 41-12 FILL GAP BETWEEN STAIR LANDING AND WALL AS NECESSARY 05 12-02 STRUCTURAL STEEL COLUMN, RE: STRUCTURAL DRAWINGS. 05 51-01 FABRICATED PAINTED METAL STAIR, PAINT BLACK 05 51-02 LINE OF NEW STAIRS BELOW 05 52-01 GUARDRAIL W/ ATTACHED HANDRAIL. 05 52-03 WALL MOUNTED HANDRAIL, PAINTED TO MATCH STAIR FRAMING 07 30-41 NEW ENTRY CANOPY ASSEMBLY: STANDING SEAM METAL ROOF PANELS O/ STRUCTURAL STEEL FRAMING. STANDING SEAM METAL ROOF PANELS: AEPSPAN DESIGN SPAN HP PANELS OR APPROVED EQUIVALENT, 18" PANEL SIZE, 24 GA., PREFINISHED COLOR TBD. ATTACH PANELS DIRECTLY TO OPEN FRAMING. PAINT CANOPY STEEL STRUCTURE TO MATCH EXISTING GREEN PAINT COLOR. 07 30-42

SLOPE CANOPY ROOF TO MATCH EXISTING ROOF SLOPE ABOVE. PROVIDE CONCRETE LANDING WITH 2% MAXIMUM CROSS SLOPE.

### 34 200 BR BOISE, PHONE TREET 83702 3-1858 S D S NEN 2AD SE, I 208) AX OBF ш H RD RO (208) MP BI [-] 50 **I** 81 BUILDING **IMPROVEMENT** PERMIT SET PROJECT DATE 23002 10-30-23 CHECKED DRAWN SS LB REVISED 1 E\_BACK CHECK 1 03/27/24 SHEET TITLE **STAIRS &** CANOPY

SHEET

A71









1 STAIR AT BOTTOM W/ RAILING

STAIR AT TOP OF INTERMEDIATE **2**RUN W/ RAILING

ents the note

STAIR AT TOP LANDING W/ **3**RAILING 1 1/2" = 1'-0"



# **4** WALL MOUNTED HANDRAIL





# HG DOOR HARDWARE GROUP RE: SPECIFICATION SECTION 087110 "DOOR HARDWARE"

HARDWARE SET NO. 1: DOOR 221

- (3) HINGES (1) LEVER LOCKSET
- (1) PANIC HARDWARE (1) CLOSER
- (1) THRESHOLD
- (1) DOOR SWEEP (1) SEAL SET
- (3) SILENCERS

HARDWARE SET NO. 2: DOOR 160

(3) HINGES (1) LEVER LATCHSET (3) SILENCERS

**10** DOOR SCHEDULE RE: A21-1 NUMBER 160 218 221





# 2 STERIOR DOOR JAMB 3" = 1'-0"



(E) CONC. WALL







INSULATED METAL

EXTERIOR

AS SCHEDULED

A8 

A82/ 2





 $\langle \mathbf{B} \rangle$ 

SOLID CORE WOOD

INTERIOR

AS SCHEDULED





### DOOR GENERAL NOTES:

2

1

- VERIFY ROUGH OPENING IN FIELD. 1.
- INSTALL DOORS AND FRAMES PER MANUFACTURER'S REQUIREMENTS. 2.
- 3. ALL EXITS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

OPENING FORCE FOR INTERIOR SIDE-SWINGING DOORS WITHOUT 4. CLOSERS SHALL NOT EXCEED A 5- POUND FORCE

5. FOR OTHER SIDE- SWINGING DOOR, THE DOOR LATCH SHALL RELEASE WHEN SUBJECTED TO A 15-POUND FORCE. THE DOOR SHALL BE SET IN MOTION WHEN SUBJECTED TO A 30-POUND FORCE. THE DOOR SHALL SWING TO A FULL-OPEN POSITION WHEN SUBJECTED TO A 15-POUND FORCE. FORCES SHAL LBE APPLIED TO THE LATCH SIDE

6. DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.

7. DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL BE INSTALLED 34 INCHSE MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FINISHED FLOOR. LOCKS ONLY USED FOR SECUIRTY PURPOSES AND NOT USED FOR NORMAL OPERATION ARE PERMITTED AT ANY HEIGHT

8. THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.

LICENSED ARCHITECT ORIGINAL DOCUMENT SIGNED BY	ORIGINAL SACHITECT ON FILE WITH THE OWNER ORIGINAL SIGNED BY: JAMES A MARSH	Manual Machan ORIGINAL DATE SIGNED: JAMES A MARSH STATE OF IDAHO MARCH 27, 2024
VENERT JAMES MARSH, ARCHITECT	<b>ENCITY, ID</b> PHONE: 208-343-4635 • FAX: 208-343-1858	200 BROAD STREET BOISE, ID 83702 4635 • FAX (208) 343-1858 http://www.cshqa.com http://www.cshqa.com convinted for the are and shall remain the reservice. Are and shall remain the reservice. Are and shall remain the reservice and shall remain reservices and shall remain remain reservices and remain rem
D DIST. 3 BLDG. IMPROV	50 WEST CHINDEN BLVD GARD	ŚŚŁAG (208) 343-
EIMP	BUIL PROV PEF SI	DING /EMENT RMIT ET
PROJE 23002 DRAW SS REVISI 1 E_BA	ECT 2 N ED CK CHECK	DATE 10-30-23 CHECKED LB
SHEE DOOR & WINDOW SCHEDULES		

### STRUCTURAL ABBREVIATIONS

#	NUMBER	MISC
&	AND	NTS
0	АТ	OC
Ø	DIAMETER	OD
ALT	ALTERNATE	OPP
ARCH	ARCHITECT	OSB
	ARCHITECTURAL	PFRP
BOD	BOTTOM OF DECK	PI
BPL	BASE PLATE	DT
CJ	CONTROL JOINT	
	CONSTRUCTION JOINT	REINF
CL	CENTER LINE	
CLR	CLEAR	
CMU	CONCRETE MASONRY UNITS	
CONC	CONCRETE	REQD
CONN	CONNECTION	SCHED
CONT	CONTINUOUS	SER
DF	DOUGLAS FIR	
	DIAMETER	SHTHG
		SIM
FI	EXPANSION JOINT	SPEC
EJ		SSE
		ST
		STD
		STRUCT
	EQUIPMENT	T&B
EXSI, (E)	EXISTING	T&G
EXI		THRU
FIG	FOOTING	TOB
GA	GAGE OR GAUGE	TOC
GC	GENERAL CONTRACTOR	TOCP
GLB	GLU LAM BEAM	TOF
GT	GIRDER TRUSS	ТОМ
HORIZ	HORIZONTAL	TOP
ID	INSIDE DIAMETER	TOS
JB	JOIST BEARING	TOW
LONG	LONGITUDINAL	TRANS
LT WT	LIGHT WEIGHT	TWS
MAX	MAXIMUM	TYP
MECH	MECHANICAL	UNO
MFD	MANUFACTURED	VFRT
MFG	MANUFACTURING	VER
MFR	MANUFACTURER	W/P
MIN	MINIMUM	VVI
<u>STRUCTURAL</u>		
#, LB	POUND	
FI/LB	FOOT POUND	
K	KIP (1000 LBS)	
KSI	KIPS PER SQUARE INCH	
PCF	POUNDS PER CUBIC FOOT	
PLF	POUNDS PER LINEAL FOOT	
PSF	POUNDS PER SQUARE FOOT	
PSI	POUNDS PER SQUARE INCH	
SF	SQUARE FOOT	
STRUCTURA	ORGANIZATIONS	
ΔΙϚΟ		JNSTDI
ΔΝςτ		



GENERAL SYMBOL LEGEND



uuluu

FINISH FLOOR ELEVATION

CHANGE (STEP) IN ELEVATION

MISCELLANEOUS NOT TO SCALE ON CENTER OUTSIDE DIAMETER OPPOSITE ORIENTED STRAND BOARD PERPENDICULAR PLATE POST TENSIONED PRESSURE TREATED REINFORCE REINFORCED REINFORCEMENT REINFORCING REQUIRED SCHEDULE STRUCTURAL ENGINEER OF RECORD SHEATHING SIMILAR SPECIFICATION SPECIALTY STRUCTURAL ENGINEER SHEAR TRUSS STANDARD STRUCTURAL TOP AND BOTTOM TONGUE AND GROOVE THROUGH TOP OF BEAM TOP OF CONCRETE TOP OF CONCRETE PIER TOP OF FOOTING TOP OF MASONRY TOP OF PARAPET TOP OF STEEL TOP OF WALL TRANVERSE THREADED WELD STUD TYPICAL UNLESS NOTED OTHERWISE VERTICAL VERIFY IN FIELD WORK POINT



GEND	SHEET INDEX			
1ed Bar	SHEET NUMBER	SHEET NAME	CURRENT REVISION	CURRENT REVISION DATE
S EXTEND	S0.01	STRUCTURAL COVER SHEET	1	03/27/2024
	S0.02	GENERAL NOTES		
AV BADS OD DOST TENSION	S0.03	GENERAL NOTES		
ST BARS OR FOST TENSION	S0.04	GENERAL NOTES		
	S0.05	GENERAL NOTES		
CHEDULE	S1.01	FOUNDATION PLAN	1	03/27/2024
	S1.02	LEVEL 2 FRAMING PLAN	1	03/27/2024
	S1.03	ROOF FRAMING PLAN	1	03/27/2024
D LENGTH AT THIS LEVEL. SEE R SHEATHING BLOCKING NATITING AND	S1.04	SECTIONS	1	03/27/2024
VTS. ALL EXTERIOR WALLS SHALL BE	S1.05	CONCRETE DETAILS	1	03/27/2024
RIA, UNO	S1.06	ROOF DETAILS	1	03/27/2024
DE INDICATES SHEATHING SIDE OF WALL	S1.07	ROOF DETAILS	1	03/27/2024
	S1.08	ROOF DETAILS	1	03/27/2024
EE SCHEDUI E	S1.09	STEEL DETAILS		

H##

J##



### **GENERAL NOTES**

### **GENERAL REQUIREMENTS**

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GOVERNING CODE: THE DESIGN AND CONSTRUCTION OF THIS PROJECT IS GOVERNED BY THE "INTERNATIONAL BUILDING CODE (IBC)", 2018 EDITION, HEREAFTER REFERRED TO AS THE IBC, AS ADOPTED AND MODIFIED BY THE LOCAL BUILDING DEPARTMENT WITH AUTHORITY HAVING JURISDICTION.

**REFERENCE STANDARDS: REFER TO CHAPTER 35 OF IBC. WHERE OTHER STANDARDS ARE** NOTED IN THE DRAWINGS, USE THE LATEST EDITION OF THE STANDARD UNLESS A SPECIFIC DATE IS INDICATED. REFERENCE TO A SPECIFIC SECTION IN A CODE DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE ENTIRE STANDARD. ALL SPECIFICATIONS AND CODES NOTED SHALL BE THE LATEST APPROVED EDITIONS AND REVISIONS BY THE AUTHORITY HAVING JURISDICTION OVER THIS PROJECT.

SPECIFICATIONS: REFER TO THE PROJECT SPECIFICATIONS ISSUED AS PART OF THE CONTRACT DOCUMENTS FOR INFORMATION SUPPLEMENTAL TO THESE DRAWINGS.

OTHER DRAWINGS: REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO: DIMENSIONS, ELEVATIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, STAIRS, FINISHES, DRAINS, WATERPROOFING, RAILINGS, CURBS, DEPRESSIONS, MECHANICAL UNIT LOCATIONS, AND OTHER NON-STRUCTURAL ITEMS.

STRUCTURAL DETAILS: THE STRUCTURAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT AND ARE NOT INTENDED TO SHOW ALL DETAILS OF THE WORK. DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE SHOWN OR NOTED. IF LOCATIONS ARE FOUND WHERE NO TYPICAL DETAIL, TYPICAL SCHEDULE, OR SPECIFIC DETAIL APPLIES, NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER.

STRUCTURAL RESPONSIBILITIES: THE STRUCTURAL ENGINEER (SER) IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRIMARY STRUCTURE IN ITS COMPLETED FORM. THE STRUCTURAL DRAWINGS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION.

COORDINATION: THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK; FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR SELECTING FABRICATION PROCESSES; FOR TECHNIQUES OF ASSEMBLY; AND FOR PERFORMING WORK IN A SAFE AND SECURE MANNER.

DIMENSIONS: DO NOT SCALE THE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. STRUCTURE NOTED IN THE DRAWINGS AS EXISTING SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/STRUCTURAL ENGINEER

MEANS, METHODS AND SAFETY REQUIREMENTS: THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB RELATED SAFETY STANDARDS SUCH AS OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) AND DOSH (DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH). THE CONTRACTOR IS TO PROVIDE ADEOUATE EXCAVATION PROCEDURES, SHORING, BRACING AND ERECTION PROCEDURES COMPLYING WITH NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.

TEMPORARY SHORING AND BRACING: THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION SUCH MEASURES SHALL INCLUDE (BUT ARE NOT LIMITED TO): BRACING AND SHORING FOR LOADS DUE TO HYDROSTATIC, EARTH, WIND OR SEISMIC FORCES, CONSTRUCTION EQUIPMENT, ETC IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WORK REQUIRED IN THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENTS FOR EXECUTING IT PROPERLY. THE CONTRACTOR SHALL AT HIS DISCRETION EMPLOY A REGISTERED PROFESSIONAL ENGINEER FOR THE DESIGN OF ANY TEMPORARY BRACING AND SHORING.

CONSTRUCTION LOADS: CONSTRUCTION LOADS AND MATERIALS SHALL BE SPREAD OUT WHEN PLACED ON FRAMED FLOORS OR ROOFS. LOADS ON THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS AS NOTED IN DESIGN CRITERIA AND LOADS BELOW OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTION AS DETERMINED BY THE CONTRACTOR'S PROFESSIONAL ENGINEER FOR BRACING/SHORING

CHANGES IN LOADING: THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY THE SER OF ANY ARCHITECTURAL, MECHANICAL, ELECTRICAL, OR PLUMBING LOAD IMPOSED ONTO THE STRUCTURE THAT DIFFERS FROM, OR THAT IS NOT DOCUMENTED ON THE ORIGINAL CONTRACT DOCUMENTS (ARCHITECTURAL / STRUCTURAL / MECHANICAL / ELECTRICAL OR PLUMBING DRAWINGS). PROVIDE DOCUMENTATION OF LOCATION, LOAD, SIZE AND ANCHORAGE OF ALL UNDOCUMENTED LOADS IN EXCESS OF 300 POUNDS. PROVIDE MARKED UP STRUCTURAL PLAN INDICATING LOCATIONS OF ANY NEW EQUIPMENT OR LOADS NOT PREVIOUSLY DOCUMENTED. SUBMIT PLANS TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

ROOF DRAINAGE: THE ROOF DRAINAGE SYSTEM SHALL BE DESIGNED SO THAT RAINWATER LOADS DO NOT EXCEED THE ROOF SNOW OR LIVE LOADS AS SHOWN IN THE DESIGN CRITERIA AND LOADS SECTION.

NOTE PRIORITIES: PLAN AND DETAIL NOTES AND SPECIFIC LOADING DATA PROVIDED ON INDIVIDUAL PLANS AND DETAIL DRAWINGS SUPPLEMENTS INFORMATION IN THE STRUCTURAL GENERAL NOTES AND PROJECT SPECIFICATIONS.

DISCREPANCIES: IN CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS PLAN/DETAILS OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR WILL BE DEEMED TO HAVE INCLUDED IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK, UNLESS PRIOR TO THE SUBMISSION OF THE PRICE, THE CONTRACTOR ASKS FOR A DECISION FROM THE ARCHITECT AS TO WHICH SHALL GOVERN. ACCORDINGLY, ANY CONFLICT IN OR BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADJUSTMENT IN THE CONTRACT PRICE.

SITE VERIFICATION: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, UTILITIES, ETC IF ANY SUCH STRUCTURES ARE FOUND, NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY.

ADJACENT UTILITIES: THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO EARTH-WORK, FOUNDATIONS, SHORING, AND EXCAVATION. ANY UTILITY INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS AND DETAILS ARE INTENDED FOR REFERENCE ONLY AND NOT FOR CONSTRUCTION.

### **GENERAL REQUIREMENTS (CONT)**

<u>ALTERNATES</u>: ALTERNATE PRODUCTS OF SIMILAR STRENGTH, NATURE AND FORM FOR SPECIFIED ITEMS MAY BE SUBMITTED WITH ADEQUATE TECHNICAL DOCUMENTATION TO THE ARCHITECT/ENGINEER FOR REVIEW. ALTERNATE MATERIALS THAT ARE SUBMITTED WITHOUT ADEQUATE TECHNICAL DOCUMENTATION OR THAT SIGNIFICANTLY DEVIATE FROM THE DESIGN INTENT OF MATERIALS SPECIFIED MAY BE RETURNED WITHOUT REVIEW. ALTERNATES THAT REQUIRE SUBSTANTIAL EFFORT TO REVIEW WILL NOT BE REVIEWED UNLESS AUTHORIZED BY THE OWNER.

MECHANICAL, PLUMBING AND ELECTRICAL ANCHORAGE: ANCHORAGE AND SUPPORT OF MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING AND DUCTWORK IS TO BE DESIGNED BY OTHERS. SEE ASCE 7-16 SECTION 13.2 AND TABLE 13.2-1. USE ISOLATORS, FASTENERS AND BRACING APPROVED BY ICC-ES REPORT CAPABLE OF TRANSMITTING CODE REQUIRED LATERAL LOADS. ALL SUSPENDED EQUIPMENT IS TO BE SECURED WITH LATERAL BRACING. SEE THE LATEST EDITION OF "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS" BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION.

OBSERVATION VISITS: OBSERVATION VISITS (SITE VISITS) BY REPRESENTATIVES OF ARCHITECT/STRUCTURAL ENGINEER DO NOT INCLUDE INSPECTION OF CONSTRUCTION MEANS AND METHODS. SITE VISITS DURING CONSTRUCTION ARE NOT CONTINUOUS AND DETAILED INSPECTION SERVICES (WHICH ARE TO BE PERFORMED BY OTHERS). OBSERVATIONS ARE PERFORMED SOLELY FOR THE PURPOSE OF DETERMINING IF THE CONTRACTOR UNDERSTANDS DESIGN INTENT SHOWN IN THE CONTRACT DRAWINGS. OBSERVATIONS DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND ARE NOT TO BE CONSTRUED AS SUPERVISION OR VERIFICATION OF CONSTRUCTION.

SHOP DRAWINGS: SHOP DRAWINGS SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW SHALL CONSIST OF (1) ELECTRONIC PDF SET OR (1) MARKUP SET (FOR OUR RECORDS) AND (1) REPRODUCIBLE SET. NO MODIFICATIONS OR SUBSTITUTION OF DRAWINGS AND SPECIFICATIONS WILL BE ACCEPTED VIA SHOP DRAWING REVIEW.

- 1. CONTRACTOR SHALL REVIEW AND STAMP SHOP DRAWINGS PRIOR TO SUBMISSION TO THE ARCHITECT/STRUCTURAL ENGINEER. CONTRACTOR SHALL REVIEW FOR COMPLETENESS AND COMPLIANCE WITH CONTRACT DOCUMENTS
- 2. SUBMIT SHOP DRAWINGS TO THE ARCHITECT/STRUCTURAL ENGINEER AS INDICATED OR SPECIFIED FOR REVIEW PRIOR TO FABRICATION. REVIEW WILL BE FOR GENERAL
- WHEN AN ENGINEER IS REQUIRED TO SIGN AND STAMP SHOP DRAWINGS AND CALCULATIONS, ENSURE SEAL INDICATES ENGINEER AS BEING REGISTERED IN THE STATE OF THE PROJECT SITE.
- 4. SHOP DRAWINGS ARE NOT A PART OF CONTRACT DOCUMENTS. THEREFORE, ARCHITECT'S/STRUCTURAL ENGINEER'S REVIEW DOES NOT CONSTITUTE AN
- SHOP DRAWINGS WILL BE REJECTED FOR INCOMPLETENESS, LACK OF COORDINATION WITH OTHER PORTIONS OF CONTRACT DOCUMENTS, LACK OF CALCULATIONS (IF REQUIRED), OR WHERE MODIFICATIONS OR SUBSTITUTIONS ARE INDICATED WITHOUT PRIOR REVIEW PER PARAGRAPH ABOVE.
- 6. SUBMIT SHOP DRAWINGS AND CALCULATIONS TO GOVERNING CODE AUTHORITY WHEN SPECIFICALLY INDICATED OR REQUESTED.
- MAINTAIN A COPY OF ALL SHOP DRAWINGS REVIEWED BY THE ARCHITECT/STRUCTURAL
- ENGINEER AT SITE DURING CONSTRUCTION PERIOD. 8. STRUCTURAL ENGINEER REQUIRES 10 WORKING DAYS AFTER RECEIPT OF SHOP
- DRAWINGS AND CALCULATIONS FOR PROCESSING. 9. REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN
- SUCH A MANNER WILL BE REJECTED AND RETURNED.

**RISK CATEGORY OF BUILDING** 

WIND DESIGN - ASCE 7-16 CHAPTER 26, 27, & 30 (STRENGTH LEVEL UNLESS NOTED) - WIND ANALYSIS PROCEDURE USED DIRECTIONAL PROCEDURE

- BASIC WIND SPEED
- EXPOSURE CATEGORY
- TOPOGRAPHIC FACTOR (K<sub>zt</sub>) - WIND DESIGN BASE SHEAR (ELEV OVERRUN) (N/S)
- (E/W)

- COMPONENTS AND CLADDING LOAD (C&C)

SEISMIC DESIGN - ASCE 7-16 CHAPTER 11 AND 12 (STRENGTH LEVEL UNLESS NOTED)

- SEISMIC ANALYSIS PROCEDURE USED
- MAPPED MCE: - SOIL SITE CLASSIFICATION
- DESIGN ACCEL:
- SEISMIC DESIGN CATEGORY (SDC)
- SEISMIC IMPORTANCE FACTOR (I<sub>e</sub>)
- AT ELEVATOR OVERRUN:
- BASIC STRUCTURAL SYSTEM
- SEISMIC FORCE-RESISTING SYSTEM
- RESPONSE MODIFICATION FACTOR (R)
- SYSTEM OVER STRENGTH FACTOR ( $\Omega_0$ ) - DEFLECTION AMPLIFICATION FACTOR (Cd)
- SEISMIC RESPONSE COEFFICIENT (C<sub>S</sub>) - DESIGN BASE SHEAR (V)
- REDUNDANCY FACTOR  $(\rho)$

FLOOR (EXISTING)

	- )
SNOW LOAD - ASCE 7-16	<u>CHAPTER 7</u>
- GROUND SNOW LOAD (p	g)
- SNOW EXPOSURE FACTO	OR (Ce)
- THERMAL FACTOR (Ct)	
- SNOW LOAD IMPORTANC	CE FACTOR (Is)
- ROOF SNOW LOAD (pf or	p <sub>m OR</sub> p <sub>s</sub> )
<u>DESIGN LIVE LOADS - ASC</u>	<u>CE 7-16 CHAPTER 4</u>
AREA	LIVE LOADS
STAIRS AND EXIT WAYS	100
ROOF	20
HANDRAIL/GUARDRAIL	50 PLF
[1] NOT APPLIED CONCUR	RENT WITH UNIFORM
[2] NOT APPLIED CONCUR	RENT WITH UNIFORM
DESIGN DEAD LOADS	
	DEAD LOADS (PSE)
ROOF	20

100

CONFORMANCE WITH DESIGN INTENT CONVEYED IN THE CONTRACT DOCUMENTS.

