BURLINGTON FIRE STATION NO. 2 - TOILET RENOVATIONS

D&W PROJECT # 18-0786

JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

OWNER

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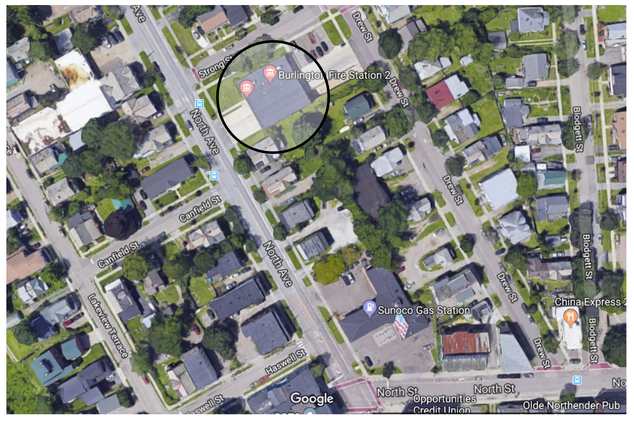

PROJECT LOCATION MAP
IMAGE COURTESY OF GOOGLE MAPS

LIST OF DRAWING SHEETS

* REFERENCE DRAWINGS ARE PROVIDED FOR INFORMATIONAL REFERENCE ONLY, AND DO NOT CONVEY ANY CONTRACTUAL REQUIREMENTS UPON THE CONTRACTOR ASIDE FROM INTERPRETATION OF THE INFORMATION CONTAINED THEREIN FOR THE PURPOSED OF COORDINATING THE NEW WORK WITH THE EXISTING BUILT CONDITION.

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Project No.
18-0786

BURLINGTON FIRE STA. NO. 2- TOILET RENO
JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

BID SET

REVISION:	Date:

DATE: 2/21/2019
SCALE:

SHEET TITLE:
COVER

SHEET #:
COVER

SYMBOLS LEGEND

DATUM POINT
0 NEW CONSTRUCTION GRID BUBBLE
0 EXISTING CONSTRUCTION GRID BUBBLE
CENTER LINE
ITEMS BELOW CUT LINE - HIDDEN
ITEMS ABOVE CUT LINE - OVERHEAD
ROOM NAME — ROOM NAME
200A-A — ROOM NUMBER
100 — DOOR NUMBER
W4 WINDOW TAG
BL3 BORROWED LIGHT TAG
CW1 CURTAIN WALL TAG
SF1 STOREFRONT TAG
WALL TYPE TAG
96 INDICATES PARTIAL HEIGHT OF WALL IN INCHES
X1.11 WALL TYPE - SEE AG0.02 FOR TYPES
1 INDICATES ANY RATING OF WALL
1 / 1 A101 1 / 1 ELEVATION CALLOUT
1 / A101 BUILDING SECTION CALLOUT
1 / A101 DETAIL CALLOUT
1 / 4 A9.10 2 / 3 MULTIPLE ELEVATION CALLOUT
1 REVISION TAG
REVISED CONTENT

ABBREVIATIONS

A
ABV ABOVE
AFF ABOVE FINISH FLOOR
AFG ABOVE FINISHED GRADE
AFS ABOVE FINISHED SLAB
ASC ABOVE SUSPENDED CEILING
ACS ACCESS(ORY)
ACS FLR ACCESSIBLE FLOOR
ACS PNL ACCESS PANEL
ACST ACOUSTICAL
ACP ACOUSTICAL CEILING PANEL
ACPL ACOUSTICAL PLASTER
ACT ACOUSTIC CEILING TILE
AWD ACOUSTIC CEMENTITIOUS WOOD FIBER PANELS
AWP ACOUSTIC WALL PANEL
ADDM ADDENDUM
ADDN ADDITION
ADH ADHESIVE
ADJ ADJACENT
ADJT ADJUSTABLE
AGGR AGGREGATE
AIB AIR INFILTRATION BARRIER
A/C AIR CONDITIONING
ALT ALTERNATE
ALUM ALUMINUM
ADA AMERICANS WITH DISABILITIES ACT
AB ANCHOR BOLT
AHR ANCHOR, ANCHORAGE
ANOD ANODIZED
APPROX APPROXIMATE
ARCH ARCHITECT(URAL)
AD AREA DRAIN
ASB ASBESTOS
ASPH ASPHALT
ACCMP ASPHALT COATED CORRUGATED METAL PIPE
AV AUDIOVISUAL
AUTO AUTOMATIC
AED AUTOMATIC EXTERNAL DEFIBRILATOR

B
BR BACKER ROD
BAR BARRIER
BB BASEBOARD
BSMT BASEMENT
BRG BEARING
BRG PL BEARING PLATE
BJT BED JOINT
BM BENCHMARK
BTWN BETWEEN
BEV BEVELED
BITUM BITUMINOUS
BLK BLOCK
BLKG BLOCKING
BLU BLUE STONE
BD BOARD
BLT BORROWED LITE
BS BOTH SIDES
BW BOTH WAYS
BOT BOTTOM
B/O BOTTOM OF
BOD BOTTOM OF DECK
BOS BOTTOM OF STEEL
BRK BRICK
BRZ BRONZE
BLDG BUILDING
BN BULLNOSE

C
CAB CABINET
CUH CABINET UNIT HEATER
CPT CARPET (ED)
CSMT CASEMENT
C CONC CAST CONCRETE
CIP CAST IN PLACE
CI CAST IRON
CS CAST STONE
CSMU CAST STONE MASONRY UNIT
CB CATCH BASIN
CLG CEILING
CLG HT CEILING HEIGHT
CEM CEMENT
C TO C CENTER TO CENTER
CL CENTER LINE
cm CENTIMETER (S)
CER CERAMIC
CT CERAMIC TILE
CH BD CHALKBOARD
CHFR CHAMFER
CHGTB CHANGING TABLE
CH CHEMICAL HARDENER
CLD CHILD
CIR CIRCLE
CRCMF CIRCUMFERENCE
CLRM CLASSROOM

C (CONT.)
CLR CLEAR (ANCE)
CLO CLOSET
CLOS CLOSURE
CFMF COLD FORMED METAL FRAMING
COL COLUMN
COMB COMBINATION
PTDWR COMBINATION PAPER TOWEL DISPENSER / WASTE RECEPTACLE
MBH COMBINATION UTILITY SHELF / MOP AND BROOM HOLDER
COMBST COMBUSTIBLE (COMBUSTION)
COMPT COMPARTMENT
CMPST COMPOSITION (COMPOSITE)
CPRS COMPRESS (ED), (ION), (IBLE)
CMPTR COMPUTER
CONC CONCRETE
CUVM CONCRETE UNIT VENEER MASONRY
CMU CONCRETE MASONRY UNIT
CONF CONFERENCE
CONN CONNECTION
CONSTR CONSTRUCTION
CM CONSTRUCTION MANAGER
CONT CONTINUOUS OR CONTINUE
CONTR CONTRACT (OR)
CF CONTRACTOR FURNISHED
CF/CI CONTRACTOR FURNISHED / CONTRACTOR INSTALLED
CF/OI CONTRACTOR FURNISHED / OWNER INSTALLED
CLL CONTRACT LIMIT LINE
CJ CONTROL JOINT
CVTR CONVECTOR
CU COPPER
CG CORNER GUARD
CORR CORRIDOR
CRG CORRUGATED
CMP CORRUGATED METAL PIPE
CNTR COUNTER
CFLG COUNTERFLASHING
CTSK COUNTERSUNK SCREW
CSK COUNTERSINK
CRS COURSE (S)
COV COVER
CRG CROSS GRAIN
CU FT CUBIC FOOT
CW CURTAINWALL

D
DMPR DAMPER
DMPF DAMPROOFING
DL DEAD LOAD
DFLCT DEFLECTION
DEMO DEMOLISH, DEMOLITION
DMT DEMOUNTABLE
DEP DEPRESSED
D DEPTH
DET DETAIL
DIAG DIAGONAL
DIA DIAMETER
DIM DIMENSION
DW DISHWASHER
DISP DISPENSER
DIV DIVISION
DR DOOR
DR OPNGDOOR OPENING
DH DOUBLE HUNG
DBL ACT DOUBLE ACTING
DTS DOVETAIL ANCHOR SLOT
DN DOWN
DS DOWNSPOUT
DT DRAIN TILE
DRB DRAINBOARD
DWR DRAWER
DWG DRAWING (S)
DF DRINKING FOUNTAIN
DWTR DUMBWAITER

E
EA EACH
EF EACH FACE
E EAST
EOD EDGE OF DECK
EOS EDGE OF SLAB
ED EDUCATION
ELEC ELECTRIC (AL)
EWC ELECTRIC WATER COOLER
EP ELECTRICAL PANEL
EL ELEVATION
ELEV ELEVATOR
EMER EMERGENCY
ESB ENCLOSED STEEL BEAM
ENCL ENCLOSURE
ENTR ENTRANCE
EPX EPOXY FLOORING

E (CONT.)
CT-ER EPOXY RESIN COUNTERTOP
EQ EQUAL
EQUIP EQUIPMENT
ESCAL ESCALATOR
EST ESTIMATE
ETC ET CETERA (AND SO FORTH)
EXC EXCAVATE
EXH EXHAUST
EXIST EXISTING
EXMP EXPANDED METAL PLATE
EXPN EXPANSION
EXP BT EXPANSION BOLT
EJ EXPANSION JOINT
EXP EXPOSED
EXT EXTERIOR
EFS EXTERIOR FINISH SYSTEM
EIFS EXTERIOR INSULATION FINISH SYSTEM
EXS EXTRA STRONG

F
FWC FABRIC WALL COVERING
FAB FABRICATE (ION)
FC BRK FACE BRICK
F/O FACE OF
FOC FACE OF CONCRETE
FOF FACE OF FINISH
FOM FACE OF MASONRY
FOW FACE OF WALL
F/F FACE TO FACE
FM FACTORY MUTUAL
FCU FAN COIL UNIT
FSTN FASTEN
FSTNR FASTENER
FN FENCE
FC FIBER CEMENT
FRP FIBER REINFORCED PLASTIC
FBD FIBERBOARD
FGL FIBERGLASS
FRP FIBERGLASS REINFORCED PLASTIC, FIBER REINFORCED POLYESTER
FIN FINISH (ED)
FF EL FINISHED FLOOR ELEVATION
FFL FINISH FLOOR LINE
FTR FINNED TUBE RADIATION
FA FIRE ALARM, FRESH AIR
FAP FIRE ANNUNCIATOR PANEL
F BRK FIRE BRICK
FE FIRE EXTINGUISHER
FE-K FIRE EXTINGUISHER, CLASS K WET CHEMICAL
FE&C FIRE EXTINGUISHER AND CABINET
FE&RC FIRE EXTINGUISHER AND RATED CABINET
FHC FIRE HOSE CABINET
FHS FIRE HOSE STATION
FPL FIREPLACE
FP FIRE PROOF (ING)
FPC FIRE PROTECTION SYSTEM CONTRACTOR
FR FIRE RATED (ING), FRAME (D), (ING)
FRC FIRE RESISTANT COATING
FRJS FIRE RESISTIVE JOINT SEALANT
FRT FIRE RETARDANT TREATED
FRTW FIRE RETARDANT TREATED WOOD
FIXT FIXTURE
FLMB FLAMMABLE
FLASH FLASHING
FHMS FLATHEAD MACHINE SCREW
FHWS FLATHEAD WOOD SCREW
FLEX FLEXIBLE
FKFL FLOCKED FLOORING
FLR FLOOR (ING)
FCO FLOOR CLEANOUT
FD FLOOR DRAIN
FLOUR FLUORESCENT
FSS FOLDING SHOWER SEAT
FT FOOT, FEET
FTG FOOTING
FRG FORGED
FDTN FOUNDATION
FR FRAME (D), (ING), FIRE RATED (ING)
FA FRESH AIR, FIRE ALARM
FS FULL SIZE
FURN FURNISHED, FURNITURE
FURN FURRED (ING)
FUT FUTURE

G
GA GAGE, GAUGE
GALV GALVANIZED
GI GALVANIZED IRON
GIP GALVANIZED IRON PIPE
GKT GASKET (ED)
GC GENERAL CONTRACT (OR)
GL BLK GLASS BLOCK
GLF GLASS FIBER

G (CONT.)
GFRP GLASS FIBER REINFORCED PLASTIC
GL GLASS GLAZING
GLT GLASS WALL TILE
GLZ CMUGLAZED CONCRETE MASONRY UNITS
GST GLAZED STRUCTURAL TILE
GB GRAB BAR
GRADE GRADE, GRADING
GRAN GRANITE
GCB GROUND FACE CONCRETE BLOCK
GT GROUT
GUT GUTTER
GYM GYMNASIUM
GYP GYPSUM
GPL GYPSUM LATH
GYP PLASGYPSUM PLASTER
GPT GYPSUM TILE
GYP BD GYPSUM BOARD

H
HD HAND DRYER (HAIR DRYER)
HC HOLLOW CORE
HDBD HARDBOARD
H&S HARDENER AND SEALER
HDW HARDWARE
HDWD HARDWOOD
HD JT HEAD JOINT
HDR HEADER
HGLR HEAT, GLARE, LIGHT REDUCING GLASS
HTG HEATING
HVAC HEATING/VENTILATION/AIR CONDITIONING
HT HEIGHT
HEX HEXAGONAL
H HIGH
HES HIGH EARLY-STRENGTH CEMENT
HS HIGH SCHOOL
HDC HOLD DOWN CLIPS
HLD HOLDERS
HC HOLLOW CORE, HANDICAPPED
HM HOLLOW METAL
HORIZ HORIZONTAL
HLB HORIZONTAL LOUVER BLINDS
HB HOSE BIBB
HR HOUR

I
IMPG IMPREGNATED
INCIN INCINERATOR
INCL INCLUDE (D), (ING)
ID INSIDE DIAMETER / INSIDE DIMENSION
ICS INSULATED COMPOSITE SIDING
INSF INSULATED FILL
IG INSULATED GLASS
INSUL INSULATE (D), (ION)
INT INTERIOR
INTM INTERMEDIATE
ISFP INTUMESCENT SPRAY-ON FIREPROOFING
INV INVERT
INV EL INVERT ELEVATION
IPS IRON PIPE SIZE

J
JAN JANITOR
JAN CLO JANITOR'S CLOSET
JNT JOINT
JNT BK JOINT BACKER
J JOIST

K
KPL KICKPLATE
KIT KITCHEN
KO KNOCKOUT

L
LBL LABEL
LAB LABORATORY
LAD LADDER
LB LAG BOLT
LAM LAMINATE (D)
LAV LAVATORY
LH LEFT HAND
L LENGTH
LT LIGHT
LT CTRL LIGHT CONTROL
LTG LIGHTING
LP LIGHTPROOF
LT WT LIGHT WEIGHT
LWC LIGHTWEIGHT CONCRETE
LMST LIMESTONE
LF LINEAR FEET
LIN LINOLEUM
LIN TILE LINOLEUM TILE
LTL LINTEL
LL LIVE LOAD
LKR LOCKER
LLH LONG LEG HORIZONTAL
LLV LONG LEG VERTICAL
LVR LOUVER
LPT LOW POINT

M
MACH MACHINE
MAG MAGNETIC
MDH MAGNETIC DOOR HOLDER
MH MANHOLE
MFR MANUFACTURE (R)
MRB MARBLE BASE
MRT MARBLE THRESHOLD
MRF MARBLE FLOOR
MB MARKER BOARD
MAS MASONRY
MO MASONRY OPENING
MATL MATERIAL (S)
MAX MAXIMUM
MECH MECHANICAL
MC MEDICINE CABINET
MED MEDIUM
MDF MEDIUM DENSITY FIBERBOARD
MDO MEDIUM DENSITY OVERLAY
MBR MEMBER
MEMB MEMBRANE
MTL METAL
MD METAL DECK
MTFR METAL FURRING
MTL PNL METAL PANEL
MRD METAL ROOF DECK
MT METAL THRESHOLD
MWS METAL WINDOW SYSTEM
m METER (S)
MEZZ MEZZANINE
MS MIDDLE SCHOOL
mm MILLIMETER (S)
MLWK MILLWORK
MIN MINIMUM
MIRR MIRROR
MISC MISCELLANEOUS
MOD MODULE
MRG MOISTURE RESISTANT GYPSUM WALLBOARD
MR MOISTURE RETARDANT
MLDG MOLDING, MOULDING
MOPR MOP HOLDER
MTD MOUNTED
MTG MOUNTING
MVBL MOVABLE
MULL MULLION
MCWF MULTI COLOR WALL FINISH

N
NL NAILABLE
NAT NATURAL
NR NOISE REDUCTION
NRC NOISE REDUCTION COEFFICIENT
NOM NOMINAL
NMT NONMETALLIC
N NORTH
NE NORTHEAST
NW NORTHWEST
NA NOT APPLICABLE
NIC NOT IN CONTRACT
NTS NOT TO SCALE
NO NUMBER

O
OBS OBSCURE
OFF OFFICE
OC ON CENTER (S)
OP OPAQUE
OPNG OPENING
OPP OPPOSITE
OPH OPPOSITE HAND
OSB ORIENTED STRAND BOARD
OZ OUNCE
OD OUTSIDE DIAMETER / OUTSIDE DIMENSIO
OA OVERALL
OVH OVERHEAD
OH DR OVERHEAD DOOR
OF/CI OWNER FURNISHED, CONTRACTOR INSTALLED
OF/OI OWNER FURNISHED, OWNER INSTALLED

P
PT PAINT (ED), POINT
PMTL PAINTED METAL
PT STL PAINTED STEEL
PR PAIR
PNL PANEL
PB PANIC BAR
PTD PAPER TOWEL DISPENSER
PTDWR (COMBINATION) PAPER TOWEL DISPENSER / WASTE RECEPTACLE
PAR PARALLEL
PRKG PARKING
PBD PARTICLE BOARD
PTN PARTITION
P&M PATCH AND MATCH
PV PAVE(D), (ING)

P (CONT.)
PERF PERFORATE (D)
PERIM PERIMETER
PERM PERMANENT
PERP PERPENDICULAR
PE PHYSICAL EDUCATION
PLAS PLASTER
PLAM PLASTIC LAMINATE
CT-PL PLASTIC LAMINATE COUNTER TOP
PL PLATE
PL GL PLATE GLASS
PLBG PLUMBING
PLYWD PLYWOOD
PT POINT, PAINT (ED)
PISO POLYISOCYANURATE
PVC POLYVINYL CHLORIDE
PCF POUNDS PER CUBIC FOOT
PLF POUNDS PER LINEAR FOOT
PSF POUNDS PER SQUARE FOOT
PSI POUNDS PER SQUARE INCH
PAF POWDER ACTUATED FASTENER
PCC PRECAST CONCRETE
PREFAB PREFABRICATED
PREFIN PREFINISHED
PMF PREFINISHED METAL FASCIA
PREFMD PREFORMED
PMS PREFORMED METAL SIDING
PRE-K PRE-KINDERGARTEN
PPT PRESSURE PRESERVATIVE TREATED
PSC PRESTRESSED CONCRETE
PROJ PROJECT, PROJECTION
PL PROPERTY LINE

Q
QTY QUANTITY
QT QUARRY TILE

R
RAB RABBET(ED)
RAD RADIATOR
R RADIUS
RLG RAILING
RWL RAIN WATER LEADER
RBT REBATE
RECD RECEIVED
RECT RECTANGULAR
REF REFERENCE
RFL REFLECT (ED), (IVE), (OR)
RCP REFLECTED CEILING PLAN
REFG REFRIGERATOR
REG REGISTER
RENOV RENOVATION
REQD REQUIRED
RESIL RESILIENT
RB RESILIENT BASE
RAF RESILIENT ATHLETIC FLOORING
RF RESILIENT FLOORING
RET RETURN
RA RETURN AIR
RVS REVERSE (SIDE)
REV REVISION (S), REVISED
RH RIGHT HAND
ROW RIGHT OF WAY
R RISER
RVT RIVET
RB HK ROBE HOOK
RD ROOF DRAIN
RTU ROOF TOP UNIT
RF ROOFING
RM ROOM
RO ROUGH OPENING
RBR RUBBER
RFL RUBBER FLOORING
RTF RUBBER TILE FLOOR
RBL RUBBLE STONE

S
SFGL SAFETY GLASS
SND SANITARY NAPKIN DISPOSAL
SNV SANITARY NAPKIN VENDOR
SCHED SCHEDULE
STEM SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH
STEAM SCIENCE, TECHNOLOGY, ENGINEERING, ARTS, AND MATH
SCRN SCREEN
SLNT SEALANT
S&BR SEALANT AND BACKER ROD
SLR SEALER
SJT SEISMIC JOINT
SJC SEISMIC JOINT COVER
SHTHG SHEATHING
SHT GL SHEET GLASS
SHT LIN SHEET LINOLEUM
SV SHEET VINYL
SHV SHELF, SHELVING
SHO SHORE, (D), (ING)

S (CONT.)
SC SHOWER CURTAIN ROD & CURTAIN
SGB SHOWER GRAB BAR
SIM SIMILAR
SIM OH SIMILAR / OPPOSITE HAND
SPMR SINGLE PLY MEMBRANE ROOF
SKLT SKYLIGHT
SLV SLEEVE
SD STORM DRAIN, SOAP DISPENSOR
SC SOLID CORE
SSM SOLID SURFACE MATERIAL
STC SOUND TRANSMISSION COEFFICIENT
S SOUTH
SE SOUTHEAST
SW SOUTHWEST
SPKR SPEAKER
SPCL SPECIAL
SPEC SPECIFICATION (S)
SFRM SPRAY-APPLIED FIRE-RESISTIVE MATERIAL
SPKLR SPRINKLER
SQ SQUARE
SF SQUARE FEET
SS STAINLESS STEEL
CT-SS STAINLESS STEEL COUNTER TOP
STD STANDARD
SSR STANDING SEAM ROOFING
SDF STATIC DISSIPATIVE FLOORING
SDT STATIC DISSIPATIVE TILE
STA STATION
STL STEEL
STOR STORAGE
SD STORM DRAIN, SOAP DISH
SCT STRUCTURAL CLAY TILE
STRUCT STRUCTURE (AL)
SC-ACP SUBCONTRACTOR - ACOUSTIC CEILINGS
SC-ELECT SUBCONTRACTOR - ELECTRICAL
SC-ELEV SUBCONTRACTOR - ELEVATORS
SC-FPROT SUBCONTRACTOR - FIRE PROTECTION
SC-GLASS SUBCONTRACTOR - GLASS AND GLAZING
SC-HVAC SUBCONTRACTOR - HEATING, VENTILATING, AND AIR CONDITIONING
SC-PLAST SUBCONTRACTOR - LATH AND PLASTER
SC-STONE SUBCONTRACTOR - MARBLE AND STONE
SC-MASN SUBCONTRACTOR - MASONRY
SC-WIND SUBCONTRACTOR - METAL WINDOWS
SC-MTLS SUBCONTRACTOR - MISCELLANEOUS METALS
SC-PAINT SUBCONTRACTOR - PAINTING
SC-PLUMB SUBCONTRACTOR - PLUMBING
SC-RESFL SUBCONTRACTOR - RESILIENT FLOORING
SC-ROOF SUBCONTRACTOR - ROOFING, FLASHING, AND SHEET-METAL
SC-TZZO SUBCONTRACTOR - TERRAZZO
SC-TILE SUBCONTRACTOR - TILE
SC-WD&C SUBCONTRACTOR - WATERPROOFING, DAMP-PROOFING, AND CAULKING
SUSP SUSPENDED
SYMM SYMMETRY (ICAL)
SYNTH SYNTHETIC
SYS SYSTEM

T
TB TACKBOARD
TKS TACK STRIP
TEL TELEPHONE
TV TELEVISION
TMPD TEMPERED
TEMP HDBD TEMPERED HARDBOARD
TERM TERMINAL
TC TERRA COTTA
TER TERRAZZO
THK THICKNESS
THRES THRESHOLD
TRS TILE REDUCER STRIP
TPD TOILET PAPER DISPENSER
TPTN TOILET PARTITION
TOL TOLERANCE
T&G TONGUE AND GROOVE
TOB TOP OF BEAM
TO BRK TOP OF BRICK
TO BRKS TOP OF BRICK SHELF
TOW TOP OF CONCRETE WALL
TOD TOP OF DECK
TO FL TOP OF FLOOR
TOF TOP OF FOOTING
TO FDN TOP OF FOUNDATION
TO SLAB TOP OF SLAB
TO STL TOP OF STEEL
TOW TOP OF WALL
TWB TOWEL BAR
XFMR TRANSFORMER
TGS TRANSLUCENT GLAZING SYSTEM
T TREAD
TS TUBE STEEL
TYP TYPICAL

U
UC UNDERCUT
UNDLMT UNDERLAYMENT
UOD UNDERSIDE OF DECK
UL UNDERWRITERS LABORATORIES
UNFIN UNFINISHED
UV UNIT VENTILATOR
UNO UNLESS NOTED OTHERWISE
UR URINAL

V
VR VAPOR RETARDER
VR/AIB VAPOR RETARDER/ AIR INFILTRATION BARRIER
VNR VENEER
VIF VERIFY IN FIELD
VRM VERMICULITE
VERT VERTICAL
VEST VESTIBULE
VAT VINYL ASBESTOS TILE
VB VINYL BASE
VCT VINYL COMPOSITION TILE
VWC VINYL WALL COVERING
VIS PNL VISION PANEL
VJ V-JOINT

W
WSCT WAINSCOT
WOM WALK OFF MAT
WH WALL HUNG
WH WALL HYDRANT
W/W WALL TO WALL
WR WASTE RECEPTACLE, WATER REPELLENT
WC WATER CLOSET
WP WATERPROOFING, WORKING POINT
WR WATER REPELLENT, WASTE RECEPTACLE
WS WEATHERSTRIP, (ING)
WWF WELDED WIRE FABRIC
W WEST, WIDE, WIDTH
WHB WHEEL BUMPER
W WIDE, WIDTH, WEST
WDW WINDOW
WS WINDOW SHADE
WGLWIRE GLASS
WM WIRE MESH
W/ WITH
W/O WITHOUT
WD WOOD
WB WOOD BASE
WP WORKING POINT, WATER PROOFING
WI WROUGHT IRON

