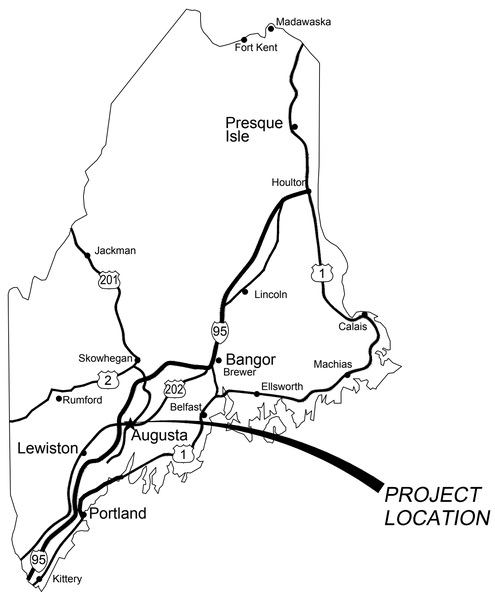
STATE OF MAINE
TEMPORARY MILK AND BLOOD LABS
MARQUARDT BUILDING EAST CAMPUS

AUGUSTA, MAINE

BID SET MAY 25, 2016

LOCATION MAP
N.T.S.



VICINITY MAP N.T.S.

ARCHITECTURAL
A001-A601
QL001-QL901

MECHANICAL
H100-H200

ELECTRICAL
E001-E300

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"STATEMENT AND NOTICE OF COOPERATION"
RELEASE OF THESE PLANS CONTEMPLATES FURTHER COOPERATION AMONG THE OWNER, HIS CONTRACTOR AND THE ARCHITECT. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH THE ARCHITECT AND HIS CONSULTANTS HAVE PERFORMED THEIR SERVICES WITH DUE CARE AND DILIGENCE, THEY CANNOT GUARANTEE PERFECTION. COMMUNICATION IS IMPERFECT, AND EVERY CONTINGENCY CANNOT BE ANTICIPATED. ANY AMBIGUITY OR DISCREPANCY DISCOVERED BY THE USE OF THESE PLANS NEED BE REPORTED IMMEDIATELY TO THE ARCHITECT. FAILURE TO NOTIFY THE ARCHITECT COMPOUNDS MISUNDERSTANDING AND INCREASES CONSTRUCTION COSTS. A FAILURE TO COOPERATE BY A SIMPLE NOTICE TO THE ARCHITECT RELIEVES THE ARCHITECT FROM RESPONSIBILITY FOR ALL CONSEQUENCES. CHANGES MADE FROM THE PLANS WITHOUT CONSENT OF THE ARCHITECT ARE UNAUTHORIZED, AND RELIEVE THE ARCHITECT OF RESPONSIBILITY FOR ALL CONSEQUENCES ARRIVING OUT OF SUCH CHANGES. IN MANY CASES SUCH RELIEF OF RESPONSIBILITY INCLUDES RELIEF OF OWNER RESPONSIBILITY. THE CONTRACTOR AND HIS SUBCONTRACTORS NEED BE DILIGENT IN THESE MATTERS AT ALL TIMES PRIOR TO AND DURING CONSTRUCTION. REFER TO CONTRACT GENERAL AND SUPPLEMENTAL CONDITION AND SPECIFICATIONS (PROJECT MANUAL) FOR ADDITIONAL DETAILS AND CONDITIONS.

AMES ASSOCIATES LLC
ARCHITECTS ENGINEERS

May 27, 2016 - 2:49pm
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ARCHITECTURAL ABBREVIATIONS

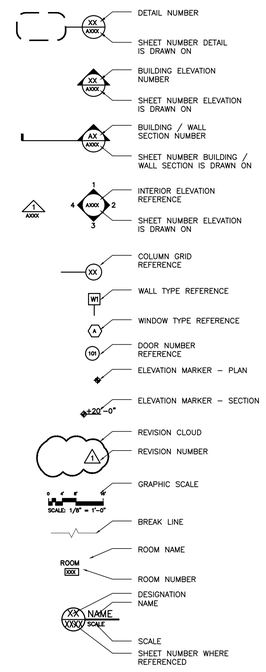
ϕ	DIAMETER
1 PP	SINGLE PHASE
3 WAY	THREE WAY
3/C	THREE CONDUCTOR
3/P	THREE POLE
4 WAY	FOUR WAY
@	AT
ABI	ADDITIVE BID ITEM
AB	ANCHOR BOLT, AUGER BORING
ABS	AIR BREAK SWITCH
AC	ACOUSTIC
	AIR CONDITIONING, ASPHALTIC CONCRETE,
AD	ACCESS DOOR, AREA DRAIN, ALGEBRAIC DIFFERENCE
ADD ALT	ADDITIVE ALTERNATE
ADJ	ADJUSTABLE
AE	AERIAL ELECTRICAL
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
ALUM	ALUMINUM
AMP, A	AMPERE
ANOD	ANODIZE
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASB	ASBESTOS
ASPH	ASPHALT
ATC	ACOUSTIC TILE CEILING
AUTO	AUTOMATIC
AV	AUTOMATIC VENT
B	BATH, BOILER, BASE
B B	BULLETIN BOARD
BC	BALANCING COCK
	BOTTOM OF CURB,
BRD	BOARD
BFP	BACKFLOW PREVENTER
BHP	BREAK HORSEPOWER
BIT. CONC.	BITUMINOUS CONCRETE
BJ	BAR JOIST
BLDG	BUILDING
BLK	BLOCK
BM	BEAM, BENCHMARK
BOT	BOTTOM
BR	BOTTOM REGISTER, BEDROOM
BRG	BEARING
BS	BOTTOM OF STEP
BSMT	BASEMENT
BTWN	BETWEEN
BTU	BRITISH THERMAL UNIT
BV	BALANCING VALVE
BVC	BEGIN VERTICAL CURVE
BW	BOTTOM OF WALL
C	CONVECTOR
CAB	CABINET
CAP	CAPACITY
CAR	CARPET
CB	CATCH BASIN
CC	CENTER TO CENTER
CEM	CEMENT
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CIR	CIRCULATING
CJ	CONSTRUCTION JOINT
	CONTROL JOINT
CKT	CIRCUIT
CL	CLEAR
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNITS
CMU G1	GLAZED CMU, ONE SIDE
CMU G2	GLAZED CMU, TWO SIDES
CND,C	CONDUIT
CNDS	CONDENSATE
CO	CLEANOUT
COL	COLUMN
COMP'T	COMPARTMENT
CONC	CONCRETE
COND	CONDUCTOR
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTION
CONV	CONVERTER
COP,CU	COPPER
CR	CONDENSATE RETURN
CS/CI	CONTRACTOR SUPPLIED/ CONTRACTOR INSTALLED
CS/OI	CONTRACTOR SUPPLIED/ OWNER INSTALLED
CSK	COUNTER SUNK
CT	CERAMIC TILE,
	CURRENT TRANSFORMER
CTE	CONNECT TO EXISTING
CTR	CENTER
CU	COPPER
CUH	CABINET UNIT HEATER
CV	CONTROL VALVE
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
D	DEPTH, DEGREE OF CURVATURE
	DRAIN, DRYER
D PNL	DISTRIBUTION PANEL
D&D	DROP AND DRIP
DB	DIRECT BURIAL,
	DRY BULB, DECIBEL
DD	DOOR DIMENSION
DF	DRINKING FOUNTAIN
DFD	DOOR FRAME DIMENSION
DH	DRILL HOLE, DOUBLE HUNG
DI	DUCTILE IRON, DITCH INVERT
DIA	DIAMETER
DIC	DOWN IN CORNER/CHASE
DIFF	DIFFUSER
DIM	DIMENSION
DISP	DISPENSER
DIW	DOWN IN WALL
DL	DEAD LOAD
DMH	DRAIN MANHOLE
DMPFG	DAMPPROOFING
DMPR	DAMPER
DN	DOWN
DO	DITTO, DRAW-OFF
DS	DOWN SPOUT
DTL	DETAIL
DWG	DRAWING
E	EAST, ELECTRICAL
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
	EMPTY CONDUIT
ECG	EXHAUST CEILING GRILLE
ECR	EXHAUST CEILING REGISTER
EF	EACH FACE, EXHAUST FAN
EG	EXHAUST GRILLE
EL,ELEV	ELEVATION
ELEC	ELECTRIC
EMER	EMERGENCY
ENCL	ENCLOSURE
EP	EDGE OF PAVEMENT
EPS	EXTRUDED POLYSTYRENE
EPT	ENAMEL PAINT
EQ	EQUAL
EQUIP	EQUIPMENT
ER	EXHAUST REGISTER

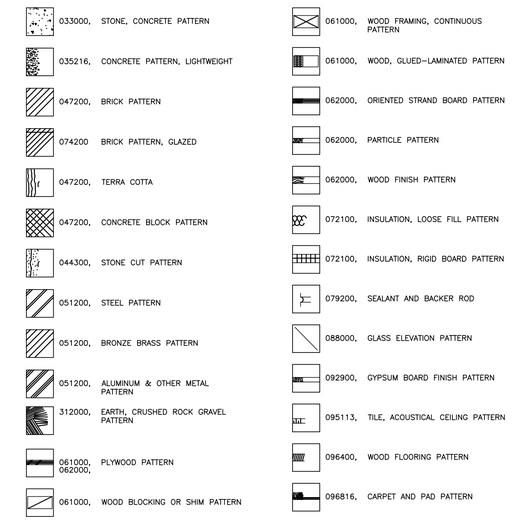
ETC	ETCETERA
EVAP	EVAPORATIVE
EVC	END VERTICAL CURVE
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWG	EXHAUST WALL GRILLE
EWR	EXHAUST WALL REGISTER
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION, EXPOSED
EXP JT	EXPANSION JOINT
EXP	EPOXY PAINT
EXT	EXTERIOR
F	FAHRENHEIT, FIRE, FREEZER, FLOOR
F&T	FLOAT AND THERMOSTATIC
FABX	FIRE ALARM BOX
FAC	FIRST AID CABINET
FBO	FURNISHED BY OTHERS
FC	FLEXIBLE CONNECTION
FCO	FLOOR CLEAN-OUT
FD	FLOOR DRAIN, FOOTING DRAIN
FDR	FEEDER
FE	FIRE EXTINGUISHER
FF	FAR FACE, FINISH FLOOR
FFE	FINISHED FLOOR ELEVATION
FG	FINISH GRADE, FIBERGLASS
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIG	FIGURE
FIN	FINISH
FJ	FELT JOINT
FL	FLOOR, FLASHING
FLUOR	FLUORESCENT
FM	EXIST, FORCE MAIN
FO	FUEL OIL
FOF	FACE OF FOUNDATION
FOR	FUEL OIL RETURN
FOS	FACE OF STUD,
	FUEL OIL SUPPLY
FOUND	FOUNDATION
FP	FINNED PIPE
	FIREPROOF
FPH	FROST PROOF HYDRANT
FPM	FEET PER MINUTE
FR	FRAME, FIRE RESISTANT
FS	FLOOR SINK
FT	FOOT, FEET, FINNED TUBE
FTG	FOOTING
FU	FIXTURE UNIT
FV	FACE VELOCITY
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GF/GI	GOVT. FURNISHED/GOVT. INSTALLED
GF/CI	GOVT. FURNISHED/CONTRACTOR INSTALLED
GI	GALVANIZED IRON
GL	GLASS
GOV'T	GOVERNMENT
GPM	GALLONS PER MINUTE
GR	GRADE
GRAN	GRANULAR
GRD	GROUND
GT	GREASE TOP
GV	GATE VALVE
GWB	GYPSUM WALLBOARD
GYP	GYPSUM
H	HUMIDIFIER
H,HGT	HEIGHT
H&V	HEATING AND VENTILATING
HB	HOSE BIB
HC	HANDICAPPED
	HEATING CONTRACTOR
HCWD	HOLLOW CORE WOOD DOOR
HDC	HANDICAPPED
HDW	HARDWARE
HDWD	HARDWOOD
HGSW	HORN GAP SWITCH
HM	HOLLOW METAL
HORZ	HORIZONTAL
HP	HORSEPOWER, HIGH POINT
HPS	HIGH PRESSURE STEAM, HIGH PRESSURE SODIUM
HR	HOUR
HRU	HEAT RECOVERY UNIT
HS	HIGH STRENGTH
HTHW	HIGH TEMPERATURE HOT WATER
HTP	HIGH TEMPERATURE RETURN
HTS	HIGH TEMPERATURE SUPPLY
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
HW	HOT WATER HEADWALL
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HYD	HYDRANT
HZ	HERTZ
ID	INSIDE DIAMETER
IER	INVERTED ECCENTRIC REDUCER
IN	INCH
INCL	INCLUSIVE
INFO	INFORMATION
INSUL	INSULATION, INSULATED
INT	INTERIOR
INV	INVERT
IW	IN WALL
JB	JUNCTION BOX
JAN	JANITOR CLOSET
JCT	JUNCTION
JST	JOIST
JT	JOINT
K	KITCHEN, CURVE COEFFICIENT
kPa	KILOPASCAL
KO	KNOCK OUT
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
L	LENGTH OF CURVE
	LOUVER, LENGTH
LA	LIGHTNING ARRESTOR
LAB	LABORATORY
LAD	LADDER
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LBS	POUNDS
LF	LINEAR FEET
LGR	LEDGER
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT, LIGHTING PANEL
LPS	LOW PRESSURE STREAM, LOW PRESSURE SODIUM, LITERS PER SECOND
LPT	LATEX PAINT
LR	LIVING ROOM
LT	LIGHT
LTHW	LOW TEMPERATURE HOT WATER
LTR	LOW TEMPERATURE RETURN
LTS	LOW TEMPERATURE SUPPLY
LW	LIGHT WEIGHT
LWC	LIGHT WEIGHT CONCRETE
LWCO	LOW WATER CUT-OFF
M&S	MIRROR AND SHELF
MACH	MACHINE

M	MITER
MANUF	MANUFACTURER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MC	MEDICINE CABINET
MCB	METAL CORNER BEAD
MD	MANUAL DAMPER
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MLDG	MOULDING
mm	MILLIMETER
MO	MASONRY OPENING, MOTOR OPERATED
MOD	MOTOR OPERATED DAMPER
mPa	MEGAPASCAL
MPS	METAL PLASTER STOP
MR	MOISTURE RESISTANT
MS	METAL STRIP
MTD	MOUNTED
MTL	METAL
MV	MANUAL VENT
N	NORTH
N.I.C.	NOT IN CONTRACT
NC	NONCORROSIVE, NORMALLY CLOSED
NDC	NOSE DOWN CURB
NE	NEW UNDERGROUND ELECTRICAL
NEUT	NEUTRAL
NF	NEAR FACE
NFD	NEW FOOTING DRAIN
NFH	NEW FIRE HYDRANT
NFM	NEW FORCE MAIN
NLP	NEW LIQUID PROPANE GAS
NO	NUMBER, NORMALLY OPEN
NOM	NOMINAL
NSD	NEW STORM DRAIN
NSS	NEW SANITARY SEWER
NT	NEW TELEPHONE LINE
NTS	NOT TO SCALE
NW	NEW WATER
NUE	NEW UNDERGROUND ELECTRIC
NUP	NEW UNDERGROUND PRIMARY
NUS	NEW UNDERGROUND SECONDARY
OA	OVER ALL, OUTDOOR AIR
	OUTSIDE AIR
OB GL	OBSCURE GLASS
OC	ON CENTER
OCB	OIL CIRCUIT BREAKER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
OS&Y	OUTSIDE SCREW AND YOKE
OS/OI	OWNER SUPPLIED / OWNER INSTALLED
OVHD, OH	OVERHEAD
P	PIPE
	PUMP
P.	FIXTURE NUMBER
P-1	PLUMBING FIXTURE TYPE
PART	PARTITION
PAT	PATIENT
PAVT	PAVEMENT
PB	PULL BOX
PC	PLUMBING CONTRACTOR
PD	PUMP DISCHARGE
PF	PRESSURIZATION FAN
PG	PRESSURE GAUGE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
PL	PLATE
PLAS	PLASTER
PLAST	PLASTIC
PLYWD	PLYWOOD
PNL	PANEL
PNTD	PAINTED
POL	POLISHED
PRELIM	PRELIMINARY
PRESS	PRESSURE
PRIM	PRIMARY
PROJ	PROJECTION
PRV	PRESSURE REDUCING VALVE
PS	PULL SWITCH
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PAINT
	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PVC	POLY VINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
QT	QUARRY TILE
R	RADIUS, RISER,
	RETURN, RADIUS OF CURVE
	RUBBER SHEATH, RANGE
RA	RETURN AIR
RAD	RADIUS, RADIATOR
RCG	RETURN CEILING GRILLE
RCP	REFLECTED CEILING PLAN
RCR	RETURN CEILING, REGISTER
RD	ROOF DRAIN, ROAD
RECP	RECEPTACLE
RED	REDUCING
REF	REFRIGERATOR
REG	REGULATOR, REGISTER
REINF	REINFORCEMENT
REQ'D	REQUIRED
REV	REVISION
RF	RETURN FAN
RL	RAIN LEADER
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
RV	RELIEF VALVE
RW	RAIN WATER
RWG	RETURN WALL GRILLE
RWR	RETURN WALL REGISTER
RWV	RESET WATER VALVE
S	SOUTH, SUPPLY
S DISP	SOAP DISPENSER
S&L	SINK AND LAUNDRY TRAY
S&V	STAIN AND VARNISH
S/S	SERVICE SINK
	STAINLESS STEEL
S2S	SURFACED TWO SIDES
S4S	SURFACED FOUR SIDES
SA	SUPPLY AIR
SAN	SANITARY SEWER
SAT	SUSPENDED ACOUSTICAL TILE
SB	SECURITY BARS
SCWD	SOLID CORE WOOD DOOR
SCD	SECURITY CEILING DIFFUSER
SCG	SECURITY CEILING GRILLE
SCH	SCHEDULE
SCR	SUPPLY CEILING REGISTER
SD	SPLITTER DAMPER, STORM DRAIN
SECT	SECTION
SF	SUPPLY FAN
SG	SUPPLY GRILLE

SH	SINGLE HUNG
SHT	SHEET
SIM	SIMILAR
SL	SLOPE
SMH	SANITARY MANHOLE
SND	SANITARY NAPKIN DISPOSAL
SP	SINGLE POLE STATIC PRESSURE,
SPDT	SINGLE POLE, DOUBLE THROW
SPECS	SPECIFICATIONS
SQ	SQUARE
SQ FT	SQUARE FEET
SR	SUPPLY REGISTER
SS	SERVICE SINK, SANITARY SEWER
ST	STREET, SINGLE THROW, STRUCTURAL TUBING
STA	STATION
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUP	SUPPORT
SUSP	SUSPEND
SW	STORM WATER SWITCH
SWG	SUPPLY WALL GRILLE
SWR	SUPPLY WALL REGISTER
SYM	SYMMETRICAL
T	TRANSFORMER, THERMOMETER, TILE, TOP, TANGENT
TBM	TEMPORARY BENCH MARK
T&B	TOP AND BOTTOM
T&G	TONGUE & GROOVE
T.O.C.	TOP OF CONCRETE
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL, TOP OF SLAB
T.O.W.	TOP OF WALL
TC	TEMPERATURE CONTROL TOP OF CURB
TCG	TRANSFER CEILING GRILLE
TCP	TEMPERATURE CONTROL PANEL
TDV	TRIPLE DUTY VALVE
TELE	TELEPHONE
TEMP	TEMPERATURE, TEMPORARY
TERM	TERMINAL
THK	THICK
THRU	THROUGH
TP	TOILET PARTITION
TPD	TOILET PAPER DISPENER
TRAN	TRANSOM
TS	TOP OF STEP, TOP OF SILL
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TT	THERMOSTATIC TRAP
TV	TELEVISION CAMERA
	TURNING VANE
TWG	TRANSFER WALL GRILLE
TYP	TYPICAL
TYPE "X"	UL APPROVED GWB
U&D	UP AND DOWN
UC	UNDERCUT
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UH	UNIT HEATER
UIC	UP IN CHASE
UIW	UP IN WALL
UNO	UNLESS NOTED OTHERWISE
UV	UNIT VENTILATOR
V	VENT, VOLT, VALVE
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VB	VACUUM BREAKER
	VAPOR BARRIER
VCB	VINYL COVE BASE
VCT	VINYL COMPOSITION TILE
VEN	VENEER
VENT	VENTILATING, VENTILATOR
VERT	VERTICAL
VEST	VESTIBULE
VI	VIBRATION ISOLATOR
VS	VENT STACK, VINYL STRIP
VSB	VINYL STRAIGHT BASE (CARPET BASE)
VT	VINYL THRESHOLD
VTR	VENT THRU ROOF
VWB	VINYL WALL BASE
VWC	VINYL WALL COVER
W	WASTE, WALL, WEST, WASHING MACHINE
	WIDTH, WASTE, WATER, WATT,
W CAB	WALL CABINET
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WCO	WALL CLEAN-OUT
WD	WIDTH, WINDOW DIMENSION, WOOD
WDW	WINDOW
WGL	WIRE GLASS
WH	WALL HUNG CABINET WATERHEATER
WNSCT	WAINSCOT
WP	WATERPROOF, WEATHERPROOF
WPD	WATER PRESSURE DROP
WS	WASTE STACK, WATER SURFACE, WATERSTOP, WEATHERSTRIPPING
WSO	WATER SHUT OFF
WT	WEIGHT
WTD	WATER TEMPERATURE DROP
WTR	WATER TEMPERATURE RISE
WWF	WELDED WIRE FABRIC
X-SECT	CROSS SECTION
X-STR	EXTRA STRENGTH
XFMR	TRANSFORMER