AUTHORIZATION TO DEVIATE FROM TERMS AND CONDITIONS OF THE CONTRACT

### DESIGN CRITERIA AND LOADS

Π

102 MPH  $\mathbf{C}$ 

1.0

0.5 KIPS 0.5 KIPS

SEE TABLE BELOW

EQUIVALENT LATERAL FORCE (ELF)  $S_S = 0.306$   $S_1 = 0.110$  $S_{DS} = 0.317g$   $S_{D1} = 0.174g$ 

1.0

**BEARING WALL** LIGHT FRAMED WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS 6.5

2.5 4.0

0.048 0.08 KIPS

1.0

20 PSF 1.0 1.0 1.0 25 PSF

**REMARKS AND NOTES** <u>5 (PSF) UNO</u> 300 LBS CONC LOAD [1] (OR SNOW LOAD)

200 LBS CONC LOAD [2] LOAD; APPLIED OVER 2 IN. x 2 IN. AREA LOAD; APPLIED AT ANY LOCATION/DIRECTION

REMARKS AND NOTES UNO





• POSITIVE PRESSURES ACT TOWARDS THE INTERIOR OF STRUCTURE. NEGATIVE PRESSURES ACT AWAY FROM STRUCTURE (SUCTION ON WALLS, UPLIFT ON ROOF).

17.8

• PRESSURES IN TABLE ABOVE ARE 'NET' PER ASCE 7, MEANING SUM OF EXTERNAL AND INTERNAL WIND PRESSURE COMPONENTS.

 WIND UPLIFT PRESSURES ON ROOFS SHALL BE COMBINED WITH PROPER DEAD LOAD ACCORDING TO APPROPRIATE STRENGTH OR SERVICE LOAD COMBINATIONS FROM IBC AND ASCE 7.

21.6

**TESTS AND INSPECTIONS**: SPECIAL INSPECTIONS AND TESTING SHALL BE DONE IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS PER IBC SECTIONS 1704 AND

1705 AS APPLICABLE. FOR SPECIFIC SECTIONS: 1705.11 (WIND SPECIAL INSPECTIONS)

1705.12 (SEISMIC SPECIAL INSPECTIONS)

100

1705.13 (SEISMIC SPECIAL TESTING)

FOUNDATIONS, FOOTINGS, UNDER SLAB SYSTEMS AND FRAMING ARE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL IN ACCORDANCE WITH IBC SECTION 110.3. CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS WITH THE BUILDING OFFICIAL.

SPECIAL INSPECTORS: SPECIAL INSPECTORS SHALL BE EMPLOYED BY THE OWNER TO PROVIDE SPECIAL INSPECTIONS FOR THE PROJECT. SPECIAL INSPECTORS SHALL BE QUALIFIED PERSONS WHO DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION PER 1704.1.

STATEMENT OF SPECIAL INSPECTIONS: SPECIAL INSPECTIONS AND TESTING ARE REQUIRED BY 1704 AND 1705 FOR THE FOLLOWING:

SOIL AND FOUNDATION CONSTRUCTION: PER IBC SECTION 1705.6:

- 1. PERIODIC INSPECTION OF SOILS EARTHWORK PER TABLE 1705.6 IS REQUIRED FOR: A. FOOTING SOIL BEARING SURFACES PRIOR TO PLACING ANY REINFORCING
- STEEL. B. EXCAVATION DEPTH AND BEARING LAYER PRIOR TO PLACING ANY
- REINFORCING STEEL.
- C. COMPACTED FILL MATERIAL CLASSIFICATION AND TESTING.
- D. SUBGRADE PREPARATION PRIOR TO FILLING. 2. CONTINUOUS INSPECTION PER TABLE 1705.6 REQUIRED TO VERIFY:
- A. FILLING OPERATIONS TO SATISFY REQUIREMENTS OF IBC TABLE 1705.6 AND THE GEOTECHNICAL REPORT LISTED UNDER SOILS AND FOUNDATIONS SECTION.
- B. COMPACTED FILL DENSITY TESTING OF EACH LIFT, PROPER LIFT THICKNESS AND MATERIAL CLASSIFICATION.

CONCRETE CONSTRUCTION: PER IBC SECTION 1705.3 AND TABLE 1705.3 INCLUDING: 1. PERIODIC INSPECTION REQUIRED FOR:

- A. SIZE AND PLACEMENT OF ALL REINFORCING STEEL PRIOR TO THE POUR. B. PLACEMENT CLEARANCES AROUND REINFORCING STEEL AT EMBEDDED CONDUIT.
- C. SHAPE, LOCATION AND DIMENSIONS OF MEMBERS FORMED.
- D. USE OF THE REQUIRED DESIGN CONCRETE MIX.
- E. MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES. F. VERIFICATION OF IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.
- CONTINUOUS INSPECTION REQUIRED DURING THE:
- A. PLACING OF REINFORCED CONCRETE, INCLUDING CONCRETE ON METAL DECK FOR PROPER APPLICATION TECHNIQUES.
- B. PLACING AND STRESSING OF POST-TENSIONING
- C. PLACING AND SIZE OF CAST-IN-PLACE BOLTS AND EMBEDDED FABRICATIONS PRIOR TO THE POUR.
- D. PLACING OF MECHANICAL BAR SPLICES
- E. PLACING OF CONCRETE AROUND CAST-IN-PLACE BOLTS AND EMBEDS. F. SAMPLING OF FRESH CONCRETE.
- G. DETERMINATIONS OF SLUMP, AIR CONTENT AND TEMPERATURE.

WOOD CONSTRUCTION: PER IBC SECTION 1705.5:

- HIGH-LOAD DIAPHRAGMS
- METAL-PLATE CONNECTED WOOD TRUSSES SPANNING 60'-0" OR HAVING OVERALL HEIGHTS GREATER THAN 60".
- 3. WOOD SHEAR WALLS WITH FASTENER SPACING OF LESS THAN 4"

MISCELLANEOUS INSPECTIONS: PER IBC SECTION 1705:

- 1. PILING, DRILLED PIERS AND CAISSONS
- 2. WELDING OF:
- A. WELDED GUARDRAIL B. COLD-FORMED STEEL
- 3. SPRAY APPLIED FIREPROOFING AS INDICATED IN THE ARCHITECTURAL DRAWINGS

### TESTS AND INSPECTIONS (CONT)

1. HIGH-LOAD DIAPHRAGMS

MISCELLANEOUS INSPECTIONS: PER IBC SECTION 1705: 1. PILING, DRILLED PIERS AND CAISSONS

2. WELDING OF: A. WELDED GUARDRAIL COLD-FORMED STEEL

POST INSTALLED ANCHORS TO CONCRETE AND MASONRY: SHALL COMPLY WITH IBC SECTION 1705. INSPECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THE APPROVED ICC EVALUATION REPORT AND AS INDICATED BY THE DESIGN REQUIREMENTS SPECIFIED ON THE DRAWINGS. REFER TO THE POST INSTALLED ANCHORS SECTION OF THESE NOTES FOR ANCHORS THAT ARE THE BASIS OF THE DESIGN. SPECIAL INSPECTOR SHALL VERIFY ANCHORS ARE AS SPECIFIED IN THE POST INSTALLED ANCHORS SECTION OF THESE NOTES OR AS OTHERWISE SPECIFIED ON THE DRAWINGS. SUBSTITUTIONS REQUIRE APPROVAL BY THE SER AND REQUIRE SUBSTANTIATING CALCULATIONS AND CURRENT IBC RECOGNIZED ICC-ES REPORT. SPECIAL INSPECTOR SHALL DOCUMENT IN THEIR SPECIAL INSPECTION REPORT COMPLIANCE WITH EACH OF THE ELEMENTS REQUIRED WITHIN THE APPLICABLE ICC-ES REPORT.

INSPECTION REPORTS: SPECIAL INSPECTION REPORTS SHALL BE PROVIDED AS SOON AS PRACTICAL AFTER COMPLETING INSPECTIONS. FINAL SPECIAL INSPECTION REPORTS WILL BE REOUIRED BY EACH SPECIAL INSPECTION FIRM PER IBC 1704.2.4. SUBMIT COPIES OF ALL INSPECTION REPORTS TO THE ARCHITECT/ENGINEER AND THE AUTHORITY HAVING JURISDICTION FOR REVIEW.

PREFABRICATED CONSTRUCTION: ALL PREFABRICATED CONSTRUCTION SHALL CONFORM TO IBC SECTION 1703.

**INSPECTION FOR SEISMIC RESISTANCE: SPECIAL INSPECTION IN ACCORDANCE WITH THE** REQUIREMENTS OF IBC SECTION 1704, 1705, AND STRUCTURAL TESTING IN ACCORDANCE WITH THE REQUIREMENTS OF IBC SECTION 1705.12 SHALL BE REQUIRED FOR: 1. DESIGNATED SEISMIC FORCE RESISTING SYSTEMS DENOTED BY [SFRS] ON PLAN OR

- DETAIL
- RECORD.

(DEFERRED SUBMITTALS)

GENERAL CONTRACTOR'S PRIOR REVIEW: ONCE THE CONTRACTOR HAS COMPLETED HIS REVIEW OF THE SPECIALTY STRUCTURAL ENGINEER'S (SSE) COMPONENT DRAWINGS, THE SER WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN AND IMPACT TO STRUCTURE OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY. REVIEW OF THE SSE SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) IS FOR COMPLIANCE WITH DESIGN CRITERIA AND COMPATIBILITY WITH THE DESIGN OF THE PRIMARY STRUCTURE AND DOES NOT RELIEVE THE SSE OF RESPONSIBILITY FOR THAT DESIGN. ALL NECESSARY BRACING, TIES, ANCHORAGE, PROPRIETARY PRODUCTS SHALL BE FURNISHED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS OR THE SSE'S DESIGN DRAWINGS AND CALCULATIONS. THESE ELEMENTS INCLUDE BUT ARE NOT

LIMITED TO:

1. BUILDING EXTERIORS 2. BUILDING INTERIORS

BUILDING EXTERIORS: ALL ENGINEERING REQUIRED FOR NON-STRUCTURAL EXTERIOR STUD WALLS, CURTAIN WALLS, CLADDING, VENEER AND GLAZING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE DRAWINGS SHALL MAINTAIN THE DESIGN INTENT OF THE ARCHITECTURAL DRAWINGS AND SHALL BE REVIEWED BY THE ENGINEER OF RECORD FOR COMPATIBILITY WITH THE BASE STRUCTURE. THE CONTRACTOR'S ENGINEER SHALL BE A LICENSED PROFESSIONAL CIVIL ENGINEER IN THE STATE OF THE PROJECT.

BUILDING INTERIORS: ALL ENGINEERING REQUIRED FOR THE INTERIOR CEILING SYSTEMS, STUD WALLS, HANGING CHANDELIERS, SIGNAGE, ETC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE DRAWINGS SHALL MAINTAIN THE DESIGN INTENT OF THE ARCHITECTURAL DRAWINGS AND SHALL BE REVIEWED BY THE ENGINEER OF RECORD FOR COMPATIBILITY WITH THE BASE STRUCTURE. THE CONTRACTOR'S ENGINEER SHALL BE A LICENSED PROFESSIONAL CIVIL ENGINEER IN THE STATE OF THE PROJECT.

### SOIL AND FOUNDATIONS

- ALLOWABLE FOUNDATION BEARING PRESSURE 1,500 PSF EQUIVALENT FLUID PRESSURE (CONSTRAINED) 64 PCF

FOUNDATION REDESIGN.

WOOD CONSTRUCTION: PER IBC SECTION 1705.5:

2. METAL-PLATE CONNECTED WOOD TRUSSES SPANNING 60'-0" OR HAVING OVERALL HEIGHTS GREATER THAN 60".

3. WOOD SHEAR WALLS WITH FASTENER SPACING OF LESS THAN 4"

3. SPRAY APPLIED FIREPROOFING AS INDICATED IN THE ARCHITECTURAL DRAWINGS

2. ALL SEISMIC FORCE RESISTING SYSTEMS (SFRS) SHOWN IN ELEVATION 3. EXISTING SEISMIC FORCE RESISTING SYSTEMS DENOTED ON PLAN OR DETAIL BY [ESFRS]. ANY DEFICIENCIES OR DISCREPANCIES FROM THAT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE REPORTED TO THE STRUCTURAL ENGINEER OF

### <u>CONTRACTOR'S ENGINEERING REQUIREMENTS</u>

### 3. STEEL STAIRS HANDRAILS AND GUARDRAILS

STEEL STAIRS, HANDRAILS, AND GUARDRAILS: ALL STAIRS, LANDINGS AND HANDRAILS SHALL BE DESIGN/BUILD AND MAINTAIN THE DESIGN INTENT ON THE ARCHITECTURAL DRAWINGS AND STRUCTURAL DRAWINGS. ALL STAIRS AND LANDINGS SHALL BE FREE STANDING, UNLESS COORDINATED WITH THE ENGINEER OF RECORD. ALL REQUIRED SLAB EMBEDS FOR VERTICAL AND LATERAL SUPPORTS ARE TO BE COORDINATED WITH THE ARCHITECT AND ANY OTHER DISCIPLINE THAT MAY BE AFFECTED. SHOP DRAWINGS FOR THE STAIRS AND ALL

COMPONENTS RELATED TO THE STAIRS SHALL BE SEALED AND SUBMITTED ALONG WITH SEALED ENGINEERED CALCULATIONS PREPARED BY A LICENSED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, DETAILS, AND STRUCTURAL CALCULATIONS FOR THE ITEMS PER THE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND DESIGN CRITERIA.

A. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED FOR REVIEW TO THE ARCHITECT AND ENGINEER-OF-RECORD.

B. THE ARCHITECT, AND ENGINEER-OF-RECORD SHALL REVIEW ALL DEFERRED SUBMITTAL ITEMS, SIGN AND STAMP THEM AS APPROVED, AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATED THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING AND NO EXPECTATIONS ARE TAKEN.

C. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

REFERENCE STANDARDS: CONFORM TO IBC CHAPTER 18 "SOILS AND FOUNDATIONS."

### **DESIGN SOIL VALUES \***

\* DESIGN SOIL VALUES SHOWN ARE PRESUMPTIVE VALUES PRESENTED IN IBC 1806 AND THEREFORE ARE TO BE VERIFIED IN THE FIELD. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE



### **GENERAL NOTES**

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### SOIL AND FOUNDATIONS (CONT)

FOUNDATIONS AND FOOTINGS: FOUNDATIONS SHALL BEAR ON EITHER COMPETENT NATIVE SOIL OR COMPACTED STRUCTURAL FILL AS PER THE GEOTECHNICAL REPORT. EXTERIOR PERIMETER FOOTINGS SHALL BEAR NOT LESS THAN 24" BELOW FINISH GRADE, UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER AND/OR THE BUILDING OFFICIAL.

FOOTING DEPTH: FOOTINGS SHALL BE PLACED ACCORDING TO THE DEPTHS SHOWN ON THE DRAWINGS. TOPS OF FOOTINGS SHALL BE AS SHOWN ON PLANS WITH VERTICAL CHANGES AS INDICATED WITH STEPS IN THE FOOTINGS; LOCATIONS OF STEPS SHOWN AS APPROXIMATE AND SHALL BE COORDINATED WITH THE CIVIL GRADING PLANS TO ENSURE THAT THE EXTERIOR PERIMETER FOOTINGS BEAR NO LESS THAN 24" BELOW FINISH GRADE. OR AS OTHERWISE INDICATED BY THE GEOTECHNICAL ENGINEER OR BUILDING OFFICIAL EXCAVATIONS FOR FOOTINGS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE AND REINFORCING. THE GEOTECHNICAL ENGINEER SHALL SUBMIT A LETTER OF COMPLIANCE TO THE OWNER. SHOULD SOIL AT THESE PRESCRIBED DEPTHS NOT MEET THE APPROVAL OF THE GEOTECHNICAL ENGINEER, FOOTING ELEVATIONS OR DESIGNS WILL BE ALTERED BY CHANGE ORDER.

SLABS-ON-GRADE: ALL SLABS-ON-GRADE SHALL BEAR ON COMPACTED STRUCTURAL FILL OR COMPETENT NATIVE SOIL PER THE GEOTECHNICAL REPORT. ALL MOISTURE SENSITIVE SLABS-ON-GRADE OR THOSE SUBJECT TO RECEIVE MOISTURE SENSITIVE COATINGS/COVERING SHALL BE PROVIDED WITH AN APPROPRIATE CAPILLARY BREAK AND VAPOR BARRIER/RETARDANT OVER THE SUBGRADE PREPARED AND INSTALLED AS NOTED IN THE GEOTECHNICAL REPORT, BARRIER MANUFACTURER'S WRITTEN RECOMMENDATIONS AND COORDINATED WITH THE FINISHES SPECIFIED BY THE ARCHITECT.

PREPARATION: THE CONTRACTOR SHALL PROVIDE FOR PROPER DEWATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER, SEEPING ETC

SHORING: THE CONTRACTOR SHALL PROVIDE FOR THE INSTALLATION AND DESIGN OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY AND ADEQUATELY RETAIN THE EARTH BANKS, NEW WALLS AND SUPPORT ANY EXISTING STRUCTURES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.

EXISTING CONDITIONS: ALL ABANDONED UTILITIES, FOOTINGS, ETC, THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED. NOTIFY THE STRUCTURAL ENGINEER SHOULD EXISTING FOUNDATIONS OR STRUCTURES BE ENCOUNTERED THAT ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS.

BACKFILL: ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN THE BUILDING PERIMETER SHALL BE MECHANICALLY COMPACTED IN LAYERS, TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. FLOODING WILL NOT BE PERMITTED. SEE THE GEOTECHNICAL REPORT FOR REQUIREMENTS. BACKFILL BEHIND RETAINING OR PIT WALLS BELOW GRADE SHALL NOT OCCUR UNTIL THE WALLS HAVE REACHED FULL DESIGN STRENGTH. PROPER BRACING TO PROTECT THE STRUCTURE AGAINST LATERAL LOADS SHALL BE IN PLACE PRIOR TO BACKFILL UNTIL THE ATTACHING FLOORS ARE IN PLACE AND HAVE REACHED FULL DESIGN STRENGTH.

### <u>CAST-IN-PLACE CONCRETE</u>

<u>REFERENCE STANDARDS</u>: CONFORM TO:

- 1. ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE", WITH MODIFICATIONS AS NOTED ON THE PROJECT DRAWINGS AND SPECIFICATIONS
- 2. IBC 2018 CHAPTER 19 "CONCRETE" 3. ACI 318-14 WITH MODIFICATIONS AS NOTED ON THE PROJECT DRAWINGS AND SPECIFICATIONS
- 4. ACI 117-10: SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS AND COMMENTARY RE-APPROVED 2015

FIELD REFERENCE: THE CONTRACTOR SHALL KEEP A COPY OF ACI FIELD REFERENCE MANUAL, SP-15, "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301-10) WITH SELECTED ACI AND ASTM REFERENCES."

CONCRETE MIXTURES: CONFORM TO ACI 301 SECTION 4 "CONCRETE MIXTURES" AND ACI 318 SECTION 26.4.

MATERIALS: CONFORM TO ACI 301 SECTION 4.2.1 "MATERIALS" FOR REQUIREMENTS FOR CEMENTITIOUS MATERIALS, AGGREGATES, MIXING WATER AND ADMIXTURES.

- 1. CEMENT
- A. PORTLAND CEMENT SHALL CONFORM TO ASTM C150 TYPE II.
- B. IF SULFATES ARE IN SOIL, PER GEOTECHNICAL REPORT, PROVIDE CEMENTITIOUS MATERIAL, MAXIMUM W/CM AND MINIMUM f' CONCRETE STRENGTH PER EXPOSURE CATEGORY S "X" AND ACI 301 TABLE 4.2.2.7.a
- C. DO NOT USE CONCRETE OR GROUT CONTAINING CHLORIDES.

SUBMITTALS: PROVIDE ALL SUBMITTALS REQUIRED BY ACI 301 SECTION 4.1.2. SUBMIT MIX DESIGNS TO THE SER FOR EACH MIX IN THE TABLE BELOW. SUBSTANTIATING STRENGTH RESULTS FROM PAST TESTS SHALL NOT BE OLDER THAN 24 MONTHS PER ACI 318 SECTION 26.4.3.1(b). ALL MIX DESIGNS SHALL BE VERIFIED BY A QUALIFIED TESTING LABORATORY. WHERE REQUIRED BY THE AUTHORITY HAVING JURISDICTION, MIX DESIGNS SHALL BE WET STAMPED BY A CIVIL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

### TABLE OF MIX DESIGN REQUIREMENTS

### MEMBER TYPE/LOCATION

FOOTINGS, STEMWALLS, AND SLAB

TABLE OF MIX DESIGN REQUIREMENTS NOTES:

- W/C RATIO: WATER-CEMENTITIOUS MATERIAL RATIOS SHALL BE BASED ON THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS. MAXIMUM RATIOS ARE CONTROLLED BY STRENGTH NOTED IN THE TABLE OF MIX DESIGN REQUIREMENTS AND DURABILITY **REQUIREMENTS GIVEN IN ACI 318 SECTION 19.3.2.** CEMENTITIOUS MATERIALS:
- A. THE USE OF FLY ASH, OTHER POZZOLANS, SILICA FUME, OR SLAG SHALL CONFORM OTHERWISE BY SER.
- LISTED IN ACI 318 SECTION 26.4.1.1. AND TABLE 26.4.2.2(b) AIR CONTENT: CONFORM TO ACI 318 SECTION 19.3.3.1. MINIMUM STANDARDS FOR
- EXPOSURE CLASS ARE NOTED IN THE TABLE. IF FREEZING AND THAWING CLASS IS NOT NOTED, AIR CONTENT GIVEN IS THAT REQUIRED BY THE SER. CONCRETE SURFACES IN CONTACT WITH THE SOIL REQUIRE ENTRAINED AIR. TOLERANCE IS ±1-1/2%. AIR CONTENT SHALL BE MEASURED AT POINT OF PLACEMENT.
- HARDROCK AGGREGATES (COARSE AND FINE) SHALL CONFORM TO ASTM C33. LIGHT-WEIGHT AGGREGATES SHALL CONFORM TO ASTM C330.
- SLUMP: CONFORM TO ACI 301 SECTION 4.2.2.2. SLUMP SHALL BE DETERMINED AT POINT OF DELIVERY.
- 6. CHLORIDE CONTENT: CONFORM TO ACI 318 SECTION 19.3.2.1 AND TABLE 19.3.2.1. 7. NON-CHLORIDE ACCELERATOR: NON-CHLORIDE ACCELERATING ADMIXTURE MAY BE USED IN CONCRETE PLACED AT AMBIENT TEMPERATURES BELOW 50°F AT THE
- CONTRACTOR'S OPTION. 8. ACI 318, SECTION 19.3.1.1 EXPOSURE CLASSES SHALL BE ASSUMED TO BE F0, S0, P0, AND CO UNLESS DIFFERENT EXPOSURE CLASSES ARE LISTED IN THE TABLE OF MIX
- DESIGN REQUIREMENTS THAT MODIFY THESE BASE REQUIREMENTS. 9. ELEVATED SLABS AND BEAM CONCRETE MIXTURE SHALL HAVE A MAXIMUM SHRINKAGE
- OF 0.04 PERCENT AT 28 DAYS AS MEASURED BY ASTM C157. 10. SUBMIT ASTM 1260, C1567, C1293 TESTING FOR ALL ALKALI-SILICA REACTION (ASR) FROM THE AGGREGATE SUPPLIER FOR BOTH THE COARSE AND FINE AGGREGATES. IN LIEU OF TESTING, A 10-YEAR SERVICE HISTORY FOR THE AGGREGATES MAY BE SUBMITTED.