X
XFMR TRANSFORMER

MATERIALS LEGEND

EARTH
FILL
CONCRETE / PRE-CAST CONCRETE
CONCRETE MASONRY UNITS
BRICK
SAND GRANULAR FILL / MORTAR
STEEL
SHEET METAL
FLUID APPLIED OR SHEET MEMBRANE MATERIAL
REINFORCING BARS
PLASTER/LATH
GYPSUM WALL BOARD
PLYWOOD
PLASTIC LAMINATE (ON PLYWOOD)
2 6 WOOD BLOCKING CONTINUOUS (NOM. DIM.)
WOOD SHIMS SPACED BLOCKING
BATT INSULATION
SEMI-RIGID BATT INSULATION
RIGID INSULATION
REINFORCING - WWF
FINISHED HARDWOOD
ACOUSTIC CEILING PANEL
CERAMIC / QUARRY TILE
RESIN BASED SOLID MATERIAL
CARPET
STONE, GRAVEL
SPRAY FOAM INSULATION
CEMENT - FIBER
STONE/GRANITE/MARBLE
GLASS

GENERAL NOTES

1. ABBREVIATIONS ON THIS SHEET APPLY TO ARCHITECTURAL DRAWINGS ONLY. THE LIST OF ABBREVIATIONS IS COMPREHENSIVE AND NOT RESTRICTED TO THOSE USED FOR THIS PROJECT – NOT ALL ABBREVIATIONS WILL BE FOUND WITHIN THE DRAWINGS.
2. LEGEND SYMBOLS ON THIS SHEET APPLY TO ARCHITECTURAL DRAWINGS ONLY. THE SYMBOLS LEGEND IS COMPREHENSIVE AND NOT RESTRICTED TO THOSE USED FOR THIS PROJECT – NOT ALL SYMBOLS WILL BE FOUND WITHIN THE DRAWINGS.
3. REPRESENTATION OF MATERIALS PATTERNS IN DRAWINGS AND DETAILS MAY BE AT A DIFFERENT APPARENT SCALE THAN THE THOSE SHOWN ON THE MATERIALS LEGEND ON THIS SHEET.
4. CONTRACTORS REQUIRING SLEEVES, BOX-OUTS, CORED HOLES, ETC. IN FLOORS AND WALLS TO FACILITATE THE INSTALLATION OF THEIR WORK SHALL FULLY COORDINATE THE LOCATION AND REQUIREMENTS WITH THE CM/GC AND ALL PERTINENT AND RELATED TRADES.
5. THE CONTRACTOR REQUIRING SLEEVES OR BOX-OUTS SHALL PROVIDE THOSE DEVICES TO THE APPROPRIATE TRADE FOR INSTALLATION.
6. THE CONTRACTORS FOR DIVISION 21, 22, 23, 26, 27. AND 28 WORK SHALL FULLY COORDINATE THE LOCATION AND INSTALLATION OF EQUIPMENT, PIPING, SUPPORTS, HOUSEKEEPING CURBS, DRAINS, DUCTWORK, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL BUILDING. THE DRAWINGS DO NOT DEPICT THE INSTALLATION OF SUCH ITEMS WITH EXACT LOCATION; THEREFORE THE CONTRACTORS SHALL PERFORM THIS COORDINATION, AND THE OWNER WILL NOT CONSIDER ANY ADDITIONAL COSTS RELATED TO THE FIELD CONFLICTS RESULTING FROM FAILURE OF THE CONTRACTORS TO COORDINATE THEIR WORK.
7. CONTRACTORS REQUIRING ACCESS DOORS AND CLEANOUTS IN THE FINISHED SPACES SHALL PROVIDE DEVICES AND COORDINATE THE LOCATION WITH ALL AFFECTED TRADES. ACCESS DOORS IN FINISHED CEILINGS AND WALLS SHALL BE DOCUMENTED IN DETAIL ON COORDINATION DRAWINGS AND SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO PLACEMENT.
8. ALL CONTRACTORS PROVIDING “BUILT-IN” ITEMS,(INCLUDING BUT NOT LIMITED TO EQUIPMENT, CASEWORK, MILLWORK, WINDOWS, STOREFRONT AND CURTAIN WALL ASSEMBLIES, DOORS, FIELD INSTALLED GLAZING) SHALL FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE THERMAL AND ACOUSTICAL REQUIREMENTS OF THE FLOOR AND ROOF CONSTRUCTION, WALLS AND PARTITIONS BY INSTALLING PROPER SEALS AND CLOSURES AT THE PERIMETER OF ALL OPENINGS.
10. LOCATION OF ALL FLOOR DRAINS AND TRENCH DRAINS MUST BE COORDINATED WITH EQUIPMENT LAYOUTS AND RELATED TRADES.
11. AT ALL EXPOSED CONCRETE WALLS PROVIDE 3/4" x 3/4" CHAMFER AT OUTSIDE CORNERS (HORIZONTAL AND VERTICAL), UNLESS NOTED OTHERWISE.
12. WALL VR/AIB SHALL BE CONTINUOUS AND SHALL BE SEALED AT ALL EDGES OF WALL AND PENETRATIONS. REFER TO SPECIFIC DETAILS FOR TERMINATIONS AT WINDOWS, DOORS, CURTAIN WALL, TOP AND BOTTOM OF WALL, ETC. REFER TO SPECIFICATIONS AND MANUFACTURER RECOMMENDATIONS FOR ITEMS NOT SPECIFICALLY DETAILED.
13. ALL CMU DIMENSIONS ARE TO THE FACE OF CMU. ALL METAL STUD PARTITIONS ARE TO THE FACE OF STUD UNLESS OTHERWISE NOTED

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Project No. 18-0786

BURLINGTON FIRE STA. NO. 2- TOILET RENO
JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

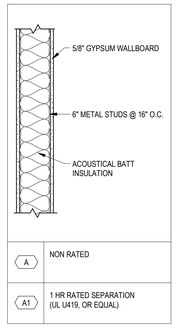
BID SET

REVISION:	Date:

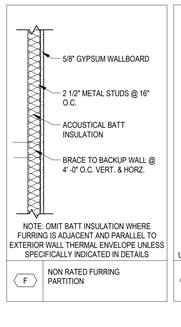
DATE: 2/21/2019
SCALE: As indicated

SHEET TITLE:
ABBREVIATIONS SYMBOLS MATERIALS & LEGEND

SHEET #:
AG0.01

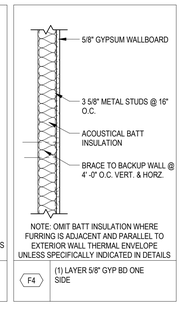


A	NON RATED
A1	1 HR RATED SEPARATION (UL U419, OR EQUAL)



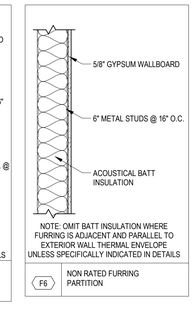
NOTE: OMIT BATT INSULATION WHERE FURRING IS ADJACENT AND PARALLEL TO EXTERIOR WALL THERMAL ENVELOPE UNLESS SPECIFICALLY INDICATED IN DETAILS

F	NON RATED FURRING PARTITION



NOTE: OMIT BATT INSULATION WHERE FURRING IS ADJACENT AND PARALLEL TO EXTERIOR WALL THERMAL ENVELOPE UNLESS SPECIFICALLY INDICATED IN DETAILS

F4	(1) LAYER 5/8" GYP BD ONE SIDE

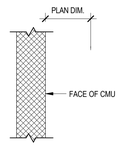


NOTE: OMIT BATT INSULATION WHERE FURRING IS ADJACENT AND PARALLEL TO EXTERIOR WALL THERMAL ENVELOPE UNLESS SPECIFICALLY INDICATED IN DETAILS

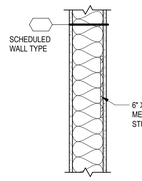
F6	NON RATED FURRING PARTITION

TYPICAL PARTITION GENERAL NOTES

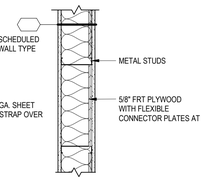
1. ALL PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF THE METAL ROOF DECK OR FLOOR DECK ABOVE, UNLESS SPECIFICALLY INDICATED AS OTHERWISE ON DRAWINGS. REFER TO PARTITION TERMINATION DETAILS THIS SHEET.
2. ACOUSTIC INSULATION SHALL BE PROVIDED IN ALL NON-FIRE RATED PARTITIONS AS INDICATED BY PARTITION TYPES. INSULATION SHALL EXTEND MINIMUM 6 INCHES ABOVE THE HIGHEST ADJACENT CEILING. INSULATION IN FIRE RATED PARTITIONS SHALL BE PROVIDED PER THE U.L. ASSEMBLY DETAILS INDICATED.
3. PROVIDE CONTROL JOINTS IN GYPSUM WALL BOARD PARTITIONS AT 30 FEET MAXIMUM SPACING, WHETHER OR NOT THE DRAWINGS DEPICT CONTROL JOINTS. LOCATE JOINTS AT TOP CORNERS OF DOOR AND BORROWED LIGHT FRAMES TO THE GREATEST EXTENT POSSIBLE.
4. WHERE GYP BD CONTROL JOINTS OCCUR AWAY FROM DOOR OR BORROWED LIGHT FRAMES, JOINTS SHALL EXTEND THE FULL HEIGHT OF THE FRAMED WALL, WHETHER OR NOT CONCEALED BY SURFACE INSTALLED EQUIPMENT OR APPLIED TREATMENTS, OR CEILINGS.
5. PROVIDE FIRE RATED CONTROL JOINTS MATCHING THE REQUIRED RATING OF THE WALL ASSEMBLY AT FIRE RATED WALLS. REFER TO CONTROL JOINT DETAILS AT SHEET AG0.02.
6. PROVIDE MASONRY CONTROL JOINTS AT MAXIMUM 24 FOOT SPACING, AND WHERE INDICATED ON DRAWINGS. PROVIDE BRICK CONTROL JOINTS WITHIN 24 INCHES OF EACH OUTWARD CORNER OF EXTERIOR WALLS. AT INWARD CORNERS, PROVIDE CONTROL JOINTS AT THE CHANGE IN SURFACE PLANE ON THE "LEAST VISIBLE" SIDE OF THE CORNER.
7. THE INTEGRITY OF GYP BD FIRE RATED PARTITIONS SHALL BE MAINTAINED WHEREVER RECESSED EQUIPMENT, DEVICES, SPECIALTIES, OR OTHER COMPONENTS OF MORE THAN 20 SQUARE INCHES IN FACE AREA OF RECESS OR PENETRATION OCCURS. WHERE SUCH RECESSED EQUIPMENT DOES NOT FEATURE A FIRE RATED CABINET OR ENCLOSURE MATCHING THE FIRE RATING OF THE WALL BEING PENETRATED, THE RECESS SHALL BE LINED WITH LAYER(S) OF GYPSUM WALL BOARD TO PROVIDE AN EQUIVALENT FIRE RATING, THROUGHOUT THE RECESS, OR FIRESTOPPED WITH AN APPROVED ASSEMBLY SUITABLE TO THE PENETRATION SIZE, PENETRATING ITEM, AND REQUIRED RATING. THE CONTRACTOR RESPONSIBLE FOR THE RECESSED EQUIPMENT SHALL COORDINATE THE RECESS REQUIREMENTS, DEPTH, AND DETAILING OF THE OPENING WITH THE CM/GC TO CONFIRM THAT ADEQUATE WALL DEPTH EXISTS. FIRESTOPPING MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR REQUIRING THE PENETRATION PER THE REQUIREMENTS OF SECTION 07 84 00. IF A RATED CABINET IS NOT PROVIDED THE COST OF LINING THE RECESS WITH GYPSUM WALL BOARD OR PROVISION OF FIRESTOPPING SHALL BE PAID BY THE CONTRACTOR RESPONSIBLE FOR THE RECESSED EQUIPMENT.
8. ALL FIRE RATED PARTITIONS SHALL EXTEND TO UNDERSIDE OF DECK ABOVE, WITH ALL GAPS AND DECK FLUTES AT TOPS OF WALLS FILLED WITH FIRE RESISTANT JOINT SEALANTS (FRJS).
   a. FRJS1 – PACKING MATERIAL: MINIMUM 4.0 PCF MINERAL WOOL INSULATION, IN THICKNESS 1 LESS THAN OVERALL WALL THICKNESS OR AS REQUIRED BY THE SELECTED U.L. ASSEMBLY SUITABLE TO THE WALL TYPE AND REQUIRED RATING (WHICHEVER IS GREATER). TIGHTLY PACK MINERAL WOOL INTO FLUTES OF STEEL DECKING AND GAP AT TOP OF WALL TO FILL GAPS COMPLETELY AND FORM A PERMANENT FORM TO SERVE AS BACKING FOR FRJS2.
   b. FRJS2: FIRESTOPPING SEALANT: MINIMUM 1/2" THICK MATERIAL INSTALLED ON EACH SIDE OF JOINT TO COVER FRJS1 COMPLETELY AND SPAN BUILDING JOINT, WITH SURFACE OF SEALANT FLUSH WITH URFACE OF WALL. WHERE EXPOSED TO VIEW FIRESTOPPING SEALANT SHALL BE PAINTABLE AND INSTALLATION SHALL BE SUITABLE FOR EXPOSURE TO VIEW IN FINISHED SPACES.
   c. SELECTION OF PROPRIETARY MATERIALS AND U.L. APPROVED ASSEMBLIES APPROPRIATE TO REQUIRED RATINGS AND CONSTRUCTION IS AT THE CONTRACTOR'S OPTION, HOWEVER **ALL FIRESTOPPING MATERIALS FOR THE PROJECT SHALL BE PROVIDED FROM THE SAME MANUFACTURER REGARDLESS OF WHICH TRADE OWNS THE FIRESTOPPING WORK**. THE CM/GC SHALL BE RESPONSIBLE FOR COORDINATING THIS REQUIREMENT WITH ALL TRADES.
9. ALL GAPS AT BUILDING JOINTS AND THROUGH PENETRATIONS AT WALLS THAT ARE INDICATED AS "SMOKE RATED" SHALL BE FILLED WITH FRJS #1 AND SEALED ON ONE SIDE WITH FRJS #2 AS DEFINED ABOVE, SUCH THAT GAPS ARE SEALED TO PREVENT THE PASSAGE OF SMOKE.
10. ALL GAPS AT BUILDING JOINTS AND THROUGH-PENETRATIONS OF NON-FIRE RATED WALLS SHALL BE SEALED TO REDUCE NOISE TRANSFER. AT CONTRACTOR'S OPTION, PROVIDE ACOUSTIC FOAM INSULATION PER SECTION 07 21 19, OR PACK CONTINUOUS MINERAL WOOL INSULATION TO FILL GAPS TO FULL THICKNESS OF WALL.



J12 TYPICAL DIMENSION DETAIL
1" = 1'-0"

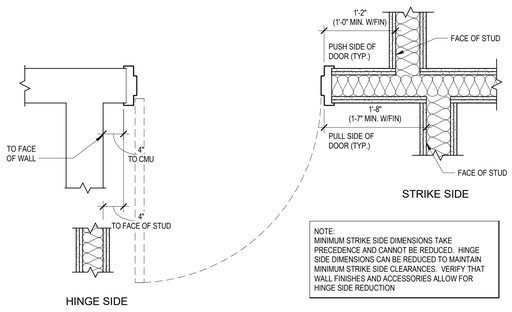


NOTE:
PROVIDE TYPE 1 BLOCKING FOR MARKER BOARDS, TACK BOARDS, WALL MOUNTED ACOUSTICAL/REFLECTOR PANELS, ETC



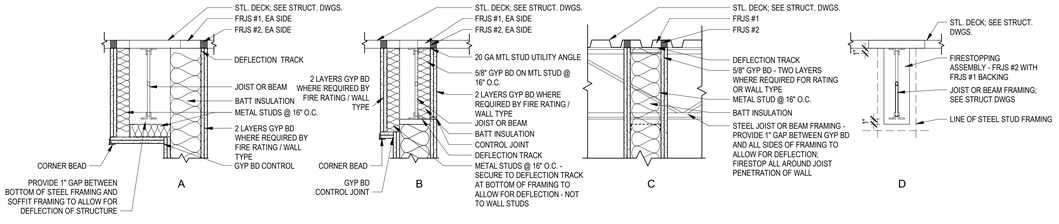
NOTE:
PROVIDE TYPE 2 BLOCKING FOR TOILET ACCESSORIES, WALL-MOUNTED TV MONITOR BRACKETS, RAILING BRACKETS, DOOR STOPS, WALL SHELVING, CASEWORK, WALL MOUNTED PROJECTORS, ETC.

J9 TYPICAL BLOCKING DETAIL
1" = 1'-0"

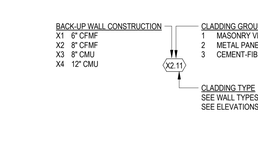


NOTE:
MINIMUM STRIKE SIDE DIMENSIONS TAKE PRECEDENCE AND CANNOT BE REDUCED. HINGE SIDE DIMENSIONS CAN BE REDUCED TO MAINTAIN MINIMUM STRIKE SIDE CLEARANCES. VERIFY THAT WALL FINISHES AND ACCESSORIES ALLOW FOR HINGE SIDE REDUCTION

D9 TYPICAL DOOR OFFSETS (U.N.O)
1" = 1'-0"



A15 TYPICAL TOP OF STUD PARTITION DETAILS @ STRUCTURE
1" = 1'-0"



GYPSUM WALL BOARD SCHEDULE

1. WHERE METAL STUD AND GYPSUM WALL BOARD PARTITIONS ARE INDICATED ON THE DRAWINGS USE THE FOLLOWING TABLE IN CONJUNCTION WITH THE ROOM FINISH SCHEDULE TO DETERMINE THE TYPE OF GYPSUM WALL BOARD REQUIRED

GYP BD1	ABUSE RESISTANCE/ ENHANCED CORE	USE ON ALL INTERIOR WALLS OR WHERE NOTED (TO 10'-0" A.F.F.)
GYP BD2	NON REINFORCED	USE ON ALL INTERIOR WALLS FROM 10'-0" A.F.F. TO BOTTOM OF DECK UNLESS NOTED OTHERWISE, AND AT SOFFITS
GYP BD3	WATER-RESISTANT	USE IN ALL TOILET ROOMS, LOCKER ROOMS, KITCHENS AND OTHER AREAS WHICH ARE SUBJECT TO MODERATE AMOUNTS OF MOISTURE*
GYP BD4	FLEXIBLE	USE IN AREAS THAT REQUIRE CURVED WALLS OR SOFFITS, ETC.
GYP BD5	EXTERIOR GYPSUM SHEATHING	USE ON ALL EXTERIOR WALLS WITH METAL STUD BACK-UP
GYP BD6	CEILING BOARD	HARD CEILINGS (EXCEPT IN AREAS THAT WOULD OTHERWISE REQUIRE GYP BD3 OR GYP BD8 DUE TO MOISTURE*)
GYP BD7	EXTERIOR CEILING BOARD	EXTERIOR GYPSUM BOARD SOFFITS
GYP BD8	UNFACED MOISTURE RESISTANT BOARD	SHOWER AREAS AND OTHER HIGH MOISTURE AREAS*
GYP BD9	CEMENTITIOUS TILE BACKER BOARD	ALL LOCATIONS BEHIND WALL TILE (WET OR DRY)

*MODERATE AND HIGH MOISTURE AREAS SHALL BE AS DEFINED BY THE GYP BD MANUFACTURER FOR EACH TYPE OF BOARD. COORDINATE WITH MANUFACTURERS RECOMMENDED USES AND/OR MOISTURE LIMITATIONS.

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Project No.
18-0786

BURLINGTON FIRE STA. NO. 2- TOILET RENO

JOHN D. BOARDMAN FIRE STATION #2
129 NORTH AVENUE
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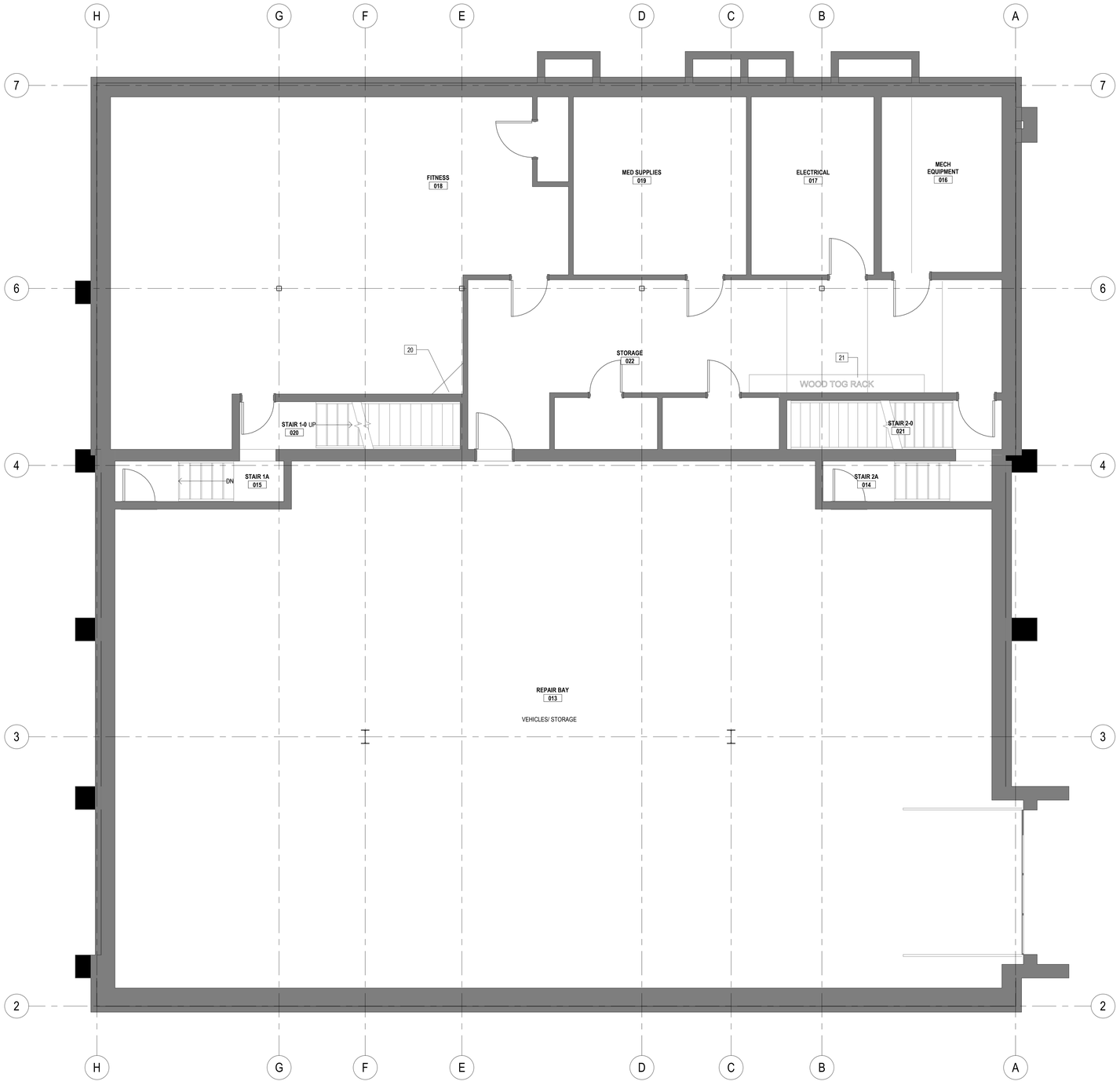
DRAFT BID SET

REVISION:	Date:

DATE: 2/21/2019
SCALE: As indicated

SHEET TITLE:
WALL TYPES, NOTES & DETAILS

SHEET #:
AG0.02



A21 BASEMENT DEMOLITION
1/4" = 1'-0"

DEMOLITION NOTES

1. DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE DEMOLITION INTENT REQUIRED TO SATISFY THE COMPLETED SCOPE OF WORK FOR THE PROJECT. THESE DRAWINGS MAY NOT SHOW ALL AREAS, ELEMENTS, SIZES OR QUANTITIES OF EQUIPMENT TO BE REMOVED. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND PROJECT DRAWINGS PRIOR TO THE START OF DEMOLITION OR REMOVALS FOR COORDINATION WITH THE INTENT OF THE COMPETED WORK. ADDITIONAL REMOVALS AND / OR REPLACEMENT IN KIND OF ELEMENTS OR EQUIPMENT MAY BE REQUIRED TO ACCOMMODATE THE COMPLETED PROJECT AND ALL SUCH WORK SHALL BE INCLUDED AS PART OF THE CONTRACT.
2. THROUGHOUT THE PROJECT, COORDINATE WITH, AND ALLOW FOR OWNER REMOVAL OF LOOSE FURNITURE, EQUIPMENT, AND OTHER SALVAGE ITEMS PRIOR TO THE START OF ABATEMENT OR DEMOLITION.
3. IN AREAS INDICATING DEMOLITION OF PARTITIONS REMOVE EQUIPMENT AND FIXTURES INCLUDING BUT NOT LIMITED TO FLOOR AND WALL STOPS, FIRE EXTINGUISHERS AND CABINETS, WALL HOOKS, DISPLAY CASES, MARKER/TACK/CHALK BOARDS AND OTHER WALL MOUNTED AND RECESSED SPECIALITIES AND SUPPORT BRACKETS.
4. REMOVE CEILINGS AND RELATED COMPONENTS, WHERE NOTED. NOTE THAT CEILINGS ARE GENERALLY NOT SHOWN ON DEMOLITION DRAWINGS, UNLESS REQUIRED FOR PARTIAL DEMOLITION.
5. AT AREAS NOTED FOR REMOVAL OF FLOOR FINISH, REMOVE FLOOR COVERINGS AND ADHESIVES, TOPPINGS, MATS, FRAMES AT RECESSED PORTIONS OF EXISTING SLABS, TO FACE OF UNDERLYING SLAB.
6. EXISTING BUILDING OR SITE ELEMENTS NOT SCHEDULED FOR WORK WHICH ARE DAMAGED SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITIONS WITH MATERIALS AND METHODS APPROVED BY THE ARCHITECT. THE COST OF SUCH REPLACEMENT OR RESTORATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. REFER TO MEP DRAWINGS FOR MECHANICAL, PLUMBING AND ELECTRICAL DEMOLITION.