ARCHITECTURAL SYMBOLS





LINETYPES

- SMOKE PARTITION
- 3 HOUR RATED PARTITION
- 2 HOUR RATED PARTITION
- 1 HOUR RATED PARTITION
- MATCH LINE

NOTES:

1. ALL SYMBOLS & ABBREVIATIONS ON THIS SHEET MAY OR MAY NOT BE APPLICABLE TO THIS SET OF DRAWINGS
2. REFER TO CIVIL, STRUCTURAL, MECHANICAL, AND/OR ELECTRICAL DRAWINGS FOR ABBREVIATIONS SPECIFIC TO EACH DISCIPLINE

State of Maine Milk and Blood Labs
Marquardt Building - East Campus
Augusta Maine

LICENSED ARCHITECT ELENI M. ANGEL AR01888 STATE OF MAINE

ARCHITECTURAL LEGEND, ABBREVIATIONS & SYMBOLS

REV.	DATE	DESCRIPTION	CHECKED BY:

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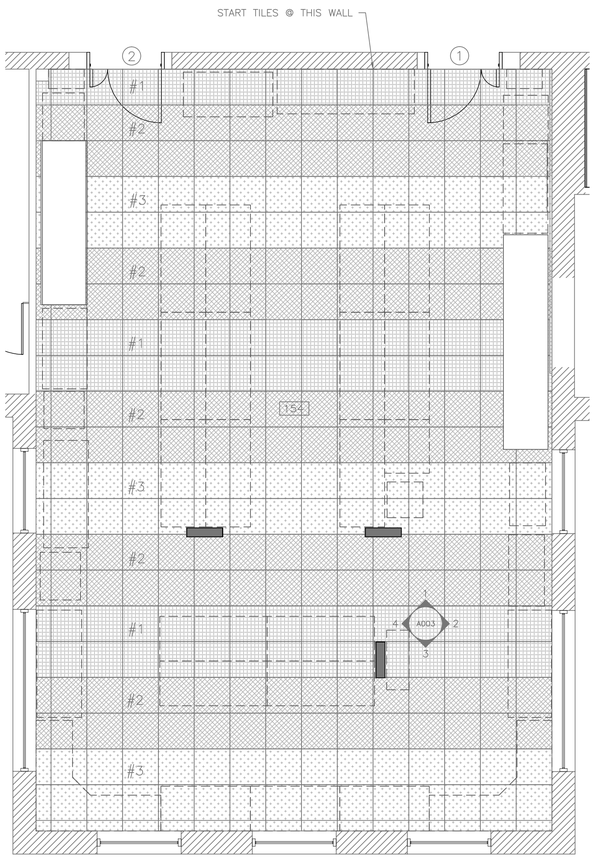
DATE: 05-25-2016

A001

PROJECT NO. 2015114.01

SCALE: N.T.S.

May 27, 2016 - 1:52pm
Z:\P_Project\2015114 CETA at AMHI BGSII, Drawings\d. Working Drawings (ff & Date)\Marquardt\2015114.01-A001.dwg



KEY:
#1 355 SPANO =
#2 354 GUSTER =
#3 356 TUSK =

BASE #TA3 CASTAWAY

JOHSONITE VCT

1 A003 LAB AREA OF DEVELOPMENT
1/4"= 1'-0"

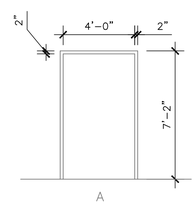
NOTES:

1. PROVIDE 3 COLORS OF VCT IN PATTERN SHOWN.
2. PROVIDE 2 COLORS OF INTERIOR PAINT COLOR 2 BE DEEP SHADE.
3. REFER TO REFLECTED CEILING PLAN, SHEET A104 FOR CEILING HEIGHTS AND LOCATIONS OF MATERIALS

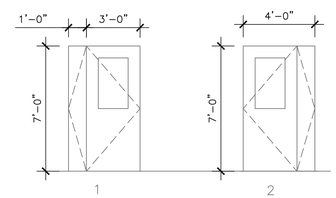
N NORTH

DOOR AND FRAME SCHEDULE

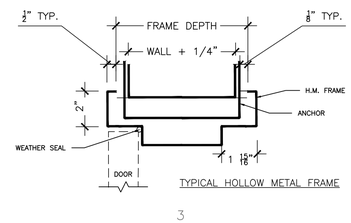
#	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE Frame Depth	DOOR EL	DOOR MATL	DOOR GLAZING	FIRE RATING LABEL	FRAME MATL	FRAME EL	FRAME Hardware	FRAME DETAIL HEAD	FRAME DETAIL JAMB	FRAME DETAIL SILL	NOTES
1	1'-0"	7'-0"	11 5/16"	A	WOOD	NO	0	STEEL	--	A	3	3	YES	PR DOOR
	3'-0"	7'-0"	11 5/16"	A	WOOD	1'-8"x2'-10"	0	STEEL	--	B	3	3	YES	SELF CLOSING
2	3'-0"	7'-0"	11 5/16"	B	WOOD	1'-8"x2'-10"	0	STEEL	--	A	3	3	YES	PR DOOR
	1'-0"	7'-0"	11 5/16"	B	WOOD	NO	0	STEEL	--	B	3	3	YES	SELF CLOSING



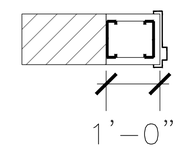
2 A003 DOOR FRAME ELEVATION
1/4"= 1'-0"



3 A003 DOOR TYPE ELEVATIONS
1/4"= 1'-0"

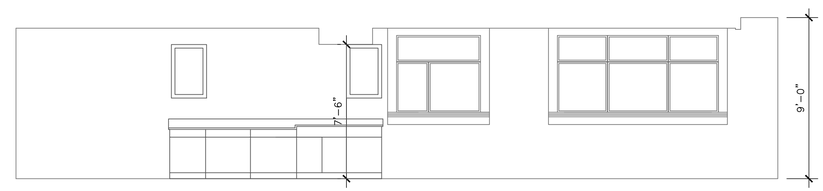


4 A003 HEAD/JAMB DETAIL
1/4"= 1'-0"

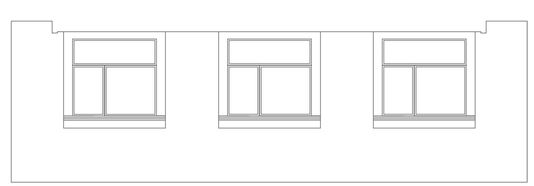


5 A102 HMF & INFILL DETAIL
1/4"= 1'-0"

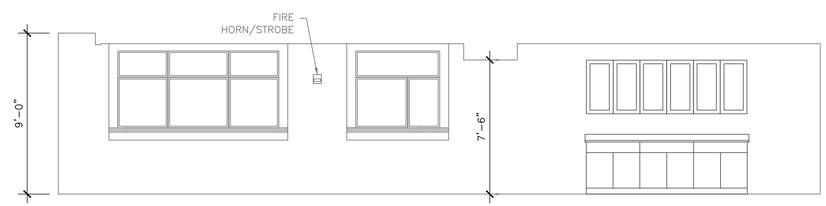
6 A003 NORTH ELEVATION 1
1/4"= 1'-0"



7 A003 EAST ELEVATION 2
1/4"= 1'-0"



8 A003 SOUTH ELEVATION 3
1/4"= 1'-0"



9 A003 WEST ELEVATION 4
1/4"= 1'-0"

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	Base	WALLS N	WALLS S	WALLS E	WALLS W	CEILING MATL	CEILING HEIGHT	NOTES
154	LAB AREA	VCT	TOPSET	1	1	2	2	CT	VARIES	--

LEGEND:

=MASONRY/CONCRETE WALLS
=INTERIOR WALLS
=CONC SLAB @ FLOOR ELEV.

May 27, 2016 - 2:14pm
Z:\P_Project\2015114 CETA at AMHI BGSII, Drawings\d. Working Drawings (# & Date)\Marquardt\2015114.01 Marquardt Blood And Milk Labs(2016-05-2).dwg

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Marquardt Building - East Campus
Augusta Maine

LICENSED ARCHITECT ELENI M. ANGEL AR01888 STATE OF MAINE

LAB AREA OF DEVELOPMENT
DOOR & FINISH SCHEDULE
EAST WING

REV.	DATE	DESCRIPTION	CHECKED BY

DRAWN BY: ADT

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www.amesmaine.com

DATE: 05-25-2016

A003

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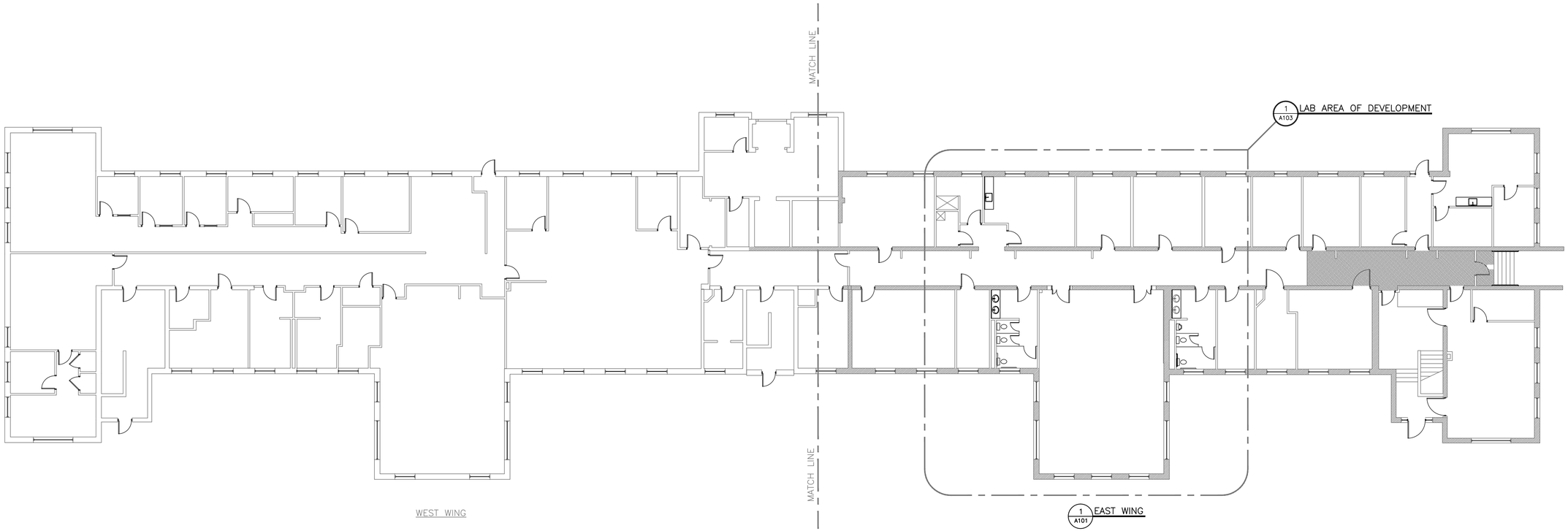
SCALE: 1/4" = 1'-0"



1 A100 FIRST FLOOR PLAN
N.T.S.

LEGEND:

=MASONRY/CONCRETE WALLS

=INTERIOR WALLS

=CONC SLAB @ FLOOR ELEV.

May 27, 2016 - 1:38pm
Z:\P_Project\2015114 CETA at AMHI BGSII, Drawings\d. Working Drawings (# & Date)\Marquardt\2015114.01 Marquardt Blood And Milk Labs(2016-05-2).dwg

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LICENSED ARCHITECT
ELENI M. ANGEL
AR01888
STATE OF MAINE

FULL FIRST FLOOR PLAN
(AREA OF DEVELOPMENT ONLY)
FLOOR PLAN

REV.	DATE	DESCRIPTION

DRAWN BY:
CHECKED BY:

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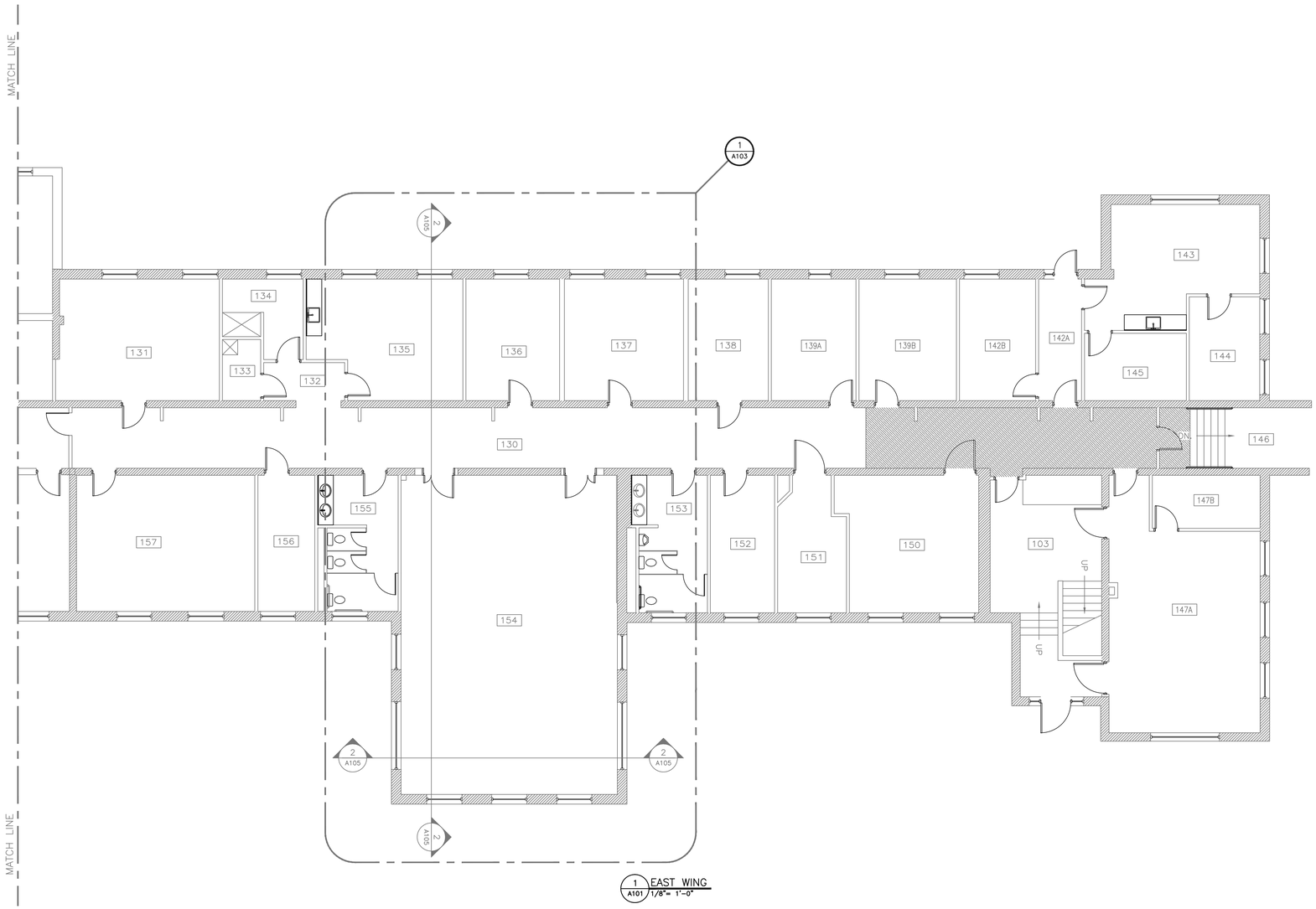
www.amesmaine.com

DATE: 05-25-2016

A100

PROJECT NO. 2015114.01

SCALE: N.T.S.



1 EAST WING
A101 1/8"= 1'-0"

LEGEND:

▨=MASONRY/CONCRETE WALLS

▭=INTERIOR WALLS

▧=CONC SLAB @ FLOOR ELEV.

May 27, 2016 - 1:39pm
Z:\P_Project\2015114 CETA at AMHI BGSII, Drawings\d. Working Drawings (# & Date)\Marquardt\2015114.01 Marquardt Blood And Milk Labs(2016-05-2).dwg

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LICENSED ARCHITECT
ELENI M. ANGEL
AR01888
STATE OF MAINE

FIRST FLOOR EAST WING PLAN (AREA OF DEVELOPMENT ONLY) FLOOR PLAN

REV.	DATE	DESCRIPTION

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CHECKED BY:

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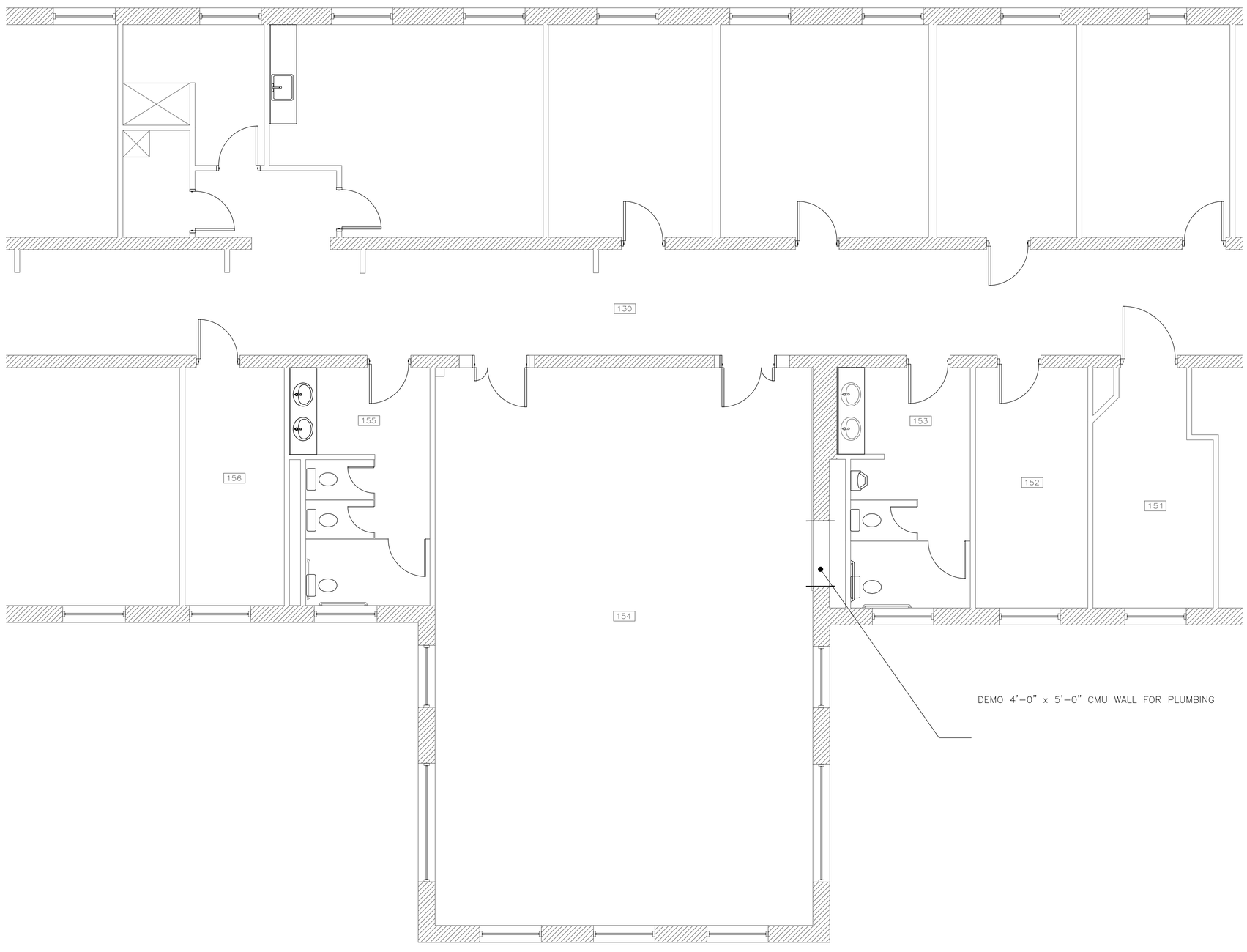
DATE: 05-25-2016

A101

PROJECT NO. 2015114.01

SCALE: 1/8" = 1'-0"



1 A102 REMOVAL PLAN
1/4"= 1'-0"

LEGEND:

=MASONRY/CONCRETE WALLS

=INTERIOR WALLS

=CONC SLAB @ FLOOR ELEV.