### <u>CAST-IN-PLACE CONCRETE (CONT)</u>

MEASURING, MIXING AND DELIVERY: CONFORM TO ACI 301 SECTION 4.3-EXECUTION. 1. DO NOT ADD WATER TO CONCRETE DURING DELIVERY, AT PROJECT SITE, OR DURING PLACEMENT.

HANDLING, PLACING, CONSTRUCTING AND CURING: CONFORM TO ACI 301 SECTION 5. IN ADDITION, HOT WEATHER CONCRETING SHALL CONFORM TO ACI 305R-10 WITH 305.1-14 UPDATES AND COLD WEATHER CONCRETING SHALL CONFORM TO ACI 306R-10. CONCRETE CURING: PROVIDE CURING COMPOUNDS FOR CONCRETE AS FOLLOWS: 1. USE MEMBRANE CURING COMPOUNDS THAT ARE COMPATIBLE WITH AND WILL NOT

- AFFECT SURFACES TO BE COVERED WITH FINISH MATERIALS APPLIED DIRECTLY TO CONCRETE. APPLY CURING COMPOUNDS AT A RATE EOUIVALENT TO THE RATE OF APPLICATION AT
- WHICH CURING COMPOUND WAS ORIGINALLY TESTED FOR IN CONFORMANCE TO THE REOUIREMENTS OF ASTM C 309-11 AND THE MANUFACTURER'S RECOMMENDATIONS.

CONSTRUCTION JOINTS: CONFORM TO ACI 301 SECTIONS. 2.2.2.5, 5.2.2.1 AND 5.3.2.6. CONSTRUCTION JOINTS SHALL BE LOCATED AND DETAILED AS ON THE CONSTRUCTION DRAWINGS. SUBMIT ALTERNATE LOCATIONS PER ACI 301 SECTION 5.1.2.3A FOR REVIEW AND APPROVAL BY THE SER (2) WEEKS MINIMUM PRIOR TO FORMING. USE OF AN ACCEPTABLE ADHESIVE, SURFACE RETARDANT, PORTLAND CEMENT GROUT OR ROUGHENING THE SURFACE IS NOT REQUIRED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.

EMBEDDED ITEMS: POSITION AND SECURE IN PLACE EXPANSION JOINT MATERIAL, ANCHORS AND OTHER STRUCTURAL (REINFORCING BARS, ANCHOR BOLTS AND OTHER EMBEDDED ITEMS) AND NON-STRUCTURAL EMBEDDED ITEMS BEFORE PLACING CONCRETE. CONTRACTOR SHALL REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND ARCHITECTURAL DRAWINGS AND COORDINATE OTHER EMBEDDED ITEMS.

GROUT: USE 5000 PSI NON-SHRINK GROUT UNDER COLUMN BASE PLATES.

CONCRETE PLACEMENT TOLERANCE: CONFORM TO ACI 117 FOR CONCRETE PLACEMENT TOLERANCE. CONCRETE FORMS SHALL BE LAID OUT AND CONSTRUCTED TO PROVIDE THE SPECIFIED CAMBERS INDICATED IN THE STRUCTURAL DRAWINGS. CONCRETE PLACEMENT SHALL BE IN ACCORDANCE WITH ACI STANDARD 304R-00 AND PROJECT SPECIFICATIONS.

CONCRETE PREPARATION AND FINISH: CONCRETE SURFACES TO BE ROUGHENED TO 1/4" AMPLITUDE WHERE MASONRY WALLS INTERSECT CONCRETE OR WHERE NEW CONCRETE INTERFACES WITH EXISTING CONCRETE. THE PROJECTING CORNERS OF COLUMNS, BEAMS, AND WALLS, ETC, SHALL BE FORMED WITH A 3/4" CHAMFER, UNLESS OTHERWISE NOTED ON ARCHITECTURAL DRAWINGS OR SPECIFICATIONS.

ELEVATED SLAB PLACEMENT: IF COLUMNS AND WALLS ARE PLACED WITH A FLOOR, (2) HOURS MUST ELAPSE BETWEEN END OF COLUMN OR WALL PLACEMENT AND BEGINNING OF THE FLOOR PLACEMENT. MECHANICAL PIPES OR ELECTRICAL CONDUIT SHALL NOT PASS THROUGH CONCRETE COLUMNS OR BEAMS UNLESS SPECIFICALLY DETAILED.

SLABS: FOR SLABS ON GRADE AND CONCRETE ON STEEL DECK NO PIPES OR CONDUITS SHALL BE PLACED WITHIN THE INDICATED CONCRETE SLAB THICKNESS AND SHALL BE LOCATED BELOW THE SLAB UNLESS SPECIFICALLY DETAILED OTHERWISE.

CLEAR COVERAGE TO REINFORCING: CLEAR COVERAGE OF CONCRETE REINFORCING SHALL BE PER ACI 318 SECTION 20.6.1.3.1 AS FOLLOWS:

MIN 28 DAY STRENGTH f' <sub>c</sub> (PSI)	MAXIMUM AGGREGATE	EXPOSURE CLASS	MAX W/C	AIR CONTENT
3,500	3/4"	F1, C1	0.45	5%

TO ACI 318 SECTIONS 19.3.2 AND 19.3.3.4. MAXIMUM AMOUNT OF FLY ASH SHALL BE 20% OF TOTAL CEMENTITIOUS CONTENT UNLESS REVIEWED AND APPROVED

B. CEMENTITIOUS MATERIALS SHALL CONFORM TO THE RELEVANT ASTM STANDARDS

CLEAR COVERAGE OF REINFORG	CING	
LOCATION OF CONCRETE	CONCRETE COVER	E
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"	R V
CONCRETE EXPOSED TO EARTH OR WEATHER: #6 THROUGH #18 BAR #5 BAR AND SMALLER	2″ 1 1/2″	L S II
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND UNO: SLABS, WALLS AND JOISTS: #14 AND #18 BAR #11 BAR AND SMALLER	1 1/2″ 3/4"	C II <u>E</u> B

### <u>REINFORCING STEEL (FOR CONCRETE)</u>

**<u>REINFORCING STEEL</u>**: ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE' (ACI 318-14) AND THE 'MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION' BY CRSI AND WCRSI AS MODIFIED BY THE PROJECT DRAWINGS AND SPECIFICATIONS.

**REINFORCING MATERIAL: DEFORMED REINFORCING BARS SHALL CONFORM TO THE** REQUIREMENTS OF ASTM A615 GRADE 60 AND ASTM A706 GRADE 60 FOR DEFORMED WELDABLE BARS.

WELDING: WELDING OF REINFORCING IS PERMITTED ONLY WHERE SHOWN ON THE DRAWINGS OR WHEN APPROVED BY THE STRUCTURAL ENGINEER. WELDING OF REINFORCING BARS SHALL BE WITH LOW HYDROGEN ELECTRODES IN ACCORDANCE WITH AWS D1.4 "STRUCTURAL WELDING CODE - REINFORCING STEEL" AND ACI 318 SECTION 26.6.4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A706 GRADE 60, UNLESS NOTED OTHERWISE. SUBMIT WELDING PROCEDURE TO STRUCTURAL ENGINEER FOR ALL WELDED REINFORCEMENT. ELECTRODES USED SHALL BE E80 ELECTRODES FOR ASTM A706 GRADE 60 REINFORCEMENT AND E90 ELECTRODES FOR ASTM A615 REINFORCEMENT.

REINFORCING BAR BENDS: ALL REINFORCING BAR BENDS SHALL BE MADE COLD.

DOWELS: REINFORCING DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME NUMBER, SIZE, SPACING AND GRADE AS THE SPECIFIED VERTICAL REINFORCING, UNO

**INSPECTION:** ALL REINFORCING BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION OCCURS.

WIRE FABRIC: WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6" OR ONE FULL MESH AND ONE HALF, WHICHEVER IS GREATER.

### <u>POST-INSTALLED ANCHORS (INTO CONCRETE)</u>

DESIGN STANDARDS: POST-INSTALLED ANCHORS INTO CONCRETE FOR THIS PROJECT ARE DESIGNED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE, ACI 318-14 CHAPTER 17

POST-INSTALLED ANCHORS: ALL ANCHORS AND THREADED RODS INSTALLED IN EXTERIOR OR DAMP ENVIRONMENTS SHALL BE GALVANIZED OR STAINLESS STEEL TO PROTECT AGAINST CORROSION. INSTALL ONLY WHERE SPECIFICALLY SHOWN IN THE DETAILS OR ALLOWED BY SER. ALL POST-INSTALLED ANCHORS TYPES AND LOCATIONS SHALL BE APPROVED BY THE SER AND SHALL HAVE A CURRENT ICC-EVALUATION SERVICE REPORT THAT PROVIDES RELEVANT DESIGN VALUES NECESSARY TO VALIDATE THE AVAILABLE STRENGTH EXCEEDS THE REQUIRED STRENGTH. SUBMIT CURRENT MANUFACTURER'S DATA AND ICC-ES REPORT TO SER FOR APPROVAL REGARDLESS OF WHETHER OR NOT IT IS A PRE-APPROVED ANCHOR. ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE TO ICC-ES REPORT AND MANUFACTURER'S INSTRUCTIONS. NO REINFORCING BARS SHALL BE DAMAGED DURING INSTALLATION OF POST-INSTALLED ANCHORS. SPECIAL INSPECTION SHALL BE PER THE TESTS AND INSPECTIONS SECTION. ANCHOR TYPE, DIAMETER AND EMBEDMENT SHALL BE AS INDICATED ON DRAWINGS.

### POST-INSTALLED ANCHORS (INTO CONCRETE) (CONT)

POST-INSTALLED ANCHORS AT POST-TENSIONED CONCRETE DECKS (EXTENDING INTO THE DEPTH WHERE TENDONS ARE PLACED) SHALL NOT BE USED UNLESS THE TENDONS HAVE BEEN LOCATED AND WILL NOT BE DAMAGED BY THE ANCHOR INSTALLATION.

- 1. ADHESIVE ANCHORS: THE FOLLOWING ADHESIVE-TYPE ANCHORING SYSTEMS HAVE BEEN USED IN THE DESIGN AND SHALL BE USED FOR ANCHORAGE TO CONCRETE AND MASONRY, AS APPLICABLE AND IN ACCORDANCE WITH CORRESPONDING CURRENT ICC-ES REPORT. DRILLED-IN ANCHOR EMBEDMENT LENGTHS SHALL BE AS SHOWN ON DRAWINGS, OR NOT LESS THAN 7 TIMES THE ANCHOR NOMINAL DIAMETER (7D).
- A. HILTI "HIT HY-200" ICC ESR-3187 FOR ANCHORAGE TO CONCRETE ONLY B. HILTI "HIT HY-270" -ICC ESR-4143 FOR ANCHORAGE TO MASONRY, ICC ESR-4144 FOR ANCHORAGE TO UNREINFORCED MASONRY
- C. SIMPSON "SET-XP" -ICC ESR-2508 FOR ANCHORAGE TO CONCRETE ONLY D. SIMPSON "SET" -ICC ESR-1772 FOR ANCHORAGE TO MASONRY ONLY
- 2. EXPANSION ANCHORS:
- A. HILTI "KB-TZ"-ICC ESR-1917 FOR ANCHORAGE TO CONCRETE ONLY
- B. HILTI "KWIK BOLT 3"-ICC ESR-1385\* FOR ANCHORAGE TO MASONRY ONLY C. SIMPSON "STRONG-BOLT"-ICC ESR-3037 FOR ANCHORAGE TO CONCRETE ONLY
- D. SIMPSON "WEDGE-ALL"-ICC ESR-1396 FOR ANCHORAGE TO MASONRY ONLY
- 3. SCREW ANCHORS:

A. SIMPSON "TITEN HD"-ICC ESR-2713 FOR CONCRETE, ICC ESR-1056 FOR MASONRY

### **RENOVATION NOTES**

DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.

- 1. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE
- ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE. 2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
- SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING, IF POSSIBLE. 4. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, REBAR DOWELS EPOXIED INTO THE EXISTING CONCRETE SHALL BE PROVIDED TO MATCH HORIZONTAL REINFORCING, UNLESS OTHERWISE NOTED ON PLANS.

### <u>RENOVATION NOTES (CONT)</u>

EXTERIOR WALLS: ALL EXTERIOR WALLS SHALL BE INSPECTED AND REPAIRED AS FOLLOWS: SCRAPE ALL LOOSE AND WEAKENED MORTAR OUT TO FULL DEPTH OF THE DETERIORATION; REMOVE AND REPLACE ANY LOOSE MASONRY UNITS; CHECK FOR LOOSE FACING BRICK VENEERS; TUCK POINT ALL JOINTS SOLID. ALL MASONRY RESTORATION AND REPAIR SHALL BE PERFORMED IN SUCH A MANNER THAT THE EXISTING STRUCTURE IS NOT WEAKENED OR LEFT UNSUPPORTED DURING THE PROCESS OF THE WORK. ALL EXTERIOR APPENDAGES SUCH AS FIRE ESCAPES, CORNICES AND EYEBROWS SHALL BE INSPECTED FOR STRUCTURAL INTEGRITY AND THE CONDITION OF THE CONNECTIONS TO THE STRUCTURE. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER AS TO THE FINDINGS OF THIS INSPECTION.

EXISTING MASONRY SHEAR TEST: ALLOWABLE UNREINFORCED MASONRY STRESSES SHALL BE DETERMINED BY PERFORMING IN-PLACE SHEAR TESTS. TESTING IS TO BE IN ACCORDANCE WITH FEMA 178 AND THE IBC, INCLUDING ANY AMENDMENTS OF THE AUTHORITY HAVING JURISDICTION. TESTING IS TO BE PERFORMED BY AN APPROVED AGENCY. AN ACCURATE RECORD OF ALL SUCH TESTS AND THEIR LOCATION IN THE BUILDING SHALL BE RECORDED AND THESE RESULTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL AS PART OF THE STRUCTURAL ANALYSIS.

THE MINIMUM NUMBER OF TESTS SHALL BE TWO PER WALL OR LINE OF WALL ELEMENTS RESISTING A COMMON FORCE, OR ONE TEST PER 1500 SQUARE FEET OF WALL SURFACE. THE MINIMUM NUMBER OF TESTS AND EXACT TEST LOCATION SHALL BE DETERMINED AT THE BUILDING SITE BY THE STRUCTURAL ENGINEER.

THE TEST SHALL BE PERFORMED BY REMOVING THE BRICK IMMEDIATELY ADJACENT TO THE TEST BRICK ON THE SAME LEVEL AND INSERTING A HYDRAULIC RAM INTO THIS SPACE. THE MORTAR IS TO BE REMOVED AT THE VERTICAL JOINT AT THE OTHER END OF THE BRICK BEING TESTED. THE LOAD IS TO BE APPLIED BY THE HYDRAULIC RAM UNTIL FAILURE OCCURS. THE LOAD SHALL BE RECORDED, ALONG WITH THE DIMENSIONS OF THE TEST BRICK, ITS LOCATIONS, AND SURCHARGE LOADS.

THE RESULTS OF THE TEST ARE TO BE SUBMITTED TO THE DPD, ALONG WITH A LETTER FROM THE STRUCTURAL ENGINEER OUTLINING THE PROPOSED ALLOWABLE SHEAR STRESS, FACTOR OF SAFETY AND MAXIMUM ACTUAL ANTICIPATED SHEAR STRESS.

DRYROT: CONTRACTOR SHALL CHECK FOR DRYROT AT ALL EXTERIOR WALLS, EXISTING TOILET ROOM FLOORS AND WALLS, AREAS SHOWING WATER STAINS, AND ALL WOOD MEMBERS IN BASEMENT AND CRAWL SPACES. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

### WOOD FRAMING

REFERENCE STANDARDS: CONFORM TO:

- 1. IBC CHAPTER 23 "WOOD"
- CONSTRUCTION"

- CONNECTIONS SUBJECT TO LATERAL LOADS"

SUBMITTALS: SUBMIT SHOP DRAWINGS TO THE ENGINEER OF RECORD (EOR) AND ARCHITECT FOR REVIEW. SHOP DRAWINGS SHALL INCLUDE MEMBER SIZE, SPACING, CAMBER, MATERIAL TYPE, GRADE, SHOP AND FIELD ASSEMBLY DETAILS AND CONNECTIONS, TYPES AND LOCATIONS OF BOLTS AND OTHER FASTENERS. SUBMIT PRODUCT DATA AND PROOF OF ICBO APPROVAL FOR FRAMING MEMBERS AND FASTENERS THAT HAVE BEEN DESIGNED BY OTHERS. SEE DEFERRED SUBMITTAL SECTION FOR SPECIFIC PRODUCTS TO BE DESIGNED BY OTHERS.

IDENTIFICATION: ALL SAWN LUMBER AND PRE-MANUFACTURED WOOD PRODUCTS SHALL BE IDENTIFIED BY THE GRADE MARK OR A CERTIFICATE OF INSPECTION ISSUED BY THE CERTIFYING AGENCY.

MATERIALS

JOISTS: (2x, 3x, AN

BEAMS AND STRIN (INCLUDING 6x AN

POSTS AND TIMBE

STUDS, PLATES AND MISCELLANEOUS LIGHT FRAMING:

- THE STRUCTURAL ENGINEER.

BEAMS: (SIMPLE SPAN) BEAMS: (CONT OR CANTILEVER SPANS) COLUMNS: (POST)

2. NDS- "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION"

APA PANEL DESIGN SPECIFICATION (D510) 4. ANSI/TPI1 "NATIONAL DESIGN STANDARD FOR METAL-PLATE-CONNECTED WOOD TRUSS

5. BCSI "GUIDE TO GOOD PRACTICE FOR INSTALLING, RESTRAINING AND BRACING OF METAL PLATED CONNECTED WOOD TRUSSES"

6. TPI DSB "RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" APA REPORT TT-045B "MINIMUM NAIL PENETRATION FOR WOOD STRUCTURAL PANEL

I. FRAMING LUMBER SHALL BE KILN DRIED OR MOISTURE CONTENT LESS THAN 19%, AND GRADED AND MARKED IN CONFORMANCE WITH DEPARTMENT OF COMMERCE (DOC) PRODUCT STANDARD (PS) 20 STANDARD GRADING RULES FOR AMERICAN SOFTWOOD LUMBER FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

ND 4x MEMBERS)	DOUGLAS FIR #2
IGERS: ID LARGER MEMBERS)	DOUGLAS FIR #1
RS:	DOUGLAS FIR #1
	DOUGLAS FIR #2

2. PRE-FABRICATED WOOD I-JOISTS SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5055. THE MATERIALS FOR DESIGN ARE BASED ON I-JOISTS MANUFACTURED BY TRUS-JOIST. ALTERNATE PRODUCTS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THEY HAVE CURRENT ICC-ES OR IAMPO APPROVAL FOR EQUIVALENT OR GREATER LOAD AND STIFFNESS PROPERTIES AND ARE REVIEWED AND APPROVED BY

3. TAPERED AND PARALLEL CHORD I-JOISTS (DEFERRED SUBMITTAL) SHALL CONFORM TO ICC REPORT NO ESR-1153 OR PER ESR PER MANUFACTURER. THE MANUFACTURER SHALL DESIGN THE JOISTS FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. JOISTS SHALL HAVE WOOD CHORDS AND SOLID WOOD WEBS. JOISTS SHALL BE TAPERED OR PARALLEL AS SHOWN ON THE PLANS.

4. GLUED LAMINATED TIMBER SHALL CONFORM TO AITC 117-2015 "STANDARD SPECIFICATIONS FOR STRUCTURAL GLUE-LAMINATED TIMBER OF SOFTWOOD SPECIES, MANUFACTURING AND DESIGN" AND ANSI / AITC A190.1 "STRUCTURAL GLUED LAMINATED TIMBER." CAMBER ALL GLUED LAMINATED BEAMS, EXCEPT CANTILEVERED AND CONTINUOUS BEAMS, TO 3000' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

> DF/DF - 24F-V4 DF/DF - 24F-V8 DF - L2

Set ESSION/ LUCEA 186 VIATE O RED BI	AL ENGINE SED TEN 30 F IDANO RANDAU 03 20 24	
200 BROAD STREET BOISE, IDAHO PHONE: 208-343-4635 • FAX: 208-343-1858	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT / ENGINEER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR PROJECTS, FOR ADDITIONS TO THIS PROJECT, WHEN PHASED-WITHOUT THE WRITTEN CONSENT OF CSHQA OR ITS AFFILIATES.	
IPROVEMENT Garden City, ID	200 BROAD STREET BOISE, ID 83702 (208) 343-4635 • FAX (208) 343-1858 http://www.cshqa.com	
ITD DIST. 3 BLDG. IN 8150 West Chinden Boulevard	CSHQA	
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PROJECTDATE2300210-30-23DRAWNCHECKEDSDJBREVISED		
SHEET TITLE GENERAL NOTES		

### **GENERAL NOTES**

### <u>WOOD FRAMING (CONT)</u>

- CROSS LAMINATED TIMBER (CLT) SHALL BE DESIGNED AND MANUFACTURED PER ANSI/APA PRG320. THE MATERIALS USED FOR DESIGN ARE BASED ON COMPONENTS MANUFACTURED BY STRUCTURLAM. ALTERNATIVE PRODUCTS, BY OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THEY HAVE A CURRENT ICC-ES OR IAPMO APPROVAL FOR EQUIVALENT OR GREATER LOADS. SUBSTITUTION REQUEST WITH ALL DOCUMENTATION TO BE SUBMITTED TO STRUCTURAL ENGINEER FOR REVIEW.
- WOOD STRUCTURAL SHEATHING (PLYWOOD) WOOD APA-RATED STRUCTURAL SHEATHING INCLUDES: ALL VENEER PLYWOOD, ORIENTED STRAND BOARD, WAFERBOARD, PARTICLEBOARD, T1-11 SIDING, AND COMPOSITES OF VENEER AND WOOD BASED MATERIAL WITH T&G JOINT. ARCHITECT AND/OR MANUFACTURER OF ARCHITECTURAL FINISHES MAY DISALLOW OSB AND/OR REOUIRE A MINIMUM THICKNESS OF SHEATHING. CONFIRM WITH ARCHITECT AND/OR MANUFACTURER FOR ALL CASES. CONFORM TO "CONSTRUCTION AND INDUSTRIAL PLYWOOD" BASED ON PRODUCT STANDARD PS 1-09 BY THE U.S. DEPT. OF COMMERCE, AND "PERFORMANCE STANDARD FOR WOOD BASED STRUCTURAL-USE PANELS" BASED ON PRODUCT STANDARD PS 2-10 BY THE U.S. DEPT OF COMMERCE AND "PANEL DESIGN SPECIFICATION (REVISED 2012)" BASED ON APA PDS-12 BY THE AMERICAN PLYWOOD ASSOCIATION. SHEATHING MAY BE REQUIRED TO BE FIRE TREATED BASED ON CONSTRUCTION TYPE, CONFIRM WITH ARCHITECT.

UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE AND GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH (2) 10d-F NAILS AT EACH END, UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2x BLOCKING AT ALL UNFRAMED PANEL EDGES AND NAIL WITH EDGE NAILING SPACED PER PLANS.

- FRAMING LUMBER IN DIRECT CONTACT WITH CONCRETE OR MASONRY EXPOSED TO WEATHER OR BELOW GRADE, LUMBER WITH 12" OF EXPOSED GROUND CRAWL SPACE OR THAT ARE WITHIN 8" OF EARTH SHALL BE PRESERVATIVE TREATED AND MARKED PER IBC SECTION 2303.1.9 AND AWPA STANDARD U1 AND M4 FOR THE SPECIES, PRODUCT, PRESERVATIVE, AND END USE.
- STRUCTURAL COMPOSITE LUMBER (SCL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH MEMBER SHALL BEAR THE STAMP OF THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE AND THE INDEPENDENT INSPECTION AGENCY LOGO.

LAMINATED STRAND	LUMBER (LSL) ST	RUCTURAL PROPER	RTIES	
BLOCKING (1 3/4" MINIMUM THICKNESS):	F <sub>b</sub> = 2,325 PSI	$E = 1.55 \times 10^6 PSI$	F <sub>v</sub> = 310 PSI	
BEAMS AND HEADERS:	F <sub>b</sub> = 2,325 PSI	E = 1.55 x 10 <sup>6</sup> PSI	$F_v = 310 \text{ PSI}$	
COLUMNS:	F <sub>b</sub> = 1,700 PSI	$E = 1.3 \times 10^{6} PSI$	$F_v = 400 \text{ PSI}$	
LAMINATED VENEER LUMBER (LVL) STRUCTURAL PROPERTIES				
BEAMS & HEADERS (1 1/2" & 1 3/4" WIDTH)	$F_{b} = 2,600 \text{ PSI}$	$E = 1.9 \times 10^6 PSI$	F <sub>v</sub> = 285 PSI	
COLUMNS	F <sub>b</sub> = 1,700 PSI	$E = 1.3 \times 10^{6} PSI$	F <sub>v</sub> = 425 PSI	
PARALLEL STRAND LUMBER (PSL) STRUCTURAL PROPERTIES				
RESIDENTIAL	F <sub>b</sub> = 2,900 PSI	$E = 2.0 \times 10^6 PSI$	F <sub>v</sub> = 290 PSI	
COMMERCIAL, D>18"	F <sub>b</sub> = 2,900 PSI	$E = 2.2 \times 10^6 PSI$	F <sub>v</sub> = 290 PSI	
COMMERCIAL COLUMNS	F <sub>b</sub> = 2,400 PSI	$E = 1.8 \times 10^6 PSI$	$F_v = 190 PSI$	

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

9. ENGINEERED WOOD RIM BOARD SHALL BE DESIGNED AND MANUFACTURED PER ANSI/APA PRR 410. THE MATERIALS SHALL BE MANUFACTURED WITH THE MINIMAL STRUCTURAL **PROPERTIES AS FOLLOWS:** 

RIMBOARD LUMBER STRUCTURAL PROPERTIES				
1 1/4" - 1 1/2" LSL RIM	$F_b = 1,700 PSI$	$E = 1.3 \times 10^{6} PSI$	$F_v = 425 \text{ PSI}$	
1 3/4" LSL RIM	F <sub>b</sub> = 2,325 PSI	E = 1.55 x 10 <sup>6</sup> PSI	$F_v = 310 \text{ PSI}$	

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. THE MINIMUM RIM THICKNESS SHALL BE 1 1/4" UNO ON PLAN OR IN REFERENCED DETAILS.

THE MATERIALS USED FOR DESIGN ARE BASED ON MEMBERS MANUFACTURED BY WEYERHAEUSER. ALTERNATIVE PRODUCTS, BY OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THEY HAVE CURRENT ICC-ES OR IAPMO APPROVAL FOR EQUIVALENT OR GREATER LOADS. SUBSTITUTION REQUEST WITH ALL DOCUMENTATION TO BE SUBMITTED TO STRUCTURAL ENGINEER FOR REVIEW.

WOOD CONSTRUCTION CONNECTORS: SHALL BE SIMPSON STRONG-TIE AS SPECIFIED IN THEIR LATEST CATALOG. ALTERNATE CONNECTORS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUIVALENT OR GREATER LOAD CAPACITIES AND ARE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO ORDERING. CONNECTORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS WITH PROPER FASTENER TYPE. WHERE CONNECTOR STRAPS CONNECT (2) MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. WHERE STRAPS ARE USED AS HOLD-DOWNS, NAIL STRAPS TO WOOD FRAMING JUST PRIOR TO DRYWALL APPLICATION, AS LATE AS POSSIBLE IN THE FRAMING PROCESS TO ALLOW THE WOOD TO SHRINK AND THE BUILDING TO SETTLE. PREMATURE NAILING OF THE STRAP MAY LEAD TO STRAP BUCKLING AND POTENTIAL FINISH DAMAGE.

WHERE CONNECTORS ARE IN EXPOSED EXTERIOR APPLICATIONS IN CONTACT WITH PRESERVATIVE TREATED WOOD (PT) OTHER THAN SBX/DOT AND ZINC BORATE IN AN INTERIOR, DRY ENVIRONMENT, CONNECTORS SHALL BE EITHER BATCH HOT-DIPPED GALVANIZED, MECHANICALLY GALVANIZED (ASTM B695, CLASS 40 OR GREATER) STAINLESS STEEL, OR PROVIDED WITH 1.85 OZ/SF OF ZINC GALVANIZING EOUAL TO OR BETTER THAN SIMPSON ZMAX FINISH.

### WOOD FRAMING (CONT)

FASTENERS (NAILS, BOLTS, SCREWS, ETC) ATTACHING TIMBER CONNECTORS JOIST HANGERS, POST CAPS AND BASES, ETC) TO PT WOOD SHALL HAVE SIMILAR CORROSION RESISTANCE PROPERTIES (MATCHING PROTECTIVE TREATMENTS) AS THE PROTECTED CONNECTOR. FASTENERS (NAILS, BOLTS, SCREWS, ETC) ATTACHING SAWN TIMBER MEMBERS OR SHEATHING (SHEAR WALLS) TO PT WOOD BE CORROSION RESISTANT; NAILS AND LAG BOLTS SHALL BE EITHER HOT-DIPPED GALVANIZED (ASTM A153) OR STAINLESS STEEL. VERIFY THE SUITABILITY OF THE FASTENER PROTECTION/COATING WITH THE WOOD TREATMENT CHEMICAL MANUFACTURER/SUPPLIER.

PROVIDE STANDARD CUT WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL NAILS 12D AND SMALLER SHALL BE FULL LENGTH COMMON UNLESS NOTED OTHERWISE. NAIL STRAPS TO WOOD FRAMING AS LATE AS POSSIBLE IN THE FRAMING PROCESS TO ALLOW THE WOOD TO SHRINK AND THE BUILDING TO SETTLE. PREMATURE NAILING OF THE STRAP MAY LEAD TO STRAP BUCKLING AND POTENTIAL FINISH DAMAGE.

PLATE WASHERS AT SHEARWALLS: IN ADDITION TO STANDARD CUT WASHERS, 0.229"x3"x3" MINIMUM STEEL PLATE WASHERS ARE REQUIRED AT ALL SHEARWALLS AND WHERE DENOTED ON PLANS AND/OR IN REFERRED DETAILS TO AVOID CROSS GRAIN BENDING IN BOTTOM PLATE. PLATE WASHERS ARE PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1 3/4". PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF PLATE ON THE SIDE(S) WITH SHEATHING OR OTHER MATERIAL RATED FOR SHEAR. LARGER WASHERS ARE REQUIRED AT DOUBLE SIDED SHEARWALLS TO ACHIEVE MINIMUM 1/2" DIMENSION FROM BOTH SIDES UNO.

FASTENERS: CONFORM TO IBC SECTION 2304.10 "CONNECTIONS AND FASTENERS." UNLESS NOTED ON PLANS, NAIL PER TABLE 2304.10.1. UNLESS NOTED OTHERWISE ALL NAILS SHALL BE COMMON. ALTERNATE NAILS MAY BE USED BUT ARE SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. SUBSTITUTION OF STAPLES FOR THE NAILING OF RATED SHEATHING IS SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.

LAG SCREWS/BOLTS: CONFORM TO ASTM A307 AND IBC SECTION 2304.10.

NAILING REQUIREMENTS: PROVIDE MINIMUM NAILING IN ACCORDANCE WITH IBC TABLE 2304.10.1. "FASTENING SCHEDULE" EXCEPT AS NOTED ON THE DRAWINGS. NAILING FOR ROOF/FLOOR DIAPHRAGMS/SHEAR WALLS SHALL BE PER DRAWINGS. NAILS SHALL BE DRIVEN FLUSH AND SHALL NOT FRACTURE THE SURFACE OF SHEATHING.

WOOD FASTENERS: NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

### WOOD FASTENERS

HOOD TASTENENS				
DRAWING ID	NAIL NAME	NAIL DIAMETER	NAIL LENGTH	
"6d"	6d COMMON	0.113"	2"	
"8d BOX"	8d BOX	0.113"	2 1/2"	
"8d"	8d COMMON	0.131"	2 1/2"	
"10d-F"	10d FRAMER	0.131"	3"	
"10d"	10d COMMON	0.148"	3"	
"16d SINKER"	16d SINKER	0.148"	3 1/4"	
"16d-S"	16d SHORT	0.131"	3 1/4"	
"16d"	16d COMMON	0.162"	3 1/2"	

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

NAILS: SHEATHING FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

HOT DIPPED GALVANIZED NAILS, BOLTS AND METAL PLATES: ALL NAILS, BOLTS AND METAL PLATES IN CONTACT WITH PRESSURE TREATED (INCLUDING FIRE-RETARDANT TREATED) LUMBER SHALL BE HOT DIPPED GALVANIZED. HARDWARE IN CONTACT WITH SBX/DOT AND ZINC BORATE TREATED IN AN INTERIOR, DRY ENVIRONMENT IS NOT REQUIRED TO BE HOT DIPPED GALVANIZED.

STANDARD LIGHT-FRAME CONSTRUCTION: UNLESS NOTED ON THE PLANS, CONSTRUCTION SHALL CONFORM TO IBC SECTION 2308, "CONVENTIONAL LIGHT-FRAME CONSTRUCTION."

NAILERS ON STEEL COLUMNS AND BEAMS: WOOD 3x OR (2)2x NAILERS ARE GENERALLY REQUIRED ON ALL HSS COLUMNS AND STEEL BEAMS ABUTTING OR EMBEDDED WITHIN WOOD FRAMING. UNLESS NOTED OTHERWISE, ATTACH WITH 5/8" DIAMETER BOLTS OR WELDED THREADED STUDS @ 16" ON CENTERS. WOOD NAILERS ON BEAMS SUPPORTING JOIST HANGERS SHALL NOT OVERHANG THE BEAM FLANGE BY MORE THAN 1/4".

MOISTURE CONTENT: WOOD MATERIAL USED FOR THIS PROJECT SHALL HAVE MAXIMUM MOISTURE CONTENT OF 19%. REFER TO TESTING AND INSPECTIONS FOR THE VERIFICATION OF THESE LIMITS. THE MAXIMUM MOISTURE CONTENT REQUIRED MAY BE LESS THAN 19% WHEN BASED ON A PARTICULAR CLADDING/INSULATION SYSTEM. REFER TO THE ARCHITECT'S DRAWINGS, AND PROJECT SPECIFICATIONS, OR WITH CLADDING INSTALLER FOR MAXIMUM RECOMMENDED MOISTURE CONTENT.

MOISTURE CONTENT: WOOD MATERIAL USED FOR THIS PROJECT SHALL HAVE MAXIMUM MOISTURE CONTENT OF 19%. REFER TO TESTING AND INSPECTIONS FOR THE VERIFICATION OF THESE LIMITS. THE MAXIMUM MOISTURE CONTENT REQUIRED MAY BE LESS THAN 19% WHEN BASED ON A PARTICULAR CLADDING/INSULATION SYSTEM. REFER TO THE ARCHITECT'S DRAWINGS, AND PROJECT SPECIFICATIONS, OR WITH CLADDING INSTALLER FOR MAXIMUM RECOMMENDED MOISTURE CONTENT.

CLADDING COMPATIBILITY: THE ARCHITECT/OWNER SHALL REVIEW THE CLADDING AND INSULATION SYSTEMS PROPOSED FOR THE PROJECT WITH RESPECT TO THEIR PERFORMANCE OVER WOOD STUDS WITH MOISTURE CONTENTS GREATER THAN 19%. EIFS SYSTEMS SHOULD BE AVOIDED ON WOOD-FRAMED PROJECTS DUE TO PROBLEMS WITH MOISTURE PROOFING.

WOOD SHRINKAGE AND EXPANSION: WOOD MATERIALS WILL EXPAND OR CONTRACT BASED ON RELATIVE CHANGES IN MOISTURE CONTENT. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION RELATED TO MITIGATING AND MANAGING THE EFFECTS OF CHANGES IN MOISTURE.

CONSTRUCTION TYPE: WHERE DENOTED ON ARCHITECTURAL DRAWINGS, LUMBER MAY BE REQUIRED TO BE FIRE TREATED. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR SUCH INSTANCES AND FIRE DETAILING REQUIREMENTS UNO ON STRUCTURAL DRAWINGS.

### **VENEER TIES**

WOOD STUDS: FOR WOOD AND STEEL STUD CONSTRUCTION USE "DUR-O-WAL - D/A213 HOT-DIPPED GALVANIZED WITH 3/16" WIRE PINTLE", OR APPROVED EQUIVALENT. INSTALL AT 4" VENEERS SPACED @ 16" OC MAX VERTICAL AND 16" OC HORIZONTAL. USE 2-D/A808 CO-POLYMER COATED SCREWS PER ANCHOR.

STEEL STUDS (CFS): FOR COLD FORMED STEEL STUD CONSTRUCTION USE "DUR-O-WAL -D/A213 HOT-DIPPED GALVANIZED WITH 3/16" WIRE PINTLE", OR APPROVED EQUIVALENT. INSTALL AT 4" VENEERS SPACED @ 16" OC MAX VERTICAL AND 16" OC HORIZONTAL. USE 2-D/A807 CO-POLYMER COATED SCREWS PER ANCHOR.

CMU: FOR CMU CONSTRUCTION USE "16GA X 7/8" WIDE HOT-DIPPED GALVANIZED WALL TIE. INSTALL AT 4" VENEERS SPACED SO AS TO SUPPORT NOT MORE THAN 2 SF OF WALL AREA, BUT NOT MORE THAN 24" OC HORIZONTALLY.

CONCRETE: FOR CONCRETE CONSTRUCTION USE "DUR-O-WAL - D/A5213 HOT-DIPPED GALVANIZED WITH 3/16" WIRE PINTLE AND MECHANICAL FASTENER INCLUDED", OR APPROVED EQUIVALENT. INSTALL AT 4" VENEERS SPACED SO AS TO SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL AREA, BUT NOT MORE THAN 24" OC HORIZONTALLY.

### <u>STRUCTURAL STEEL</u>

DESIGN STANDARDS: STRUCTURAL STEEL FOR THIS PROJECT IS DESIGNED IN ACCORDANCE WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS. STRUCTURAL STEEL FOR THIS PROJECT IS DESIGNED PER AISC STEEL CONSTRUCTION MANUAL, FOURTEENTH EDITION.

**REFERENCE STANDARDS:** 

- 1. IBC, CHAPTER 22 STEEL, HEREAFTER REFERENCED AS IBC. 2. ANSI/AISC 303-16 - CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES,
- HEREAFTER REFERENCED AS AISC 303. 3. ANSI/AISC 360-16- SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, HEREAFTER **REFERENCED AS AISC 360.**
- 4. RCSC 2014 SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS, PREPARED BY "RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS, HEREAFTER REFERENCED AS RCSC.
- 5. AWS D1.1-2015 STRUCTURAL WELDING CODE- STEEL, HEREAFTER REFERENCED AS AWS D1.1.

SUBMITTALS:

- 1. SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH AISC 360 SECTION M.1 AND AISC 303 SECTION 4.
- SUBMIT WELDER'S CERTIFICATES VERIFYING QUALIFICATION WITHIN PAST 12 MONTHS. 3. AFFIDAVIT STATING THE STEEL PROVIDED MEETS THE REQUIREMENTS OF THE GRADE(S) SPECIFIED.
- 4. MANUFACTURER'S ENGINEERING AND INSTALLATION INFORMATION FOR POST-INSTALLED ANCHORS INCLUDING APPLICABLE ICC EVALUATION SERVICE (ESR-XXXX) REPORT.
- 5. QA PLAN AND PROCEDURES OF FABRICATION SHOP.

	STEEL MATERIALS
WIDE FLANGE (W), TEE (WT) SHAPES	ASTM A992, F <sub>y</sub> =50 KSI
CHANNEL (C), ANGLES (L), PLATES (PL), AND BARS	ASTM A36, F <sub>y</sub> = 36 KSI
HOLLOW STRUCTURAL SECTION SQUARE/RECT (HSS) ROUND (HSS)	ASTM A500, GRADE C $F_y = 50$ KSI ASTM A500, GRADE C $F_y = 46$ KSI
WELDED HEADED STUDS	ASTM A108
WELDING ELECTRODES	E70XX, E71TXX UNLESS NOTED OTHERWISE WITH A MINIMUM TOUGHNESS OF 20 FT-LBS AT 40° F
ANCHOR RODS (UNO)	ASTM F1554, GRADE 36, $F_y$ =36 KSI

ALL MEMBERS ARE TO BE ERECTED WITH THE NATURAL MILL CAMBER OR INDUCED CAMBER UP, UNLESS OTHERWISE NOTED ON THE DRAWINGS. BEAM CAMBER ON THE DRAWINGS IS THE UPWARD CAMBER REOUIRED IN THE BEAM AS DELIVERED TO THE JOBSITE. CONTRACTOR TO CONSIDER CAMBER LOSS, IF ANY, DUE TO SHIPPING AND HANDLING.

### WELDING:

- 1. WELDING SHALL CONFORM TO AWS D1.1 AND VISUALLY CONFORM TO AWS SECTION 6 AND TABLE 6.1. FABRICATION/ERECTION INSPECTIONS BY THE CONTRACTOR PER AWS D1.1 SECTION 6, SHALL BE BY ASSOCIATE/CERTIFIED INSPECTORS (CAWI/CWI) PER AWS QC1 OR AWS B5.1. SPECIAL INSPECTIONS (VERIFICATION INSPECTIONS) SHALL BE BY A CERTIFIED WELDING INSPECTOR (CWI) OR SENIOR WELDING INSPECTOR (SCWI) PER AWS B5.1.
- 2. WELDERS SHALL BE QUALIFIED FOR THE SPECIFIC PRE-QUALIFIED JOINTS REQUIRED BY THE DESIGN AND CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS.
- 3. WELDER QUALIFICATIONS AND WPS'S SHALL BE MAINTAINED AT THE SITE OF THE WORK AND SHALL BE READILY AVAILABLE FOR INSPECTION UPON REQUEST, BOTH IN THE SHOP AND IN THE FIELD.
- 4. USE E70 OR E71T, 70 KSI STRENGTH ELECTRODES APPROPRIATE FOR THE PROCESS SELECTED.
- 5. WELDING OF SHEAR STUDS ON STEEL BEAMS FOR COMPOSITE CONSTRUCTION: HEADED SHEAR STUDS WELDED TO TOPS OF WIDE FLANGE BEAMS, SHALL BE WELDED IN ACCORDANCE WITH AWS D1.1 CHAPTER 7 "STUD WELDING".
- 6. WELDING OF HEADED STUDS ON EMBEDDED STEEL PLATES FOR ANCHORAGE TO CONCRETE: HEADED STUDS WELDED TO STEEL EMBEDMENT PLATES CAST MONOLITHIC WITH CONCRETE AND SHALL BE WELDED IN ACCORDANCE WITH AWS D1.1 CHAPTER 7 "STUD WELDING", UNLESS NOTED OTHERWISE ON PLANS.

HIGH-STRENGTH BOLTING: HIGH STRENGTH BOLTS SHALL BE OF THE ASTM GRADE AND TYPE SPECIFIED IN THE DRAWINGS. UNLESS NOTED OTHERWISE, INSTALL BOLTS IN JOINTS IN ACCORDANCE WITH THE RCSC SPECIFICATION AS JOINT TYPE ST, "SNUG TIGHT"- PER RCSC SPECIFICATION TABLE 4.1 AND SECTION 8.1. INSPECTION IS PER RCSC SECTION 9.1. BOLTS HAVE BEEN DESIGNED AS ASTM F3125 GRADE A325-N BOLTS - "THREADS INCLUDED IN THE SHEAR PLANE".

### <u>STRUCTURAL STEEL (CONT)</u>

### PROTECTIVE COATING REQUIREMENTS:

- 2. INTERIOR STEEL:

  - b. FIREPROOFED,

  - SATISFIED.

- SPECIFICATIONS.

### <u>STEEL STAIRS</u>

**REFERENCE STANDARDS: CONFORM TO:** 

- 2. NAAMM "METALS STAIRS MANUAL"
- MEMBERS"
- 5. AWS D1.1 2015 "STRUCTURAL WELDING CODE- STEEL"

SUBMITTALS: STEEL STAIRS ARE TO BE PREPARED BY A SSE. REFERENCE DEFINITIONS AND DEFERRED SUBMITTALS ABOVE. SUBMIT STRUCTURAL CALCULATIONS AND SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) STAMPED BY A PROFESSIONAL CIVIL ENGINEER REGISTERED IN THE STATE OF THE PROJECT.

### STEEL SECTION.

- STRUCTURAL REQUIREMENTS:
- IBC CHAPTER 16.
- SECTION 1607.8.

ARCHITECTURAL REQUIREMENTS: CONFORM TO SHAPE AND CONFIGURATION SHOWN ON THE ARCHITECTURAL DRAWINGS. CONSULT THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL STEEL SHALL BE PAINTED PER PROJECT SPECIFICATIONS WITH ONE COAT OF STANDARD SHOP PRIMER UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS.

CONCRETE FILL: CONFORM TO NOTES, THIS SHEET FOR CAST-IN-PLACE CONCRETE AND CONCRETE REINFORCEMENT. PROVIDE MINIMUM 3000 PSI CONCRETE AND WWF 6X6-W1.4XW1.4 OR FIBERMESH UNLESS NOTED ON THE DRAWINGS.

1. SHOP PAINTING: CONFORM TO AISC 360 SECTION M3 AND AISC 303 SECTION 6.5 UNLESS A MULTI-COAT SYSTEM IS REQUIRED PER THE PROJECT SPECIFICATIONS.

A. UNLESS NOTED OTHERWISE, DO NOT PAINT STEEL SURFACES TO BE: a. CONCEALED BY THE INTERIOR BUILDING FINISHES,

EMBEDDED IN CONCRETE,

d. SPECIALLY PREPARED AS A "FAYING SURFACE" FOR TYPE-SC "SLIP-CRITICAL" BOLTED CONNECTIONS, UNLESS THE COATING CONFORMS TO REQUIREMENTS OF THE RCSC BOLT SPECIFICATION AND IS APPROVED BY THE ENGINEER. e. WELDED; IF AREA REQUIRES PAINTING, DO NOT PAINT UNTIL AFTER WELD INSPECTIONS AND NON-DESTRUCTIVE TESTING REQUIREMENT, IF ANY, ARE

B. INTERIOR STEEL, EXPOSED TO VIEW, SHALL BE PAINTED WITH ONE COAT OF SHOP PRIMER UNLESS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS. FIELD TOUCH-UPS TO MATCH THE FINISH COAT OR AS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS

EXTERIOR STEEL: EXPOSED EXTERIOR STEEL SHALL BE PROTECTED BY EITHER: A. PAINT WITH AN EXTERIOR MULTI-COAT SYSTEM AS PER THE PROJECT

B. FIELD TOUCH-UP PAINTING SHALL AS PER THE PROJECT SPECIFICATIONS. C. GALVANIZED PER ASTM A123 TO PROTECT AGAINST CORROSION.

