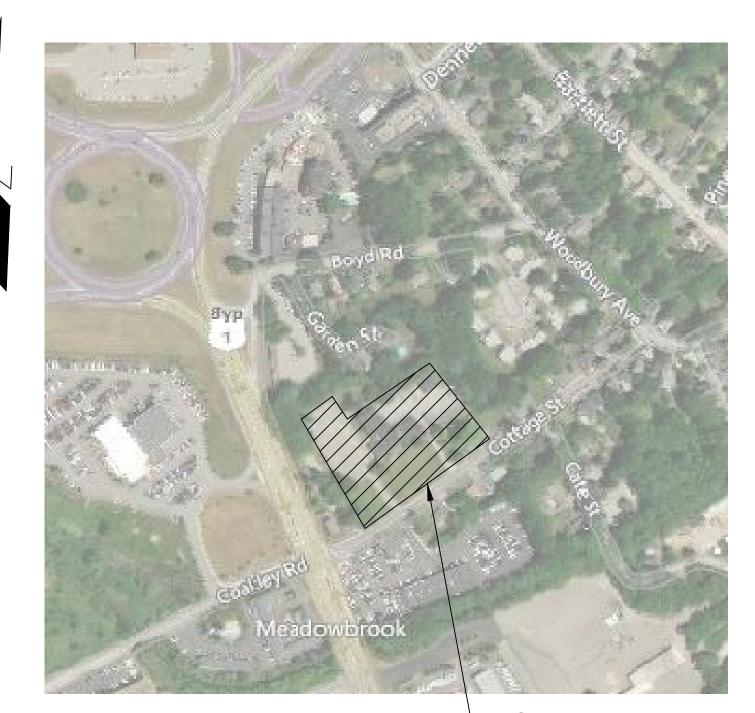
# PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE STREET PORTSMOUTH, NH DATE ISSUED: 02/20/2019

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# PORTSMOUTH SENIOR ACTIVITY CENTER 125 COTTAGE STREET | PORTSMOUTH, NH



| CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, NH 03801 JOE ALMEIDA | 603-431-2000



**AECM ARCHITECTS-ENGINEERS** 13 WATER STREET NEWMARKET, NH 03857 TIM NICHOLS | 603-217-2805

MANYPENNY | MURPHY ARCHITECTURE | ARCHITECT

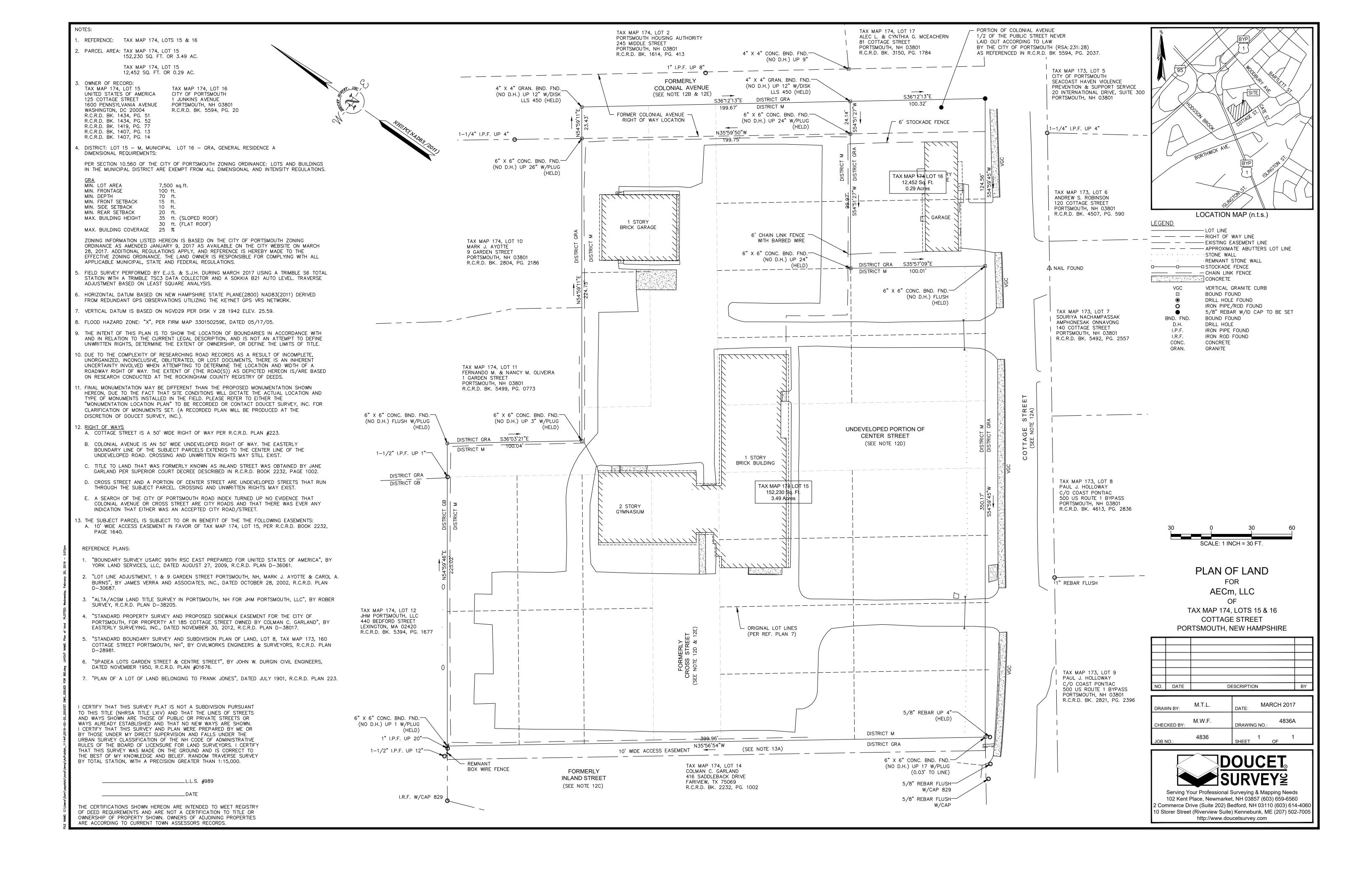
MANYPENNY-MURPHY ARCHITECTURE 96 PENHALLOW STREET PORTSMOUTH, NH 03801 ALYSSA MURPHY | 603-319-8199

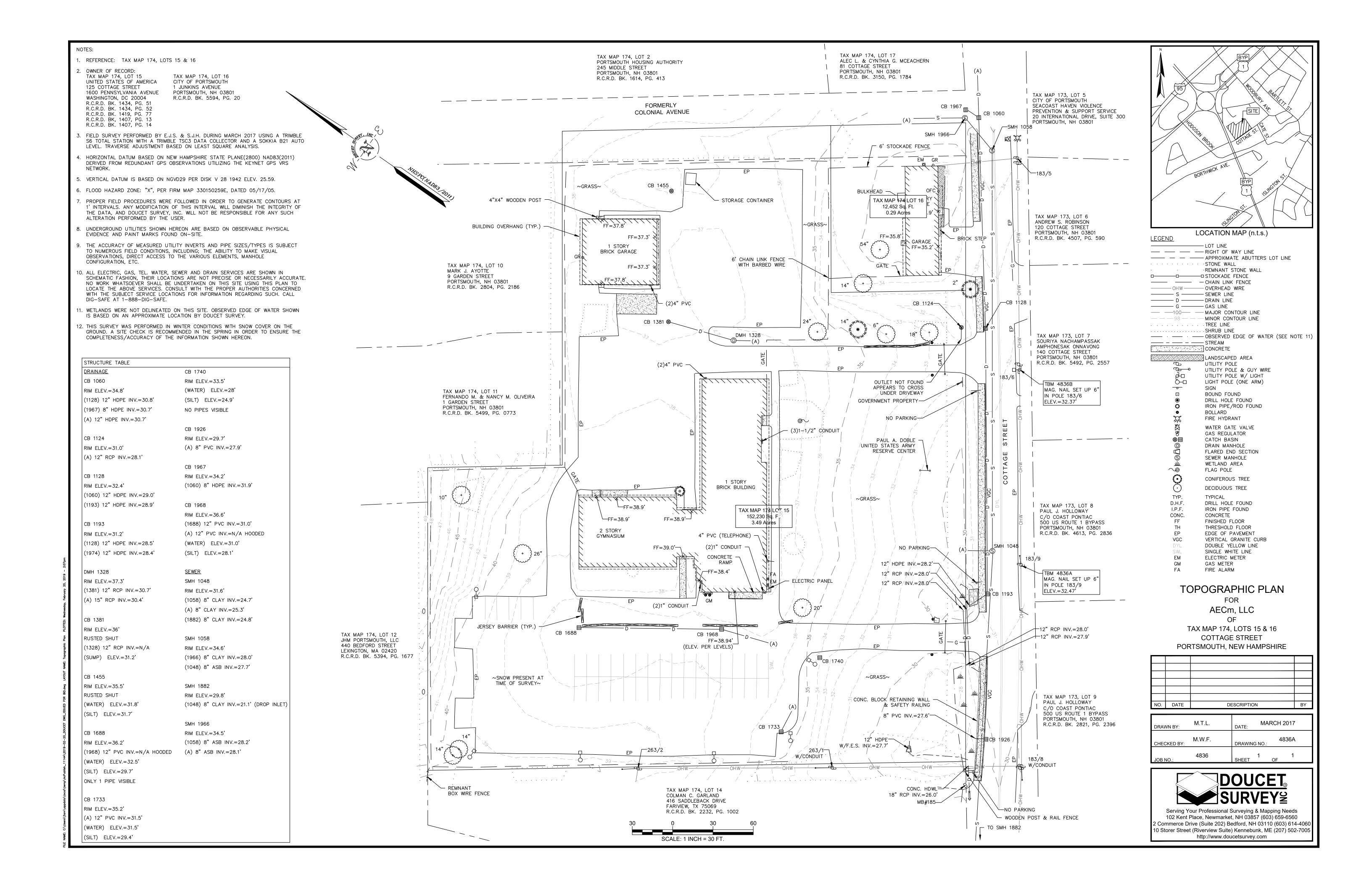


| BECKER STRUCTURAL ENGINEERS 75 YORK STREET PORTLAND, ME 04101 | PAUL BECKER | 207-879-1838

S3.3

FRAMING SECTIONS AND DETAILS





125 COTTAGE ST. 70°46'40.85"W

#### DESCRIPTION

PORTSMOUTH, NH 03801

THE PROJECT CONSISTS OF THE ADAPTIVE REUSE OF THE FORMER DOBLE ARMORY. THE PROJECT ENTAILS UPGRADES OF ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE CIVIL SYSTEMS.

#### DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 25,260 SQ. FT.

#### SOIL CHARACTERISTICS

BASED ON THE NRCS SOIL SURVEY FOR ROCKINGHAM COUNTY THE SOILS CONSISTS OF "URBAN LAND-CANTON COMPLEX".

### NAME OF RECEIVING WATERS

THE STORM WATER RUNOFF WILL FLOW VIA A CLOSED DRAINAGE SYSTEM TO ONE OF TWO EXISTING OUTFALLS NORTH MILL POND.

# SEQUENCE

- 1. CUT AND CLEAR TREES.
- 2. CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
- 2.1. NEW CONSTRUCTION.
- 2.2. DISPOSAL OF SEDIMENT SPOIL, STUMP AND OTHER SOLID WASTE.
- 2.3. CONTROL OF DUST.
- 2.4. CONSTRUCTION ACCESS.
- 2.5. PROXIMITY OF CONSTRUCTION SITE TO RECEIVING WATERS. 2.6. CONSTRUCTION DURING LATE WINTER AND EARLY SPRING.
- 3. ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION, PERCOLATION, AND SEDIMENTATION BASINS TO BE STABILIZED USING VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING RUNOFF TO THEM.
- 4. CLEAR AND DISPOSE OF DEBRIS.
- 5. CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
- 6. GRADE AND GRAVEL ROADWAYS AND PARKING AREAS ALL ROADS AND PARKING AREAS SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION.
- 7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER CONSTRUCTION.
- 8. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
- 9. FINISH PAVING ALL ROADWAYS AND PARKING LOTS. 10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- 11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 12. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

NOTE: THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.

#### **EROSION CONTROL NOTES**

- 1 ALL FROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.
- 2. PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
- 3. CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT SACKS AND SILT SOCKS, AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
- 4. SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- 5. PERIMETER CONTROLS INCLUDING SILT FENCES. HAY BALE BARRIERS. AND/OR SIL' SOCKS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- 6. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- 7. ALL DISTURBED AREAS NOT BEING TREATED SHALL RECEIVE 6" LOAM, SEED, AND
- 8. INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- 9. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

# EROSION CONTROL OBSERVATIONS AND MAINTENANCE

- 1. THIS PROJECT DOES NOT EXCEED ONE (1) ACRE OF DISTURBANCE AND DOES NOT
- 1.1. THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT.
- 1.1.1. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE SHALL BE MADE AT LEAST ONCE A WEEK OR WITH 24 HOURS OF STORM 0.25 INCHES OR GREATER.
- 1.1.2. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND
- DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR.
- 1.1.3. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES.
- 1.1.4. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

# STABILIZATION

- 1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS
- 1.1. BASE COARSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
- 1.2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
- 1.3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN
- 1.4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED. 2. WINTER STABILIZATION PRACTICES:
- 2.1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHOR NETTING. ELSEWHERE.
- 2.2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.
- 2.3. AFTER NOVEMBER 15TH, INCOMPLETE ROAD SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- 3. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21)

- CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
- 3.1. TEMPORARY SEEDING.
- 3.2. MULCHING.
- 4. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN THESE AREAS, SILT FENCES AND HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
- 5. DURING CONSTRUCTION. RUN OFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES. PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUN OFF FROM THE SITE WILL BE FILTERED THROUGH HAY BALE BARRIERS AND SILT FENCES OR SILT SOCKS ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15TH.

### DUST CONTROL

TEMPORARY MULCHING.

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST THROUGHOUT THE
- CONSTRUCTION PERIOD. 2. DUST CONTROL METHODS SHALL INCLUDE BUT ARE NOT LIMITED TO, SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND
- 3. DUST CONTROL MEASURES SHALL BE UTILIZED TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

### STOCK PILES

- 1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND
- 2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
- 3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING
- 4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE
- 5. CONTRACTOR SHALL NOT TRANSPORT ANY LOAM OR OTHER SOILS FROM THE SITE WITHOUT OWNER AUTHORIZATION.

- 1. TEMPORARY GRASS COVER:
- 1.1. SEEDBED PREPARATION: APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE. 1.2. SEEDING
- 1.2.1. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE.
- 1.2.2. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS. LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER,
- 1.2.3. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
- 1.2.4. MAINTENANCE: TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT. REPAIRS SHALL BE MADE, AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMNS, ETC.).

# 2. VEGETATIVE PRACTICE

- 2.1. FOR PERMANENT MEASURES AND PLANTINGS.
- 2.1.1. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
- 2.1.2. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZE APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER. 2.1.3. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED
- RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM, LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED. SMOOTH AND EVEN. AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES. AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH.
- 2.1.4. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE.
- 2.1.5. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT ERODING THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH
- GRASS SHALL BE RE-SEEDED, AND ALL NOXIOUS WEEDS REMOVED. 2.1.6. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL
- ACCEPTED BY THE OWNER. 2.1.7. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS
  - SHALL BE APPLIED AT THE INDICATED RATE: SEEDING RATE
  - CREEPING RED FESCUE 20 LBS/ACRE TALL FESCUE 20 LBS/ACRE
  - 2 LBS/ACRE
  - IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15TH. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
- 3. DORMANT SEEDING (SEPTEMBER 1TH TO FIRST SNOWFALL): FOLLOW PERMANENT MEASURES FOR SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE INCORPORATING WINTER RYE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

# CONCRETE WASHOUT AREA

- 1. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE.
- 1.1. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY.
- 1.2. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER.
- 1.3. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM
- STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS. 1.4. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY

# WHEN MATERIALS NEED TO BE REMOVED.

- ALLOWABLE NON-STORMWATER DISCHARGES 1. DISCHARGES FROM FIRE-FIGHTING ACTIVITIES.
- 2. FIRE HYDRANT FLUSHING
- 3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED.
- 4. WATER USED TO CONTROL DUST.
- 5. POTABLE WATER INC. UNCONTAMINATED WATER LINE FLUSHING. 6. ROUTINE EXTERNAL BUILDING WASH DOWN - NO DETERGENTS.
- 7. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATE.

- 8. FOUNDATION OR FOOTING DRAINS NOT CONTAMINATED.
  - 9. UNCONTAMINATED EXCAVATION DEWATERING.

### 10. LANDSCAPE IRRIGATION.

- WASTE DISPOSAL
- 1. WASTE MATERIALS 1.1. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER.
- 1.2. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE.
- 1.3. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
- SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. 2.2. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE

2.1. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER

#### 3. SANITARY WASTE

SUPERINTENDENT

3.1. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

### SPILL PREVENTION

- 1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
- 2. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
- 2.1. GOOD HOUSEKEEPING: THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:
- 2.1.1. ONLY SUFFICIENT AMOUNTS OF PRODUCTS REQUIRED SHALL BE STORED ON SITE.
- 2.1.2. ALL MATERIALS STORED ON SITE SHALL BE IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER CLOSURE

2.1.3. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL

- SHALL BE FOLLOWED 2.1.4. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND
- DISPOSAL OF MATERIALS. 2.1.5. SUBSTANCES SHALL NOT BE MIXED UNLESS RECOMMENDED BY THE
- MANUFACTURER.
- 2.1.6. CONTAINERS SHALL BE EMPTY PRIOR TO DISPOSAL 2.2. HAZARDOUS PRODUCTS: THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE
- THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS: 2.2.1. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE
- 2.2.2. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR
- IMPORTANT PRODUCT INFORMATION. 2.2.3. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED
- ACCORDING TO THE MANUFACTURERS RECOMMENDED METHODS OF DISPOSAL. 2.3. PRODUCT SPECIFICATION PRACTICES: THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
- 2.3.1. PETROLEUM PRODUCTS: 2.3.1.1. ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE
- REGULAR PREVENTATIVE MAINTENANCE. 2.3.1.2. PETROLEUM PRODUCTS SHALL BE STORED IN ORIGINAL MANUFACTURER LABELED CONTAINERS AND SEALED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE
- MANUFACTURER'S RECOMMENDATIONS.
- 2.3.2.1. FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS.
- ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE

CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE

# TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS

- 2.3.3.1. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT
- 2.3.3.2. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM. 2.3.3.3. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION,

THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND 2.3.4.1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE

2.3.4. SPILL CONTROL PRACTICES: IN ADDITION TO GOOD HOUSEKEEPING AND

- PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE, EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS
- MOPS, RAGES, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE. 2.3.4.3. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

2.3.4.4. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL

- WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL. STATE OR FEDERAL AGENCIES AS REQUIRED.
- THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP
- COORDINATOR. 2.3.5. VEHICLE FUELING AND MAINTENANCE PRACTICE:
- 2.3.5.1. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY.
- CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY.
- 2.3.5.3. IF POSSIBLE, THE CONTRACTOR SHALL KEEP AREA COVERED. 2.3.5.4. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE
- AREA. 2.3.5.5. THE CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.
- 2.3.5.6. VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS AND DAMAGE. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

# ADA COMPLIANCE

- 1.1. PARALLEL PARKING SPOTS SHALL BE NO LESS THAN 8.5 FEET IN WIDTH AND 20 FEET IN DEPTH. MINIMUM WIDTH OF A CORRESPONDING 1-WAY TRAFFIC AND 2-WAY TRAFFIC SHALL BE 14 FEET AND 24 FEET RESPECTIVELY.
- 1.2. 45° PARKING SPOTS SHALL BE NO LESS THAN 8.5 FEET IN WIDTH AND 19 FEET IN DEPTH. MINIMUM WIDTH OF A CORRESPONDING 1-WAY TRAFFIC AND 2-WAY TRAFFIC SHALL BE 16 FEET AND 24 FEET RESPECTIVELY.

DEPTH. MINIMUM WIDTH OF A CORRESPONDING 1-WAY TRAFFIC AND 2-WAY TRAFFIC

1.3. 90° PARKING SPOTS SHALL BE NO LESS THAN 8.5 FEET IN WIDTH AND 19 FEET IN

SHALL BE 24 FEET. 2. PEDESTRIAN CIRCULATION:

- 2.1. A MINIMUM 5-FOOT WIDE PEDESTRIAN PATH SHALL BE PROVIDED.
- 2.2. SIDEWALKS AND PEDESTRIAN PATHWAYS LONGER THAN 500 FEET SHALL PROVIDE AS BENCHES, TABLES, SHADE TREES OR GRASSY AREAS.
- 2.3. SUCH PEDESTRIAN AREAS SHALL BE A MINIMUM OF 100 SQUARE FEET IN AREA AND SHALL BE PROVIDED AT REGULAR INTERVALS OF 300 FEET ALONG THE SIDEWALK OR PEDESTRIAN PATHWAY

### **GENERAL NOTES**

- 1. STANDARD CONSTRUCTION WORK PERIOD IS MONDAY THROUGH FRIDAY FROM 0700 TO 1800. CONTRACTOR SHALL REQUEST AUTHORIZATION FROM CITY FOR WORK OUTSIDE OF
- THIS PERIOD AT LEAST 72 HOURS IN ADVANCE. 2. PLANS HAVE BEEN COMPILED FROM EXISTING RECORD PLANS, ON-SITE FIELD SURVEY
- 3. UNLESS OTHERWISE NOTED, ALL EXISTING FEATURES DESIGNATED ON THE PLANS TO REMAIN INCLUDING BUT NOT LIMITED TO TREES SIGNS SIGN POSTS CURBS. SIDEWALKS AND BACK OF SIDEWALK FEATURES WILL BE VERIFIED, LOCATED, AND PROTECTED DURING ALL PHASES OF CONSTRUCTION. ALL WORK SHALL COMPLY WITH CITY OF PORTSMOUTH STANDARDS.
- 4. NEW WHEELCHAIR RAMPS AND ACCESSIBLE FEATURES WILL BE PROVIDED WHERE REQUIRED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION OF THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS AND ALL ADDENDA ISSUED THERE 8. 2"-3" OF MULCH SHALL BE PLACED OVER THE PLANTING AREA
- 5. SURVEY CONTROL BOUNDS AND STREET LINE MONUMENTATION SHALL NOT BE DISTURBED DURING THE COURSE OF WORK AND SHALL BE PROTECTED. SHOULD ANY BOUND BE DISTURBED. THE CONTRACTOR WILL BE REQUIRED TO HIRE AT HIS OWN. EXPENSE, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEW HAMPSHIRE TO REPLACE AND OR RESET THE BOUND TO ITS ORIGINAL POSITION.
- 6. SALVAGED ITEMS AS NOTED ARE TO BECOME THE PROPERTY OF THE CITY OF
- 7. FEATURES MAY BE SHOWN WITHIN THE LIMIT OF WORK THAT ARE NOT EXPLICITLY CALLED OUT FOR REMOVAL OR DEMOLITION. DEMOLISH ALL FEATURES WITHIN THE LIMIT
- OF WORK REQUIRED TO COMPLETE THE WORK OF THE PROJECT. 8. PREVENT ANY DISTURBANCE OR DAMAGE TO ADJACENT PROPERTIES.
- 9. CONTRACTOR SHALL REPORT ALL SPILLS AND LEAKS OF OIL OR OTHER HAZARDOUS SUBSTANCES. (IE OIL, ANTIFREEZE, CHEMICALS, ETC.) OCCURRING DURING THE PERFORMANCE OF THIS CONTRACT IMMEDIATELY UPON DISCOVERY, REGARDLESS OF THE QUANTITY. CALL THE FIRE DEPARTMENT TO REPORT THE SPILL. THE CITY OF PORTSMOUTH RESERVES THE RIGHT TO CLEAN UP, PACKAGE AND DISPOSE OF CONTRACTOR SPILLS OCCURRING ON THE SITE, AND BILL SUCH COSTS TO THE
- 10. IF ADDITIONAL MATERIAL, NOT INDICATED, THAT MAY BE HAZARDOUS TO HUMAN HEALTH UPON DISTURBANCE DURING CONSTRUCTION OPERATIONS IS ENCOUNTERED, STOP THAT PORTION OF WORK AND NOTIFY THE CITY OF PORTSMOUTH AND DPW IMMEDIATELY.

# AS BUILT NOTES

- 1. CHANGES FROM THE CONTRACT PLANS WHICH ARE MADE IN THE WORK OR ADDITIONAL INFORMATION WHICH MIGHT BE UNCOVERED IN THE COURSE OF CONSTRUCTION MUST BE ACCURATELY AND NEATLY RECORDED AS THEY OCCUR BY MEANS OF DETAILS AND NOTES. THE CONTRACTOR SHALL PREPARE AND PROVIDE TO THE CITY OF PORTSMOUTH WORKING RECORD (AS-BUILT) DRAWINGS AFTER THE COMPLETION OF EACH DEFINABLE FEATURE OF WORK AS LISTED IN THE CONTRACTOR QUALITY CONTROL PLAN (FOUNDATIONS, UNDERGROUND UTILITIES, STRUCTURAL STEEL, ETC., AS APPROPRIATE FOR THE PROJECT). IF THE CONTRACTOR FAILS TO MAINTAIN THE WORKING AND FINAL RECORD DRAWINGS AS SPECIFIED HEREIN, THE CITY OF PORTSMOUTH MAY DEDUCT FROM THE MONTHLY PROGRESS PAYMENT AN AMOUNT REPRESENTING THE ESTIMATED COST OF MAINTAINING THE RECORD DRAWINGS. THIS MONTHLY DEDUCTION WILL CONTINUE UNTIL AN AGREEMENT CAN BE REACHED BETWEEN THE CITY OF PORTSMOUTH AND THE CONTRACTOR REGARDING THE ACCURACY AND COMPLETENESS OF UPDATED DRAWINGS. THE CONTRACTOR SHALL SHOW ON THE WORKING AND FINAL RECORD DRAWINGS, BUT NOT LIMITED TO, THE FOLLOWING INFORMATION:
- 1.1. THE ACTUAL LOCATION (ELEVATION AND HORIZONTAL COORDINATES), MATERIALS AND SIZES OF ALL SUB-SURFACE UTILITY LINES. IN ORDER THAT THE LOCATION OF THESE LINES AND APPURTENANCES MAY BE DETERMINED IN THE EVENT THE SURFACE OPENINGS OR INDICATORS BECOME COVERED OVER OR OBSCURED. SHOW BY OFFSET DIMENSIONS TO TWO PERMANENTLY FIXED SURFACE FEATURES THE END OF EACH RUN INCLUDING EACH CHANGE IN DIRECTION ON THE RECORD DRAWINGS OR HORIZONTAL COORDINATES BASED ON THE SHIPYARD DATUM. LOCATE VALVES, FITTINGS, SPLICE BOXES AND SIMILAR APPURTENANCES BY DIMENSIONING ALONG THE UTILITY RUN FROM A REFERENCE POINT. ALSO, RECORD THE DEPTH BELOW THE SURFACE OF EACH RUN OF PIPE, FITTINGS, VALVES, ETC.
- 1.2. THE LOCATION AND DIMENSIONS OF ANY CHANGES WITHIN THE BUILDING 1.3. CORRECT GRADE, ELEVATIONS, CROSS SECTION, OR ALIGNMENT OF ROADS, EARTHWORK, STRUCTURES OR EXISTING AND NEW UTILITIES IF ANY CHANGES WERE
- 1.4. CHANGES IN DETAILS OF DESIGN OR ADDITIONAL INFORMATION OBTAINED FROM WORKING DRAWINGS SPECIFIED TO BE PREPARED AND/OR FURNISHED BY THE CONTRACTOR: INCLUDING BUT NOT LIMITED TO FABRICATION. ERECTION. INSTALLATION PLANS AND PLACING DETAILS, PIPE SIZES, INSULATION MATERIAL DIMENSIONS OF EQUIPMENT FOUNDATIONS, ETC.
- 1.5. THE TOPOGRAPHY, INVERT ELEVATIONS AND GRADES OF DRAINAGE INSTALLED OR AFFECTED AS PART OF THE PROJECT CONSTRUCTION. 1.6. CHANGES OR MODIFICATIONS WHICH RESULT FROM THE FINAL INSPECTION.

1.7. WHERE CONTRACT DRAWINGS OR SPECIFICATIONS PRESENT OPTIONS, SHOW ONLY

THE OPTION SELECTED FOR CONSTRUCTION ON THE FINAL AS-BUILT PRINTS.

1.8 SYSTEMS DESIGNED OR ENHANCED BY THE CONTRACTOR SUCH AS HVAC CONTROLS, FIRE ALARM, FIRE SPRINKLER, AND IRRIGATION SYSTEMS.

# 1.9. WHERE UTILITY LOCATIONS DIFFER FROM THOSE IDENTIFIED ON THE PLANS.

MADE FROM CONTRACT PLANS.

- CONSTRUCTION NOTES
- 1. THE CONTRACTOR SHALL COORDINATE MATERIAL STORAGE AND LAYDOWN AREAS WITH THE CITY OF PORTSMOUTH DPW. 2. ALL CONSTRUCTION MATERIALS SHALL BE TRANSPORTED TO AND FROM THE SITE IN

COVERED VEHICLES, THE CONTRACTOR SHALL MAINTAIN AND SWEEP PAVEMENT AREAS.

- AND ADJACENT STREETS AS NECESSARY TO KEEP ALL AREAS CLEAN. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE CITY OF PORTSMOUTH DURING THE PROCESS OF THE WORK
- 4. THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SEQUENCING PLAN FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOR MAINTAINING SECURITY AT ALL
- TIMES DURING CONSTRUCTION 6. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE O.S.H.A. REGULATIONS AND SAFETY REQUIREMENTS. MA

7. ALL CONSTRUCTION SIGNS SHALL BE DESIGNED TO WITHSTAND 50MPH WINDS VELOCITY

WINDS AND BE PREPARED BY A PROFESSIONAL SIGN COMPANY WITH A MINIMUM OF

THREE (3) YEARS EXPERIENCE. 8. WHERE CONTRACTOR REMOVES EXISTING SITE FEATURES THAT ARE TO REMAIN, TO FACILITATE INSTALLATION OF NEW WORK FOR THIS PROJECT, CONTRACTOR SHALL REPLACE THE EXISTING SITE FEATURES AT CONTRACTORS EXPENSE.

9. THE CONSTRUCTION LIMIT LINE SHOWN ON DRAWING IS AN APPROXIMATION OF THE CONSTRUCTION LIMITS. THE CITY OF PORTSMOUTH MAY MODIFY THIS LINE TO

ACCOMMODATE THE EFFICIENCY OF CONSTRUCTION PROJECT.

# TREE PLANTING NOTES

- AREAS FOR STANDING AND SITTING AND MAY INCLUDE PEDESTRIAN AMENITIES SUCH 1. ALL PLANTING HOLES SHALL BE DUG BY HAND- NO MACHINES. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE NEW PLANTING PITS, PLANTING BEDS WITH GRANITE CURBING, AND PLANTING SITES WITH SILVA CELLS ARE BEING CREATED. IF A MACHINE IS USED TO DIG IN ANY OF THESE SITUATIONS AND PLANTING DEPTH NEEDS TO BE RAISED THE MATERIAL IN THE BOTTOM OF THE PLANTING HOLE MUST BE FIRMED WITH MACHINE TO PREVENT SINKING OF
  - 2. ALL WIRE AND BURLAP SHALL BE REMOVED FROM THE ROOT BALL AND PLANTING HOLE.
  - 3. THE ROOT BALL OF THE TREE SHALL BE WORKED SO THAT THE ROOT COLLAR OF THE TREE IS VISIBLE AND NO GIRDLING ROOTS ARE PRESENT. 4. THE ROOT COLLAR OF THE TREE SHALL BE 2"-3" ABOVE GRADE OF PLANTING HOLE FOR
  - 5. ALL PLANTINGS SHALL BE BACKFILLED WITH SOIL FROM THE SITE AND AMENDED NO MORE THAN 20% WITH ORGANIC COMPOST. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE ENGINEERED SOIL IS BEING USED IN CONJUNCTION WITH SILVA CELLS AND WHERE NEW
  - PLANTING BEDS ARE BEING CREATED 6. ALL PLANTINGS SHALL BE BACKFILLED IN THREE LIFTS AND **ALL** LIFTS SHALL BE WATERED SO
  - THE PLANTING WILL BE SET AND FREE OF AIR POCKETS- NO EXCEPTIONS. 7. AN EARTH BERM SHALL BE PLACED AROUND THE PERIMETER OF THE PLANTING HOLE EXCEPT
  - WHERE CURBED PLANTING BEDS OR PITS ARE BEING USED.

9. AT THE TIME THE PLANTING IS COMPLETE THE PLANTING SHALL RECEIVE ADDITIONAL WATER

TO ENSURE COMPLETE HYDRATION OF THE ROOTS, BACKFILL MATERIAL AND MULCH LAYER.

INJURY. THE CITY OF PORTSMOUTH, NH RESERVES THE RIGHT TO REFUSE/REJECT ANY PLANT

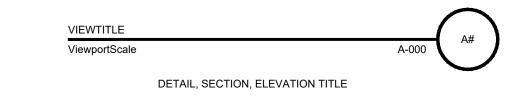
MATERIAL OR PLANTING ACTION THAT FAILS TO MEET THE STANDARDS SET FORTH IN THE ANSI

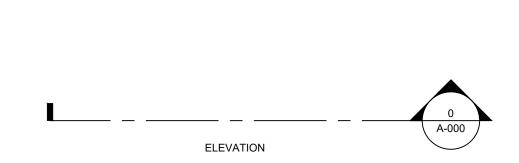
- 10. STAKES AND GUYS SHALL BE USED WHERE APPROPRIATE AND/OR NECESSARY. GUY MATERIAL SHALL BE NON-DAMAGING TO THE TREE. 11. ALL PLANTING STOCK SHALL BE SPECIMEN QUALITY, FREE OF DEFECTS, AND DISEASE OR
- A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPLANTING AND/OR THE CITY OF PORTSMOUTH, NH PLANTING REQUIREMENTS. 12. CONTRACTOR TO HAVE CERTIFIED ARBORIST EVALUATE ALL TREES (ON PROPERTY AND EXTENDING OVER THE PROPERTY BOUNDARY). ARBORIST SHALL PRUNE ALL LIMBS TO IMPROVE TREE HEALTH AND TO PREVENT DAMAGE TO FENCING STRUCTURES AND LIGHT

# LIST OF SYMBOLS

POLES. ARBORIST SHALL REMOVE ANY DISEASED OR DYING TREES AND SHRUBS







PLAN SECTION

CITY OF PORTSMOUTH

1 JUNKINS AVE.

125 COTTAGE STREET

PORTSMOUTH, NH 03801

13 WATER ST | NEWMARKET, NH

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# PORTSMOUTH **SENIOR ACTIVITY**

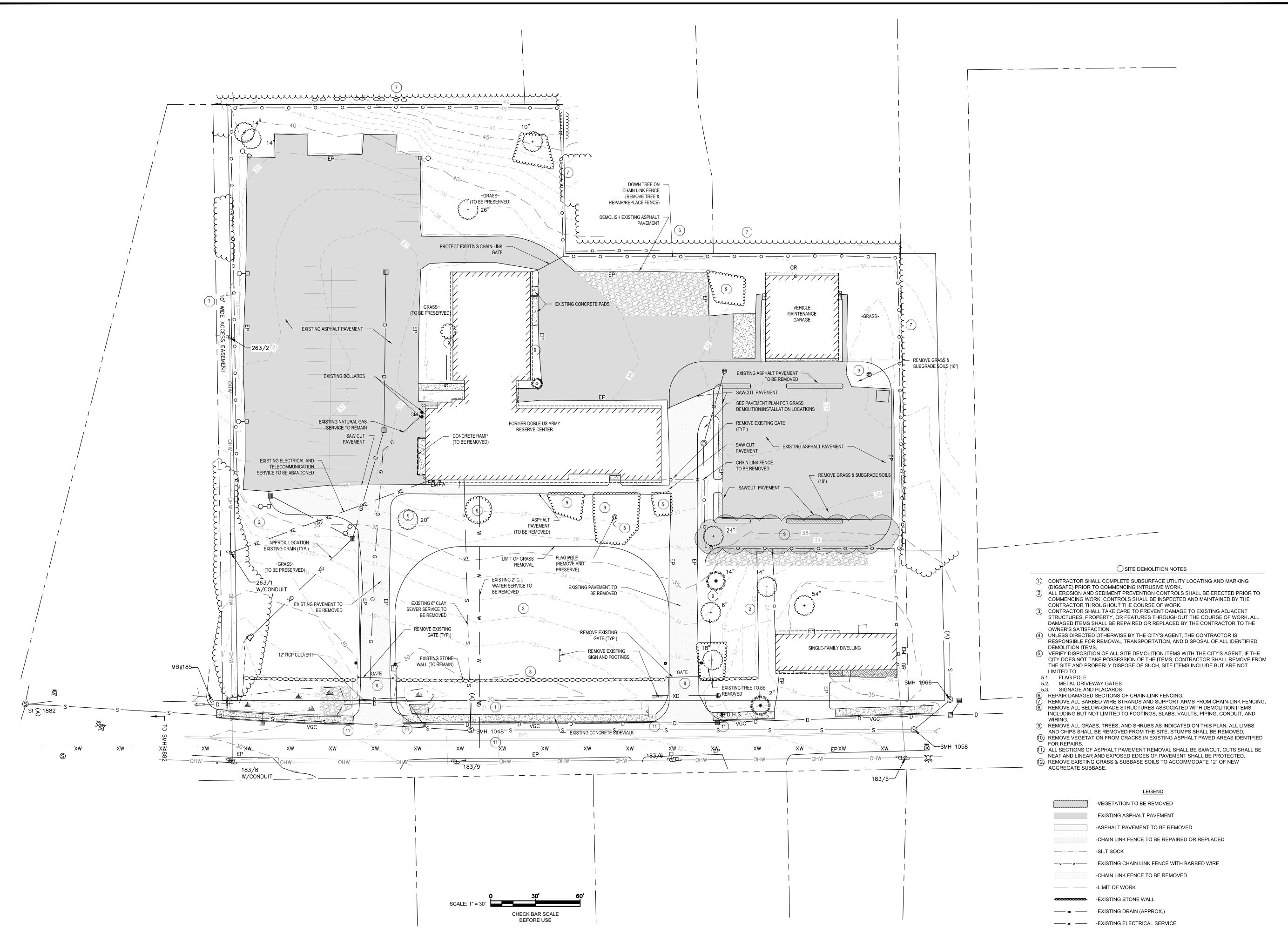
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1	PER TAC COMMENTS	12/12/201
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3	ISSUED FOR BID	02/20/201

# **GENERAL NOTES & EROSION**

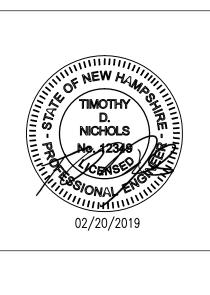
CONTROL NOTES

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CITY OF PORTSMOUTH 1 JUNKINS AVE.

# PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE STREET PORTSMOUTH, NH 03801

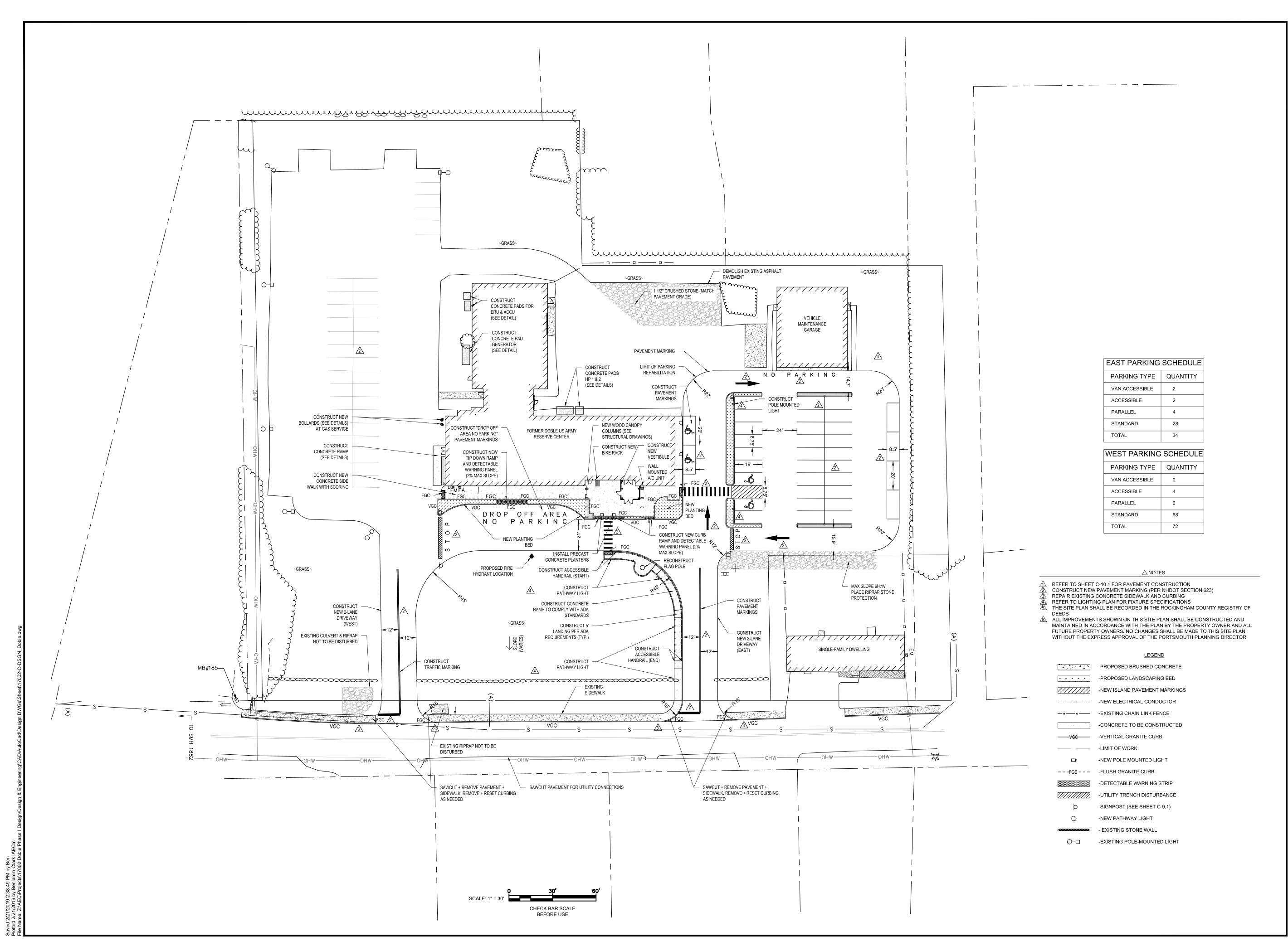
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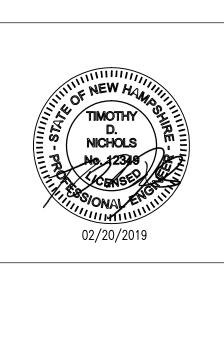
# SITE DEMOLITION PLAN

DDO IDOT NO	47000
PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	AS SHOWN
DRAWN BY:	ВСС
REVIEWED BY:	TDN

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CITY OF PORTSMOUTH 1 JUNKINS AVE.

# PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE STREET PORTSMOUTH, NH 03801

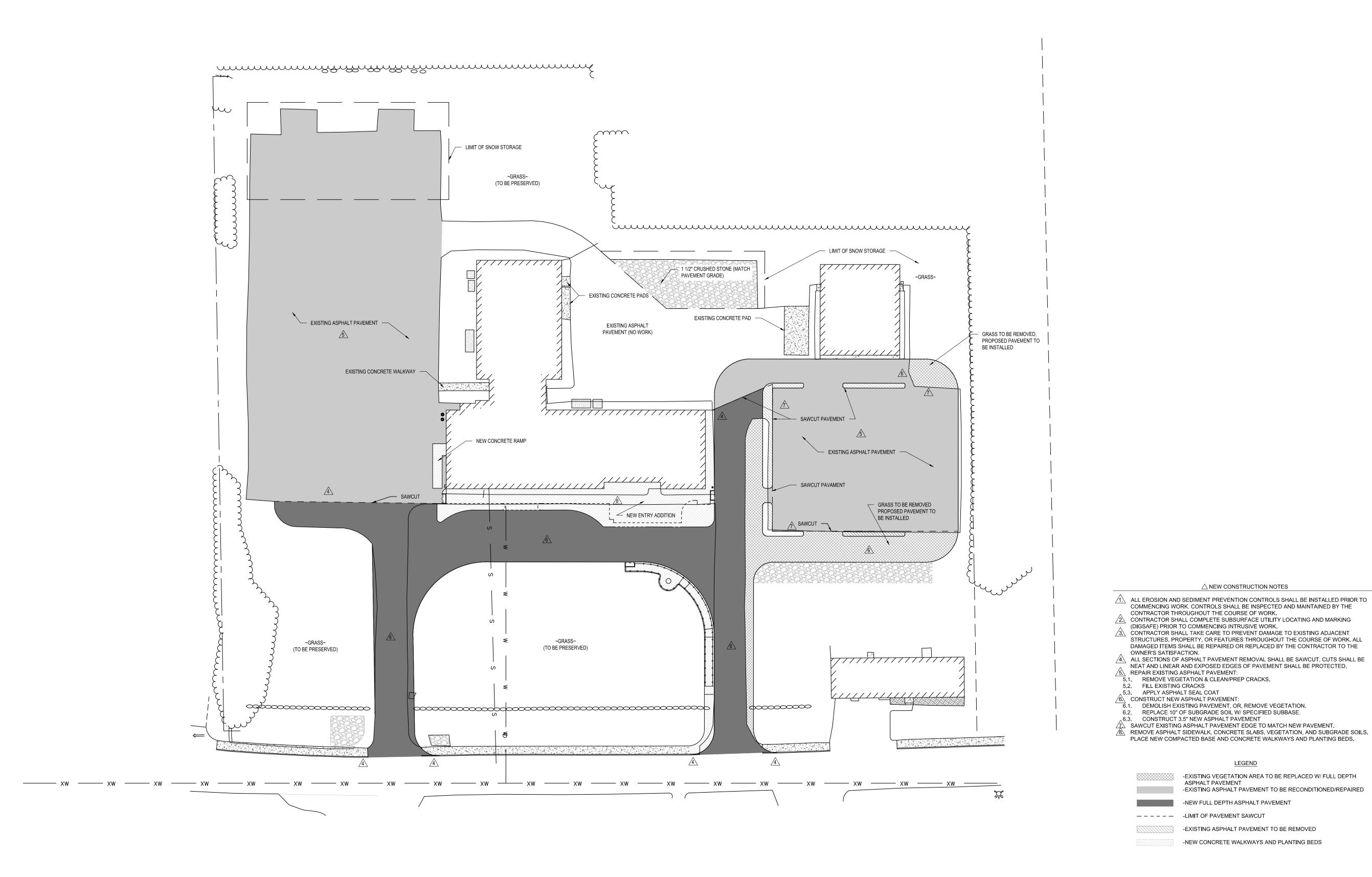
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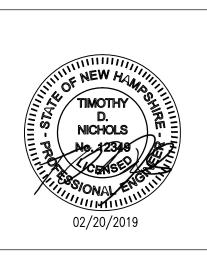
SITE PLAN

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△ NEW CONSTRUCTION NOTES

DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE

<u>LEGEND</u> -EXISTING VEGETATION AREA TO BE REPLACED W/ FULL DEPTH

-EXISTING ASPHALT PAVEMENT TO BE RECONDITIONED/REPAIRED

ASPHALT PAVEMENT

-NEW FULL DEPTH ASPHALT PAVEMENT

-EXISTING ASPHALT PAVEMENT TO BE REMOVED

-NEW CONCRETE WALKWAYS AND PLANTING BEDS

— — — — -LIMIT OF PAVEMENT SAWCUT

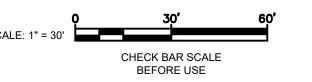
OWNER'S SATISFACTION.

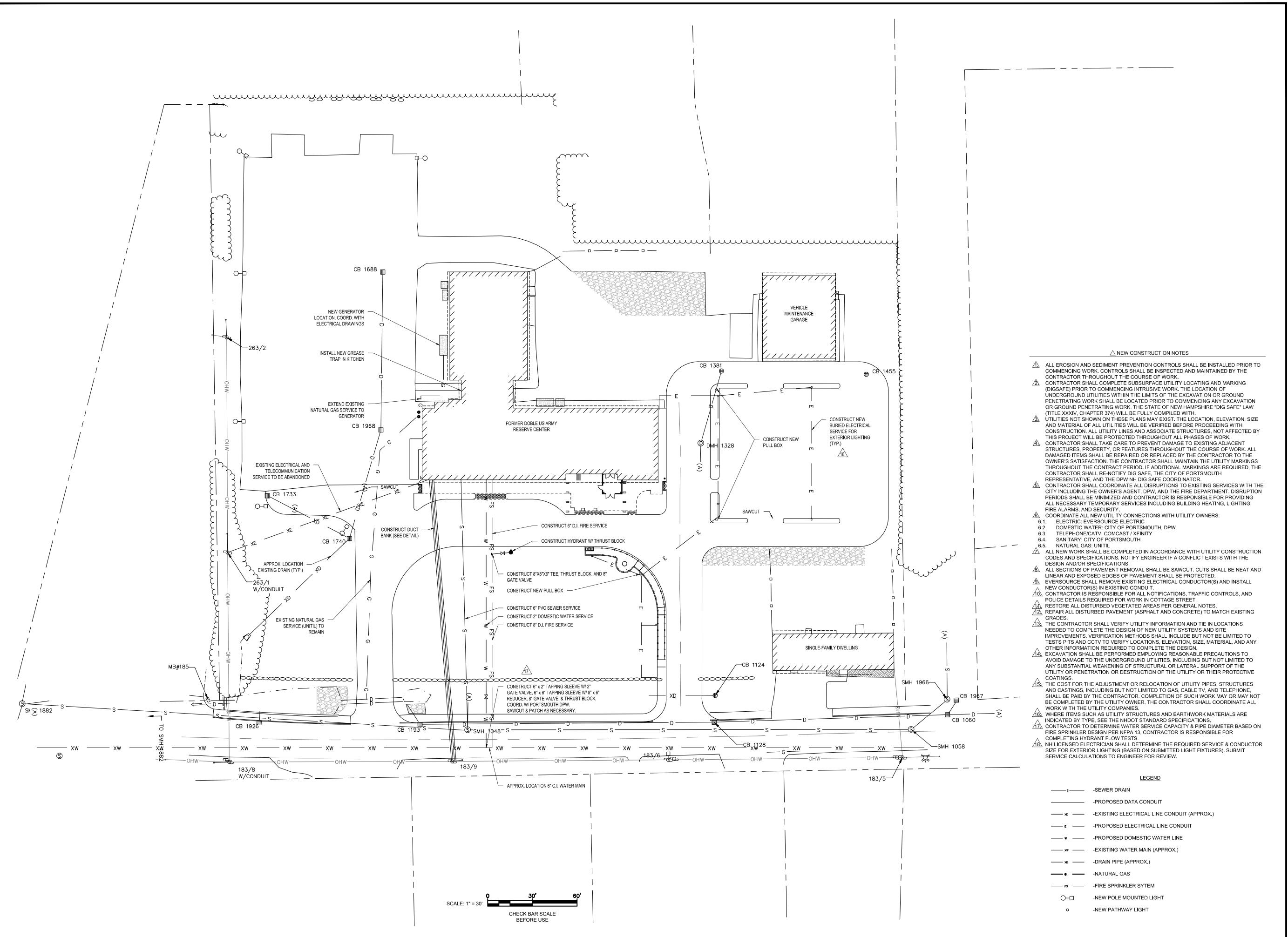


# PAVEMENT DEMOLITION & CONSTRUCTION PLAN

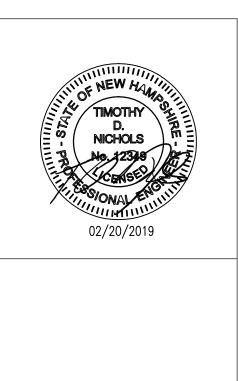
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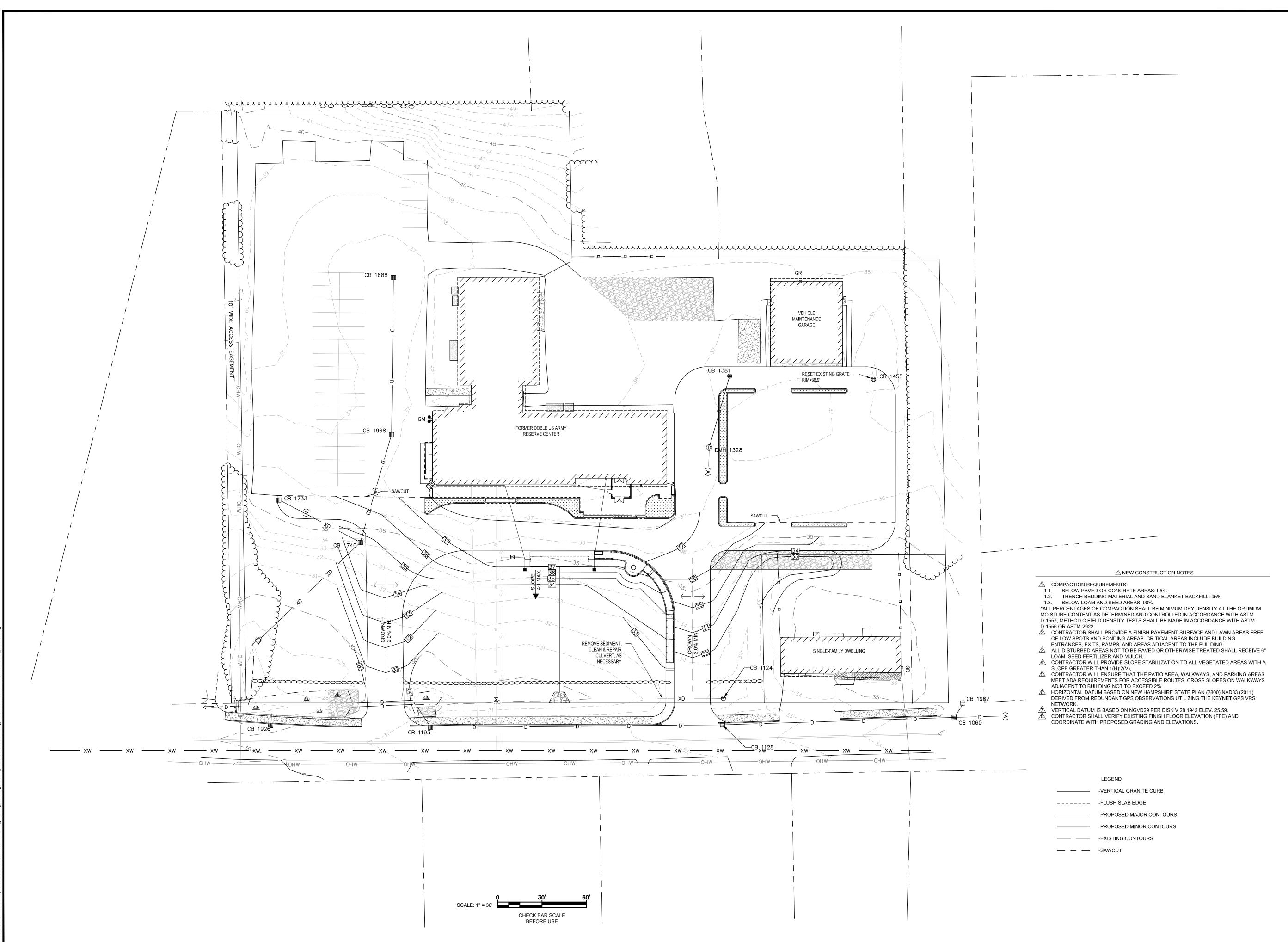
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# SITE UTILITIES PLAN

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125 COTTAGE STREET

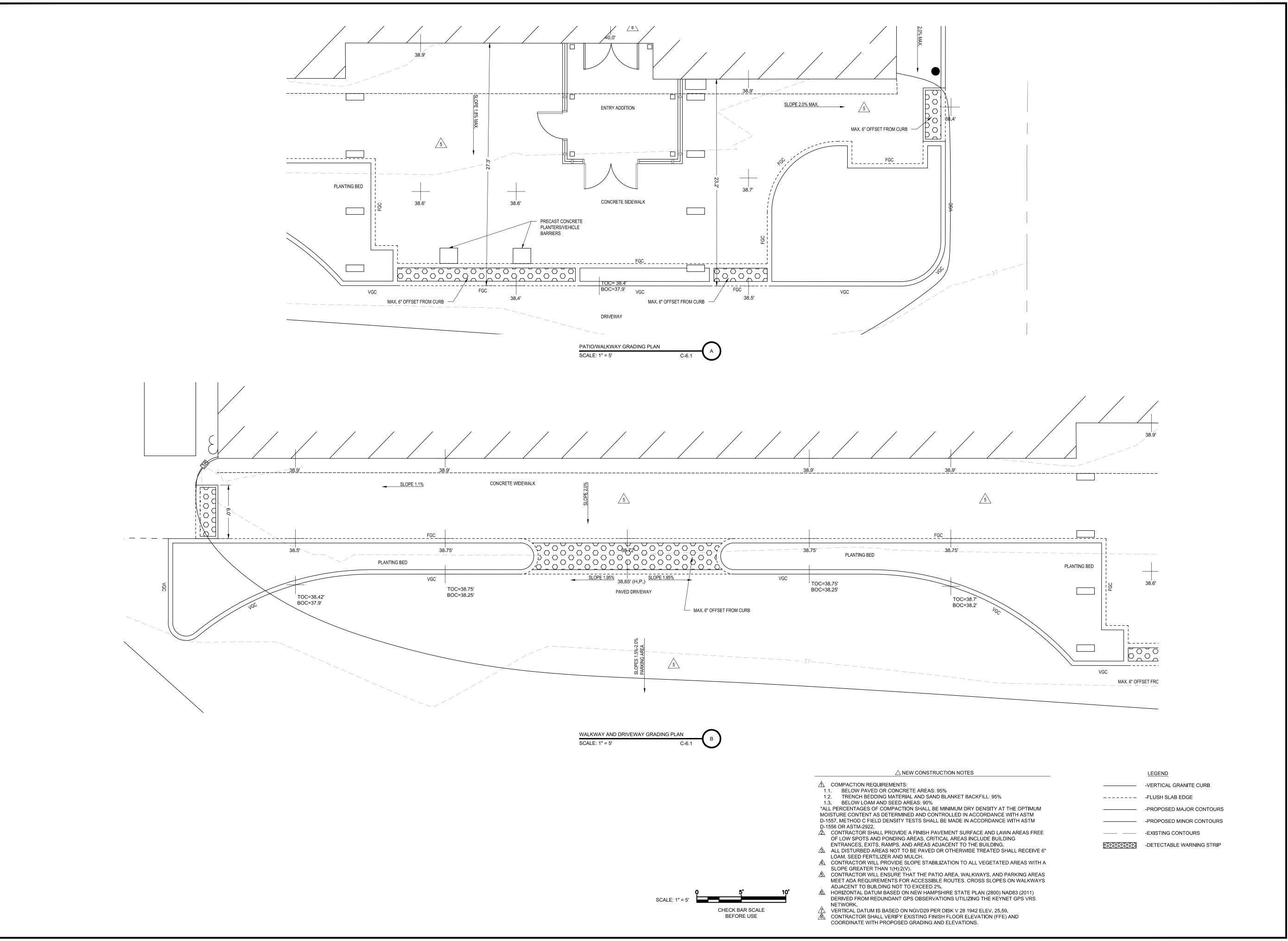
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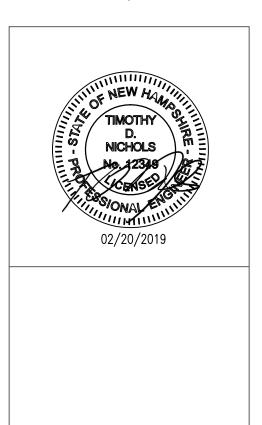
# SITE GRADING PLAN

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125 COTTAGE STREET PORTSMOUTH, NH 03801

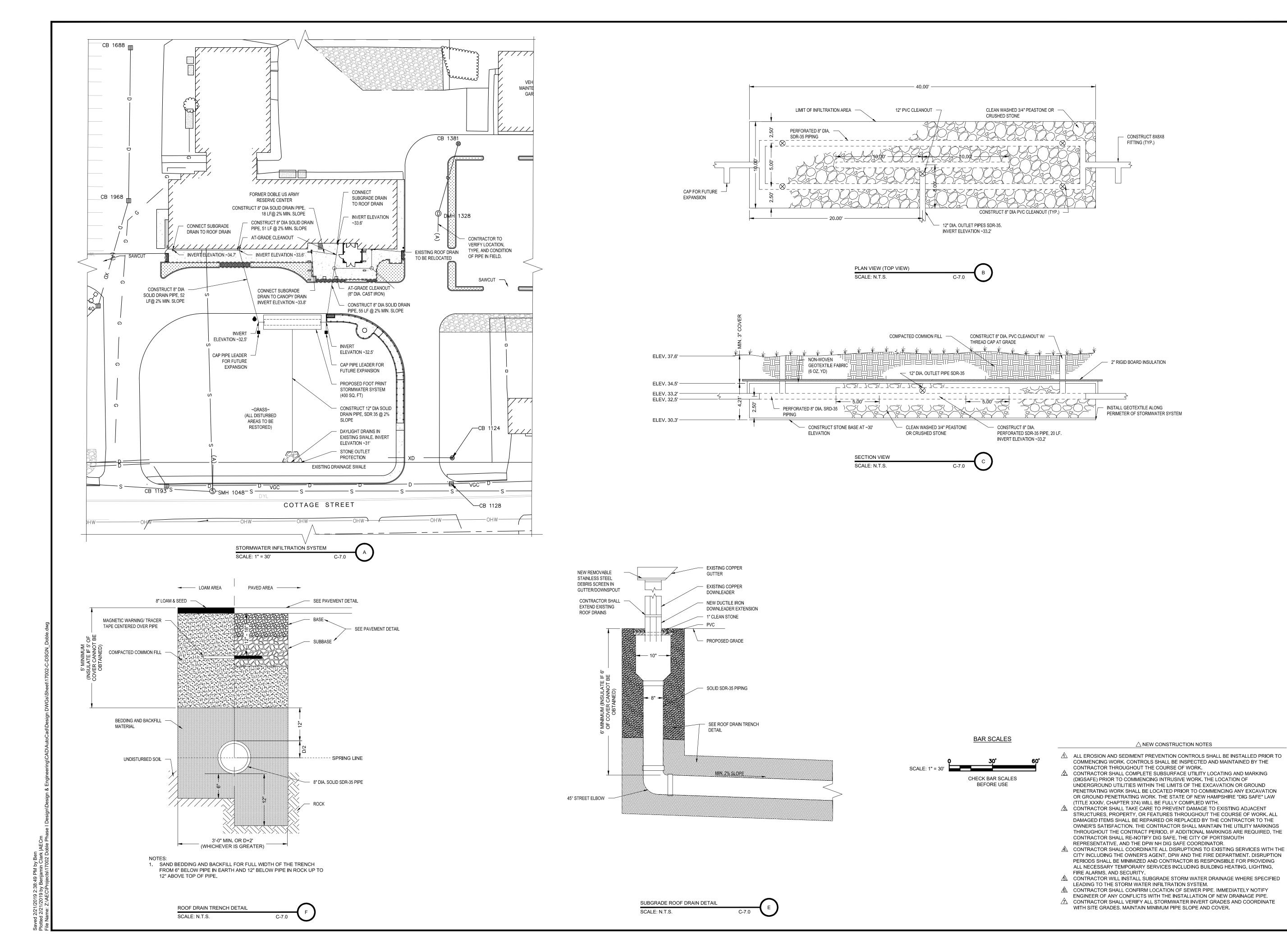
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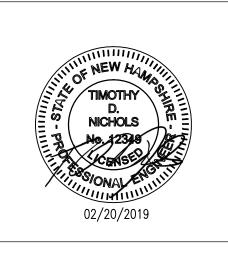
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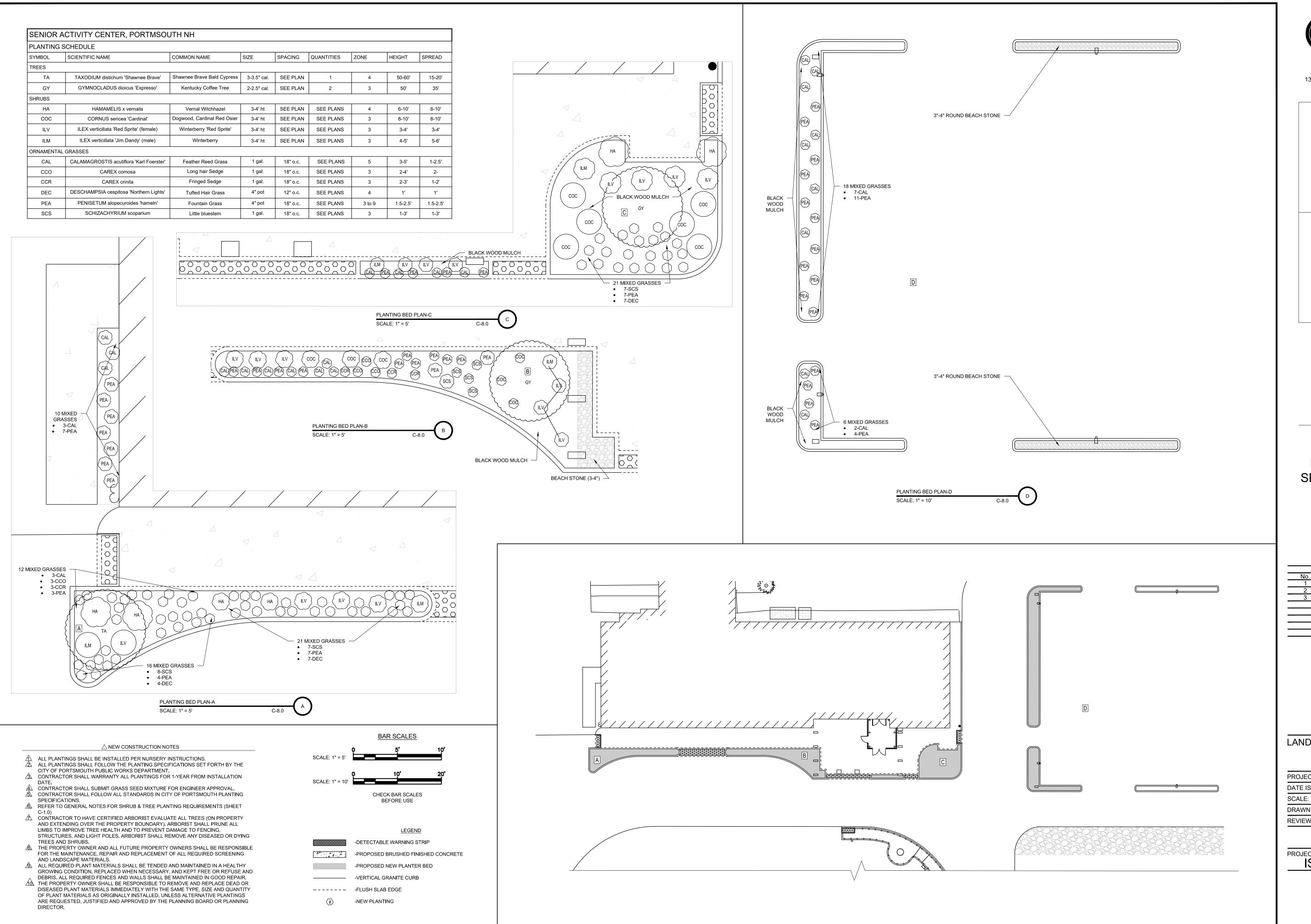
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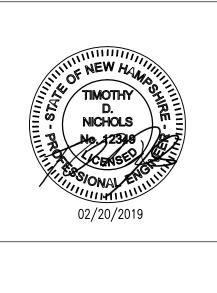
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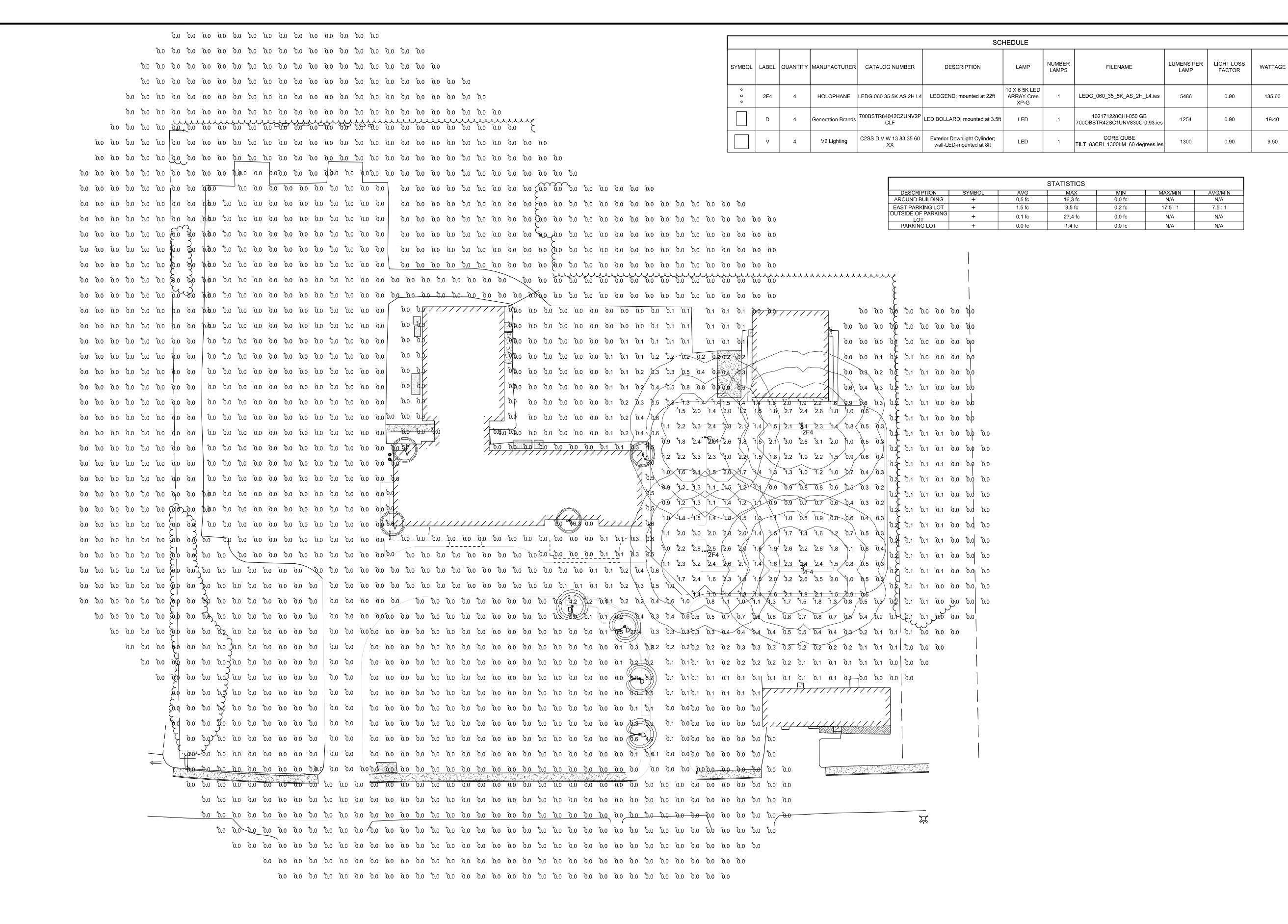
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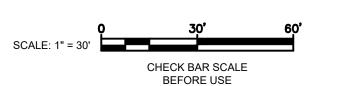


# LANDSCAPING PLAN

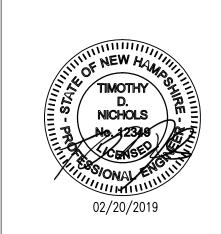
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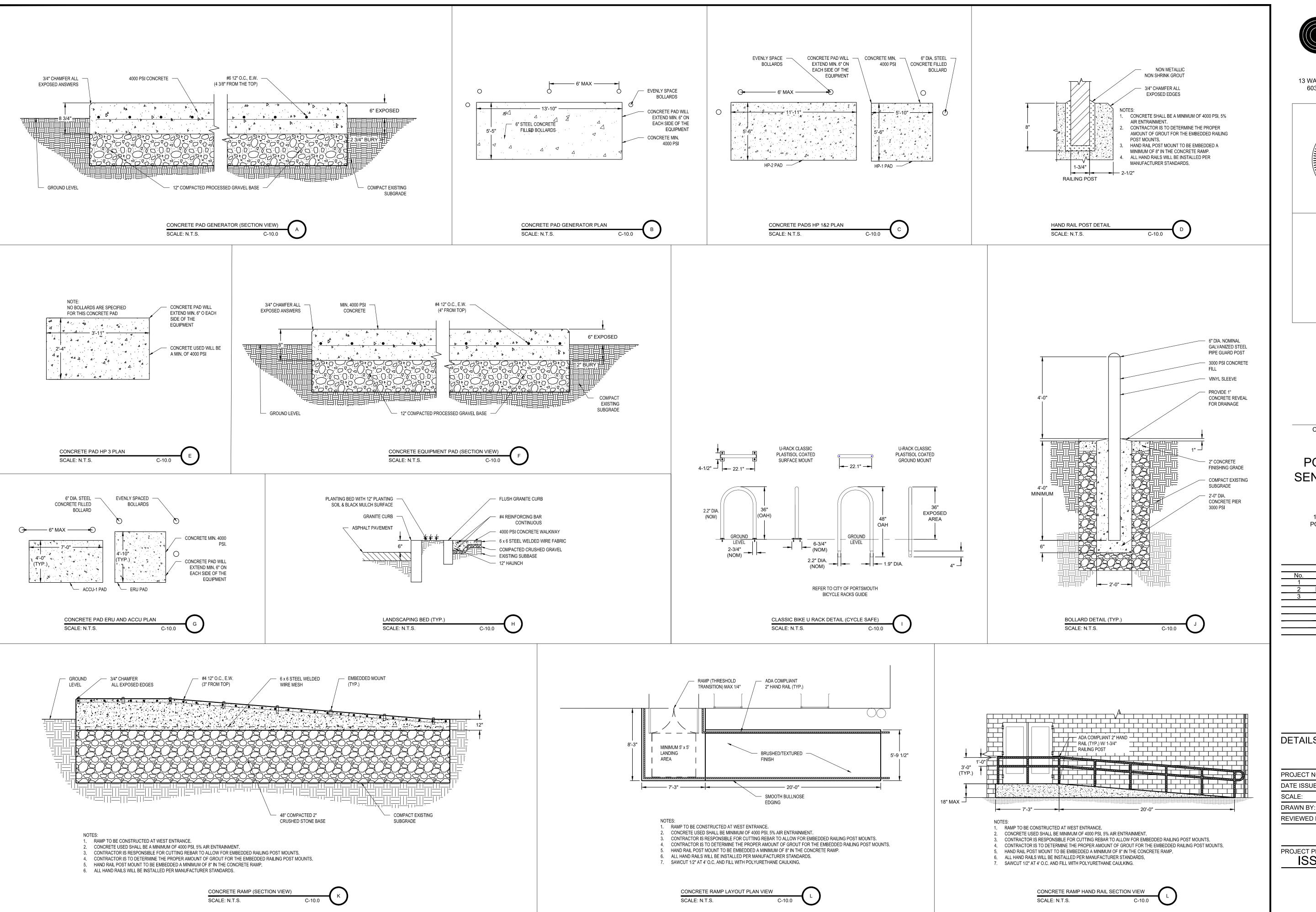
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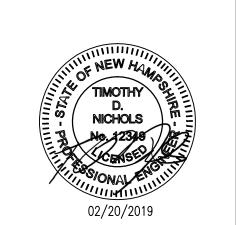
LIGHTING PLAN

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CITY OF PORTSMOUTH 1 JUNKINS AVE.

# PORTSMOUTH **SENIOR ACTIVITY** CENTER

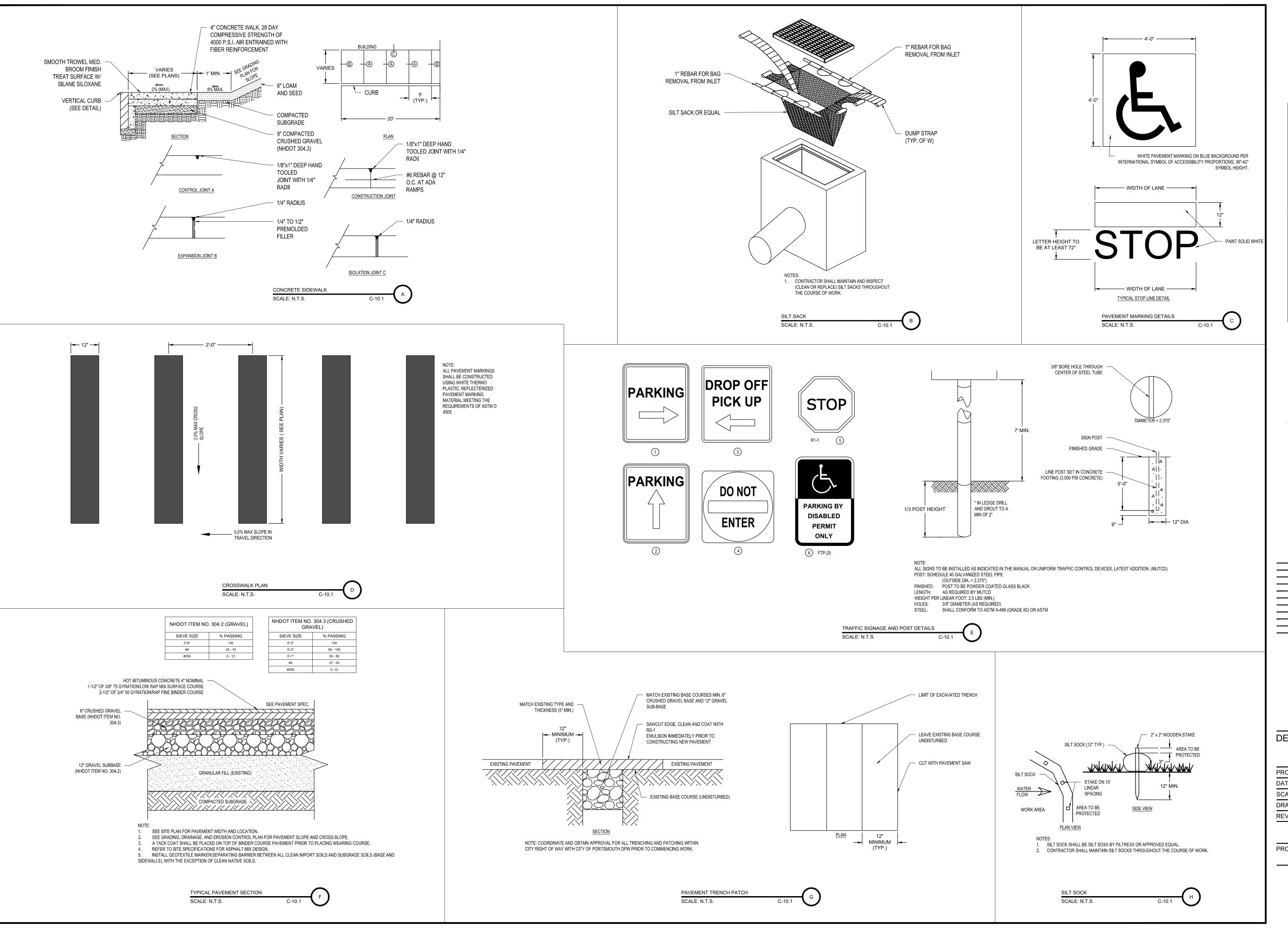
125 COTTAGE STREET PORTSMOUTH, NH 03801

	REVISIONS	
No.	DESCRIPTION	DATE
1	PER TAC COMMENTS	12/12/2018
2	PER COND. OF APPROVAL	01/10/2019
3	ISSUED FOR BID	02/20/2019

# **DETAILS SHEET**

17002
02/20/2019
AS SHOWN
ВСС
TDN

C-10.0







CITY OF PORTSMOUTH 1 JUNKINS AVE.

# PORTSMOUTH SENIOR ACTIVITY CENTER

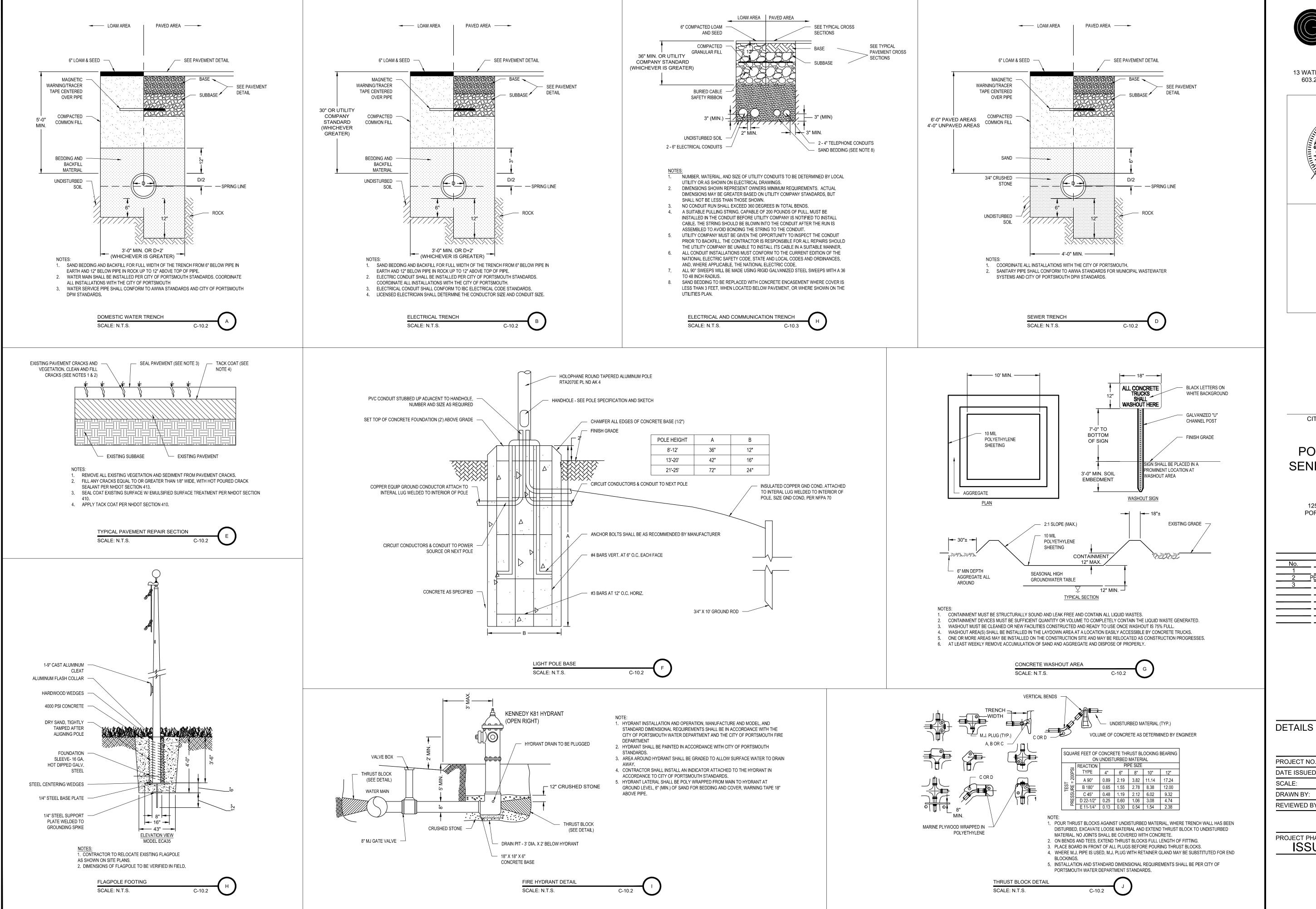
125 COTTAGE STREET PORTSMOUTH, NH 03801

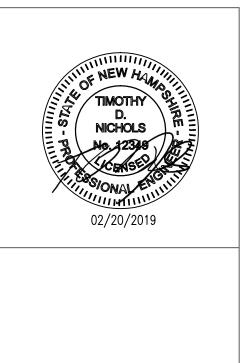
	REVISIONS	
No.	DESCRIPTION	DATE
1	PER TAC COMMENTS	12/12/2018
2	PER COND. OF APPROVAL	01/10/2019
3	ISSUED FOR BID	02/20/2019

DETAILS SHEET

PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	AS SHOWN
DRAWN BY:	BCC
REVIEWED BY:	TDN

C-10.1





CITY OF PORTSMOUTH 1 JUNKINS AVE.