REMOVALS
1 REMOVE T-BAR GRID+CEILING TILES-HANGERS TO REMAIN
2 REMOVE EXISTING CARPET AND GLUE PER SPECIFICATIONS
3 SOFFIT FRAMING TO REMAIN

RECORD DRAWING

DRAWINGS REFLECT CONDITIONS AT COMPLETION OF CONSTRUCTION. RECORD DRAWING INFORMATION PROVIDED BY CONTRACTOR AND INCORPORATED INTO THE PROJECT DRAWINGS. FIELD VERIFY EXISTING CONDITIONS BEFORE DOING ANY WORK.

State of Maine Milk and Blood Labs
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LICENSED ARCHITECT
ELENI M. ANGEL
AR01888
STATE OF MAINE

FULL FIRST FLOOR PLAN
REMOVAL PLAN
FLOOR PLAN

REV.	DATE	DESCRIPTION

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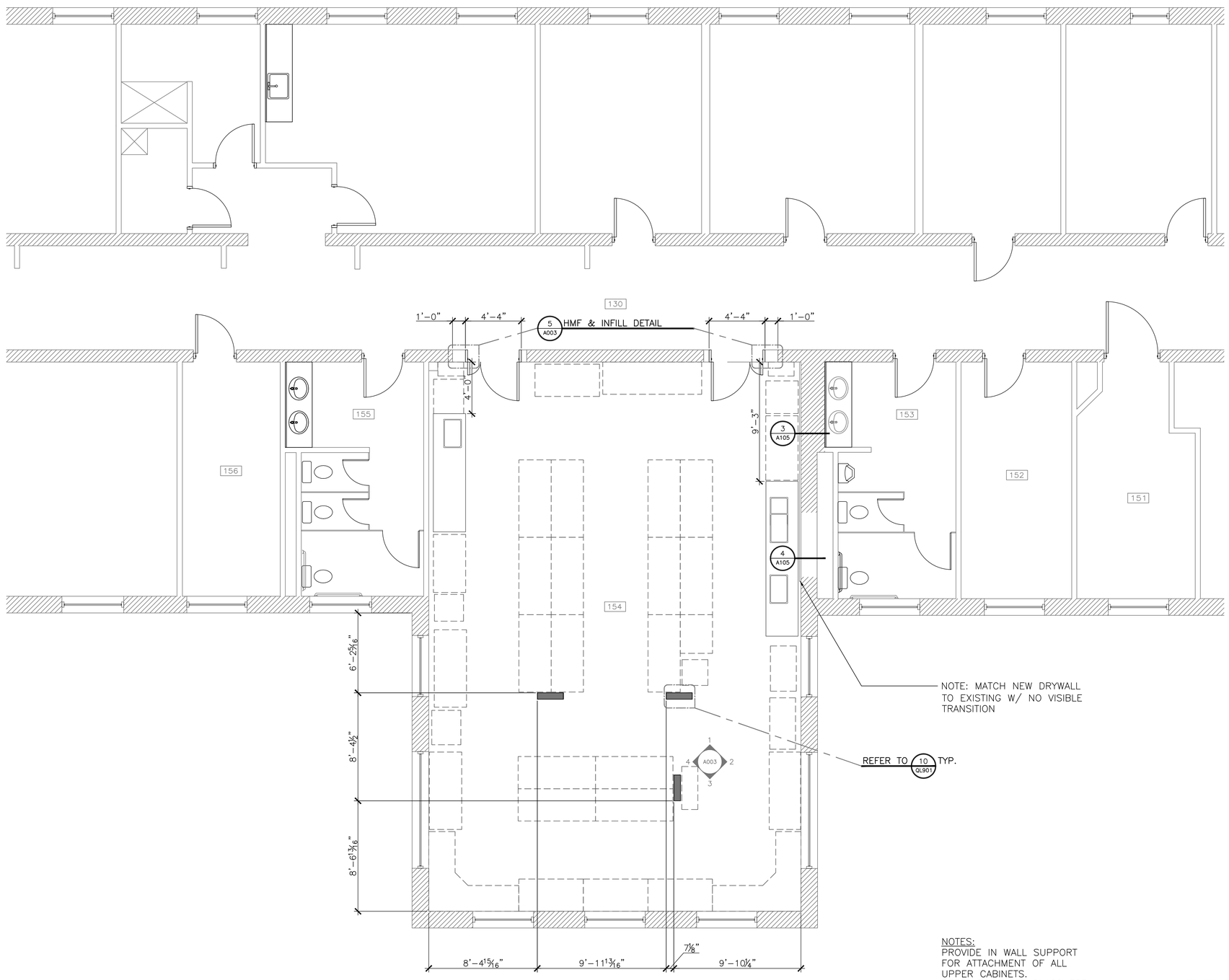
DATE: 05-25-2016

A102

PROJECT NO. 2015114.01

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

May 21, 2016 - 1:39pm
Z:\P_Project\2015114 CETA at AMHI BGSII. Drawingsid. Working Drawings (# & Date)\Marquardt\2015114.01 Marquardt Blood And Milk Labs(2016-05-2).dwg



1 A103 LAB AREA OF DEVELOPMENT
1/4"= 1'-0"

LEGEND:

=MASONRY/CONCRETE WALLS

=INTERIOR WALLS

=CONC SLAB @ FLOOR ELEV.

NOTES:
PROVIDE IN WALL SUPPORT FOR ATTACHMENT OF ALL UPPER CABINETS.
REFER TO SHEET QL102 FOR CABINETRY TYPE & LOCATION

RECORD DRAWING

DRAWINGS REFLECT CONDITIONS AT COMPLETION OF CONSTRUCTION. RECORD DRAWING INFORMATION PROVIDED BY CONTRACTOR AND INCORPORATED INTO THE PROJECT DRAWINGS. FIELD VERIFY EXISTING CONDITIONS BEFORE DOING ANY WORK.

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LICENSED ARCHITECT
ELENI M. ANGEL
AR01888
STATE OF MAINE

LAB AREA OF DEVELOPMENT
ENLARGED PLAN 154
EAST WING

REV.	DATE	DESCRIPTION	CHECKED BY

DRAWN BY: ADT

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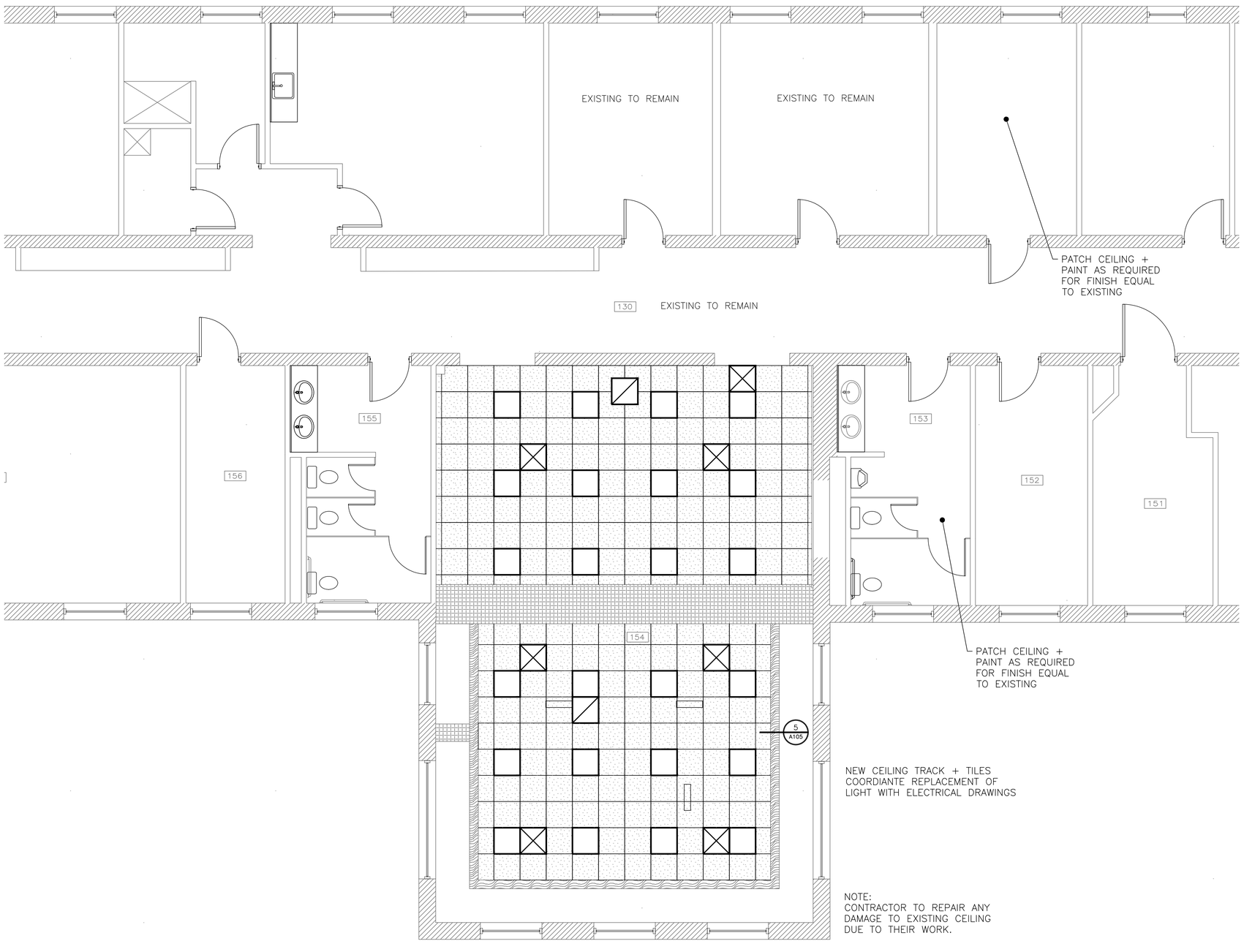
DATE: 05-25-2016

A103

PROJECT NO. 2015114.01

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

May 21, 2016 - 2:28pm
Z:\P_Project\2015114 CETA at AMHI BGSII, Drawings\d. Working Drawings (# & Date)\Marquardt\2015114.01 Marquardt Blood And Milk Labs(2016-05-2).dwg



NOTE:
CONTRACTOR TO REPAIR ANY DAMAGE TO EXISTING CEILING DUE TO THEIR WORK.

1 A104 REFLECTED CEILING PLAN
1/4"= 1'-0"

LEGEND:
=MASONRY/CONCRETE WALLS
=INTERIOR WALLS
=CONC SLAB @ FLOOR ELEV.

CEILING PLAN SYMBOLS
=GB SOFFIT 9'-0"
=ACT 8'-6"
=GB TRIM 8'-0"
=WOOD TRIM 8'-0"
=CEILING TILE
=LIGHT FIXTURE
=RETURN AIR
=AIR SUPPLY DUCT

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ELENI M. ANGEL
ARC01888
STATE OF MAINE

LAB AREA OF DEVELOPMENT REFLECTED CEILING PLAN EAST WING

REV.	DATE	DESCRIPTION	CHECKED BY:

DRAWN BY: ADT

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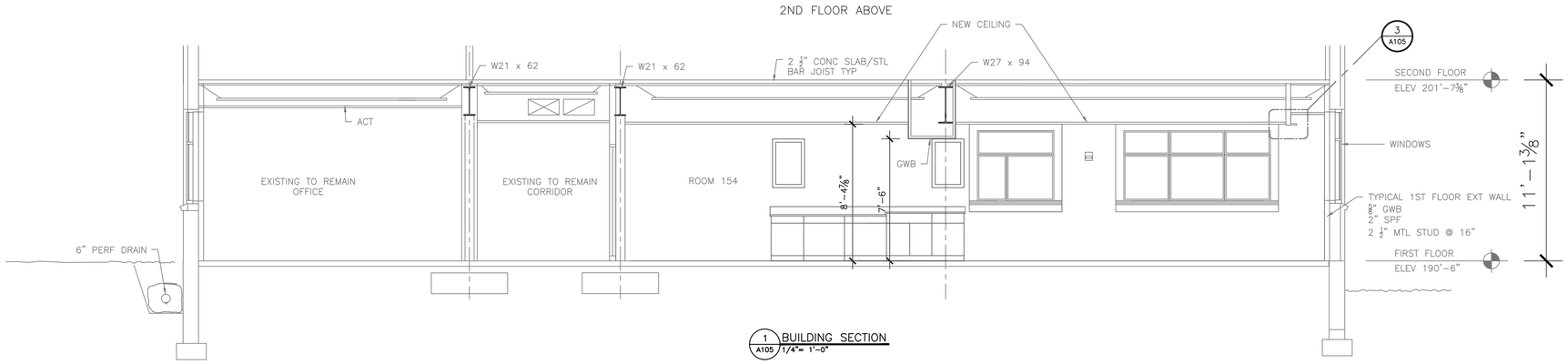
DATE: 05-25-2016

A104

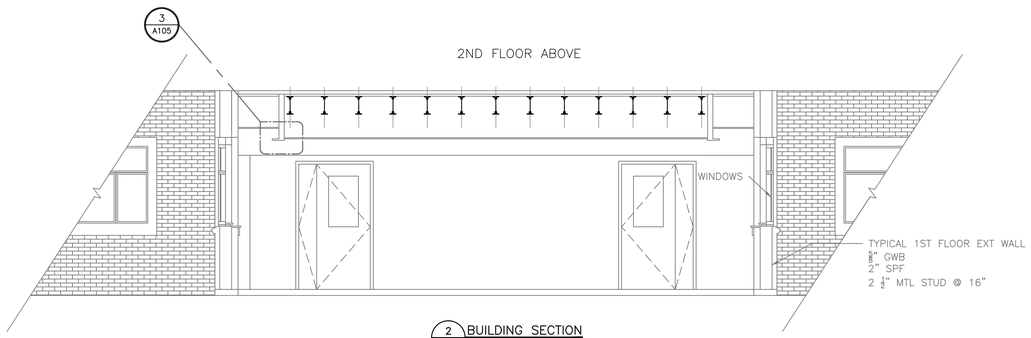
PROJECT NO. 2015114.01

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

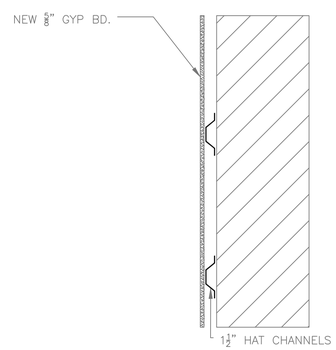
May 21, 2016 - 2:31pm
Z:\P_Project\2015114 CETA at AMHI BGSII, Drawings\d. Working Drawings (# & Date)\Marquardt\2015114.01 Marquardt Blood And Milk Labs(2016-05-2).dwg



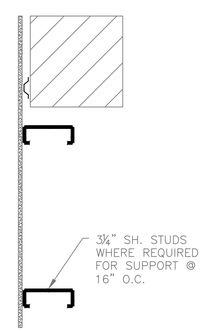
1 A105 BUILDING SECTION
1/4"= 1'-0"



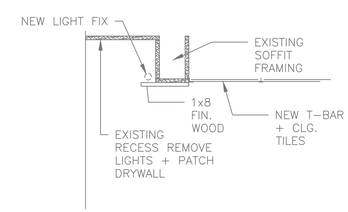
2 A105 BUILDING SECTION
1/4"= 1'-0"



3 A105 GYP WALL COVER
1"= 1'-0"



4 A105 INFILL WALL
1"= 1'-0"



5 A105 SOFFIT TRIM
1"= 1'-0"

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Augusta Maine

LICENSED ARCHITECT
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AR01888
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BUILDING SECTIONS

REV.	DATE	DESCRIPTION

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DATE: 05-25-2016

A105

PROJECT NO. 2015114.01

SCALE: 1/8" = 1'-0"

May 21, 2016 - 2:49pm
Z:\P_Project\2015114 CETA at AMHI BGSII, Drawings\d. Working Drawings (# & Date)\Marquardt\2015114.01 Marquardt Blood And Milk Labs(2016-05-2).dwg

LABORATORY ABBREVIATIONS

A

ACC	ACCESSIBLE
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ALT	ALTERNATE
ALUM	ALUMINUM
ARCH	ARCHITECT/ARCHITECTURAL
AW	ARCHITECTURAL WOODWORK (SEE ARCHITECTURAL)

B

BAL	BALANCE
BDNG	BEDDING
BKG	BACKING
BLDG	BUILDING
BLKG	BLOCKING
BO_	BOTTOM OF
BOT	BOTTOM
BRKT	BRACKET
BSC	BIOLOGICAL SAFETY CABINET
BSL-#	BIOLOGICAL SAFETY LEVEL (NUMBER)

C

CAB	CABINET(S)
CAV	CONSTANT AIR VOLUME
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED
CH	CANOPY HOOD
CHEM	CHEMICAL
CL	CENTER LINE
CLG	CEILING
CLOS	CLOSURE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CS	CUP SINK
CSWK	CASEWORK
CTR	COUNTER
CTRL	CONTROL(LED)
CYL	CYLINDER
CR	CARD READER

D

D	DEEP, DEPTH
DEG	DEGREE
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DN	DOWN
DWG	DRAWING(S)

E

E	EAST
EA	EACH
EL	ELEVATION
ELEC	ELECTRIC/ELECTRICAL
EMER	EMERGENCY
ENGR	ENGINEER
ENVIR	ENVIRONMENT(AL)
EP	ELECTRICAL PANEL (SEE ELECTRICAL)
EQ	EQUAL
EQUIP	EQUIPMENT
EST	ESTIMATE(D)
EXH	EXHAUST
EXIST	EXISTING
EXT	EXTERIOR

F

F	FILLER
FB	FIRE BLANKET (SEE DIV. 10 SECTION)
FD	FLOOR DRAIN (SEE PLUMBING)
FE	FIRE EXTINGUISHER/BRACKET (SEE DIV. 10 SECTION)
FEC	FIRE EXTINGUISHER CABINET (SEE DIV. 10 SECTION)
FH	FUME HOOD
FLR	FLOOR
FRZ	FREEZER
FUT	FUTURE

G

GA	GAGE
GALV	GALVANIZED
GL	GLASS
GT	GROUT
GYP BD	GYPSUM BOARD

H

H	HIGH/HEIGHT
HB	HOSE BIB (SEE PLUMBING)
HDW	HARDWARE
HORIZ	HORIZONTAL
HT	HEIGHT

I

ID	INSIDE DIAMETER
IN	INCH(ES)
INC	INCUBATOR
INSUL	INSULATION
INT	INTERIOR
ISO	ISOLATION

J

JT	JOINT

K

KS	KNEE SPACE

L

L-_	ANGLE (SIZE)
L	LENGTH
LAB	LABORATORY
LAM	LAMINATE
LBS	POUNDS
LKR	LOCKER (SEE DIV. 10 SECTION)
LLH	LONG-LEG HORIZONTAL
LLV	LONG-LEG VERTICAL
LS	LAB SINK
LT	LIGHT

M

MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MKR BD	MARKER BOARD (SEE DIV. 10 SECTION)
MTL	METAL

N

N	NORTH
NA	NOT APPLICABLE
NEG	NEGATIVE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE

O

OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED/CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED/OWNER INSTALLED
OH	OVERHEAD
OP	OPPOSITE
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE

P

PE	POLYETHYLENE
PHEN	PHENOLIC
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
	PLYWOOD
PNL	PANEL
POS	POSITIVE
PP	POLYPROPYLENE
	PROJ SCRN PROJECTION SCREEN
PTD	PAPER TOWEL DISPENSER (SEE DIV. 10 SECTION)
PTN	PARTITION

Q

QTY	QUANTITY

R

R=_	RADIUS (DIMENSION)
RAD	RADIUS
RCP	REFLECTED CEILING PLAN (SEE ARCHITECTURAL DOCUMENTS)
RE	REFER TO
REC	RECESSED
REF	REFRIGERATOR
REQ	REQUIRE(D)
REV	REVISION
RH	RELATIVE HUMIDITY
RM	ROOM