1. IBC CHAPTER 10 "MEANS OF EGRESS", IBC TABLES 1607.1 (30)

3. AISC 360-16 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" 4. AISI 100-16 "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL

6. AWS D1.3 - 2008 "STRUCTURAL WELDING CODE- SHEET STEEL."

MATERIALS: MATERIALS SHALL MATCH THE MATERIALS SPECIFIED IN THE STRUCTURAL

1. SCOPE: INCLUDE TREADS, RISERS, STRINGERS, LANDINGS, RAILINGS AND ALL CONNECTIONS INCLUDING CONNECTIONS TO THE PRIMARY STRUCTURE UNLESS NOTED OTHERWISE. ALL INSERTS REQUIRED FOR ATTACHMENT TO THE PRIMARY STRUCTURE SHALL BE DESIGNED AND PROVIDED BY THE STAIR SUPPLIER.

2. LOADS: STAIR TREADS SHALL BE DESIGNED FOR 100 PSF LIVE LOAD OR A 300 LB CONCENTRATED LOAD PLACED TO PRODUCE MAXIMUM STRESS, WHICHEVER CONTROLS. STRINGERS AND LANDINGS SHALL BE DESIGNED FOR 100 PSF LIVE LOAD. LIVE LOAD DEFLECTION SHALL NOT EXCEED 1/360 OF THE SPAN. THE STAIR ASSEMBLY AND ATTACHMENT TO THE MAIN STRUCTURE SHALL BE DESIGNED FOR LATERAL LOADS PER

3. RAILINGS: THE COMPLETED HANDRAIL, GUARDRAIL, AND SUPPORTING STRUCTURE AND THEIR CONNECTIONS SHALL BE DESIGNED TO RESIST LOADS AS SPECIFIED IN IBC





hents are ap the complia notes appli

### COLD-FORMED STEEL FRAMING

- GENERAL PROVISIONS"
- HEADER DESIGN"
- WALL STUD DESIGN"
- LATERAL DESIGN."

MATERIALS: STRUCTURAL SECTIONS: 54, 68 AND 97-MIL; ASTM A653 GRADE D OR ASTM A1011 GRADE 50, MIN FY=50 KSI 33 AND 43-MIL; ASTM A653 GRADE A, OR ASTM A1011 GRADE 33, MIN FY=33 KSI

SHEET METAL SCREWS GRABBER SELF-DRILLING, #10 SCREWS (ASTM C1513) UNLESS NOTED OTHERWISE ON DRAWINGS OR SER APPROVED ALTERNATE

FASTENERS TO STEEL

WELD MATERIAL

STUDS AND TRACK SPECIFIED AS GALVANIZED SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A653, G60, UNLESS IN CONTACT WITH PRESSURE TREATED WOOD. IF IN CONTACT WITH PRESSURE TREATED WOOD, USE G90 OR GREATER COATINGS. FASTENINGS NOT SHOWN ON THE DRAWINGS SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

SIZE AND PROFILE: COLD-FORMED STEEL FRAMING MEMBERS SHALL BE AS SPECIFIED IN THE STEEL STUD MANUFACTURER'S ASSOCIATION ICC EVALUATION REPORT ESR-3064P AND OF THE SIZE AND PROFILE AS SHOWN ON THE DRAWINGS. ALTERNATE MEMBERS EQUIVALENT IN SHAPE, SIZE, AND STRENGTH BY MANUFACTURERS NOT MEMBERS OF THE STEEL STUD MANUFACTURER'S ASSOCIATION SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT / ENGINEER.

JOISTS: SPANS ARE ASSUMED TO BE CONTINUOUSLY SHEATHED AT THE TOP FLANGE. ALL JOISTS MUST BE BRACED LATERALLY AT EACH END BY RIM TRACK OR BLOCKING. JOIST BRIDGING SHALL BE A MAXIMUM 8'-0" OC WEB PUNCH-OUTS SHALL BE LOCATED A MINIMUM OF 10" AWAY FROM BEARING POINTS. IF A PUNCH-OUT FALLS WITHIN 10" OF A BEARING POINT, REINFORCEMENT IS REQUIRED.

CONNECTORS AND FASTENERS: CONNECTORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS. ALL SCREWS SHALL BE SNUG WITH THE STEEL SURFACE AND SHALL PENETRATE INTO STEEL STUDS BY A MINIMUM OF (3) EXPOSED THREADS. CONNECTIONS SHALL NOT BE STRIPPED. SCREWS SHALL BE INSTALLED A MINIMUM OF 3/8" FROM STEEL EDGES AND WITH NO LESS THAN 3/4" OC SPACING.

WHEN FASTENING TO STEEL, POWDER ACTUATED FASTENERS SHALL BE INSTALLED A MINIMUM OF 1/2" FROM STEEL EDGES AND WITH NO LESS THAN 1" OC SPACING. WHEN FASTENING TO CONCRETE, POWDER ACTUATED FASTENERS SHALL BE INSTALLED A MINIMUM OF 3" FROM CONCRETE EDGES AND WITH NO LESS THAN 4" OC SPACING.

BUNDLED STUDS AND JOISTS: STUD OR JOIST GROUPS OF (2) OR MORE MEMBERS SHALL BE SHOP WELDED TOGETHER WITH DOUBLE FLARE BEVEL WELDS BY 1" LONG @ 12" OC, BOTH SIDES. STUD OR JOIST GROUPS OF (2) DO NOT REQUIRE WELDING IF THEIR WEBS ARE BACK-TO-BACK AND SCREWED TOGETHER WITH (2) #10 @ 12" OC BUNDLED JOISTS THAT ARE FRAMED IN A BOX BEAM HEADER STYLE WITH A TOP AND BOTTOM TRACK DO NOT REQUIRE WELDING. BOX BEAM FRAMING SHALL HAVE #10 SCREWS @ 24" ON CENTER ALONG EACH OF THE FOUR TRACK FLANGES. BOX BEAM JOIST AND TRACK MEMBERS SHALL BE CONTINUOUS. BOX BEAMS OR HEADERS SHALL BE FRAMED WITH UNPUNCHED JOISTS.

MEMBER CONDITION: ALL STRUCTURAL COLD-FORMED FRAMING MEMBERS MUST BE IN GOOD CONDITION, DAMAGED MEMBERS, MEMBERS WITH CRACKING IN THE STEEL AT THE BEND RADIUS LOCATIONS, AND MEMBERS WITH SIGNIFICANT RED RUSTING OR SCALING OF THE PROTECTIVE COATING ARE UNACCEPTABLE AND MUST BE REPLACED, UNLESS APPROVED BY THE SER. MEMBERS NOT MEETING TOLERANCES LISTED BELOW SHALL BE REPLACED PRIOR TO LOADING.

ERECTION AND TOLERANCES: AXIAL LOAD BEARING COLD-FORMED STEEL FRAMING SHALL BE ERECTED TRUE AND PLUMB PER THE REQUIREMENTS AND WITHIN THE SPECIFIED TOLERANCES LISTED BELOW. FOR PURPOSES OF THIS SECTION, CAMBER IS DEFINED AS THE DEVIATION FROM STRAIGHTNESS OF A MEMBER OR ANY PORTION OF A MEMBER WITH RESPECT TO ITS MAJOR AXIS, AND SWEEP IS DEFINED AS THE DEVIATION FROM STRAIGHTNESS OF A MEMBER OR ANY PORTION OF A MEMBER WITH RESPECT TO ITS MINOR AXIS.

- LENGTH (1/8" OVER 10'-0").
- BEARING STUDS.

FIELD CUTS AND NOTCHES: FIELD CUTS AND NOTCHES OF ANY KIND ARE NOT ALLOWED IN ANY STRUCTURAL COLD-FORMED STEEL MEMBER WITHOUT PRIOR APPROVAL FROM SER.

TEMPORARY BRACING: REFERENCE "TEMPORARY SHORING, BRACING" IN THE "GENERAL REQUIREMENTS" SECTION ABOVE.

SHOT PINS: SHOTPINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE FASTENERS AS MANUFACTURED BY HILTI CORPORATION. AS SPECIFIED IN THE DRAWINGS:

- HILTI X-U 19 P8 TH (ESR-2269).
- P8 S15 (ESR-2269).
- 32 P8 S15 (ESR-2269).

**<u>REFERENCE STANDARDS</u>**: CONFORM TO: 1. AISI S100-16 "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS." 2. AISI S200-12 "NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING -

3. AISI S212-07 "NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING -

4. AISI S211-07 S1-12 "NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING -

5. AISI S213-07 S1-09 "NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING -6. AWS D1.3 - 2018 "STRUCTURAL WELDING CODE - SHEET STEEL."

HILTI X-U POWDER ACTUATED FASTENERS

FASTENERS TO CONCRETE HILTI X-U POWDER ACTUATED FASTENERS PER THE "SHOT PINS" SECTION BELOW

E60XX ELECTRODES CONFORMING TO AWS D1.3

1. FOR JOISTS, TRACK, AND AXIAL LOAD BEARING STUDS, OUT OF PLUMBNESS AND OUT OF STRAIGHTNESS (CAMBER AND SWEEP) SHALL NOT EXCEED 1/1000TH OF THE MEMBER

2. ERECT FRAMING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. 3. STUDS SHALL SEAT INTO TOP AND BOTTOM TRACKS. THE GAP BETWEEN THE END OF THE STUD AND THE WEB OF THE TRACK SHALL NOT EXCEED 1/16" FOR AXIAL LOAD

4. JOISTS AND END STIFFENERS SHALL BE LOCATED DIRECTLY OVER AXIAL LOAD BEARING STUDS. THE USE OF TRACK AS A LOAD DISTRIBUTION MEMBER IS NOT PERMITTED.

1. SHOT PINS USED TO ATTACH LIGHT GAGE MATERIAL TO STRUCTURAL STEEL SHALL BE 2. SHOT PINS USED FOR LIGHT GAGE ATTACHMENT TO CONCRETE SHALL BE HILTI X-U 27

3. SHOT PINS USED FOR LIGHT GAGE ATTACHMENT TO GROUTED CMU SHALL BE HILTI X-U

200 BR( BOISE, PHONE EET 702 858 F 83. ш  $\mathbf{F}$  $(\mathbf{T})$ C 3  $\mathbf{n}$ q S 0 S BUILDING **IMPROVEMENT** PERMIT SET PROJECT DATE 23002 10-30-23 DRAWN CHECKED SD JB REVISED SHEET TITLE **GENERAL** NOTES SHEET **S0.05** ORIGINAL SHEET SIZE 24" x 36"









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GENERAL NOTES	
ALL DIMENSIONS AND ELEVATION	NS ON THE STRUCTURAL PLANS
SHALL BE VERIFIED BY THE CONT	RACTOR WITH THE LATEST
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DISCREPANCIES SHALL BE BROUG	GHT TO THE ATTENTION OF THE
ARCHITECT AND ENGINEER IMME	DIATELY.
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FOR GENERAL NOTES:	S0.00 SERIES SHEETS
CONCRETE DETAILS:	S1.05 SHEET
ROOF DETAILS:	S1.06-S1.08 SHEETS
STEEL DETAILS:	S1.09 SHEET





GENERAL NOTES	
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<ul> <li>FOR GENERAL NOTES: CONCRETE DETAILS: ROOF DETAILS: STEEL DETAILS:</li> </ul>	S0.00 SERIES SHEETS S1.05 SHEET S1.06-S1.08 SHEETS S1.09 SHEET
WOOD ROOF FRAM	ING NOTES
1. TYPICAL ROOF FRAMING CONSIST (INDEX 40/20), LAID FACE GRAIN STAGGER JOISTS. SEE 3/S1.07	TS OF 5/8" APA RATED SHEATHING PERPENDICULAR OVER ROOF JOISTS.
2. NAIL ROOF SHEATHING TO FRAM LONG) @ 6" OC AT ALL PANEL EDO INTERMEDIATE FRAMING MEMBER	ING WITH 8d NAILS (0.131" DIA x 2.5" GES AND 8d NAILS @ 12" OC AT RS. (UNBLOCKED). SEE $3/51.07$
3. ALL FLOOR HEADERS NOT SHOWN SCHEDULE AND DETAIL, SEE 3/S6 6/S5.61 FOR BUILT-UP HEADER DE	N ON PLAN SHALL BE PER HEADER .61. FOR HEADER SCHEDULE AND ETAIL.

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IPROVEMENT       200 BROAD STREET         GARDEN CITY, ID       200 BROAD STREET         BOISE, IDAHO       200 BROAD STREET	200 BROAD STREET RISTEMENTS OF SERVICE, ARE AND SHALL REMAIN THE RISTEMENTS OF SERVICE, ARE AND SHALL REMAIN THE REQUERT OF THE RACHTERT / ENGINEER WHETHER BOISE, ID 83702 (208) 343-4635 • FAX (208) 343-1858 http://www.cshqa.com ComPLETION OF THIS PROJECT. WHEN PHASED-WITHOUT THE WRITTEN CONSENT OF CSHOA OR ITS AFFILIATES.
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SCALE: NTS REF SHEET: S1.01

### **GENERAL NOTES** • ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS SHALL BE VERIFIED BY THE CONTRACTOR WITH THE LATEST ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY. CONTRACTOR SHALL FIELD VERIFY EXISTING STRUCTURAL CONDITIONS. IF ANY DISCREPANCY OCCURS BETWEEN EXISTING CONDITIONS AND PROPOSED ALTERATIONS, CONTRACTOR SHALL CONTACT ARCHITECT AND STRUCTURAL ENGINEER BEFORE PERFORMING ALTERATION WORK. FOR GENERAL NOTES: S0.00 SERIES SHEETS CONCRETE DETAILS: S1.05 SHEET ROOF DETAILS: S1.06-S1.08 SHEETS STEEL DETAILS: S1.09 SHEET





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200 BROAD STREET	BOISE, IDAHO PHONE: 208-343-4635 • FAX: 208-343-1858	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT / ENGINEER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT
<b>IPROVEMENT</b>	<b>GARDEN CITY, ID</b>	200 BROAD STREET BOISE, ID 83702 (208) 343-4635 • FAX (208) 343-1858 http://www.cshqa.com
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![](_page_21_Figure_0.jpeg)

### NOTES:

1. SEE ARCHITECTURAL DRAWINGS AND ELEVATOR MANUFACTURER DRAWINGS FOR

HOISTWAY DIMENSIONS AND WALL ASSEMBLIES 2. GUIDERAIL SUPPORT BRACKETS AND FASTENING REQUIREMENTS BY ELEVATOR MANUFACTURER. ALL CONNECTIONS ARE PRELIMINARY AND TO BE VERIFIED WITH ELEVATOR MANUFACTURER LOADING AND SPACING REQUIREMENTS

![](_page_21_Picture_4.jpeg)

TYPICAL ELEVATOR SHAFT FRAMING SCALE: NTS REF SHEET: S1.03

![](_page_21_Picture_6.jpeg)

SCHEUDLE, SW-6

		WOOD HEAD	ER SCHEDULE		
OPENING	HEADER		KING S	STUDS	]
MARK WIDTH	(UNO ON PLAN)	TRIMMER STUDS	INTERIOR	EXTERIOR	10d-F @ 12" OC
H01 3-8" MAX	(2) 2x6	(1) 2x6 OR (1) 2x4	(1) 2x6 OR (1) 2x4	(1) 2x6	
H02 3'-8" - 6'-0" MAX	(2) 2x8	(1) 2x6 OR (2) 2x4	(1) 2x6 OR (2) 2x4	(1) 2x6	
NOTES: 1. AT INTERIOR NON 2. TRIMMER STUDS/P STUD PACKS TO FO 3. FOR MULTIPLE STU SPECIES AND GRAI SCHEDULE	BEARING WALLS PRO OSTS IN SCHEDULE T OUNDATION LEVEL, TY DS OCCURRING AS PO DE OF THE WALL THE	VIDE (2) 2x6 HEADER YP UNO ON PLANS. P /PICAL. OSTS PER TABLES ABO POSTS OCCUR IN. SE	MINIMUM. ROVIDE MATCHING DVE, MATCH WOOD E WALL FRAMING	FILLER STUI REQD TO M WALL STUD AND SPACIN CRIPPLE ST MATCH AND WITH TRIM ABOVE WHE APPLICABLE (1) 2x SILL I (2) 2x SILL I FOR ALL OP GREATER TH (6) 10d-F N/ EACH SIDE CRIPPLE ST MATCH WAL SIZE AND SI	DS AS ATCH SIZE NG UD TO O ALIGN STUD ERE PL AND PLATE PENINGS HAN 8'-0" AILS UDS TO LL STUD PACING

![](_page_21_Picture_8.jpeg)

![](_page_21_Figure_10.jpeg)

### SELEVATOR BRACKET SUPPORT AT WOOD ROOF

### HOIST BEAM AT ELEVATOR 3 SCALE: NTS

![](_page_21_Figure_13.jpeg)

![](_page_21_Picture_14.jpeg)

![](_page_22_Picture_0.jpeg)

WOOD SHEARWALL SCHEDULE									
	MIN SILL OR BOTTOM PLATE ATTACHMENT								
		ASD CAPACITY	FRAMING MEMBERS AT	PANEL	SOLE PLATE	SOLE PLATE CONNECTION	ANCHOR BOL	TING OF SILL	SHEAR CONNECTION FROM
	SHEAR WALL	(plf)	ADJOINING PANEL	EDGE NAILING	REQUIRED	TO RIM/BEAM/BLOCKING	PLATE TO CO	NCRETE [10]	RIMBOARD/BLOCKING TO
MARK	SHEATHING [1]	WIND/SEISMIC	EDGES [2], [3], [6]	[4], [5], [6]	[7]	[8], [9]	1/2" DIA	5/8" DIA	TOP PLATE [11]
SW-6	7/16" APA RATED ONE-SIDE	365/260	2x	8d AT 6" OC	2x	16d AT 4" OC	32" OC	48" OC	A35 OR LTP4 AT 18" OC

SCHEDULE NOTES:

- INSTALL PANEL SHEATHING VERTICAL FOR THE ENTIRE LENGTH OF THE WALL PER PLAN.
- 2. ALL INTERMEDIATE WALL STUDS SHALL BE PER PLAN. PROVIDE BACKING FRAMING AT ALL PANEL EDGES INCLUDING HORIZONTAL BLOCKING PER THE SCHEDULE. 3. PROVIDE NAILING TO ALL PANEL EDGES, TOP AND BOTTOM PLATES, TO DOUBLE SILL/SOLE PLATES WHERE USED, AND TO HORIZONTAL BLOCKING. PROVIDE THE SAME NAILING PATTERN TO (2) 2x OF HOLDOWN POST MINIMUM. AT ALL FRAMING MEMBERS NOT AT A PANEL EDGE, FASTEN WITH NAIL SIZE MATCHING EDGE NAIL SIZE WITH SPACING AT 12" OC UNO.
- NAIL SIZE IS COMMON OR GALVANIZED BOX NAIL SIZE ONLY. SEE GSNS FOR NAIL DIAMETER AND LENGTH. 4 5. WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS SHALL BE STAGGERED SO THAT JOINTS ON THE OPPOSITE SIDES ARE NOT LOCATED ON THE SAME STUDS.
- 6. 3x SILLS CAN BE USED AT ALL SHEAR WALLS UPON CONTRACTORS PREFERENCE. WHERE (2) 2x'S ARE USED, PLATES MUST BE FASTENED TOGETHER WITH FASTENERS THAT MATCH EDGE NAILING OF SHEARWALL. ALL WOOD MEMBERS IN CONTACT WITH CONCRETE MUST BE PRESSURE TREATED PER GENERAL STRUCTURAL NOTES. 7. 16d NAILS ARE PERMITTED TO BE EITHER 0.148" DIA x 3 1/4" OR 16d COMMON UNO. SDWS SCREWS ARE PER SIMPSON AND MUST BE MODEL NUMBER SDWS22600DB UNO IN
- STRUCTURAL DETAILS. 8. PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS. GALVANIZED NAILS SHALL BE HOT-DIPPED
- OR TUMBLED. 9. SHEAR CLIPS ARE PER MANUF WITH 8d NAILS PER SIMPSON'S SPECS. (1 1/2" NAILS WHEN INSTALLED DIRECTLY OVER FRAMING, 2 1/2" NAILS WHEN INSTALLED OVER SHEATHING) SIMPSON A35 OR LTP4 CAN BE USED PER CONTRACTORS PREFERENCE.

![](_page_22_Figure_9.jpeg)

1. CONTRACTOR OPTION: POWDER ACCUATED FASTENER ALTERNATIVE: HILTI X-CF 72 PINS (ICC-ES ESR 2379) SHALL BE USED IN LIEU OF BOLTS AT INTERIOR NON-BEARING AND NON-SHEAR WALL INSTALLED AT 36" OC.

- 2. VERIFY FRAMING PRIOR TO PLACEMENT OF ANCHOR BOLTS.
- ANCHOR BOLTS REQUIRED EACH SIDE OF PLATE SPLICES.
- 4. AT DOUBLE SIDED 2x6 OR 2x8 SHEARWALLS, PLATE WASHER TO BE 0.229x3x4 1/2 AND 0.229x3x6 1/4, RESPECTIVELY, TO ENSURE PLATES EXTENDS WITHIN 1/2" OF BOTH SHEATHED FACES.

![](_page_22_Picture_14.jpeg)

### ROOF AND FLOOR DIAPHRAGM SHEATHING SCALE: NTS

3

![](_page_22_Figure_17.jpeg)

4. "X" INDICATES EDGE NAILING AT SHEARWALLS

6. PROVIDE 1/8" GAP BETWEEN PANELS AT ALL PANEL EDGE JOINTS.

OC AT INTERMEDIATE SUPPORTS.

MAINTAIN A COMMON WALL PLANE, 7/16" MIN PROVIDE FURRING OR BACKING AT ALL INTERIOR WOOD STUD WALL SURFACES WHICH ARE ONLY PARTIALLY SHEATHED WITH WOOD SHEATHING. THE FURRING OR BACKING SHALL BE OF THICKNESS TO MAINTAIN A COMMON WALL PLANE. COORDINATE AND ADJUST HEADER, JAMB AND SILL DETAILS AS REQUIRED FOR PROPER OVERALL WALL THICKNESS.

3. PROVIDE SHEATHING ON ENTIRE EXTERIOR SURFACE OF ALL STUD WALLS, UNO IN ARCH DRAWINGS. THE SHEATHING THICKNESS SHALL BE AS REQUIRED TO

1. INDIVIDUAL PIECES OF WOOD STRUCTURAL PANEL SHALL BE NOT LESS THAN 2'-0" IN LEAST DIMENSION OR 8 SQ FT IN AREA. 2. RE-TIGHTEN HOLDOWNBOLTS BEFORE CLOSING IN WALL FRAMING.