DEMOLITION KEYNOTES	
Key Value	Keynote Text
20	PROTECT IN PLACE, OR REMOVE, STORE, PROTECT AND REINSTALL EXISTING EQUIPMENT, WALL MOUNTED TELEVISIONS, AND OTHER EQUIPMENT AS NECESSARY TO FACILITATE COMPLETION OF OVERHEAD PLUMBING AND SLAB PATCHING WORK.
21	PROTECT IN PLACE, OR REMOVE, STORE, PROTECT AND REINSTALL EXISTING WOOD TURN-OUT GEAR STORAGE RACK AS NECESSARY TO FACILITATE COMPLETION OF OVERHEAD PLUMBING AND SLAB PATCHING WORK

GENERAL PATCHING AND REPAIRING NOTES

1. PATCHING: AFTER REMOVAL OF BUILDING COMPONENTS AS INDICATED, PATCH AND PREPARE THE REMAINING EXISTING EXPOSED SURFACES TO RECEIVE NEW WORK AND FINISH.
2. WHERE NEW CONSTRUCTION EITHER INFILLS OR ABUTS EXISTING CONSTRUCTION, THE FINISHED FACES SHALL ALIGN, AND THE SURFACES SHALL BE FINISHED TO MATCH.
3. AFTER REMOVAL OF BUILDING COMPONENTS, ANY RESULTING HOLES SHALL BE PATCHED. MAINTAIN EXISTING FIRE- OR SMOKE-RATINGS AS INDICATED. SUCH PATCHES SHALL BE FLUSH WITH ADJACENT SURFACES AND FINISHED TO MATCH.
4. THE CONTRACTOR MAY REPLACE SALVAGED ITEMS WITH NEW AND IDENTICAL MATERIALS ONLY WITH THE ARCHITECT'S PRIOR APPROVAL.

TRUE NORTH
N
PROJECT NORTH

0 2' 4' 8'
SCALE: 1/4"=1'-0" GRAPHIC SCALE

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BID SET

REVISION:	Date:

DATE: 2/21/2019
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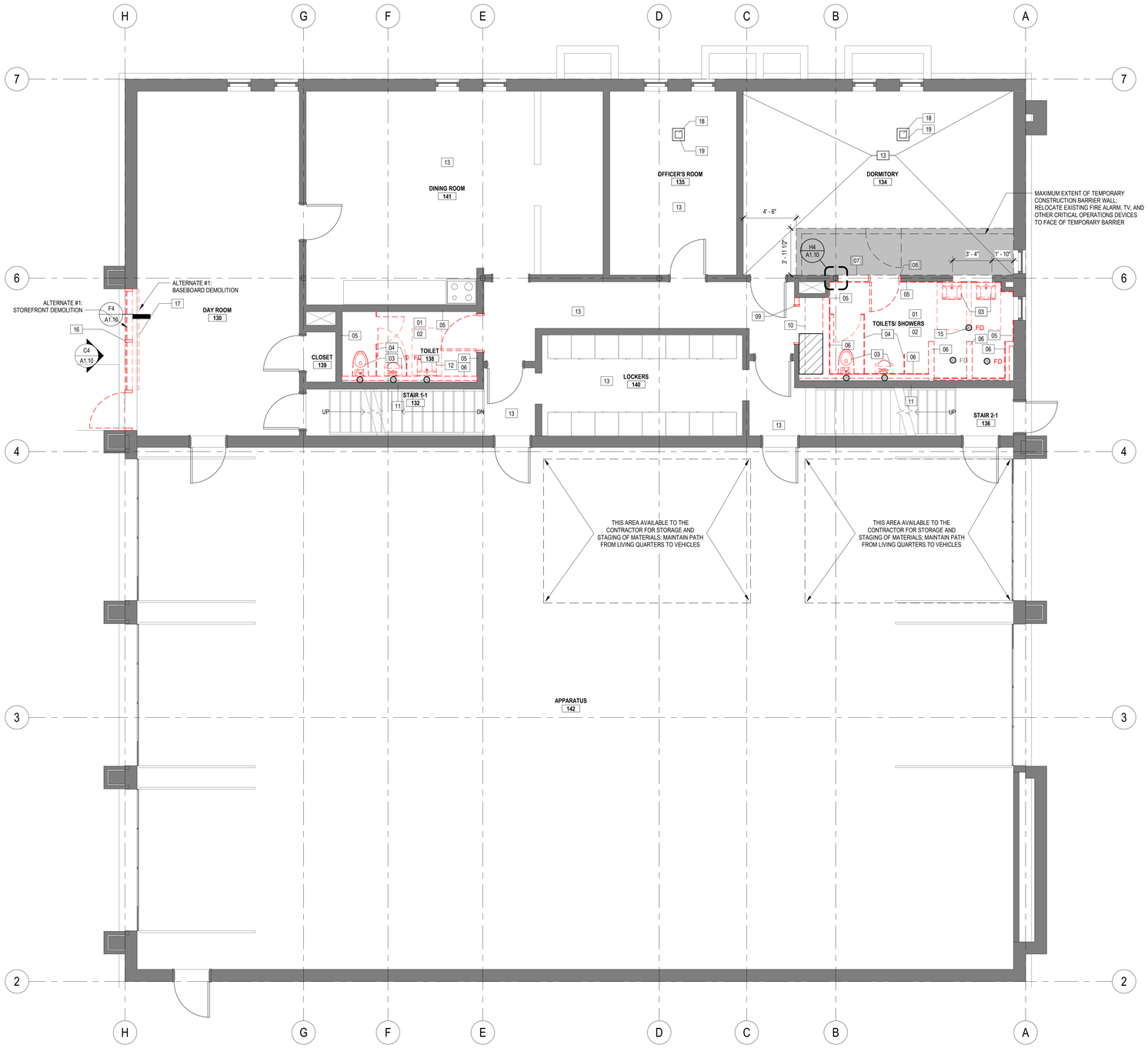
SHEET TITLE:
DEMOLITION FLOOR PLAN- BASEMENT

SHEET #:
AD1.00



A21 LEVEL 1 DEMOLITION
1/4" = 1'-0"

DEMOLITION NOTES

1. DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE DEMOLITION INTENT REQUIRED TO SATISFY THE COMPLETED SCOPE OF WORK FOR THE PROJECT. THESE DRAWINGS MAY NOT SHOW ALL AREAS, ELEMENTS, SIZES OR QUANTITIES OF EQUIPMENT TO BE REMOVED. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND PROJECT DRAWINGS PRIOR TO THE START OF DEMOLITION OR REMOVALS FOR COORDINATION WITH THE INTENT OF THE COMPETED WORK. ADDITIONAL REMOVALS AND / OR REPLACEMENT IN KIND OF ELEMENTS OR EQUIPMENT MAY BE REQUIRED TO ACCOMMODATE THE COMPLETED PROJECT AND ALL SUCH WORK SHALL BE INCLUDED AS PART OF THE CONTRACT.
2. THROUGHOUT THE PROJECT, COORDINATE WITH, AND ALLOW FOR OWNER REMOVAL OF LOOSE FURNITURE, EQUIPMENT, AND OTHER SALVAGE ITEMS PRIOR TO THE START OF ABATEMENT OR DEMOLITION.
3. IN AREAS INDICATING DEMOLITION OF PARTITIONS REMOVE EQUIPMENT AND FIXTURES INCLUDING BUT NOT LIMITED TO FLOOR AND WALL STOPS, FIRE EXTINGUISHERS AND CABINETS, WALL HOOKS, DISPLAY CASES, MARKER/TACK/CHALK BOARDS AND OTHER WALL MOUNTED AND RECESSED SPECIALITIES AND SUPPORT BRACKETS.
4. REMOVE CEILINGS AND RELATED COMPONENTS, WHERE NOTED. NOTE THAT CEILINGS ARE GENERALLY NOT SHOWN ON DEMOLITION DRAWINGS, UNLESS REQUIRED FOR PARTIAL DEMOLITION.
5. AT AREAS NOTED FOR REMOVAL OF FLOOR FINISH, REMOVE FLOOR COVERINGS AND ADHESIVES, TOPPINGS, MATS, FRAMES AT RECESSED PORTIONS OF EXISTING SLABS, TO FACE OF UNDERLYING SLAB.
6. EXISTING BUILDING OR SITE ELEMENTS NOT SCHEDULED FOR WORK WHICH ARE DAMAGED SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITIONS WITH MATERIALS AND METHODS APPROVED BY THE ARCHITECT. THE COST OF SUCH REPLACEMENT OR RESTORATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. REFER TO MEP DRAWINGS FOR MECHANICAL, PLUMBING AND ELECTRICAL DEMOLITION.

GENERAL PATCHING AND REPAIRING NOTES

1. PATCHING: AFTER REMOVAL OF BUILDING COMPONENTS AS INDICATED, PATCH AND PREPARE THE REMAINING EXISTING EXPOSED SURFACES TO RECEIVE NEW WORK AND FINISH.
2. WHERE NEW CONSTRUCTION EITHER INFILLS OR ABUTS EXISTING CONSTRUCTION, THE FINISHED FACES SHALL ALIGN, AND THE SURFACES SHALL BE FINISHED TO MATCH.
3. AFTER REMOVAL OF BUILDING COMPONENTS, ANY RESULTING HOLES SHALL BE PATCHED. MAINTAIN EXISTING FIRE- OR SMOKE-RATINGS AS INDICATED. SUCH PATCHES SHALL BE FLUSH WITH ADJACENT SURFACES AND FINISHED TO MATCH.
4. THE CONTRACTOR MAY REPLACE SALVAGED ITEMS WITH NEW AND IDENTICAL MATERIALS ONLY WITH THE ARCHITECT'S PRIOR APPROVAL.

DEMOLITION KEYNOTES	
Key Value	Keynote Text
01	REMOVE EXISTING FLOOR TILE AND ANY UNDERLYING WATERPROOFING MEMBANES OR OTHER UNDERLAYMENTS TO FACE OF CONCRETE SLAB. LEAVE SURFACE OF SLAB SUITABLE TO RECEIVE PROPOSED FLOORING SYSTEMS.
02	REMOVE EXISTING ACOUSTIC PANEL CEILING THROUGHOUT SPACE.
03	REMOVE EXISTING PLUMBING FIXTURES AND RELATED PIPING. REFER TO PLUMBING DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION.
04	REMOVE EXISTING TOILET PARTITION SYSTEMS COMPLETELY.
05	AT WALLS WITHIN SPACE INDICATED TO REMAIN, REMOVE WALL TILE AND INTERIOR GYPSUM BOARD FINISH COMPLETELY TO FACE OF STUDS.
06	REMOVE EXISTING WALL FINISH AND FRAMING COMPLETELY.
07	REMOVE PORTION OF EXISTING WALL TO ACCOMODATE NEW DOOR OPENING. LEAVE EDGES OF OPENING SUITABLE TO RECEIVE NEW DOOR FRAME.
08	REMOVE DOOR AND FRAME COMPLETELY.
09	REMOVE EXISTING HOLLOW METAL FRAME COMPLETELY. LEAVE EDGES OF OPENING SUITABLE TO RECEIVE PROPOSED WORK.
10	REMOVE EXISTING SHELVING INCLUDING WALL CLEATS AT CLOSET COMPLETELY.
11	DURING DEMOLITION, MAINTAIN ANY EXISTING FIRE SEPARATION RATING OF STAIR. DAMAGE TO EXISTING CONCEALED GYPSUM BOARD AT DEMOLITION SIDE OF WALL SHALL BE REPAIRED AND RESTORED TO LIKE NEW CONDITION AND SHALL BE ACCEPTABLE TO THE AHJ.
12	REMOVE EXISTING PLUMBING FIXTURE. ROUGH-INS TO BE PROTECTED AND MAINTAINED FOR USE IN THE PROPOSED CONFIGURATION.
13	ALL FINISHES, LIGHTING, DEVICES, AND EQUIPMENT THIS AREA TO REMAIN. REMOVE CEILINGS ONLY AS NECESSARY TO FACILITATE ROUTING OF NEW UTILITIES. ALL MATERIALS REMOVED SHALL BE REINSTALLED, WITH DAMAGED, CHIPPED, OR SOILED CEILING PANELS REPLACED WITH NEW.
15	EXISTING FLOOR DRAIN TO BE REMOVED; SLAB TO BE PATCHED. REFER TO SLAB INFILL DETAIL.
16	COMPLETELY REMOVE STOREFRONT FRAMING SYSTEM; LEAVE OPENING SUITABLE TO RECEIVE NEW STOREFRONT FRAMING SYSTEM.
17	REMOVE EXISTING FIN-TUBE HEATING AND COVER AS REQUIRED TO REMOVE STOREFRONT FRAMING - REFER TO HVAC DRAWINGS.
18	REMOVE EXISTING VCT AT GRILLE TO NEAREST TILE JOINT; PREPARE FLOOR FOR PATCHING/INFILL WITH NEW VCT.
19	EXISTING FLOOR GRILLE TO BE REMOVED - SEE HVAC DRAWINGS. PREPARE OPENING TO RECEIVE SLAB INFILL PER DETAIL.

PROJECT NORTH

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

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Project No.
18-0786

BURLINGTON FIRE STA. NO. 2- TOILET RENO

JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

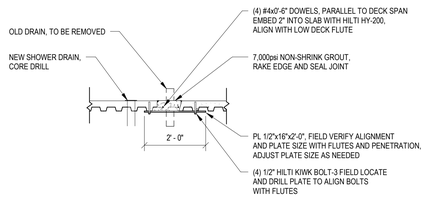
BID SET

REVISION:	Date:

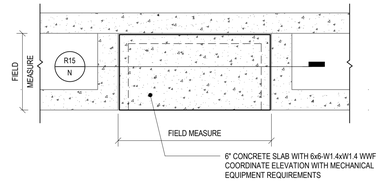
DATE: 2/21/2019
SCALE: As indicated

SHEET TITLE:
DEMOLITION FLOOR PLAN- FIRST FLOOR

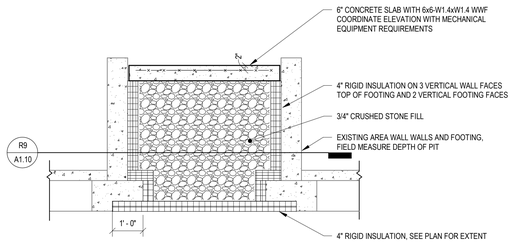
SHEET #:
AD1.10



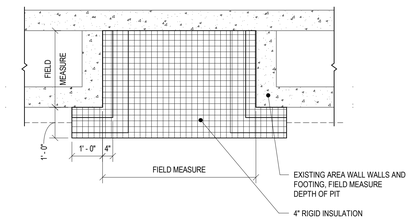
R24 SLAB AT SHOWER
1/2" = 1'-0"



R19 EXTERIOR PAD - TOP
1/2" = 1'-0"



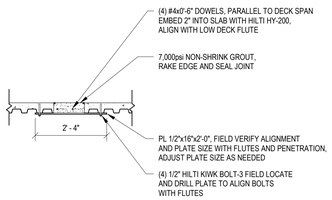
R15 EXTERIOR PAD - SECTION
1/2" = 1'-0"



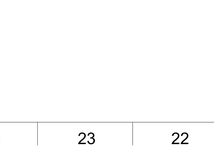
R9 EXTERIOR PAD - BASE
1/2" = 1'-0"

PLAN GENERAL NOTES

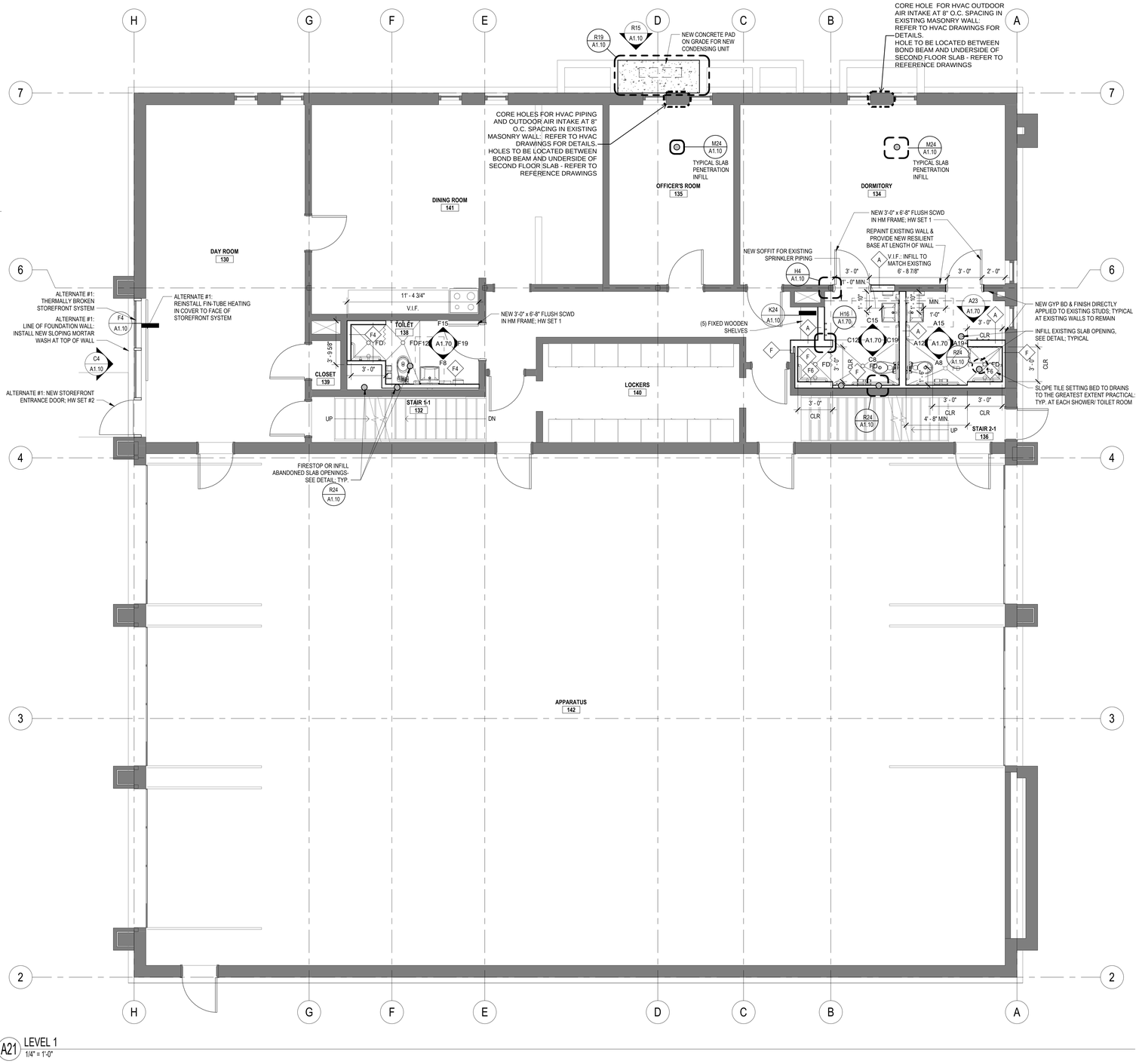
1. ALL INTERIOR CMU PARTITIONS ARE TYPE "E", UNLESS NOTED OTHERWISE. ALL INTERIOR STUD PARTITIONS ARE TYPE "A", UNLESS NOTED OTHERWISE.
2. WHERE DOORS, WINDOWS, BORROWED LITES, GRILLES, OR OPENINGS OCCUR IT SHALL BE ASSUMED THAT THE WALL CONSTRUCTION IS THE SAME ABOVE AS ADJACENT, UNLESS NOTED OTHERWISE.
3. WHERE COLUMN LINES ARE SHOWN INSIDE WALLS AND PARALLEL TO THE WALL, IT SHALL BE ASSUMED THAT THE WALL IS CENTERED ON THE COLUMN LINE UNLESS DIMENSIONED OTHERWISE.
4. WHERE ENLARGED PLANS ARE INDICATED, REFER TO ENLARGED PLAN SHEET FOR DIMENSIONS, WALL TYPES, AND DETAIL REFERENCES.
5. REFER TO HORIZONTAL CONTROL PLANS AND STRUCTURAL DRAWINGS FOR SLAB INFORMATION (INCLUDING DEPRESSIONS, EDGE DIMENSIONS, AND SHAFT OPENINGS).
6. TO THE GREATEST EXTENT PRACTICAL, EXISTING SLAB PENETRATIONS SHALL BE USED FOR THE ROUTING OF NEW DOMESTIC WATER SUPPLY PIPING. ALL NEW AND EXISTING PENETRATIONS AT SLAB SHALL BE SEALED WITH FIRESTOPPING SEALANT.
7. ALL EXISTING SLAB PENETRATIONS AT ABANDONED PIPING LOCATIONS EXPOSED TO FOOT TRAFFIC AND NOT CONCEALED WITHIN WALL CAVITIES SHALL BE INFILLED WITH CONCRETE FILL AS INDICATED IN DETAILS.
8. ALL EXISTING SLAB PENETATIONS AT ABANDONED PIPING LOCATIONS WITHIN CONCEALED LOCATIONS NOT EXPOSED TO FOOT TRAFFIC SHALL BE SEALED WITH FIRESTOPPING ASSEMBLIES SUITABLE FOR THE APPLICATION, OR INFILLED WITH CONCRETE FILL AS INDICATED IN DETAILS.