S

S	SOUTH
SBSTR	SUBSTRATE
SCF	SLOTTED CHANNEL FRAMING
SD	SOAP DISPENSER (SEE DIV 10 SECTION)
SHR	SHOWER
SHT	SHEET
SHV	SHELF/SHELVING
SIM	SIMILAR
SP	SPACE(S)
SPEC	SPECIFICATION
SSM	SOLID SURFACE MATERIAL
SST	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE/STRUCTURAL

T

TEMP	TEMPERATURE
THK	THICK(NESS)
THRU	THROUGH
TK BD	TACK BOARD (SEE DIV. 10 SECTION)
TO_	TOP OF
TR	TROUGH
TS-_	TUBE STEEL (SIZE)
TYP	TYPICAL

U

UC	UNDER-COUNTER
UCL	UNDER-CABINET LIGHT
UNO	UNLESS NOTED OTHERWISE

V

VAR	VARIES
VAV	VARIABLE AIR VOLUME
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD

W

W	WEST
W	WIDTH
W/	WITH/
W/O	WITHOUT
WD	WOOD
WT	WEIGHT
WW	WIREWAY (SEE ELECTRICAL)

LABORATORY SERVICE FITTING ABBREVIATIONS

AIR

CA	AIR (COMPRESSED)
AP	AIR, PERSONNEL (BREATHING)
ZA	ZERO AIR

ELECTRICAL AND DATA

DATA	DATA
ELEC.	ELECTRICAL

NATURAL GAS

G	GAS

OTHER PIPED SERVICES

ST	STEAM
VAC	VACUUM

PURIFIED WATER

DI	DEIONIZED WATER
DW	DISTILLED WATER
PW	PURE WATER
RO	REVERSE OSMOSIS WATER

SPECIAL GAS

AR	ARGON
CO2	CARBON DIOXIDE
H2	HYDROGEN
HE	HELIUM
N	NITROGEN
O2	OXYGEN
SG-	SPECIAL GAS-(CHEMICAL SYMBOL)

WATER

CW	COLD WATER
HW	HOT WATER
H/C	HOT & COLD WATER
PR	PRE-RINSE

FIXTURE TAGS

CW-1	COLD WATER
HCW-1	HOT AND COLD FAUCET DECK MOUNTED
PW-1	PURE WATER FAUCET DECK MOUNTED
EW-1	EYEWASH FAUCET DECK MOUNTED
EW-2	DRENCH HOSE DECK MOUNTED

ELECTRICAL TAGS

- 120V DUPLET OUTLET
- 208V OUTLET
- DATA OUTLET

REFERENCE SYMBOLS LEGEND

N	NORTH ARROW
# SHT	ENLARGED PLAN, DETAIL
# SHT	SECTION/ELEVATION
# SHT # # SHT # #	ELEVATION, INTERIOR ELEVATION(S)
X	KEYED NOTE
±0"	SPOT ELEVATION
X	REVISION TAG
	WORK POINT

LINE TYPE LEGEND

	CONTINUOUS - LAB FURNISHINGS & EQUIPMENT, EXCEPT AS INDICATED BELOW.
	DASH - HIDDEN ITEMS (ABOVE OR BELOW).
	SMALL DASH - MOVEABLE OR OWNER-FURNISHED EQUIPMENT
	INSULATED METAL PANEL.
	SCREENED - EXISTING, NOT IN CONTRACT, OR BY OTHERS.
	SCREENED DASH - HIDDEN ITEMS (ABOVE OR BELOW) WHICH ARE EXISTING, NOT IN CONTRACT, OR BY OTHERS.
	COLUMN LINE, CENTER LINE.
	BREAKLINE - MATERIAL CONTINUES.
MATCH LINE	MATCH LINE.

GENERAL NOTES

1) FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCEMENT OF ANY WORK
2) REFER TO GL030 FOR LAB CASEWORK TYPES AND LAB CASEWORK GENERAL NOTES.
3) REFER TO 1/QL001 FOR TYPICAL ACCESSORY MOUNTING HEIGHTS.

LABORATORY PLAN SYMBOLS LEGEND

SINK — LAB CASEWORK — COUNTER TOP

LA-X — CASEWORK ACCESSORIES, CASEWORK SYSTEM & LAB ACCESSORY TAG:

LA	=	LAB ACCESSORY
LE	=	LOCAL EXHAUST VENT
LS	=	LAB SINK
LT	=	LAB TABLE
PB	=	PEGBOARD
UM	=	UMBILICAL

AND AS SCHEDULED

E / 36" — COUNTERTOP MATERIAL & HEIGHT TAG: (SEE CASEWORK GENERAL NOTES FOR DEFAULT MATERIAL AND HEIGHT)

MATERIALS:		HEIGHTS:
E	= EPOXY	ADJ
L	= PLASTIC LAMINATE	30"
M	= SOLID SURFACE MATERIAL	34"
		36"
P	= PHENOLIC	
S	= STAINLESS STEEL	
W	= WOOD	

XXXX — LAB EQUIPMENT TAG

FUME EXTRACTION DEVICE

XX-X — LAB SERVICE FITTING

SS-1 — RECESSED SAFETY SHOWER (SEE PLUMBING)

FH#X — FUME HOOD — CUP SINK

BIOLOGICAL SAFETY CABINET

CANOPY HOOD (ABOVE, SEE MECH)

REF — OWNER FURNISHED PRODUCTS

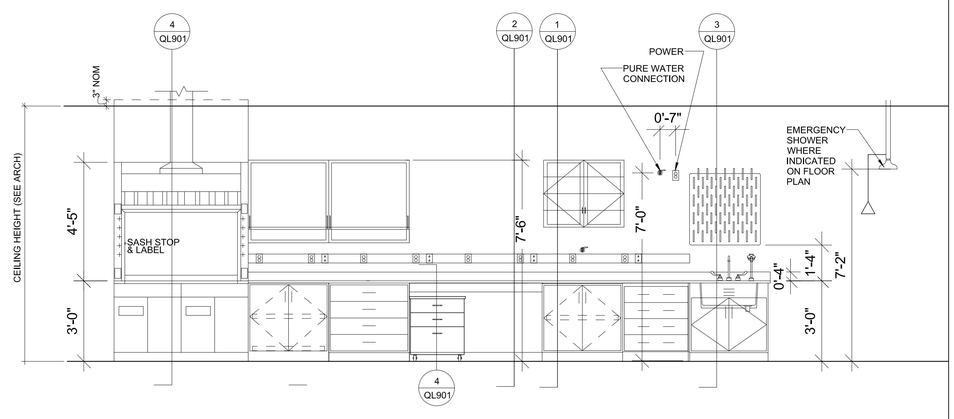
UMBILICALS (VERTICAL SERVICE CHASES)

PEGBOARD

CR — CARD READER

FREE-STANDING SAFETY SHOWER/ EYE WASH STATION (SEE PLUMBING)

X — LABORATORY FURNISHINGS & EQUIPMENT KEYNOTES



1 TYPICAL MOUNTING HEIGHTS
3/8" = 1'-0"

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Augusta Maine

ABBREVIATIONS,LEGENDS AND NOTES

REV.	DATE	DESCRIPTION	CHECKED BY:
DRAWN BY:			

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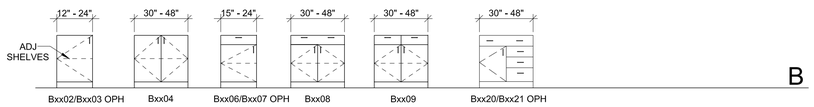
DATE: 05-25-2016

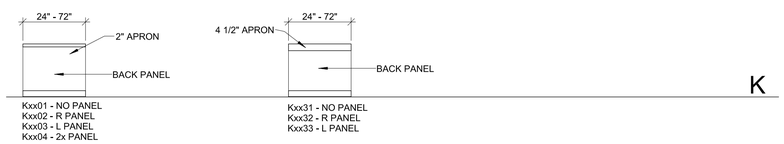
QL001

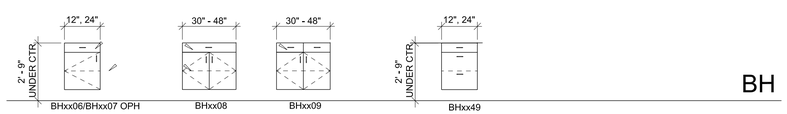
PROJECT NO. 2015114.01

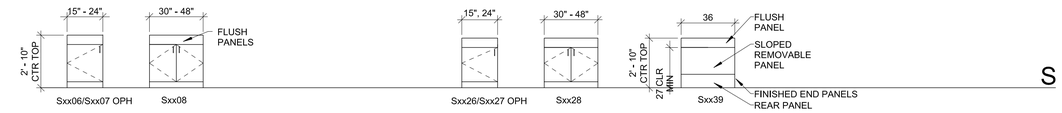
SCALE: NTS

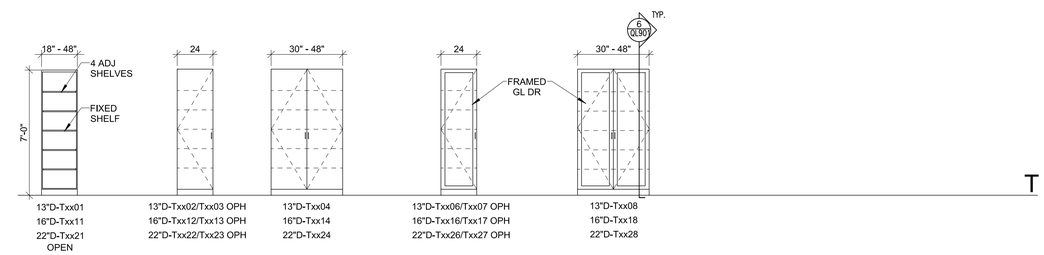
RText (RText)

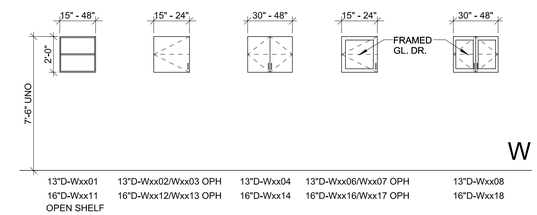


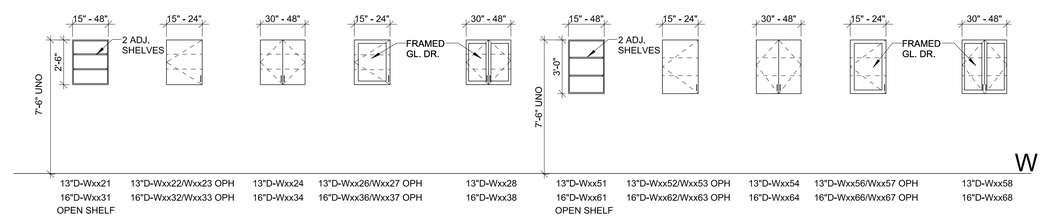












CASEWORK LEGEND

CASEWORK TYPE

B 36 01

WIDTH INCHES

DRAWER/DOOR CONFIGURATION

CASEWORK TYPES

TAG	DESCRIPTION	TYPICAL DETAILS
A	NOT USED	-
B	STANDING HEIGHT BASE CABINET - 36"	1/QL901
BH	BASE CABINETS HANGING	8/QL901
D	ACCESSIBLE HEIGHT BASE CABINET - 34"	1/QL901
F	NOT USED	-
H	NOT USED	-
J	ADJUSTABLE SHELVING	7/QL901
K	KNEE SPACES	2/QL901
L	NOT USED	-
M	NOT USED	-
Q	NOT USED	-
S	SINK BASE CABINET	3/QL901
T	TALL CABINET	6/QL901
U	NOT USED	-
V	NOT USED	-
W	WALL CABINET	1/QL9.01

CASEWORK GENERAL NOTES

A. NOT ALL CASEWORK TYPES ARE USED. REFER TO PLANS.

B. CASEWORK WIDTHS SHALL BE MODULAR, IN 3" INCREMENTS FOR UNITS UP TO 30" W; 6" INCREMENTS FOR UNITS 30" TO 48" W. WIDTH SHOWN X" - X" INDICATES MODULAR RANGE; X", X" INDICATES LIMITED WIDTH UNITS.

C.

D. WALL, UPPER AND TALL CABINET HEIGHTS AND DEPTHS ARE INDICATED BY CASEWORK TYPE.

E. COUNTERTOPS SHALL BE 1" EPOXY RESIN.

F. COUNTERTOP HEIGHT SHALL BE 36", UNO. COUNTERTOP HEIGHT IS NOMINAL, BASED ON CASEWORK MANUFACTURER'S CABINET MODULE AND COUNTERTOP MATERIAL (WITHIN 3/4"). WHERE 30" HIGH COUNTERTOP NOTED, MIN CLEAR HEIGHT AT KNEE SPACE SHALL BE NOT LESS THAN 30".

G. COUNTERTOP WIDTH AT WALL CONDITIONS SHALL BE 2'-6", INCLUDING OVERHANGS, UNO.

H. COUNTERTOPS SHALL OVERHANG 1" NOMINAL AT FRONT AND EXPOSED ENDS OF CABINETS, UNO. WHEN OVERALL DIMENSIONS ARE INDICATED, THE OVERHANG IS INCLUDED.

J. COUNTERTOP OVERALL LENGTH SHALL BE DETERMINED BY CASEWORK TYPE WIDTH, PLUS FILLERS, OVERHANGS, AND / OR DIMENSIONS INDICATED. HOLD OVERALL LENGTHS REGARDLESS OF CASEWORK MANUFACTURER CABINET MODULE.

K. PROVIDE 2" FILLER BETWEEN CASEWORK AND ADJOINING CONSTRUCTION. AT WALL-TO-WALL CONDITIONS, VERIFY OPEN SPACE IN FIELD. WHEN MORE THAN ONE FILLER SPACE OCCURS, THE SPACE AVAILABLE SHALL BE EVENLY DISTRIBUTED. PROVIDE 1" FILLER BETWEEN BASE AND / OR WALL, AND ADJOINING TALL CABINETS.

State of Maine Milk and Blood Labs
Marquardt Building - East Campus
Augusta Maine

LAB CASEWORK TYPES, LEGENDS AND NOTES

REV:	DATE	DESCRIPTION	CHECKED BY:

DRAWN BY:

AMES & ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
Bangor, ME 04401
PHONE: 207-974-3028
FAX: 207-941-1921
www.amesassoc.com

DATE: 05-25-2016

QL030

PROJECT NO. 2015114.01

SCALE: NTS

RText (RText)

Identification					Tracking and Location						
Equip. Tag	Equipment Description	Manufacturer	Model No.	Qty.	Furnish & Install	Existing	New	Existing Building	Existing Room Number	New Building	New Room Number
	Milk Quality Lab										
MK01	Analytical Balance	Sartorius	A Series	1	OFOI	X		Deering	219	Marquardt	154
MK02	Laboratory Balance	Sartorius	LP 3200D	1	OFOI	X		Deering	219	Marquardt	154
MK03	Undercounter Freezer - sample storage	GE	GE FP5DSARWH	1	OFOI	X		Deering	219	Marquardt	154
MK04	Refrigerator - double door - sample storage	True Manuf.	T-49	1	OFOI	X		Deering	219	Marquardt	154
MK05	Water Bath - 40 deg C	Fisher	VERSA-BATH	1	OFOI	X		Deering	219	Marquardt	154
MK06	Plate Reader - Darkfield Quebec Colony Counter	Reichert	13332500	1	OFOI	X		Deering	219	Marquardt	154
MK07	Incubator - 64 deg C	Lab-Line	120	1	OFOI	X		Deering	219	Marquardt	154
MK08	Incubator - 32 deg C (top)	VWR	1545	1	OFOI	X		Deering	219	Marquardt	154
MK09	Incubator - 35 deg C (bottom)	VWR	1545	1	OFOI	X		Deering	219	Marquardt	154
MK10	Slide Warmer	Fissher Scientific	77	1	OFOI	X		Deering	219	Marquardt	154
MK11	Heater Blocks - Test Tubes	Charm		3	OFOI	X		Deering	219	Marquardt	154
MK12	Mixer Plate	Thermolyne	37600	1	OFOI	X		Deering	219	Marquardt	154
MK13	Liquid Scintillation Counter	Charm	LSC 6600	1	OFOI	X		Deering	219	Marquardt	154
—	LSC Computer			1	OFOI	X		Deering	219	Marquardt	154
—	LSC Printer	HP	Deskjet 5650	1	OFOI	X		Deering	219	Marquardt	154
MK14	Incubator - Test Strips	Charm	ROSA Incubator	1	OFOI	X		Deering	217	Marquardt	154
MK15	Digital Lateral Flow Strip Reader	Charm	ROSA Reader	1	OFOI	X		Deering	217	Marquardt	154
MK16	Milk Analyzer	Foss	FT120	1	OFOI	X		Deering	219	Marquardt	154
—	FT 120 Computer			1	OFOI	X		Deering	219	Marquardt	154
—	FT120 Printer	HP		1	OFOI	X		Deering	219	Marquardt	154
—	UPS	ONEAC	ON1300	1	OFOI	X		Deering	219	Marquardt	154
MK17	Hot Plate/Stirrer			1	OFOI	X		Deering	219	Marquardt	154
—	Lab Computer and Printer workstation			1	OFOI	X		Deering	219	Marquardt	154
MK18	Microscope	Olympus	BX41TF	1	OFOI	X		Deering	217	Marquardt	154
MK19	pH/ISE Meter	Thermo Scientific	Orion Dual Star	1	OFOI	X		Deering	217	Marquardt	154
MK20	Cryoscope	Advanced Instruments	DigiMatic 4D2	1	OFOI	X		Deering	217	Marquardt	154
MK21	Centrifuge	Baxter	Medifuge 3611	1	OFOI	X		Deering	217	Marquardt	154
MK22	Balance	Mettler	H80	1	OFOI	X		Deering	217	Marquardt	154
MK23	Spectrophotometer	Coleman	Junior II 6/35	1	OFOI	X		Deering	217	Marquardt	154
MK24	Somatic cell counter	Bentley	SomaCount FC	1	OFOI		X	—	—	Marquardt	154
	Water Bath	National Appliance Co.	220-6			X					
	Moisture Analyzer	Ohaus	MB200			X					
	Peristaltic Dispensing Pump	Wheaton	Unispense II			X					
	State-Federal Diagnostics Lab										
SF01	Centrifuge	IEC	K	1	OFOI	X		Deering	217	Marquardt	154
SF02	Chest Freezer	NA	NA	1	OFOI	X		Deering	217	Marquardt	154
—	Lab Computer and Printer			1	OFOI	X		Deering	217	Marquardt	154
SF03	Refrigerator - double door	True Manuf.	T-43	1	OFOI	X		Deering	217	Marquardt	154
SF04	Refrigerator - double door	True Manuf.	T-49	1	OFOI	X		Deering	217	Marquardt	154
SF05	Incubator	VWR	1530	1	OFOI	X		Deering	217	Marquardt	154
SF06	Vacuum Pump	GE	5KH33DN16HX	1	OFOI	X		Deering	217	Marquardt	154
SF07	Sterilizer, Benchtop	Tuttnauer	2540M	1	OFOI		X	Deering	217	Marquardt	154
SF08	Absorbance Reader	BioTek	ELx800	1	OFOI	X		Deering	217	Marquardt	154
SF09	Stir Plate	Curtin Matheson Scientific	267-914	1	OFOI	X		Deering	217	Marquardt	154
	Milk Quality and State-Federal Diag. Shared Equipment										
SH01	Freezer - low temperature	Frigidaire		1	OFOI	X		Deering	217	Marquardt	154
SH02	MS Water Purifier	Thermo Scientific	7116	1	OFOI	X		Deering	217	Marquardt	154
SH03	Flammable Storage Cabinet - 30 Gal.	Eagle	1932	1	OFOI	X		Deering	217	Marquardt	154

1 QL040 EQUIPMENT MATRIX

RText (RText)

State of Maine Milk and Blood Labs
Marquardt Building - East Campus

Augusta **Maine**

LAB EQUIPMENT MATRIX

REV.	DATE	DESCRIPTION

DRAWN BY:
CHECKED BY:

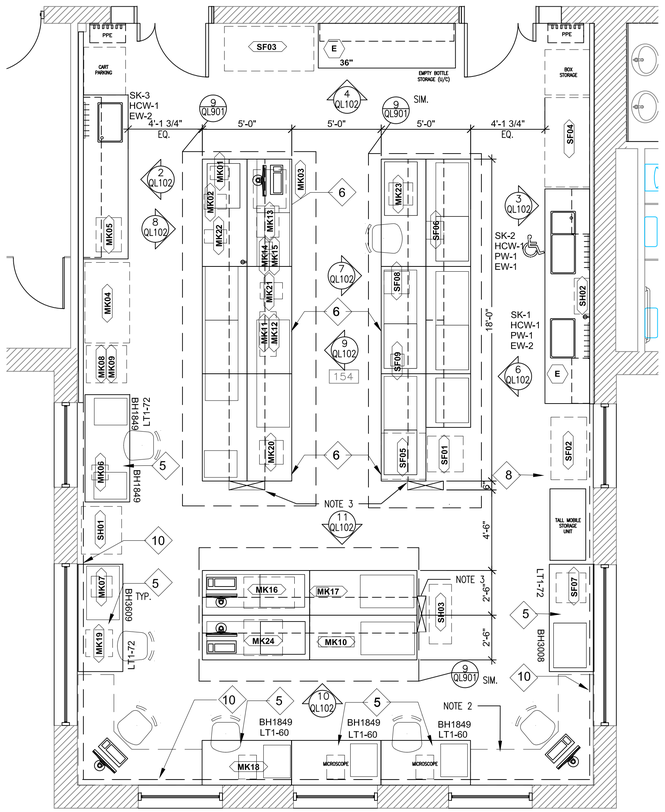
AMES & ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
Bangor, ME 04401
PHONE: 207-974-3028
FAX: 207-941-1921
www.amesmaine.com

DATE: 05-25-2016

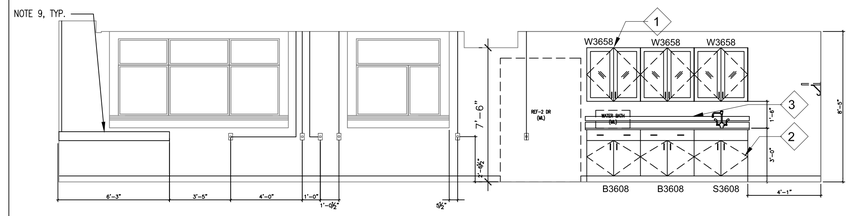
QL040

PROJECT NO. 2015114.01

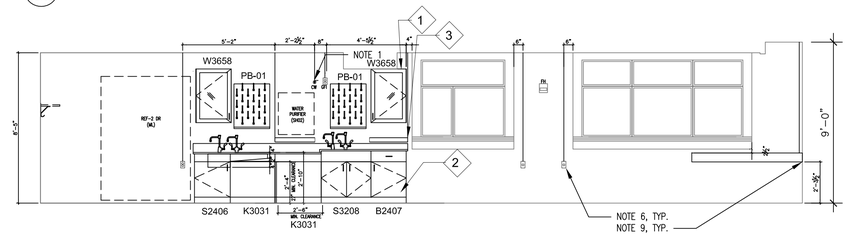
SCALE: 1/4" = 1'-0"



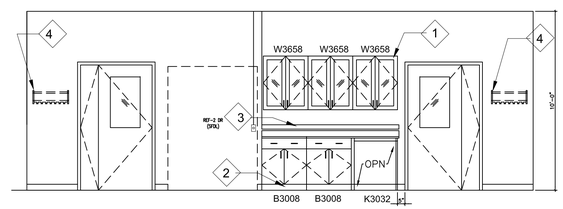
1 QL102 LAB AREA OF DEVELOPMENT
1/4"= 1'-0"



2 QL102 NORTH ELEVATION
1/4"= 1'-0"



3 QL102 SOUTH ELEVATION
1/4"= 1'-0"



4 QL102 EAST ELEVATION
1/4"= 1'-0"

GENERAL NOTES:

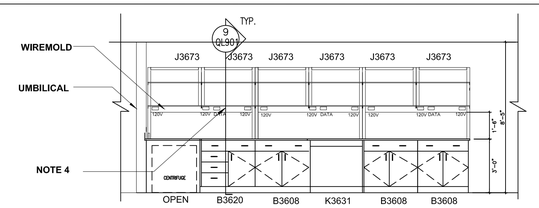
A. RELATING TO THE CASEWORK TAGS ,REFER TO SHEET QL030 FOR THE CASEWORK LEGENDS WHICH EXPLAINS THE MEANING OF CASEWORK TAGS SHOWN ON PLAN AND ELEVATION.
B. REFER TO SHEET QL001 FOR ABBREVIATIONS, LEGENDS AND NOTES
C. REFER TO SHEET QL040 FOR EQUIPMENT MATRIX
D. REFER TO SHEET QL901 FOR CASEWORK DETAILS AND ISLAND BENCH CASEWORK DETAILS.
E. PATCH AND PAINT ALL EXISTING WALL WHERE REQUIRED.
F. ALL COMPUTERS SHALL BE OWNER FURNISHED OWNER INSTALLED

SHEET NOTES

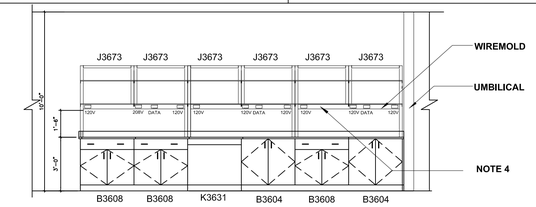
1. PROVIDE AN ELECTRICAL AND WATER OUTLET FOR WATER PURIFIER SH02. REFER TO PLUMBING AND ELECTRICAL AND FOR LOCATION REFER TO DETAIL 3/QL102.
2. FURNITURE, O.F.O.I
3. PROVIDE 6"X24" SERVICE UMBILICAL AT ONE END OF EACH ISLAND BENCH. REFER TO DETAIL 11/QL901
4. PROVIDE TASK LIGHTING UNDER BOTTOM SHELF.
5. PROVIDE AN ELECTRICAL OUTLET
6. LOCATION OF SURFACE MOUNTED OUTLETS. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. OUTLET FOR UPS UNIT FOR MK-14 EQUIPMENT, REFER TO ELECTRICAL DRAWINGS
8. PROVIDE WIREMOLD WITH ELECTRICAL AND DATA AS INDICATED
9. PROVIDE WIREMOLD, REFER TO ELECTRICAL DWGS

LABORATORY FURNISHINGS & EQPT. KEYED...

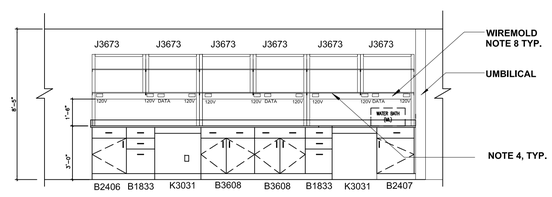
X	
1	FIXED WALL CABINETS; SECTION 12 3553
2	FIXED BASE CASEWORK; SECTION 12 3553
3	WIREMOLD; SEE ELECTRICAL
4	COAT HOOK WITH SHELF; SECTION 12 3553
5	MOBILE METAL LABORATORY TABLE WITH HANGING CABINETS - 30" X 72" ; SECTION 123553
6	FIXED ISLAND BENCH WITH 2 TIER UPPER SHELVES WITH TASK LIGHTING; SECTION 12 3553
7	NOT USED
8	4' WIDTH 22" DEPTH MOBILE TALL STORAGE CABINET; SECTION 12 3553
9	METAL MOBILE TABLE; SECTION 12 3553



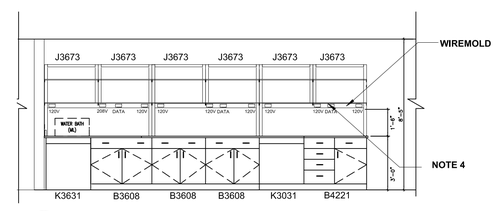
6 QL102 ISLAND ELEVATION– REAR
1/4"= 1'-0"



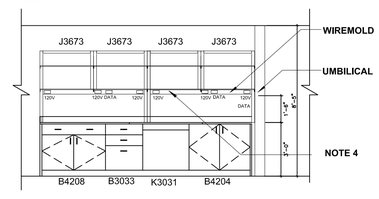
7 QL102 ISLAND ELEVATION– FRONT
1/4"= 1'-0"



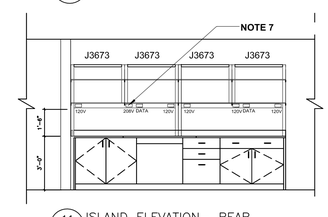
8 QL102 ISLAND ELEVATION– FRONT
1/4"= 1'-0"



9 QL102 ISLAND ELEVATION– REAR
1/4"= 1'-0"



10 QL102 ISLAND ELEVATION– FRONT
1/4"= 1'-0"



11 QL102 ISLAND ELEVATION– REAR
1/4"= 1'-0"

LABORATORY SINK SCHEDULE

TAG	NEW(N) RELOCATED (R)	SINK TYPE (COMPARTMENT)	COMPARTMENT SIZE LENGTH	WIDTH	DEPTH	MATERIAL	SPECIFICATIONS	MOUNTING	NOTES
SK-1	N	SINGLE	28"	15"	11"	EPOXY	SECTION 12 3553	UNDERMOUNT	NOTE 3, NOTE 1, NOTE 2, NOTE 5
SK-2	N	DOUBLE	42"	15"	4"/10"	EPOXY	SECTION 12 3553	UNDERMOUNT	ADA SINK, NOTE 1, NOTE 4
SK-3	N	SINGLE	28"	15"	11"	EPOXY	SECTION 12 3553	UNDERMOUNT	NOTE 5

LABORATORY SINK SCHEDULE NOTES
1. PROVIDE A PURE WATER FIXTURE (PW-1) WHERE INDICATED ON FLOOR PLAN.
2. PROVIDE DISPOSAL UNIT, REFER TO PLUMBING DRAWINGS
3. REFER TO SPECIFICATION FOR FIXTURE INFORMATION
4. REFER TO DETAIL 8/A901 ADA LAB SINK PLAN.
5. REFER TO DETAIL 4/A901 FOR TYPICAL LAB SINK PLAN.

LABORATORY TABLE SCHEDULE

TAG	NOMINAL SIZE LENGTH	WIDTH	DEPTH	FRAME MATERIAL	WORK SURFACE MATERIAL	CABINET MATERIAL	DETAIL	NOTES	SPECIFICATIONS
LT1-72	72"	30"	36"	METAL	EPOXY	NOTE 2	3/QL001	NOTE 1	SECTION 12 3553
LT1-60	60"	30"	36"	METAL	EPOXY	NOTE 2		NOTE 1	SECTION 12 3553

LABORATORY TABLE SCHEDULE NOTES
1. ADJUSTABLE TABLES WITH SELF LEVELING LEGS
2. HANGING CABINET. REFER TO SPEC SECTION 12 3553

LABORATORY ACCESSORIES SCHEDULE

TAG	SPECIFICATION SECTION	DESCRIPTION	COMMENTS	DETAIL REF.	NOTES	SPECIFICATIONS
PB-A		PEG BOARD - TYPE A			NOTE 1	SPEC 12 3553

LABORATORY ACCESSORIES SCHEDULE NOTES
1. PROVIDE A 24"X36" PEGBOARD

RText (RText)

State of Maine Milk and Blood Labs
Marquardt Building - East Campus

Augusta Maine

LAB AREA OF DEVELOPMENT ENLARGED LAB PLAN

REV.	DATE	DESCRIPTION

DRAWN BY:
CHECKED BY:

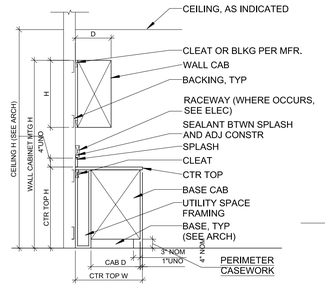
AMES & ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
Bangor, ME 04401
PHONE: 207-974-3028
FAX: 207-941-1921
www.amesmaine.com

DATE: 05-25-2016

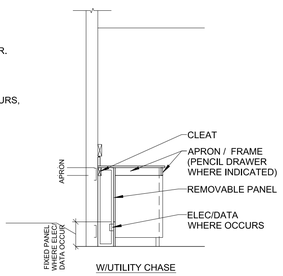
QL102

PROJECT NO. 2015114.01

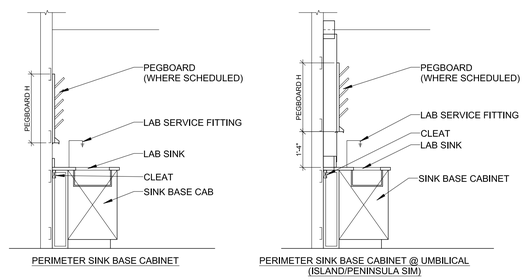
SCALE: 1/4" = 1'-0"



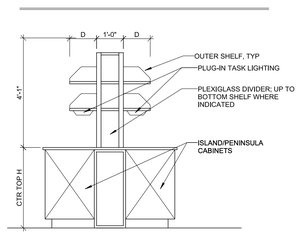
1 SECTION - TYP BASE / WALL CABINETS
3/8" = 1'-0"



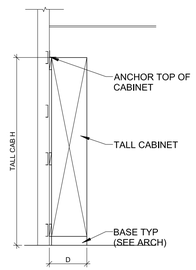
2 SECTION - TYP KNEE SPACE
3/8" = 1'-0"



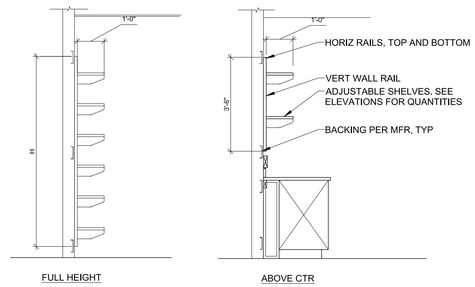
3 SECTION - TYP SINK BASE CABINETS
3/8" = 1'-0"



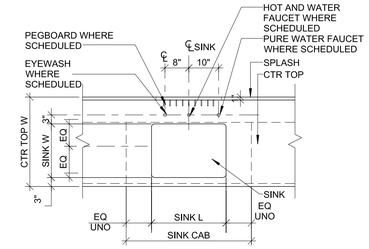
5 SECTION - BENCHTOP UPRIGHTS
1/2" = 1'-0"



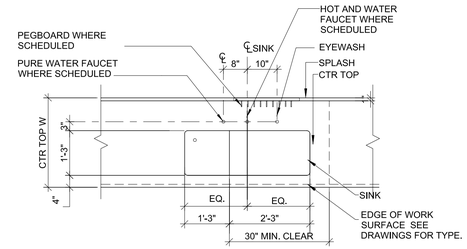
6 SECTION - TYP TALL CABINET
3/8" = 1'-0"



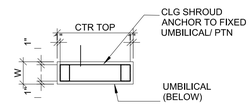
7 ADJUSTABLE WALL RAIL SHELVING SYSTEM
3/8" = 1'-0"



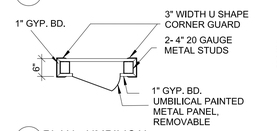
4 TYPICAL LAB SINK- PLAN
1/2" = 1'-0"



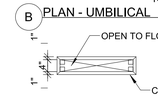
8 TYPICAL ADA LAB SINK- PLAN
1/2" = 1'-0"



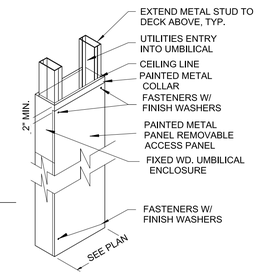
A PLAN - CEILING SHROUD

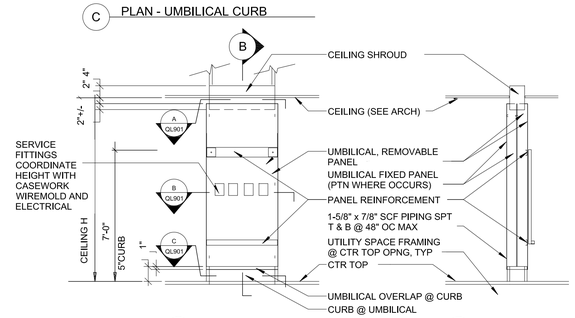


B PLAN - UMBILICAL



C PLAN - UMBILICAL CURB

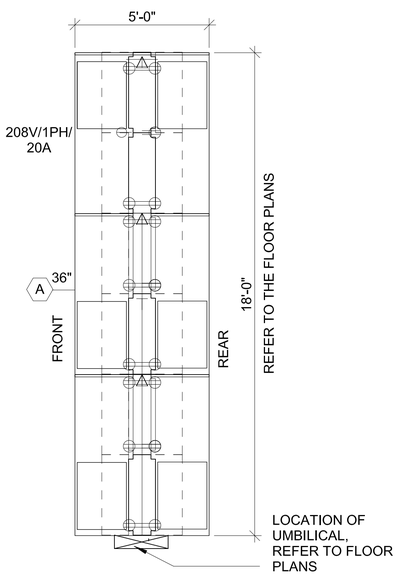




A ELEVATION

B SECTION

11 UMBILICAL DETAIL



9 FIXED ISLAND BENCH- PLAN
3/8" = 1'-0"

GENERAL NOTES:

A. NOT ALL CASEWORK DETAIL ARE USED IN THIS PROJECT.

RText (RText)

State of Maine Milk and Blood Labs
Marquardt Building - East Campus

Augusta Maine

TYPICAL DETAILS

REV.	DATE	DESCRIPTION

DRAWN BY: HERA lab planners | CHECKED BY:

AMES ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
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PHONE: 207-974-3028
FAX: 207-941-1921
www.amesmaine.com

DATE: 05-25-2016

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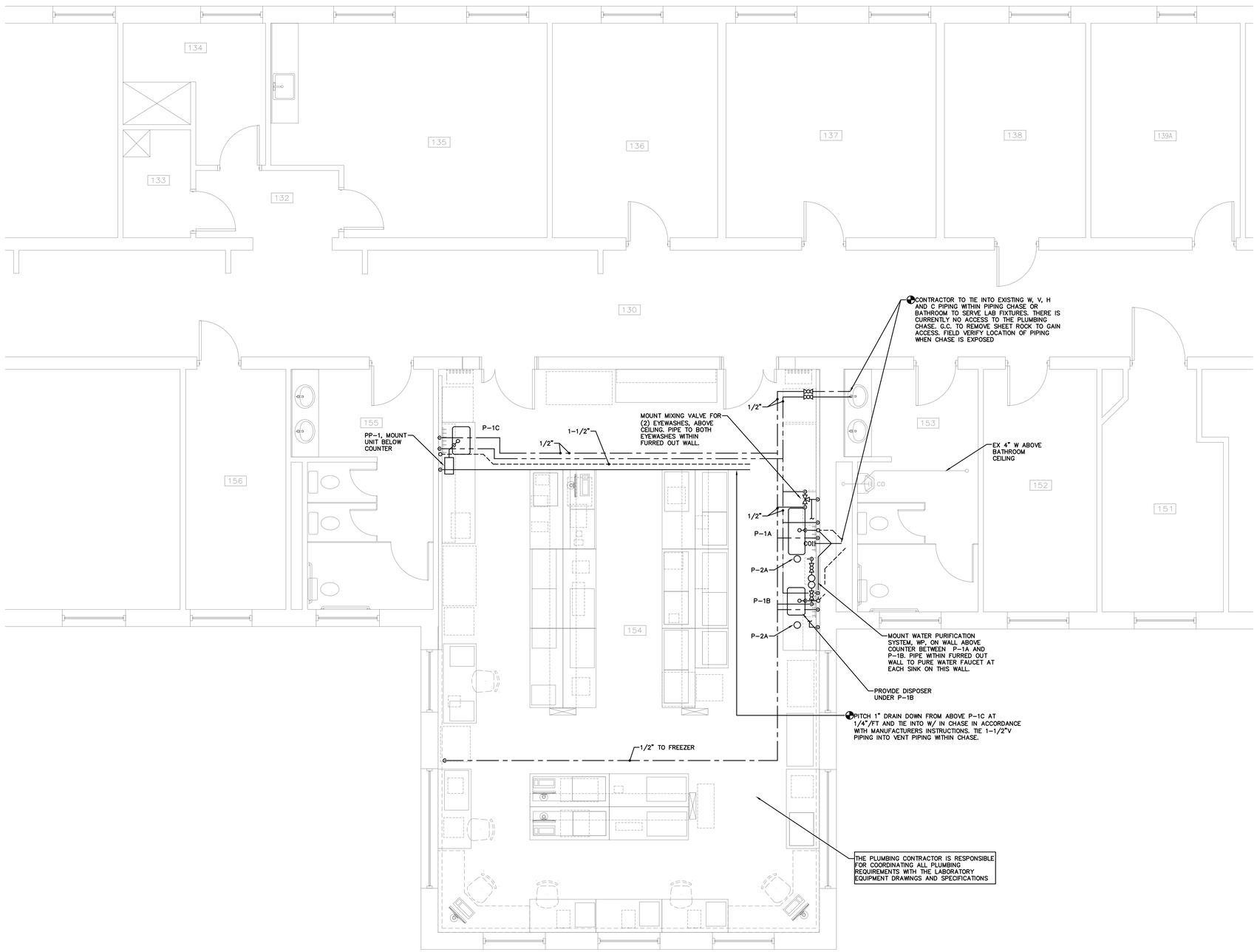
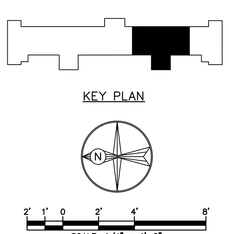
PROJECT NO. 2015114.01