# PORTSMOUTH **SENIOR ACTIVITY** CENTER

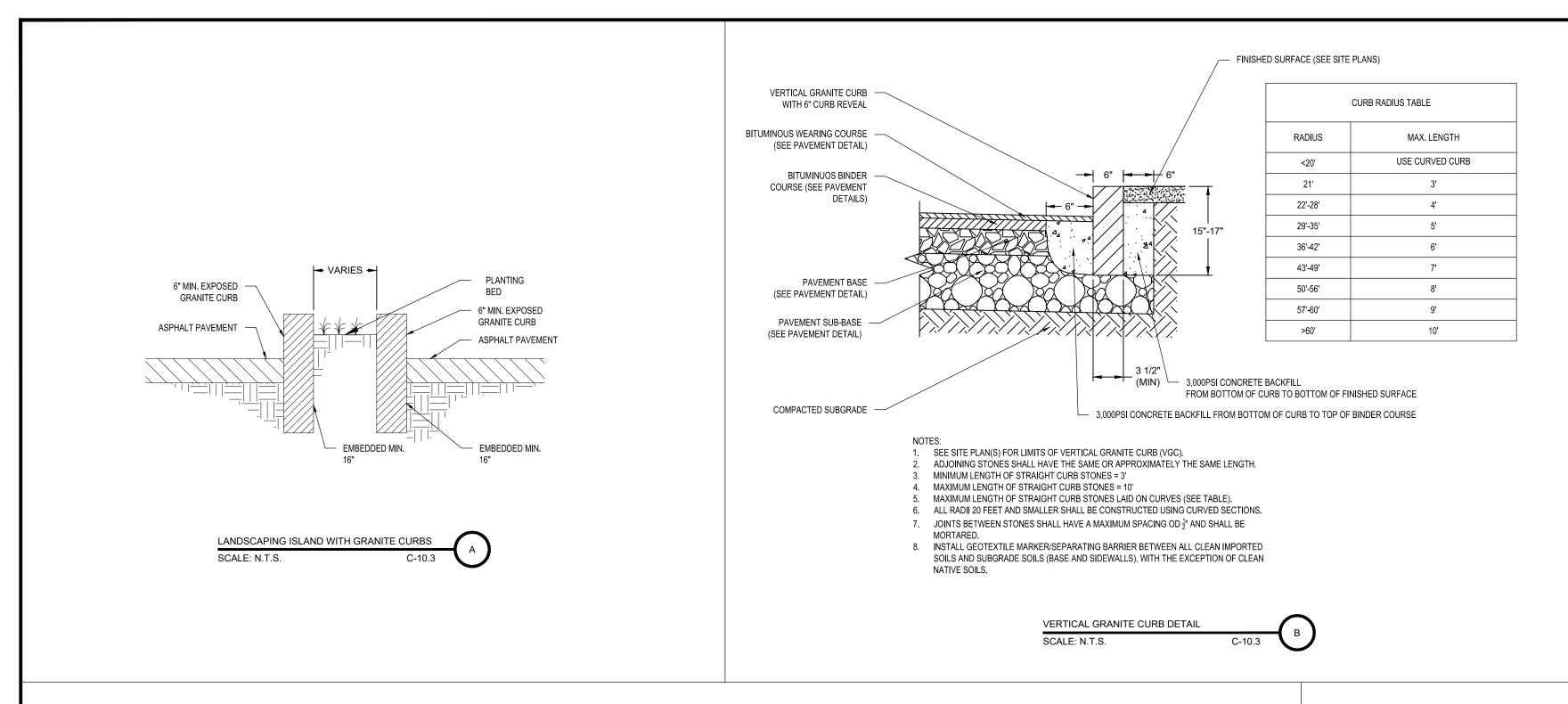
125 COTTAGE STREET PORTSMOUTH, NH 03801

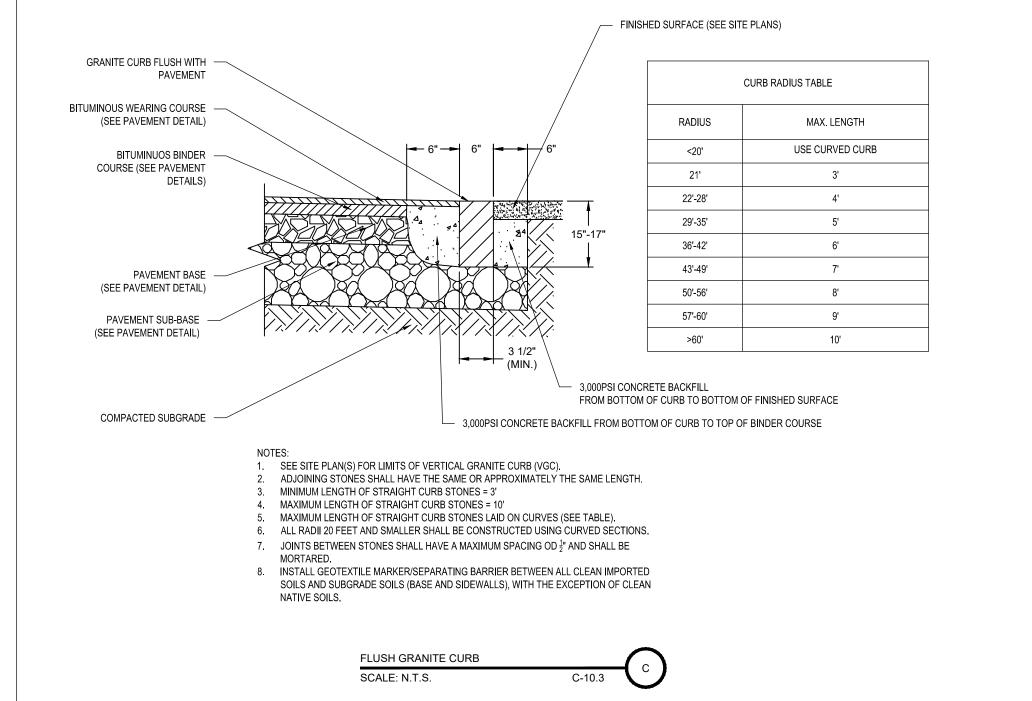
	REVISIONS	
No.	DESCRIPTION	DATE
1	PER TAC COMMENTS	12/12/2018
2	PER COND. OF APPROVAL	01/10/2019
3	ISSUED FOR BID	02/20/2019
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	-	

# **DETAILS SHEET**

PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	AS SHOWN
DRAWN BY:	BCC
REVIEWED BY:	TDN

C-10.2

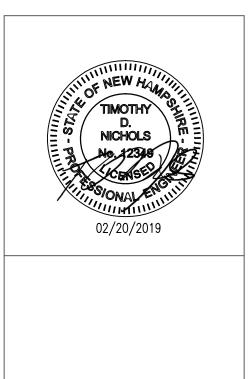




KORNEGAY DESIGN 212 SOUTH 18TH STREET PHOENIX, AZ, 85034

PHONE: (602) 252-6323



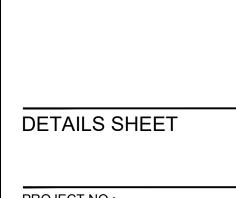


CITY OF PORTSMOUTH 1 JUNKINS AVE.

# PORTSMOUTH SENIOR ACTIVITY CENTER

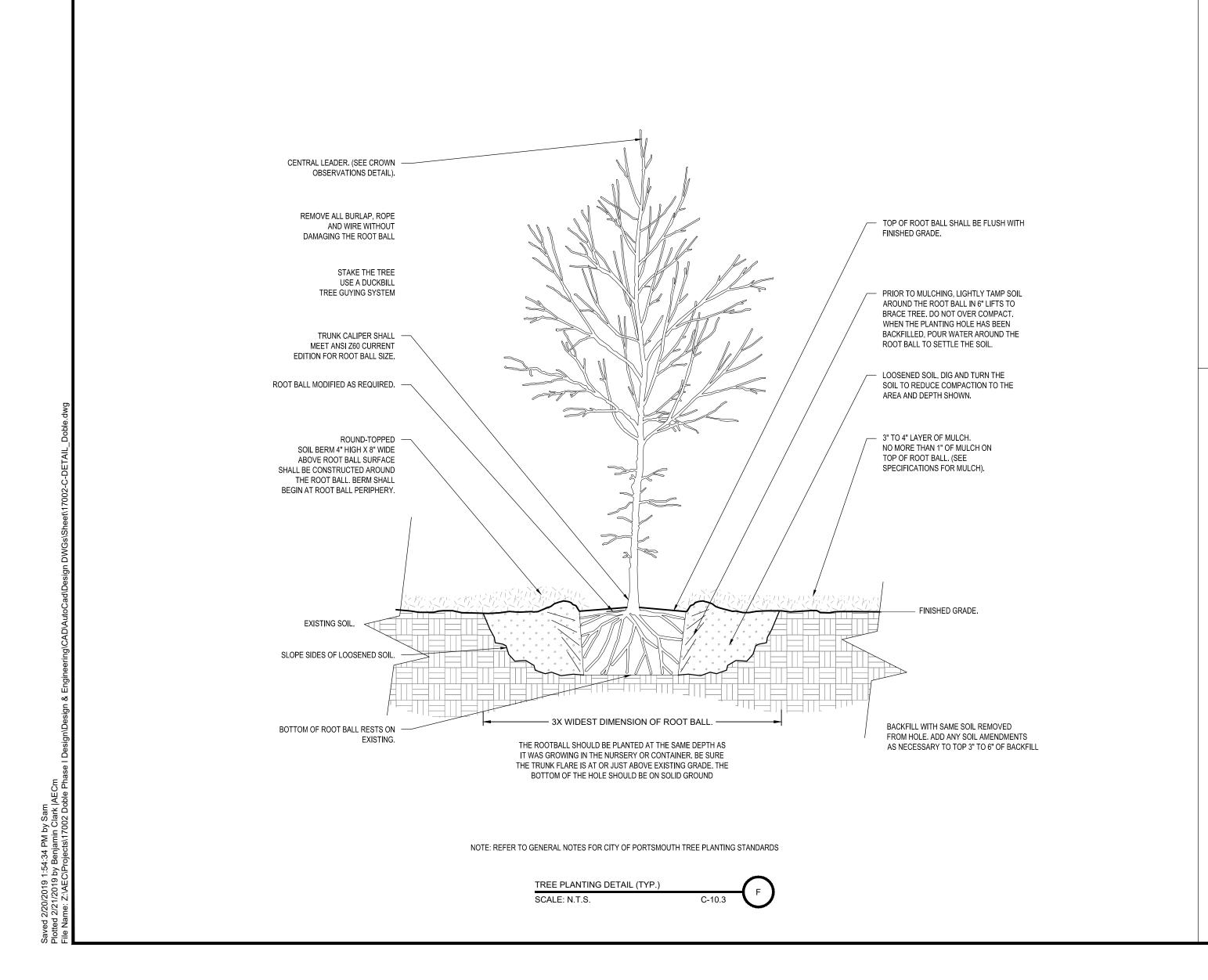
125 COTTAGE STREET PORTSMOUTH, NH 03801

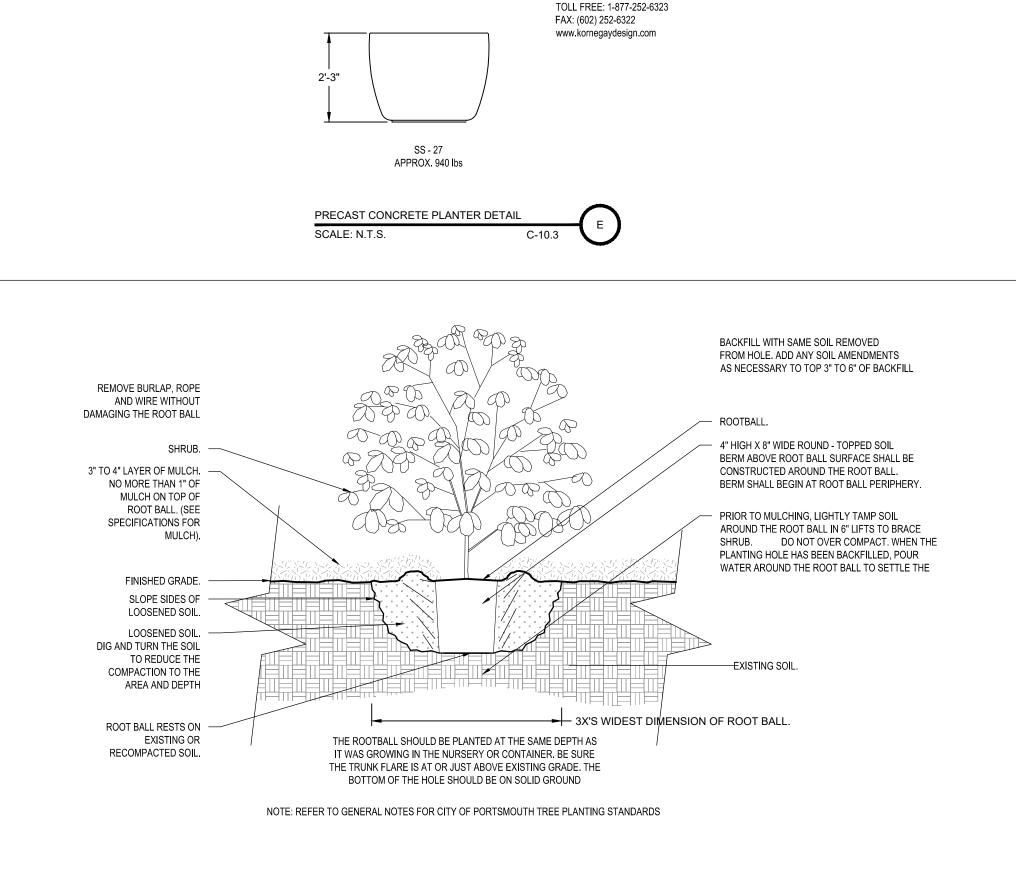
	REVISIONS	
No.	DESCRIPTION	DATE
1	PER TAC COMMENTS	12/12/2018
2 PI	ER COND. OF APPROVAL	01/10/2019
3	ISSUED FOR BID	02/20/2019

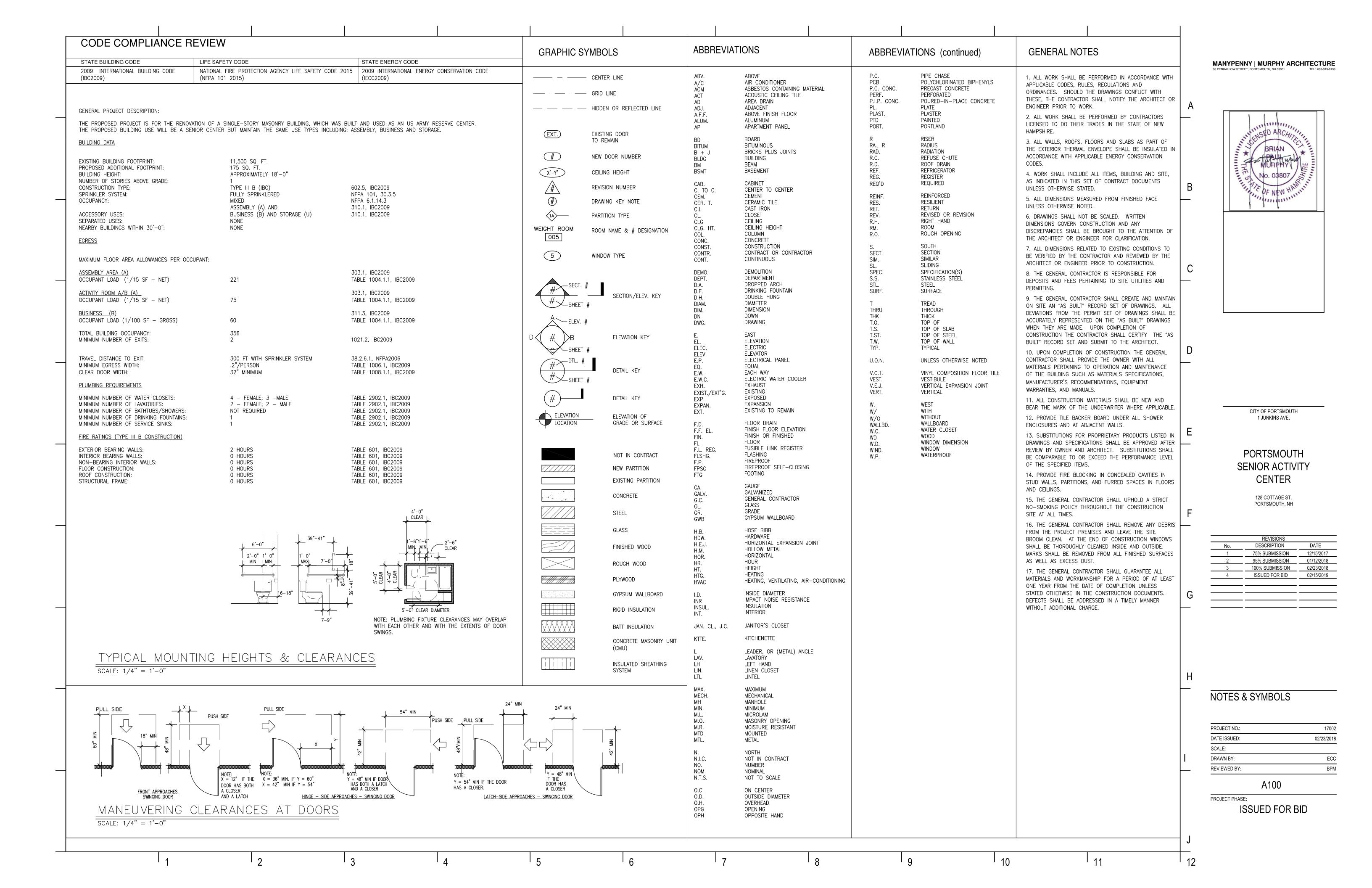


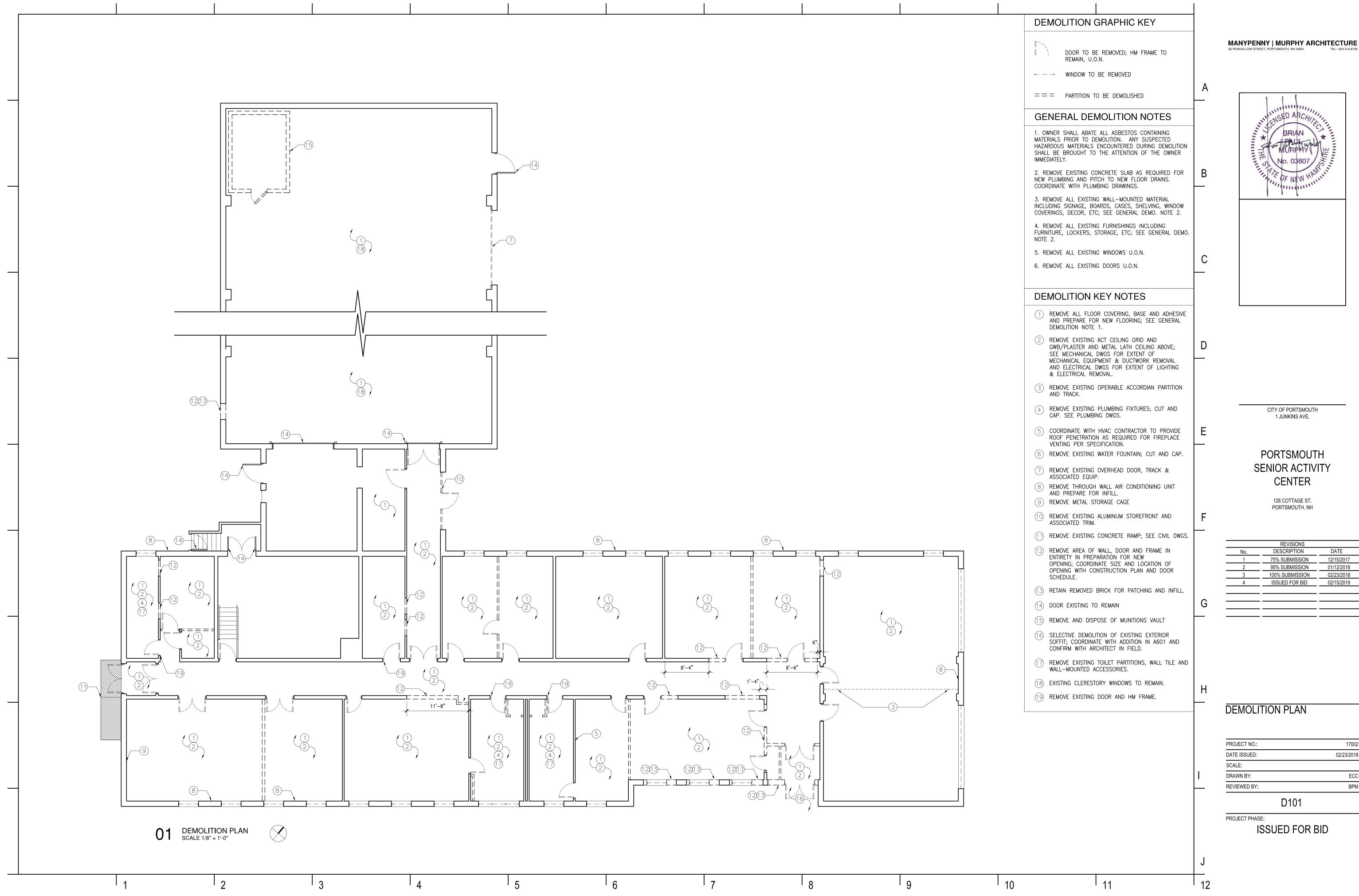
PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	AS SHOWN
DRAWN BY:	BCC
REVIEWED BY:	TDN

C-10.3



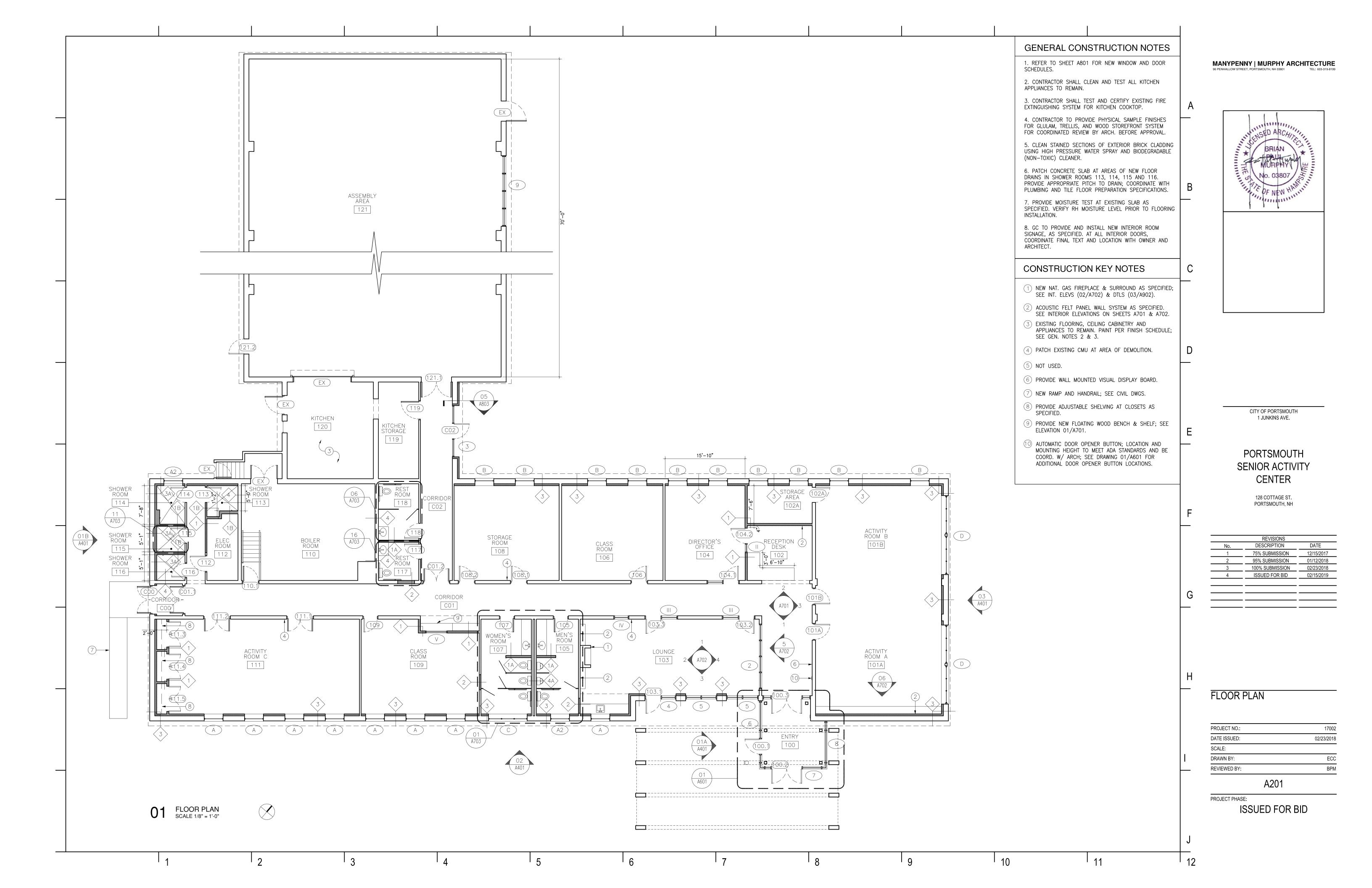


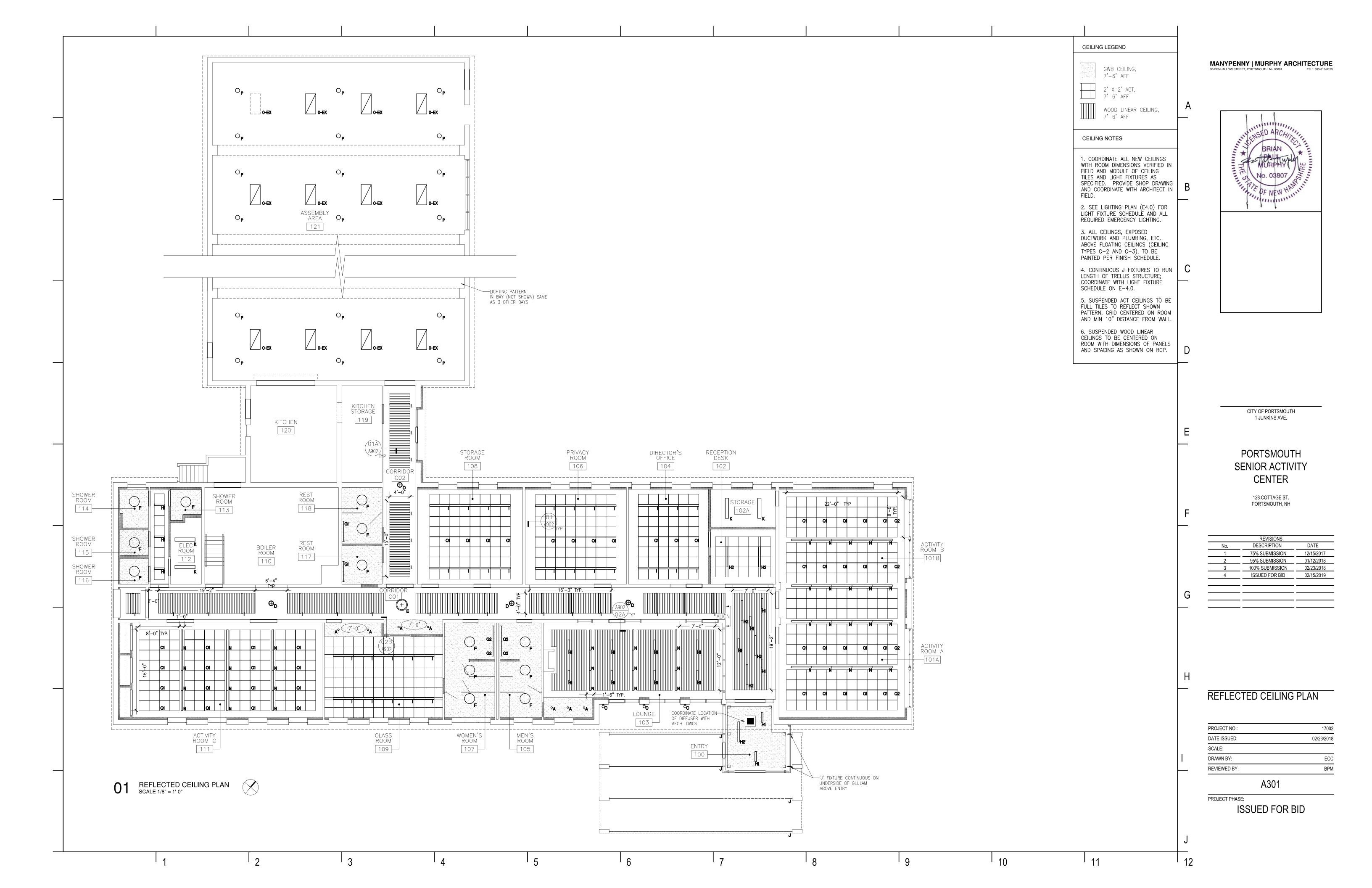




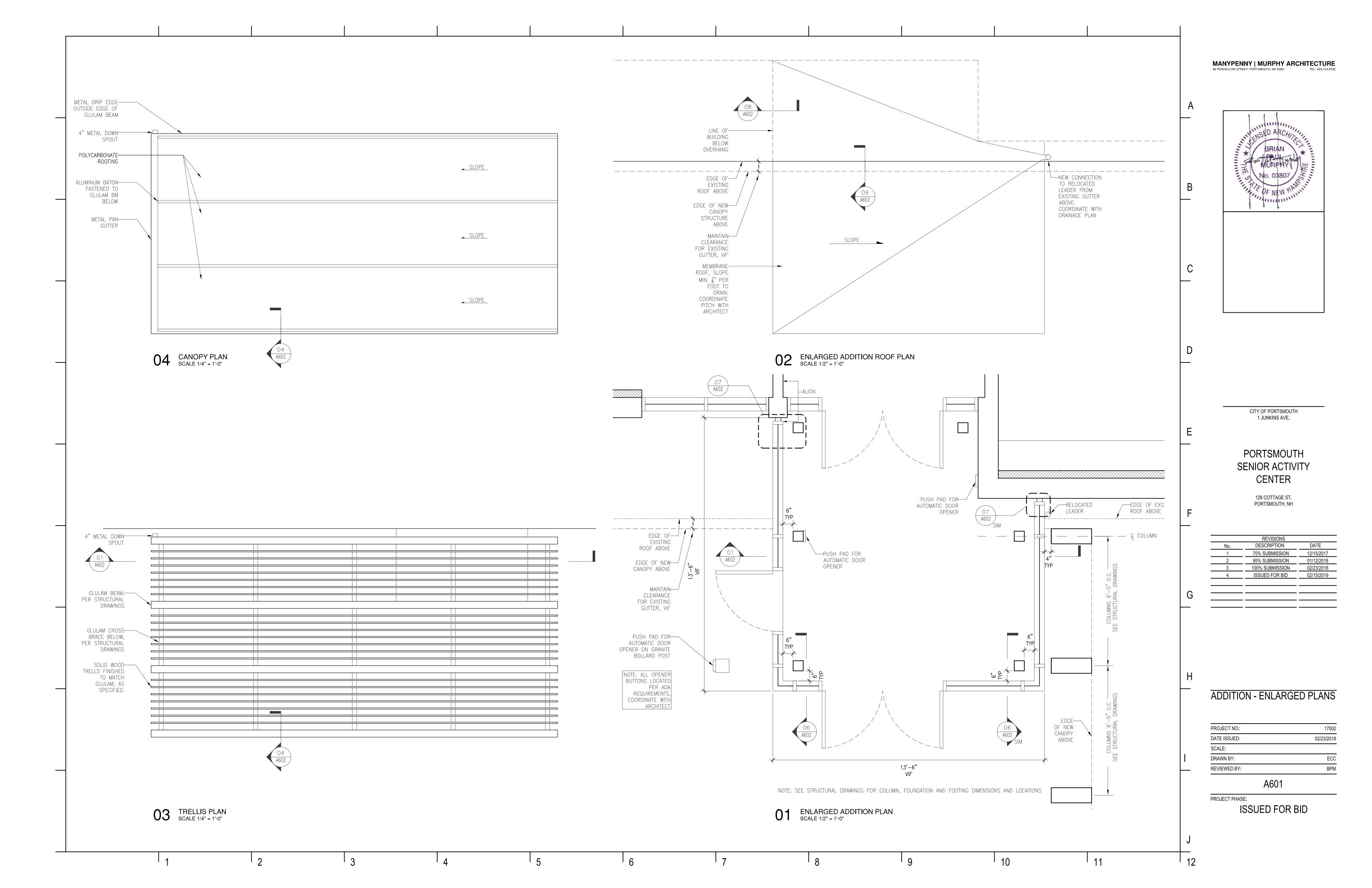
REVISIONS	
DESCRIPTION	DATE
75% SUBMISSION	12/15/2017
95% SUBMISSION	01/12/2018
100% SUBMISSION	02/23/2018
ISSUED FOR BID	02/15/2019
	DESCRIPTION 75% SUBMISSION 95% SUBMISSION 100% SUBMISSION

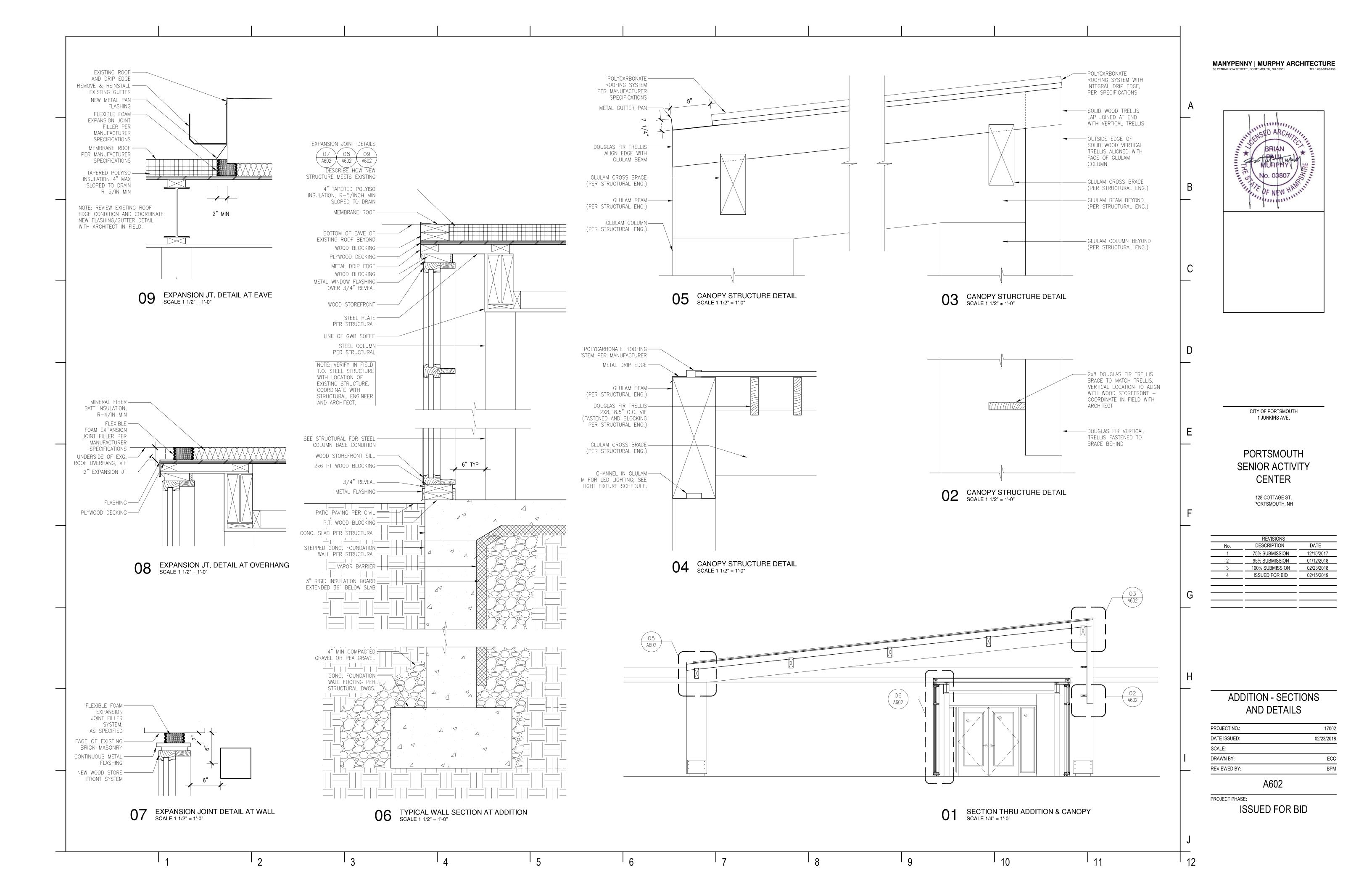
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REVIEWED BY:	ВРМ	
DRAWN BY:	ECC	
SCALE:		
DATE ISSUED:	02/23/2018	
PROJECT NO.:	17002	