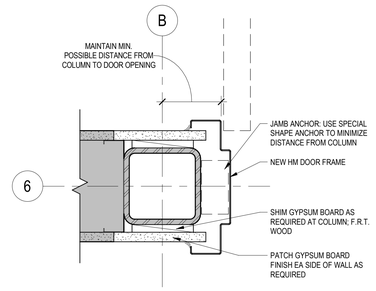
M24 SLAB AT AIR DUCT INFILL
1/2" = 1'-0"



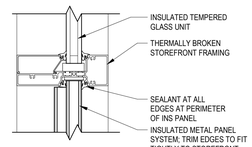
K24 DETAIL- FIXED WOODEN SHELF
1 1/2" = 1'-0"



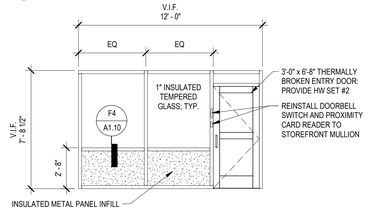
A21 LEVEL 1
1/4" = 1'-0"



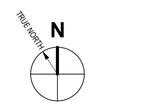
H4 HM DOOR FRAME AT EXISTING COLUMN
3" = 1'-0"



F4 DETAIL - STOREFRONT MULLION
3" = 1'-0"



C4 ELEVATION - INSULATED STOREFRONT - ALT 1
1/4" = 1'-0"



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

ENGINEERING VENTURES PC

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Project No.
18-0786

BURLINGTON FIRE STA. NO. 2- TOILET RENO

JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

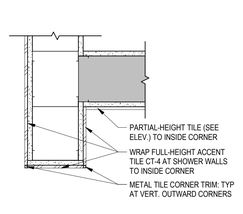
BID SET

REVISION:	Date:

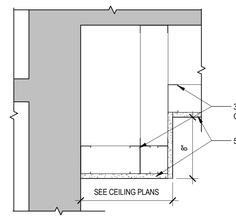
DATE: 2/21/2019
SCALE: As indicated

SHEET TITLE:
LEVEL 1
OVERALL PLAN

SHEET #:
A1.10



H16 DETAIL- SHOWER WALL AT ROOM 131
1 1/2" = 1'-0"



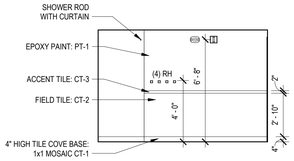
H13 SECTION DETAIL - SOFFIT
1 1/2" = 1'-0"

H11 TYPICAL MARBLE THRESHOLD @ TILE
6" = 1'-0"

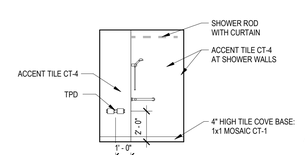
ENLARGED TOILET ROOM GENERAL NOTES

1. ALL EXTERIOR WALLS SHALL BE TYPE "X1" UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL INTERIOR STUD-FRAMED PARTITIONS SHALL BE TYPE "A" UNLESS SPECIFICALLY NOTED OTHERWISE.
3. ALL INTERIOR CONCRETE MASONRY PARTITIONS SHALL BE TYPE "E" UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO MATERIALS LEGEND AT AG0.01 FOR CONCRETE MASONRY HATCH PATTERN.
4. ALL DIMENSIONS LOCATING PARTITION WALLS ARE PROVIDED TO FACE OF STUD OR FACE OF MASONRY.
5. REFER TO AG0.01 FOR TYPICAL DOOR OFFSET FROM ADJACENT WALLS. DOORS SHALL BE LOCATED ACCORDINGLY IF NO SPECIFIC DIMENSIONS ARE PROVIDED.
6. ALL DIMENSIONS LOCATING TOILET AND SHOWER PARTITIONS ARE INDICATED BASED ON THE FOLLOWING CRITERIA:
   a. FROM FACE OF WALL FINISH TO CENTERLINE OF FIXED PARTITION PANEL, UNLESS SPECIFICALLY NOTED AS "CLR".
   b. FROM FACE OF DOOR OR PARTITION PILASTER AT FRONT OF PARTITIONS TO FACE OF WALL FINISH AT OPPOSITE WALL.
   c. FROM CENTERLINE OF FIXED PARTITION PANEL TO CENTERLINE OF FIXED PARTITION PANEL.
   d. FOR PARTITION DOOR OPENINGS, FROM EDGE OF PILASTER TO EDGE OF PILASTER.
   e. "CLR" DIMENSIONS WHERE NOTED INDICATE CLEAR DIMENSION TO FACE OF WALL FINISH, OR TOILET PARTITION PANEL, DOOR, OR PILASTER.
7. ALL DIMENSIONS LOCATING TOILET ACCESSORIES ARE PROVIDED FROM FACE OF WALL FINISH TO CENTER OF ACCESSORY OR FASTENER, IN THE CASE OF GRAB BARS. Add, "UNLESS SPECIFICALLY NOTED OTHERWISE".
8. ALL DIMENSIONS LOCATING TOILET ACCESSORIES ARE PROVIDED FROM FACE OF WALL FINISH TO CENTER OF ACCESSORY OR FASTENER, IN THE CASE OF GRAB BARS.
9. REFER TO FIXTURE & ACCESSORY MOUNTING HEIGHT LEGEND AT SHEET AG0.01 FOR TOILET ACCESSORY AND FIXTURE MOUNTING HEIGHTS.
10. REFER TO FIXTURE & ACCESSORY MOUNTING HEIGHT LEGEND AT SHEET A1.70 AND PLUMBING DRAWINGS AND/OR SPECIFICATIONS FOR PLUMBING FIXTURE MOUNTING HEIGHTS.
11. WHERE OWNER-PROVIDED TOILET ACCESSORIES ARE INDICATED FOR INSTALLATION UNDER THE CONSTRUCTION CONTRACT, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO CONFIRM ACCESSORY SIZES, AND INSTALL ALL SUCH ACCESSORIES IN ACCORDANCE WITH MASSACHUSETTS A.A.B. (521 CMR) AND A.D.A. 2010 (36 CFR 1191) REQUIREMENTS, REGARDLESS OF THE LOCATIONS SHOWN IN THE DRAWINGS.
12. WHERE OWNER PROVIDED TOILET ACCESSORIES ARE INDICATED FOR INSTALLATION UNDER THE CONSTRUCTION CONTRACT, THE EXTENT OF TYPE 1 BLOCKING WITHIN THE WALL INDICATED IS APPROXIMATE, AND THE CONTRACTOR SHALL COORDINATE THE ACTUAL REQUIREMENTS WITH THE OWNER AND THE ACTUAL ACCESSORY SIZES. BLOCKING SHALL BE PROVIDED BASED ON THESE REQUIREMENTS AND TO FACILITATE PROPER INSTALLATION OF ACCESSORIES AT NO ADDITIONAL COST TO THE OWNER.
13. WHERE BABY CHANGING TABLES (BT) ARE INDICATED, PROVIDE TYPE 2 BLOCKING WITHIN WALLS. COORDINATE MOUNTING HEIGHT AND EXTENT OF BLOCKING WITH ACCESSORY MOUNTING INFORMATION.
14. REFER TO SHEET A9.01 FOR INDEX OF INTERIOR FINISHES INDICATED ON THIS DRAWING.
15. PROVIDE GYP BD3 AT WALL SURFACES INDICATED TO RECEIVE PAINT OR EPOXY PAINT FINISHES IN ALL LOCKER, SHOWER, KITCHEN, AND OTHER SPACES SUBJECT TO HIGH HUMIDITY.
16. PROVIDE GYP BD8 AT ALL WALL SURFACES INDICATED TO RECEIVE TILE FINISH.
17. REFER TO HORIZONTAL CONTROL PLANS FOR FLOOR DRAIN LOCATIONS.
18. FLOORS SHOWN SLOPING TO DRAIN AT GANG TOILET ROOMS SHALL INCLUDE A 3 INCH SLAB DEPRESSION WITH PEASTONE CONCRETE FILL SLOPED TO DRAIN AS DESCRIBED IN SECTION 03 54 00. REFER TO HORIZONTAL CONTROL PLANS FOR SLAB DEPRESSIONS.
19. WHERE PLANS INDICATE FLOORS SLOPING TO FLOOR DRAINS, THE MAXIMUM SLOPE OR CROSS SLOPE IN ANY DIRECTION SHALL BE 1:50. THE FLOOR FINISH LEVEL AT THE PERIMETER OF THE SLOPED AREA SHALL REMAIN CONSTANT AT THE MAIN FLOOR LEVEL DATUM.
20. PROVIDE WATERPROOF MEMBRANE THROUGHOUT ALL TOILET ROOMS AT ELEVATED SLAB ON DECK. TURN MEMBRANE UP WALLS A MINIMUM OF 4 INCHES.
21. THE CONTRACTOR SHALL PROVIDE FRAMED OR MASONRY OPENINGS IN WALLS FOR RECESSED ACCESSORIES. OPENING DIMENSIONS SHALL BE COORDINATED WITH THE SUBMITTED AND REVIEWED TOILET ACCESSORY DIMENSIONS AND INSTALLATION REQUIREMENTS. PROVIDE LINTELS AT MASONRY OPENINGS AS SCHEDULED BY STRUCTURAL DRAWINGS.
22. PROVIDE TYPE 2 BLOCKING WITHIN FRAMED WALLS AS REQUIRED BY THE SUBMITTED AND REVIEWED TOILET AND SHOWER PARTITION SYSTEM MANUFACTURER'S INSTALLATION REQUIREMENTS.
23. PROVIDE THE FOLLOWING TILE TRIM ACCESSORY ITEMS, WHETHER OR NOT INDICATED ON DRAWINGS: TRIM ACCESSORY TILE WITH FINISHED ROUNDED EDGES.
   a. DEMI-BULLNOSE ROUNDED TRIM AT ALL OPEN EDGES OF TILE FIELDS.
   b. COVE BASE TRIM AT TILE WALL TRANSITION TO FLOOR TILE.
24. PROVIDE WALL BOARD TYPES AS SCHEDULED FOR WALL FINISH MATERIALS INDICATED AT DRY AND WET AREAS.
25. ELECTRICAL OUTLETS AND DEVICES ARE SHOWN FOR COORDINATION PURPOSES. REFER TO ELECTRICAL DRAWINGS FOR MOUNTING HEIGHTS AND INSTALLATION REQUIREMENTS. ELECTRICAL DRAWINGS LOCATED DEVICES GENERICALLY – WHEN DIMENSIONS ARE PROVIDED HEREIN, INSTALL DEVICES TO DIMENSIONS SHOWN.

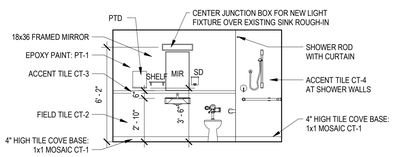
F19 ELEVATION TOILET/ SHOWER 138 EAST
1/4" = 1'-0"



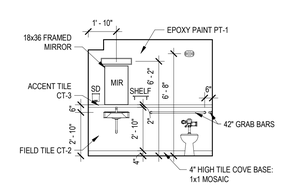
F15 ELEVATION TOILET/ SHOWER 138 NORTH
1/4" = 1'-0"



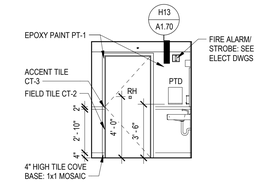
F12 ELEVATION TOILET/ SHOWER 138 WEST
1/4" = 1'-0"



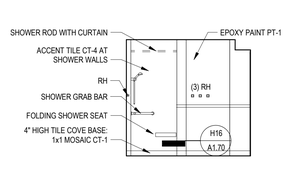
F8 ELEVATION TOILET/ SHOWER 138 SOUTH
1/4" = 1'-0"



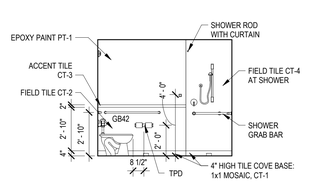
C19 ELEVATION TOILET/ SHOWER 131 EAST
1/4" = 1'-0"



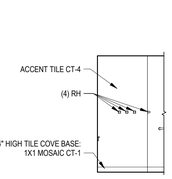
C15 ELEVATION TOILET/ SHOWER 131 NORTH
1/4" = 1'-0"



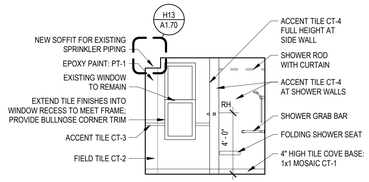
C12 ELEVATION TOILET/ SHOWER 131 WEST
1/4" = 1'-0"



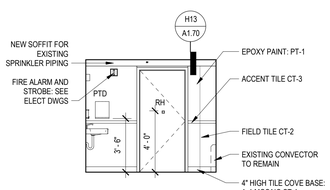
C8 ELEVATION TOILET/ SHOWER 131 SOUTH
1/4" = 1'-0"



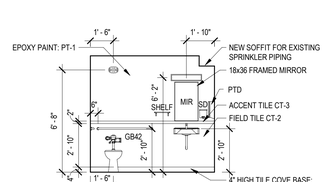
A23 ELEVATION TOILET/ SHOWER 133 PARTIAL SOUTH
1/4" = 1'-0"



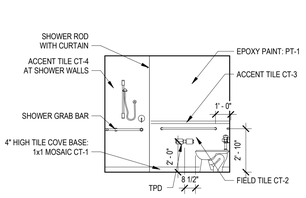
A19 ELEVATION TOILET/ SHOWER 133 EAST
1/4" = 1'-0"



A15 ELEVATION TOILET/ SHOWER 133 NORTH
1/4" = 1'-0"



A12 ELEVATION TOILET/ SHOWER 133 WEST
1/4" = 1'-0"



A8 ELEVATION TOILET/ SHOWER 133 SOUTH
1/4" = 1'-0"

FINISH SCHEDULE GENERAL NOTES

1. FOR LIST OF MATERIAL ABBREVIATIONS REFER TO SHEET AG0.01.
2. TILE INSTALLATION DETAILS ON THIS SHEET ARE TYPICAL FOR THE PROJECT. PROVIDE TILE CONTROL JOINTS AND MOVEMENT JOINTS AS REQUIRED PER THE PROJECT SPECIFICATIONS AND BASED ON LOCATIONS OF FLOOR SLAB JOINTS AS DETERMINED IN THE FIELD.
3. SEE CONSTRUCTION FLOOR PLANS FOR FLOORS SLOPING TO DRAINS AND LOCATIONS OF FLOOR DRAINS. INSTALL FLOOR FINISHES AS APPROPRIATE TO SLOPING CONDITIONS AND DRAINS. DO NOT INSTALL CERAMIC TILE, OR OTHER HARD SURFACE FLOORING ACROSS CHANGES IN FLOOR PLANE. INSTALL PER SPECIFICATIONS AND INCORPORATE MFR. RECOMMENDED DETAILS.
4. LOCATE ALL CHANGES IN FLOORING MATERIAL OR COLOR AT OPENINGS WITH DOORS UNDER THE CENTER OF DOOR WHEN IN THE CLOSED POSITION UNLESS SPECIFICALLY NOTED OTHERWISE. LOCATE CHANGES IN FLOORING MATERIAL OR COLOR AT OPENINGS WITH NO DOORS AND UNFRAMED OPENINGS IN WALLS AT THE MID-POINT OF JAMB DEPTH UNLESS SPECIFICALLY INDICATED OTHERWISE IN PLANS OR DETAILS.
5. WHERE DOORS AND/OR DOOR FRAMES ARE INDICATED TO RECEIVE DIFFERENT PAINT COLORS AT OPPOSITE SIDES OF OPENING, COLOR CHANGE SHALL OCCUR AT THE CORNER BETWEEN THE STOP PROFILE AND THE JAMB FRAME (CONCEALED BY THE DOOR IN THE CLOSED POSITION.)
6. THE FLOOR FINISH AT ALL ELECTRICAL, MECHANICAL, AND OTHER SIMILAR UTILITY SPACES SHALL BE SEALED CONCRETE UNLESS SPECIFICALLY NOTED OTHERWISE. SEALER PROVIDED AND INSTALLED BY DIVISION 3 CONCRETE CONTRACTOR.

TOILET ACCESSORY SCHEDULE

TAG	DESCRIPTION	FURNISHED BY	INSTALLED BY
TPD	TOILET PAPER DISPENSER	CONTRACTOR	CONTRACTOR
PTD	PAPER TOWEL DISPENSER	OWNER	CONTRACTOR
SD	SOAP DISPENSER	OWNER	CONTRACTOR
GB42	42" GRAB BAR	CONTRACTOR	CONTRACTOR
RH	ROBE HOOK	CONTRACTOR	CONTRACTOR
SHOWER GRAB BAR		CONTRACTOR	CONTRACTOR
FOLDING SHOWER SEAT		CONTRACTOR	CONTRACTOR
SHELF		CONTRACTOR	CONTRACTOR

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Project No.
18-0786

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JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

BID SET

REVISION:	Date:

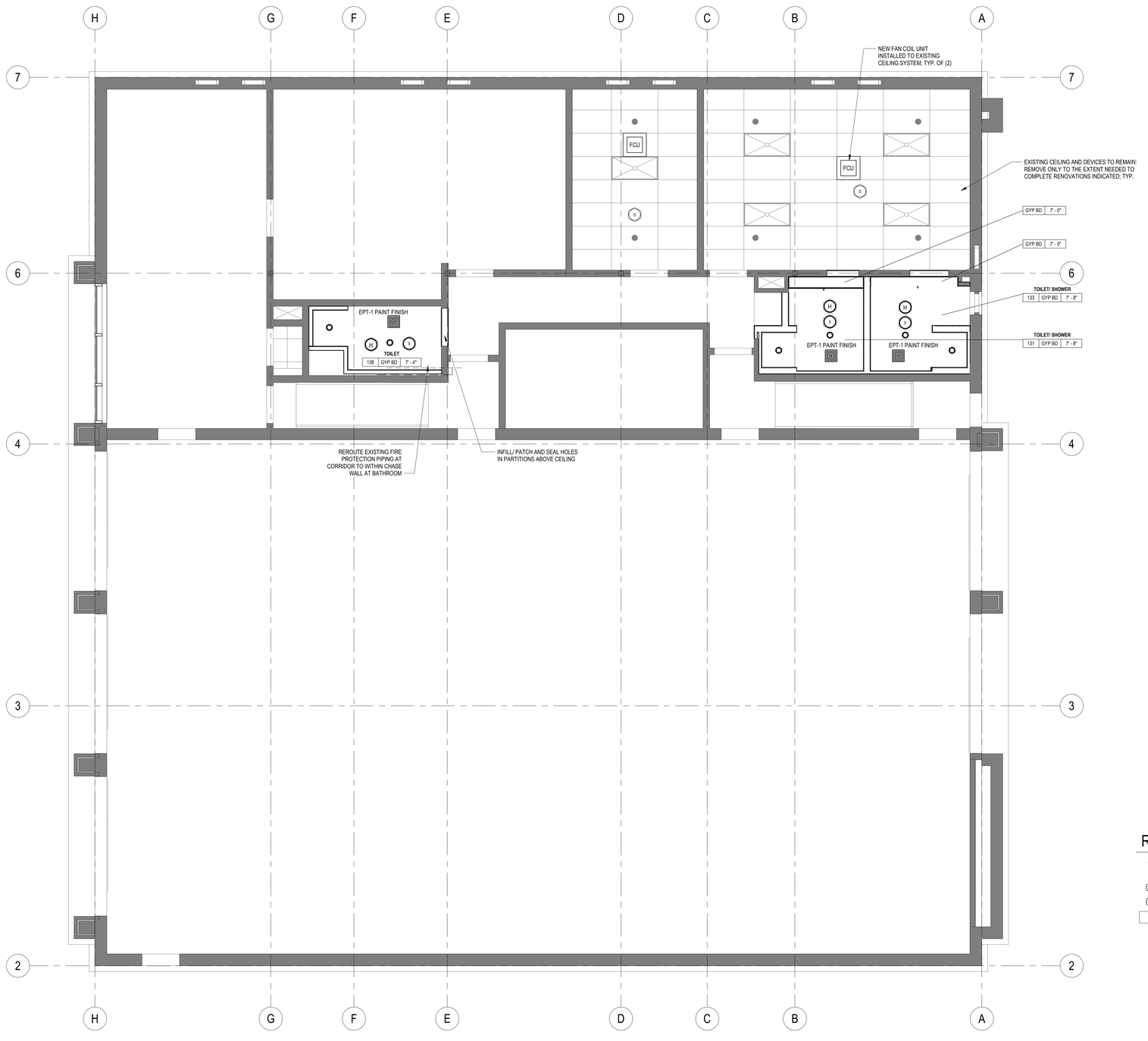
DATE: 2/21/2019
SCALE: As indicated

SHEET TITLE:
ENLARGED TOILET ROOM ELEVATIONS

SHEET #:
A1.70

TRUE NORTH
N
PROJECT NORTH

0 2' 4' 8'
SCALE: 1/4"=1'-0" GRAPHIC SCALE



A21 LEVEL 1 RCP
1/4" = 1'-0"

REFLECTED CEILING PLAN LEGEND

- WALL MOUNTED SPRINKLER
- RECESSED LIGHT FIXTURE
- (S) SMOKE DETECTOR
- (H) HEAT DETECTOR
- LIGHT FIXTURE
- SPRINKLER HEAD (RECESSED OR SEMI-RECESSED)(SEE FP FOR TYPE)
- HVAC GRILLE
- FCU FAN COIL UNIT
- SPEAKER

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0 2' 4' 8'
SCALE: 1/4"=1'-0" GRAPHIC SCALE

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DORE & WHITTIER ARCHITECTS, INC.

Project No.
18-0786

BURLINGTON FIRE STA. NO. 2- TOILET RENO

JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

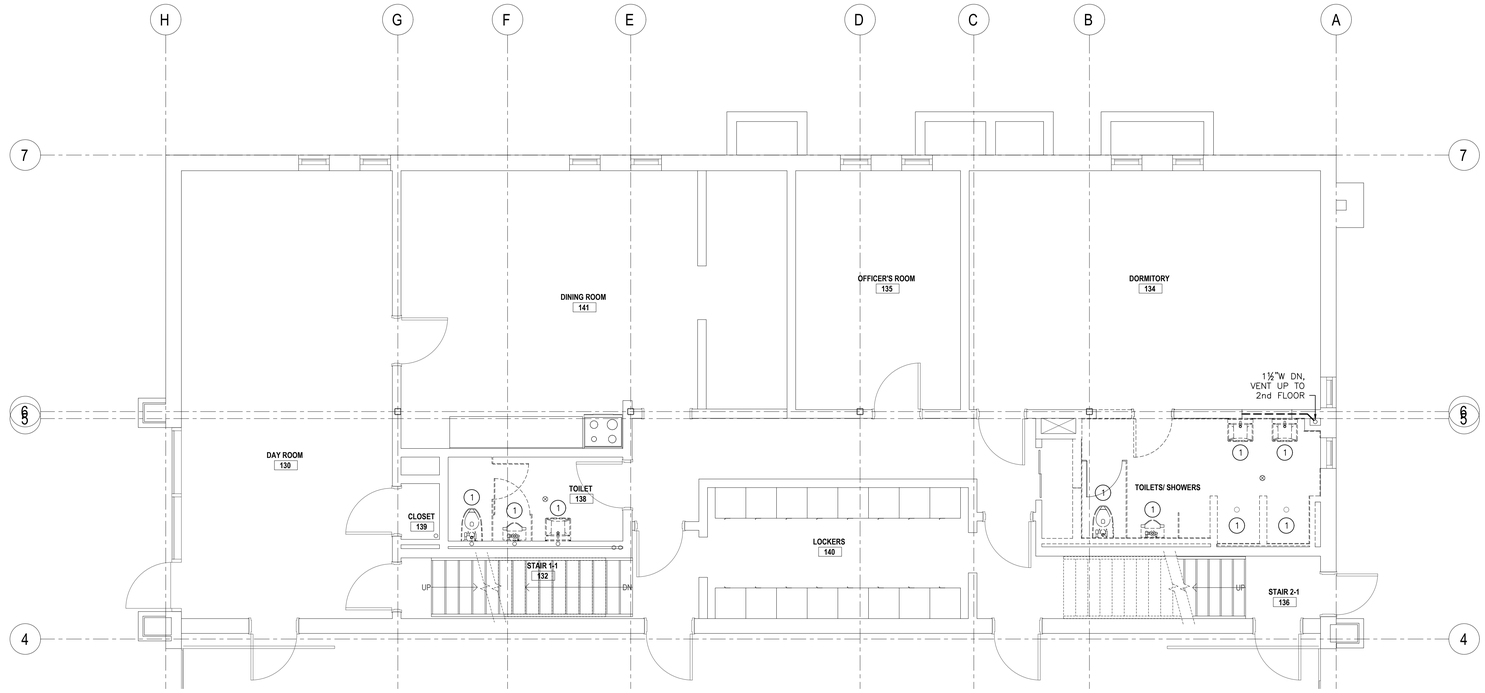
BID SET

REVISION:	Date:

DATE: 2/21/2019
SCALE: As indicated

SHEET TITLE:
LEVEL 1 REFLECTED CEILING PLAN

SHEET #:
A2.10

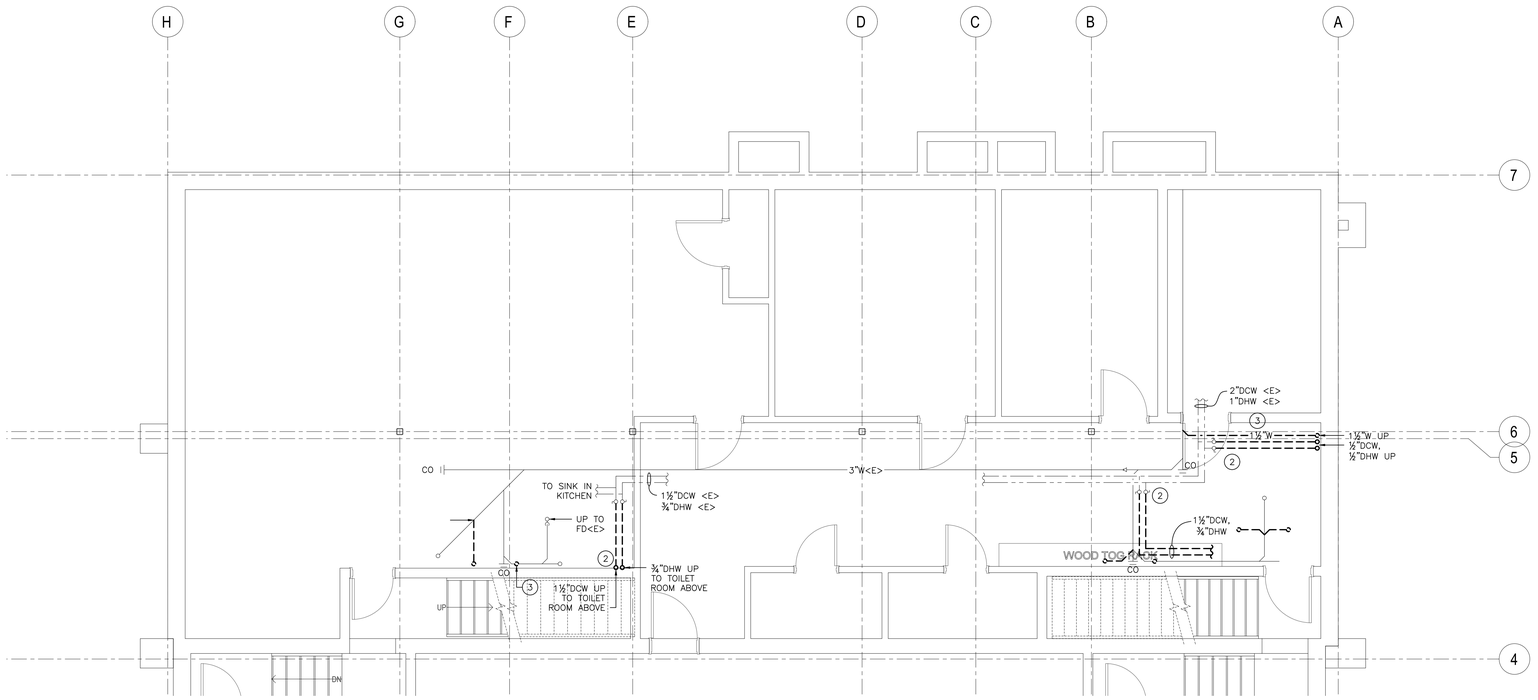


LEVEL 1 PLUMBING DEMOLITION PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16



BASEMENT PLUMBING DEMOLITION PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

KEYED NOTES:

1. PLUMBING FIXTURES & ASSOCIATED PLUMBING SERVICES TO BE DEMOLISHED. REMOVE DCW, DHW, AND SANITARY WASTE PIPING TO BASEMENT. SEE BASEMENT DEMOLITION PLAN FOR CONTINUATION.
2. EXISTING DCW & DHW PIPING SHALL BE REMOVED FROM FIXTURES ABOVE BACK TO VALVES.
3. REMOVE EXISTING SANITARY WASTE PIPING BACK TO MAIN AND CAP.