SCALE:



KEY PLAN



Hewett & Whitney
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STATE OF MAINE
KENNETH W. WHITNEY
8213
LICENSED PROFESSIONAL ENGINEER
05-25-16

FIRST FLOOR PLUMBING PART PLAN

REV.	DATE	DESCRIPTION
0	05/25/16	ISSUED FOR BID

DRAWN BY: - CHECKED BY: KWW

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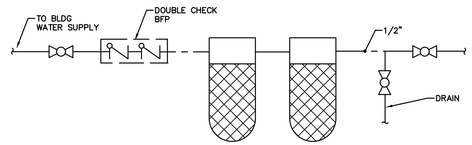


WATER PURIFIER DETAIL

NOT TO SCALE

NOTES:

1. WATER PURIFIER BY OTHERS, PLUMBER TO MOUNT UNIT AND TO PROVIDE BFP, DRAIN AND ISOLATION VALVES.
2. ALL PIPING DOWNSTREAM OF THE PURIFICATION UNIT SHALL BE POLYPROPYLENE ORION WHITELINE PIPE OR EQUAL.
3. REFER TO UNIT INSTALLATION INSTRUCTIONS

FIXTURE SCHEDULE

UNIT	DESCRIPTION	MIN. LINE SIZE (IN.)					NOTES
		W	V	H	C	PW	
P-1A	ADA LAB SINK	2	1-1/2	1/2	1/2	1/2	1
P-1B	LAB SINK	2	1-1/2	1/2	1/2	1/2	1,2,4
P-1C	LAB SINK	2	1-1/2	1/2	1/2	–	1,3
P-2A	EMERGENCY EYE WASH	1-1/4	1-1/4	1/2	–	–	5
FR	FREEZER	–	–	–	1/2	–	1
WP	WATER PURIFIER	–	–	–	1/2	–	1

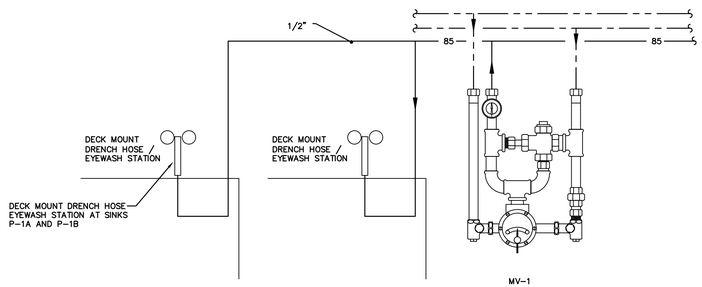
NOTES:

PROVIDE SHUT OFF VALVES IN H & C LINES TO ALL FIXTURES/APPLIANCES

1. FURNISHED BY OTHERS, PLUMBER TO PROVIDE ALL H, C, W AND VENT PIPING TO UNITS AS REQUIRED.
2. PROVIDE 1/2" LINE TO PURE WATER "PW" FAUCET FROM THE WATER PURIFIER.
3. PROVIDE PUMP PP-1 UNDER UNIT FOR WASTE DISCHARGE.
4. PROVIDE INSINKERATOR, BADGER 5, 120V, 1/2 HP GARBAGE DISPOSAL FOR P-1B SINK.
5. 85 DEGREES F

PLUMBING LEGEND

	SANITARY SOIL OR WASTE – ABOVE FLOOR
X	SANTITARY SOIL OR WASTE – UNDER FLOOR
	VENT
RL	ROOF LEADER
X RL	UNDERFLOOR ROOF LEADER
– –	110° HOT WATER LINE
110R	110° HOT WATER RECIRCULATION LINE
140	140° HOT WATER LINE
140R	140° HOT WATER RECIRCULATION LINE
160	160° HOT WATER LINE
160R	160° HOT WATER RECIRCULATION LINE
CD	CONDENSATE DRAIN
X GR	UNDERFLOOR GREASE WASTE
–	COLD WATER
G	GAS LINE
3"/1/4"	PIPE SIZE / SLOPE PER FOOT
	PIPE RISER
	PIPE DROP
	UNION
	GATE VALVE
	CHECK VALVE
	BALL VALVE
	BALANCING VALVE (BV)
	GAS PLUG VALVE
	PUMP
	THERMOMETER/THERMOWELL
	PRESSURE GAGE WITH SHUT-OFF COCK
SPKL	SPRINKLER
	PRESSURE RELIEF VALVE
FD	FLOOR DRAIN
	HOSE BIBB (HB)
	NON-FREEZE WALL HYDRANT (NFWH)
	TIE INTO EXISTING SYSTEM
	EXISTING EQUIPMENT TO BE REMOVED
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
CD	CONDENSATE DRAIN
CO	CLEANOUT
EX	EXISTING EQUIPMENT
FCO	FLOOR CLEANOUT
FE	FIRE EXTINGUISHER – WEIGHT (LB)
H & C	HOT AND COLD
INV	INVERT ELEVATION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
SA	SHOCK ABSORBER
VTR	VENT THROUGH ROOF
W & V	WASTE AND VENT
WCO	WALL CLEANOUT



EMERGENCY EYE WASH P-2A DETAIL

NTS

NOTES:

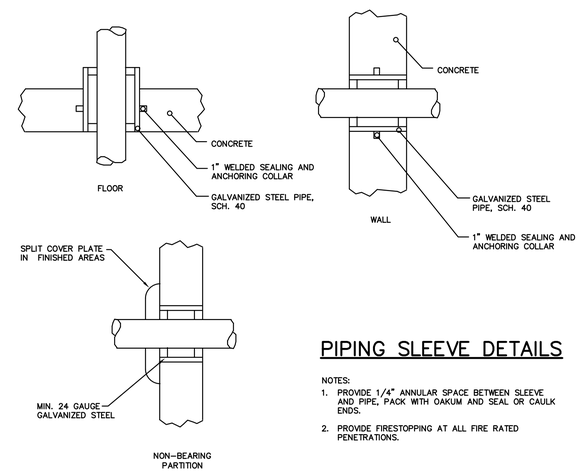
1. MIXING VALVE, MV-1, GUARDIAN MODEL G3600LF W/ 1/2" INLETS AND OUTLET.
2. MOUNT MV-1 ABOVE THE CEILING

PUMP SCHEDULE (P)

UNIT	LOC.	SYS.	MODEL	TYPE	GPM		TDH (FT)	HP	RPM	POWER	NOTES
					BV	PUMP					
PP-1	LAB	P-1C SINK	SANIVITE	GRAY	–	18	16	–	3600	115	1

NOTES:

1. BASED ON UPFLUSH SANIVITE. INSTALL AT P-1C



PIPING SLEEVE DETAILS

NOTES:

1. PROVIDE 1/4" ANNULAR SPACE BETWEEN SLEEVE AND PIPE, PACK WITH OAKUM AND SEAL OR CAULK ENDS.
2. PROVIDE FIRESTOPPING AT ALL FIRE RATED PENETRATIONS.

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05-25-16

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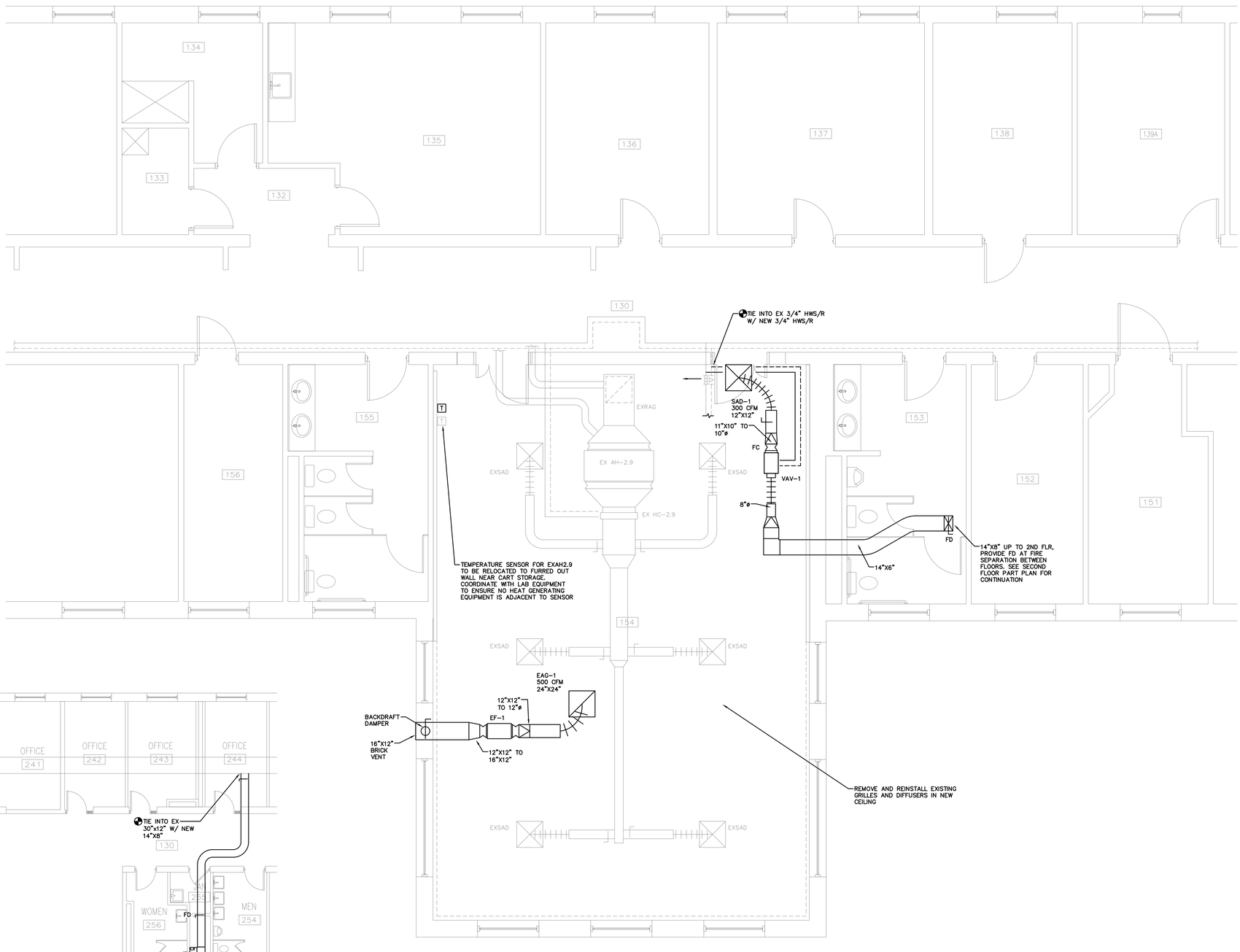
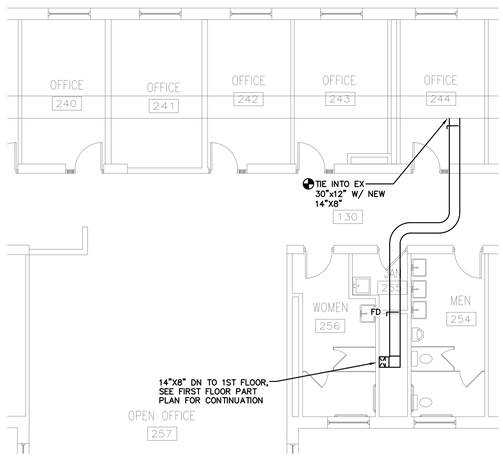
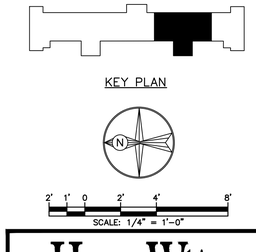


FIRST FLOOR PART PLAN
SCALE: 1/4" = 1'-0"



SECOND FLOOR PART PLAN
SCALE: 1/8" = 1'-0"



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

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FIRST FLOOR HVAC PART PLAN

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VARIABLE VOLUME BOX SCHEDULE (VAV)

TERM NO.	MODEL & STYLE	CFM RANGE	APD AT MAX CLG	MAX. NC	HEATING COIL					NOTES
					MBH	GPM	WPD(MAX)	WTD	CFM	
VAV-1	VCWF08 SINGLE	150-300	0.051	21	8.4	0.6	0.78	39	150	–

NOTES:

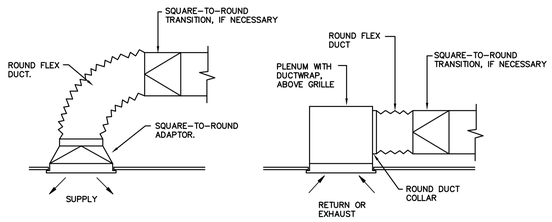
1. BASED ON TRANE

FAN SCHEDULE

UNIT	SERVES	SONES	CFM	BALANCE CFM	T.S.P. " W.C.	RPM	TYPE	MODEL NO.	HP	POWER	NOTES
EF-1	LAB	5.3	500	500	.05	1482	INLINE	100SQN17DEC	1/4	120	1,2,3,4

NOTES:

1. BASED ON COOK
2. BRICKVENT 16"X12"
3. RIS VIBRATION HANGERS
4. ECM MOTOR WITH SIDE MOTOR MOUNT AND EXTERNAL SIGNAL PRESSURE SPEED CONTROL

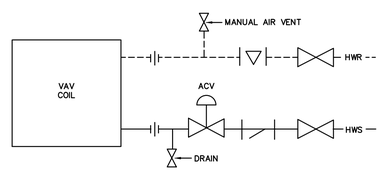


GRILLE & DIFFUSER DETAIL

NTS

NOTES:

1. FLEX DUCT LENGTH 3 TO 5 FEET.
2. TYPICAL FOR SUPPLY, RETURN AND EXHAUST.
3. PROVIDE SQUARE-TO-ROUND ADAPTORS AS SHOWN.
4. SEE FLOOR PLAN FOR SIZES.



COIL WITH 2-WAY VALVE DETAIL

NTS

NOTES:

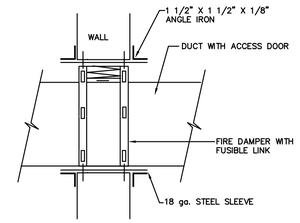
1. DETAIL TYPICAL FOR VAV-1.

DIFFUSER/REGISTER SCHEDULE

UNIT	MODEL NO.	MAX CFM	T.P. " W.C.	THROW (FT)	NC	PATTERN	SIZE	NOTES
SAD-1	5500-S-6	300	.04	16-27	20	1-WAY	12"x12"	1,2
EAG-1	CC5-6	1200	.02	–	20	–	22"x22"	1,2

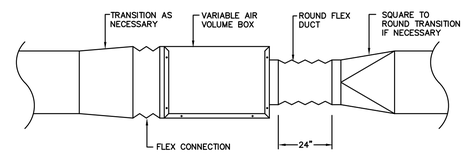
NOTES:

1. BASED ON METALAIRE
2. LAY-IN UNIT



FIRE DAMPER DETAIL

NTS

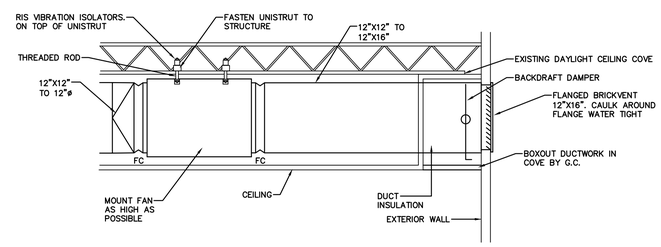


VARIABLE AIR VOLUME BOX

NTS

NOTES:

1. FLEX DUCT LENGTH 2 FEET.
2. SEE FLOOR PLANS FOR SIZES.



INLINE FAN DETAIL

NTS

NOTES:

1. MOUNTING ARRANGEMENT FOR EF-1 INLINE FAN.

HVAC LEGEND

HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
S	STEAM SUPPLY
CR	STEAM CONDENSATE RETURN
CWS	CHILLED WATER SUPPLY
CWR	CHILLED WATER RETURN
HG	HOT GAS LINE
L	LIQUID LINE
SL	SUCTION LINE
G	GAS LINE
	PIPE RISER
	PIPE DROP
	ECCENTRIC REDUCER
	PIPE ANCHOR
	UNION
	GATE VALVE
	BALL VALVE
	CHECK VALVE
	IN – LINE PUMP
	STRAINER
	THERMOMETER/THERMOWELL
	PRESSURE GAUGE WITH SHUT-OFF COCK
	BALANCING AND SHUT-OFF VALVE
	PRESSURE RELIEF VALVE
	FUSIBLE LINK VALVE
	FUEL OIL FILTER
	FLEXIBLE CONNECTOR (FC)
AAV	AUTOMATIC AIR VENT
	SUPPLY DUCT
	EXHAUST OR RETURN DUCT
FD	FIRE DAMPER
	VOLUME DAMPER
M	MOTOR OPERATED DAMPER (MOD)
	TURNING VANE (TV)
ALD	ACOUSTICALLY LINED DUCTWORK
F	FIRE SUPPRESSION PULL STATION
EX	EXISTING EQUIPMENT
	EXISTING EQUIPMENT TO BE REMOVED
	TIE INTO EXISTING SYSTEM
AFF	ABOVE FINISHED FLOOR
NTS	NOT TO SCALE
ACV	AUTOMATIC CONTROL VALVE
T	THERMOSTAT/TEMPERATURE SENSOR
H	HUMIDISTAT
S	WALL SWITCH
S,T	TIMER
PNL	CONTROL PANEL
NIC	NOT IN CONTRACT
	BACKDRAFT DAMPER
	AUTOMATIC CONTROL VALVE

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ELECTRICAL SYMBOLS & INSTRUCTIONS