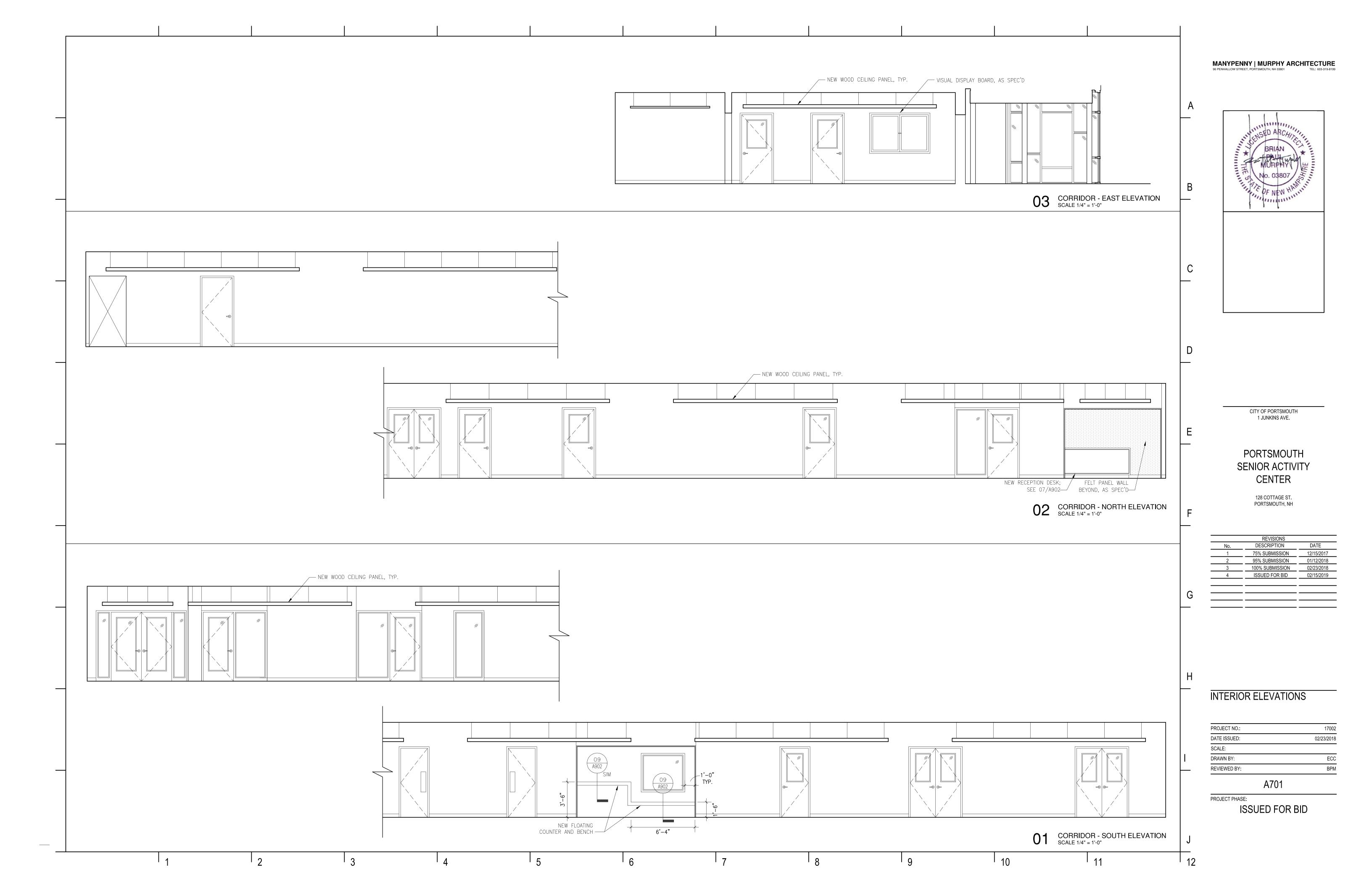


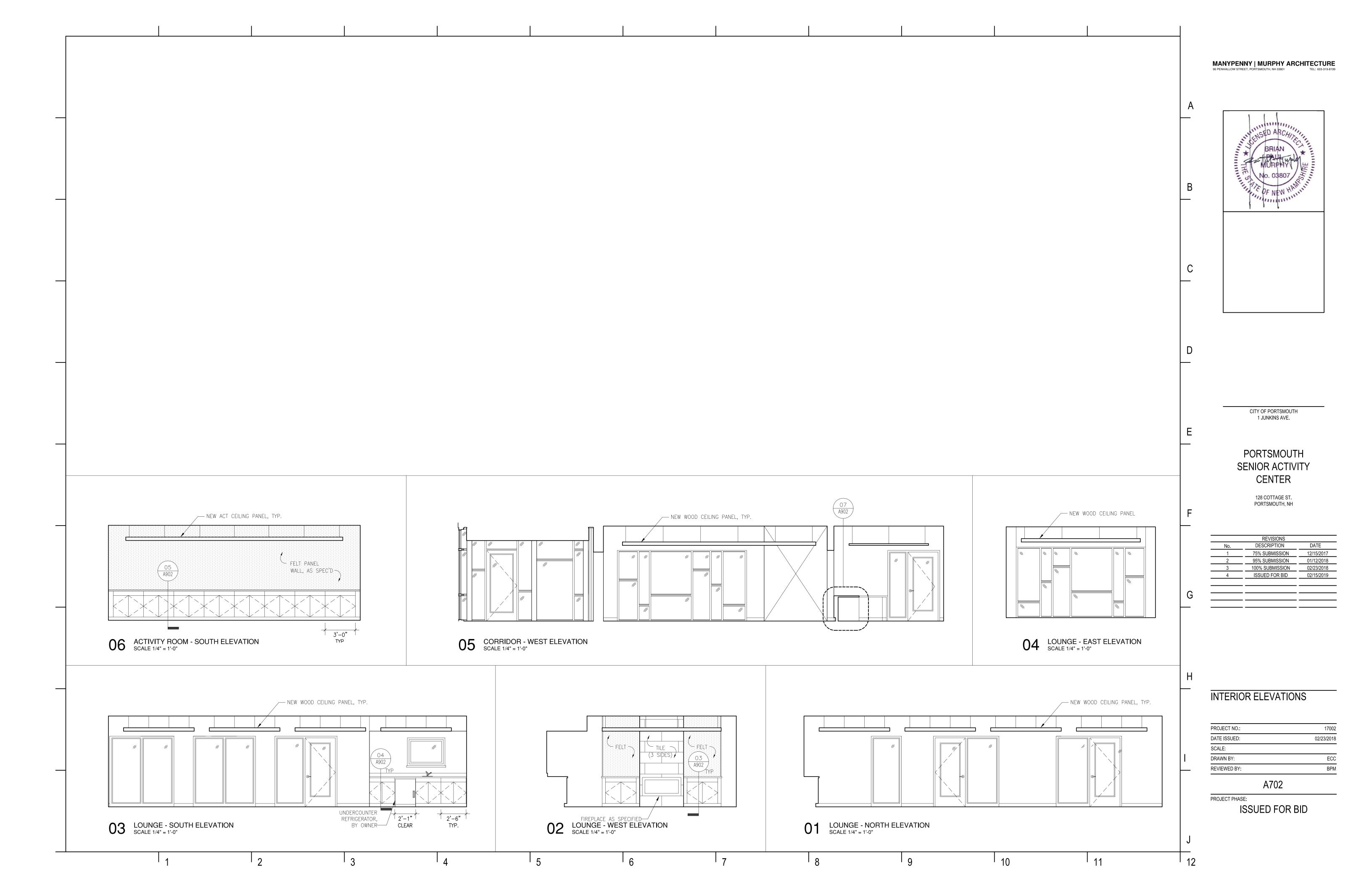


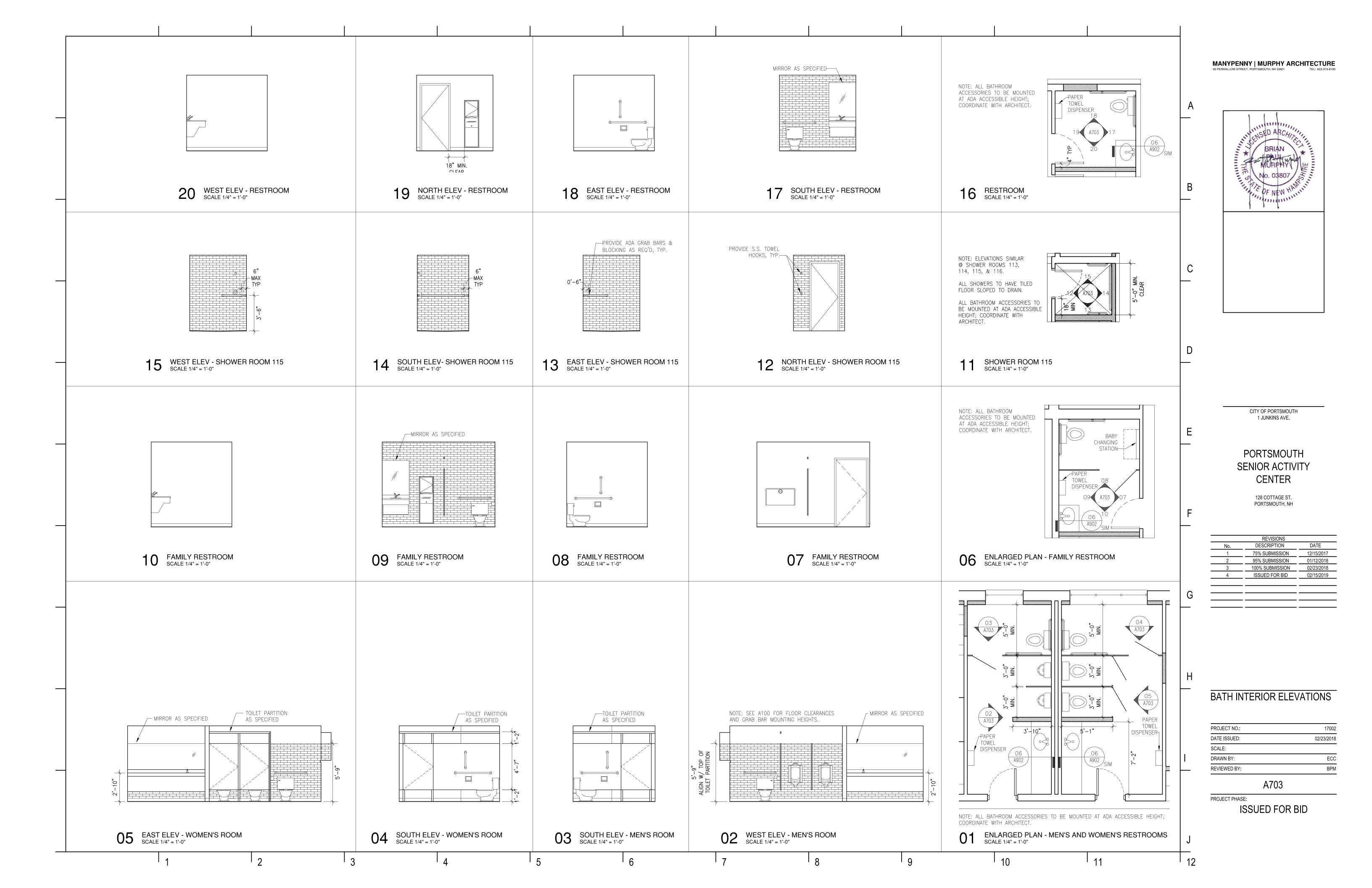


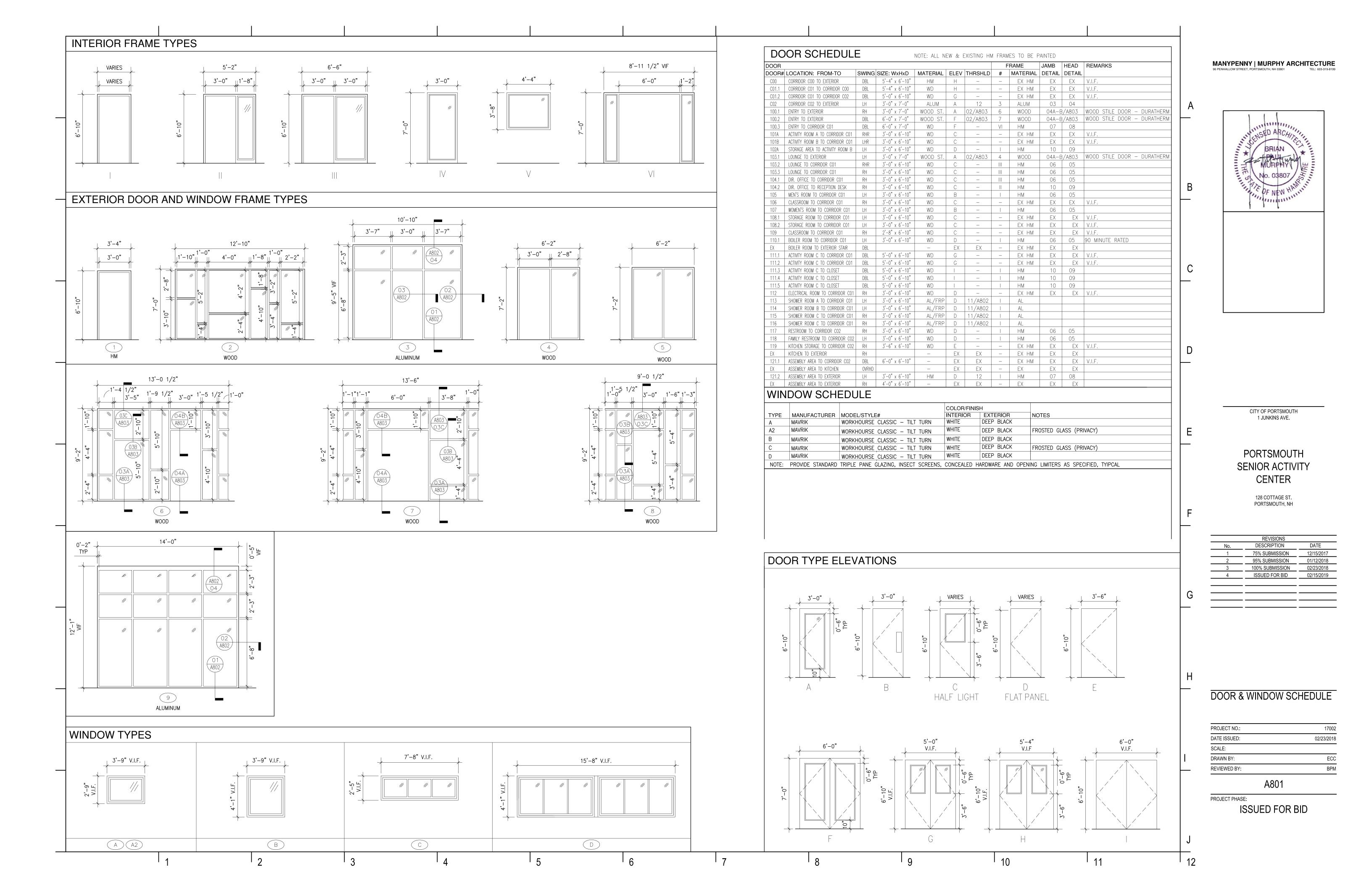


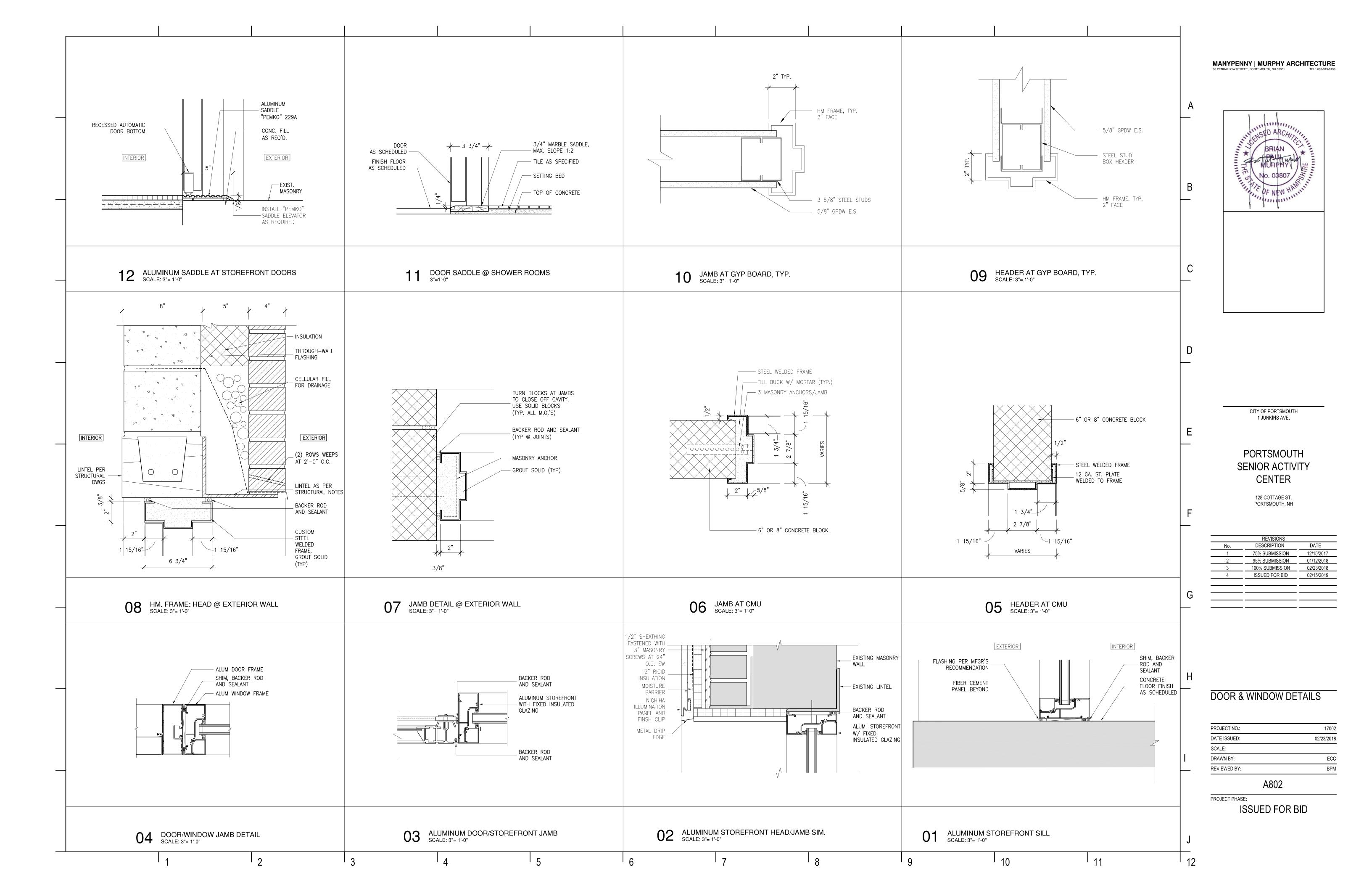


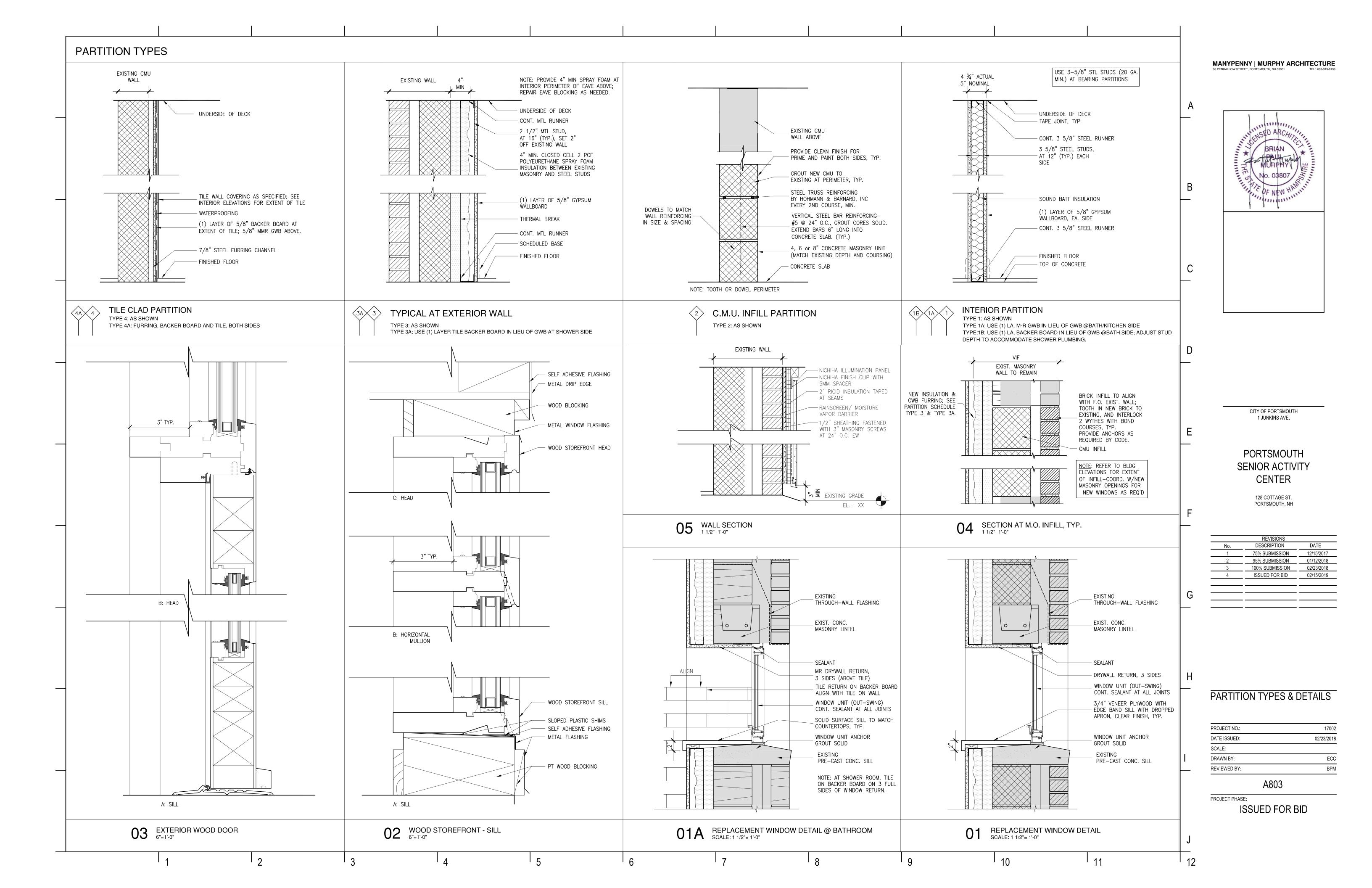




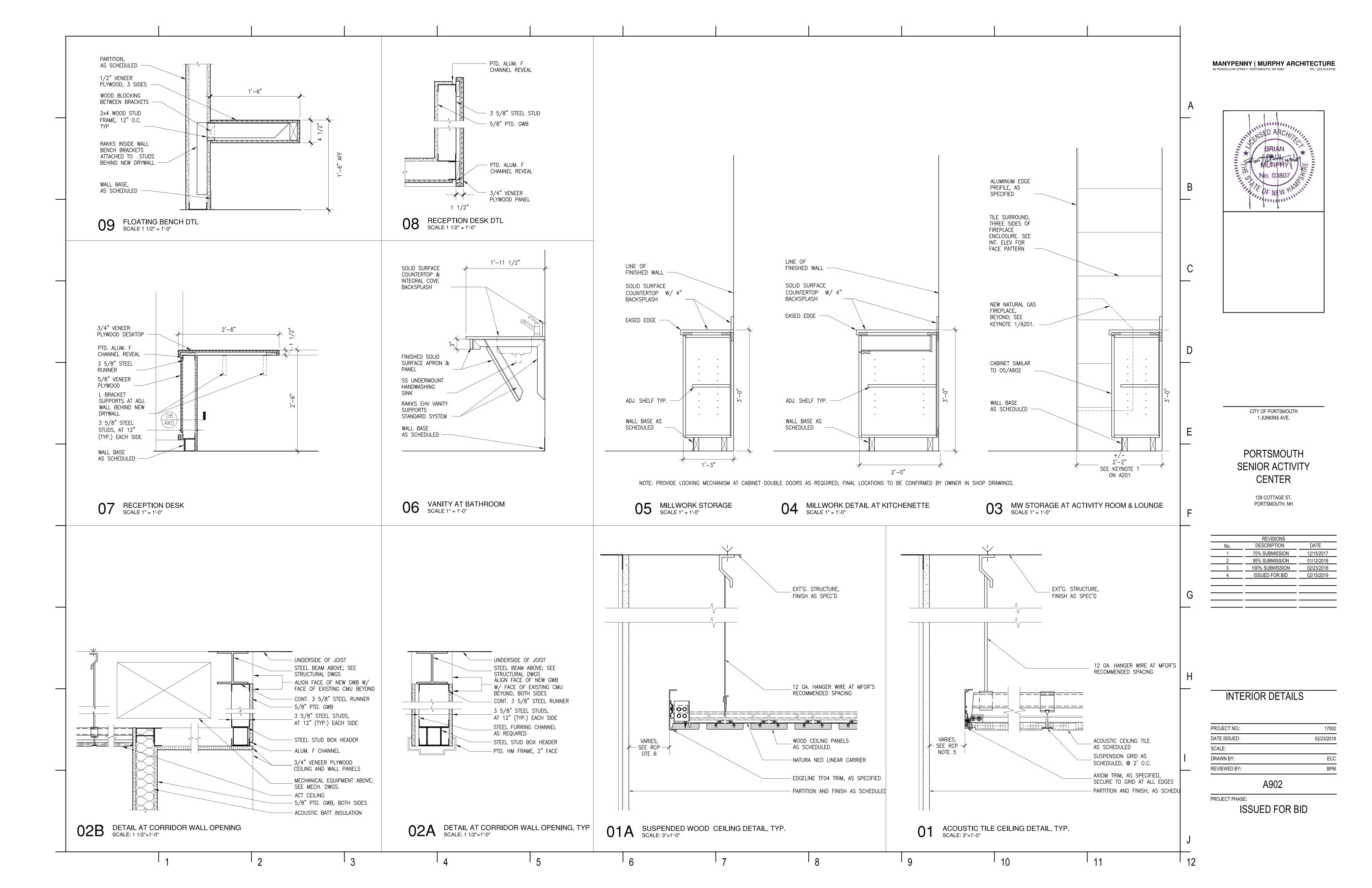












### **GENERAL NOTES**

- THE FOLLOWING NOTES ARE INTENDED TO BE USED AS OUTLINED STRUCTURAL SPECIFICATIONS FOR THIS PROJECT. THE REFERENCED STANDARDS ARE CONSIDERED TO BE PART OF THE WORK.
- 2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- ALL DIMENSIONS, EXISTING CONDITIONS, AND AS-BUILT CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- 4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE ONLY AFTER THE STRUCTURAL WORK CONTAINED IN THE S- DRAWINGS IS COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AS DETERMINED BY THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER RESERVES THE RIGHT TO INTERPRET DETAILS TO ADDRESS OTHER PROJECT CONDITIONS.
- 6. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
- IN ACCORDANCE WITH THE NEW HAMPSHIRE BUILDING CODE/INTERNATIONAL BUILDING CODE (2009 EDITION, SECTION 1704.1), A STATEMENT OF SPECIAL INSPECTIONS IS REQUIRED AS A CONDITION FOR PERMIT ISSUANCE BY THE LOCAL CODE OFFICIAL. THIS STATEMENT SHALL INCLUDE A COMPLETE LIST OF MATERIALS AND WORK REQUIRING SPECIAL INSPECTIONS, THE INSPECTIONS TO BE PERFORMED AND A LIST OF THE INDIVIDUALS, APPROVED AGENCIES AND FIRMS INTENDED TO BE RETAINED FOR CONDUCTING SUCH INSPECTIONS.

#### <u>SUBMITTALS</u>

- THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHORING, AND CONSTRUCTION METHODS AND SEQUENCING WHERE APPLICABLE. NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO, SHORING AND DEMOLITION OF EXISTING STRUCTURE, OR FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ARCHITECT OR CONSTRUCTION MANAGER AND ENGINEER. CONTRACTOR SHALL ALLOW 10 WORKING DAYS FOR REVIEW.
- 2. REQUIRED SUBMITTALS SHALL INCLUDE:

CONCRETE MIX DESIGN

CONCRETE REINFORCING INCLUDING BAR SUPPORTS

STRUCTURAL STEEL FRAMING FABRICATION DRAWINGS

STRUCTURAL STEEL CONNECTION DESIGN

GLULAM FRAMING FABRICATION DRAWINGS, INCLUDING CONNECTIONS.

- OWNER WILL ENGAGE A QUALIFIED TESTING AGENCY TO CONDUCT PERIODIC TESTS TO CONFIRM CONSTRUCTION IS IN CONFORMANCE WITH SPECIFIED PROCEDURES AND
- 2. TESTING SHALL INCLUDE STRUCTURAL FILL GRADATION AND COMPACTION CONCRETE SLUMP. TEMPERATURE. AIR CONTENT AT POINT OF PLACEMENT CONCRETE COMPRESSION TESTS STRUCTURAL STEEL FIELD BOLTED CONNECTIONS STRUCTURAL STEEL FIELD WELDED CONNECTION
- TEST RESULTS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW WITHIN 72 HOURS OF COMPLETION OF EACH TEST.

#### **DESIGN LOADS**

- BUILDING CODE: NEW HAMPSHIRE STATE BUILDING CODE INTERNATIONAL BUILDING CODE, 2009 EDITION INTERNATIONAL EXISTING BUILDING CODE, 2009 EDITION ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- 2. DESIGN FLOOR LIVE LOADS: CORRIDOR FIRST FLOOR: 100 PSF
  - 50PSF OFFICES:
- 3. DESIGN ROOF SNOW LOAD: GROUND SNOW LOAD (Pg): *50 PSF* SNOW EXPOSURE FACTOR (Ce):
  - SNOW LOAD IMPORTANCE FACTOR (Is): 1.0 1.1 (1.2 AT CANOPY) SNOW LOAD THERMAL FACTOR (Ct): FLAT ROOF SNOW LOAD (Pf): 42 PSF + DRIFT
- 4. DESIGN WIND LOAD: BASIC WIND SPEED: 100 MPH WIND LOAD IMPORTANCE FACTOR (IW): **WIND EXPOSURE:**
- INTERNAL PRESSURE COEFFICIENT: ±0.18 COMPONENTS & CLADDING PER ASCE 7-05 5. DESIGN SEISMIC LOADS:
- EQUIVALENT LATERAL FORCE PROCEDURE SEISMIC OCCUPANCY CATEGORY: SEISMIC IMPORTANCE FACTOR (Ie): 1.0 MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss: 0.357 S1: 0.076
  - SEISMIC SITE CLASS: D (UNKNOWN) SPECTRAL RESPONSE COEFFICIENTS:

Sds: 0.360 Sd1: 0.126

SEISMIC DESIGN CATEGORY: BASIC SEISMIC FORCE RESISTING SYSTEM:

VESTIBULE: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE CANOPY: CANTILEVERED COLUMNS SYSTEM DETAILED TO CONFORM TO THE REQUIREMENTS FOR TIMBER FRAME.

RESPONSE MODIFICATION FACTOR (R): VESTIBULE: 3.0 CANOPY: 1.5 VESTIBULE: 0.12 SEISMIC RESPONSE COEFFICIENT (Cs):

6. EXISTING BUILDING

ALTERATION LEVEL 3, LIMITED STRUCTURAL ALTERATION MINOR MODIFICATIONS TO THE LATERAL SYSTEM.

- MOST LOCATIONS THE DEMAND TO CAPACITY RATIO INCREASE IS LESS THEN 10% - IN LOCATIONS WHERE THE INCREASE IS MORE, THE SYSTEM IS CAPABLE OF RESISTING REDUCED IBC LOADS FOR UNREINFORCED MASONRY SYSTEMS WITH THE REPAIRS SHOWN IN THE DRAWINGS.

CANOPY: 0.24

#### FOUNDATION NOTES (SOIL SUPPORTED)

- FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH INVESTIGATION BY AECm. THE RECOMMENDATIONS OF THE REPORT ARE PART OF THIS WORK. REFER TO THIS REPORT FOR SPECIFIC RECOMMENDATIONS.
- FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE UNDISTURBED NATIVE SOILS AND/OR NEW COMPACTED STRUCTURAL FILL EXTENDING TO UNDISTURBED NATIVE SOIL.
- IT IS THE CONTACTOR'S SOLE RESPONSIBILITY TO VERIFY EXISTING SOIL CONDITIONS AND TO BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCING PLACEMENT OF FOUNDATIONS. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- 4. ALLOWABLE BEARING CAPACITY OF 2000 PSF.
- 5. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 4.6 FEET BELOW THE FINAL EXTERIOR GRADE FOR PROTECTION AGAINST FROST.
- 6. ALL PAVEMENT AND UNCONTROLLED GRANULAR FILL SHALL BE REMOVED FROM THE AREA OF THE PLANNED FOUNDATION TO AT LEAST 4 FEET BEYOND THE FOOTING
- COMPACTED STRUCTURAL FILL SHALL BE USED TO BACKFILL TO THE DESIGN FOOTING SUBGRADE AND BENEATH ALL SLABS ON GRADE. STRUCTURAL FILL SHALL BE A CLEAN SAND-GRAVEL MIXTURE MEETING THE FOLLOWING GRADATION:

CREEN OR SIEVE SIZE	PERCENT PASSING
6 INCH	100
3 INCH	90-100
1/4 INCH	25-90
ŃO. 40	0-30
NO 200	0.5

- 8. STRUCTURAL FILL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D1557, MODIFIED PROCTOR TEST. COMPACT ADJACENT TO FOUNDATION WALLS SUPPORTING UNBALANCED FILL (RETAINING WALLS) TO 94 TO 96 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D1557. HAND OPERATED EQUIPMENT SHALL BE USED FOR COMPACTION WITHIN 8 FEET OF NEW FOUNDATION WALL.
- 9. NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS RETAINING EARTH, UNLESS WALLS ARE ADEQUATELY BRACED TO PREVENT MOVEMENT OR STRUCTURAL DAMAGE.
- 10. PROVIDE PVC DRAINPIPE AROUND THE PERIMETER OF THE STRUCTURE. LOCATE AT THE BOTTOM OF THE FOUNDATION WALLS AND PROVIDE POSITIVE GRAVITY FLOW TO PROPERLY DESIGNED OUTLET. REFER TO SITE DRAWINGS FOR ADDITIONAL INFORMATION.
- 11. SOILS EXPOSED AT THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHALL BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHALL BE DRAINED AWAY FROM THE EXCAVATIONS SHALL BE ADEQUATELY PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. GROUNDWATER SHALL BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.
- 12. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY IN ACCORDANCE WITH OSHA REQUIREMENTS. PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA GUIDELINES. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW HAMPSHIRE.

#### TIMBER NOTES

- 1. ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL - LATEST EDITION, AND THE AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) LATEST EDITION.
- 2. UON INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED. MINIMUM GRADE NO1/NO2 SPRUCE-PINE-FIR KILN DRIED TO 19% MAXIMUM MOISTURE CONTENT UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 3. ENGINEERED WOOD PRODUCTS SHALL BE AS SPECIFIED ON THE DRAWINGS. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES. MANUFACTURER AND PRODUCT SHALL BE:
  - TRUS-JOIST: I-JOIST (TJI), PARALLAM (PSL), MICROLAM (LVL), TIMBERSTRAND (LSL) I-JOIST (BCI), VERSALAM (LVL)
- 4. SUBSTITUTIONS OF ENGINEERED WOOD MATERIALS OTHER THAN THOSE SPECIFIED WILL BE PERMITTED ONLY WITH WRITTEN CERTIFICATION FROM THE MANUFACTURER THAT SUBSTITUTED ITEMS "MEETS OR EXCEED" ALL PROPERTIES OF SPECIFIED PRODUCT, INCLUDING ENGINEERING AND DURABILITY CHARACTERISTICS. SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE ARCHITECT AND ENGINEER.
- 5. PRESSURE TREATED LUMBER SHALL BE USED FOR SILL MEMBERS, EXTERIOR EXPOSURE, OR WHERE SHOWN ON THE DRAWINGS. TIMBER SHALL BE SOUTHERN YELLOW PINE TREATED WITH CCA OR ACQ TO 0.4 #/CF IN ACCORDANCE WITH AWPA C-18. ACZA IS STRICTLY
- 6. ALL ROOF SHEATHING SHALL BE APA PERFORMANCE—RATED. PROVIDE 5/8" THICK CD—X ROOF SHEATHING (U.N.O.) SHEATHING SHALL BE NAILED TO THE FRAMING AS FOLLOWS,

- TYPICAL PANEL FASTENING (U.N.O.)

  A. ROOFS: 8d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12"O.C. AT INTERMEDIATE SUPPORTS.
- 7. FASTENING NOT SPECIFIED SHALL CONFORM WITH IBC (2009) TABLE 2304.9.1. NAIL FASTENERS SHALL MEET THE REQUIREMENTS OF ASTM F1667. UNLESS NOTED OTHERWISE, NAILS REFERENCED ON DRAWINGS ARE TO BE COMMON NAILS WITH DIMENSIONS AS FOLLOWS.
  - 6d: 2" LONG BY 0.113" DIAMETER SHANK WITH 0.266" DIAMETER HEAD 8d: 2 1/2" LONG BY 0.131" DIAMETER SHANK WITH 0.281" DIAMETER HEAD 10d: 3" LONG BY 0.148" DIAMETER SHANK WITH 0.312" DIAMETER HEAD 12d: 3 1/4" LONG BY 0.148" DIAMETER SHANK WITH 0.312" DIAMETER HEAD 16d: 3 1/2" LONG BY 0.162" DIAMETER SHANK WITH 0.344" DIAMETER HEAD 20d: 4" LONG BY 0.192" DIAMETER SHANK WITH 0.406" DIAMETER HEAD 30d: 4 1/2" LONG BY 0.207" DIAMETER SHANK WITH 0.438" DIAMETER HEAD
- 8. ALL TIMBER CONNECTION HARDWARE (JOIST HANGERS, POST BASES, SHEARWALL HOLDOWNS, ETC) SHALL BE AS INDICATED ON THE DRAWINGS AND MANUFACTURED BY SIMPSON STRONG-TIE. ALL CONNECTION HARDWARE SHALL BE HOT-DIPPED GALVANIZED G-90 (U.N.O.). CONNECTION HARDWARE USED IN CONTACT WITH PRESERVATIVE TREATMENT SHALL BE GALVANIZED G185 (ZMAX) USE FASTENERS AND HANGERS OF SAME MATERIAL & COATING. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES.
- 9. FASTENERS USED IN CONTACT WITH PT LUMBER SHALL BE HOT DIPPED GALVANIZED (ASTM A153), STAINLESS STEEL, OR OTHER FINISH AS APPROVED BY THE ENGINEER.

# GLUED-LAMINATED (GLULAM) TIMBER NOTES

- 1. SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
- 2. ALL GLULAM TIMBER SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL-LASTEST EDITION, AND THE AF&PA NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS)-LATEST EDITION.
- 3. SUBMIT ALL PRODUCT INFORMATION FOR REVIEW. FRAMING MEMBERS SHALL BE PROVIDED AS FOLLOWS U.N.O.:

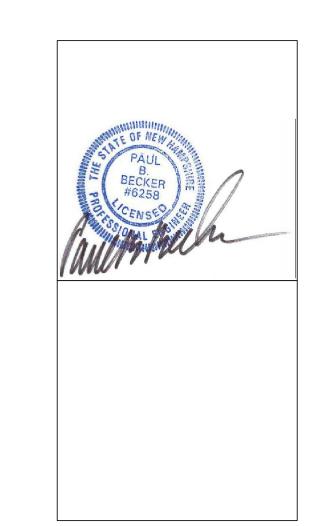
BEAMS: SOUTHERN PINE 24F-V3, E=1800 ksi OR BETTER. UNBALANCED LAY-UP. COLUMNS: SOUTHERN PINE 24F, E=1800 ksi OR BETTER. BALANCED LAY-UP.

6. ALL STEEL CONNECTORS TO BE HOT DIP GALVANIZED WITH FLAT BLACK POWDER COAT FINISHED.

- 4. ALL BEAMS AND COLUMNS EXPOSED TO VIEW, PROVIDE GLULAM OF ARCHITECTURAL GRADE COMPLYING WITH AITC 110. GLULAM TO RECEIVE STAIN FINISH. COORD WIHT ARCH.
- 5. ALL BEAMS AND COLUMNS TO RECEIVE PRESERVATIVE TREATMENT TO COMPLY WIHT AWPA U1, CATEGORY 3B.



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CLIENT

PORTSMOUTH SENIOR ACTIVITY

> 125 COTTAGE ST. PORTSMOUTH, NH

No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/201
2	95% SUBMISSION	01/12/201
3	100% SUBMISSION	02/23/201

**GENERAL NOTES** 

PROJECT NO.:	42
DATE ISSUED:	02/23/20
SCALE:	
DRAWN BY:	MS
REVIEWED BY:	CA

PROJECT PHASE: FOR CONSTRUCTION

#### CONCRETE NOTES

- 1. CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 LATEST)," AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301—LATEST)". THESE PUBLICATIONS ARE AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848—3800.
- 2. GENERAL CONTRACTOR, CONSTRUCTION MANAGER AND/OR OWNER'S CLERK OF THE WORKS SHALL HAVE AVAILABLE ON SITE AT ALL TIMES A COPY OF ACI "FIELD REFERENCE MANUAL SP-15 (LATEST)". THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.
- 3. CONCRETE SHALL BE CONTROLLED CONCRETE, PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ACI 318—LATEST.

#### 4. CONCRETE MIX DESIGN:

- FOOTINGS AND FOUNDATION WALLS:
  - A. STRENGTH: 3,500 PSI @ 28 DAYS
  - B. AGGREGATE: 3/4"
  - C. W/C RATIO: 0.55 MAX
    D. ENTRAINED AIR:  $6\% \pm 1$  1/2%
- E. SLUMP: 4" MAX
- INTERIOR SLABS ON GRADE

  A. STRENGTH: 3,000 PSI @ 28 DAYS
  - B. AGGREGATE: 3/4"
  - C. W/C RATIO: 0.55 MAX
- D. ENTRAPPED AIR ONLY (NO ENTRAINMENT)
- E. SLUMP: 4" MAX EXTERIOR SLABS ON GRADE:
  - A. STRENGTH: 5,000 PSI @ 28 DAYS
  - B. AGGREGATE: 3/4"
  - C. W/C RATIO: 0.40 MAX
    D. ENTRAINED AIR:  $6\% \pm 1 \cdot 1/2\%$
  - E. SLUMP: 4" MAX

#### NOTE:

- A. ADD AIR ENTRAINING ADMIXTURE AT MANUFACTURER'S PRESCRIBED RATE TO
  RESULT IN CONCRETE AT POINT OF PLACEMENT HAVING THE ABOVE NOTED AIR
  - ADDITIONAL SLUMP MAY BE ACHIEVED BY THE ADDITION OF A MIDRANGE OR HIGH RANGE WATER REDUCING ADMIXTURE. MAXIMUM SLUMP AFTER ADDITION OF ADMIXTURE SHALL BE 6 INCHES AND 8 INCHES RESPECTIVELY.
- 5. ADJUSTMENT TO CONCRETE MIXES: MIX ADJUSTMENTS MAY BE REQUESTED BY THE CONTRACTOR, WHEN CHARACTERISTICS OF THE MATERIALS, JOB CONDITIONS, WEATHER OR OTHER CIRCUMSTANCES WARRANT, AT NO ADDITIONAL COST TO THE OWNER AS ACCEPTED BY THE ARCHITECT. LABORATORY TEST DATA FOR THE REVISED MIX DESIGN AND STRENGTH DATA MUST BE SUBMITTED AND ACCEPTED BY THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.

#### <u>NO7</u>

- A. WATER MAY BE ADDED AT THE PROJECT ONLY IF THE MAXIMUM SPECIFIED WATER—CEMENT RATIO AND SLUMP ARE NOT EXCEEDED. CONTRACTOR SHALL HAVE BATCH TICKET INDICATING WATER AND CEMENT MIXED IN THE PLANT, AND SHALL RECORD THE WATER ADDED AS EVIDENCE THAT THE WATER—CEMENT RATIO HAS NOT BEEN EXCEEDED.
- B. ADDITIONAL DOSES OF SUPER PLASTICIZER SHOULD BE USED WHEN DELAYS OCCUR AND REQUIRED SLUMP HAS NOT BEEN MAINTAINED. A MAXIMUM OF TWO ADDITIONAL DOSAGES ARE PERMITTED PER ACI 212.3R RECOMMENDATIONS.