NOTES:

![](_page_22_Figure_37.jpeg)

5. UNO ON SHEARWALL SCHEDULE, PROVIDE THE MINIMUM NAIL SIZE AND SPACING OF 8d NAILS AT 6" OC AT PANEL EDGES, AT SILL AND SOLE PLATES, AND 12"

-PANEL EDGE NAILING, SEE PLAN

-2x4 FLAT BLOCKING

- PANEL EDGE NAILING, SEE PLAN

-2x4 NAILER WITH 10d NAILS @ 6" OC

-JOIST BEYOND AT JOIST SPLICE WHERE OCCURS

- Second Se	THESSION/ TRESSI	AL ENGLAND SED THE 30 F UDHID RANDAU RANDAU 03 20 24
	200 BROAD STREET BOISE, IDAHO PHONE: 208-343-4635 • FAX: 208-343-1858	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE INSTRUMENTS OF THE ARCHITECT I FUGINEER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR R COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT THE WRITTEN CONSENT OF CSHQA OR ITS AFFILIATES. COPYRIGHT © 2022
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TTD DIST 3 RLDG IN	8150 West Chinden Boulevard	<b>SHOA</b>
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PROJ 2300 DRAV SD REVIS 1 E_B	ECT D2 VN SED ACK CHECK	DATE 10-30-23 CHECKED JB
SHEE	T TITLE RO DET	OF
ORI	S1	<b>.07</b> SHEET SIZE

![](_page_23_Figure_0.jpeg)

## WOOD JOIST PERPENDICULAR TO EXTERIOR WALL

![](_page_23_Picture_4.jpeg)

![](_page_24_Figure_1.jpeg)

![](_page_24_Figure_3.jpeg)

5/16

BOXED HEADER TO JAMB CONNECTION SCALE: NTS

7

CUT\_FLANGE/BENT\_WEB\_OPTION

SHAPE	DESIGNATION	FLANGE WIDTH
	S125	1.25"
	S137	1.375"
S-SECTIONS	S162	1.625"
	S200	2"
	S250	2.5"
U-SECTIONS	U50	.50"
F-SECTIONS	F125	1.25"
	T125	1.25"
T-SECTIONS	T150	1.5"
	T200	2"
EXAMPLE CALL OUT 600: SI S: SE 162: 1. 54: .0	: 600S162-54 ZE = 6" ECTION DESIGNAT 625" FLANGE WID 54 THICKNESS	4 FION (STYLE) = S STUD )TH

TRACK OPTION

![](_page_24_Picture_11.jpeg)

This is not a building permit
from, Idaho's adopted codes, standards, laws or rules applicable to this project.
an approval of any violation of, or variance
This approval shall not be construed to be
mark-ups and notes applied.
contingent on the compliance with the
These Documents are approved
Date: 04/09/24
PA#: BLD2311-00062
Division of Building Safety
State of Idaho
Approved

	MECHANICAL	ABBRE	VIATIONS
A/Q == AQ			
A/C or AC		KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	KWH	KILOWATTHOUR
AHU	AIR HANDLING UNIT		
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND	ΙΔΤ	LEAVING AIR TEMPERATURE
	AIR CONDITIONING ENGINEERS	LAI	
		LAV	LAVATORY
BTU	BRITISH THERMAL UNITS	LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
BTUH	BTUS PER HOUR	LWT	LEAVING WATER TEMPERATURE
CA	COMBUSTION AIR	MAX	MAXIMUM
CC	COOLING COIL	MCA	MINIMUM CIRCUIT AMPS
CFM	AIR FLOW RATE (CUBIC FEET PER MINUTE)	MOCP	MAXIMUM OVERCURRENT PROTECTION
CHWR	CHILLED WATER RETURN	MIN	MINIMUM
CHWS	CHILLED WATER SUPPLY		
CLG	CEILING	NC	NOISE CRITERIA
CW	COLD WATER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
011		NTS	NOT TO SCALE
DEG or °	DEGREE		
DIA or Ø	DIAMETER	OSA	
DR	DRY BULB		
		PD	
FA	EXHAUST AIR	PH or Ø	PHASE
FAT		PRV	PRESSURE REDUCING VALVE
FFR		1100	
ESP		RA	RETURNAIR
FWT	ENTERING WATER TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
		RTU	
FCO	FLOOR CLEANOUT		
FD	FIRE DAMPER	SA	SUPPLY AIR
FLA	FULL LOAD AMPS	SEER	SEASONAL ENERGY EFFICIENCY RATIO
FLR	FLOOR	SED	COMBINATION SMOKE/FIRE DAMPER
FPM	FEET PER MINUTE	SP	STATIC PRESSURE
FT	FFFT	SYM	SYMBOI
••		0.111	
GA	GAUGE	T&P	TEMPERATURE AND PRESSURE
GCO	GRADE CLEANOUT	TEMP	TEMPERATURE
GPM	WATER ELOW RATE (GALLONS PER MINUTE)	TYP	TYPICAI
0.111			
HC	HEATING COIL	UMC	LINIFORM MECHANICAL CODE
HP	HORSE POWER	UPC	
HVAC	HEATING, VENTILATING, AIR CONDITIONING		
HW	HOT WATER		
HWR	HOT WATER RETURN	VTR	VENT THROUGH ROOF
HWS	HOT WATER SUPPLY	V	VOLTS
11110		•	
IBC	INTERNATIONAL BUILDING CODE	W/	with
IEFC	INTERNATIONAL ENERGY CONSERVATION CODE	WB	WET-BULB
IFC		WC	WATER CLOSET
IFGC	INTERNATIONAL FUEL GAS CODE	WCO	WALL CLEANOUT
		<u></u> 	WATER HEATER
IPC			
NOTE:	THIS IS A STANDARD LIST OF COMMONLY USED MECHANIC/ MAY NOT BE USED IN THIS DRAWING PACKAGE.	AL ABBREVIA	TIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE

### MECHANICAL GENERAL NOTES ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE (IMC) LATEST EDITION, AND ALL APPLICABLE LOCAL AND STATE CODES. ALL MECHANICAL SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. MECHANICAL CONTRACTORS SHALL RECEIVE PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE MAKING CUTS THROUGH ANY STRUCTURAL MEMBER. MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION WITH CONSTRUCTION SUPERVISOR AND WITH ALL OTHER TRADES TO AVOID CONFLICTS. THE MECHANICAL CONTRACTORS SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWINGS PRIOR TO ORDERING MOTORIZED EQUIPMENT AND CONTROLS. SEE MECHANICAL SCHEDULE SHEET FOR SCHEDULED CAPACITIES OF ALL MECHANICAL EQUIPMENT AND MATERIALS SPECIFIED. ALL MECHANICAL EQUIPMENT TO BE PROPOSED MUST BE ON THE APPROVED LIST PRIOR TO SUBMITTALS. ALL APPROVED MANUFACTURERS MUST BE CAPABLE OF MEETING THE REQUIREMENTS OF THE SPECIFIED EQUIPMENT. PAINT MECHANICAL ITEMS ON THE ROOF TO MATCH THE ROOF COLOR. INSULATED FLEXIBLE DUCTWORK--IN LENGTHS OF 6'-0" OR LESS--MAY BE USED FOR RUNOUTS TO AIR TERMINALS. 9. 10. MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN ALL FRESH AIR INTAKES AND EXHAUST OR GAS FLUE DISCHARGES. 11. LOCATE ACCESS HATCHCES SO AS TO PROVIDE OPTIMUM SERVICEABILITY TO EQUIPMENT AND/OR VALVING. SEE ARCHITECTURAL SPECIFICATION FOR TYPE AND COLOR. COORDINATE LOCATION WITH ARCHITECTURAL, STRUCTURAL, AND LIGHTING. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE 12. SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR VERIFICATION OF EXISTING JOB CONDITIONS PRIOR TO BID. NO ADDITIONAL 13. COST SHALL BE AWARDED TO THE SUCCESSFUL CONTRACTOR (OR THEIR SUBCONTRACTORS) AFTER BIDS HAVE BEEN SUBMITTED AND CONTRACTS AWARDED FOR FAILURE TO VERIFY EXISTING FIELD CONDITIONS. DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR ALTERNATIVE METHODS OF INSTALLATION PRIOR TO THE BIDDING OF THIS PROJECT. 14. UNLESS OTHERWISE NOTED, ALL EXISTING MECHANICAL EQUIPMENT, PIPING, ETC, TO BE REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR UNDER THIS CONTRACT. THE OWNER SHALL RETAIN THE RIGHT TO KEEP ANY REMOVED ITEMS. HOLES IN EXISTING WALLS OR FLOORS SHALL BE PATCHED TO MATCH EXISTING WHERE PIPING, DUCTWORK, ETC, WERE 15. REMOVED OR ADDED DURING THIS PROJECT. 16. DAMAGE TO THE EXISTING FACILITY DURING THE CONSTRUCTION OF THIS PROJECT SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST THE OWNER.

		Ą	
	FLEXIBLE DUCTWORK	<u>k</u>	THREE WAY CONTROL VALVE
<b>††</b>	DUCTWORK	Ŕ	TWO WAY CONTROL VALVE
	DUCTWORK BREAK	×	PRESSURE REDUCING VALVE
$\bigcirc$	DUCTWORK OR PIPING RISE	$\bowtie$	GATE VALVE
	CONCENTRIC SQUARE TO ROUND	И	REDUCER
M———	MOTORIZED DAMPER	$\bowtie$	GLOBE VALVE
—	MANUAL VOLUME DAMPER	i di ta	BALL VALVE
	SPIN-IN FITTING W/ AIR EXTRACTOR		BUTTERFLY VALVE
	HIGH EFFICIENCY FITTING W/ HAND DAMPER	۰۰۰ <b>۲۰۰</b>	BALANCE VALVE
\$	SWITCH		CHECK VALVE
Ō	THERMOSTAT	<u><u><u></u><u><u></u><u><u></u><u></u><u><u></u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u></u></u>	FLOOR CLEANOUT
B	HUMIDISTAT	<u>۲ سا wco</u>	WALL CLEANOUT
S	TEMPERATURE SENSOR	<u>٢ ۲ ۲</u>	GRADE CLEANOUT
<u>co</u>	CARBON DIOXIDE SENSOR	<b>P</b>	WATER HAMMER ARRESTOR
	CARBON MONOXIDE SENSOR		FLOOR DRAIN
<u></u>	NITROUS OXIDE SENSOR		FLOOR SINK
(CD)	DUCT SMOKE DETECTOR	<u>ب ب</u> لا بلا	GAS PRESSURE REGULATOR W/ GAS COC
₹	COMBINATION SMOKE/FIRE DAMPER	*	PRESSURE RELIEF VALVE
<	FIRE DAMPER	, 1 × 0	VENT-THROUGH-ROOF
	SMOKE DAMPER	<i></i>	VENT
	EQUIPMENT CALLOUT	<u>۶</u>	SOIL, WASTE, OR SANITARY SEWER
	TURNING VANES	<b>۶</b> AW <b>۶</b>	ACID WASTE LINE
<b>⊸</b> ∕γ	INTAKE OR EXHAUST		ACID VENT LINE
	DIRECTION OF AIRFLOW	<b>۶</b> −−−− <b>۶</b> D −−−− <b>۶</b>	STORM DRAIN
	SUPPLY DIFFUSER	<b>∫</b> RD <b>∫</b>	ROOF DRAIN LINE
	RETURN GRILLE	<b>۶</b> OD	OVERFLOW DRAIN LINE
R-X CFM X"Ø	EXHAUST GRILLE	<b>۶</b>	CONDENSATE DRAIN LINE
G-X CFM X"Ø	FLOOR GRILLE	<u>ج</u>	DOMESTIC COLD WATER (CW)
80	CEILING EXHAUST FAN	<u>ډ</u> ـــــ	DOMESTIC HOT WATER (HW)
φ	TEMPERATURE GAUGE	<u>ډ ۶</u>	DOMESTIC HOT WATER RETURN (HWR)
 ?	PRESSURE GAUGE (LIQUID	<b>ر</b> тw	TEMPERED WATER (TW)
 ET] I	TEMPERATURE SENSOR (DUCT OR PIPING)	<b>۶</b> ــــــــــــــــــــــــــــــــــــ	MEDIUM PRESSURE NATURAL GAS
	FLOW SWITCH	<b>۶</b> G	LOW PRESSURE NATURAL GAS
	STAINLESS STEEL BRAIDED FLEX	۶۔۔۔۔۔ ۶ ا	FIRE SPRINKLER LINE
	CONNECTION ELASTOMETRIC FLEX CONNECTOR	Gws	GEOTHERMAL WATER SUPPLY
	SUCTION DIFFUSER	۔ ج GW <del>R</del>	GEOTHERMAL WATER RETURN
		<b>ہ</b> cws	CHILLED WATER SUPPLY
	FLOW DIRECTION	<b>∫</b> CWR <b>∫</b>	CHILLED WATER RETURN
	DEMOLITION / EQUIPMENT TO BE REMOVED	<u>۲</u> cs	CONDENSER WATER SUPPLY
	NEW TO EXISTING CONNECTION POINT	<b>f</b> CR <b>f</b>	CONDENSER WATER RETURN
(E)	EXISTING	<b>۲</b>	HEATING WATER SUPPLY
(F)	FUTURE	<b>۶</b> HWR	HEATING WATER RETURN
(N)	NEW	<b>۶</b> ــــــــــــــــــــــــــــــــــــ	LIQUID REFRIGERANT LINE
	REDUCED PRESSURE BACKFLOW PREVENTER	ss	SUCTION REFRIGERANT LINE
	DOUBLE CHECK BACKFLOW PREVENTER	<del>ب مع</del> رج	SLOPE PIPE IN DIRECTION OF ARROW
	UNION	۔ ۲ ج	PIPE ANCHOR
<b>卒 </b>	AIR VENT	_ 	PIPE GUIDE
<u> </u>		,	
NOTE:	THIS IS A LIST OF COMMONLY USED MECHAN	IICAL AND PLUMBING SYMBO	LS. SOME OF THE SYMBOLS SHOWN ABOV

A.	COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL EN PROJECT. THESE NOTES COVER MANDATORY REQUIREMENTS OF THE CODE. / DRAWINGS AND IN THE SPECIFICATIONS.
В.	MINIMUM REQUIREMENTS FOR SUPPLY AND RETURN DUCTWORK INSULATION:
	1. R-6: DUCTS LOCATED IN UNCONDITIONED SPACES (SPACE NEITHER HEAT WALL SPACES, DUCT CHASES, SOFFITS, ATTICS, CRAWL SPACES, UNHEA
	2. R-12: DUCTS LOCATED OUTSIDE OF THE BUILDING'S INSULATION ENVELO
	TYPICAL INSULATION THICKNESS REQUIRED TO MEET THESE REQUIREMENTS:
	1. FIBERGLASS DUCT WRAP: R-6, R-12.
	2. FIBERGLASS DUCT LINER: R-6, R-12.
C.	CONTRACTOR SHALL VERIFY THE R-VALUES OF THE ACTUAL INSULATION USED INSTALLED VALUES.
D.	WHERE DUCTS USED FOR COOLING ARE EXTERNALLY INSULATED, THE INSULA HAVING A MAXIMUM PERMEANCE OF 0.05 PERM OR ALUMINUM FOIL HAVING A PERMEANCE OF 0.05 PERMS OR LESS SHALL NOT BE REQUIRED TO BE COVERE MAINTAIN THE CONTINUITY OF THE VAPOR RETARDER.
E.	ALL DUCT JOINTS, SEAMS, AND CONNECTIONS SHALL BE FASTENED AND SEAL MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, OR TAPES. TAPES AND MASTICS S UL181B. DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS. I SHALL BE SEALED AND MECHANICALLY FASTENED.
F.	AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED PRIOR TO ISS O&M MANUAL SHALL CONTAIN THE FOLLOWING INFORMATION AS A MINIMUM:

- 1. EQUIPMENT CAPACITY (INPUT & OUTPUT).
- 2. EQUIPMENT OPERATING AND MAINTENANCE INSTRUCTIONS.
- CONTROL SEQUENCES.
- COMMENT ON DDC SYSTEMS.

![](_page_25_Picture_12.jpeg)

MUSGROVE ENGINEERING, P.A. 234 S. Whisperwood Way Boise, ID 83709 208.384.0585

645 West 25th Street Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com Project No. 23-264

### ENERGY CODE COMPLIANCE

F THE INTERNATIONAL ENERGY CONSERVATION CODE IS REQUIRED FOR THIS REMENTS OF THE CODE. ADDITIONAL REQUIREMENTS ARE NOTED ON THE

CES (SPACE NEITHER HEATED NOR COOLED SUCH AS ABOVE CEILING SPACES, , CRAWL SPACES, UNHEATED BASEMENTS, AND UNHEATED GARAGES).

ING'S INSULATION ENVELOPE (SUCH AS ABOVE THE ATTIC INSULATION).

ACTUAL INSULATION USED WITH THE MANUFACTURER. R-VALUES SHALL BE

(INSULATED, THE INSULATION SHALL BE COVERED WITH A VAPOR RETARDER LUMINUM FOIL HAVING A MINIMUM THICKNESS OF 2 MILS. INSULATION HAVING A REQUIRED TO BE COVERED. ALL JOINTS AND SEAMS SHALL BE SEALED TO

L BE FASTENED AND SEALED WITH WELDS, GASKETS, ADHESIVES, PES. TAPES AND MASTICS SHALL BE LISTED AND LABELED PER UL181A OR T ON ANY METAL DUCTS. DUCT CONNECTIONS TO FLANGES OR EQUIPMENT

E PROVIDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE

3. CONTROL SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND

4. CONTROL SYSTEM SETPOINTS SHALL BE SHOWN ON CONTROL DRAWINGS, AT CONTROL DEVICES, OR IN PROGRAMMING

5. A COMPLETE WRITTEN NARRATIVE ON HOW EACH MECHANICAL SYSTEM IS INTENDED TO OPERATE.

![](_page_25_Picture_29.jpeg)

![](_page_26_Figure_1.jpeg)

-(1

 $\frown$ 

2

(3)

4

5

6

# Approved a physical and the physical and

![](_page_26_Figure_3.jpeg)

![](_page_26_Picture_4.jpeg)

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![](_page_26_Figure_7.jpeg)

![](_page_26_Figure_8.jpeg)

- 2. REMOVE EXISTING DUCTWORK BACK INDICATED LOCATION AND CAP.
- 3. INSTALL HIGH WALL DUCTLESS SPLIT FAN COIL UNIT ABOVE DOOR PER MANUFACTURER RECOMMENDATIONS.
- 4. ROUTE 3/4" CD EXPOSED DOWN WALL. TERMINATE INDIRECTLY AT EXISTING FLOOR SINK.
- 5. ROUTE 3/4" CD ABOVE CEILING.
- 6. ROUTE REFRIGERANT LINESET UP TO FLOOR ABOVE. SEE SECOND FLOOR PLAN FOR CONTINUATION.

![](_page_27_Picture_0.jpeg)

![](_page_27_Figure_1.jpeg)

![](_page_27_Picture_3.jpeg)

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### KEYED NOTES:

# SYMBOL USED FOR CALLOUT

- 1. LOCATE THERMOSTAT AT TOP OF ELEVATOR SHAFT, PROVIDE WITH INSULATED BACKING.
- 2. ROUTE 10"X10" EXHAUST DUCT FROM EXHAUST FAN OPEN TO THE ELEVATOR SHAFT. PROVIDE WITH EXPANDED METAL GRATE AT OPENING. PROVIDE FLEXIBLE CONNECTOR AT EXHAUST FAN CONNECTION.
- 3. SEE EXHAUST FAN MOUNTING DETAIL FOR ADDITIONAL INFORMATION.
- 4. ROUTE REFRIGERANT LINESET FROM FROM BELOW TO ROOF ABOVE TIGHT TO WALL. SEE FIRST FLOOR AND ROOF PLANS FOR CONTINUATION.
- 5. INSTALL NEW ROOF MOUNTED HEAT PUMP ON MIRO STAND 10' MINIMUM FROM EDGE OF ROOF. SEE DETAIL FOR INSTALLATION REQUIREMENTS.
- 6. PROVIDE AND ROUTE REFRIGERANT LINES THROUGH REFRIGERANT HOOD. SEE DETAIL FOR REQUIREMENTS.

13789 3/26/2024 THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL I PROPERTY OF THE ARCHITECT / ENGINEER W PROPERTY OF THE ARCHITECT / ENGINEER W PROPECT FOR WHICH THEY ARE MADE IS OR NOT. THESE DRAWINGS AND SPECIFICATION NOT BE USED BY ANY PERSON OR ENTITY ON PROJECTS, FOR ADDITIONS TO THIS PROJECT THE WRITTEN CONSENT OF CSHQA OR IT SAA 200 BROAD STR BOISE, IDAHO PHONE: 208-343 200 BROAD STREET BOISE, ID 83702 • FAX (208) 343-1858 httn://..... MENT BOISE IMPROV က် (208) NANT I Boulevard TEL Õ  $\mathbf{r}$ **hin** ITD DIST. 5 8150 L2 TENANT IMPROVEMENT PERMIT SET DATE PROJECT 02-20-24 23002 CHECKED DRAWN ED ΤN REVISED 3/27/2024 1 REVISION 1 <sup>si</sup>HVAC NEW FLOOR & **ROOF PLAN** SHEET **M12.1** 

![](_page_28_Figure_0.jpeg)

### - EXHAUST FAN, REFER TO FAN SCHEDULE FOR SPECIFIED MODEL

- FACTORY WOOD 12" MINIMUM NAILER. - LAG FAN BASE TO WOOD NAILOR, TWO SCREWS T ON EACH SIDE OF CURB.

12" ABOVE

FIN. ROOF

- ROOF INSULATION BELOW ROOF DECK - USE SILICONE CAULK AND SHEETMETAL SCREWS TO SEAL

FLANGE TO PLATE.

- LAG CURB AND DUCT SUPPORT PLATE TO ROOF DECK AT TWO PLACES ON EACH SIDE OF CURB. USE THE FOLLOWING: FOR METAL DECK, USE SHEETMETAL SCREWS. FOR WOOD DECK, USE LAGS. FOR CONCRETE DECK, USE EXPANSION ANCHORS.

# **1** EXHAUST FAN MOUNTING DETAIL

![](_page_28_Figure_6.jpeg)

	EXHAUST FAN SCHEDULE											
SYMPOL		UNIT TYPE	BLOWER			ELECTRIC	CAL		OPERATING		DEMADKS	
SYMBOL	AKEA SEKVED		CFM	ESP	MAXIMUM RPM	DRIVE	HP/W	V/Ø	SONES	(LBS)	MANUFACIURER AND MODEL	
<u>EF-1</u>	ELEVATOR SHAFT	UPBLAST	400	0.45	1550	DIRECT	86W/.125HP	115/1	8	150	COOK MODEL 90C15DH	1,2,3
REMARKS <sup>.</sup>												

1. APPROVED ALTERNATE MANUFACTURERS: ACME, GREENHECK, PENNBARRY, TWIN CITY FAN COMPANY, SOLER & PALAU AND BARRY BLOWER.

2. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB W/ DAMPER TRAY AND MOTORIZED BACKDRAFT DAMPER, THERMAL OVERLOAD PROTECTION (120 VOLT ONLY), PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, AND INTEGRAL BIRD SCREEN. 3 CONTROL FAN WITH HEAT RISE T-STAT

		Dl	JCTLES	SS S	SPLI	THI	GH WA	ALL CC	OLING &	, HE	ATI	NG	UNI	Г SCH	IEDULE	
SYMBOL AREA SERVED	NOMINAL		SUPPLY FAN		COOLING REQUIRED AT 95°F OSA, 80°F EDB, 62°F EWB		HEATING REQUIRED AT 32°F OSA, 69°F EDB.	ELECTRICAL OUTDOOR UNIT		MINIMUM	INDOOR/ OUTDOOR OPERATING		REMARKS			
	AREA SERVED	TONS	TONS	UNITITE	CFM	WATTS	V/Ø	TOTAL MBH	SENSIBLE MBH	TOTAL MBH	MCA	МОСР	V/Ø	HSPF	F WEIGHT (LBS)	
<u>FC-5</u> , <u>HP-5</u>	ELEVATOR EQUIPMENT ROOM	1.5	HIGH WALL COOL/HEAT UNIT	306-524	30.0	THROUGH OUTDOOR UNIT	18.0	18.0	18.0	17.0	25.0	208 / 1	22.6 / 12.0	30 / 95	LENNOX INDOOR UNIT MODEL MWMC018 LENNOX OUTDOOR UNIT MODEL MPC018	1,2,3,4,5,

1. APPROVED ALTERNATE MANUFACTURERS: CARRIER, SAMSUNG, LG, DAIKIN, OR APPROVED EQUAL BY ENGINEER.

2. CONTROL UNIT WITH MANUFACTURER'S HARD-WIRED WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT WITH AUTO CHANGE OVER.