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18-0786

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136 S WINOOSKI AVENUE
BURLINGTON, VT 05401

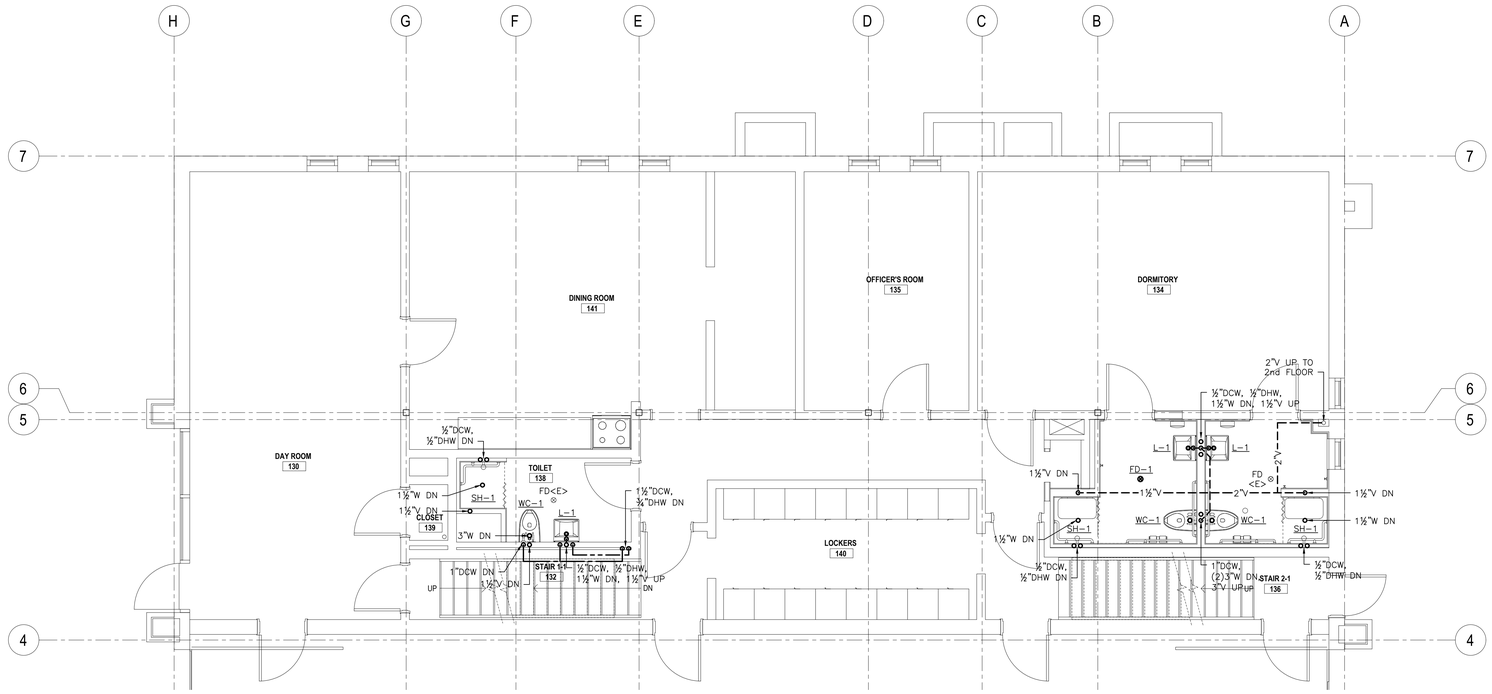
ISSUED FOR BID

REVISION:	Date:

DATE:	SCALE:
02/20/19	As Noted
DRAWN BY:	CHK'D BY:
JSM	DLA

SHEET TITLE:
PLUMBING DEMOLITION PLANS

SHEET #:
P1.1

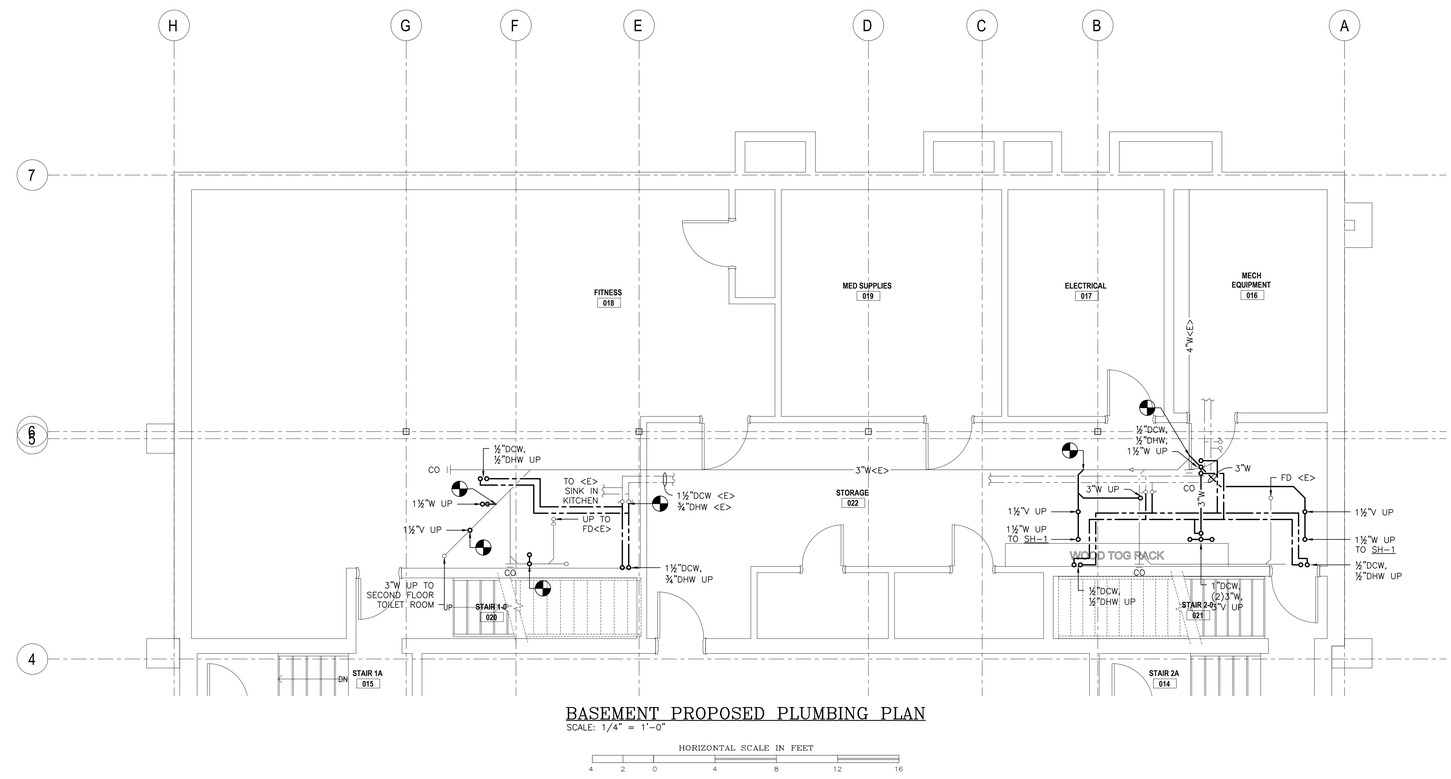


LEVEL 1 PROPOSED PLUMBING PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16



BASEMENT PROPOSED PLUMBING PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

FIRE PROTECTION NOTES:

1. SPINKLER CONTRACTOR TO PERFORM THE FOLLOWING WORK
   - 1.1. REMOVE EXISTING SPRINKLER HEADS IN TOILET ROOM OFF OF DORM ROOM – TWO HEADS TOTAL.
   - 1.2. SPRINKLER LINE WILL BE ENCLOSED IN A SOFFIT AS PART OF THE NEW WORK. PROVIDE TWO NEW SIDEWALL HEADS IN NEW SOFFIT.

PLUMBING FIXTURE SCHEDULE

ITEM	MANUFACTURER & MODEL NO.	TRIM & ACCESSORIES	CONNECTION SIZES				REMARKS
			WASTE	VENT	CW	HW	
FD–1	FLOOR DRAIN – ZURN MODEL ZN415S–P[½]–Y	PROVIDE WITH TYPE 'S' STRAINER, ½" TRAP PRIMER	3"	1½"	½"	–	–
L–1	WALL HUNG LAVATORY – AMERICAN STANDARD LUCERNE #0355.012 THREE HOLE (ADA COMPLIANT)	FAUCET: SYMMONS MODEL S–9610–0.5–G. PROVIDE CHROME STOPS, FLEXIBLE PIPING CONNECTIONS, CHROME TAIL PIECE, AND CHROME P–TRAP	1½"	1¼"	½"	½"	LOW FLOW HIGH EFFICIENCY AERATORS TO BE PROVIDED WITH THIS FAUCET. PROVIDE TRUEBRO LAVGUARD P–TRAP AND ANGLE VALVE COVERS.
SH–1	SHOWER TO BE TILED BY GC.	PROVIDE WITH HUD WOOD BLOCKING. VALVE & TRIM: SYMMONS MODEL 3503–H321–V–CYL–B–1.5. MOUNT CONTROLS AS SHOWN ON ARCHITECTURAL PLANS.	1½"	1½"	½"	½"	MC SHALL REFER TO ARCHITECTURAL PLANS FOR DRAIN LOCATION. SHOWERHEAD TO BE 1.5 GPM.
TP–1	TRAP PRIMER PPP, INC MODEL P–1	–	–	–	–	–	PROVIDE FOR ALL FLOOR DRAINS, INSTALL ON 1½" DCW LINE OR LESS. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
WC–1	SLOAN ADA WATER CLOSET, MODEL ST–2029	FLUSH VALVE: SLOAN ROYAL 113; SEAT: CHURCH MODEL 100EC; PROVIDE WITH CHROME SUPPLIES & STOPS, WAX RING.	3"	1½"	½"	–	PROVIDE WC WITH RIGHT HAND TRIP LEVER WHERE REQUIRED TO MEET ADA REQUIREMENTS. 1.6 GPF.

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18-0786

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136 S WINOOSKI AVENUE
BURLINGTON, VT 05401

ISSUED FOR BID

REVISION:	Date:

DATE:	SCALE:
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JSM	DLA

SHEET TITLE:
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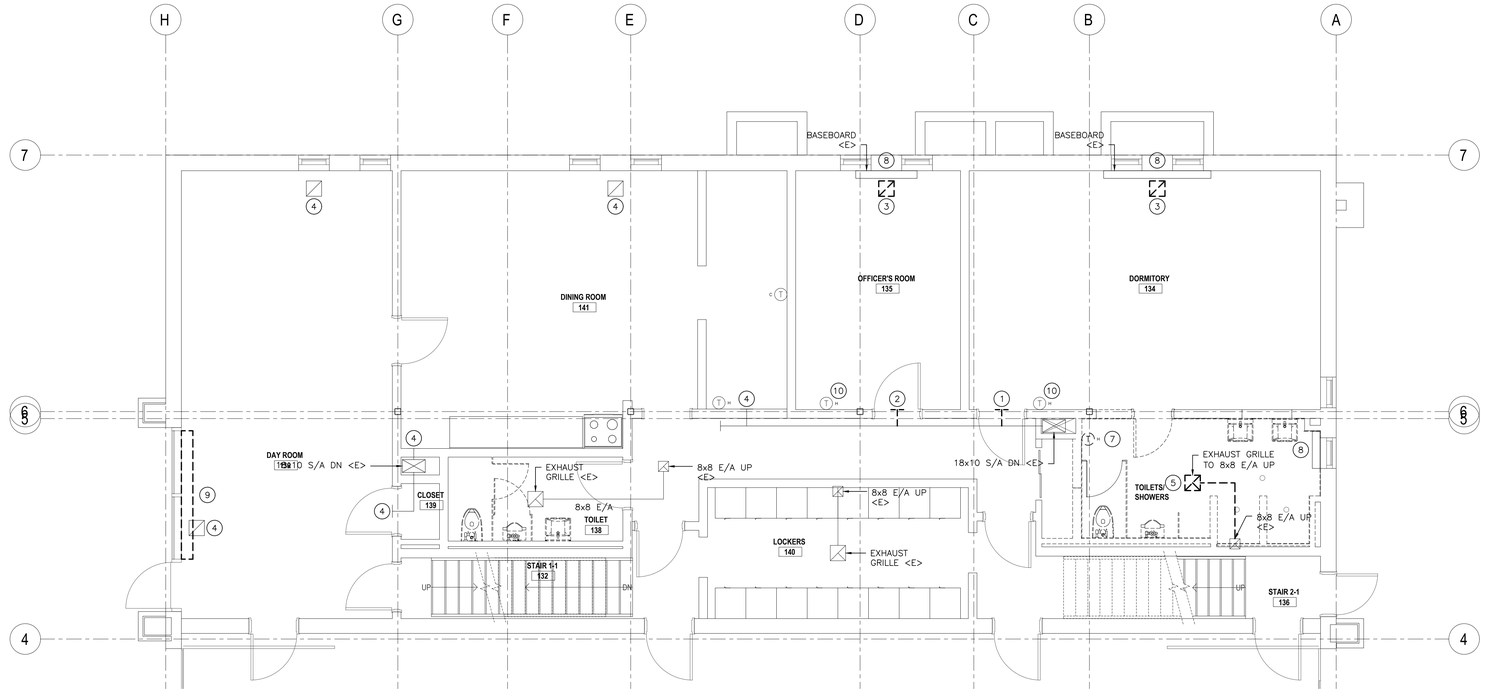
SHEET #:
P2.1

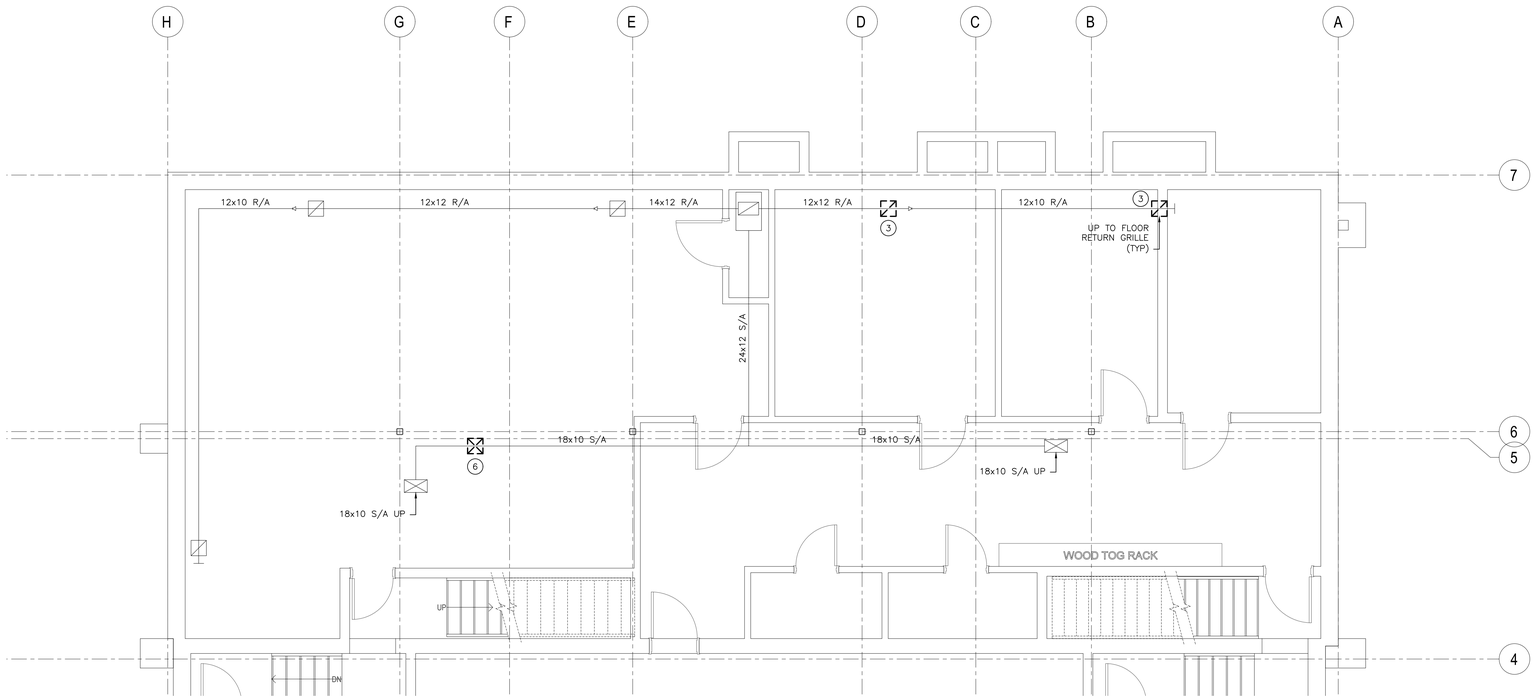


LEVEL 1 MECAHNICAL DEMOLITION PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16



BASEMENT MECHANICAL DEMOLITION PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

KEYED NOTES:

1. EXISTING 26x6 WALL GRILLE TO BE REMOVED. PATCH & SEAL DUCT.
2. EXISTING 18x6 WALL GRILLE TO BE REMOVED. PATCH & SEAL DUCT.
3. EXISTING FLOOR RETURN REGISTER TO BE REMOVED. PATCH & SEAL DUCT.
4. EXISTING SUPPLY OR RETURN GRILLE TO REMAIN.
5. EXISTING CEILING EXHAUST GRILLE TO BE REMOVED.
6. CAP & SEAL EXISTING 12x12 SUPPLY ON BOTTOM OF DUCT.
7. EXISTING THERMOSTAT TO BE REMOVED AND RELOCATED. SEE PROPOSED PLAN FOR NEW LOCATION.
8. REMOVE EXISTING BASEBOARD. REMOVE PIPING TO CHASE ON NORTH END AND BELOW FLOOR ON SOUTH END.
9. ADD/ALTERNATE: REMOVE EXISTING BASEBOARD TO ALLOW FOR STOREFRONT REPLACEMENT.
10. EXISTING THERMOSTAT TO BE REMOVED.

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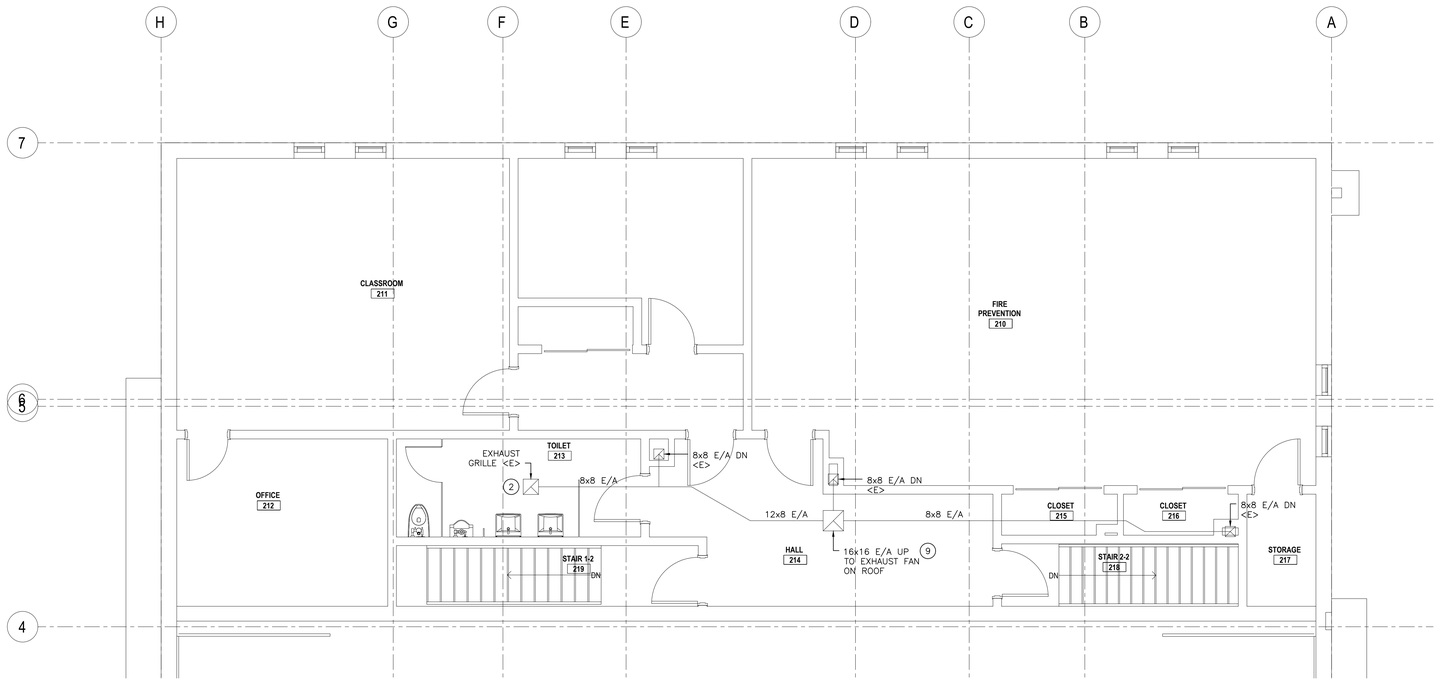
JSM	DLA

SHEET TITLE: MECHANICAL DEMOLITION PLANS

SHEET #: **M1.1**



LEVEL 2 MECHANICAL PROPOSED PLAN

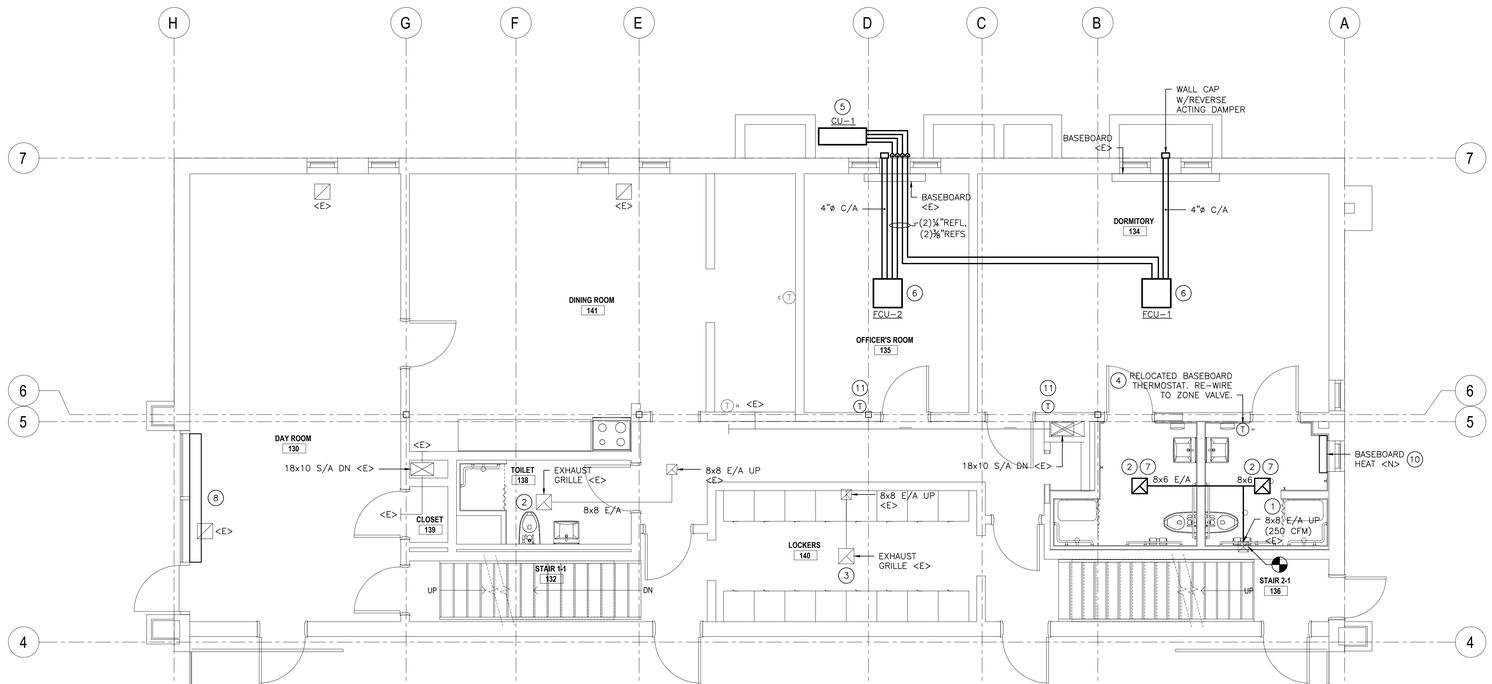
SCALE: 1/4" = 1'-0"

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

KEYED NOTES:

1. VERIFY EXACT LOCATION IN FIELD PRIOR TO COMMENCEMENT OF WORK.
2. BALANCE TO 125CFM.
3. BALANCE TO 145CFM.
4. RELOCATED THERMOSTAT FOR TOILET ROOM BASEBOARD. INSTALL 60"AFF.
5. CONDENSING UNIT TO SIT ON CONCRETE HOUSEKEEPING PAD. SEE ARCHITECTURAL PLANS FOR PAD DETAILS.
6. SUPPORT FROM DECK ABOVE CEILING. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL PLANS.
7. NEW EXHAUST GRILLES – PRICE MODEL 500.
8. ADD/ALTERNATE: RE-INSTALL BASEBOARD AFTER NEW STOREFRONT IS INSTALLED.
9. RE-BALANCE EXISTING FAN TO NEW CFM VALUES SHOWN. PROVIDE BELTS AND SHIEVES AS REQUIRED.
10. NEW STERLING MODEL LCS-10. 2-ROW, ¾"C, 950 BTU/ft, 36" LONG. MOUNT 5" ABOVE FLOOR. PIPE TO EXISTING ¾"HW FEEDS.
11. NEW VRF THERMOSTAT. THERMOSTAT TO CONTROL FAN COIL AND BASEBOARD ZONE VALVE SERVING THIS ROOM.



LEVEL 1 MECHANICAL PROPOSED PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

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JSM	DLA

SHEET TITLE:
MECHANICAL PROPOSED PLAN

SHEET #:
M2.1

SECTION 15000 – MECHANICAL OUITLINE SPECIFICATIONS

PART 1 – GENERAL

1.1 DESCRIPTION

A. Provide all material and equipment related to the renovations to Burlington Fire Department #2 as shown on these drawings including but not limited thereto.