### 6. CONCRETE MIXING:

- A. JOB-SITE MIXING OF CONCRETE WILL NOT BE PERMITTED.
- B. READY—MIX CONCRETE MUST COMPLY WITH THE REQUIREMENTS OF ASTM C94, AND AS SPECIFIED HEREIN. PROVIDE BATCH TICKET FOR EACH BATCH DISCHARGED AND USED IN WORK, INDICATING PROJECT NAME, MIX TYPE, MIX TIME, BATCH QUANTITY, AND PROPORTIONS OF INGREDIENTS.
- 7. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- 8. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE OR SLABS CAST ON GRADE. ADJACENT SLEEVES SHALL BE SPACED A MINIMUM OF THREE DIAMETERS APART. NO PENETRATIONS SHALL BE MADE THROUGH FOOTINGS WITHOUT WRITTEN PERMISSION FROM ENGINEER.
- 9. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST FOITION
- 10. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND SHALL BE PROVIDED IN FLAT SHEETS. LAP TWO SQUARES AT ALL JOINTS AND TIE AT 3'-0" ON CENTER.
- 11. COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. PROVIDE AND SCHEDULE ON THE SHOP DRAWINGS ALL NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN POSITION. MINIMUM REQUIREMENTS SHALL BE: HIGH CHAIRS AT 4'-0" O.C. WITH CONTINUOUS # 5 SUPPORT BARS; SLAB BOLSTERS, CONTINUOUS AND 3'-6" O.C.; BEAM BOLSTERS AT 5'-0" O.C.
- 12. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:
  - A. SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH, 3.0"
    B. FORMED SURFACES IN CONTACT WITH EARTH OF EXPOSED TO WEATHER
    #5 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"
  - #6 THROUGH #11 BARS, 2.0"
    C. SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER WALLS, SLABS, JOISTS #11 AND SMALLER, 1.0"
- 14. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS.
  PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS
  ENDS. SEE SCHEDULE ON S2.1 FOR REQUIRED REBAR LAP SPLICE LENGTHS.
- 15. WELDING OF REINFORCEMENT IS NOT PERMITTED.
- 16. FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS TYPICAL DETAILS.
- 17. PROVIDE A MIN. 15 MIL, POLYOLEFIN GEOMEMBRANE TYPE VAPOR BARRIER UNDER INTERIOR SLABS CAST ON GRADE. SEE TYPICAL DETAILS FOR SPECIFIC UNDERSLAB PREPARATION REQUIREMENTS.

- 18. CONTRACTION/CONTROL JOINTS SHOWN ON DRAWINGS ARE MANDATORY. OMISSIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMITTAL OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATIONS FOR APPROVAL BY THE STRUCTURAL ENGINEER.
- 19. WHERE CONTROL JOINTS ARE NOT SHOWN, OR WHEN ALTERNATE LOCATIONS ARE PROPOSED, DRAWINGS SHOWING LOCATIONS(S) OF CONTRACTION AND CONTROL JOINTS AND CONCRETE PLACING SEQUENCE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR O PREPARATION OF THE REINFORCEMENT SHOP DRAWINGS.
- 20. SPACING OF CONSTRUCTION OR CONTRACTION JOINTS, UNLESS NOTED OTHERWISE SHALL BE AS FOLLOWS:
  - A. FOOTINGS AND WALLS

B. SLABS ON GRADE

MAX LENGTH 40'-0" NOR 15'-0" FROM ANY CORNER\*\* MAX LENGTH 15'-0"\*\* MAX AREA 900SF\*\*

- \*\* EXCEED ONLY WHERE INTERMEDIATE CONTRACTION JOINTS ARE PROVIDED. MINIMUM
- 21. CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTIONS JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS IN CONCRETE WORK SHALL BE MADE AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR.

OF 72 HOURS SHALL ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS.

- 14. ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554, GRADE 36 KSI WELDABLE STEEL, UNLESS NOTED OTHERWISE ON DRAWINGS. ANCHOR RODS SHALL BE HOT—DIPPED GALVANIZED.
- 15. ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE 5000 PSI NON-SHRINK GROUT BY U.S. GROUT CORP., OR APPROVED EQUAL.
- 16. SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR STRUCTURE DEFLECTION, SUBGRADE FLUCTUATIONS, AND TO OBTAIN THE SPECIFIED SLAB ELEVATION AT THE FLATNESS AND LEVELNESS INDICATED.
- 17. INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED COMPLETION OF THE INSTALLATION OF REINFORCEMENT.
- 18. ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED TO ENSURE THE CORRECT POSITIONS OF EMBEDMENTS. "WET SETTING" OF EMBEDMENTS INTO CONCRETE IS STRICTLY PROHIBITED. EMBEDMENTS INCLUDE, BUT NOT BY LIMITATION, REINFORCEMENT, REINFORCING DOWELS, EMBEDDED PLATES, ANCHOR RODS, ANCHOR INSERTS, SLEEVES, LOAD TRANSFER PLATES, DIAMOND DOWELS, AND SHELF BULK HEADS

#### STRUCTURAL STEEL NOTES

- 1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATIONS, AND ERECTION OF STRUCTURAL STEEL" 13TH EDITION, AND THE "CODE OF STANDARD PRACTICE", LATEST EDITION.
- 2. STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, SHALL CONFORM TO ASTM A36
  UNLESS NOTED OTHER WISE (U.N.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON THE
  DRAWINGS FOR WIDE—FLANGE SECTIONS: ASTM A992 (ASTM A572 GRADE 50 WITH SPECIAL
  REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1997)
- 3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B, 46 KSI.
- 4. FIELD CONNECTIONS SHALL BE BOLTED USING 3/4" DIAMETER ASTM A325N HIGH STRENGTH BOLTS (U.N.O.).
- 5. WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN)
- 6. DESIGN AND DETAIL ALL CONNECTIONS ACCORDING TO AISC STANDARD CONNECTION TABLES. DESIGN STANDARD BEAM CONNECTIONS FOR THE MAXIMUM LOAD CAPACITY OF THE MEMBER. BRACING CONNECTIONS HAVE BEEN DETAILED ON THE DRAWINGS.
- 7. STEEL FINISHES:
- ALL INTERIOR STEEL SHALL BE FABRICATED AND SHIPPED AS PRIMED STEEL.
   ALL EXTERIOR STEEL SHALL BE HOT DIP GLAVANIZE.
- 8. SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
- 9. COAT ALL COLUMNS, BASEPLATES, AND BRACE ELEMENTS ENCASED IN CONCRETE OR BELOW GRADE WITH BITUMINOUS MASTIC ON TNEMEC H.B. TNEMECOL (46-465) COAT TAR
- 10. PROVIDE 3/8" MINIMUM STIFFENER PLATES EACH SIDE OF BEAM WEB AT BEAMS FRAMING OVER COLUMNS AND AT COLUMNS OVER BEAMS.
- 11. PROVIDE 1/4" THICK LEVELING PLATE AND 1 1/2"± OF NON—SHRINK GROUT UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED. LEVELING PLATES SHALL BE SET AND GROUTED PRIOR TO ERECTING COLUMNS.
- 10. PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHOR BLOTS ETC., SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BLOCKING, PARAPETS, FINISHES, ETC. COORDINATE WITH MISCELLANEOUS METAL FABRICATOR TO ENSURE COMPLETE COVERAGE OF ALL ITEMS.
- 11. PROVIDE L 4 x 4 x 1/4 SLAB SUPPORT ANGLE AS REQUIRED AT COLUMNS WHERE STRUCTURAL MEMBERS DO NOT FRAME IN AT ALL FOUR SIDES.

#### <u>LINTELS</u>

1. THE FOLLOWING LINTELS SHALL BE USED FOR MASONRY OPENINGS, U.N.O. ON DRAWINGS:

MASONRY OPENING	<u>LINTEL SIZE</u>
UP TO 3'-0"	L 3 1/2 x3 1/2 x 5/16
3'-1" TO 4'-6"	L 4 x 3 1/2 x 5/16 (LLV)
4'-7" TO 6'-0"	L 5 x 3 1/2 x 5/16 (LLV)
6'-1" TO 8'-0"	L 6 x 3 1/2 x 5/16 (LLV)

2. PROVIDE ONE ANGLE FOR EACH 4" WALL THICKNESS. FOR 6" WALL THICKNESS, PROVIDE WT OR BUILT—UP SECTION WITH PROPERTIES EQUAL TO OR GREATER THAN 1 ½ TIMES THE ANGLES PROPERTIES FOR A 4" WALL THICKNESS.

Q

- 3. PROVIDE 8" OF BEARING AT EACH END OF ALL LINTELS.
- 4. ALL EXTERIOR LINTELS SHALL BE HOT-DIPPED GALVANIZED.



STRUCTURAL ENGINEERS

75 York Street, Portland, Maine 04101
207.879.1838 • beckerstructural.com

PAUL BECKER #6258
CENSES

CLIENT

# PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST. PORTSMOUTH, NH

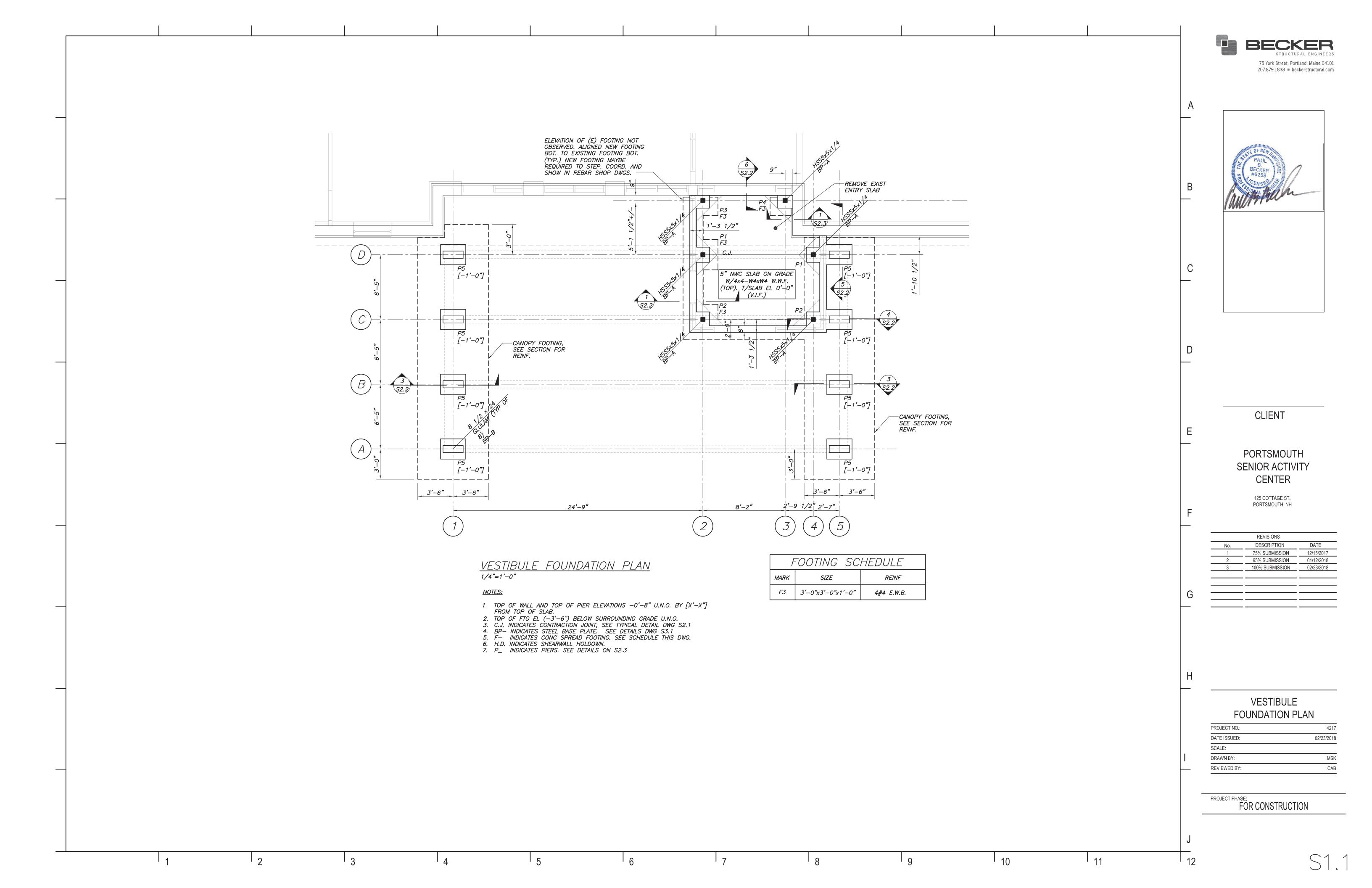
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No.	DESCRIPTION	DATE
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2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
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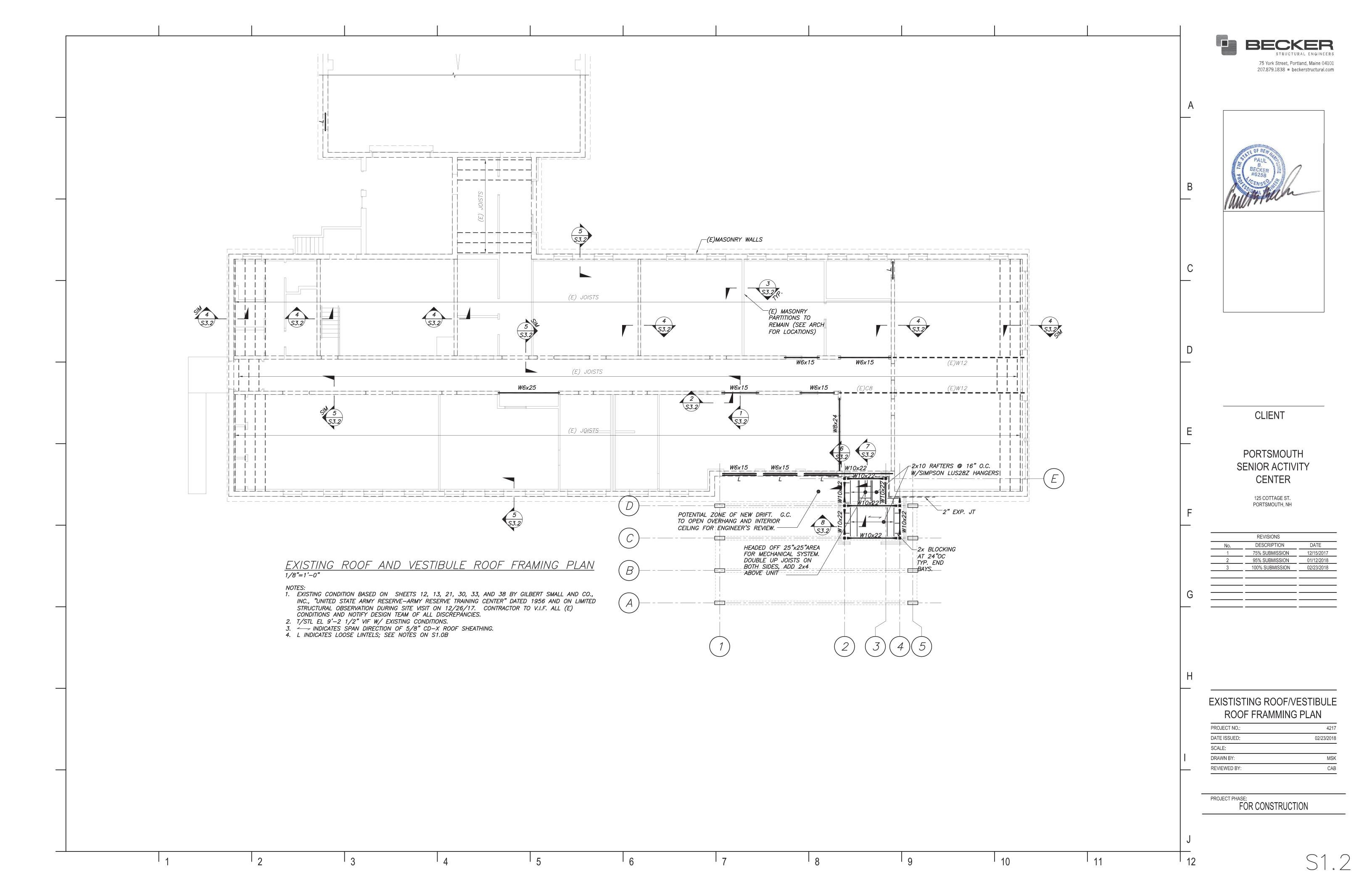
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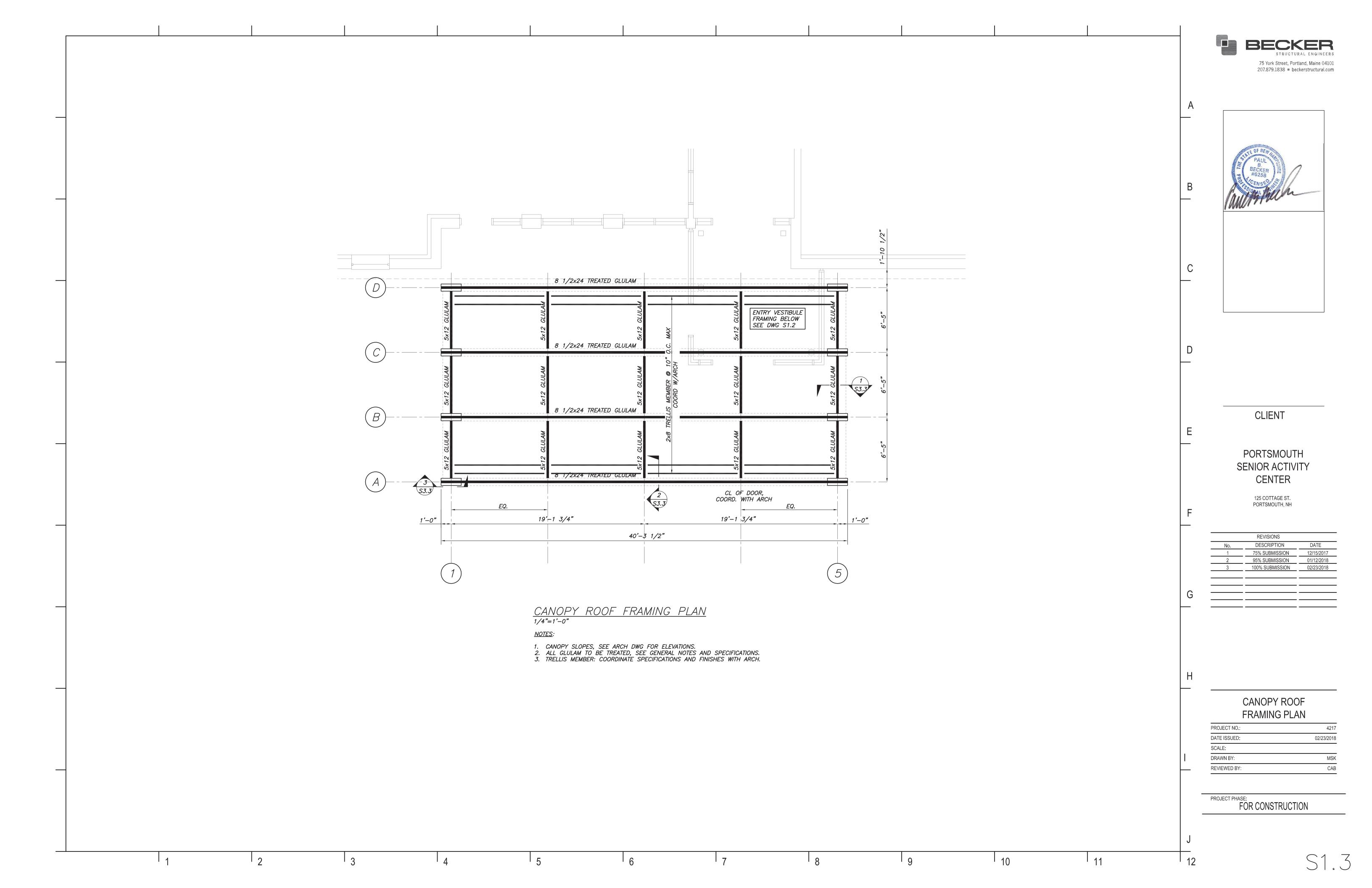
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CALE:	
RAWN BY:	MSK
EVIEWED BY:	CAB

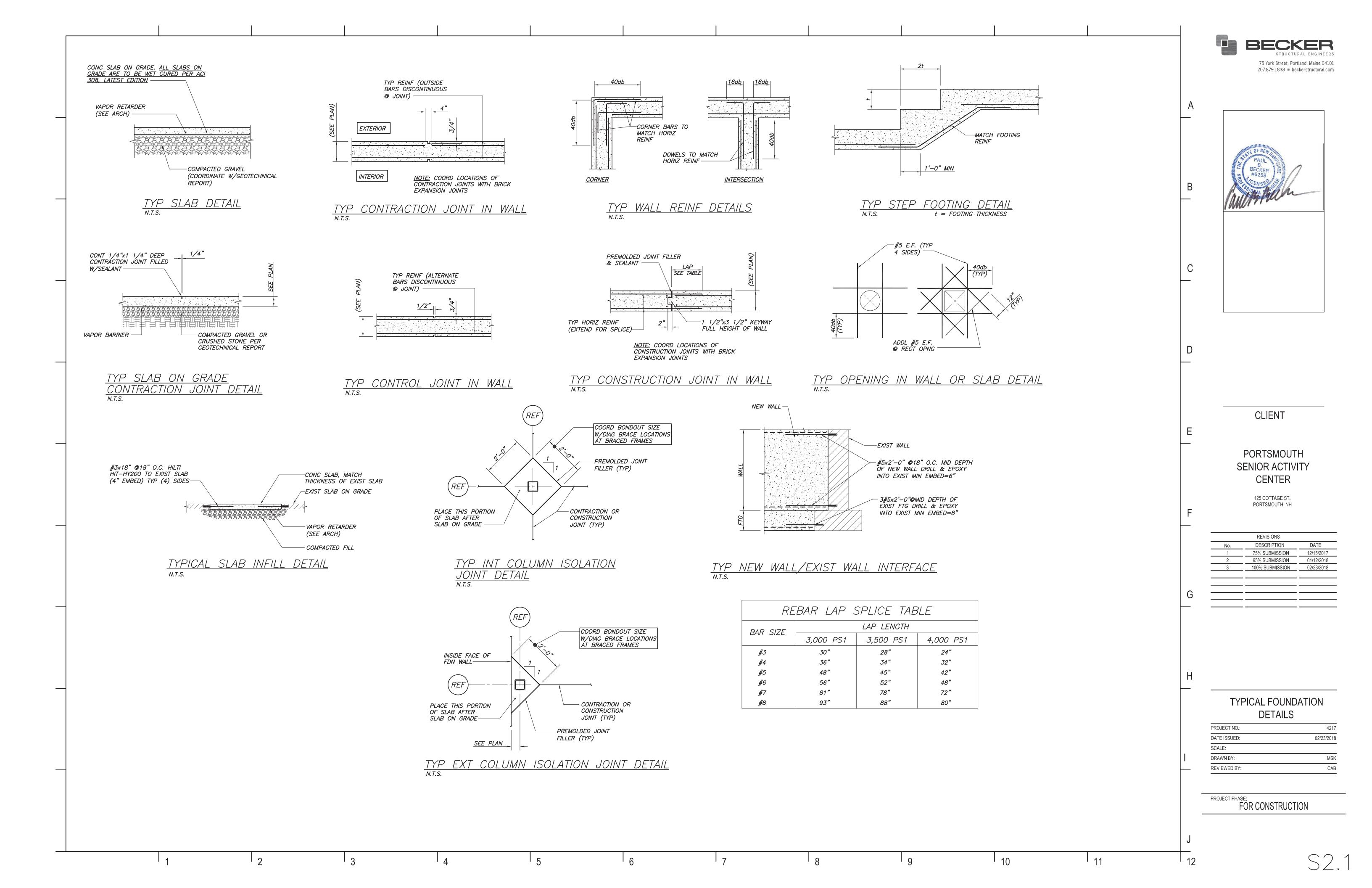
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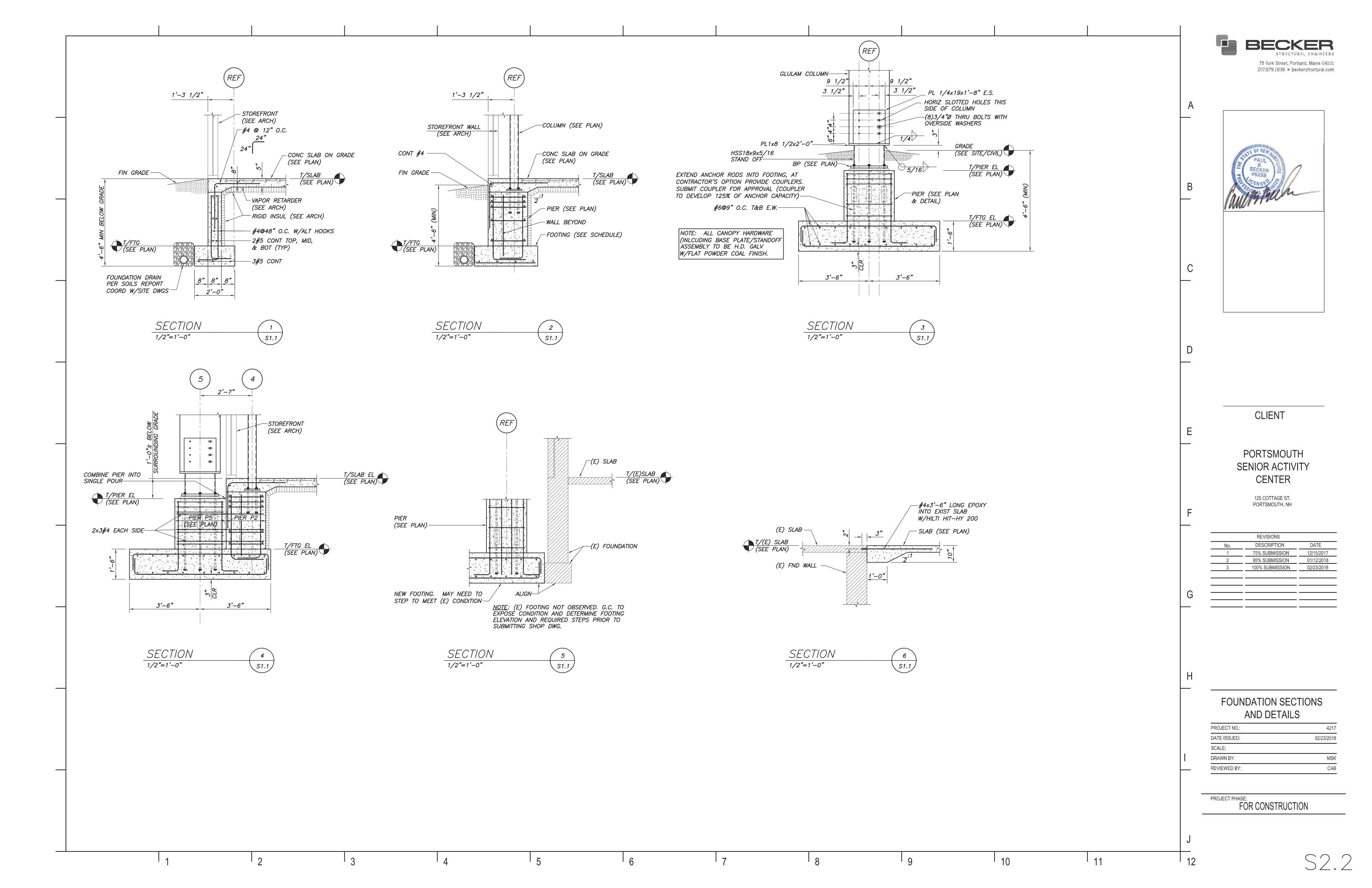
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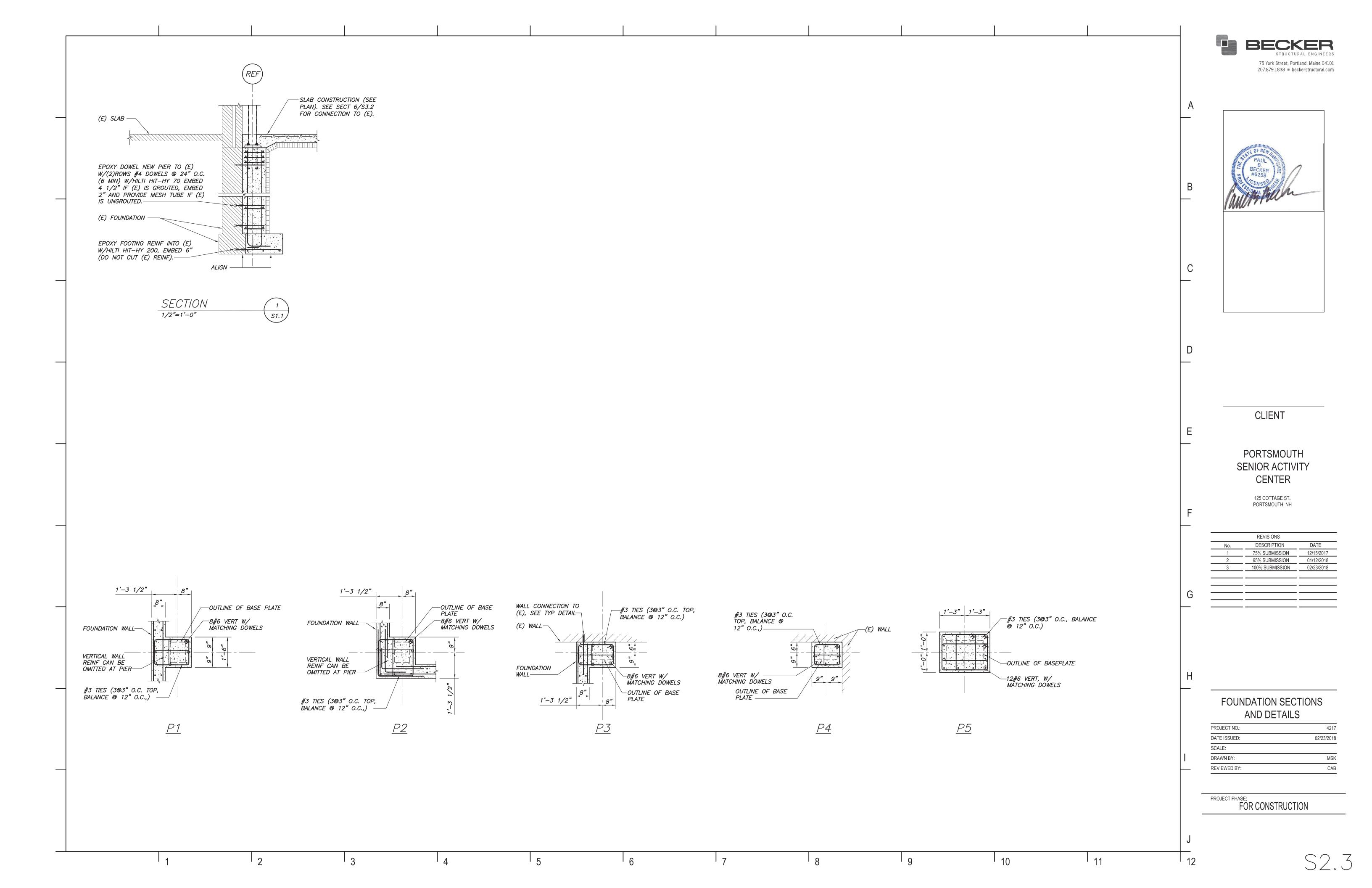




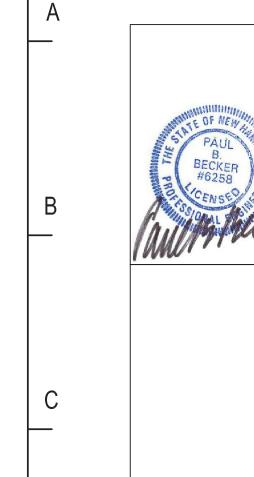












CLIENT

## PORTSMOUTH SENIOR ACTIVITY CENTER

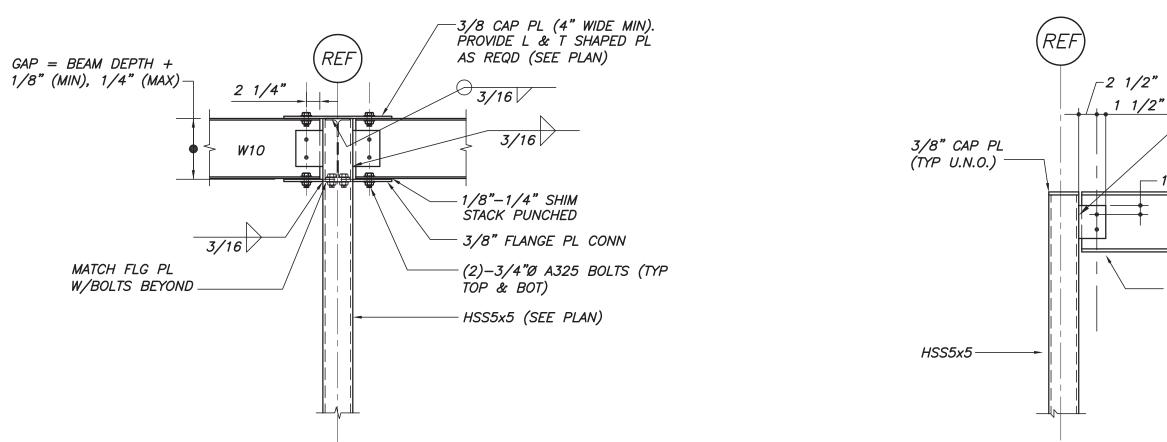
125 COTTAGE ST.

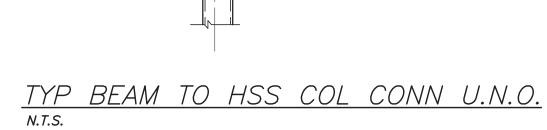
	REVISIONS	
No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
	-	

TYPICAL FRAMING **DETAILS** 

PROJECT NO.:	4217
DATE ISSUED:	02/23/2018
SCALE:	
DRAWN BY:	MSK
REVIEWED BY:	CAF

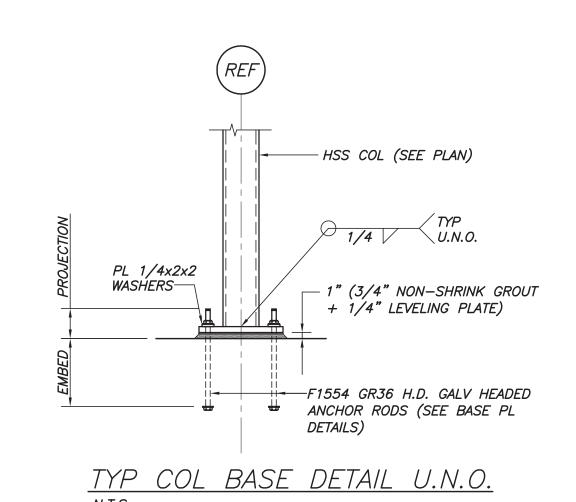
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FOR CONSTRUCTION

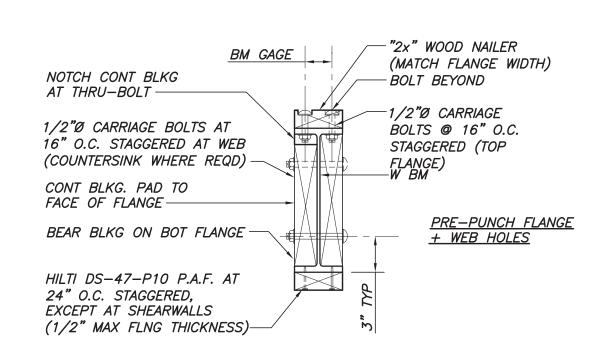




W10

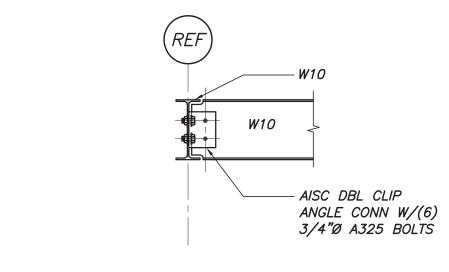
— PL 3/8×4×0'–5 1/2" W/(2) 3/4"Ø A325 BOLTS



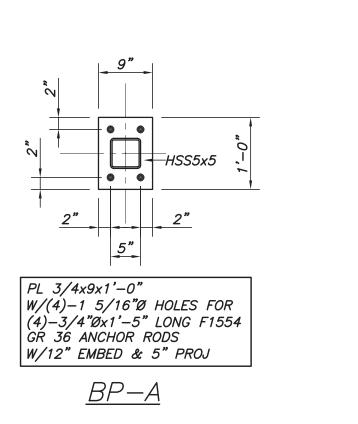


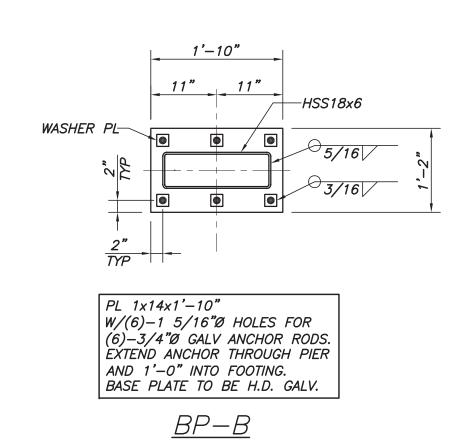
TYPICAL W10 TO HSS MOMENT CONN DETAIL

TYP WOOD NAILER/WEB BLKG TO W-BM DETAIL

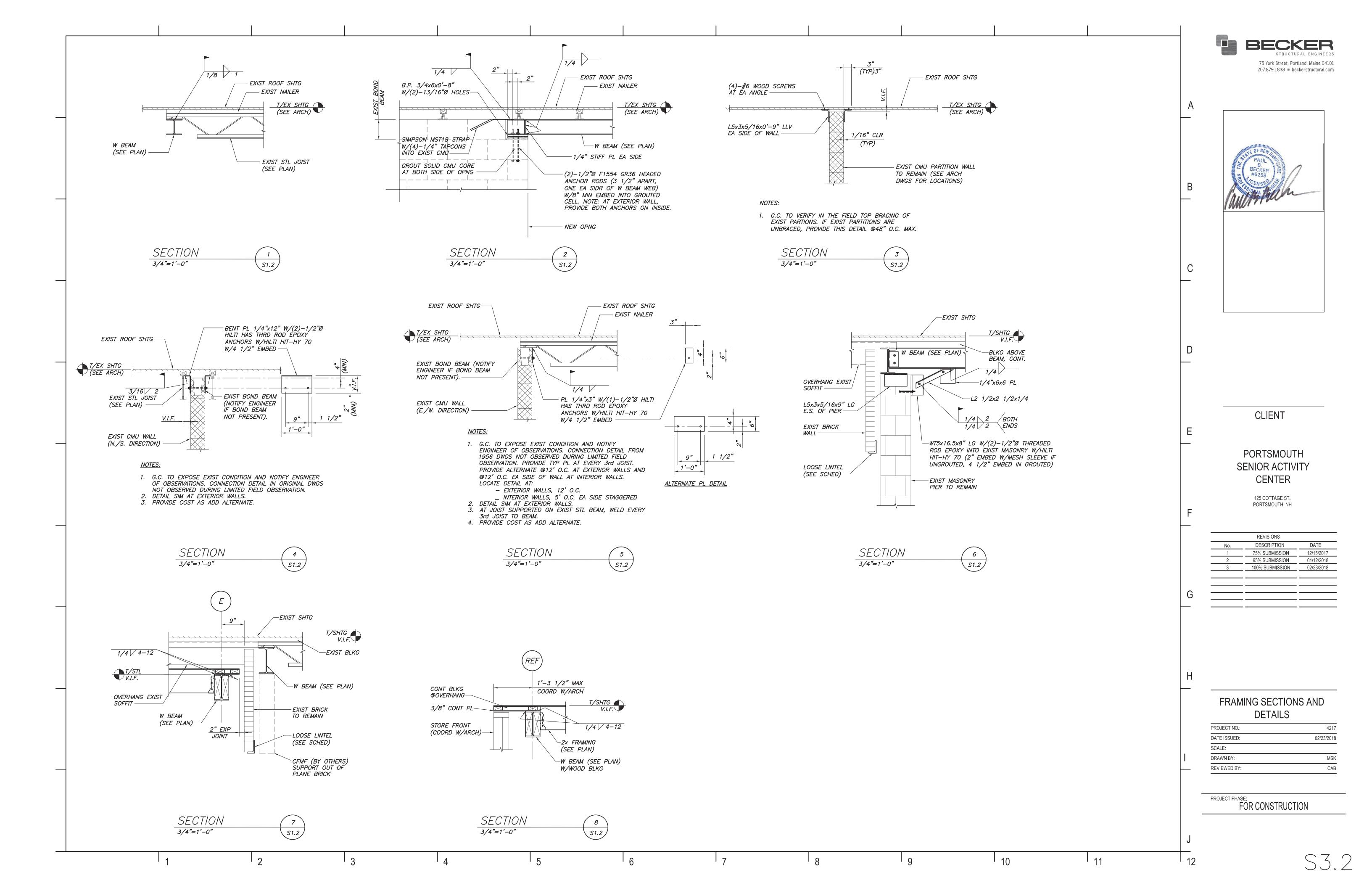


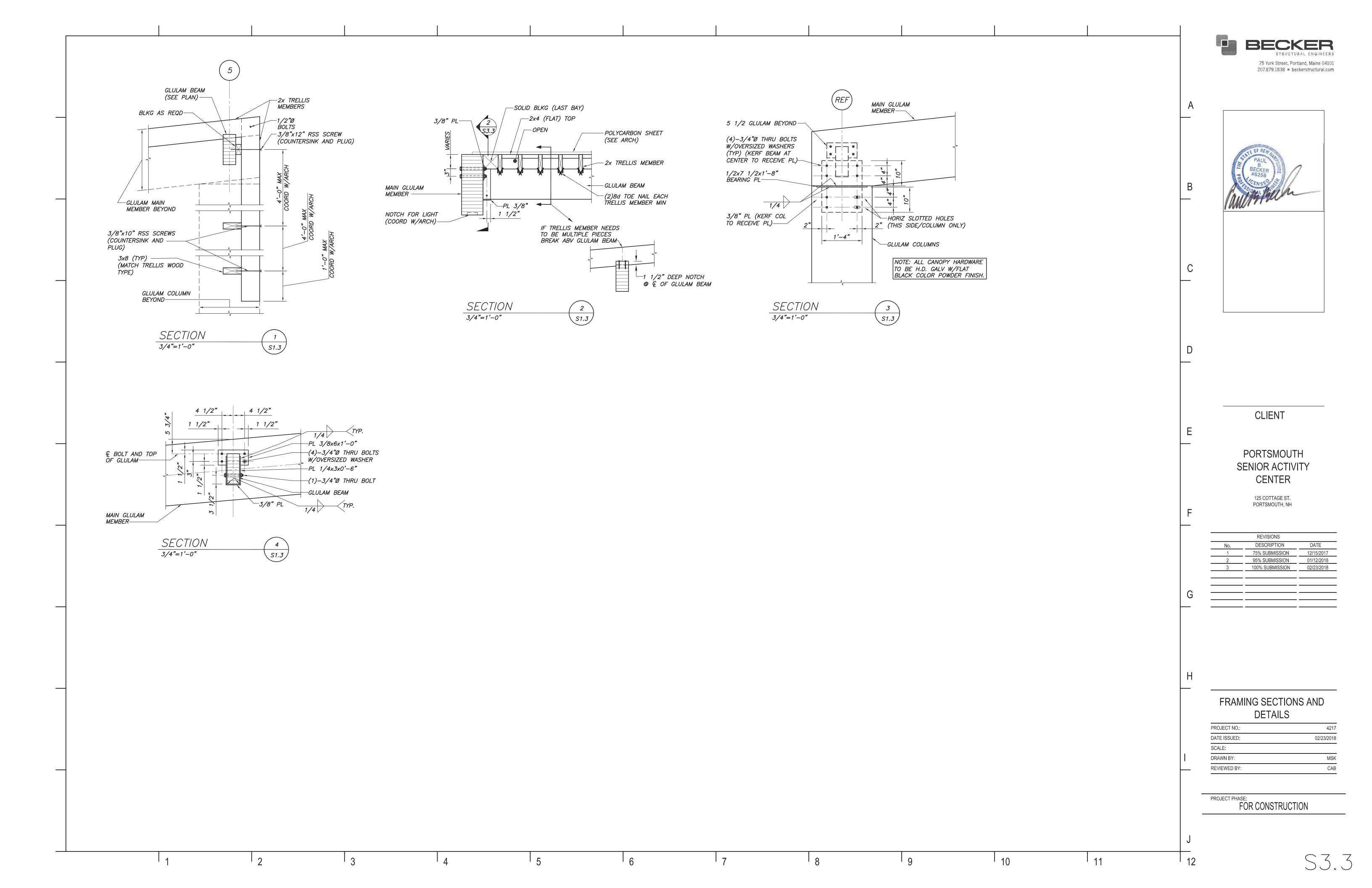
TYP BEAM TO BEAM DETAIL U.N.O.