3. PROVIDE MANUFACTURERS CRANKCASE HEATER, LOW AMBIENT CONTROLS & (TO -0°F COOLING & TO -0°F HEATING) WIND BAFFLES, REFRIGERATION LINE SET SIZED BY MANUFACTURER, AND TAMPER PROOF PORT CAPS.

4. PROVIDE WITH MIRO INDUSTRIES HEAVY DUTY MECHANICAL GALVANIZED ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS. SUPPORT SHALL EXTEND A MINIMUM OF 6" BEYOND EQUIPMENT IN EACH DIRECTION. BOLT EQUIPMENT TO MECHANICAL SUPPORT.

5. PROVIDE WITH MANUFACTURER'S CONDENSATE PUMP, OR LITTLE GIANT MINI CONDENSATE PUMP, CONCEAL PUMP BEHIND UNIT WITHIN MOUNTING BRACKET ASSEMBLY. ELECTRICAL CIRCUIT FOR PUMP SHALL BE INTEGRATED TO FAN COIL. 6. ELECTRICAL TO PROVIDE DISCONNECT AND HEAT TRACE BENEATH UNIT AND TO ROOF DRAIN.

MUSGROVE ENGINEERING, P.A. 234 S. Whisperwood Way

Boise, ID 83709

208.384.0585 645 West 25th Street Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com Project No. 23-264

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SHEET DI SC SHEET	'HV ETA HEI	AC ALS & DULES
	12 SINAL S	<b>0.1</b> SHEET SIZE

### ELECTRICAL LEGEND - LIGHTING

	ENCE FIXTURE SCHEDULE FOR MOUNTING TYPE, MOUNTING HEIGHT,
	DOUBLE FACE EXIT SIGN, CEILING MOUNTED, PROVIDE UNSWITCHED
НØ	WALL MOUNTED DOUBLE FACE EXIT SIGN PROVIDE UNSWITCHED
$\bigotimes$	SINGLE FACE EXIT SIGN, CEILING MOUNTED PROVIDE UNSWITCHED
H⊗	WALL MOUNTED SINGLE FACE EXIT SIGN PROVIDE UNSWITCHED
◄—	ARROW INDICATES DIRECTION TO BE SHOWN ON SIGN.
	1'X1' LIGHT FIXTURE.
	1'X1' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
	TRACK LIGHT
	1'X4' LIGHT FIXTURE.
	1'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
	2'X4' LIGHT FIXTURE.
	2'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
$\square$	2'X2' LIGHT FIXTURE.
	2'X2' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
	DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH.
	DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR
	STRIP LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH.
and a second sec	STRIP LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR
Ŧ	WALL MOUNTED LIGHT FIXTURE.
Ą	WALL MOUNTED LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
Ф	RECESSED LIGHT FIXTURE
<b>\$</b>	RECESSED LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
0	ROUND LIGHT FIXTURE
Ø	ROUND EMERGENCY LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
ю	WALL MOUNTED LIGHT FIXTURE.
۲Ø	WALL MOUNTED EMERGENCY LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
•	POLE LIGHT 1 HEAD WITH POLE
	TIME CLOCK
$\mathbf{r}$	PHOTO CONTROL CELL LOCATED 12" ABOVE ROOF FACING NORTH.
09	OCCUPANCY SENSOR. PROVIDE RELAYS AND POWER PACKS AS REQUIRED.
Ø	LED DRIVER
	EMERGENCY EGRESS LIGHTING WITH OUT FIXTURE HEADS. CONNECT TO AN UNSWITCHED CONDUCTOR.
	EMERGENCY EGRESS LIGHTING. CONNECT TO AN UNSWITCHED CONDUCTOR.
	WALL MOUNTED SINGLE FACE EXIT SIGN WITH EMERGENCY EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR. MOUNT AT +8'-0" UNO.
4⊗∿	CEILING MOUNTED. SINGLE FACE EXIT SIGN WITH EMERGENCY EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR.
	CEILING MOUNTED. DOUBLE FACE EXIT SIGN WITH EMERGENCY EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR.
XXX	INDICATES FIXTURE TYPE. REFER TO FIXTURE SCHEDULE.
НZ	EXTERIOR WALL PACK
	EMERGENCY EXTERIOR WALL PACK. PROVIDE EMERGENCY BATTERY

BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR

	DEVICES
SXX	SWITCH, TYPE AS INDICATED. +46"AFF
	2 DOUBLE POLE 3 3-WAY
	4 4-WAY K KEYED
	P PILOT LIGHT
	HP HORSEPOWER RATED
	LV LOW VOLTAGE
	OS OCCUPANCY SENSOR OR LOW VOLTAGE, MOMENTARY OVERRIDE
	vs vacancy sensor a superscript indicates lights
<b>\$</b> \$	TO BE SWITCHED TOGETHER DUAL LEVEL SWITCHING, INSIDE AND OUTSIDE LAMPS OF FIXTURE
<b>\$</b> <sup>2</sup> os	DUAL LEVEL SWITCHING WITH OCCUPANCY SENSOR, INSIDE AND
S <sup>D</sup> os	OCCUPANCY SENSOR WITH MANUAL DIMMING, SET FOR 50% AUTOMATIC ON, AUTOMATIC OFF, WITH MANUAL DIMMING.
φ	SINGLE CONVENIENCE OUTLET, +18" AFF UNO
٦	FLOOR MOUNT SINGLE CONVENIENCE OUTLET
Φ	DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
Ā	FLOOR MOUNT DUPLEX CONVENIENCE OUTLET
<u>ш</u> ф	EMERGENCY DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
Ф	SWITCHED DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
$\overline{\Phi}$	FLOOR MOUNTED SWITCHED DUPLEX CONVENIENCE OUTLET
∉	USB DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
<b>⊕</b>	USB FOURPLEX CONVENIENCE OUTLET, +18" AFF UNO
⊕	FOURPLEX CONVENIENCE OUTLET. +18"AFF UNO
	FLOOR MOUNT FOURPLEX CONVENIENCE OUTLET
٥	CONNECTION POINT TO EQUIPMENT SPECIFIED, ELECTRICAL CONTRACTOR TO SUPPLY RACEWAY AND CONDUCTORS AND MAKE FINAL CONNECTION TO EQUIPMENT UNDER THIS SECTION. UNO
	FLOOR MOUNTED CONNECTION POINT, SEE NOTE ABOVE FOR REQUIREMENTS
	FLOOR MOUNTED JUNCTION BOX
U U U	
ю Нонс	WALL MOUNTED PUSH BUTTON, HANDICAPPED MOUNT AT SWITCH HEIGHT UNO
000	WALL MOUNTED PUSH BUTTON, MOUNT AT SWITCH HEIGHT UNO
$\boxtimes$	MOTOR STARTER/CONTACTOR, SIZE/POLES NEMA 1 UNO AS INDICATED
$\boxtimes$	COMBINATION STARTER AND DISCONNECT, SIZE/POLES, STARTER SIZE AS INDICATED, NEMA 1 UNO
F	FUSED DISCONNECT SWITCH, SIZE/POLES, FUSE SIZES AS INDICATED, NEMA 1 UNO
마	NON-FUSED DISCONNECT SIZE/ POLES AS INDICATED, NEMA 1 UNO
(unit-#)	THERMOSTAT, +46" AFF PROVIDE CONDUIT, J-BOX, CONDUCTORS AS REQUIRED TO CONTROL ASSOCIATED UNITS. UNO COORDINATE WITH DIVISION 15.
(unit-#)	HUMIDISTAT, +46" AFF PROVIDE CONDUIT, J-BOX, CONDUCTORS AS REQUIRED TO CONTROL ASSOCIATED UNITS.
	POWER POLE - DUAL CHANNEL
REB	RECESSED ENTERTAINMENT BOX
T	TRANSFORMER
	PANELBOARD. SEE SCHEDULE FOR TYPE.
 	EQUIPMENT CABINET FLUSH MOUNTED
O <u>₩</u> ₩ _#\#	
###	MECHANICAL EQUIPMENT CALL OUT
< <u>#</u>	KITCHEN EQUIPMENT CALLOUT

![](_page_29_Figure_3.jpeg)

◻ Ю  $\langle \diamond \rangle$ Κ CR  $\bigcirc$ Ю 0

ΗZ

NOTE:

### ONE LINE

DELTA WYE TRANSFORMER UNO

##A #P

##A

125A )

125A

3P--

GFP

TVSS

ST

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100A

3P

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Т

PANEL BOARD, SEE SCHEDULE FOR TYPE AND SIZE

CIRCUIT BREAKER, SIZE AND POLES INDICATED

FUSE, SIZE AND TYPE INDICATED, PROVIDE FUSE FOR EACH POLE

##A INTERRUPTER SWITCH, SIZE AND POLES INDICATED

##A FUSED SWITCH, SIZE/POLES AND FUSE SIZE INDICATED

DRAW OUT CIRCUIT BREAKER, SIZE AND POLES INDICATED

INDIVIDUAL BREAKER WITH SHUNT TRIP, SIZE AND POLES INDICATED. NEMA 1 UNO

INDIVIDUAL BREAKER, SIZE AND POLES INDICATED. NEMA 1 UNO

GROUND FAULT PROTECTION

TRANSIENT VOLTAGE SURGE SUPPRESSION LSIGR — ADJUSTABLE BREAKER SETTINGS (PER SPECIFICATIONS): 'L'-LONG TIME 'S'-SHORT TIME 'I'-INSTANTANEOUS

> 'G'-GROUND FAULT 'R'-ENERGY REDUCING MAINTENANCE SWITCH W/STATUS INDICATOR

GROUND

SHUNT TRIP COIL MOTOF

DISCONNECT SWITCH, SIZE AND POLES INDICATED. NEMA 1 UNO

OVERHEAD SERVICE DROP

GENERATOR SET, MAIN BREAKER SIZE INDICATED

AUTOMATIC TRANSFER SWITCH (ATS)

METER AND BASE

NEUTRAL

DRY TYPE TRANSFORMER

PAD MOUNT TRANSFORMER

### SECURITY

CCTV CAMERA POWER SUPPLY CCTV SYSTEM POWER SUPPLY

ADJUSTABLE CAMERA (PAN/TILT/ZOOM)

FIXED CAMERA

CAMERA IN OUTDOOR HOUSING

ADJUSTABLE CAMERA (PAN/TILT/ZOOM) IN OUTDOOR HOUSING

CCTV OUTLET, +18" UNO

CEILING MOUNTED CCTV OUTLET

SECURITY SYSTEM KEYPAD CONTROLLER COORDINATE BOX SIZE AND MUDRING WITH VENDOR

CARD READER

CEILING MOUNTED MOTION SENSOR WALL MOUNTED MOTION SENSOR, MOUNTING HEIGHT INDICATED

PANIC BUTTON - MOUNTED UNDER COUNTER

THIS IS A STANDARD LIST OF COMMONLY USED ELECTRICAL SYMBOLS. SOME OF THE SYMBOLS SHOWN MAY NOT HAVE BEEN USED IN THIS DRAWING PACKAGE.

### COMMUNICATIONS

- JUNCTION BOX FOR FUTURE TELEPHONE/DATA OUTLET. MOUNT AT 18" A.F.F. UNO. PROVIDE SINGLE-GANG MUD RING WITH BLANK COVER PLATE. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. #D #T
  - TELEPHONE/DATA OUTLET. MOUNT AT 18" A.F.F. UNO. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING. INSTALL QUANTITY OF DATA (#D) AND TELEPHONE (#T) CABLES INDICATED TO THE NEAREST DATA RACK. PROVIDE (2) DATA CABLES IF A CABLE QUANTITY IS NOT INDICATED.
- FLOOR MOUNTED BOX FOR FUTURE TELEPHONE/DATA OUTLET. V JUNCTION BOX WITH SINGLE-GANG MUD RING. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. PROVIDE BLANK COVER PLATE.
- #D.#T FLOOR MOUNTED TELEPHONE/DATA OUTLET. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING. INSTALL QUANTITY OF DATA (#D) AND TELEPHONE (#T) CABLES INDICATED TO THE NEAREST DATA RACK. PROVIDE (2) DATA CABLES IF A CABLE QUANTITY IS NOT INDICATED.
- (SP) CEILING MOUNTED SPEAKER WITH BACKBOX

WALL MOUNTED SPEAKER, WITH BACKBOX +80" UNO

TTB TELEPHONE TERMINAL BOARD

### ABBREVIA A AMPERES AC 6" ABOVE BACKSPLASH AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AMP FRAME AMPS INTERRUPTING CAPACI AUTOMATIC TRANSFER SWITCH AMERICAN WIRE GAUGE BOTTOM OF DECK BS BOTTOM OF STRUCTURE CEILING MOUNTED CB CIRCUIT BREAKER CF COMPACT FLUORESCENT CKT CIRCUIT CONDUIT ONLY, PROVIDE PULL-LINE CURRENT TRANSFORMER CONTROL CO CTL DC (D) DIRECT CURRENT DEMOLITION DEMO DET DTT DOUBLE TWIN TUBE EMERGENCY ELECTRICAL CONTRACTOR EMERGENCY LIGHT FACP FIRE ALARM CONTROL PANEL G/GND GROUND GFCI GROUND FAULT CIRCUIT INTERRUPTER GFI GROUND FAULT INTERRUPTER HHHAND HOLEHIDHIGH INTENSITY DISCHARGEHOAHAND-OFF-AUTOHPSHIGH PRESSURE SODIUM HVAC HEATING, VENTILATION, & AIR CONDITIONING IG ISOLATED GROUND IPCO IDAHO POWER COMPAN J-BOX JUNCTION BOX KA KILOAMP KVA KILO VOLT-AMP KW KILOWATT KWH KILOWATT HOUR LCP LIGHTING CONTROL PANE MAIN BREAKER MAIN BREAKER MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER MAIN DISTRIBUTION PANEL MAIN LUG MODULAR METERING CENTER METAL HALIDE MAIN SWITCH BOARD MMC MSB MTG MOUNTING NORMALLY CLOSED NATIONAL ELECTRICAL CODE NOT IN CONTRACT NIGHT LIGHT NO NORMALLY OPEN NTS NOT TO SCALE OH OVERHEAD OS OCCUPANCY SENSOR P POLES PC PHOTO-CONTROL PVC POLYVINYL CHLORIDE PWR POWER RE: REFERENCE REC RECEPTACLE (R) RELOCATED SF SQUARE FEET TBDTO BE DETERMINEDTDRTIME DELAY RELAY TK TOE KICK TR TAMPER RESISTANT TSP TWISTED SHIELDED PAIR TRT TRIPLE TUBE TTB TELEPHONE TERMINAL BOARD (TYP.) TYPICAL UC UNDERCABINET UG UNDERGROUND U.N.O. UNLESS NOTED OTHERWISE VA VOLT-AMPERE W WATT WGWIRE GUARDWPWEATHER PROOF/NEMA 3R PROVIDED/ PROVIDE AND INSTALL / PROVIDED AND PROVIDE BY INSTALLED BY / PROVIDE AND INSTALL INSTALLED/ INSTALL NOTE: THIS IS A STANDARD LIST OF COMMONLY USED USED IN THIS DRAWING PACKAGE.

![](_page_29_Picture_53.jpeg)

ELECTRICAL
BBREVIATIONS

ITY		
<b>*</b> · · ·		

ELECTRICAL ABBREVIATIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT BE

![](_page_29_Picture_68.jpeg)

Boise, ID 83709 208.384.0585

208.523.2862

### ELECTRICAL GENERAL NOTES

- A. THESE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE; THEREFORE, THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL EQUIPMENT AND DEVICE LOCATIONS WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DIVISIONS PRIOR TO ROUGH-IN. REFER TO AND COORDINATE WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL WORK THAT IS REQUIRED BY THE ELECTRICAL CONTRACTOR.
- B. ALL CONDUIT AND JUNCTION BOXES ARE TO BE CONCEALED UNLESS LOCATED WITHIN DEDICATED ELECTRICAL OR MECHANICAL ROOMS. USE OF SURFACE MOUNTED RACEWAYS IN ALL OTHER SPACES MUST BE APPROVED BY THE ARCHITECT FOR EACH LOCATION. WHERE SURFACE RACEWAYS ARE APPROVED, UTILIZE WIREMOLD, OR APPROVED EQUAL, SURFACE MOUNTED RACEWAYS PAINTED TO MATCH SURROUNDING WALLS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET HEIGHTS WHERE THE SPECIFIC OUTLET HEIGHT IS NOT INDICATED. REFER TO THE ELECTRICAL LEGEND FOR THE DEFAULT OUTLET HEIGHT WHEN NOT INDICATED ON ELEVATIONS OR ON AT THE DEVICES.
- D. PROVIDE PULL-LINE IN ALL EMPTY CONDUITS.
- E. TERMINATE ALL LOW-VOLTAGE CONDUITS WITH INSULATED THROAT BUSHING.
- F. MECHANICAL EQUIPMENT INDICATED IS SHOWN IN AN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- G. INSTALL PLENUM RATED FIRE ALARM CONDUCTORS FROM ALL FIRE ALARM DEVICES INDICATED TO THE FIRE ALARM CONTROL PANEL OR NAC EXTENDER PANEL(S) AS REQUIRED. STUB 3/4" CONDUIT FROM DEVICE TO VOID ABOVE CEILING. PROVIDE NAC EXTENDER PANELS (QUANTITY AS REQUIRED) IN LOCATIONS INDICATED AND CIRCUITING AS REQUIRED FOR A COMPLETE INSTALLATION. CIRCUIT THE FIRE ALARM NOTIFICATION AND INITIATION DEVICES PER THE ELECTRICAL SPECIFICATIONS. FURNISH AND INSTALL ALL APPURTENANCES AND PROGRAMMING REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. REFER TO ELECTRICAL FIRE ALARM SPECIFICATIONS FOR SYSTEM REQUIREMENTS AND SUBMITTAL PROCEDURES.
- THE ELECTRICAL DEMOLITION DRAWING(S) PROVIDED ARE INTENDED TO ASSIST THE ELECTRICAL CONTRACTOR IN ESTABLISHING AREAS REQUIRING DISCONNECTION, REMOVAL, OR RELOCATION OF ELECTRICAL EQUIPMENT, OUTLETS, WIRING, DEVICES, FIXTURES, ETC. AND MAY NOT INDICATE ALL DEVICES OR THE FULL EXTENT OF DEMOLITION AND RECONNECTION WHICH MAY BE REQUIRED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY EXAMINE ALL REQUIRED DEMOLITION WORK AND INCLUDE ALL LABOR AND INCIDENTALS THAT WILL BE NECESSARY TO PERFORM DEMOLITION RECONNECTION AND TEMPORARY POWER CONNECTIONS IN THE BID.
- ALL ELECTRICAL DEVICES AND WALLS INDICATED ON THE ELECTRICAL DEMOLITION DRAWING(S) ARE TO REMAIN UNLESS OTHERWISE NOTED.

<b>ELECTRICAL SHEET INDEX - PHASE 1</b>								
SHEET NUMBER	SHEET NAME							
E00.1	ELECTRICAL COVERSHEET							
E01.1	LIGHTING COMPLIANCE							
E10.1	ELECTRICAL OVERALL PLAN							
E21.1	ELECTRICAL DEMO FLOOR PLANS							
E31.1	ELECTRICAL FLOOR PLANS							
E80.1	ELECTRICAL DETAILS AND SCHEDULES							

![](_page_29_Picture_80.jpeg)

![](_page_30_Picture_0.jpeg)

Project Title: ITD DIST. 3 BLD. IMPROVEMENT Data filename: P:\Files\2023\23264\CALCS\ELEC\23264 Electrical\_Compliance.cck

Report date: 10/26/23 Page 1 of 7

Division of Buildin PA# BuD2311-00062 Date:04/09/24 These Documents are contingent on the comp mark-ups and notes ap This approval of any violatio an approval of any violatio any rules adopted cod laws or rules applicable to any or ru

COMcheck Exterior	Software Vers Lighting C	omplia	5.3 ance (	Certi	ficat	te
Project Information						
Energy Code: Project Title: Project Type: Exterior Lighting Zone	VEMENT s district (LZ2))					
Construction Site: 8150 West Chinden Boulevard Garden City, ID 83714	Designer/Contractor: Musgrove Engineering 234 S Whisperwood Way Boise, ID 83709 (208)384-0585					
Allowed Exterior Lighting Powe	r					
A Area/Surface Catego	У	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)	
Pedestrian and vehicular entrances and e	xits	3 ft of door	14	Yes		42
			Total Tradab	le Watts (a) =	=	42 42
		Total Allo	wed Supplement	al Watts (b) =	=	42
<ul> <li>(a) Wattage tradeoffs are only allowed</li> <li>(b) A supplemental allowance equal to</li> </ul>	between tradable areas/surfaces 400 watts may be applied toward	s. d compliance of bot	th non-tradable a	and tradable a	areas/surfa	ces.
Proposed Exterior Eighting Pow	A		В	С	D	Е
Fixture ID : Description	Lamp / Wattage Per Lamp	/ Ballast	Lamps/ Fixture	# of Fixtures	Fixture Watt.	(C X D)
Pedestrian and vehicular entrances a	nd exits (3 ft of door width): T	radable Wattage				
LED 1: WP1: Other:			1 Total Tra	1 dable Propos	11 ed Watts =	11
Exterior Lighting PASSES						
<b>Exterior Lighting Compliance S</b> <i>Compliance Statement:</i> The propose building plans, specifications, and oth systems have been designed to meet applicable mandatory requirements I	tatement d exterior lighting alteration her calculations submitted wi the 2018 IECC requirements isted in the Inspection Check	project represen th this permit ap s in COM <i>check</i> Vo list	ted in this doc plication. The ersion 4.1.5.3	ument is co proposed ex and to comp	nsistent w kterior ligh bly with ar	rith the nting NY
Angelo Neglia - Electrical De	esigner	Angelo	(Regl	<u>i</u> 10/2	6/2023	
Name - Title	Signature			Date		

Project Title: ITD DIST. 3 BLD. IMPROVEMENT Data filename: P:\Files\2023\23264\CALCS\ELEC\23264 Electrical\_Compliance.cck

SECTION 408 SYSTEM COMMISSIONING

IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL BELOW NOTED DOCUMENTS WITHIN 90 DAYS OF CERTIFICATE OF OCCUPANCY:

A. <u>AS-BUILT DRAWINGS</u> - DRAWINGS SHALL INCLUDE THE LOCATION AND PERFORMANCE DATA OF ALL PIECES OF MECHANICAL EQUIPMENT.