1. Scope of work:
   a. Removal of existing fixtures from three (3) toilet rooms and replacing with new per new layout shown on plans. Provide all domestic hot and cold water, sanitary and vent piping, fittings and accessories as required to meet code.
   b. Existing ductwork serving the Office and Dorm rooms shall be removed and capped as noted on the plans
   c. Addition of a VRF system to the Dorm and Officer rooms. System will provide ventilation, air conditioning and heating to these spaces. Cooling will be provided through a ceiling mounted unit. Heating will be two stage with the ceiling mounted unit being the first stage and the existing baseboard being the second stage
   d. Existing exhaust system shall be modified as shown on the plans to accommodate the new toilet rooms. The system shall be rebalanced per notes on the plans. Modifications to existing fan shall be included to meet new CFM value.
   e. Per the plans the existing baseboard in the toilet room shall be removed and replaced with new. New baseboard to fit between existing chase and new shower installation. New baseboard to be piped into the existing hot water branch lines. Thermostat to be relocated from current position to new position as shown on plans. Provide wiring as required to connect thermostat to zone valve
2. Work not specifically shown or specified, yet required to ensure proper and complete operation of all systems and to satisfy the design intent inherent in the Work and to comply with all applicable codes and regulations.

B. Drawings

1. Contract drawings are, in part, diagrammatic and are intended to convey the scope of work and indicate, in general, arrangement of the equipment and do not indicate every required offset, fitting, valve, etc. Follow these drawings in laying out the work. Consult all Drawings to become familiar with all conditions affecting the work and to verify spaces in which the work will be installed.
2. Reasonable changes required by job conditions (including offsetting of piping and ductwork, etc.) shall be made at no additional cost to the owner.

C. Definitions:

1. "Provide" shall have the same meaning as "furnish and install". All material so implied either on the drawings or in these specifications shall be furnished and installed unless specifically noted otherwise.

1.2 QUALITY ASSURANCE

A. All work specified in Division 15 shall be performed by approved workmen qualified by satisfactory experience in the particular work.

B. Submit seven copies of all submittal data and/or completes shop drawings for review. Submittals for equipment requiring electrical service shall include wiring diagrams. Submittals and/or shop drawings are to be edited to show specific data for the mechanical equipment that the contractor intends to provide. Submittals and/or shop drawings are to be identified with numbers and letters identical to those listed on the drawings and/or specifications.

C. Substitution for Specified Materials:

1. Where a specific trade name, manufacturer and model number is mentioned, it is intended to establish the quality, style and type of equipment necessary to fulfill design criteria and shall not be construed as restricting or limiting competition among manufacturers.
2. The specific name and model number scheduled on the drawings and/or the first name in the specification is the basis of the system design.
3. Contractor may propose substitutes.
   a. Any material or equipment other than that designated as system design shall be considered a substitute whether referenced as an equal or not.
   b. All submittals for substitution shall be in the form of a fully coordinated proposal covering all changes in the work associated with making the substitution.
   c. The change shall include the mechanical and all other disciplines associated with the change.
   d. Refer to Division 1, General Requirements for procedures to propose substitutes.
4. Contractors shall be held responsible for all physical changes resulting from such substitutions of equipment and shall bear any and all increased costs as well as costs to other trades in making said substitutions. Approval by the Architect/Engineer of equipment other than the specified does not relieve the Contractor of this responsibility.
5. In all instances, contractors shall assume full responsibility for proof of quality of the substitute to the equipment hereinafter specified. All data and information necessary for proof of equality, function and space requirements shall be prepared and accompany the submittal of the substitution to the Architect/Engineer.
6. In the event the substitute material or equipment does not perform, fit or meet quality standards, the Contractor shall provide the specified material or equipment and bear all costs to replace the substituted item with the specified.

1.3 LAWS, PERMITS, INSPECTION

A. Comply with all Federal, State, Municipal, OSHA, NFPA, AGA, NEC, and Utility Companies' laws, ordinances and regulations that apply to the work.

1.4 OPERATION AND MAINTENANCE MANUAL

A. Upon completion of this portion of the work, and as a condition of its acceptance, deliver to the Architect/Engineer three copies of a manual describing the system. Prepare manuals in durable plastic binders approximately 8½ by 11 inches in size with at least the following:

1. Identification on, or readable through, the front cover stating general nature of the manual.
2. Neatly typewritten index near the front of the manual, furnishing immediate information as to location in the manual of all data regarding the installation.
3. A copy of all reviewed submittals and shop drawings.
4. A simplified description of the operation of all systems including the function of each piece of equipment within each system. These descriptions shall be supported with a schematic flow diagram.
5. An explanation of the control sequence of each system along with the following instructions wherever applicable.
   a. Emergency procedures for fire or failure of major equipment.
   b. Normal starting, operation, and shutdown.
   c. Summer or winter shutdown.
6. An outline of a preventive maintenance program for each system that shall include a schedule of inspection and maintenance. It shall suggest the maintenance and inspection that should be done with outside service.
7. Complete name and address of nearest vendor of replaceable parts.
8. Copy of all guarantees and warranties issued.
9. Where contents of manual include manufacturer's catalog pages, clearly indicate the precise items included in this installation and delete, or otherwise clearly indicate, all manufacturers' data with which this installation is not concerned.
10. Guarantee letter from Contractor.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Provide and install only new materials and equipment of the latest design of the respective manufacturers.

B. All materials and equipment of the same classification shall be the product of the same manufacturer unless otherwise specified.

C. Furnish to the proper trades, all manufacturer's wiring diagrams for installation of mechanical equipment.

2.2 PIPING

A. All pipe and pipe fittings shall meet ruling codes and regulations and shall be used and installed according to the ruling codes and regulations.

B. Install piping approximately as indicated, straight, plumb and as direct as possible. All piping in occupied spaces to be concealed. Install risers in corner as close to wall as possible, without offsets unless in such a fashion that they can be concealed. Install ceiling mounted piping parallel to walls and as close to junction of ceiling and wall as possible.

C. All piping shall be installed with appropriate provisions for movement and expansion. Provide adequate expansion joints, guides, and anchors.

D. Connections to equipment or control valves shall include unions whether shown on drawings or not. Connection to water heater shall be with dielectric unions.

E. Before starting installation of piping, survey the routes and check for interference. Modify route as required with the permission of the Owner at no additional cost.

F. Pipe and pipe fittings for each service shall conform to the following schedule:

2.3 QUALITY OF PIPING (All standards shall be of the latest editions).

A. Copper tube, Type "L", hard temper: ANSI H23.1.

B. P.V.C. (Polyvinylchloride) - ASTM D3034.

C. Hard drawn copper refrigeration tubing. Cleaned and sealed.

D. Pex tubing, high-density cross-linked polyethylene with oxygen barrier: ASTM F 876

2.4 QUALITY OF FITTINGS (All standards shall be of latest editions).

A. Copper water tube solder joint fittings: Cast brass ANSI B16.18.

B. P.V.C. (polyvinylchloride) - ASTM D3034.

C. Copper refrigeration tube solder joint fittings.

D. Same material as pipe: ASTM F 1807

2.5 JOINTS

A. Brazed Joints

Silver Brazing Alloy: "Stay-Silv "45" or approved equal.
Flux: Silver brazing flux as approved.
Remove excess flux.
Remake leaky joints with new pipe and fittings.

B. Solvent Weld Joints

C. Soldered Joints

95-5 Tin-Antimony solder
Flux: Paste form as approved
Remove excess solder and flux

D. Compression; crimp or cinch

2.6 SCHEDULE

A. Letters in the schedule refer to paragraphs of Articles 2.3, 2.4 and 2.5 of this Section. The reference in parenthesis is an option; select one. Use the following materials unless otherwise noted:

Service -	Size	Location	2.2 Pipe	2.3 Fittings	2.4 Joints
Domestic Water Piping	<3"	Above Slab	A	A	C
Domestic Water Piping (Alternate)	≤2"	All	D	D	D
Sanitary Waste Piping	-	Above Slab	C	B	B
Sanitary Vent Piping (Alternate)		All	C	B	B
Hot Water Heating.	<3"	Indoor	A	A	C
Hot Water Heating (Alternate)	≤2"	All	D	D	D
A/C Condensate Drain Piping	-	All	B	B	B
Refrigeration Piping	-	All	C	C	A

2.7 INSULATION

A. Insulating material and methods of installation shall conform to the following:

B. Type A: One piece of half sectional fiberglass insulation jacketed with Owens-Corning Fiberglass, or equal, Fiberglass 25ASJ/SSL-II all service vapor barrier jacket.

1. K: 0.24 BtuH in./°F sq. ft. at 75°F mean temperature.
2. Operating temperatures: -60°F to 450°F.
3. Jacket water vapor permeance: not more than 0.02 perm./inch.
4. Jacket and butt strips: factory applied, self-sealing pressure sensitive adhesive or a conventional lap-seal adhesive.
5. Surface burning characteristic ratings as tested by ASTM E-84, UL 723, or NFPA 255 not exceeding:
   a. Flame Spread 25
   b. Smoke Developed 50

C. Type B: Rigid phenolic foam insulation, Armstrong Accotherm or equal, jacketed with an all service vapor barrier jacket.

1. K: 0.23 BtuH in./°F sq. ft. at 75°F mean temperature.
2. Operating temperatures: -40°F to 275°F.
3. Jacket water vapor permeance: not more than 0.02 perm./inch.
4. Seal vapor barrier jacket laps and butt joints with Accotherm lap-seal tape, Armstrong 520 adhesive, or a conventional lap-seal adhesive.
5. Fitting covers: fabricated and installed in accordance with manufacturer's recommendations with all joints sealed with Armstrong 520.

D. Type C: Flexible, elastomeric thermal insulation, Armstrong Armaflex II or equal.

1. K: 0.27 BtuH in./°F sq. ft. at 75°F mean temperature.
2. Operating temperatures: -20°F to 220°F.
3. Water vapor permeance: not more than 0.20 perm./inch.
4. Seal seams and butt joints with Armstrong 520.
5. Fitting covers: fabricate and install in accordance with manufacturer's recommendations.
6. Type C insulation shall not be used in air plenums or where prohibited by code.

E. Type D: Plain, semi-rigid fiberglass board insulation, Owens-Corning Fiberglass 703 board or equal.

1. K: 0.23 BtuH in./°F sq. ft. at 75°F mean temperature.
2. Operating temperatures: 0°F to 450°F.
3. Density: 3 lb./cu. ft.
4. Secure insulation in place with minimum 16 gauge steel wire on 12" centers. Butt all joints firmly together.
5. Finish: embed reinforced fiberglass cloth into a coat of white Foster 30-70 Lagtone cement; apply second coat of cement to provide neat finished appearance.
6. Cleanouts, nameplates, and manholes shall not be insulated; neatly bevel insulation on surrounding surfaces at such openings.

F. Type E: Foil-reinforced kraft faced vapor barrier jacketed, rigid fiberglass board insulation, Owens-Corning Fiberglass 705 FSK board or equal.

1. K: 0.23 BtuH in./°F sq. ft. at 75°F mean temperature.
2. Operating temperatures: 0°F to 450°F.
3. Jacket water vapor permeance: not more than 0.02 perm./inch.
4. Density: 6 lb./cu. ft.
5. Box around item to be insulated with insulating board filling all spaces and voids of box with fiberglass blanket insulation.
6. Seal all joints with FRK vapor seal tape.
7. Finish: embed reinforced fiberglass cloth into a coat of white Foster 30-35; apply second coat of 30-35 providing a complete vapor seal with a neat finished appearance.
8. Construct insulation for items with sections that must be removed for maintenance, such as split casing pumps, in sections so that same may be removed to service item.

G. Type F: All service vapor barrier jacketed , rigid fiberglass board insulation, Owens-Corning Fiberglass 705 ASJ board or equal.

1. K: 0.23 BtuH in./°F sq. ft. at 75°F mean temperature.
2. Operating temperatures: 0°F to 450°F.
3. Jacket water vapor permeance: not more than 0.02 perm./inch.
4. Density: 6 lb./cu. ft.
5. Apply insulation with mechanical fasteners spaced not more than 12" on center.
6. Seal all edges, punctures, and joints with ASJ pressure sensitive tape.

H. Type G: Foil-reinforced kraft faced vapor barrier jacketed, inorganic glass fiber blanket insulation, Owens-Corning Fiberglass T-100 FSK Faced Duct Work Insulation, Commercial Grade, or equal.

1. K: 0.30 BtuH in./°F sq. ft. at 75°F mean temperature
2. Operating temperatures: 40°F to 250°F.
3. Jacket water vapor permeance: not more than 0.02 perm./inch.
4. Wrap insulation tightly on ductwork with all circumferential joints butted and longitudinal joints overlapped a minimum of 2"; ductwork over 24" wide use mechanical fasteners spaced not more than 18" on center.
5. Adhere insulation to sheet metal with Foster 85-17 bonding adhesive.

I. Type H: Bonded mat of glass fiber insulation coated with a black pigmented fire-resistant coating and EPA - Registered anti-microbial agent on the airstream side, Certain Teed Tough Guard or equal.

1. K: 0.26 BtuH in./°F sq. ft. at 75°F mean temperature.
2. Operating temperature: to 250°F.
3. Airstream side coating shall prevent insulation erosion at velocities up to 6,000 fpm.
4. Attach liner to duct with both mechanical fasteners and Foster 85-62 adhesive in conformance with SMACNA "Duct Liner Application Standard", latest edition.

J. Type I: Lightweight, semi-rigid glass fibers, bonded with a high temperature binder, board like insulation, Owens-Corning Fiberglass Insul-Quick Insulation or equal.

1. K: 0.30 BtuH in./°F sq. ft. at 200°F mean temperature.
2. Operating temperatures: to 950°F after product stabilization.
3. Secure insulation and metal mesh with welded pins or studs maximum spacing of 16" on center.
4. Finish: trowel coat of insulating cement to a smooth, hard finish; apply coat of fire retardant lagging adhesive, Foster Lagton 30-70 embedding a layer of open weave glass cloth or canvas, overlapping seams 2"; finish with second coat of 30-70.

K. Type J: Rigid hydrous calcium silicate insulation, Owens-Corning Fiberglass Kaylo Asbestos Free insulation or equal.

1. K: 0.42 BtuH in./°F sq. ft. at 200°F mean temperature.
2. Operating temperatures: to 1200°F.
3. Insulation: fit the contour of surface using preformed pipe sections for pipe and beveled lag sections for circumferences.
4. Butt insulation at joints and hold in place using 16 gauge steel wire bands spaced not more than 12" on centers.

L. Type K: ADA compliant. Insulation with a white, fitted anti-microbial pipe cover. Cover shall be designed to allow access to the stop valves. Provide the following manufacturer:

1. Lav Guard; Truebro, Inc.

2.8 INSULATION SCHEDULE

A. Contractor shall provide insulation as per the following Schedule:

Service	Location	Type	Size	Thickness
PIPING				
Heating Hot Water Piping	all	A	runouts	½"
Domestic Cold Water Piping	all	A	runouts	½"
Domestic Cold Water Piping	all	A	>= 1"	1"
Domestic Hot Water Piping	all	A	runouts	½"
Domestic Hot Water Piping	all	A	>= 1"	1-1/2"
Refrigeration Suction/gas Piping	all	C	all	1"
Plumbing vent piping	Within 6' of roof outlet	A or C	all	1"
ADA lavatory piping	Under lavatory	K	all	-
DUCTWORK				
Exhaust Air Ductwork from space	all	none	-	-
Outside Air Ductwork	all	D	all	2"

Notes:
1. Runouts are piping not more than 5 ft. in length.
2. The Type A insulation noted for heating hot water piping, domestic hot water piping and domestic cold water piping applies to copper piping. If the piping is to be pex, Type C insulation shall be provided at the thickness noted above.

2.9 ESCUTCHEONS

A. Provide chromium plated, satin finish, cast brass escutcheons for exposed piping passing through or protruding from walls, ceilings, and floors.

2.10 DUCTWORK AND FITTINGS

A. Construct all ductwork of galvanized sheet metal unless noted otherwise.

B. Galvanized steel shall be of lock forming quality with zinc coating of 1.25 ounces per square foot on each side. Metal gauge, joints, connections, fan casings, casements, bracing, supports and other details not listed in these specifications or indicated on the drawings shall comply with the SMACNA Duct Construction Standards and shall become part of this specification as though printed herein.

C. Fabricate ductwork in a neat and workmanlike manner, free from dents, all joints driven home, smooth inside, neat outside, airtight and without the use of tape. Inside radius of elbows not less than 1.5 times width. Provide all square elbows with turning vanes.

D. Fabricate branch take-offs with 45° tee connection or straight tee connection with air extractors.

E. All low-pressure supply ducts shall be sealed to limit leakage to 5% or less of system air capacity.

F. Fabricate and install all ductwork in accordance with recommendations and procedures of the latest edition of the ASHRAE Handbooks, all pertinent local, state, and federal codes, and the "Duct Manual of Sheet Metal Construction for Ventilating and Air-Conditioning Systems" published by the Sheet Metal and air-conditioning Contractor's National Association, Inc.

G. Install flexible connections between all ducts and heat recovery unit, fans, etc., to prevent the transfer of equipment vibration to the ductwork.

H. Adjoining duct inlet shall be same size and shape of equipment outlet and shall be aligned with outlet and independently supported with a minimum of 2" separation from equipment.

I. Provide materials that meet the requirements of NFPA Pamphlet #90A, and are UL approved for use intended, as manufactured by Duro-Dyne Ventfabrics, Inc., Elgin or approved equal.

J. Round Ductwork and Fittings above grade.

1. Factory manufactured or machine fabricated of galvanized steel or aluminum with lock formed joints and seams.
2. Low pressure round ductwork of rigid snap lock or ACME seam pipe, seal joints and seams.
3. Include damper with locking quadrant in collar where a manual damper is shown on plans.
4. Connect to rectangular ductwork with spin collars or clinch collars; seal airtight with suitable duct sealer.

K. Flexible Ductwork

1. For connections between air devices and where otherwise shown on Drawings. Manufactured flexible duct from spring steel helix with an impervious, reinforced, vapor proof, reinforced polyester outer jacket and inner core. Inner Core shall be airtight and prevent fiberglass erosion into air stream. Wire helix shall be encapsulated and prevent unraveling when cut to length. Provide 1 inch thick by 3/4 lb./cu. ft. fiberglass insulation and polyethylene jacket. Duct shall comply with UL 181 Class I Air Duct.
2. Fire Resistant, self-extinguishing, UL Standard 181, Class 1, flame spread of 25 or less and smoke development index not to exceed 50.
3. Length: three (3) feet maximum, fully extended. Where more length is required, remainder shall be rigid round ductwork.
4. Install duct in full extended position with no kinks or sags; use only minimum length required to make connection; support ducts, as required, to prevent sagging with 3/4" wide metal banding material; secure joints with a draw band.

L. Duct Sealant

1. All duct systems shall be effectively sealed. Total allowable leakage from low-pressure ducts shall not exceed five (5) per cent of the total system design airflow rate. These requirements are in compliance with ASHRAE Standard 90.1, and SMACNA High, Medium and Low Pressure Duct Construction Standards (Seal Class A, B, C, D).

M. Manual Damper (Volume Damper)

1. Dampers shall be two gauges heavier than the duct in which installed.
2. Operators shall be operated by locking type quadrant operators.
3. Locate dampers at access panel locations. Coordinate final locations with architectural drawings.

N. Grilles, Registers, Diffusers

1. Furnish and install air diffusers, grilles and registers of capacities and material indicated on the Drawings.

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Project No. 18-0786

BURLINGTON FIRE STA. NO. 2 - TOILET RENO

136 S WINOOSKI AVENUE
BURLINGTON, VT 05401

ISSUED FOR BID

REVISION:	Date:

DATE: 02/20/19
SCALE: As Noted
DRAWN BY: JSM
CHK'D BY: DLA

SHEET TITLE: MECHANICAL SPECIFICATIONS

SHEET #: **M3.0**

2.11 CONTROLS

A. Control Sequences:
1. Exhaust Fan:
a. Existing exhaust fan shall operate 24/7.

2. Toilet room baseboard (Toilet Room):
a. Thermostat shall control zone valve
b. When space falls below 70F (adj) zone valve shall open
c. When space rises above 70F (adj) zone valve shall close

3. Fan coil and baseboard (Officer and Dorm Rooms):
a. Fan coil thermostat shall control both heating and cooling
b. Cooling
i. When the space temperature rises above 75F (adj) the fan coil shall be energized and a signal sent to the exterior heat pump
ii. When the space temperature falls below 75F (adj) the fan coil shall be de-energized.
c. Heating
i. Heating is two stages with the fan coil(heat pump) providing stage 1 and the baseboard providing stage 2.
ii. When the space temperature falls below 70F (adj) the fan coil and heat pump shall be energized
iii. If temperature falls 3F (adj) below set point, then the baseboard zone valve shall be open
iv. When the space temperature rises above 70F (adj) the baseboard zone valve shall close and the fan coil is to be de-energized.

B. OTHER MATERIALS

1. Provide all other materials such as wire, transformers, relays, etc. that may be required for a complete control system as described herein and on the Drawings. Items shall be as selected by the Contractor subject to the acceptance of the Engineer.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Install all work with a neat and orderly appearance, as specified and as shown on the Drawings.

B. Make all installations structurally sound throughout.

C. Perform all work incidental to the installation of the apparatus and materials including, but not limited to, cutting, patching, trenching, excavating, backfilling, and trench covering. All work shall be performed by qualified workmen regularly employed in the applicable trades.

3.2 DUCTWORK INSTALLATION

A. Take all necessary measurements at the building and fabricate the ductwork on the site if required to ensure an approvable installation.

B. Provide cross overs, transitions, offsets and changes in duct shapes as required in order to avoid interfering with pipe lines and to maintain full areas of ducts. No pipes shall pass through ducts.

C. The right is reserved to vary runs, shapes and make offsets during construction to meet structural interference. Consult with other trades to establish clearances before installing ductwork, grilles, registers and diffusers.

D. Install suitable access doors wherever necessary to permit operation, adjustment and servicing of equipment.

E. Connect the ducts, casings, and other sheet metal work to all outside air intakes and exhausts through building walls. Blank off unused portions of louvers with proper type and gauge sheet metal faced on room side with one-inch thick rigid insulation with vapor barrier.

F. At connections to all equipment, support ductwork independently with no weight upon the equipment.

G. Furnish and install hangers, brackets and supports for all sheet metal work. Secure ducts passing through walls and floors to angle frames by rivets or sheet metal screws. Secure angle iron frames in place by inserts, expansion bolts or wood screws.

H. Support rigid round ducts at joints and on maximum 5'-0" centers. Support rectangular ducts to 24" wide at joints and on maximum of 6'0" centers; over 24" wide support at joints and on maximum of 4'-0" centers. Supports are to prevent sag and vibration when equipment is operating at maximum speed and capacity.

I. Protect openings in ductwork during construction. Seal supply and exhaust boots to prevent dirt and materials from entering the system during construction. Clean system thoroughly when complete.

J. Install ductwork and accessories to provide a system free from buckling, warping, and vibration.

K. Insulate ductwork in accordance with the requirements of this Specification Section, Paragraph 2.10.

3.3 CLEANUP AND PROTECTION OF EQUIPMENT

A. The contractor is responsible to protect all equipment from the dust and dirt generated by the contractor during the construction of the project.

B. No construction debris may remain in the building.

C. Clean up must occur twice daily or as required to keep the area clean and free from debris.

3.4 IDENTIFICATION

A. All piping shall be identified as to the service of the pipe and the normal direction of flow. The letters shall be at least 1" high and the flow arrows shall be at least 6" long.

B. All equipment shall be identified by stenciling the title of the equipment in a position that is clearly visible.

C. All isolation valves shall be labeled with brass tags hanging from a chain on valve.

D. Piping shall be identified at all tees, at equipment locations and in each separate room.

E. All color codes of piping shall comply with ANSI A 13.1.

3.5 GUARANTEE

A. The Contractor shall guarantee all materials, workmanship, and the successful operation of all equipment and apparatus installed for a period of one year from the date of final acceptance.

3.6 TESTING, ADJUSTING, AND BALANCING

A. The Contractor shall provide for the adjusting and balancing of all systems to conform to these plans and specifications.

B. The following codes and standards shall be followed:

1. NEBB: "Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems".

2. AABC: "National Standards for Total System Balancing".

3. ASHRAE: ASHRAE Handbook, 2003 HVAC Applications, Chapter 37, "Testing,

4. Verify cleanliness of strainers.

5. Verify expansion tanks are not air bound.

6. Verify the system is full of water/propylene glycol mixture (20%).

7. Check bearing and motor lubrication.

8. Verify air vents (manual or automatic) are installed and working properly.

C. Air systems shall be balanced to within ±10% of values shown on plans.

1. Contractor shall submit a Adjusting, and Balancing".

D. Air System Testing Procedures

1. Review the system installation from distribution units to terminal units to verify the system has been installed per plans.

2. Check bearing and motor lubrication.

3. Check fan belt tensions.

4. Check for proper fan rotation.

5. Check air filters.

END OF SECTION

HEAT PUMP SCHEDULE – INDOOR UNIT

TAG	SERVES	MANUFACTURER & MODEL NO.	TYPE	FAN PERFORMANCE		REFRIG. TYPE	COOLING CAPACITY (MBH)	HEATING CAPACITY @5°F (MBH)	ELECTRICAL				REMARKS
				CFM	E.S.P. SETPOINT				MCA	VOLTS	PH	HZ	
FCU–1	DORMITORY	MITSUBISHI MODEL SLZ–KA12NA	CEILING	350	N/A	R–410A	13.3	7.9	12	208	1	60	1,2,3
FCU–2	OFFICER'S ROOM	MITSUBISHI MODEL SLZ–KA09NA	CEILING	350	N/A	R–410A	10.9	6.4	12	208	1	60	1,2,3

REMARKS:
1. PROVIDE A FACTORY AUTHORIZED START–UP OF THE EQUIPMENT.
2. PROVIDE WITH A MITSUBISHI MODEL PAR–33MAA–J THERMOSTAT & MODEL CN24 RELAY–KIT–CM3 HEATER ADAPTER. BOTH FIELD INSTALLED.
3. 1¼" DRAIN PIPE.