19





## **ELECTRIC GENERAL NOTES** CONTRACTOR IS RESPONSIBLE FOR COMPLETING ALL WORK IN ACCORDANCE WITH ALL RELEVANT CODES AND STANDARDS; INCLUDING BUT NOT LIMITED TO INTERNATIONAL BUILDING CODE 2006, NATIONAL ELECTRICAL CODE (NFPA 70) 2011, INTERNATIONAL FIRE CODE 2006, LIFE SAFETY CODE (NFPA 101) 2009, AND THE INTERNATIONAL ENERGY CONSERVATION CODE 2006. . THE ELECTRICAL DEMOLITION PLANS AND DETAILS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE SUBMISSION OF BIDS TO BECOME FAMILIAR WITH THE ACTUAL CONDITIONS AND EXTENT OF WORK. DEVICES AND EQUIPMENT LOCATED ON WALLS AND/OR CEILINGS TO BE REMOVED SHALL BE DISCONNECTED FOR REMOVAL PER OSHA CONSTRUCTION STANDARDS. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UNANTICIPATED OR HIDDEN CONDITIONS ENCOUNTERED DURING DEMOLITION. 3. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ALL SYSTEMS OR BUILDING COMPONENTS DAMAGED DURING THE EXECUTION OF WORK. DAMAGE SHALL INCLUDE BUT NOT BE LIMITED TO THE REMOVAL OR DISPOSAL OF ITEMS INTENDED TO REMAIN OR BE SALVAGED. . THE ELECTRICAL CONTRACTOR SHALL DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND RACEWAYS TO THEIR POINT OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH AT THE SURFACE FOR PATCHING BY TRADE CONTRACTOR. ALL CIRCUIT BREAKERS ASSOCIATED WITH THE DEMOLITION SCOPE SHALL BE DE-ENERGIZED AND LABELED AS SPARE.

- 5. ALL REMOVED ITEMS SHALL BE DISPOSED AT PERMITTED DISPOSAL FACILITIES UNLESS IDENTIFIED FOR TURNED OVER TO OWNER. THE OWNER'S REPRESENTATIVE SHALL INSPECT ALL RETAINED ITEMS PRIOR TO PLACEMENT IN THE IDENTIFIED STORAGE LOCATION BY THE ELECTRICAL CONTRACTOR.
- S. CIRCUIT NUMBERS ARE DIAGRAMMATIC. NUMBERS SHALL BE DETERMINED IN THE FIELD AND REFLECTED ON AS-BUILT DOCUMENTATION BY THE ELECTRICAL CONTRACTOR. CIRCUITRY HAS BEEN DETERMINED BASED UPON INFORMATION GATHERED, AND INFORMATION OBTAINED FROM THE OWNER. EXACT CIRCUITING, EQUIPMENT SIZES, AND CONDUIT AND WIRING SIZES MAY DIFFER IN THE FIELD FROM WHAT IS SHOWN ON THE DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR TRACING ALL CIRCUITS BEING DEMOLISHED AND REUSED PRIOR TO DISCONNECTING, VERIFYING EXISTING CIRCUITRY AND EQUIPMENT SIZES, AND SHALL SIZE ALL NEW EQUIPMENT AND BRANCH CIRCUITRY ACCORDINGLY IF ACTUAL CONDITIONS DIFFER FROM WHAT IS SHOWN ON THE DRAWINGS. THE ASSOCIATED CIRCUIT NUMBERS THAT ARE APPLIED TO EACH DEVICE AND PIECE OF EQUIPMENT INFERS INTERCONNECTING BRANCH CIRCUITRY. INTERCONNECTING BRANCH WIRING SHALL BE SIZED EQUAL TO THE HOMERUN UNLESS NOTED OTHERWISE.
- THE ELECTRICAL NEW WORK PLANS DO NOT SHOW ALL ACCESSORIES REQUIRED FOR A COMPLETE SYSTEM. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL COORDINATION AMONG TRADES TO DETERMINE ALL ACCESSORIES AND COMPONENTS REQUIRED TO FORM A COMPLETE AND FUNCTIONAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY ACCESSORIES AND COMPONENTS NEEDED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM AND SHALL BE RESPONSIBLE TO ENSURE THE INTEGRITY AND SAFETY OF THE SYSTEM AFTER COMPLETION. THE ELECTRICAL CONTRACTOR SHALL TAKE ALL NECESSARY STEPS AND PROVIDE ALL ADDITIONAL COMPONENTS NEEDED TO ENSURE THE SYSTEM IS SAFE UPON COMPLETION OF THE PROJECT.
- 8. ROUTING IS DIAGRAMMATIC. CONTRACTOR SHALL DETERMINE ROUTING IN FIELD AND RE-USE EXISTING PENETRATIONS WHERE POSSIBLE.
- 9. ROOM NUMBERS WERE PRESCRIBED BY AECM AND MAY NOT MATCH THOSE ASSIGNED BY OWNER.
- 10. CONTRACTOR SHALL CONFIRM LOCATION OF ALL EQUIPMENT PRIOR TO COMMENCING WORK.
- 11. CONTRACTOR SHALL MAKE NOTE OF ANY DISCREPANCIES BETWEEN DESIGN DRAWINGS AND ACTUAL INSTALLATION LOCATION.
- 12. CONTRACTOR WILL TRACE AND MAKE NOTE OF CIRCUIT PATHS WHERE POSSIBLE.

LINE WEIGHT EXAMPLES

THIS LINE WEIGHT INDICATES A NEWLY CONSTRUCTED

THIS LINE WEIGHT INDICATES A FEATURE THAT ALREADY

	RECEPTACLE LEGEN
SYMBO	DESCRIPTION
	SINGLE OUTLET RECEPTACLE
	DOUBLE OUTLET RECEPTACLE
	QUAD OUTLET RECEPTACLE
#	SWITCH, NUMBER OF LINES CONTROLLED IS SHOWN ABOVE
PNL	PANEL BOARD, NAME INDICATED UNDERNEATH IN DRAWING
()	RECEPTACLE LOCATION COULD NOT BE CONFIRMED
•	RECEPTACLE CONDUCTOR THAT GOES INTO THE WALL
•	RECEPTACLE CONDUCTOR THAT GOES INTO THE CEILING
	RECEPTACLE CONDUCTOR PATHWAY
	RECEPTACLE CONDUCTOR PATHWAY COULD NOT CONFIRMI
	# # PNL

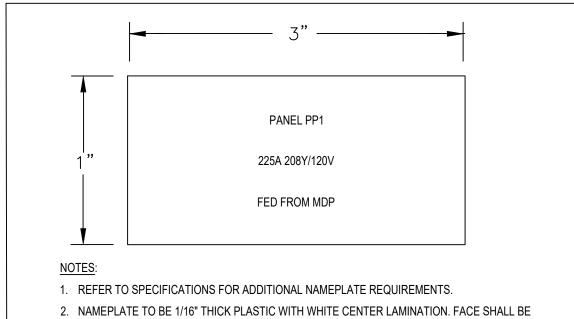
		RECEPTACLE LEGEND
	SYMBOL	DESCRIPTION
	$\bigcirc$	SINGLE OUTLET RECEPTACLE
1		DOUBLE OUTLET RECEPTACLE
		QUAD OUTLET RECEPTACLE
	#	SWITCH, NUMBER OF LINES CONTROLLED IS SHOWN ABOVE THE SYMBOL IF GREATER THAN ONE
	PNL	PANEL BOARD, NAME INDICATED UNDERNEATH IN DRAWING
	00	RECEPTACLE LOCATION COULD NOT BE CONFIRMED
	•	RECEPTACLE CONDUCTOR THAT GOES INTO THE WALL
	•	RECEPTACLE CONDUCTOR THAT GOES INTO THE CEILING
		RECEPTACLE CONDUCTOR PATHWAY
		RECEPTACLE CONDUCTOR PATHWAY COULD NOT CONFIRMED
	GFCI	POSSIBLE

	FIRE ALARM SYSTEM LEGEND
SYMBOL	DESCRIPTION
	CEILING MOUNTED EXIT SIGN, ARROW INDICATES PATH OF EGRESS
	WALL MOUNTED EXIT SIGN, ARROW INDICATES PATH OF EGRESS
	CEILING MOUNTED EXIT SIGN WITH EMERGENCY LIGHTS, ARROW INDICATES PATH OF EGRESS
PD	FIRE ALARM PULL BOX
HS	FIRE ALARM NOTIFICATION DEVICE, HORN/STROBE
(S <sub>D</sub> )	SMOKE DETECTOR
	EMERGENCY LIGHTS WITH BATTERY BACKUP

	PANELBOARD LEGEND
SYMBOL	DESCRIPTION
	PANELBOARD
	BOILER
	THERMAL ELEMENT
$\otimes$	LIGHTING ELEMENT
$\Box$	PUMP
	AIR HANDLING HVAC EQUIPMENT
SPARE	SPARE PANEL BOARD INTAKE
-7 <sup>°</sup>	RECEPTACLE WHOSE'S LOCATION COULD NOT BE CONFIRMED
$\bigoplus$	SYSTEM CONTROLS
	EMERGENCY LIGHTING FIXTURE
	MOTOR
~	FAN
F	FIRE DETECTION SYSTEM

HAND DRYER

A/AMP  AC  ADA  AF  AFF  AFG  AIC  AL	AMPERE  ALTERNATING CURRENT  AMERICAN WITH DISABILITIES ACT  AMPERE FRAME  ABOVE FINISHED FLOOR  ABOVE FINISHED GRADE  AMPERE INTERRUPTING CAPACITY  ALUMINUM  AMPERE TRIP	MCB MEC MH MLO MTD MTG NEC	LIGHTING  MAIN CIRCUIT BREAKER  MASSACHUSETTS ELECTRIC CODE  MANHOLE  MAIN LUGS ONLY  MOUNTED  MOUNTING	
ADA  AF  AFF  AFG  AIC	AMERICAN WITH DISABILITIES ACT  AMPERE FRAME  ABOVE FINISHED FLOOR  ABOVE FINISHED GRADE  AMPERE INTERRUPTING CAPACITY  ALUMINUM	MEC MH MLO MTD MTG	MASSACHUSETTS ELECTRIC CODE  MANHOLE  MAIN LUGS ONLY  MOUNTED	
AFF AFG AIC	AMPERE FRAME  ABOVE FINISHED FLOOR  ABOVE FINISHED GRADE  AMPERE INTERRUPTING CAPACITY  ALUMINUM	MH MLO MTD MTG	MANHOLE  MAIN LUGS ONLY  MOUNTED	
AFG AIC	ABOVE FINISHED FLOOR  ABOVE FINISHED GRADE  AMPERE INTERRUPTING CAPACITY  ALUMINUM	MLO MTD MTG	MAIN LUGS ONLY  MOUNTED	
AFG AIC	ABOVE FINISHED GRADE  AMPERE INTERRUPTING CAPACITY  ALUMINUM	MTD MTG	MOUNTED	
AIC	AMPERE INTERRUPTING CAPACITY  ALUMINUM	MTG		
AL	ALUMINUM		MOUNTING	
		NEC		
AT	AMPERE TRIP		NATIONAL ELECTRIC CODE	
		NTS	NOT TO SCALE	
ATS	AUTOMATIC TRANSFER SWITCH	#	NUMBER	
AWG	AMERICAN WIRE GAUGE	PVC	POLYVINYL CHLORIDE	
С	CONDUIT	PWR	POWER	
CATV	CABLE TELEVISION	RGS	RIGID GALVANIZED STEEL	
CCTV	CLOSED CIRCUIT TELEVISION	PNL	PANEL	
СВ	CIRCUIT BREAKER	SWBD	SWITCHBOARD	
CKT	CIRCUIT	TEL	TELEPHONE	
Ĺ	CENTERLINE	TERM	TERMINAL	
DWG	DRAWING	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION	
EC	ELECTRICAL CONTRACTOR	TSP	TWISTED SHIELDED PAIR	
EMT	ELECTRICAL METALLIC TUBING	TYP	TYPICAL	
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	UNO	UNLESS OTHERWISE NOTED	
GFI	GROUND FAULT INTERRUPTING	UPS	UNINTERRUPTIBLE POWER SUPPLY	
GND	GROUND	UTP	UNSHIELDED TWISTED PAIR	
НН	HANDHOLE	V	VOLT	
HP	HORSEPOWER	VA	VOLT AMPERE	
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	VFD	VARIABLE FREQUENCY DRIVE	
HZ	HERTZ	W	WATT	
G	ISOLATED GROUND	WP	WEATHERPROOF	
KVA	KILOVOLT - AMPERE			



- BLACK, ENGRAVED LETTERS SHALL BE WHITE.
- 3. SECURE NAMEPLATE TO SURFACES WITH HIGH STRENGTH ADHESIVE CEMENT. UTILIZE
- MECHANICAL FASTENERS FOR ALL EXTERIOR LOCATIONS. 4. TYPICAL FOR "STARTERS", "DISCONNECTS", AND "TRANSFORMERS".

TYPICAL NAMEPLATE DETAIL



13 WATER ST NEWMARKET NH (603) 200-0096 AECGR.COM

CITY OF PORTSMOUTH 1 JUNKINS AVE.

## PORTSMOUTH SENIOR ACTIVITY

125 COTTAGE ST. PORTSMOUTH, NH 03801

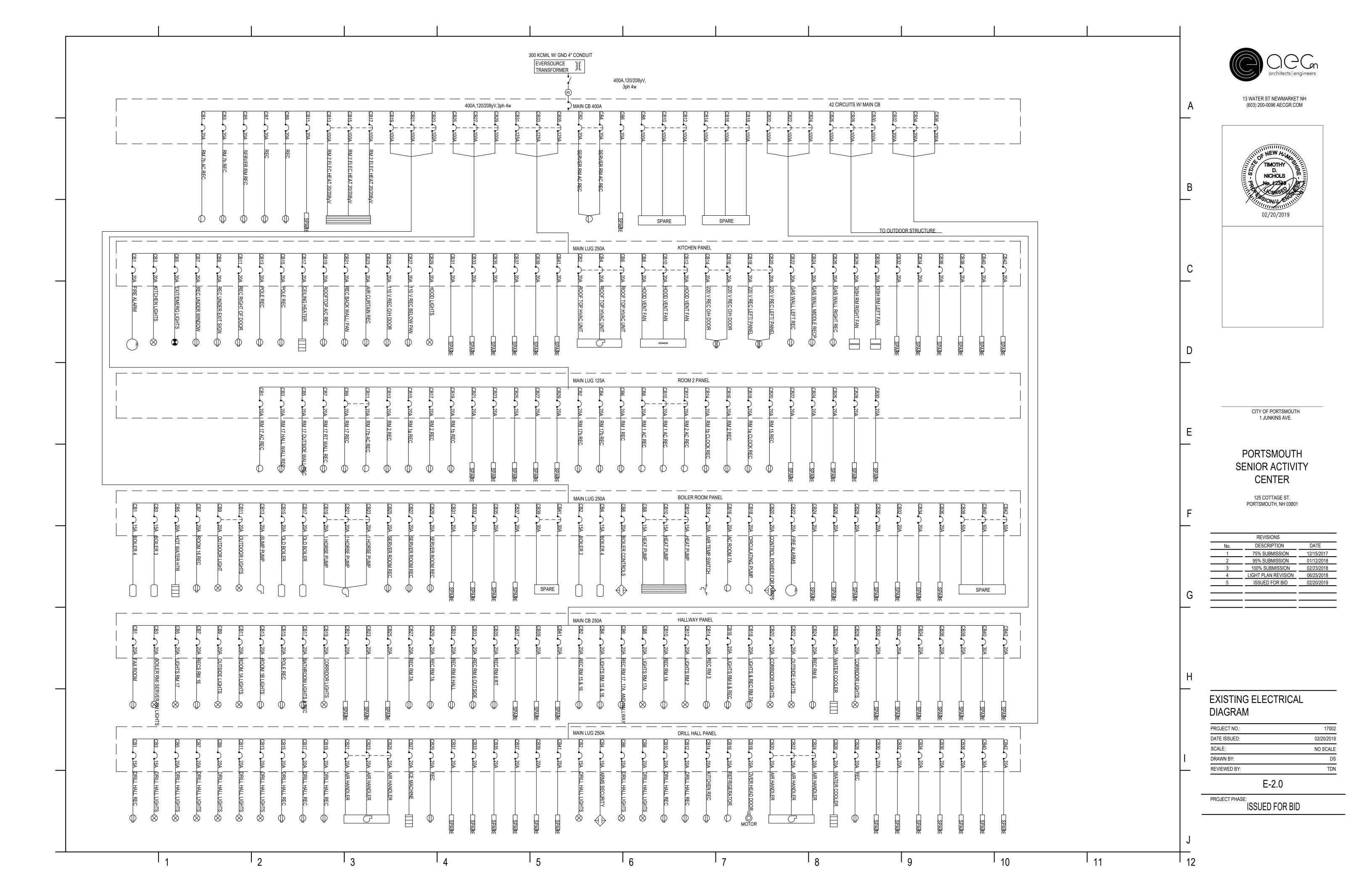
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No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	LIGHT PLAN REVISION	06/25/2018
5	ISSUED FOR BID	02/20/2019

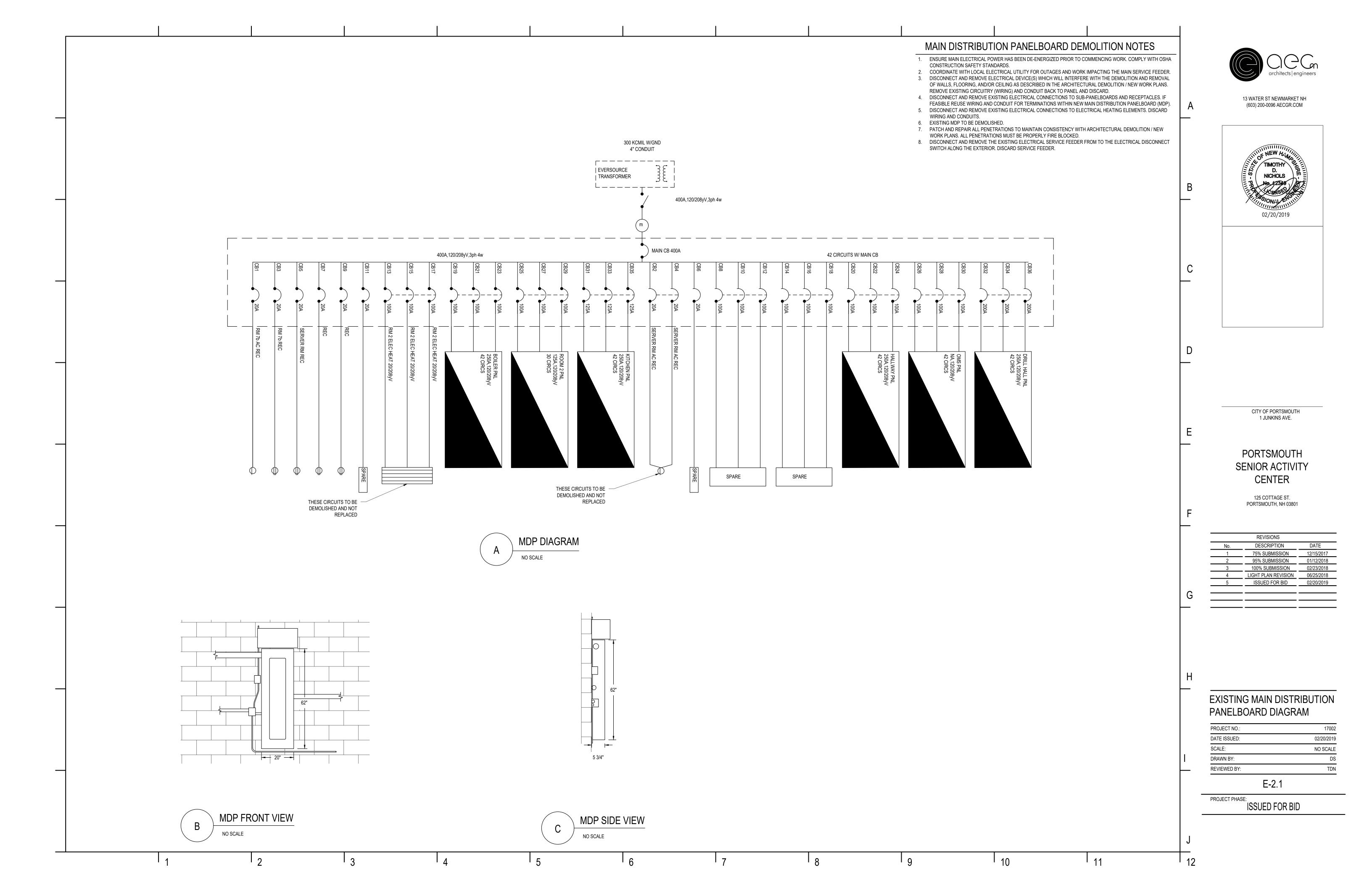
**ELECTRICAL GENERAL** NOTES

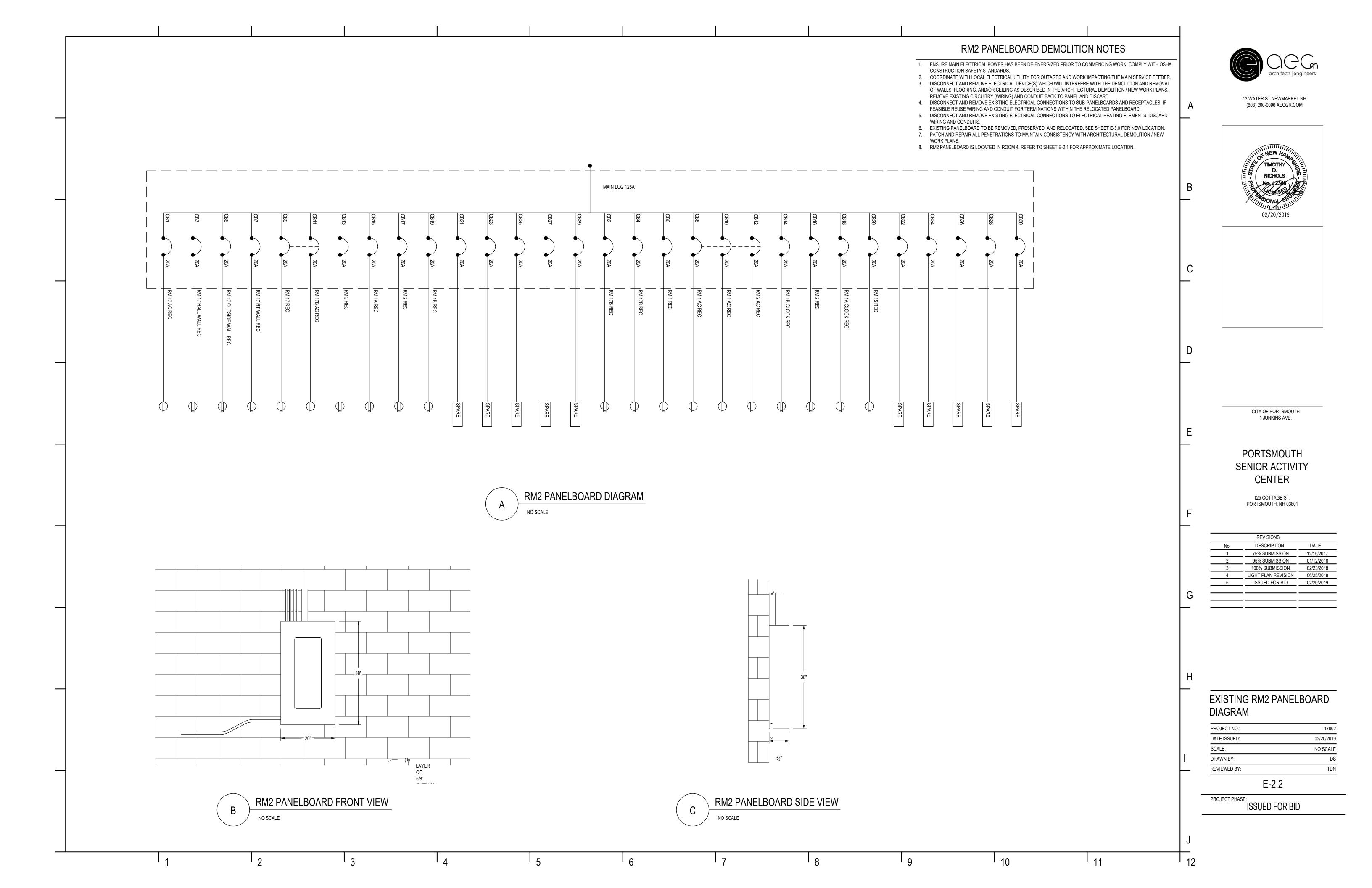
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DATE ISSUED:	02/20/201
SCALE:	NO SCAL
DRAWN BY:	D
REVIEWED BY:	TD

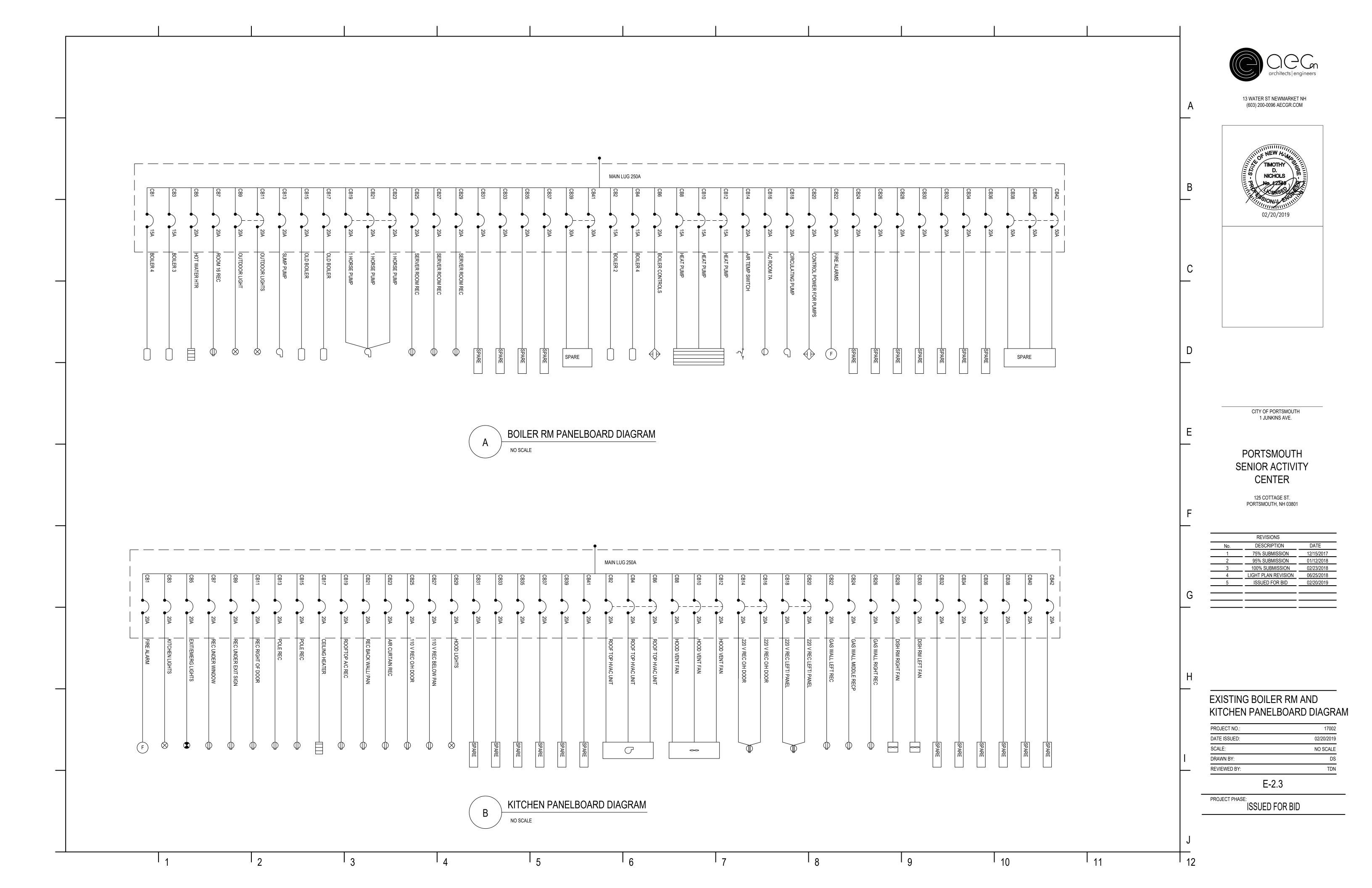
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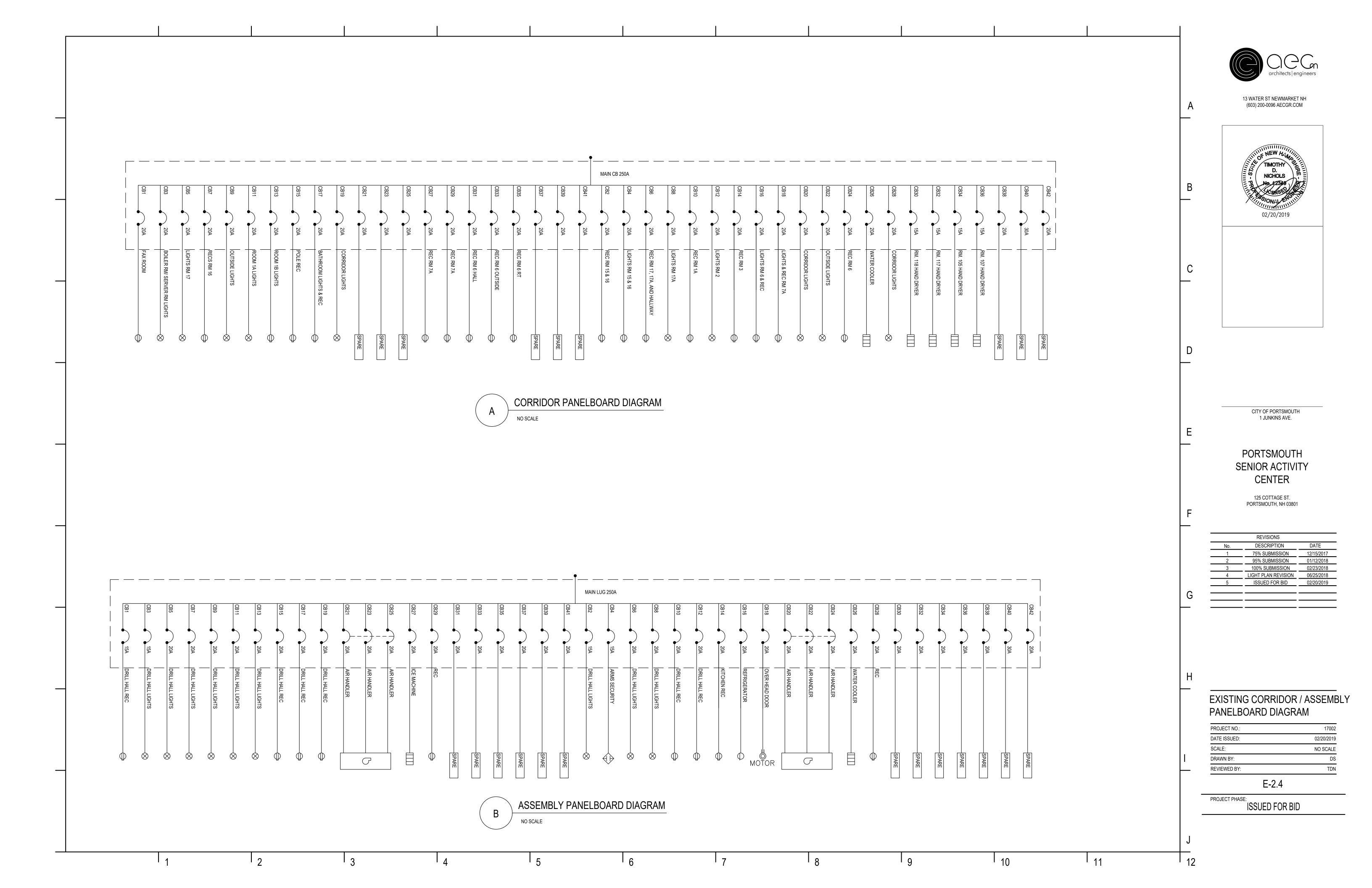
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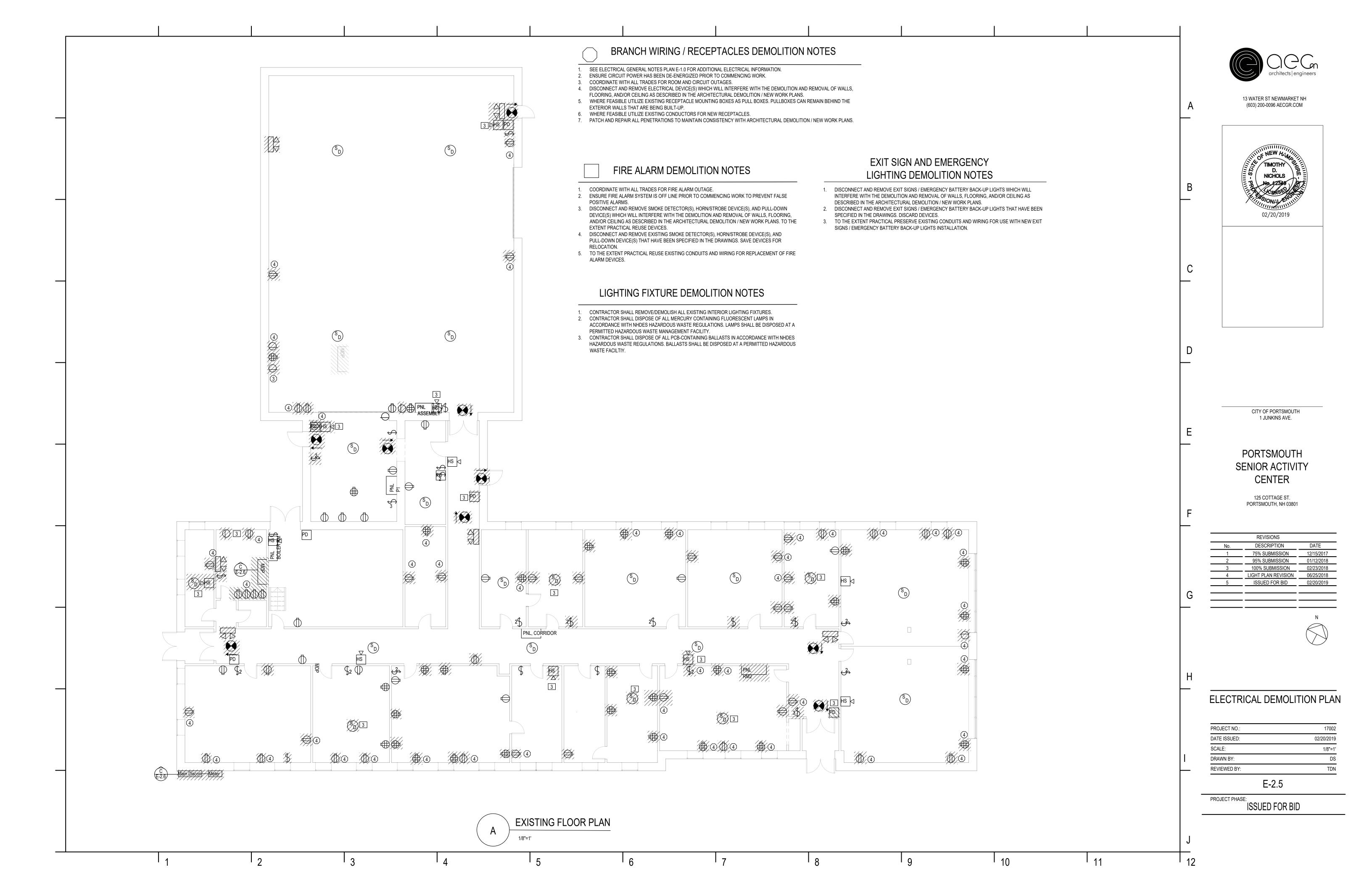