B. <u>OPERATING AND MAINTENANCE MANUALS</u>- MANUALS SHALL INCLUDE THE FOLLOWING:

- SUBMITTAL DATA ON ALL PIECES OF EQUIPMENT REQUIRING MAINTENANCE. MANUFACTURER'S OPERATIONS AND MAINTENANCE DATA ON ALL PIECES OF EQUIPMENT. ROUTINE MAINTENANCE ACTIONS SHALL BE
- CLEARLY IDENTIFIED. NAME AND ADDRESS AND PHONE NUMBER OF OF AT LEAST ONE (1) SERVICE PROVIDED. LIGHTING CONTROL SYSTEMS MAINTENANCE AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, EQUIPMENT AND SYSTEM
- INSTRUCTIONS. 5. A NARRATIVE ON HOW EACH LIGHTING SYSTEM IN INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.

C. LIGHTING SYSTEM FUNCTIONAL TESTING REQUIREMENTS

FUNCTIONAL TESTING - ALL AUTOMATIC LIGHTING CONTROL SYSTEM SHALL BE FULLY TESTED TO ENSURE THE CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, P[ROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

WHERE OCCUPANT SENSORS, TIME SWITCHES, PROGRAMMABLE CONTROLS, PHOTOSENSORS OR DAYLIGHTING CONTROLS ARE INSTALLED, THE FOLLOWING PROCEDURES SHALL BE PREFORMED:

2. AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

D. FINAL LIGHTING SYSTEM FUNCTIONAL REPORT- A REPORT OF TEST PROCEDURES AND RESULTS IDENTIFIED AS THE "FINAL LIGHTING CONTROL REPORT" SHALL BE DELIVERED TO THE BUILDING OWNER. THE REPORT SHALL INCLUDE THE FOLLOWING:

- RESULTS OF ALL FUNCTIONAL TESTS ON ALL PIECES OF EQUIPMENT.

Report date: 10/26/23 Page 2 of 7

1. 2.

EQUIPMENT.

FUNCTIONALLY TESTED ONCE CLIMATE CHANGES ALLOW.

MUSGROVE ENGINEERING, P.A. 234 S. Whisperwood Way Boise, ID 83709 208.384.0585 645 West 25th Street Idaho Falls, ID 83402 208.523.2862

www.musgrovepa.com Project No. 23-264

### ENERGY CODE COMMISSIONING COMPLIANCE NOTES

SCHEMATICS, AND CONTROL SEQUENCES OF OPERATIONS. DESIRED OR FIELD DETERMINED SETPOINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS AT ALL CONTROL DEVICES, OR FOR DIGITAL CONTROL SYSTEMS, IN THE SYSTEM PROGRAMMING

1. CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME-OUT ADJUSTMENTS FOR OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCE. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF. 3. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE

LIST OF FUNCTIONAL TESTS USED DURING THE COMMISSIONING PROCESS ON EACH PIECE OF EQUIPMENT.

3. LIST OF DEFICIENCIES FOUND AND CORRESPONDING CORRECTIVE MEASURES EITHER IMPLEMENTED OR PROPOSED ON EACH PIECE OF 4. LIST OF EQUIPMENT NOT ABLE TO BE FUNCTIONALLY TESTED DUE TO CURRENT CLIMATE CONDITIONS. THESE PIECES OF EQUIPMENT WILL

ECIS ECIS 1030 ECIS 1030 ECIS 1030 ECIS	L ENCLUS TERECULAR 389 V2023 OCTO F IDIN HTENHEL
- 200 BROAD STREET BOISE, IDAHO PHONE: 208-343-4635 • FAX: 208-343-1858	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT / ENGINEER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT THE WRITTEN CONSENT OF CSHQA OR ITS AFFILIATES. COPYIGH® © 2022
PROVEMENT BOISE, II	200 BROAD STREF BOISE, ID 837 (208) 343-4635 • FAX (208) 343-18 http://www.cshqa.cc
ITD DIST. 3 BLDG. IMI 8150 West Chinden Boulevard	<b>Aghered</b>
BUIL IMPROV PEF SI	DING /EMENT RMIT ET
PROJECT 23002 DRAWN AN REVISED	DATE 10-30-23 CHECKED KL
SHEET TITLE LIGH COMPI	TING LIANCE
<b>EO</b> ORIGINAL S	<b>1.1</b> SHEET SIZE

![](_page_31_Picture_0.jpeg)

![](_page_31_Figure_1.jpeg)

![](_page_31_Picture_2.jpeg)

![](_page_31_Picture_3.jpeg)

![](_page_31_Picture_4.jpeg)

![](_page_31_Figure_5.jpeg)

4

6

![](_page_31_Picture_6.jpeg)

MUSGROVE ENGINEERING, P.A.

234 S. Whisperwood Way Boise, ID 83709 208.384.0585

645 West 25th Street Idaho Falls, ID 83402 208.523.2862

www.musgrovepa.com Project No. 23-264

![](_page_32_Picture_0.jpeg)

![](_page_32_Figure_1.jpeg)

2 ELECTRICAL DEMO FIRST FLOOR PLAN

![](_page_32_Picture_4.jpeg)

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### **KEYED NOTES:**

(#) SYMBOL USED FOR CALLOUT

- 1. EXISTING WALL TO BE REMOVED. REMOVE ALL EXISTING DEVICES AND JUNCTION BOXES. RE-ROUTE CONDUIT AND CONDUCTORS AS REQUIRED TO MAINTAIN POWER TO ALL DOWN STREAM DEVICE THAT ARE EXISTING TO REMAIN.
- 2. EXISTING DEVICES TO BE REMOVED. REMOVE ALL CONDUIT, CONDUCTORS, AND JUNCTION BOXES BACK TO SOURCE OR NEAREST UPSTREAM DEVICE THAT IS TO REMAIN. MAINTAIN CONTINUITY TO ALL DOWNSTREAM DEVICES THAT ARE TO REMAIN.
- 3. EXISTING LIGHT FIXTURE TO BE REMOVED, REPLACED, AND RE-CIRCUITED FROM DIFFERENT LOCATION. JUNCTION BOX AT LIGHT FIXTURE TO REMAIN. REMOVE ALL CONDUIT, CONDUCTORS, AND JUNCTION BOXES BACK TO SOURCE OR NEAREST UPSTREAM DEVICE THAT IS TO REMAIN. MAINTAIN CONTINUITY TO ALL DOWNSTREAM DEVICES THAT ARE TO REMAIN. RE: SECOND FLOOR ELECTRICAL PLAN.
- 4. EXISTING CABLING DATA CABLING RUNS ALONG THE SOUTH WALL AT THE CEILING. CABLING TO BE RE-ROUTED AND EXTENDED AS REQUIRED AROUND THE NEW ELEVATOR SHAFT. COORDINATE WITH IDAHO TRANSPORTATION DEPARTMENT I.T. STAFF IN REMOVAL AND RE-ROUTING OF CABLING. RE-ROUTE ALL CONDUIT AND CONDUCTORS AS REQUIRED TO MAINTAIN CONNECTIVITY TO ALL DOWNSTREAM DEVICES THAT ARE EXISTING TO REMAIN.
- 5. EXISTING WALL, FLOOR, AND CEILING TO BE REMOVED IN PREPARATION FOR NEW ELEVATOR SHAFT. REMOVE EXISTING LIFT AND ALL CONDUIT, CONDUCTORS, AND JUNCTION BOXES BACK TO SOURCE OR NEAREST UPSTREAM DEVICE THAT IS TO REMAIN. RE-ROUTE CONDUIT AND CONDUCTORS AS REQUIRED TO MAINTAIN POWER TO ALL DOWN STREAM DEVICE THAT ARE EXISTING TO REMAIN.
- 6. EXISTING EXTERIOR STAIRS TO BE REMOVED. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR MORE INFORMATION.
- 7. EXISTING EXTERIOR CANOPY TO BE REMOVED. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR MORE INFORMATION. EXISTING LIGHT FIXTURE TO BE REMOVED AND RELOCATED, RE:LIGHTING PLAN FOR NEW LOCATIONS. MAINTAIN FUNCTIONALITY OF ALL DOWN STREAM DEVICES. REMOVE UNUSED CONDUIT, CONDUCTORS, AND J-BOXES.

![](_page_32_Figure_15.jpeg)

10389 10389 10389 100 100 100 100 100 100 100 10						
	200 BROAD STREET BOISE, IDAHO PHONE: 208-343-4635 • FAX: 208-343-1858	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT / ENGINEER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR COMPLETION OF THIS PROJECT-WHEN PHASED-WITHOUT THE WRITTEN CONSENT OF CSHOA OR ITS AFFILIATES. COPYIGHT © 2022				
PROVEMENT	<b>GARDEN CITY, ID</b>	200 BROAD STREET BOISE, ID 83702 (208) 343-4635 • FAX (208) 343-1858 http://www.cshqa.com				
ITD DIST. 3 TENANT IM	8150 West Chinden Boulevard	<b>VADA</b>				
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PROJE 23002 DRAW AN REVISI 1 REVIS	ECT 2 N ED SION 1	DATE 03-27-24 CHECKED KL 3/27/2024				
EL DEI Sheet	ECT MO PL/	RICAL FLOOR ANS				
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![](_page_33_Picture_0.jpeg)

![](_page_33_Figure_1.jpeg)

1 ELECTRICAL FIRST FLOOR PLAN 1/8" = 1'-0" 2 ELECTRICAL SECOND FLOOR PLAN

![](_page_33_Picture_6.jpeg)

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3/28/2024

WHETHER IS EXECUTED TIONS SHALL NO OTHER CT, OR

VIGS AND SPECIFICATIONS, AS OF SERVICE, ARE AND SHALL I THE ARCHITECT / ENGINEER V FOR WHICH THEY ARE MADE I FOR WHICH THEY ARE MADE I BY ANY PERSON OR ENTITY ON IR ADDITIONS TO THIS PROJEC

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> TREET 83702 3-1858

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ITD

PROJECT

23002

DRAWN

REVISED

SHEET

**REVISION 1** 

ELECTRICAL

FLOOR

PLANS

ORIGINAL SHEET SIZE 24" x 36"

**E31** 

AN

50

81

L2 TENANT

IMPROVEMENT

PERMIT

SET

DATE 03-27-24

KL

CHECKED

3/27/2024

### **KEYED NOTES:**

# SYMBOL USED FOR CALLOUT

1

2

3

4

5

6

- 1. EQUIPMENT LOCATED ON ROOF.
- EXTEND CONDUIT AND CONDUCTORS FROM EXISTING LIGHTING CIRCUIT AS INDICATED. EXTEND AN UNSWITCHED LEG OF THE LIGHTING CIRCUIT TO THE INTEGRAL EMERGENCY BATTERY WHERE INDICATED.
- S. PROVIDE LOCKABLE NEAMA ENCLOSURE WITH 15 AMP BREAKER FOR ELEVATOR CAR LIGHTS/CONVENIENCE RECEPTACLES AND 25 AMP BREAKER FOR MECHANICAL UNIT 'HP-5'. ROUTE CIRCUIT FOR MECHANICAL UNI 'HP-5'LOCATD ON ROOF THROUGH OVERCURRENT DEVICE LOCATED IN ELEVATOR EQUIPMENT ROOM THEN TO CIRCUIT INDICATED. RE:ELECTRICAL SECOND FLOOR PLAN. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
- ALL CONDUIT, JUNCTION BOXES, AND DEVICES TO BE MOUNTED +50" ABOVE PIT FLOOR. ANY CONDUIT, JUNCTION BOXES, AND DEVICES MOUNTED BELOW +48" SHALL BE NEMA 4 RATED.
- 5. ELEVATOR BUSSMAN CONTROL MODULE. RE:PARTIAL ONE-LINE DIAGRAM.
- 6. CONNECTION FOR ELEVATOR LIGHTS AND RECEPTACLES. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
  - 7. CONNECTION FOR ELEVATOR CONTROLLER. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
  - 9. PROVIDE RED HANDLED LOCKABLE TYPE CIRCUIT BREAKER IN PANEL AT POSITION INDICATED.
  - 10.REMOVE LIGHT AND SWITCH IN EQUIP. RM 160 FROM EXISTING<br/>CIRCUIT AND RE-CIRCUIT TO DEDICATED RECEPTACLE CIRCUIT IN<br/>THIS SPACE. CONNECT SUCH THAT RECEPTACLE GFCI TRIP DOES<br/>NOT TURN OF LIGHTS.
  - 11. PROVIDE AND INSTALL LINE VOLTAGE AND CONTROL CABLING TO THE CORRESPONDING OUTDOOR UNIT. COORDINATE REQUIREMENTS WITH THE MECHANICAL CONTRACTOR.
  - 1/2" CONDUIT TO CORRESPONDING MECHANICAL UNIT. BOX, CONDUIT, AND CONDUCTORS TO BE PROVIDED BY ELECTRICAL
     CONTRACTOR. LEAVE 12" SLACK AT BOX AND MECHANICAL UNIT. MECHANICAL CONTRACTOR TO MAKE FINAL CONNECTIONS.
     COORDINATE BOX SIZE, QUANTITY OF CONDUCTOR(S), AND EXACT
     LOCATION WITH MECHANICAL CONTRACTOR.
  - 13. MOUNT RECEPTACLE ON RIGID CONDUIT 12" ABOVE ROOF DECK OR ON MECHANICAL UNIT WHERE APPLICABLE.
  - 14. MOUNT RECEPTACLE ON RIGID CONDUIT 12" ABOVE ROOF DECK OR ON MECHANICAL UNIT WHERE APPLICABLE.
  - 15. PROVIDE AND INSTALL HEAT TAPE AROUND THE BASE OF THE HEAT PUMP AND ROUTE TO NEAREST GUTTER, AND DOWNSPOUT TO GRADE. WRAP AROUND THE BASE OF THE UNIT. UTILIZE 12W/FT REYCHEM ICESTOP HEAT TAPE OR EQUAL. PROVIDE AND INSTALL 1 PENTAIR AMC-1A TEMPERATURE CONTROL UNIT PER CIRCUIT. COORDINATE THE INSTALLATION WITH THE MECHANICAL CONTRACTOR.
  - . 16. FUSED DISCONNECT FOR ELEVATOR. RE: PARTIAL ONE-LINE DIAGRAM.

![](_page_34_Picture_0.jpeg)

![](_page_34_Figure_1.jpeg)

DETAIL GENERAL NOTES: 1. PROVIDE FRAMING AS REQUIRED.

**1** STANDARD MOUNTING HEIGHTS - PHASE 1

### **GENERAL NOTES:**

- A. CONDUIT, CONDUCTORS AND AIC CALCULATIONS FOR ALL SERVICE, PANEL AND EQUIPMENT FEEDERS INDICATED ON THE ONE-LINE HAVE BEEN SIZED BASED ON COPPER. THE CONTRACTOR MAY USE COMPRESSED ALUMINUM CONDUCTORS FOR THESE FEEDERS PROVIDING THE CONDUIT, CONDUCTOR SIZES AND AIC CALCULATIONS ARE ADJUSTED AS REQUIRED TO MEET ALL NATIONAL ELECTRICAL CODE REQUIREMENTS.
- B. FURNISH AND INSTALL ENGRAVED LABEL ON THE FRONT OF ALL ELECTRICAL EQUIPMENT NOTING THE AVAILABLE FAULT CURRENT VALUE SHOWN.

## **KEYED NOTES:**

# SYMBOL USED FOR NOTE CALLOUT.

- 1. PROVIDE BUSSMAN POWER MODULE, OR APPROVED EQUAL, SWITCH SIZED AS REQUIRED WITH CONTROL TRANSFORMER, FIRE SAFETY INTERFACE, FIRE ALARM VOLTAGE MONITORING RELAY, KEYED TEST SWITCH, RED INDICATOR LAMP, MECHANICALLY INTERLOCKED AUXILIARY NO/NC CONTACTS, AND CLASS J FUSES SIZED AS REQUIRED. VERIFY THE POWER MODULE AND THE FUSE RATING WITH THE ELEVATOR SUPPLIER PRIOR TO ORDERING THE EQUIPMENT. RE:ELECTRICAL FIRST AND SECOND FLOOR PLANS.
- 2. PROVIDE RELAY AND MONITOR MODULE TO MONITOR POWER TO SHUNT TRIP BREAKER. RE: PANEL 'H' SCHEDULE.
- 3. CONNECT TO FIRE ALARM SYSTEM. COORDINATE WITH FIRE ALARM CONTRACTOR TO PROVIDE ALL COMPONENTS FOR A COMPLETE SYSTEM.
- 4. 3/4"C WITH CAT 5 CABLE TO TELEPHONE BACKBOARD FOR ELEVATOR TELEPHONE. COORDINATE INSTALLATION WITH ELEVATOR INSTALLERS.
- $\sim$ COORDINATE ELEVATOR MOTOR RATING AND OVER-CURRENT REQUIREMENTS WITH ELEVATOR SUPPLIER PRIOR TO ORDERING EQUIPMENT. DESIGN BASED ON 25HP HYDRAULIC ELEVATOR.
- TAP EXISTING DISTRIBUTION BOARD BUSSING FOR FEEDERS TO NEW ELEVATOR. RE:E31.1
- PROVIDE NEW DISCONNECT WITHIN 10-FEET OF THE DISTRIBUTION BOARD BUSS TAP.
- 8. DISCONNECT AND REMOVE EXISTING ELEVATOR CONDUIT, BOXES, AND FEEDERS. MARK EXISTING BREAKER AS SPARE.

![](_page_34_Figure_17.jpeg)

### **LIGHTING FIXTURE SCHEDULE - PHASE 1**

TYPE MARK	DESCRIPTION	MOUNTING	WATTAGE	LAMP	MANUFACTURER	MODEL	OR EQUAL BY	NOTES
EX1	THERMOPLASTIC EXIT SIGN WITH GREEN LETTERING,	+8'-0" UNO	0.7	LED	LITHONIA	LQM-S-W-3-G-MVOLT-ELN-SD	COMPASS/SURE-LIT	1
	NICKEL CADMIUM BATTERY AND SELF DIAGNOSTICS						E	
VP1	2' WALL BRACKET, VAPOR TIGHT WITH BATTERY BACKUP	WALL MOUNTED	13.4	LED, 2000	LITHONIA	FEM-L24-2000LM-IMAFL-MD-MVOLT-GZ10-40K-80CRI-E10WMCP	COLUMBIA/METALU	1
				LUMENS, 4000K			Х	
WP1	EXTERIOR LED WALL PACK WITH BATTERY BACKUP AND	WALL MOUNTED;	11	LED, 1500	LITHONIA	WSTLED-P1-30K-VW-MVOLT-PIR-E20WC-DDBXD	COOPER/HUBBELL	1
	MOTION/PHOTOCELL SENSOR	HEIGHT		LUMENS, 3000K			ļ	
		INDICATED ON					ļ	
		PLANS						

LIGHTING FIXTURE SCHEDULE NOTES - PHASE 1

SUBSTITUTIONS WILL BE ALLOWED IF SUBMITTED PRIOR TO BID DATE BY THE GREATER OF 7 BUSINESS DAYS OR THE TIME PERIOD SPECIFIED BY DIVISION 1 SPECIFICATIONS, AND IF DEEMED EQUAL BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING SUBSTITUTED FIXTURES MEET OR EXCEED THE SPECIFICATIONS OF THE FIXTURES SPECIFIED.

Location: P17 Supply From: Mounting: Surface Enclosure: Type 1			Volts: 120/208 Wye Phases: 3 Wires: 4				A.I.C. Rating: EXISTIN Mains Type: 400A Mains Rating: 400 A MCB Rating: MBR							
Note 1)EX	<b>es:</b> KISTING BREAKER; 2)NEW BREAK	ER; 3)REI	D HAND	DLED, L	OCKABLE	BREAKER; 4	4)GFEP (30m	A) FOR EQU	IPMENT PR	OTECTION				
скт	Gircuit Description		,Frip,	Roles				Ŗ		C	Poles	Trip	CKT Note	c
1	REC-ROOF (HP-5)	2	20 A	1	180 VA	0 VA		3			3	100 A	1	(E)PANEL
3	HEAT TAPE (HP-5), ROOF	2,4	20 A	1			660 VA	} 0 VA						
لحرا	spare	- And	202	الحدا	<u> </u>	m	<u> </u>		0 VA	0 VA				
7					0 VA	0 VA					3	15 A	1	EXISTING
9	REC-ELEVATOR SHAFT/PIT	1	20 A	1			180 VA	0 VA						
11	LTS-ELEVATOR SHAFT/PIT	1	20 A	1					136 VA	0 VA				
13	EF-4, ROOF	1	20 A	1	120 VA	0 VA					1	20 A	2,3	FACP, FIF
15	LTS/REC-ELEVATOR	2,3	20 A	1		$ \  \  \  \  \  \  \  \  \  \  \  \  \ $	~360 VA~	~PXA~	$\sim$	$\sim$	$\gamma \gamma$	20A	~2,3~	₽₩₩₽₽₽
17	ELEVATOR SHUNT TRIP	2,3	20 A	1	{				0 VA	1768 VA	2	25 A	2	HP-5, RO
19	(E)PANEL 'J'	1	60 A	2	0 VA {	1768 VA								
21						h	NOVA	250VA~	pur.	m	ngi	20-A	μt	DRY PIPÉ
23	REC-EQUIP. RM 160	1	20 A	1					180 VA	250 VA				
25	HP-1, ROOF	2	45 A	2	3120 VA	900 VA					1	20 A	2,4	HEAT TA
27							3120 VA	900 VA			1	20 A	2,4	HEAT TAI
29	HP-2, ROOF	2	45 A	2					3120 VA	1200 VA	1	20 A	2,4	HEAT TA
31					3120 VA	0 VA					1	20 A	1	Spare
33	HP-3, ROOF	2	25 A	2			1768 VA	0 VA			1	20 A	1	Spare
35									1768 VA		1			Space
37	HP-4, ROOF	2	20 A	2	1352 VA	9485 VA					3	100 A	2	PANEL 'A
39							1352 VA	8115 VA						
41	Space			1						8931 VA				
			Total	Load:	2003	35 VA	1669	94 VA	1731	4 VA				-
			Tatal	A		0	10	0			_			

![](_page_34_Figure_25.jpeg)

![](_page_34_Picture_27.jpeg)

Circuit Description	скт	
IEL 'G'	2	
	4	
	6	
NG	8	
	10	
	12	
FIRE RISER ROOM.	14	
th, RISER, ROOM ~~~~~	18	
ROOF	18	<u>)</u> —/1
	20	3 —
PEPUMP, FIRE RISER	22	
	24	
ГАРЕ (HP-4)	26	
ГАРЕ (НР-1)	28	
ГАРЕ (НР-2/3)	30	
	32	
	34	
	36	
'A'	38	
	40	
	42	

AUE	JATE O	F 1911 HTENHE
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ITD DIST. 3 TENANT IMI	8150 West Chinden Boulevard	<b>SHOA</b>
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PROJEC 23002 DRAWN AN REVISE 1 REVISE	D ON 1	DATE 03-27-24 CHECKED KL 3/27/2024
ELE DET SCI	ECT AIL HEI	RICAL LS AND DULES

![](_page_34_Picture_31.jpeg)

![](_page_34_Picture_32.jpeg)