XXX	ROOM NUMBER.
X	KEYED NOTE, SEE NOTE OF SAME LETTER ON SHEET.
	INDICATES REMOVED DEVICE OR ITEM.
X	EQUIPMENT NUMBER.
	BRANCH CIRCUIT WIRING ON PLAN DRAWING INDICATES CONCEALED IN CEILING OR WALL. DIAGRAM DRAWING WIRING INDICATES NEW.
	BRANCH CIRCUIT WIRING ON PLAN DRAWING INDICATES CONCEALED IN FLOOR. DIAGRAM DRAWING WIRING INDICATES EXISTING.
	BRANCH CIRCUIT WIRING ON PLAN DRAWING INDICATES EXPOSED WIRING. DIAGRAM DRAWING WIRING INDICATES REMOVED.
	LOW-VOLTAGE OR SYSTEMS WIRING CONCEALED IN CEILING OR WALL.
	MULTI-CONDUCTOR BRANCH CIRCUIT, NO. OF HASHMARKS IS NO. OF CIRCUIT CONDUCTORS, WITHOUT HASHMARKS TWO CIRCUIT CONDUCTORS. ALL CIRCUITS TO INCLUDE SEPARATE GREEN GROUNDING CONDUCTOR. FOR FLUORESCENT LIGHTING CIRCUITS, INCREASE NEUTRAL CONDUCTOR 1 SIZE OVER PHASE CONDUCTORS (#10 AWG FOR 20A CIRCUIT)
	HOMERUN TO CIRCUIT AND PANELBOARD INDICATED, NO. OF ARROWS IS NO. OF PHASE WIRES, NO. OF HASHMARKS INDICATE NO. OF CIRCUIT CONDUCTORS.
	DIRECTIVE ARROW.
J S PB	JUNCTION BOX, SPLICE BOX AND PULL BOX.
	LIGHTING WIRING OUTLET BOX WITH FLEXABLE WIRING CONNECTION (WHIPS).
	FLUORESCENT OR LED LIGHTING FIXTURE WITH AND WITHOUT OUTLET, UPPER CASE LETTER TYPE, LOWER CASE LETTER IS CONTROL GROUP, RECTANGLES INDICATE NO. OF SECTIONS. SEE LIGHTING FIXTURE SCHEDULE FOR TYPES AND MOUNTING.
X^a	CEILING MOUNTED LIGHTING FIXTURE, LETTER SUBSCRIPTS AS ABOVE.
S^a SH SP SK SM ST SL SL^J	SPST FLUSH WALL SWITCH 4'-0" UP ON CENTER ADJUSTED TO MINIMUM CUT OF BLOCK OR TILE, LOWER CASE LETTER IS CONTROL GROUP, WITH "H" 6' ABOVE FLOOR, WITH "P" PILOT LIGHT, WITH "K" KEY OPERATED, WITH "M" MOMENTARY, WITH "T" 0-6 HOUR TIMER, WITH "L" LOW-VOLTAGE, WITH SUPERSCRIPT # QUANTITY OF LOW VOLTAGE BUTTONS (ONE PER ZONE).
S2 S3 S4	DOUBLE POLE, THREE-WAY AND FOUR-WAY SWITCHES, SUBSCRIPTS AS ABOVE.
D	DIMMER SWITCH, SUBSCRIPTS THE SAME AS ABOVE.
	120/208 VOLT PANELBOARD, FLUSH MOUNTED AND SURFACE MOUNTED.
	UNIVERSAL PANEL OR CABINET, FLUSH MOUNTED AND SURFACE MOUNTED.
	TRANSFORMER.
X	MOTOR OF SIZE SHOWN, WITH "F" FRACTIONAL HORSEPOWER MOTOR BELOW 1/20 HP OR 100 WATTS.
U	DUPLEX GROUNDED POLARIZED 120 VOLT THREE-WIRE CONVENIENCE OUTLET 1'-6" UP VERTICALLY, WITH "U" 4'-0" AFF OR 0'-6" ABOVE COUNTER, ADJUST TO MINIMUM CUT OF BLOCK OR TILE, LETTER IS CIRCUIT GROUP, WITH "WP" WEATHERPROOF, WITH "G" FOR GROUND FAULT PROTECTED BY GFCI RECEPTACLE OR CIRCUIT BREAKER LOCATED UPSTREAM, WITH "H" MOUNT 7'-6" UP OR AS NOTED, WITH "TR" TAMPER RESISTANT, WITH "C" CEILING MOUNTED.
	QUADRUPLEX OUTLET IN ONE BOX, NOTES AND SUBSCRIPTS AS ABOVE.
	GROUND FAULT CIRCUIT INTERRUPTING (GFCI) DUPLEX RECEPTACLE, 120 VOLT THREE-WIRE 20 AMP, SUBSCRIPTS AND MOUNTING AS ABOVE.
	208 TO 480V OUTLET OF AMPACITY AS SHOWN, 1'-6" UP VERTICALLY OR AS NOTED ON DRAWINGS.
	MULTI-OUTLET ASSEMBLY, MOUNT 0'-6" ABOVE COUNTER, WIREMOLD WM3000 SINGLE-CHANNEL STEEL RACEWAY, IVORY FINISH, DUPLEX RECEPTACLE SPACING AS INDICATED.
2	MULTI-OUTLET ASSEMBLY, MOUNT 0'-6" ABOVE COUNTER OR AS INDICATED ON DRAWING, WIREMOLD WM4000 MULTIPLE-CHANNEL STEEL RACEWAY, IVORY FINISH, DUPLEX RECEPTACLE AND DATA OUTLET SPACING AS INDICATED.
^{J}	SINGLE THROW HEAVY DUTY FUSED DISCONNECT SWITCH, NO. OF POLES AND SIZE AS REQUIRED FOR THE LOAD, "NF" NON FUSED, "WP" WEATHERPROOF.
2	DATA OUTLET, QUANTITY AS NOTED.
4-DATA 1"C	DATA HOMERUN TO PATCH PANEL IN TEL/DATA CLOSET WITH CAT6 CABLING, QUANTITY AS NOTED.
H	FIRE ALARM AUDIO/VISUAL ALARM, 6'-8" AFF.
	FIRE ALARM VISUAL ALARM, 6'-8" AFF.
	DOOR POSITION SWITCH.
CR	PROXIMITY CARD READER.
RTE	REQUEST TO EXIT.

ABBREVIATIONS

A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ARCH'L	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
BH	BANGOR-HYDRO
BATT	BATTERY
BKR	BREAKER
BLDG	BUILDING
C,c	CONDUIT, CONDUCTOR
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CMP	CENTRAL MAINE POWER CO.
CT	CURRENT TRANSFORMER
DIST	DISTRIBUTION
DN	DOWN
DWG	DRAWING
E	EXISTING
EC	ELECTRICAL CONTRACTOR
ER	EXISTING REPLACE
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATION, ELEVATOR
EMG	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EXT	EXTERIOR
FA	FIRE ALARM
FIN	FINISH, FINISHED
FLR	FLOOR
F/FUT	FUTURE
GND	GROUND
HP	HORSEPOWER, HEAT PUMP
J-BOX	JUNCTION BOX
KW	KILOWATT(S)
LTG	LIGHTING
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MIN	MINIMUM
N	NEW
NIC	NOT IN CONTRACT
NID	NETWORK INTERFACE DEMARCATION
NO	NUMBER
OC	ON CENTER
PNL	PANEL, PANELBOARD
PVC	POLYVINYL CHLORIDE
PWR	POWER
R	REMOVE
RECEP	RECEPTACLE
RL	RELOCATE
RSC	RIGID STEEL CONDUIT
SW	SWITCH
TEL	TELEPHONE
XFMR	TRANSFORMER
TYP	TYPICAL
UG	UNDERGROUND
V	VOLTS
W	WATTS
WM	WIREMOLD
WP	WEATHERPROOF
WW	WIREWAY

LIGHTING FIXTURE & LAMPING SCHEDULE

TYPE	DESCRIPTION	VOLTS	VA	MOUNTING & INSTRUCTIONS	LAMPING
A	LITHONIA CAT# ZL2N-L48-3000LM-MDD-MVOLT-35K-80CRI-WH 4' LED LENSED STRIPLIGHT, 3000 LUMENS, MEDIUM DIFFUSER, 0-10V DIMMING DRIVER, WHITE FINISH	MVOLT		WALL MOUNT WITHIN ARCHITECTURAL FASCIA BOARD TO UPLIGHT SOFFIT CEILING	LED INCLUDED 3500K

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	VOLTS	PH.	AMPS	HP	WATTS	J-BOX	CORD/ PLUG	NOTES
	MILK QUALITY LAB								
M01	ANALYTICAL BALANCE	115	–	–	–	13	–	–	–
M02	LABORATORY BALANCE	115	–	–	–	16	–	–	–
M03	UNDERCOUNTER FREEZER – SAMPLE STORAGE	120	–	1.3	–	–	–	–	–
M04	REFRIGERATOR-DBL DOOR – SAMPLE STORAGE	115	–	9.1	–	–	–	–	–
M05	WATER BATH – 40 DEG C	115	–	6.5	–	–	–	–	–
M06	PLATE RDR-DARKFIELD QUEBEC COLONY CNTR	120	–	–	–	40	–	–	–
M07	INCUBATOR – 64 DEG C	120	–	0.8	–	100	–	–	–
M08	INCUBATOR – 32 DEG C (TOP)	115	–	7	–	–	–	–	–
M09	INCUBATOR – 35 DEG C (BOTTOM)	115	–	7	–	–	–	–	–
M10	SLIDE WARMER	115	–	2	–	–	–	–	–
M11	(3) HEATER BLOCKS – TEST TUBES	120	–	–	–	75	–	–	–
M12	MIXER PLATE	120	–	0.75	–	50	–	–	–
M13	LIQUID SCINTILLATION COUNTER	120	–	1.5	–	–	–	–	–
–	LSC COMPUTER	120	–	–	–	–	–	–	–
–	LSC PRINTER	120	–	–	–	–	–	–	–
M14	INCUBATOR – TEST STRIPS	120	–	2	–	–	–	–	–
M15	DIGITAL LATERAL FLOW STRIP READER	110	–	–	–	–	–	–	–
M16	MILK ANALYZER	120-230	–	–	–	600	–	–	–
–	FT 120 COMPUTER	120	–	–	–	–	–	–	–
–	FT 120 PRINTER	120	–	–	–	–	–	–	–
–	UPS	120	–	–	–	–	–	–	–
M17	HOT PLATE/STIRRER	120	–	–	–	615	–	–	–
–	LAB COMPUTER AND PRINTER WORKSTATION	120	–	–	–	–	–	–	–
M18	MICROSCOPE	100-120	–	0.8	–	–	–	–	–
M19	pH/ISE METER	110	–	–	–	–	–	–	–
M20	CRYOSCOPE	100-130	–	–	–	300	–	–	–
M21	CENTRIFUGE	100-120	–	1	–	–	–	–	–
M22	BALANCE	110	–	–	–	15	–	–	–
M23	SPECTROPHOTOMETER	110-120	–	1.5	–	–	–	–	–
M24	SOMATIC CELL COUNTER	110	–	–	–	150	–	–	–
–	WATER BATH	120	–	–	–	600	–	–	NOT USED
–	MOISTURE ANALYZER	120	–	–	–	350	–	–	NOT USED
–	PERISTALTIC DISPENSING PUMP	120	–	–	–	220	–	–	–
	STATE-FEDERAL DIAGNOSTICS LAB								
D01	CENTRIFUGE	120	–	1.5	–	–	–	–	DEDICATED CIRCUIT
D02	CHEST FREEZER	115	–	1.5	–	–	–	–	–
–	LAB COMPUTER AND PRINTER	120	–	–	–	–	–	–	–
D03	REFRIGERATOR – DOUBLE DOOR	115	–	5.8	–	–	–	–	–
D04	REFRIGERATOR – DOUBLE DOOR	115	–	9.2	–	–	–	–	–
D05	INCUBATOR	120	–	–	–	600	–	–	–
D06	VACUUM PUMP	115	–	4.2	–	–	–	–	–
D07	STERILIZER, BENCHTOP	120	–	12	–	–	–	–	–
D08	ABSORBANCE READER	120	–	2.1	–	–	–	–	–
D09	STIR PLATE	120	–	5.4	–	650	–	–	–
	MILK QUAL & STATE-FED DIAG SHARED EQUIP								
S01	FREEZER – LOW TEMPERATURE	115	–	5	–	–	–	–	–
S02	MS WATER PURIFIER	120	–	0.1	–	–	–	–	–
S03	FLAMMABLE STORAGE CABINET – 30 GALLON	–	–	–	–	–	–	–	–

Hewett & Whitney
ENGINEERS & DESIGNERS
ELECTRICAL & MECHANICAL SYSTEMS
161 MAIN STREET WINTHROP, MAINE
Tel 207•377•6969 Fax 207•377•7584

PLOT DATE: May 27, 2016

State of Maine Milk and Blood Labs
Marquardt Building - East Campus
Augusta Maine

STATE OF MAINE
COLIN C. HEWETT
8374
LICENSED PROFESSIONAL ENGINEER
05-25-16

ELECTRICAL SYMBOLS LIST & EQUIPMENT SCHEDULE

REV.	DATE	DESCRIPTION
0	05/25/16	ISSUED FOR BID

DRAWN BY: ELH
CHECKED BY: CCH

AMES & ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
Bangor, ME 04401
PHONE: 207.974.3028
FAX: 207.941.1921
www.amesmaine.com

DATE: 05-25-2016

E001

PROJECT NO. 2015114.01

NO SCALE

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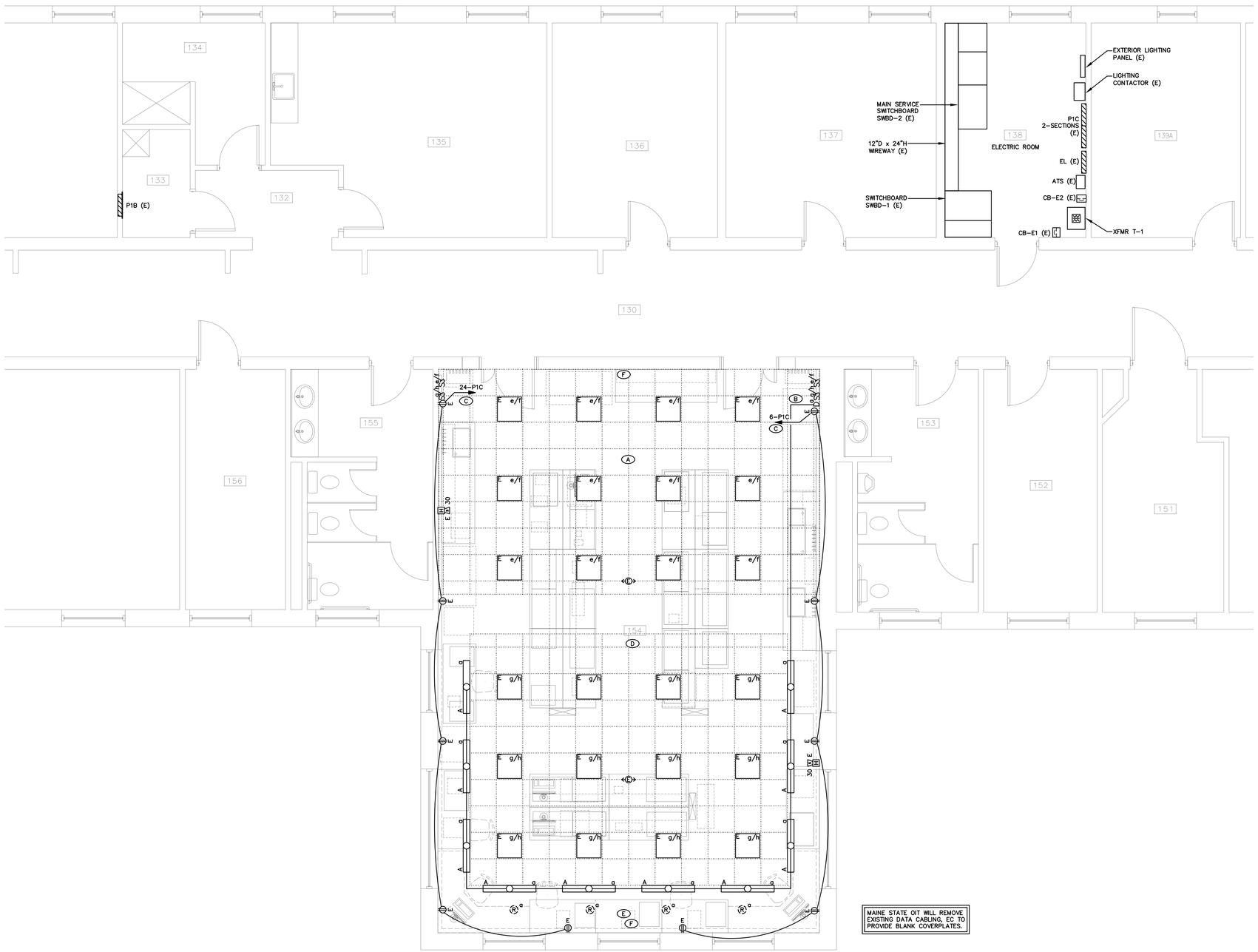

ELECTRICAL DEMOLITION GENERAL NOTES

1. IN GENERAL, ELECTRICAL DEVICES TO REMAIN UNLESS NOTED OTHERWISE.

ELECTRICAL GENERAL NOTES

1. THIS PLAN HAS BEEN COMPILED FROM FIELD OBSERVATIONS AND OWNER SUPPLIED DRAWINGS. FIELD VERIFY ALL CONDITIONS AND OBSERVE NECESSARY SAFETY PRECAUTIONS BEFORE DOING ANY WORK.
2. RUN SURFACE WIRING AS INCONSPICUOUS AS POSSIBLE, IN WALL AND CEILING CORNERS WHERE POSSIBLE, AS INDICATED.
3. DEVICES WITH CONTINUOUS LINETYPE ———— INDICATE NEW UNLESS OTHERWISE INDICATED.
4. DEVICES WITH DASHED LINETYPE – – – – – – INDICATE EXISTING TO REMAIN UNLESS OTHERWISE INDICATED.
5. DEVICES WITH HIDDEN LINETYPE - - - - - - - - INDICATE REMOVE UNLESS OTHERWISE INDICATED.
6. IN EVENT ANY UNSAFE WIRING IS ENCOUNTERED, IMMEDIATELY NOTIFY ENGINEER FOR CORRECTIVE ACTION.
7. EXISTING CONDUIT MAY BE RE-USED WHERE POSSIBLE.

KEYED NOTES

(A) CAREFULLY REMOVE EXISTING 2'x2' LIGHTING FIXTURES AND OCCUPANCY SENSORS AND STORE; CLEAN AND RE-INSTALL IN NEW CEILING, COORDINATE WITH ARCHITECTURAL. MAINTAIN EXISTING CIRCUIT (65-P1C) AND SWITCHES.

(B) WIRE NEW LIGHT FIXTURES TO NEW 0-10V DIMMER SWITCH IN EXISTING BOX AND SUPPLY FROM EXISTING LIGHTING CIRCUIT SERVING THIS AREA, VERIFY AMPACITY.

(C) MAINTAIN EXISTING CIRCUIT AND GENERAL PURPOSE RECEPTACLES.

(D) EXISTING FIRE ALARM DEVICES IN THIS AREA TO REMAIN.

(E) REMOVE EXISTING RECESSED FIXTURES; PATCH AND PAINT CEILING.

(F) REMOVE FURNITURE WIRING WHIPS AND PROVIDE BLANK COVERPLATE.

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

Hewett & Whitney
ENGINEERS & DESIGNERS
ELECTRICAL & MECHANICAL SYSTEMS
161 MAIN STREET WINTHROP, MAINE
Tel 207•377•6969 Fax 207•377•7584

PLOT DATE: May 27, 2016

State of Maine Milk and Blood Labs
Marquardt Building - East Campus

Augusta Maine

STATE OF MAINE
COLIN C. HEWETT
8374
LICENSED PROFESSIONAL ENGINEER
05-25-16

1ST FLOOR EXISTING, DEMO & NEW LIGHTING PART PLAN

REV.	DATE	DESCRIPTION
0	05/25/16	ISSUED FOR BID

DRAWN BY: ELH
CHECKED BY: CCH

AMES & ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
Bangor, ME 04401
PHONE: 207.974.3028
FAX: 207.94.11921
www.amesmaine.com

DATE: 05-25-2016

E100

PROJECT NO. 2015114.01

1/4" = 1'-0"

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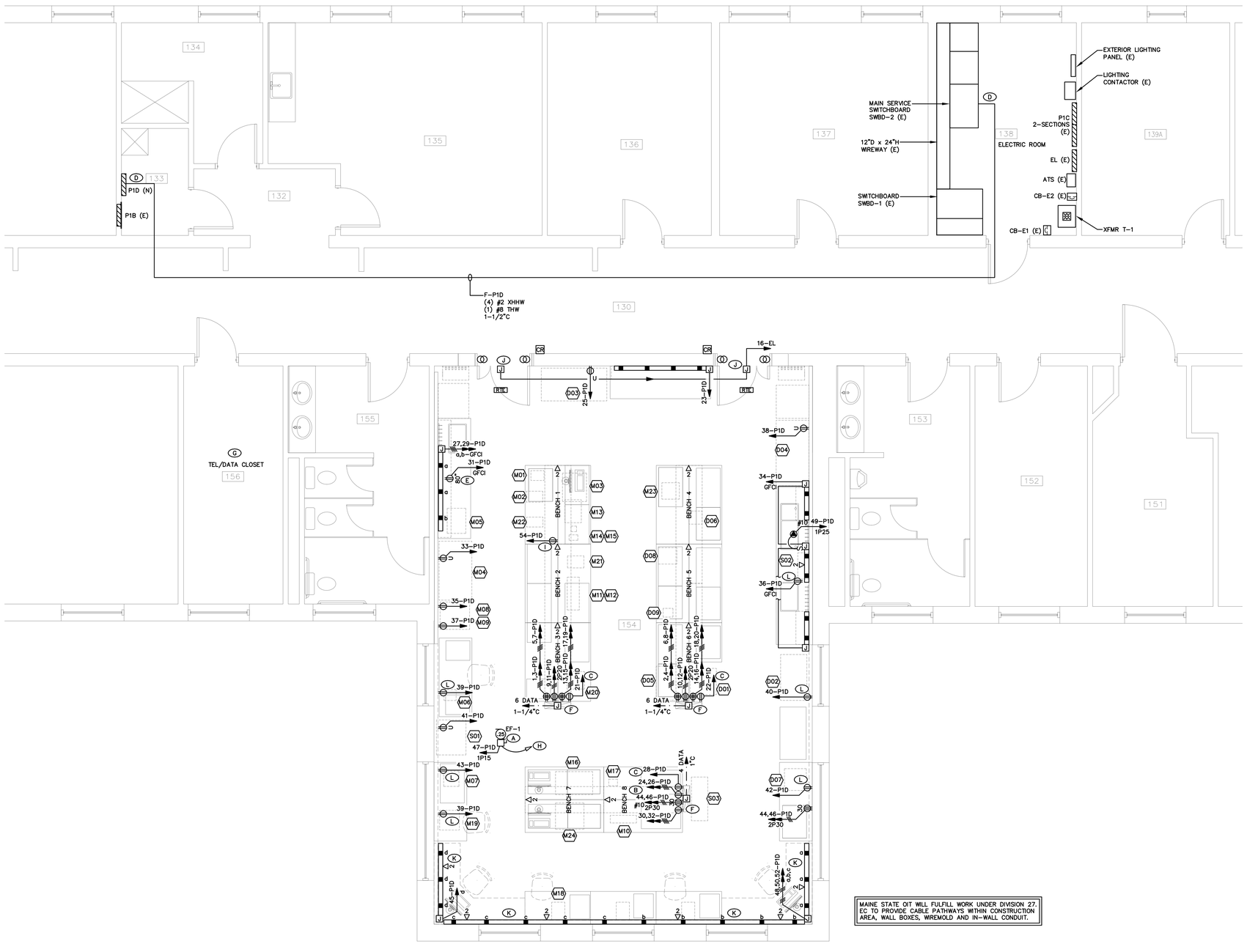

ELECTRICAL DEMOLITION GENERAL NOTES

1. IN GENERAL, ELECTRICAL DEVICES TO REMAIN UNLESS NOTED OTHERWISE.

ELECTRICAL GENERAL NOTES

1. THIS PLAN HAS BEEN COMPILED FROM FIELD OBSERVATIONS AND OWNER SUPPLIED DRAWINGS. FIELD VERIFY ALL CONDITIONS AND OBSERVE NECESSARY SAFETY PRECAUTIONS BEFORE DOING ANY WORK.
2. RUN SURFACE WIRING AS INCONSPICUOUS AS POSSIBLE, IN WALL AND CEILING CORNERS WHERE POSSIBLE, AS INDICATED.
3. DEVICES WITH CONTINUOUS LINETYPE ———— INDICATE NEW UNLESS OTHERWISE INDICATED.
4. DEVICES WITH DASHED LINETYPE – – – – – – INDICATE EXISTING TO REMAIN UNLESS OTHERWISE INDICATED.
5. DEVICES WITH HIDDEN LINETYPE - - - - - - - - INDICATE REMOVE UNLESS OTHERWISE INDICATED.
6. IN EVENT ANY UNSAFE WIRING IS ENCOUNTERED, IMMEDIATELY NOTIFY ENGINEER FOR CORRECTIVE ACTION.
7. EXISTING CONDUIT MAY BE RE-USED WHERE POSSIBLE.