HEAT PUMP SCHEDULE – OUTDOOR UNIT

TAG	MATCHED UNIT TAG	LOCATION	MANUFACTURER & MODEL NO.	COOLING CAPACITY (TONS)	ELECTRICAL					REMARKS
					VOLTS	PH	Hz	MCA	MOCP	
CDU–1	FCU–1, FCU–2	OUTDOORS	MITSUBISHI MODEL MXZ–ZC20NAH72	1½	208	1	60	29.5	40	1,2

REMARKS:
1. INSTALL EQUIPMENT, REFRIGERANT PIPING, POWER AND CONTROLS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. PROVIDE A FACTORY AUTHORIZED START–UP OF THE EQUIPMENT.

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Project No.
18-0786

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REVISION:	Date:

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SCALE: As Noted
DRAWN BY: JSM
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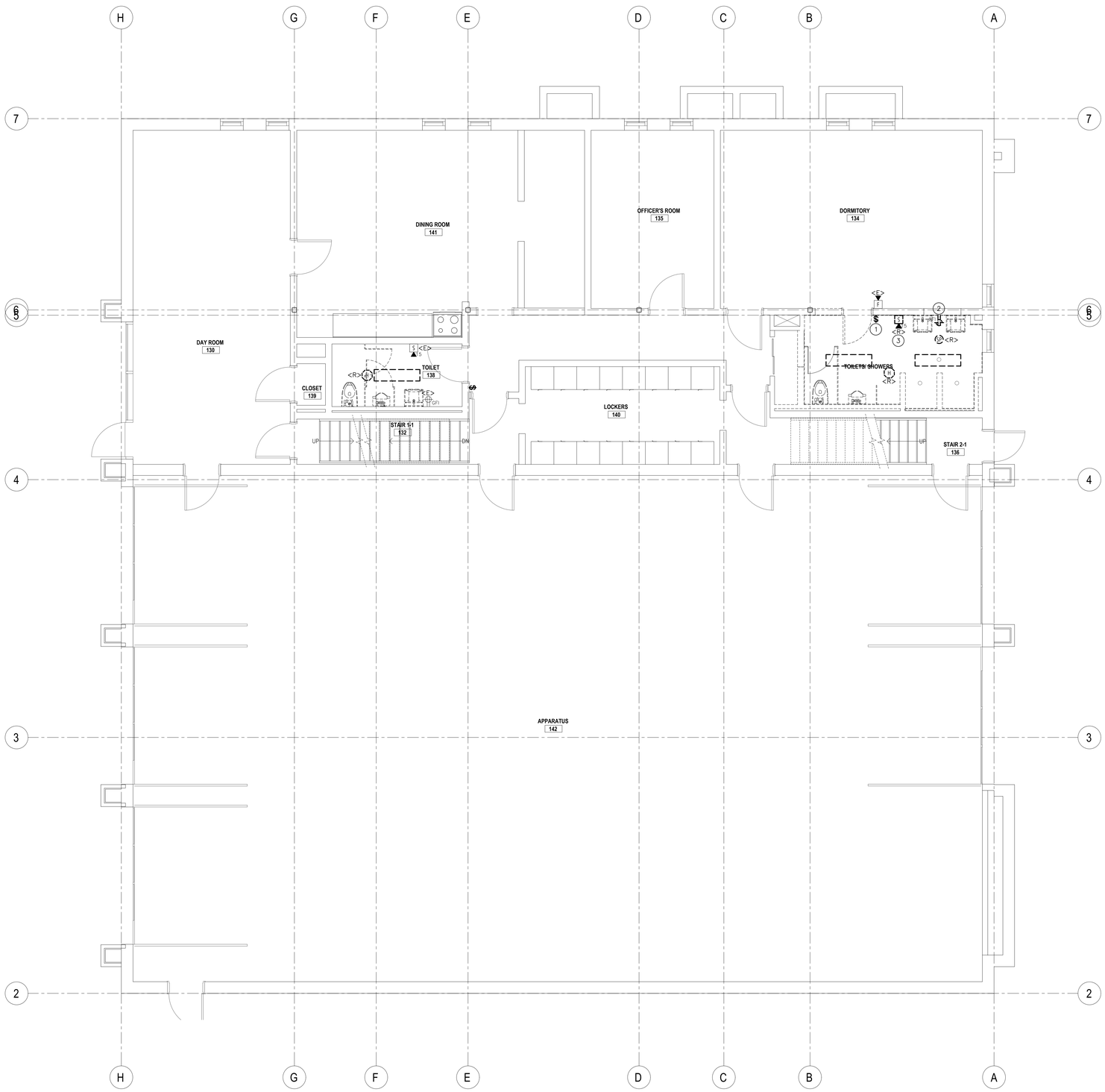
SHEET TITLE:
MECHANICAL SPECIFICATIONS & SCHEDULES

SHEET #:
M3.1

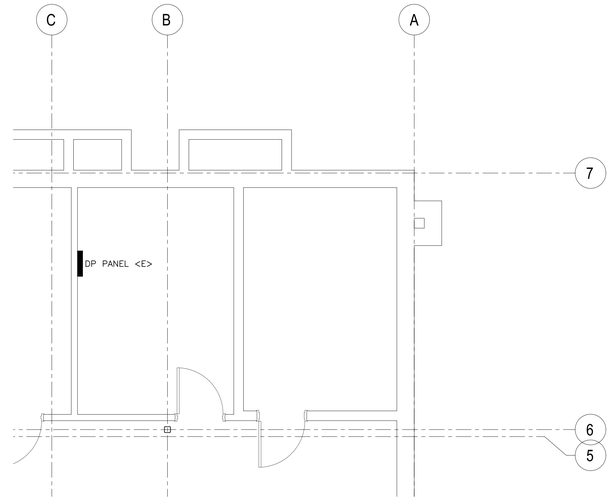


LEVEL 1 ELECTRICAL DEMOLITION PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16



PARTIAL BASEMENT ELECTRICAL DEMOLITION PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

ELECTRICAL DEMOLITION LEGEND

<E>	EXISTING TO REMAIN
<R>	EXISTING TO BE REMOVED AND RELOCATED
- - -	ELECTRICAL DEVICES, WIRES, CONDUITS TO BE REMOVED
———	EXISTING ELECTRICAL DEVICES, WIRES, CONDUITS TO REMAIN
[- -]	EXISTING LIGHT FIXTURE TO BE REMOVED AND GIVEN TO OWNER. REMOVE THE LAMPS AND BALLAST.
FE	EXISTING LIGHT FIXTURE AND WIRING TO REMAIN.

ELECTRICAL LEGEND

	LED LIGHT
	LIGHT FIXTURES
	EXIT LIGHT
	EMERGENCY LIGHT
$	SWITCH – SINGLE POLE, SERVICE SWITCH FOR MOTORS
$OC	SWITCH – OCCUPANCY
	ELECTRICAL DISTRIBUTION PANEL
	BRANCH CIRCUIT
JB	JUNCTION BOX
	DUPLEX RECEPTACLE
GFI	DUPLEX RECEPTACLE – GFCI PROTECTED
	DUPLEX RECEPTACLE – COUNTER HEIGHT
F	FIRE ALARM HORN/STROBE (NUMBER DENOTES CANDELA)
S	FIRE ALARM STROBE
H	SYSTEM HEAT DETECTOR
AFF	ABOVE FINISH FLOOR
EC	ELECTRICAL CONTRACTOR (DIVISION 26)
MC	MECHANICAL CONTRACTOR (DIVISION 23)
CM	CONSTRUCTION MANAGER
GC	GENERAL CONTRACTOR
ES	EQUIPMENT SUPPLIER
TYP.	TYPICAL OF ALL

GENERAL DEMOLITION NOTES:

A. EQUIPMENT AND MATERIALS REMOVED OR DEMOLISHED AND NOT TO BE REINSTALLED BY THE EC SHALL BE CLASSIFIED BY THE OWNER AS SALVAGE OR SCRAP. THOSE CLAIMED BY THE OWNER SHALL BE DELIVERED TO THE OWNER BY THE EC WHERE DIRECTED AT THE SITE. THOSE NOT CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE EC AND SHALL BE LEGALLY REMOVED FROM THE SITE AND PREMISES.

B. ANY PLACE WHERE THE CONTRACTOR PENETRATES, CUTS AND/OR REMOVES WALLS, CONTRACTOR IS TO REPLACE, PATCH AND PAINT WALLS TO ORIGINAL FINISHES.

C. FIELD VERIFY ALL DIMENSIONS BEFORE COMMENCEMENT OF WORK. NOTIFY ENGINEER OF ANY ERRORS. CONTRACTORS SHALL FIELD INVESTIGATE ALL EXISTING CONDITIONS PRIOR TO THE BID DATE. NO EXTRA COMPENSATION SHALL BE GIVEN TO CONTRACTORS WHO FAIL TO VISIT THE SITE PRIOR TO THE BID DATE.

D. REFER TO THE ARCHITECTURAL PLANS FOR EXTENT OF DEMOLITION WORK TO BE PERFORMED BY THE GENERAL CONTRACTOR. ALL ITEMS THAT NEED TO BE REMOVED BY THE GC SHALL HAVE THE POWER DISCONNECTED BY THE EC.

E. NOT ALL DEVICES TO BE REMOVED OR DISCONNECTED ARE SHOWN. WHERE ENTIRE WALLS AND ROOMS ARE TO BE DEMOLISHED, ALL ELECTRICAL DEVICES IN THESE AREAS AND WALLS ARE TO BE DISCONNECTED, AND THE BRANCH CIRCUIT TO BE DISCONNECTED BACK TO THE SOURCE. ITEMS TO REMAIN AND RELOCATED WILL BE SHOWN. REFER TO MECHANICAL AND ARCHITECTURAL PLANS FOR TOTAL EXTENT OF DEMOLITION WORK.

F. BUILDING IS EXISTING. WIRING IN EXTERIOR WALLS SHALL BE FISHED AS NECESSARY. SOME INTERIOR PARTITIONS ARE EXISTING, WIRING IN THESE WALLS MAY NEED TO BE FISHED. REFER TO ARCHITECTURAL PLANS FOR FULL EXTENT OF EXISTING CONDITIONS. NO SURFACE RACEWAY TO BE INSTALLED WITHOUT WRITTEN AUTHORIZATION FROM ARCHITECT.

G. ALL NEW DEVICES AND LIGHTING SHALL BE WIRED TO NEAREST EXISTING RECEPTACLE OR LIGHTING CIRCUIT UNLESS OTHERWISE SHOWN. NEW CIRCUITS ARE SHOWN WITH A HOME RUN TO LISTED PANEL.

KEYED NOTES:

1. SALVAGE AND REUSE EXISTING LIGHTING CIRCUIT.
2. SALVAGE AND REUSE EXISTING RECEPTACLE CIRCUIT.
3. SALVAGE EXISTING FIRE ALARM WIRING AND EXTEND AS REQUIRED, REFER TO PROPOSED PLAN.

TRUE NORTH

N

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Project No.
18-0786

BURLINGTON FIRE STA. NO. 2 - TOILET RENO

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BURLINGTON, VT 05401

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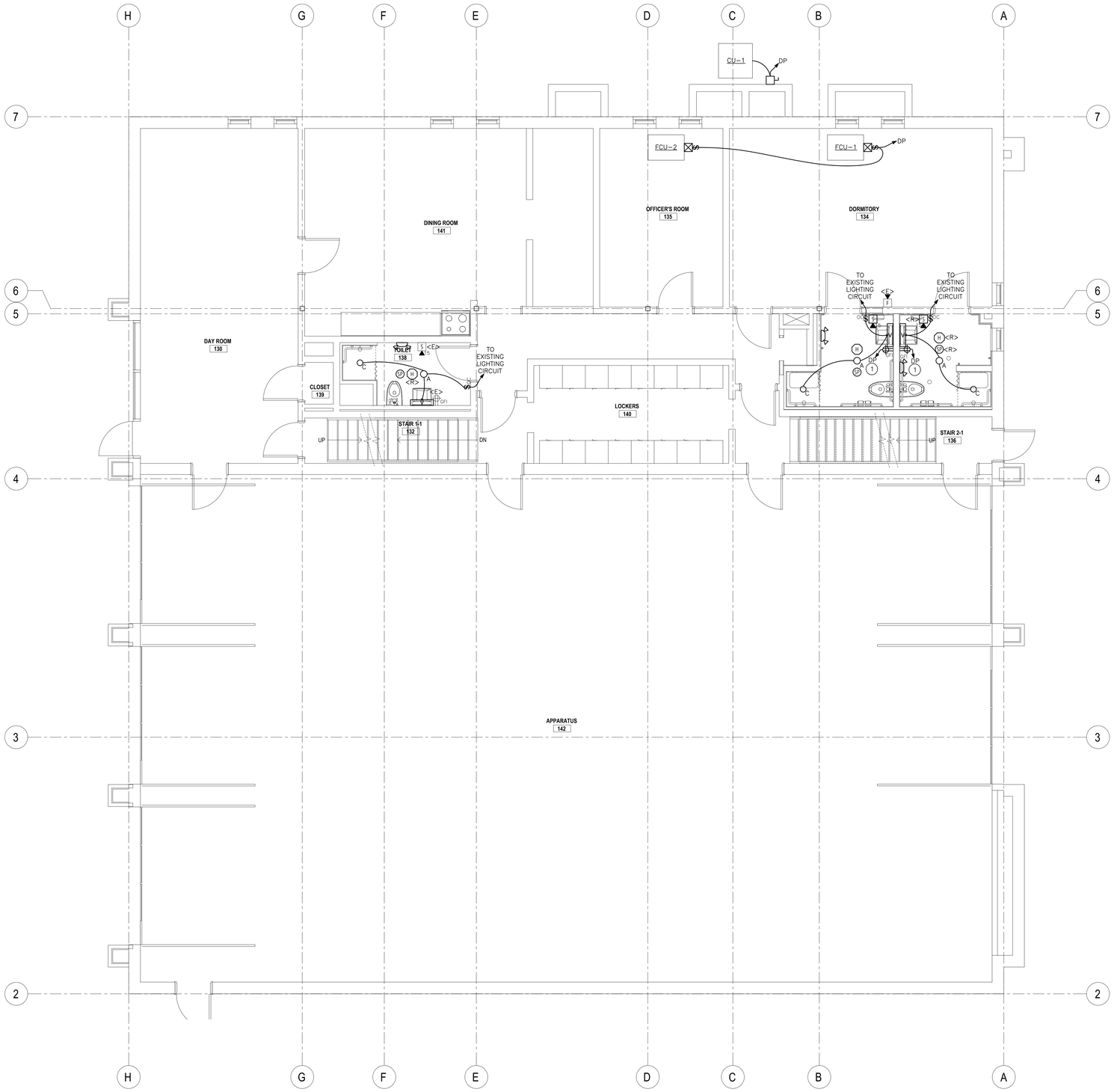
REVISION:	Date:

DATE:	SCALE:
02/20/19	As Noted
DRAWN BY:	CHK'D BY:
RMR	ASG

SHEET TITLE:
ELECTRICAL DEMOLITION PLAN

SHEET #:
E1.1

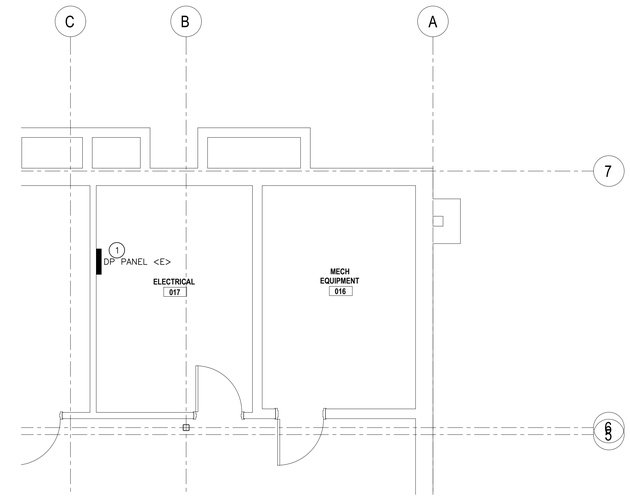


LEVEL 1 ELECTRICAL PROPOSED PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16



PARTIAL BASEMENT ELECTRICAL PROPOSED PLAN

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

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

KEYED NOTES:

(1) USE EXISTING SPARE 1P-20A BREAKERS IN PANEL DP TO FEED NEW RECEPTACLE CIRCUITS AS SHOWN.

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & MODEL NO.	DESCRIPTION	LAMPS	WATTS	LUMENS	VOLTS	REMARKS
A	JUNO JSF-7IN-10LM-35K-90CRI-MVOLTZT-WH	7" SLIM SURFACE	LED	13	1000	120 /277	
C	LITHONIA LDN6-35/10-L06-WR-M VOLT-GZ10-WL	6" RECESSED CAN	LED	13	1082	120/ 277	
V	LITHONIA BLWP2-20L-SDSM-GZ10 -LP835	SURFACE	LED	16	2000	120/ 277	
	LITHONIA LIGHTING ELMLT W LP06VS LTP	SURFACE	LED	10.8	–	120/ 277	REMOTE HEAD CAPABILITY

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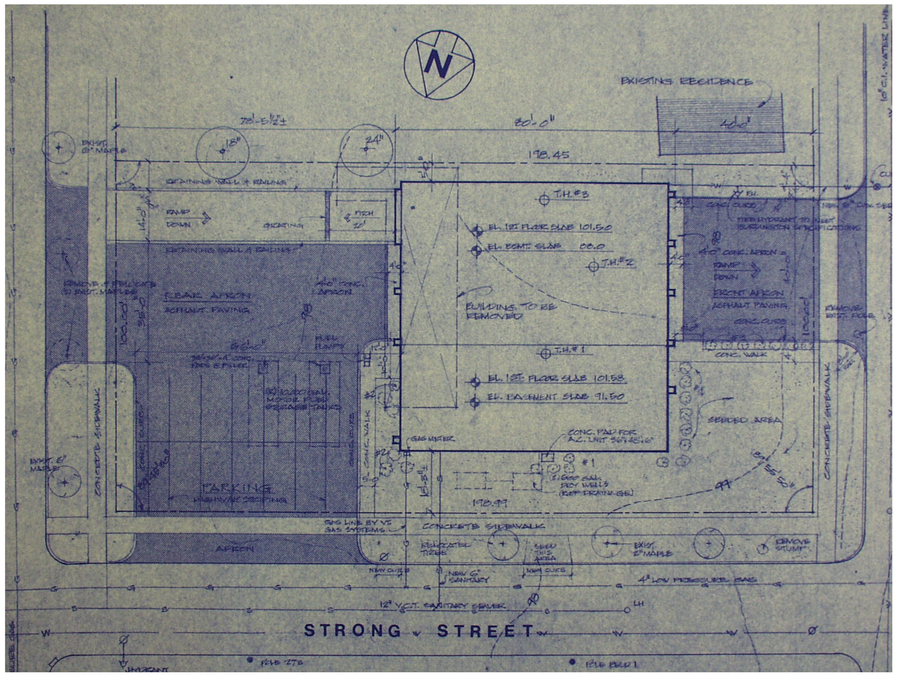
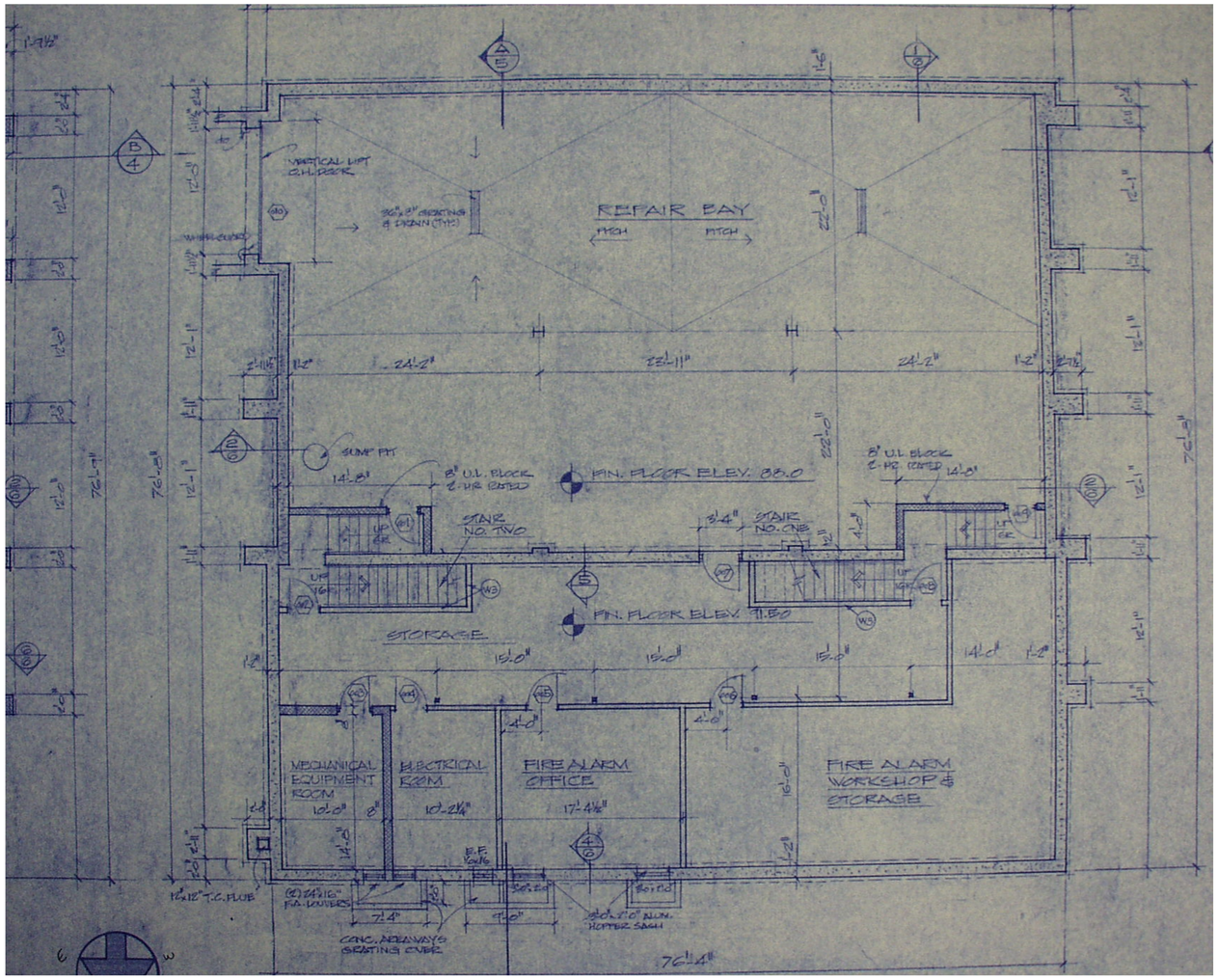
REVISION:	Date:

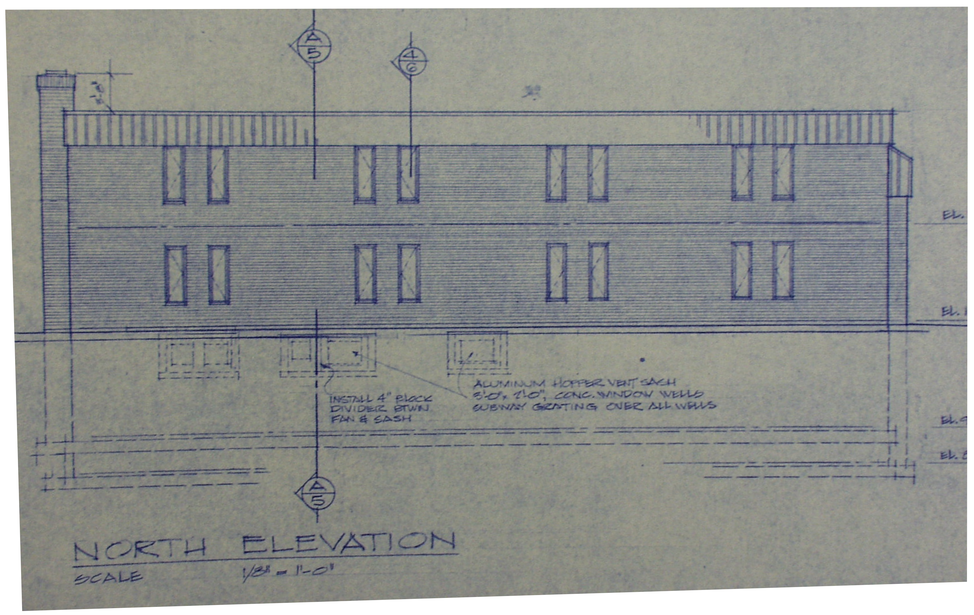
DATE:	SCALE:
02/20/19	As Noted
DRAWN BY:	CHK'D BY:
RMR	ASG

SHEET TITLE:
ELECTRICAL PROPOSED PLAN

SHEET #:
E2.1







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BURLINGTON FIRE STATION #2 - TOILET RENOVATIONS
DORE & WHITTIER ARCHITECTS INC. PROJECT #18-0786