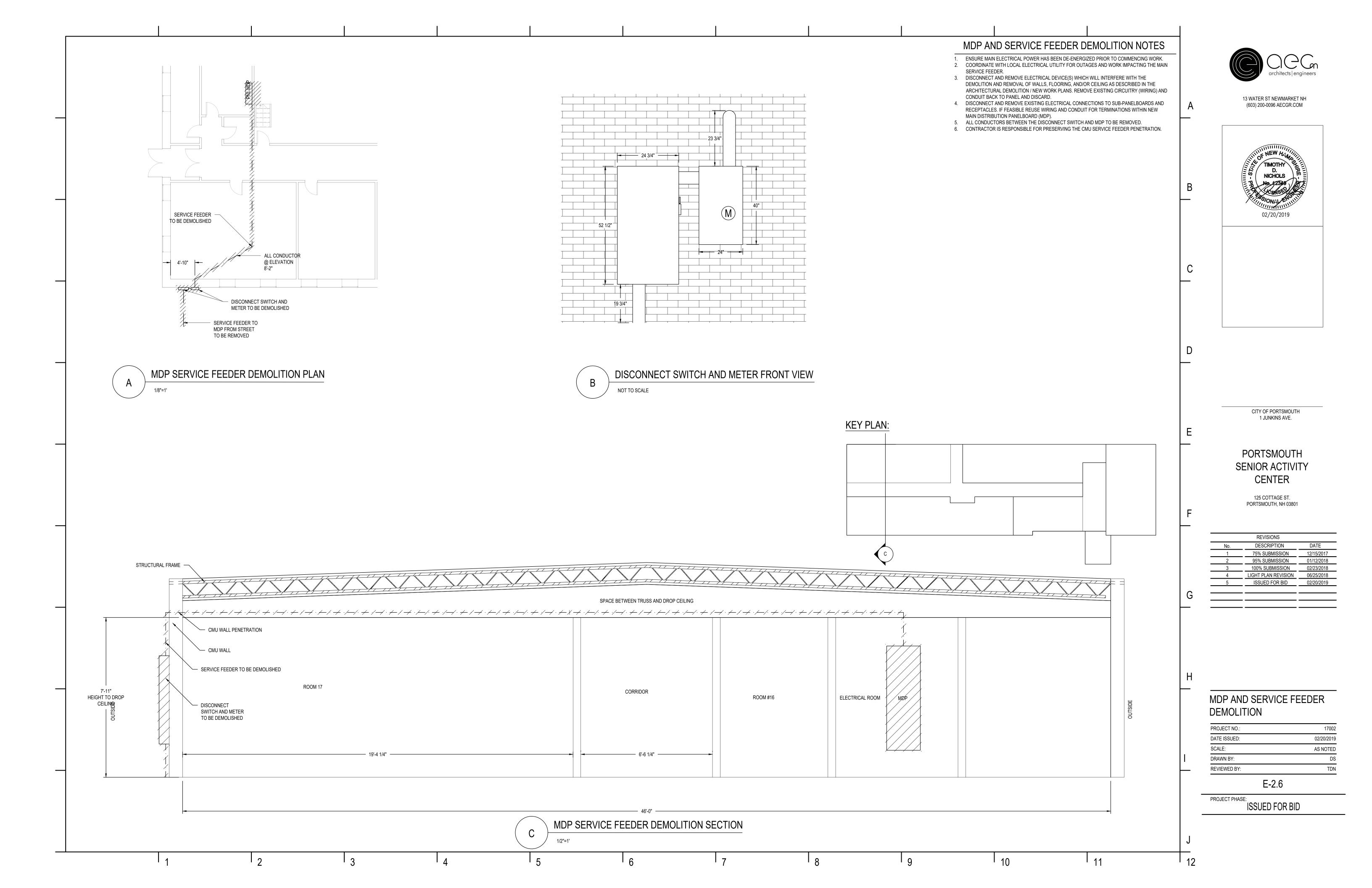


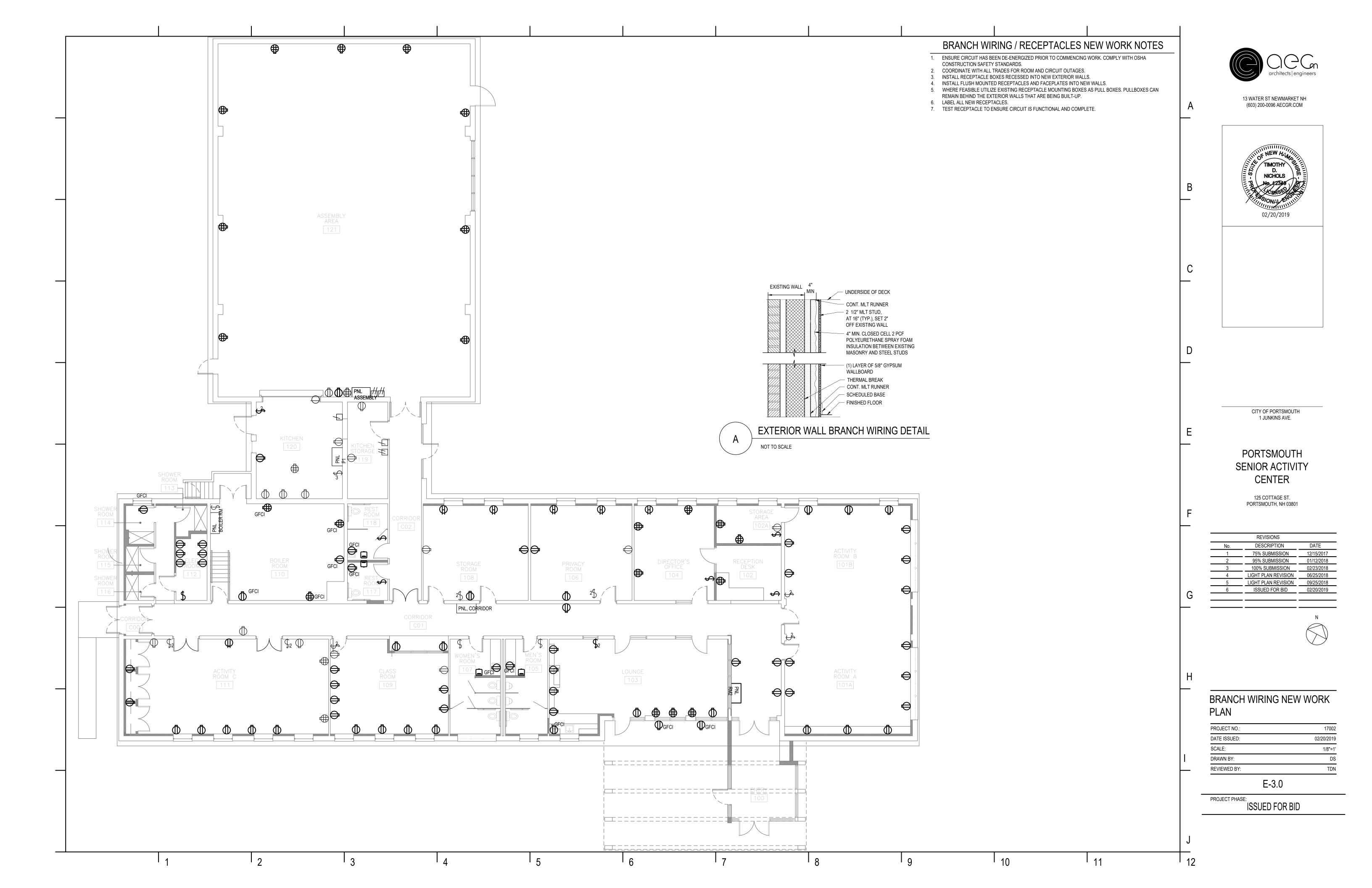


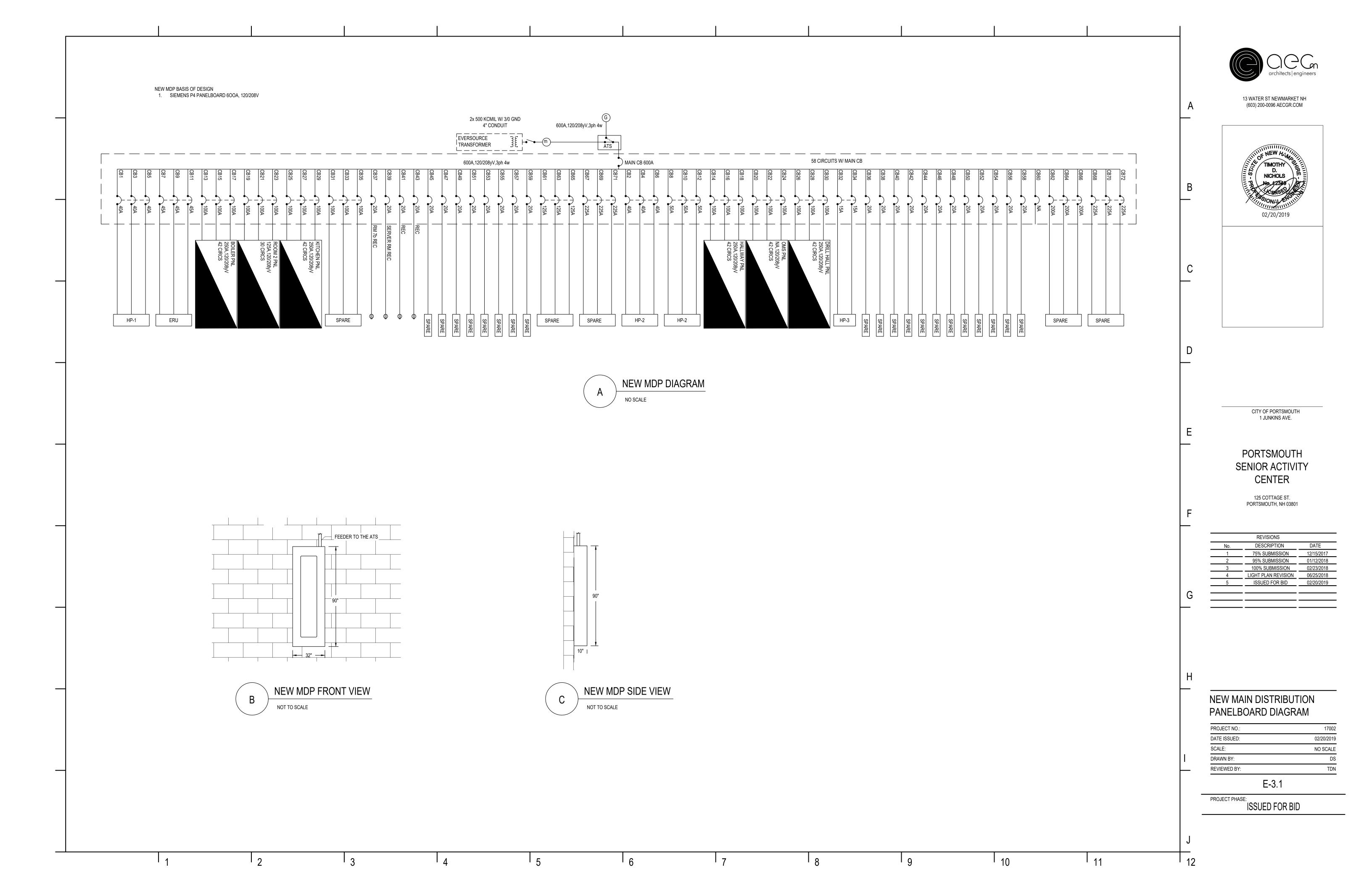


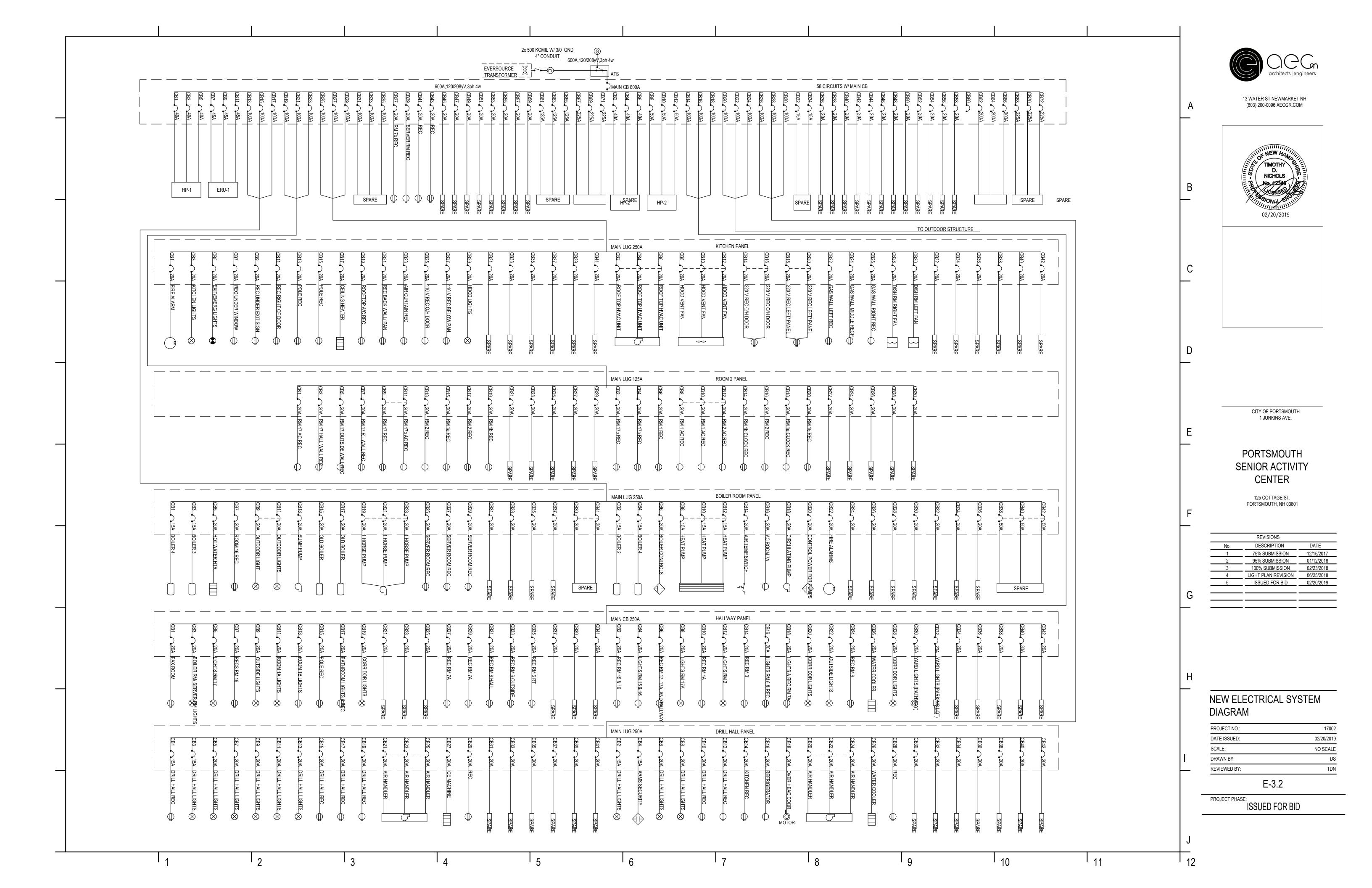


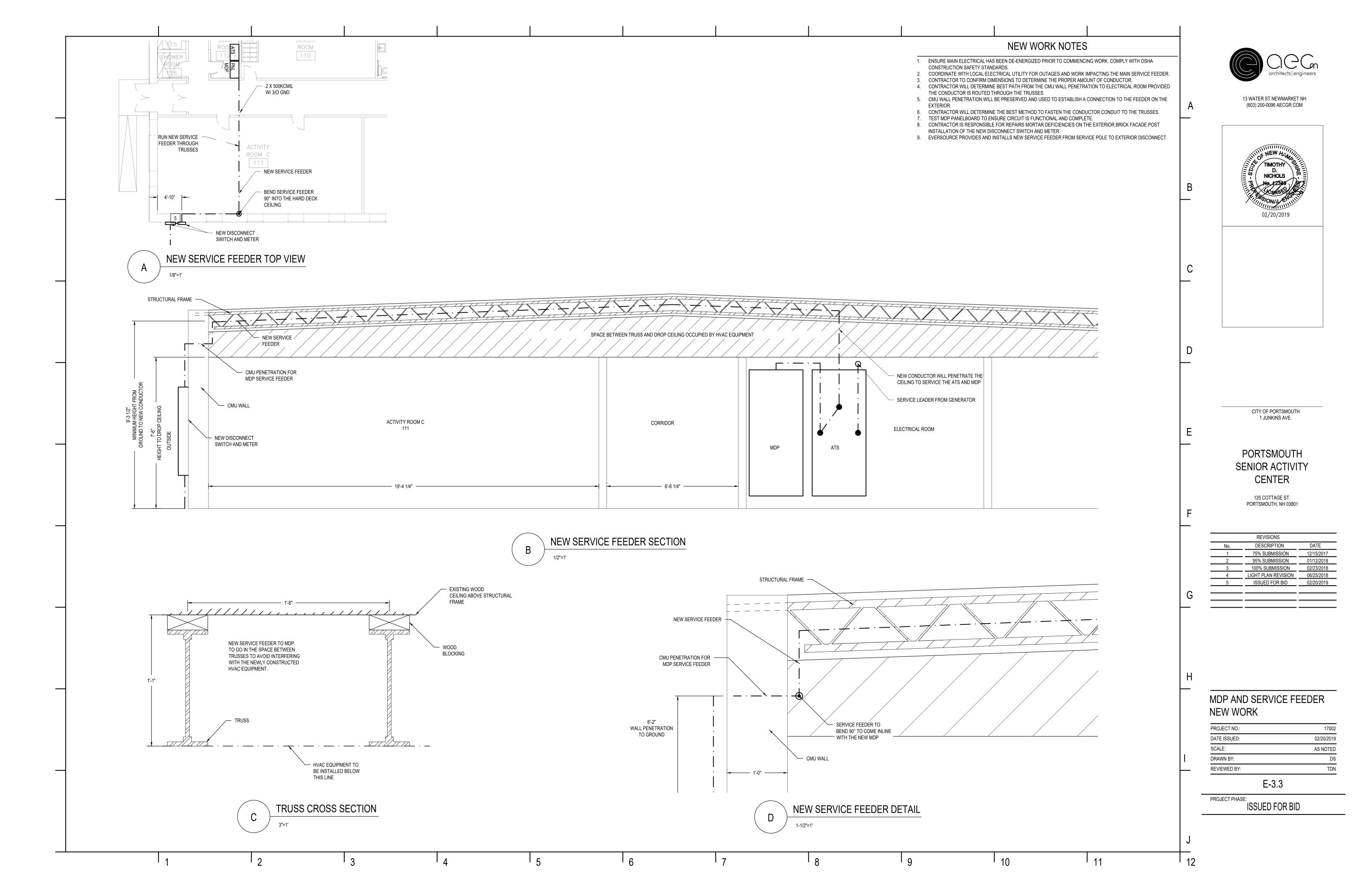


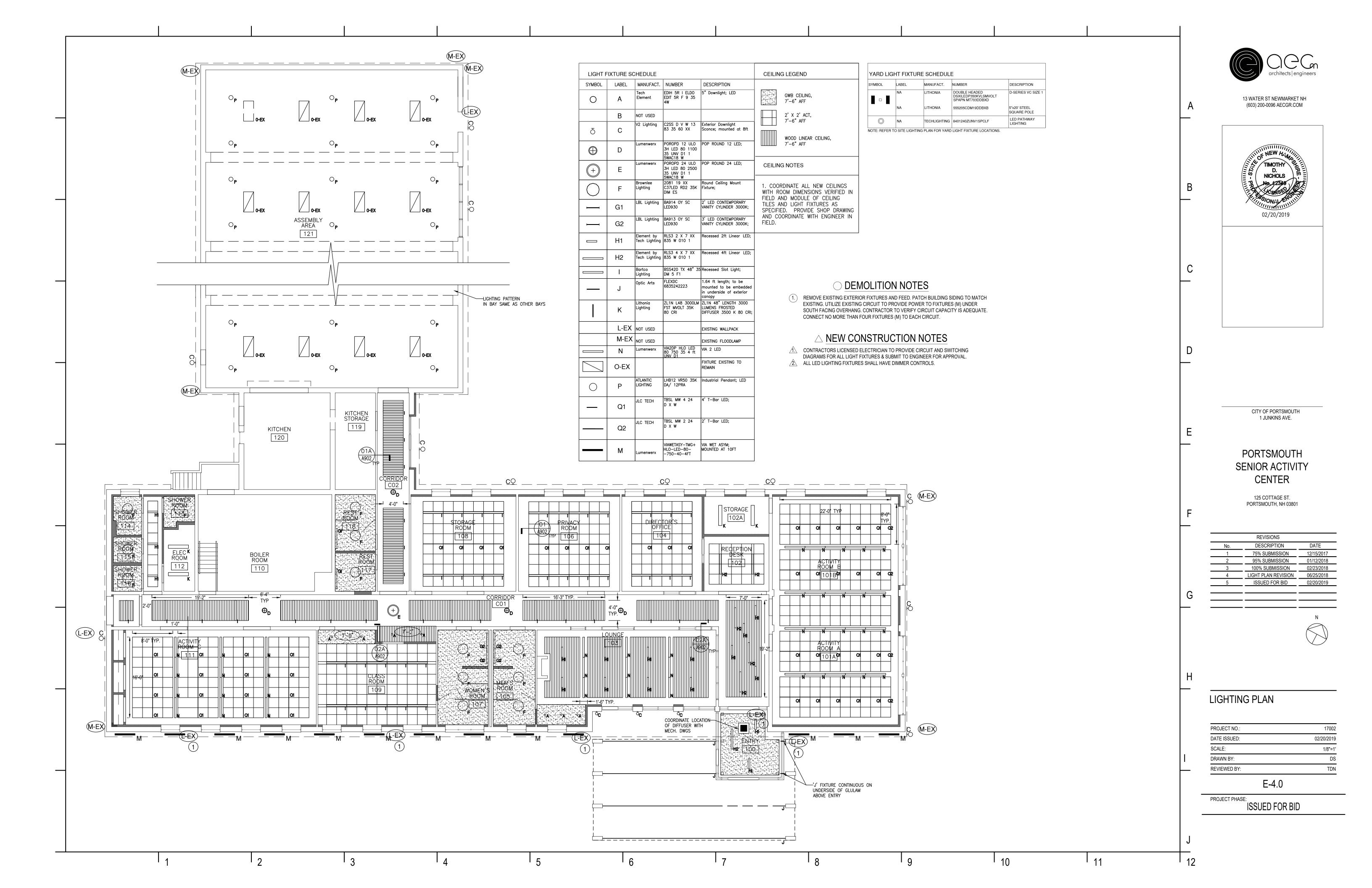


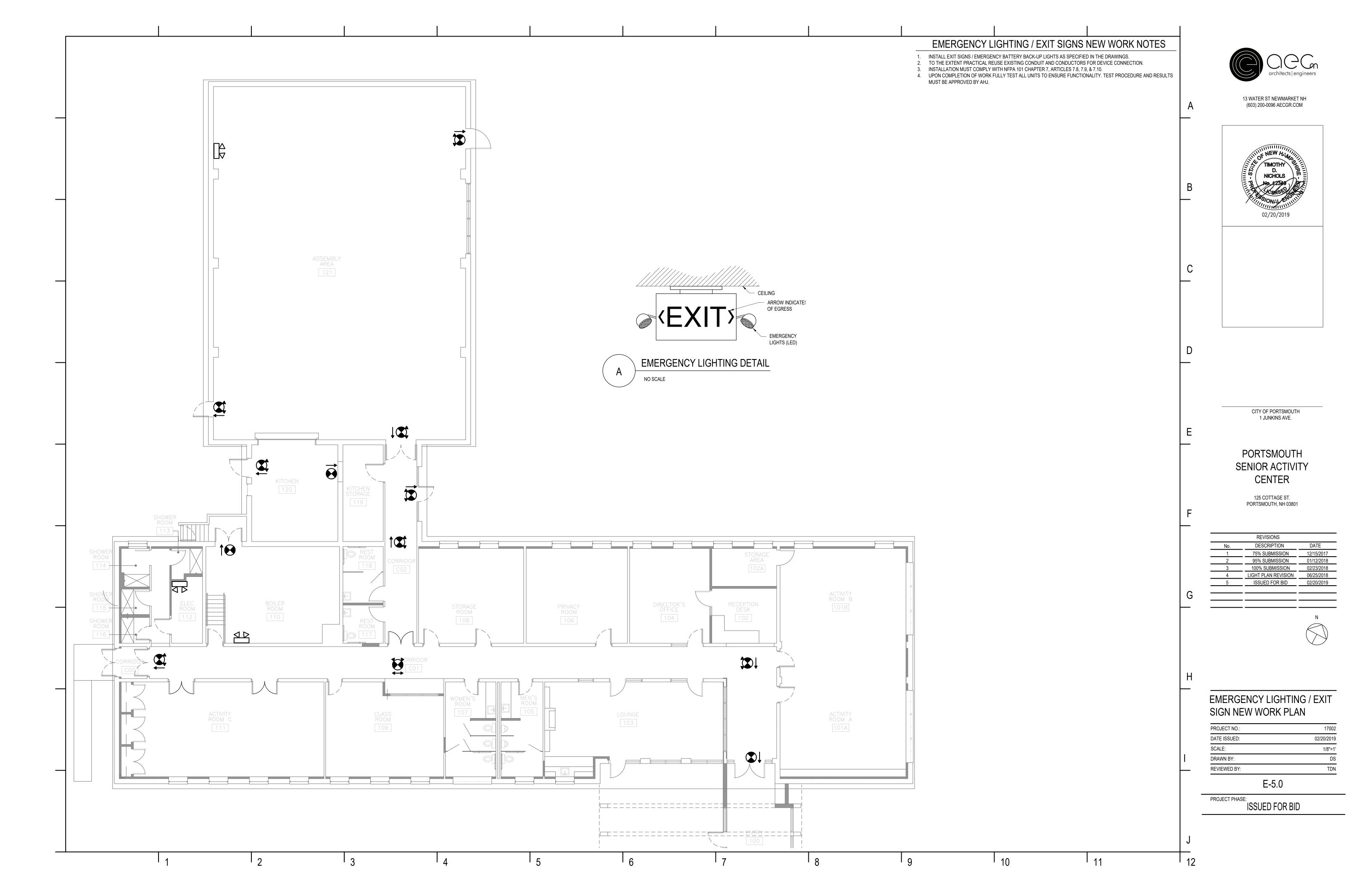


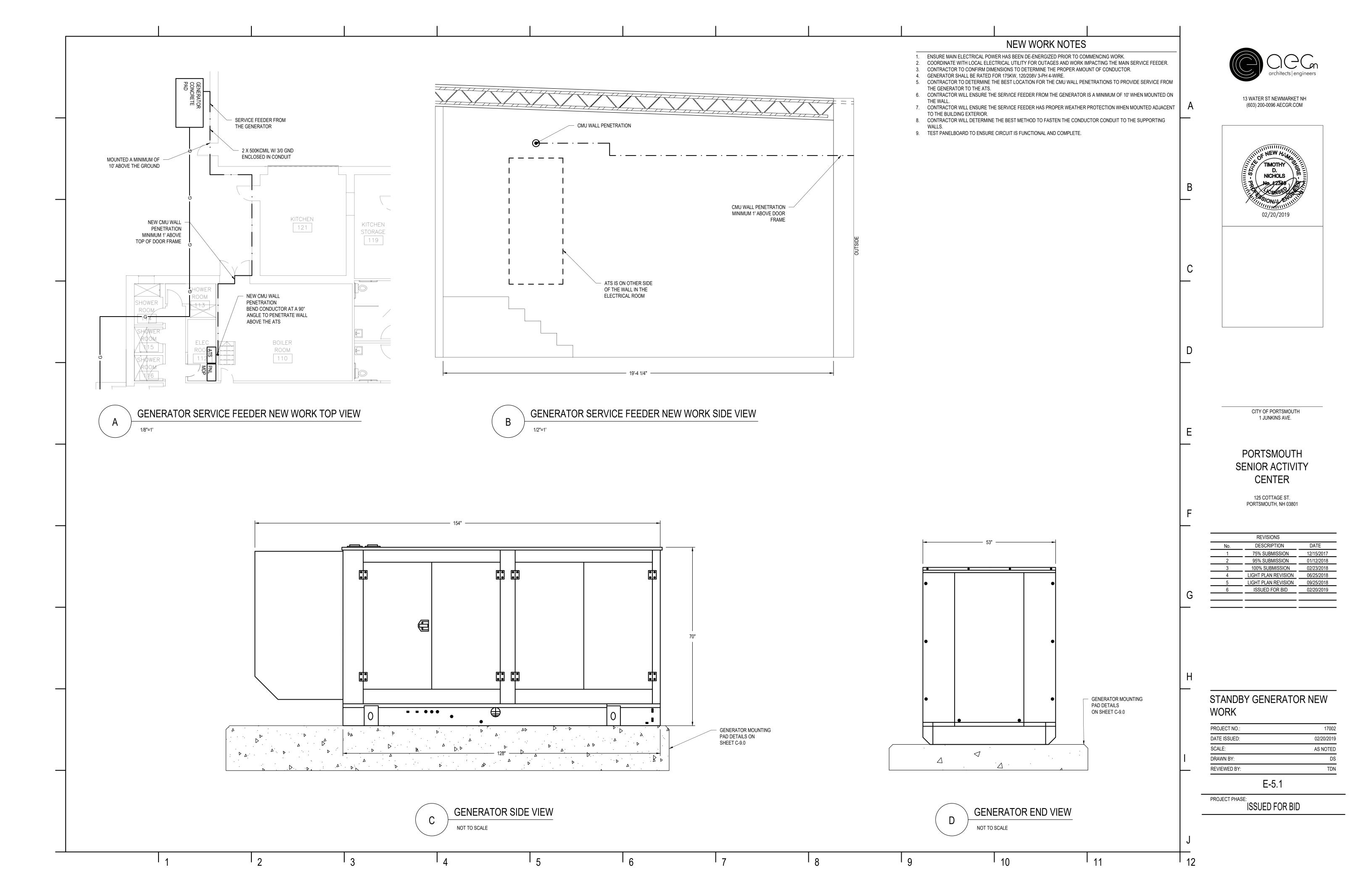


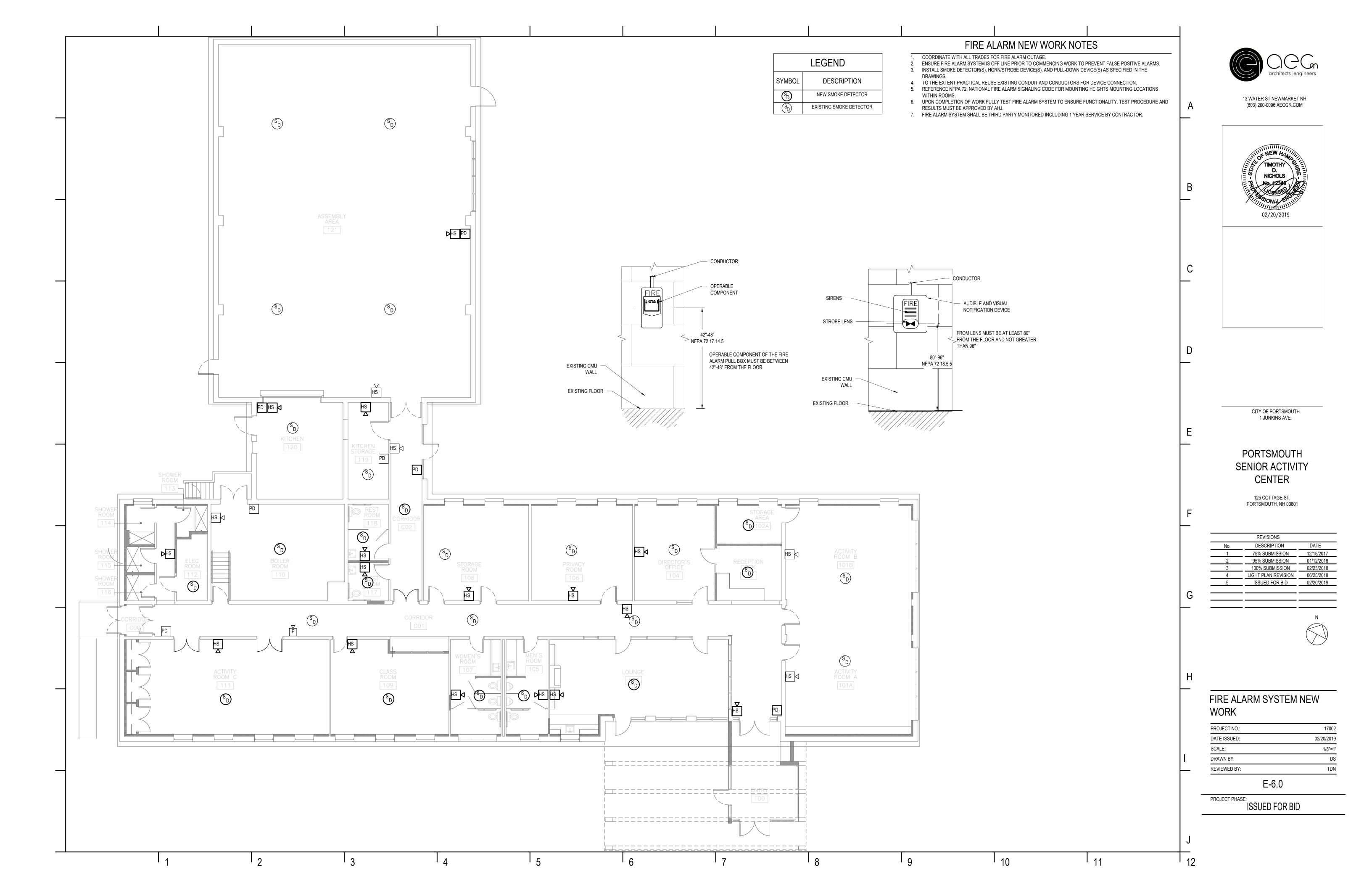












			Γ
ROOM#	HORNS AND STROBES	SMOKE DETECTOR	PULL DOWN BOX
101A	EXISTING	EXISTING	NA
101B	EXISTING	EXISTING	NA
102	NA	TO BE INSTALLED	NA
102A	NA	TO BE INSTALLED	NA
103	TO BE INSTALLED	TO BE INSTALLED	NA
104	TO BE INSTALLED	EXISTING	NA
105	TO BE INSTALLED	TO BE INSTALLED	NA
106	TO BE INSTALLED	EXISTING	NA
107	TO BE INSTALLED	TO BE INSTALLED	NA
108	TO BE INSTALLED	TO BE INSTALLED	NA
109	TO BE INSTALLED	TO BE INSTALLED	NA
110	EXISTING	TO BE INSTALLED	EXISTING
111	TO BE INSTALLED	TO BE INSTALLED	NA
112	NA	TO BE INSTALLED	NA
113		NA	NA
114	TO BE INSTALLED OUTSIDE OF THE	NA	NA
115	SHOWERS ON THE ADJACENT WALL	NA	NA
116		NA	NA
117	TO BE INSTALLED	TO BE INSTALLED	NA
118	TO BE INSTALLED	TO BE INSTALLED	NA
119	TO BE INSTALLED	EXISTING	EXISTING
120	TO BE INSTALLED	EXISTING	TO BE INSTALLED

		ŀ	HORNS AND STROBES			
EQUIPMENT	CANDELA (CD)	HORN (dBA)	VOLTAGE RANGE	MIN/MAX CURRENT DRAW	MOUNTING	COLOR
GAMEWELL FCI L-SERIES	SELECTABLE: 15,30,75,95,110,135,185	SELECTABLE: LOW OR HIGH 88+ dBA AT 16V	12 TO 24 VOLTS (NOMINAL)	52/242 (mA RMS)	WALL MOUNTED AT A HEIGHT OF 80 INCHES. NFPA 72 18.5.5	RED
		NFPA 72 WILL B	E USED TO DETERMINE THE LIGHT AND HORN INTENS  NFPA 72 18.4.3.5.1  NFPA 72 18.5.5.4.1	I SITY.		

			SMOKE DETECTORS	3		
EQUIPMENT	OPERATING TEMP.	VOLTAGE RANGE	STANDBY CURRENT	MAX CURRENT DRAW	MOUNTING	COLOR
ASD-PL2F	32°F TO 120°F	15-32 VOLTS DC	.3mA @ 24V DC	6.5mA @ 24V DC	ON THE CEILING NFPA 72 17.6.3.1	RED



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TIMOTHY D. NICHOLS NIC

C

CITY OF PORTSMOUTH 1 JUNKINS AVE.

## PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST. PORTSMOUTH, NH 03801

No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	LIGHT PLAN REVISION	06/25/2018
5	ISSUED FOR BID	02/20/2019

FIRE ALARM SYSTEM

SCHEDULE

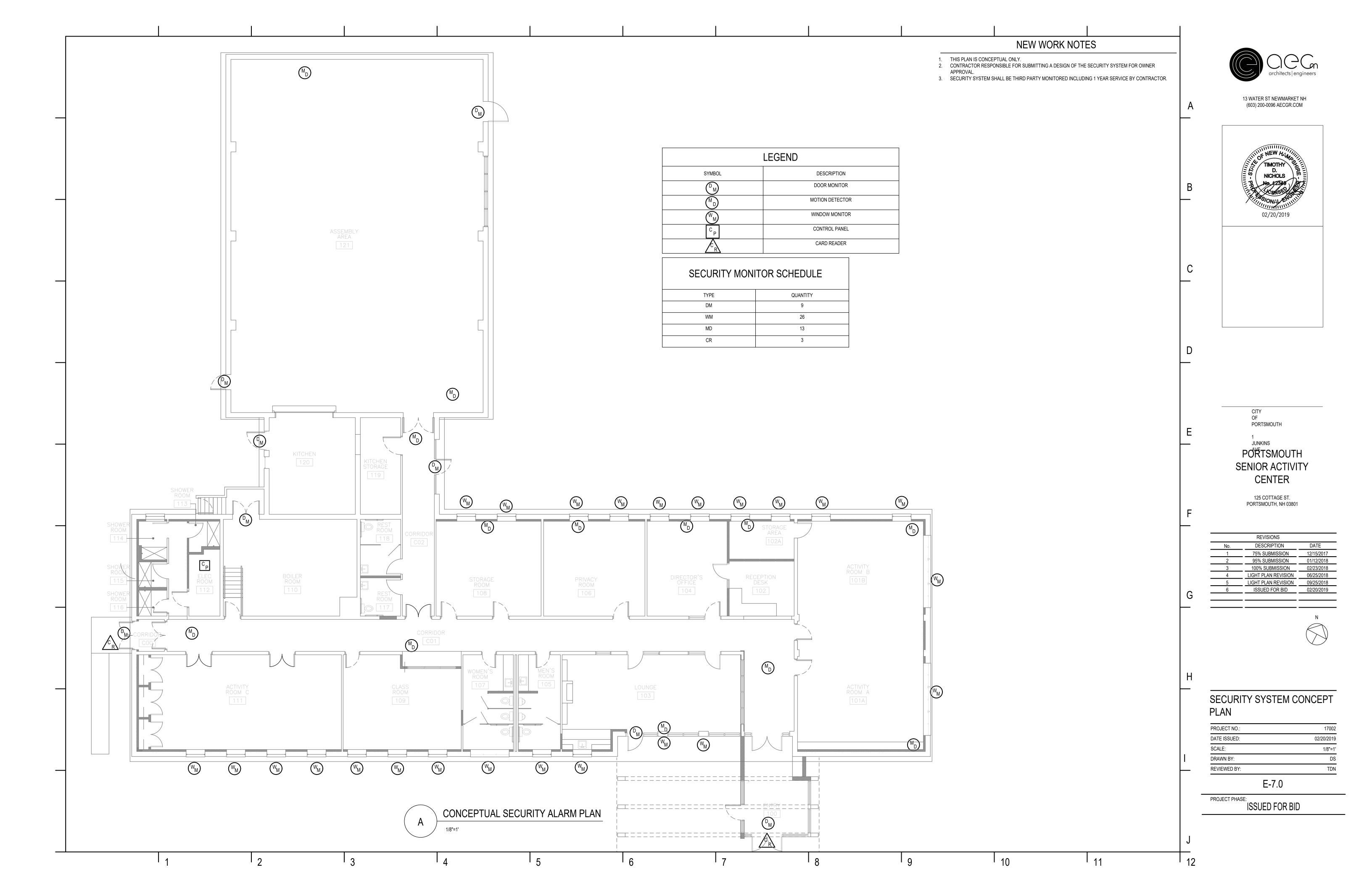
PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	NO SCALE
DRAWN BY:	DS
REVIEWED BY:	TDN
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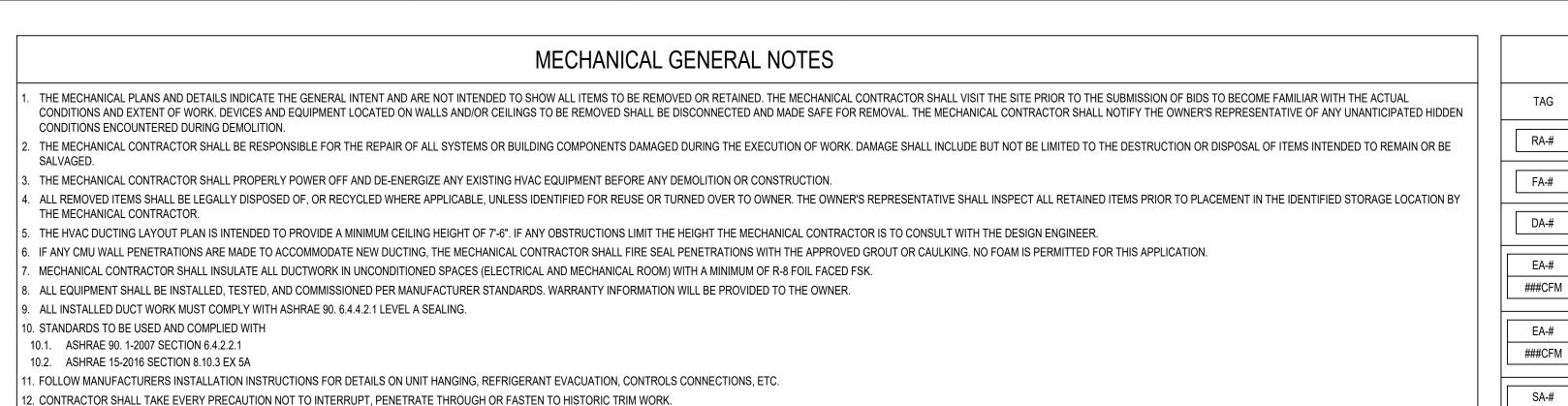
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PROJECT PHASE:

ISSUED FOR BID

2 3 4 5 6 7 8 9 10 11





13. THE CONTRACTOR SHALL CONNECT THEIR WORK TO VARIOUS EXISTING PIPING, DUCTWORK, AND CONTROL SYSTEMS IN THE BUILDING. THE NEW WORK SHALL BE COMPATIBLE WITH ANY OF THE EXISTING SYSTEMS TO REMAIN. LOCATION OF EQUIPMENT OR THE ROUTING OF THE VARIOUS SYSTEMS AS WELL AS OPENINGS IN FLOOR SLABS OR WALLS SHALL BE GOVERNED BY THE EXISTING CONDITIONS AS THEY APPEAR IN THE FIELD. CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS.	###CFM	SUPPLY AIR REGISTER. TAG DENOTES EQUIPMENT NUMBER AND CFM.
14. THE INTERIOR OF ALL DUCTWORK VISIBLE THROUGH A GRILLE OR DIFFUSER SHALL BE PAINTED FLAT BLACK.  15. THE EXTERIOR OF ALL DUCTWORK SHALL BE PAINTED FLAT BLACK.  16. ALL EQUIPMENT LOCATED ABOVE THE CLOUD CEILINGS SHALL BE PAINTED FLAT BLACK.  16.1. THIS INCLUDES, BUT IS NOT LIMITED TO; FCUs, ERUs.		HVAC EQUIPMENT LEGEND
17. SIZE OF DUCT RUN-OUT TO A DIFFUSER SHALL EQUAL DIFFUSER NECK SIZE.  18. CONTRACTOR SHALL PROVIDE THE FOLLOWING SERVICES ON ALL EXISTING HVAC EQUIPMENT INDICATED TO BE REUSED:	TAG	DESCRIPTION
18.1. FILTER CHANGES  18.2. BALANCING,  18.3. LUBRICATION.	AAA ###	HVAC EQUIPMENT TAG. AAA DENOTES THE SPECIFIC EQUIPMENT ABBREVIATION. ### DENOTES THE EQUIPMENT NUMBER.
19. CONTRACTOR SHALL REPORT ANY EXISTING EQUIPMENT DEFICIENCIES FOUND TO THE ENGINEER.  20. CONTRACTOR SHALL SEAL ALL DUCTING IN THE COURSE OF CONSTRUCTION TO MINIMIZE DEBRIS CONTAMINATION. CONTRACTOR SHALL CLEAN ALL DUCTING AND REPLACE AIR FILTERS DURING COMMISSIONING AND STAR-UP.  14. ALL PLUMBING FITTINGS AND PIPE MUST BE CERTIFIED LEAD FREE AND SPECIFIED FOR POTABLE USE.	BB-# ##FT	BASEBOARD PIPING TAG AND SECTION LENGTH (FT)
		REFRIGERANT PIPING