KEYED NOTES

- (A) DISCONNECT PROVIDED WITH UNIT.
- (B) VERIFY ELECTRICAL REQUIREMENTS AND LOCATION OF OWNER PROVIDED UPS PRIOR TO ROUGH-IN.
- (C) PROVIDE FOR TASK LIGHTING INTEGRAL TO BENCH(ES).
- (D) SUPPLY NEW PANELBOARD FROM EXISTING 3P100 SPARE CIRCUIT BREAKER IN SWBD-2.
- (E) COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
- (F) COORDINATE BENCH INSTALLATION WITH FURNITURE SUPPLIER.
- (G) PROVIDE ADDITIONAL PATCH PANEL(S) AS NECESSARY.
- (H) WIRE TO PRESSURE CONTROLLER, FIELD VERIFY LOCATION.
- (I) WIRE DOWN UMBILICAL, THROUGH FURNITURE WIRING CHASE, TO BOX AND RECEPTACLE MOUNTED WITHIN BENCH FOR NEW UNDER COUNTER REFRIGERATOR, COORDINATE WITH FURNITURE PROVIDER.
- (J) COORDINATE WITH DOOR HARDWARE INSTALLER. PROVIDE 120V POWER FROM EXISTING SPARE CIRCUIT BREAKER IN SQUARE D EMERGENCY PANEL IF NECESSARY.
- (K) REFER TO DRAWING QL102 FOR WIREMOLD MOUNTING HEIGHT.
- (L) REFER TO DRAWING QL102 FOR RECEPTACLE MOUNTING HEIGHT.

EQUIPMENT POWER NOTES

1. VERIFY MOUNTING HEIGHTS OF ALL ELECTRICAL DEVICES PRIOR TO ROUGH-IN.
2. PROVIDE ONE CIRCUIT PER INDIVIDUAL RECEPTACLE FOR ISLAND BENCHES AS INDICATED, COORDINATE WITH FURNITURE INSTALLER.

MAINE STATE OIT WILL FULFILL WORK UNDER DIVISION 27. EC TO PROVIDE CABLE PATHWAYS WITHIN CONSTRUCTION AREA, WALL BOXES, WIREMOLD AND IN-WALL CONDUIT.

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

Hewett & Whitney
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Tel 207•377•6969 Fax 207•377•7584

PLOT DATE: May 27, 2016

State of Maine Milk and Blood Labs
Marquardt Building - East Campus

Augusta Maine

STATE OF MAINE
COLIN C. HEWETT
8374
LICENSED
PROFESSIONAL ENGINEER
05-25-16

FIRST FLOOR ELECTRICAL PROPOSED PART PLAN

REV.	DATE	DESCRIPTION
0	05/25/16	ISSUED FOR BID

DRAWN BY: ELH CHECKED BY: CCH

AMES ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
Bangor, ME 04401
PHONE: 207.974.3028
FAX: 207.941.1921
www.amesmaine.com

DATE: 05-25-2016

E200

PROJECT NO. 2015114.01

1/4" = 1'-0"

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PANEL SCHEDULE

EXISTING SQUARE D NQ PANELBOARD

PANEL ID: P1C–SECT 1 | TYPE: – | AMPS: 100 | MAIN: CB | MOUNTING: SURF | VOLTS L–L: 208 | PHASE: 3
LOCATION: ELECTRICAL ROOM 138 | VOLTS L–G: 120 | WIRE: 4

BRKR A	BRKR P	DESCRIPTION	CIR VA	TYPE	CIR NO.	LOAD A	LOAD B	LOAD C	CIR NO.	TYPE	CIR VA	DESCRIPTION	BRKR P	BRKR A	NOTE
20	1	RECP – RECEPTACLES	0	O	1	0			2	O	0	DOOR CONTROL	1	20	
20	1	RECP – REFRIGERATOR	0	O	3		0		4	O	0	RECP – RECEPTACLES	1	20	
20	1	RECP – RECEPTACLES	0	O	5			0	6	O	0	RECP – ROOM 154	1	20	
20	1	RECP – WORKSTATIONS	0	O	7	0			8	O	0	SPARE	1	20	(A)
20	1	RECP – WORKSTATIONS	0	O	9		0		10	O	0	SPARE	1	20	(A)
20	1	RECP – WORKSTATIONS	0	O	11			0	12	O	0	SPARE	1	20	(A)
20	1	RECP – RECEPTACLES	0	O	13	0			14	O	0	SPARE	1	20	(A)
20	1	RECP – RECEPTACLES	0	O	15		0		16	O	0	SPARE	1	20	(A)
20	1	RECP – RECEPTACLES	0	O	17			0	18	O	0	SPARE	1	20	(A)
20	1	RECP – RECEPTACLES	0	O	19	0			20	O	0	SPARE	1	20	(A)
20	1	RECP – RECEPTACLES	0	O	21		0		22	O	0	SPARE	1	20	(A)
20	1	RECP – RECEPTACLES	0	O	23			0	24	O	0	RECP – ROOM 154	1	20	
20	1	RECP – RECEPTACLES	0	O	25	0			26	O	0	NETWORK RACK	1	20	
20	1	RECP – WORKSTATIONS	0	O	27		0		28	O	0	NETWORK RACK	1	20	
20	1	RECP – WORKSTATIONS	0	O	29			0	30	O	0	NETWORK EQUIPMENT	1	20	
20	1	RECP – WORKSTATIONS	0	O	31	0			32	O	0	RECP – RECEPTACLES	1	20	
20	1	RECP – RECEPTACLES	0	O	33		0		34	O	0	–	1	20	
20	1	RECP – COPIER	0	O	35			0	36	O	0	–	1	20	
20	1	SPARE (OFF)	0	O	37	0			38	O	0	–	1	20	
20	1	SPARE (OFF)	0	O	39		0		40	O	0	PROVISION	1	–	
–	1	PROVISION	0	O	41			0	42	O	0	PROVISION	1	–	
					PHASE TOTALS	0	0	0				[–] NUMBER BY CIRCUIT			

CONNECTED VA : 0 CONNECTED AMPS : 0.0

CIRCUIT TYPE (CODE): LIGHTS (L) | RECEPTACLE (R) | MOTOR (M) | HEAT (H) | OTHER (O) | SPARE (S) | DISTRIB (D)

PANEL SCHEDULE

EXISTING SQUARE D NQ PANELBOARD

PANEL ID: P1C–SECT 2 | TYPE: – | AMPS: 225 | MAIN: LUG | MOUNTING: SURF | VOLTS L–L: 208 | PHASE: 3
LOCATION: ELECTRICAL ROOM 138 | VOLTS L–G: 120 | WIRE: 4

BRKR A	BRKR P	DESCRIPTION	CIR VA	TYPE	CIR NO.	LOAD A	LOAD B	LOAD C	CIR NO.	TYPE	CIR VA	DESCRIPTION	BRKR P	BRKR A
15	2	AH 2.4 / 2.5 / 2.6	0	O	43	0			44	O	0	PUMP P–1	2	20
–	–	–	0	O	45		0		46	O	0	–	–	–
15	2	AH 2.7 / 2.8 / 2.9	0	O	47			0	48	O	0	PUMP P–2	2	20
–	–	–	0	O	49	0			50	O	0	–	–	–
15	3	COND PUMP P–1	0	O	51		0		52	O	0	SPARE (OFF)	3	15
–	–	–	0	O	53			0	54	O	0	–	–	–
–	–	–	0	O	55	0			56	O	0	–	–	–
20	1	–	0	O	57		0		58	O	0	EF–6 / EF–13	1	15
20	1	(OFF)	0	O	59			0	60	O	0	EF–8 / EF–9	1	15
20	1	–	0	O	61	0			62	O	0	MOTOR OPERATED DAMPERS	1	20
20	1	CUH–1	0	O	63		0		64	O	0	ATC PANEL	1	20
20	1	LIGHTS	0	O	65			0	66	O	0	LIGHTS	1	20
20	1	LIGHTS	0	O	67	0			68	O	0	LIGHTS	1	20
20	1	SPARE (OFF)	0	O	69		0		70	O	0	HONEYWELL CONTROLS	1	20
20	1	SPARE (OFF)	0	O	71			0	72	O	0	SPARE (OFF)	1	20
20	1	SPARE (OFF)	0	O	73	0			74	O	0	SPARE (OFF)	1	20
20	1	ELEVATOR CAR LTS	0	O	75		0		76	O	0	SPARE (OFF)	1	20
20	1	ELEVATOR SHUNT TRIP	0	O	77			0	78	O	0	SPARE (OFF)	1	20
20	1	ELEVATOR SUMP PUMP	0	O	79	0			80	O	0	SPARE (OFF)	1	20
20	1	ELEVATOR JB	0	O	81		0		82	O	0	SPARE (OFF)	1	20
20	1	LTG – STAIR 3 (OFF)	0	O	84			0	84	O	0	SPARE (OFF)	1	20
					PHASE TOTALS	0	0	0				[–] NUMBER BY CIRCUIT		

CONNECTED VA : 0 CONNECTED AMPS : 0.0

CIRCUIT TYPE (CODE): LIGHTS (L) | RECEPTACLE (R) | MOTOR (M) | HEAT (H) | OTHER (O) | SPARE (S) | DISTRIB (D)

PANEL SCHEDULE

EXISTING SQUARE D NQ PANELBOARD

PANEL ID: EL | TYPE: – | AMPS: 100 | MAIN: LUG | MOUNTING: SURF | VOLTS L–L: 208 | PHASE: 3
LOCATION: ELECTRICAL ROOM 138 | VOLTS L–G: 120 | WIRE: 4

BRKR A	BRKR P	DESCRIPTION	CIR VA	TYPE	CIR NO.	LOAD A	LOAD B	LOAD C	CIR NO.	TYPE	CIR VA	DESCRIPTION	BRKR P	BRKR A	NOTE
20	1	LTG – 1ST FLOOR EMERG	0	O	1	0			2	O	0	LTG – 1ST FLOOR EMERG	1	20	
20	1	LTG – 1ST FLOOR EMERG	0	O	3		0		4	O	0	LTG – 1ST FLOOR EMERG	1	20	
20	1	LTG – 3RD FLOOR EMERG	0	O	5			0	6	O	0	LTG – 3RD FLOOR EMERG	1	20	
20	1	LTG – 2ND FLOOR SOUTH	0	O	7	0			8	O	0	RECP – BELOW PANEL	1	20	
20	1	LTG – 2ND FLOOR NORTH	0	O	9		0		10	O	0	FIRE AND SECURITY PANELS	1	20	
20	1	LTG – 1ST FLOOR SOUTH	0	O	11			0	12	O	0	FIRE AND SECURITY PANELS	1	20	
20	1	LTG – DEERING TUNNEL	0	O	13	0			14	O	0	FIRE AND SECURITY PANELS	1	20	
20	1	RECP – 218	0	O	15		0		16	O	0	MILK LAB CARD READERS	1	20	(B)
20	1	RECP – 218	0	O	17			0	18	O	0	SPARE	1	20	
20	1	RECP – 218	0	O	19	0			20	O	0	SPARE	1	20	
20	1	SPARE	0	O	21		0		22	O	0	SPARE	1	20	
20	1	SPARE	0	O	23			0	24	O	0	SPARE	1	20	
–	1	PROVISION	0	O	25	0			26	O	0	PROVISION	1	–	
–	1	PROVISION	0	O	27		0		28	O	0	PROVISION	1	–	
–	1	PROVISION	0	O	29			0	30	O	0	PROVISION	1	–	
–	1	–	0	O	31	0			32	O	0	–	1	–	
–	1	–	0	O	33		0		34	O	0	–	1	–	
–	1	–	0	O	35			0	36	O	0	–	1	–	
–	1	–	0	O	37	0			38	O	0	–	1	–	
–	1	–	0	O	39		0		40	O	0	–	1	–	
–	1	–	0	O	41			0	42	O	0	–	1	–	
					PHASE TOTALS	0	0	0				[–] NUMBER BY CIRCUIT			

CONNECTED VA : 0 CONNECTED AMPS : 0.0

CIRCUIT TYPE (CODE): LIGHTS (L) | RECEPTACLE (R) | MOTOR (M) | HEAT (H) | OTHER (O) | SPARE (S) | DISTRIB (D)

PANELBOARD NOTES

(A) FURNITURE WIRING WHIPS TO BE REMOVED. VERIFY CIRCUIT BREAKER SUPPLIES NO OTHER LOAD AND INDICATE AS "SPARE".

(B) SUPPLY NEW LOAD FROM EXISTING SPARE CIRCUIT BREAKER.

PANEL SCHEDULE

NEW SQUARE D PANELBOARD w/HINGED COVER

PANEL ID: P1D | TYPE: – | AMPS: 100 | MAIN: CB | MOUNTING: SURF | VOLTS L–L: 208 | PHASE: 3
LOCATION: JANITOR'S CLOSET 133 | VOLTS L–G: 120 | WIRE: 4

BRKR A	BRKR P	DESCRIPTION	CIR VA	TYPE	CIR NO.	LOAD A	LOAD B	LOAD C	CIR NO.	TYPE	CIR VA	DESCRIPTION	BRKR P	BRKR A
20	1	RECP – BENCH 1 CKT 1	600	R	1	1200			2	R	600	RECP – BENCH 4 CKT 1	1	20
20	1	RECP – BENCH 1 CKT 2	600	R	3		1200		4	R	600	RECP – BENCH 4 CKT 2	1	20
20	1	RECP – BENCH 3 CKT 1	600	R	5			1200	6	R	600	RECP – BENCH 6 CKT 1	1	20
20	1	RECP – BENCH 3 CKT 2	600	R	7	1200			8	R	600	RECP – BENCH 6 CKT 2	1	20
20	2	RECP – BENCH 2 CKTS 3/4	1500	R	9		3000		10	R	1500	RECP – BENCH 5 CKTS 3/4	2	20
–	–	–	1500	R	11			3000	12	R	1500	–	–	–
20	1	RECP – BENCH 2 CKT 1	400	R	13	800			14	R	400	RECP – BENCH 5 CKT 1	1	20
20	1	RECP – BENCH 2 CKT 2	400	R	15		800		16	R	400	RECP – BENCH 5 CKT 2	1	20
20	1	RECP – BENCH 2 CKT 5	400	R	17			800	18	R	400	RECP – BENCH 5 CKT 5	1	20
20	1	RECP – BENCH 2 CKT 6	400	R	19	800			20	R	400	RECP – BENCH 5 CKT 6	1	20
20	1	RECP–BENCHES 1–3 TASK LTG	1200	R	21		2400		22	R	1200	RECP–BENCHES 4–6 TASK LTG	1	20
20	1	WM RECP – EAST COUNTER	800	R	23			1400	24	R	600	RECP – BENCH 7 CKT 1	1	20
20	1	RECP–D03 REFRIG DBL DOOR	696	R	25	1296			26	R	600	RECP – BENCH 7 CKT 2	1	20
20G	1	WM RECP–NORTH COUNTER–a	400	R	27		1200		28	R	800	RECP–BENCHES 7–8 TASK LTG	1	20
20G	1	WM RECP–M05 WTR BATH–b	780	R	29			1380	30	R	600	RECP – BENCH 8 CKT 1	1	20
20G	1	RECP – PLUMBING PUMP	648	R	31	1248			32	R	600	RECP – BENCH 8 CKT 2	1	20
20	1	RECP–M04 REFRIG DBL DOOR	1092	R	33		2292		34	R	1200	WM RECP–SOUTH COUNTER	1	20G
20	1	RECP – M08 INCUBATOR	840	R	35			1040	36	R	200	RECP–S02 WATER PURIFIER	1	20G
20	1	RECP – M09 INCUBATOR	840	R	37	1944			38	R	1104	RECP–D04 REFRIG DBL DOOR	1	20
20	1	RECP–M06 RDR/M19 METER	400	R	39		580		40	R	180	RECP–D02 CHEST FREEZER	1	20
20	1	RECP – S01 FREEZER	600	R	41			2040	42	R	1440	RECP – D07–STERILIZER	1	20
20	1	RECP – M07 INCUBATOR	100	R	43	2100			44	R	2000	RECP – UPS	2	30
20	1	WM RECP–NORTH COMPS–d	600	R	45		2600		46	R	2000	–	–	–
15	1	EXHAUST FAN EF–1	696	M	47			1296	48	R	600	WM RECP–SOUTH COMPS–a	1	20
25	1	GARBAGE DISPOSAL	1176	M	49	2176			50	R	1000	WM RECP–WEST COMPS–b	1	20
20	1	SPARE	0	S	51		1000		52	R	1000	WM RECP–WEST COMPS–c	1	20
20	1	SPARE	0	S	53			600	54	S	600	RECP – UC REFRIGERATOR	1	20
					PHASE TOTALS	12764	15072	12756				[–] NUMBER BY CIRCUIT		

CONNECTED VA : 40592 CONNECTED AMPS : 112.7

CIRCUIT TYPE (CODE): LIGHTS (L) | RECEPTACLE (R) | MOTOR (M) | HEAT (H) | OTHER (O) | SPARE (S) | DISTRIB (D)

Hewett & Whitney
ENGINEERS DESIGNERS
ELECTRICAL & MECHANICAL SYSTEMS
161 MAIN STREET WINTHROP, MAINE
Tel 207•377•6969 Fax 207•377•7584

PLOT DATE: May 27, 2016

State of Maine Milk and Blood Labs
Marquardt Building - East Campus
Augusta Maine

STATE OF MAINE, COLIN C. HEWETT, 8374, LICENSED PROFESSIONAL ENGINEER, 05-25-16

PANEL SCHEDULES

REV.	DATE	DESCRIPTION
0	05/25/16	ISSUED FOR BID

DRAWN BY: ELH CHECKED BY: CCH

AMES ASSOCIATES LLC
ARCHITECTS ENGINEERS
128 Broadway
Bangor, ME 04401
PHONE: 207-974-3028
FAX: 207-941-1921
www.amesmaine.com

DATE: 05-25-2016

E300

PROJECT NO. 2015114.01

NO SCALE

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