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Project No.
18-0786

BURLINGTON FIRE STA. NO. 2- TOILET RENO

JOHN D. BOARDMAN FIRE STATION #2
132 NORTH AVENUE
BURLINGTON, VT 05401

BID SET

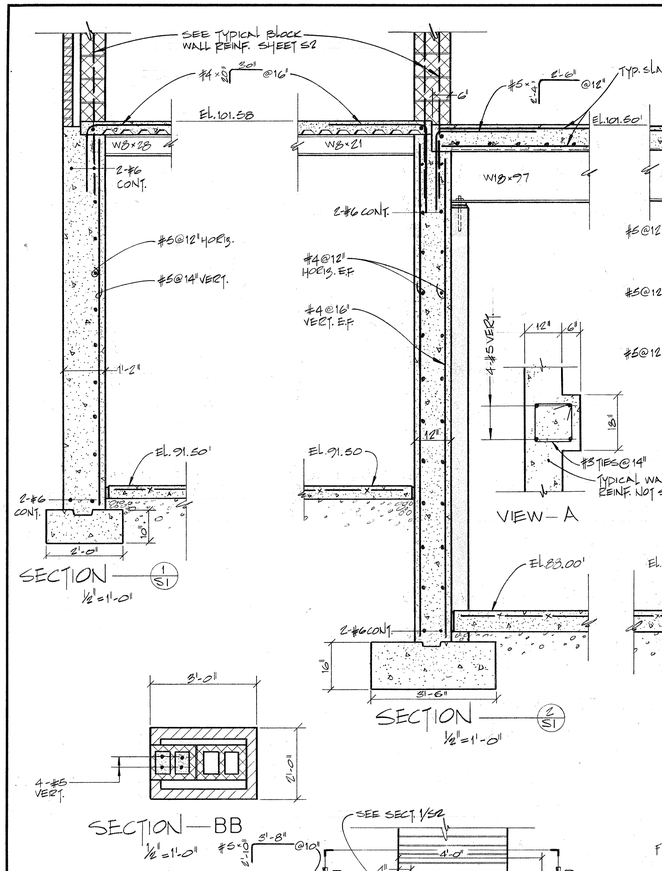
REVISION:	Date:

DATE: 2/21/2019
SCALE: NOT TO SCALE

SHEET TITLE:
REFERENCE DRAWING:

IMAGES OF ORIGINAL CONSTRUCTION DOCUMENTS

SHEET #:
REF-1



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BURLINGTON FIRE STATION #2 - TOILET RENOVATIONS
DORE & WHITTIER ARCHITECTS INC.
PROJECT #18-0786

NO.	DATE	REVISION

FOUNDATION PLAN & DETAILS

FIRE STATION NO TWO
CITY OF BURLINGTON FIRE DEPARTMENT
NORTH AVENUE • BURLINGTON • VERMONT

WIEMANN - LAMPHERE, ARCHITECTS
346 SHELBURNE STREET - BURLINGTON, VERMONT

DUBROW ASSOCIATES
STRUCTURAL ENGINEERS
SOUTH BURLINGTON — VERMONT

STATE OF VERMONT · LLOYD D. DUBROW · No. 1550 · REGISTERED PROFESSIONAL ENGINEER

SCALE	AS SHOWN
DATE	7-16-1979
DRAWN BY	MARTINEK
CHECKED BY	LDD
PROJECT	7401

DRAWING NO. S1

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BURLINGTON FIRE STATION #2 - TOILET RENOVATIONS
DORE & WHITTIER ARCHITECTS INC. PROJECT #18-0786

NO.	DATE	REVISION

FIRST & SECOND FLOOR FRAMING PLAN

FIRE STATION No TWO
CITY OF BURLINGTON FIRE DEPARTMENT
NORTH AVENUE • BURLINGTON • VERMONT

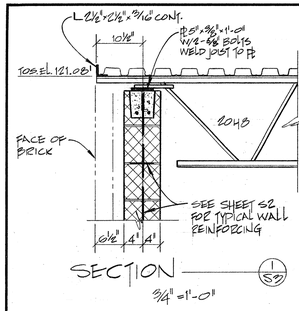
WIEMANN - LAMPHERE, ARCHITECTS
346 SHELBURNE STREET - BURLINGTON, VERMONT

DURBROW ASSOCIATES
STRUCTURAL ENGINEERS
SOUTH BURLINGTON - VERMONT

STATE OF VERMONT · LLOYD B. DURBROW · No. 1550 · REGISTERED PROFESSIONAL ENGINEER

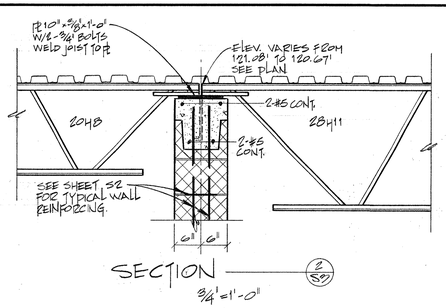
SCALE	AS SHOWN
DATE	7-16-1979
DRAWN BY	MARTINEK
CHECKED BY	LBD
PROJECT	7401

DRAWING NO. S2



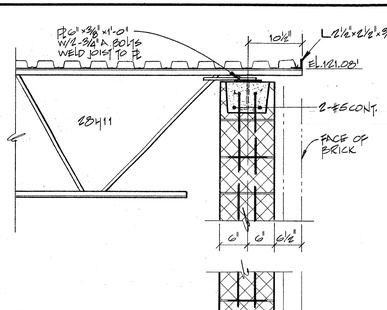
SECTION 1/S3

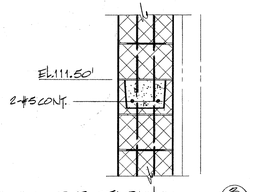
3/4" = 1'-0"



SECTION 2/S3

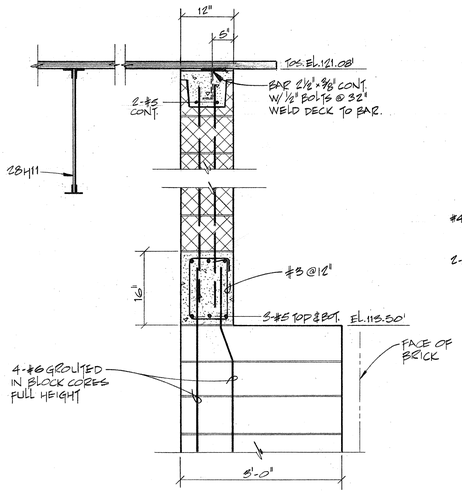
3/4" = 1'-0"





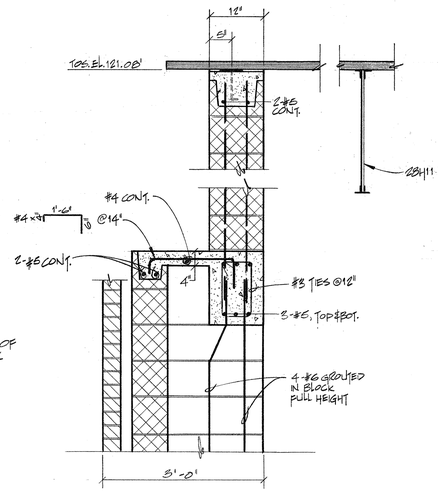
SECTION 3/S3

3/4" = 1'-0"



SECTION 4/S3

3/4" = 1'-0"



SECTION 5/S3

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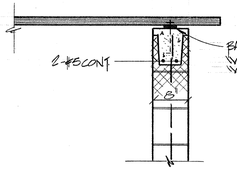
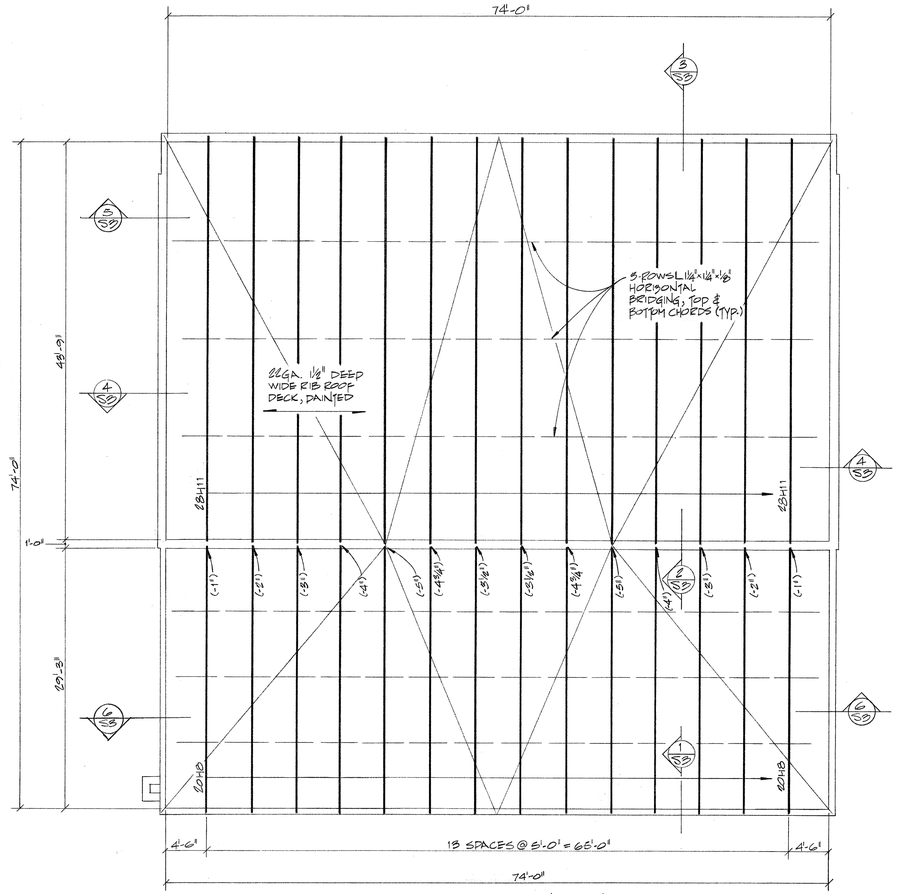


SECTION 6/S3

3/4" = 1'-0"



ROOF FRAMING PLAN

1/8" = 1'-0"

TOP OF STEEL AT ELEVATION 121.08' UNLESS NOTED (±) ON PLAN.

NORTH

MASONRY NOTES

1. ALL MASONRY WORK SHALL COMPLY TO THE "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD-BEARING CONCRETE MASONRY" BY THE NATIONAL CONCRETE MASONRY ASSOCIATION AND TO THE REQUIREMENTS OF LOCAL BUILDING CODES.
2. CONCRETE MASONRY, HOLLOW AND SOLID LOAD-BEARING UNITS, SHALL CONFORM TO ASTM SPEC C90 AND C145 RESPECTIVELY. MASONRY UNITS SHALL BE TYPE I, GRADE N.
3. CONCRETE MASONRY LOAD-BEARING UNITS SHALL HAVE MINIMUM COMPRESSIVE STRENGTH (F'm) OF 1500 PSI. AT 28 DAYS.
4. CONCRETE MASONRY UNITS MAY BE COMPOSED OF NORMAL WEIGHT OR LIGHTWEIGHT AGGREGATES.
5. MORTAR FOR NONREINFORCED MASONRY SHALL BE PROPORTIONED AND MIXED TO MEET THE REQUIREMENTS OF ASTM SPEC. C270. MORTAR SHALL BE TYPE S FOR BEARING WALLS AND TYPE N FOR NON-BEARING WALLS.
6. MORTAR AND GROUT FOR REINFORCED MASONRY SHALL BE PROPORTIONED AND MIXED TO MEET THE REQUIREMENTS OF ASTM SPEC. C476.
7. HORIZONTAL JOINT REINFORCEMENT SHALL BE FACTORY FABRICATED FROM COLD-DRAWN STEEL WIRE MEETING REQUIREMENTS OF ASTM SPEC. A82. REINFORCEMENT SHALL CONSIST OF TWO OR MORE DEFORMED LONGITUDINAL WIRES MINIMUM SIZE NO.6 GAGE FOR 12" WALLS AND NO.9 GAGE FOR 8" WALLS, WELD CONNECTED WITH MINIMUM NO.9 GAGE CROSS WIRES, FORMING A TRUSS DESIGN. MAXIMUM VERTICAL SPACING SHALL NOT EXCEED 16 INCHES UNLESS SHOWN OTHERWISE ON PLANS.
8. STEEL BAR REINFORCEMENT SHALL MEET THE REQUIREMENTS OF ASTM SPEC. A615, GRADE 40. MINIMUM LAP SPLICE TO BE 30 BAR DIAMETERS UNLESS OTHERWISE NOTED ON PLANS.

STRUCTURAL STEEL NOTES:

1. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE SPECIFICATIONS FOR DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION AND TO THE REQUIREMENTS OF LOCAL BUILDINGS CODES. STEEL SHALL CONFORM TO ASTM SPEC. A36.
2. SHOP CONNECTIONS MAY BE WELDED OR BOLTED. FIELD CONNECTIONS SHALL BE BOLTED UNLESS SPECIFICALLY SHOWN AS WELDED. BOLTS SHALL CONFORM TO ASTM SPEC. A325. MINIMUM BOLT DIAMETER TO BE 3/4". ALL CONNECTIONS SHALL BE AT LEAST EQUIVALENT TO AISC TABLE 1 SERIES CONNECTIONS, UNLESS SHOWN OTHERWISE.
3. ALL WELDING AND DETAILS SHALL BE AS RECOMMENDED BY THE AISC AND SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY. MINIMUM SIZE OF FILLET WELDS TO BE 3/16". MINIMUM RETURN SHALL BE 1/2".
4. THE STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STEEL FRAME IN ALIGNMENT.
5. ALL STEEL JOIST WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE.
6. FIELD BURNING OR CUTTING OF PRIMARY STRUCTURAL STEEL, BAR JOIST, LONGSPAN JOIST OR REINFORCING STEEL WILL NOT BE ALLOWED WITHOUT THE ARCHITECTS CONSENT.
7. ALL ROOF DECK MATERIALS SHALL BE 1 1/2" DEEP, 22 GA. WIDE RIB METAL DECK WITH A MINIMUM MOMENT OF INERTIA = 0.17 IN-4 PER FOOT UNLESS NOTED OTHERWISE ON PLANS. DECK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND ACCEPTED STANDARD PRACTICE. ROOF DECK SHALL BE WELDED TO ALL SUPPORTS WITH 5/8" DIAMETER FUSSION WELDS SPACED 6" TO 12" ON CENTER WITH A MINIMUM OF FOUR WELDS PER 30" SHEET WIDTH OR EQUIVALENT. SIDE LAPS SHALL BE MECHANICALLY FASTENED AT MIDSPAN. ALL EDGES OF DECK SHALL BE PROPERLY SUPPORTED.
8. ALL FLOOR DECK MATERIALS SHALL BE 1 1/2" DEEP, 20 GA. WIDE RIB COMPOSITE METAL DECK. FLOOR DECK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACATURERS SPECIFICATIONS USING 5/8" DIAMETER FUSION WELDS SPACED 12" MAXIMUM ON CENTER. ALL EDGES OF DECK SHALL BE PROPERLY SUPPORTED AND SIDE LAPS SHALL BE FASTENED AT MIDSPAN.

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BURLINGTON FIRE STATION #2 - TOILET RENOVATIONS
DORE & WHITTIER ARCHITECTS INC. PROJECT #18-0786

NO.	DATE	REVISION

ROOF FRAMING PLAN & STEEL DETAILS

FIRE STATION Nº TWO
CITY OF BURLINGTON FIRE DEPARTMENT
NORTH AVENUE · BURLINGTON · VERMONT

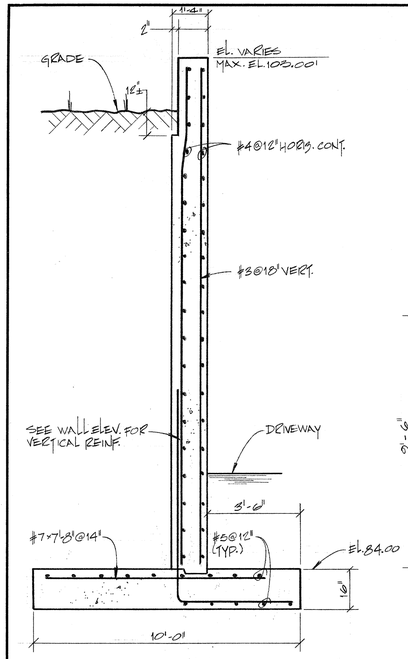
WIEMANN - LAMPHERE, ARCHITECTS
346 SHELBURNE STREET - BURLINGTON, VERMONT

DUERROW ASSOCIATES
STRUCTURAL ENGINEERS
SOUTH BURLINGTON - - - - - - - - - - VERMONT

STATE OF VERMONT · LLOYD B. DUERROW · No. 1550 · REGISTERED PROFESSIONAL ENGINEER

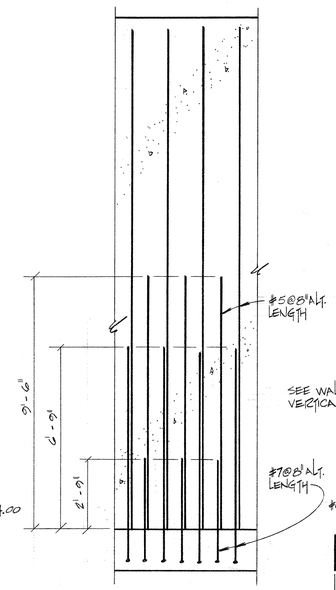
SCALE	AS SHOWN
DATE	7-16-1979
DRAWN BY	MARTINEK
CHECKED BY	LBD
PROJECT	7401

DRAWING NO. S3

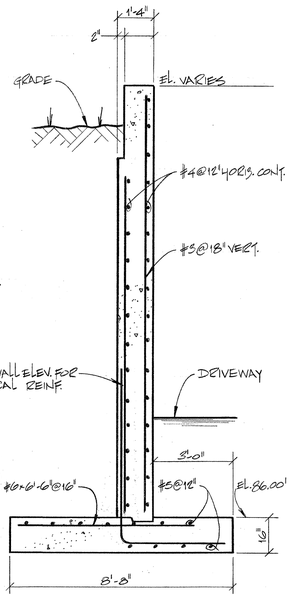


SECTION 1/S4

3/8" = 1'-0"

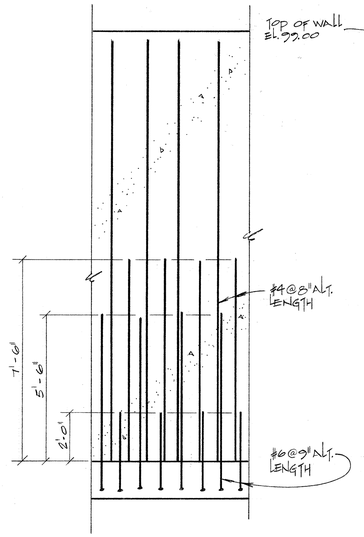


WALL ELEVATION (VERTICAL REINF. ONLY)

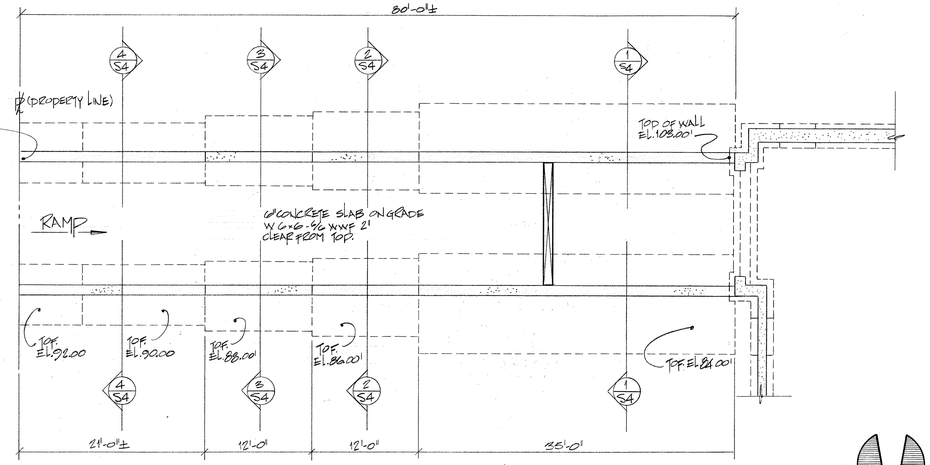


SECTION 2/S4

3/8" = 1'-0"



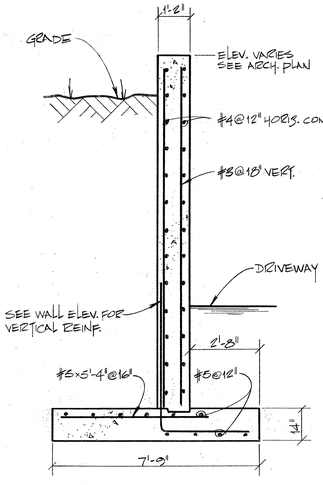
WALL ELEVATION (VERTICAL REINF. ONLY)



RETAINING WALL FOUNDATION PLAN

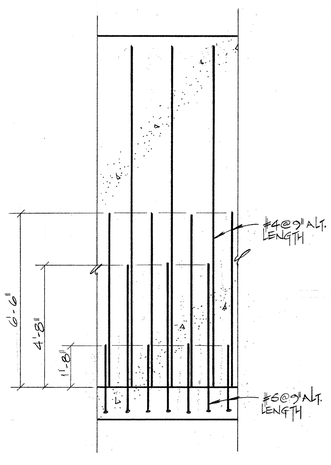
1/8" = 1'-0"

NORTH

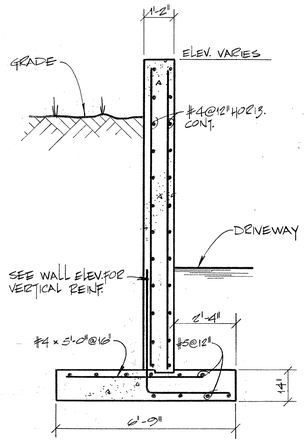


SECTION 3/S4

3/8" = 1'-0"

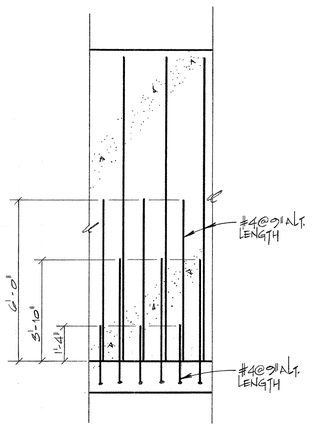


WALL ELEVATION (VERTICAL REINF. ONLY)



SECTION 4/S4

3/8" = 1'-0"



WALL ELEVATION (VERTICAL REINF. ONLY)

GENERAL NOTES

1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS, ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. ALL CONCRETE SHALL BE STONE CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS IN OFFICE AREA AND 4000 PSI AT 28 DAYS IN GARAGE AREA.
3. ALL CONCRETE SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE OF THE AMERICAN CONCRETE INSTITUTE (ACI 318-71) AND LOCAL BUILDING CODES. ALL CONCRETE WORK SHALL BE AS SPECIFIED AND RECOMMENDED BY ACI "FIELD REFERENCE MANUAL" SP-15.
4. ALL REINFORCING BARS SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO REQUIREMENTS OF A.S.T.M. SPEC. A615 GR. 60 (60,000 PSI MIN. YIELD)
5. ALL WELDED WIRE FABRIC SHALL BE PLAIN, COLD DRAWN, ELECTRICALLY WELDED FABRIC CONFORMING TO THE REQUIREMENTS OF A.S.T.M. SPEC A185, USING BRIGHT BASIC WIRE MEETING A.S.T.M. SPEC A 82.
6. ALL REINFORCING MARKED CONTINUOUS (CONT.) SHALL BE LAPPED 40 BAR DIAM. AT SPLICES AND CORNERS AND SHALL BE HOOKED OR EXTENDED 40 BAR DIAM. AT NON-CONTINUOUS ENDS. TOP BARS SHALL BE LAPPED AT MIDSPAN BOTTOM BARS SHALL BE LAPPED AT SUPPORTS.
7. SLABS ON GRADE SHALL BE POURED OVER A POROUS 8" LAYER OF COMPACTED GRAVEL FILL (MINIMUM), UNLESS OTHERWISE SHOWN ON PLANS. PROVIDE 6 x 6 10/10 WELDED WIRE MESH FOR 4" SLAB AND 6 x 6 6/6 WELDED WIRE MESH FOR 6" SLAB PLACED 1" FROMM TOP OF SLABS IN ALL SLABS ON GRADE UNLESS OTHERWISE SHOWN. SLABS SHALL BE POURED IN ALTERNATE PANELS, EACH PANEL NOT TO EXCEED 30' IN ANY DIRECTION.
8. FOUNDATION WALLS SHALL BE POURED IN ALTERNATE LENGTHS. EACH POUR NOT TO EXCEED APPROX. 60 FEET IN LENGTH. NO HORIZONTAL JOINTS SHALL BE PERMITTED EXCEPT AS SHOWN ON PLANS.
9. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL CAPABLE OF SUPPORTING A SUPERIMPOSED LOAD OF 2.00 TONS PER SQUARE FOOT.
10. FOUNDATION WALLS SHALL BE BRACED UNTIL ADJOINING FLOOR SLABS ARE IN PLACE.
11. ALL FILL AND BACKFILL MATERIAL SHALL BE PLACED IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH AND COMPACTED TO THE FOLLOWING PERCENTAGES OF MAXIMUM DENSITY AS DETERMINED BY ASTM TEST METHOD D698.
    BENEATH FOOTINGS: 98%
    BENEATH SLABS ON GRADE: 95%
12. DESIGN LIVE LOADS:

ROOF	50 PSF (GROUND SNOW LOAD)
FIRST & SECOND FLOORS	100 PSF
GARAGE FLOOR	200 PSF OR CONCENTRATED LOAD OF 16 KIP
WIND	NBC 1976 (NATIONAL BUILDING CODE)
SEISMIC	ZONE 2, NATIONAL BUILDING CODE 1976

NO.	DATE	REVISION

RETAINING WALL FOUNDATION PLAN & DETAILS

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DRAWING NO. S4