TAG

RA-#

FA-#

DA-#

EA-#

EA-#

	MECHANICAL ABBREVIATIONS
	WESTANISAL ABBITEVIATIONS
ACCU	AIR COOLED CONDENSING UNIT
AHU	AIR HANDLING UNIT
BB	BASEBOARD PIPING
CFM	CUBIC FEET PER MINUTE
DA	DISCHARGE AIR
EA	EXHAUST AIR
ERU	ENERGY RECOVERY UNIT
FA	FRESH AIR
FCU	FAN COIL UNIT
HP	HEAT PUMP
RA	RETURN AIR
SA	SUPPLY AIR
AS	AIR SOURCE
SD	AUTOMATIC SMOKE/FIRE DAMPER
SS	DUCT SMOKE SENSOR
TYP	TYPICAL
UH	UNIT HEATER
ACU	AIR CONDITIONING UNIT
ASHP	AIR SOURCE HEAT PUMP
VRF	VARIABLE REFRIGERANT FLOW

LINE WEIGHT EXAMPLES

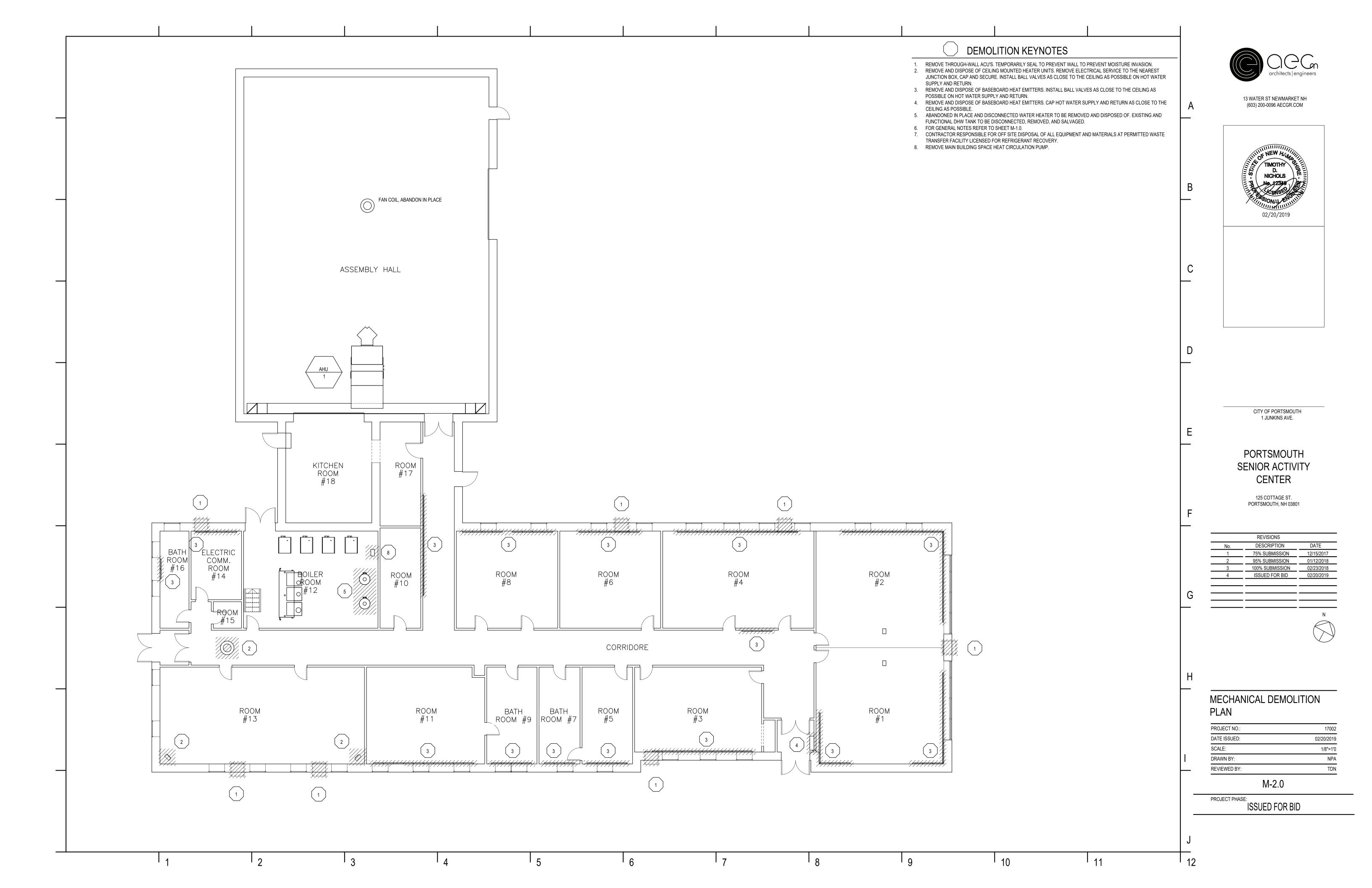
THIS LINE WEIGHT INDICATES A NEWLY CONSTRUCTED

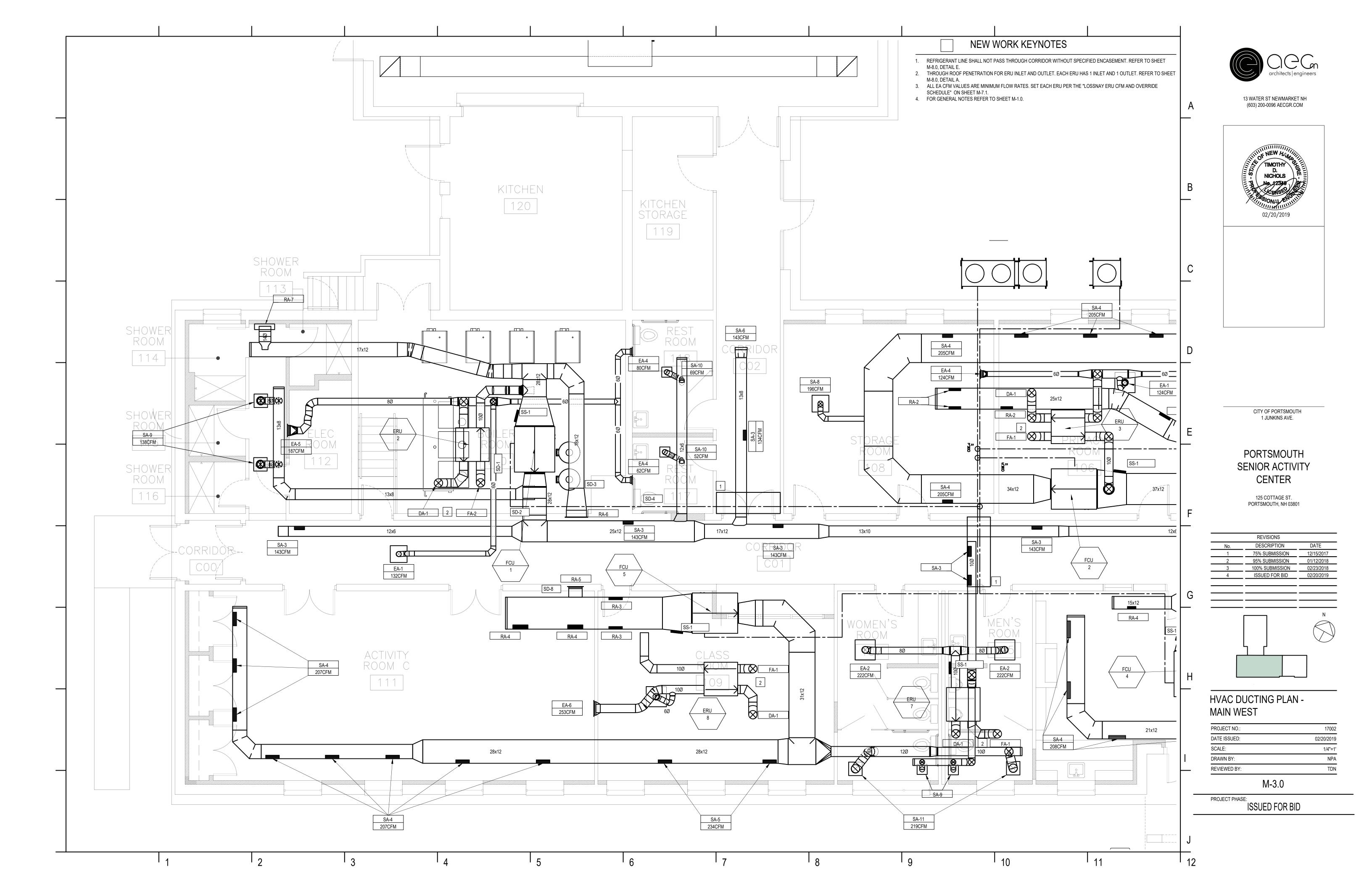
THIS LINE WEIGHT INDICATES A FEATURE THAT ALREADY

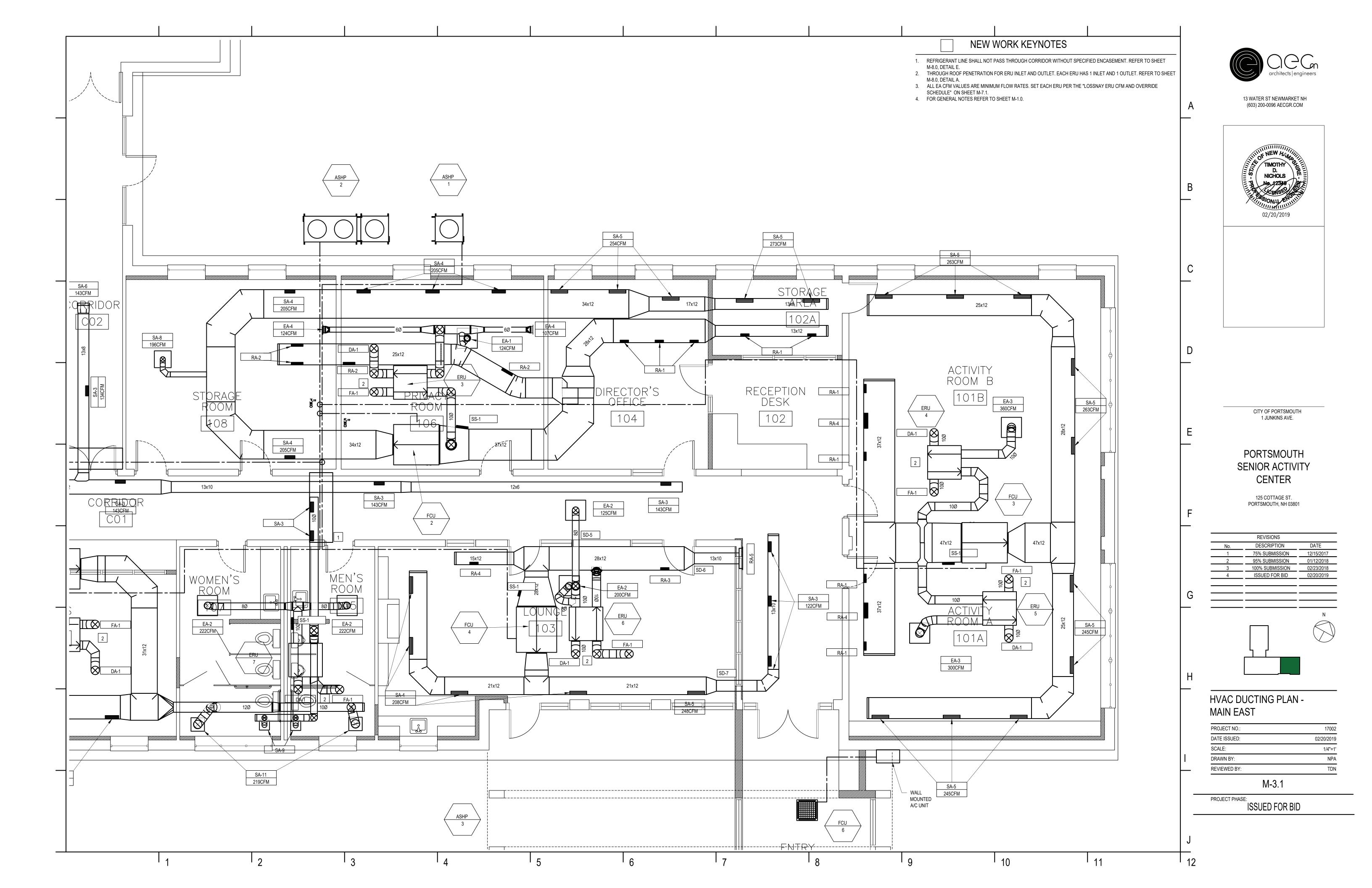
	DUCTING LEGEND
SYMBOL	DESCRIPTION
##X##	SPIRAL FLAT OVAL DUCTING MAJOR AXIS BY MINOR AXIS.
##Ø	SPIRAL CIRCULAR DUCTING DIAMETER.
$\longrightarrow$	ARROW INDICATES DIRECTION OF FLOW.
$\otimes$	INDICATES A CHANGE IN ELEVATION IN THE DUCT WORK.

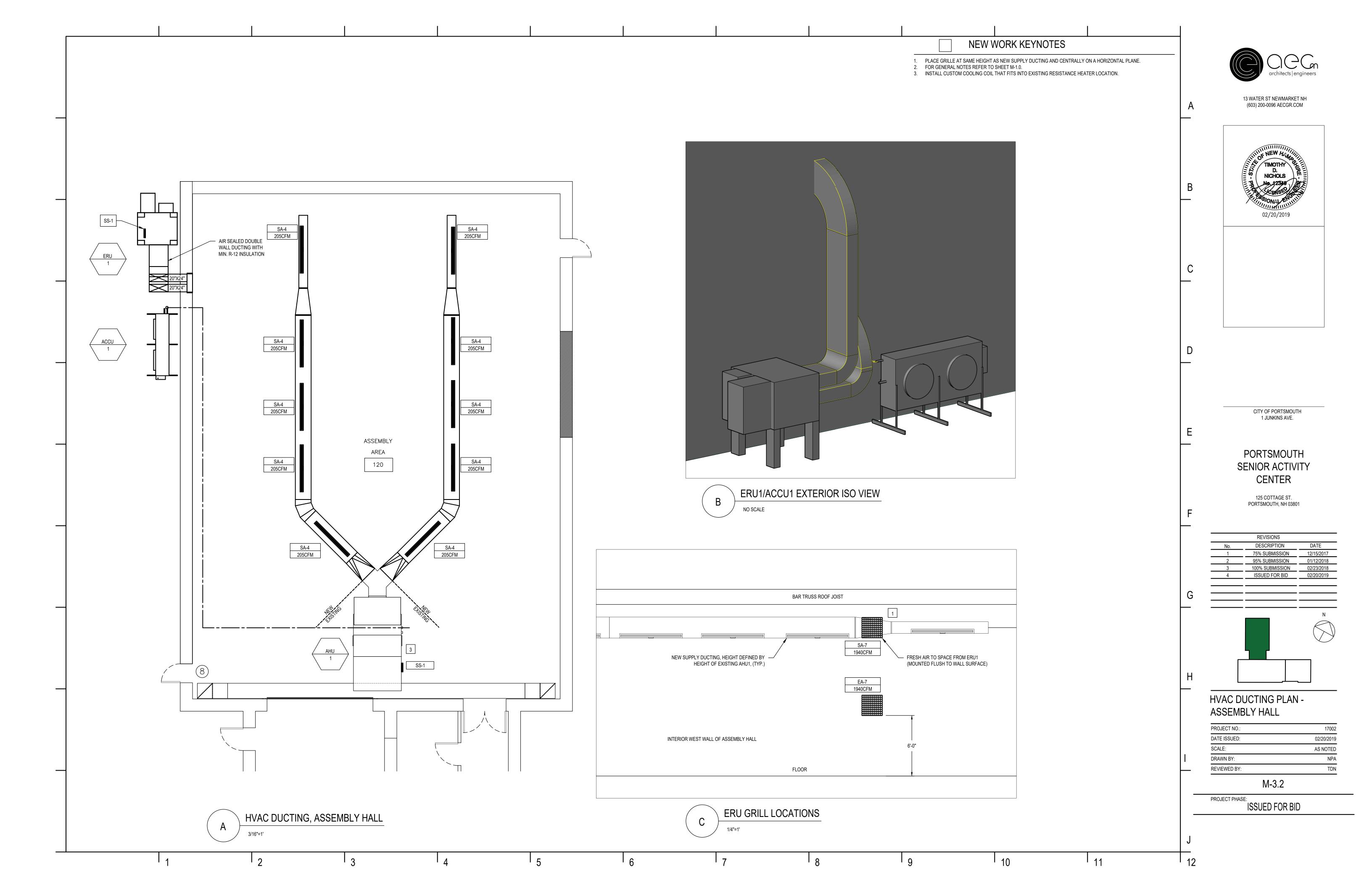
		AIR REGISTER LEGEND	
	SYMBOL	DESCRIPTION	
	000000000000000000000000000000000000000	RETURN AIR REGISTER. TAG DENOTES EQUIPMENT NUMBER.	
	$\otimes$	FRESH AIR INTAKE, MOUNTED ON ROOF. TAG DENOTES EQUIPMENT NUMBER.	
	$\otimes$	DISCHARGE AIR, MOUNTED ON ROOF. TAG DENOTES EQUIPMENT NUMBER.	
М		EXHAUST AIR, MOUNTED IN A CMU WALL PENETRATION. TAG DENOTES EQUIPMEN CFM.	NT NUMBER AND
M	$\otimes$	EXHAUST AIR, MOUNTED IN THE CEILING. TAG DENOTES EQUIPMENT NUMBER AND	D CFM.
М		SUPPLY AIR REGISTER. TAG DENOTES EQUIPMENT NUMBER AND CFM.	
	HV	AC EQUIPMENT LEGEND	
	-	DESCRIPTION	
$\supset$	HVAC EQUIPMENT T	TAG. AAA DENOTES THE SPECIFIC EQUIPMENT ABBREVIATION. ### DENOTES THE	
<u>/  </u>	EQUIPMENT NUMBE	:К.	
	BASEBOARD PIPING	G TAG AND SECTION LENGTH (FT)	
	REFRIGERANT PIPIN	NG	

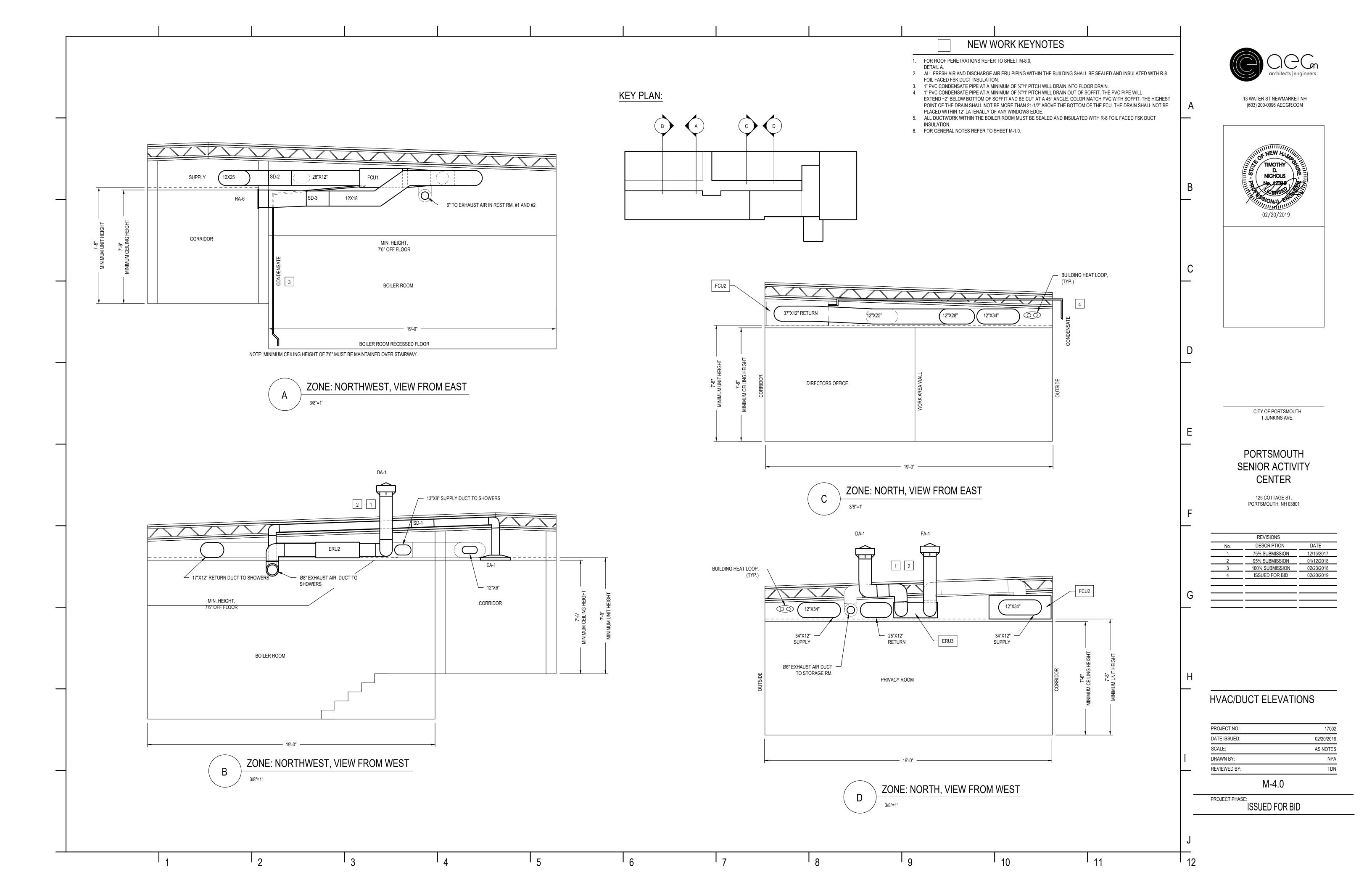
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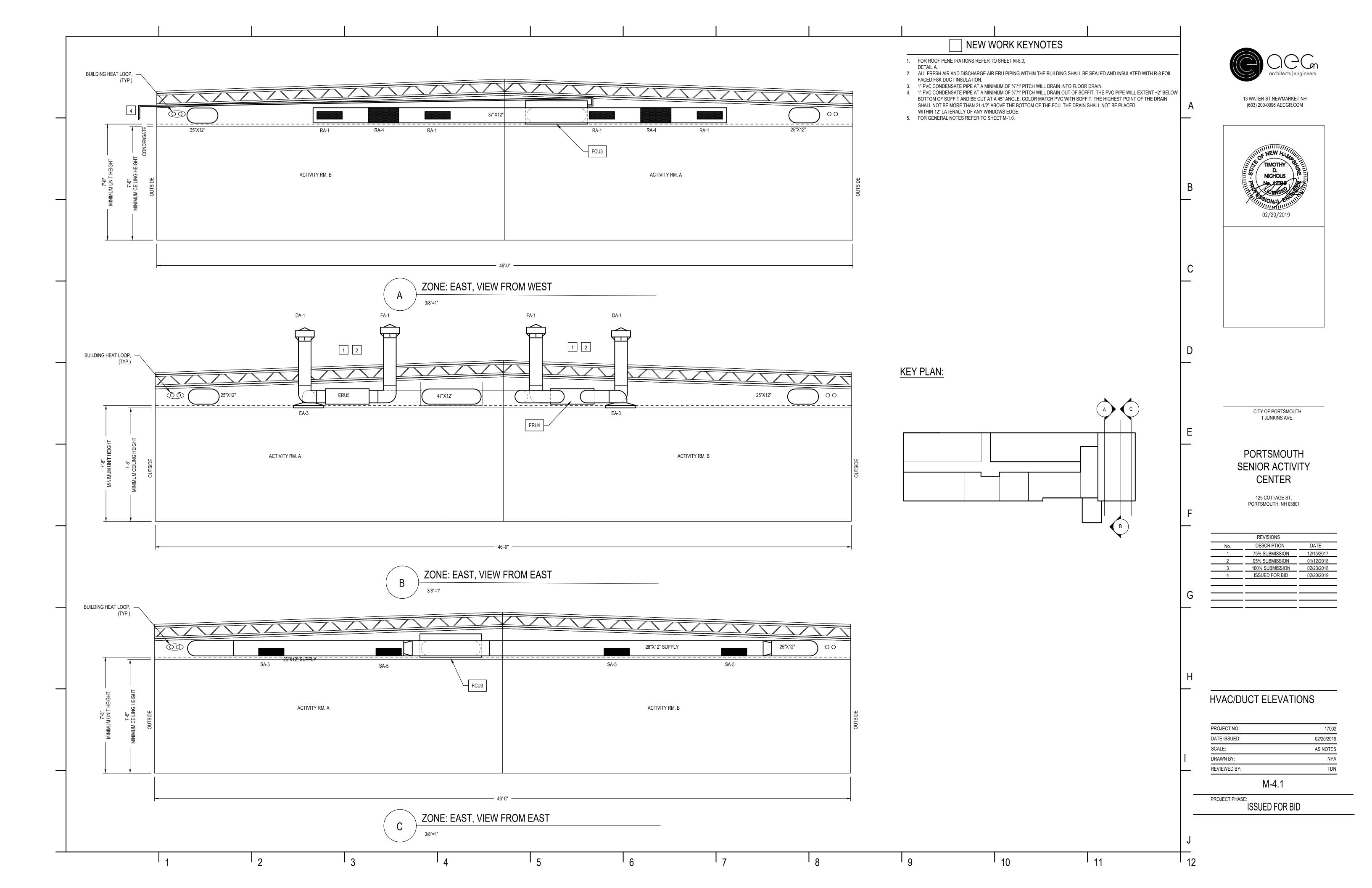


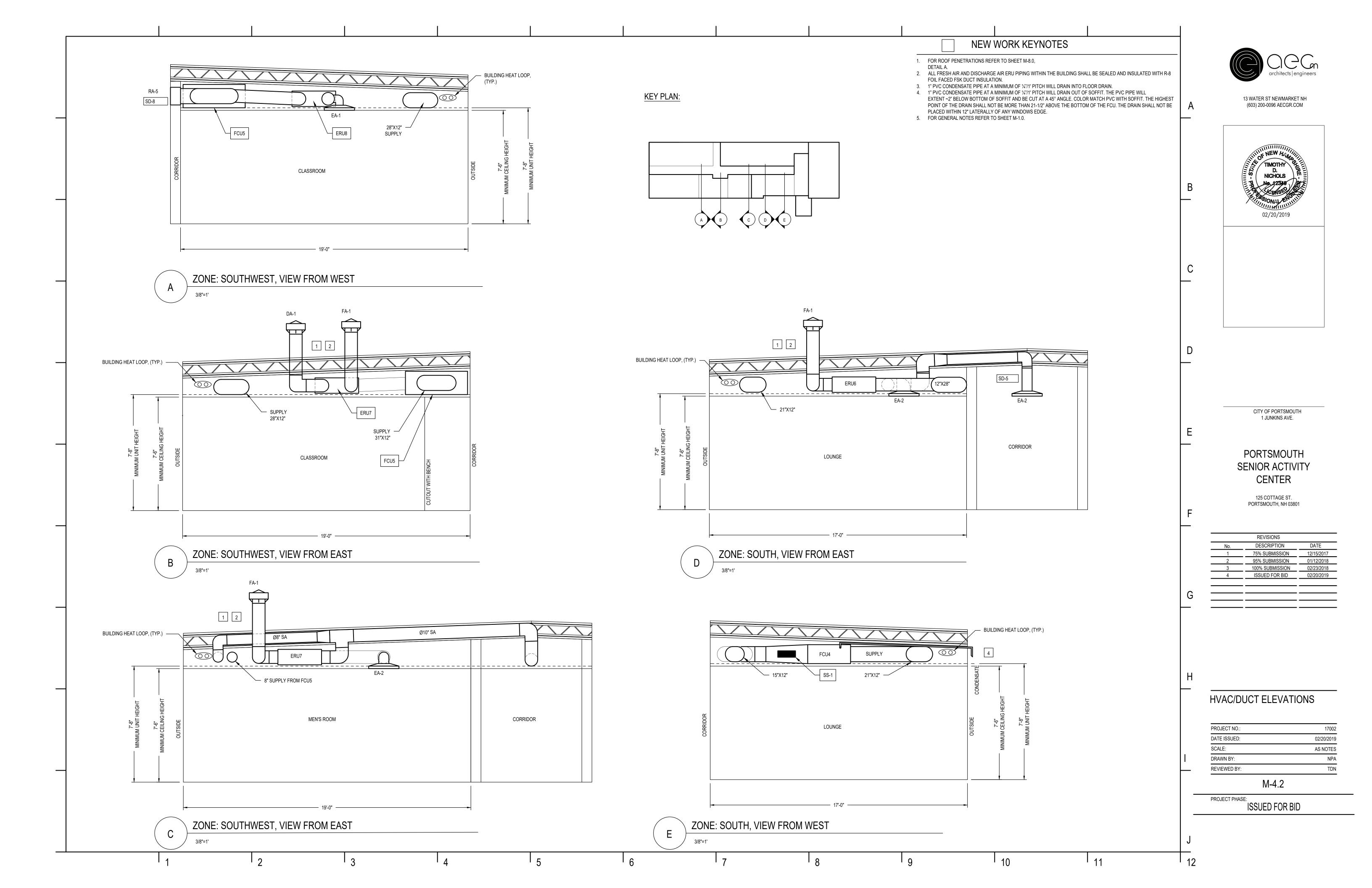


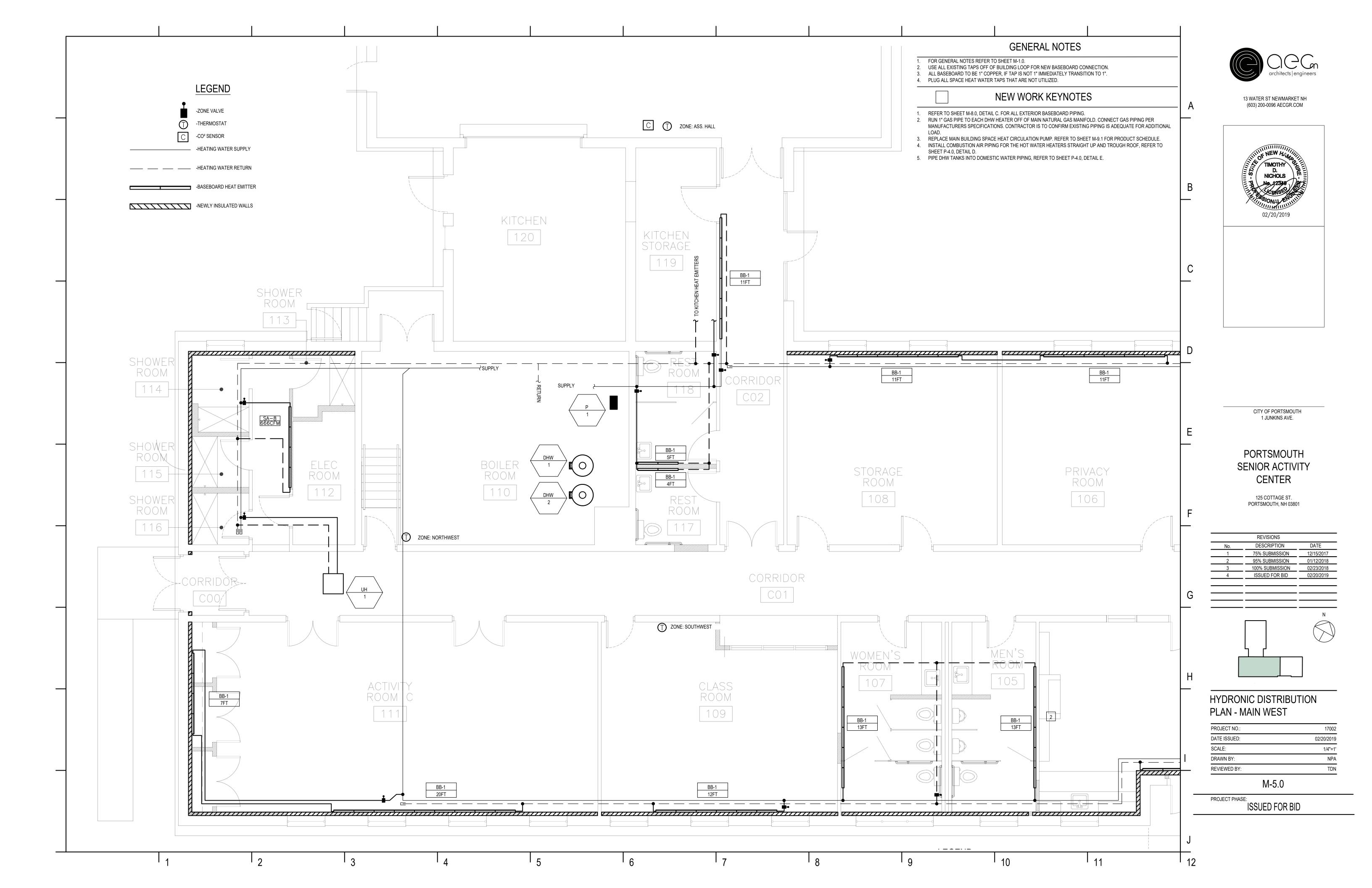


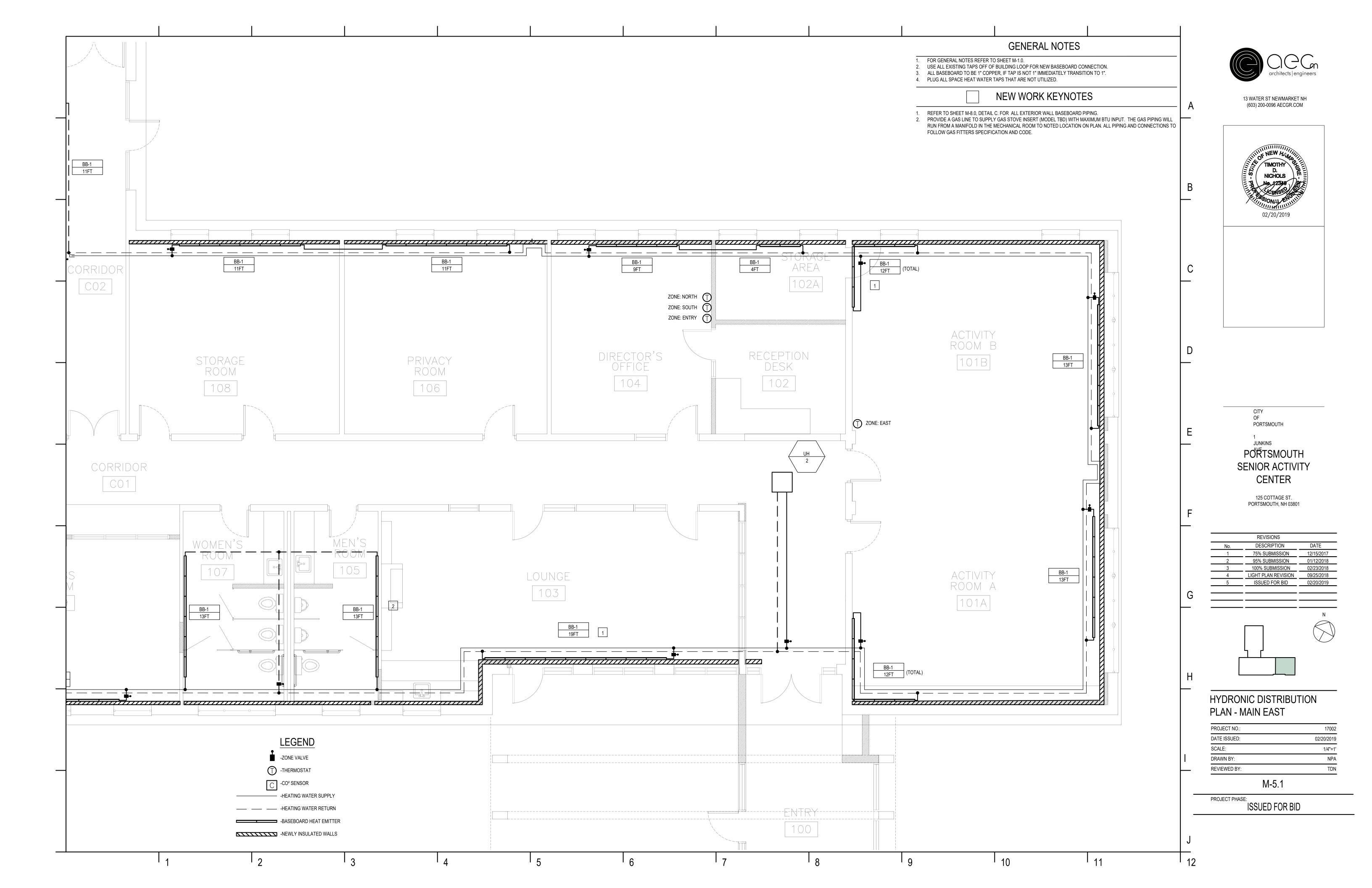


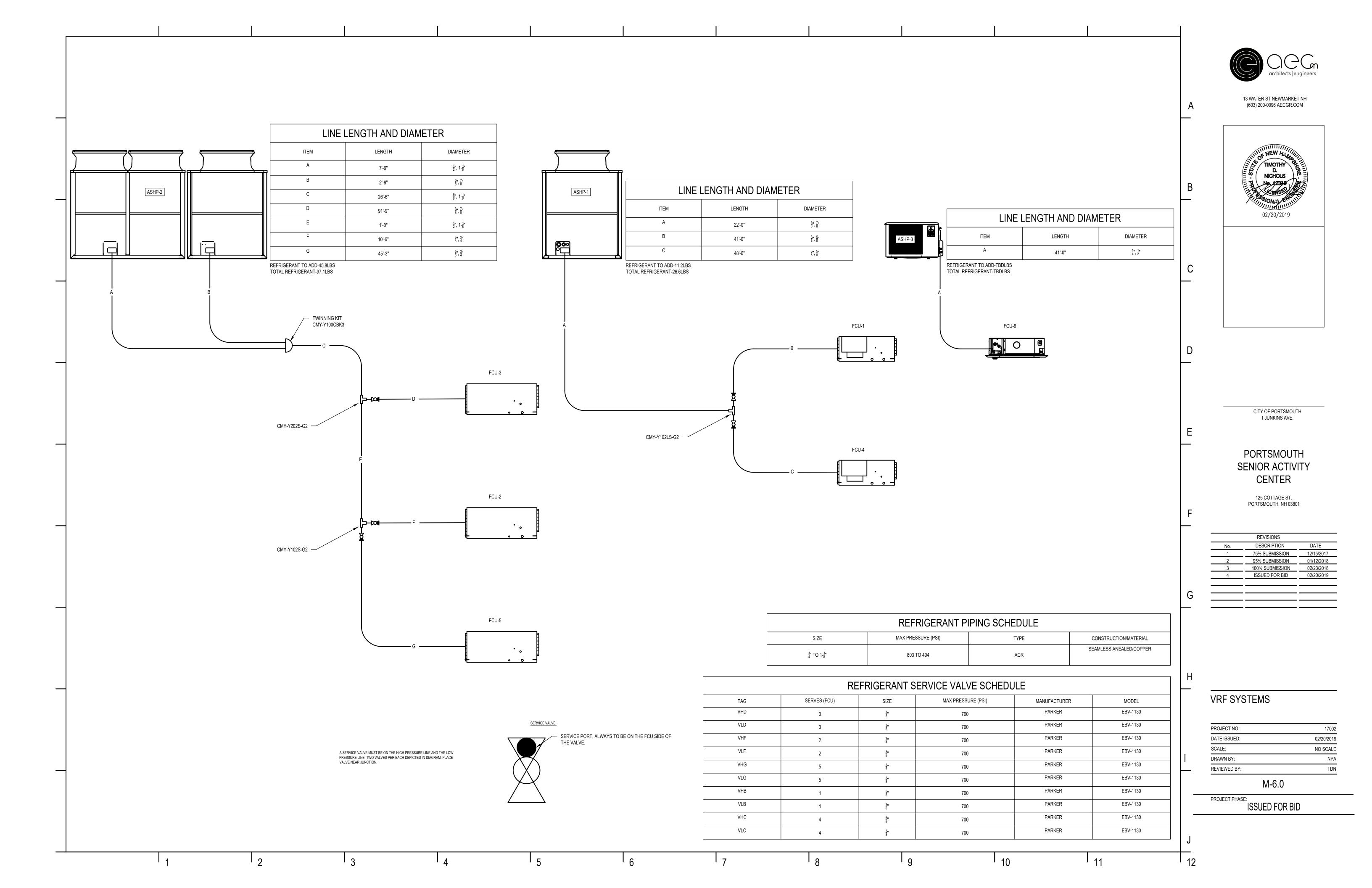


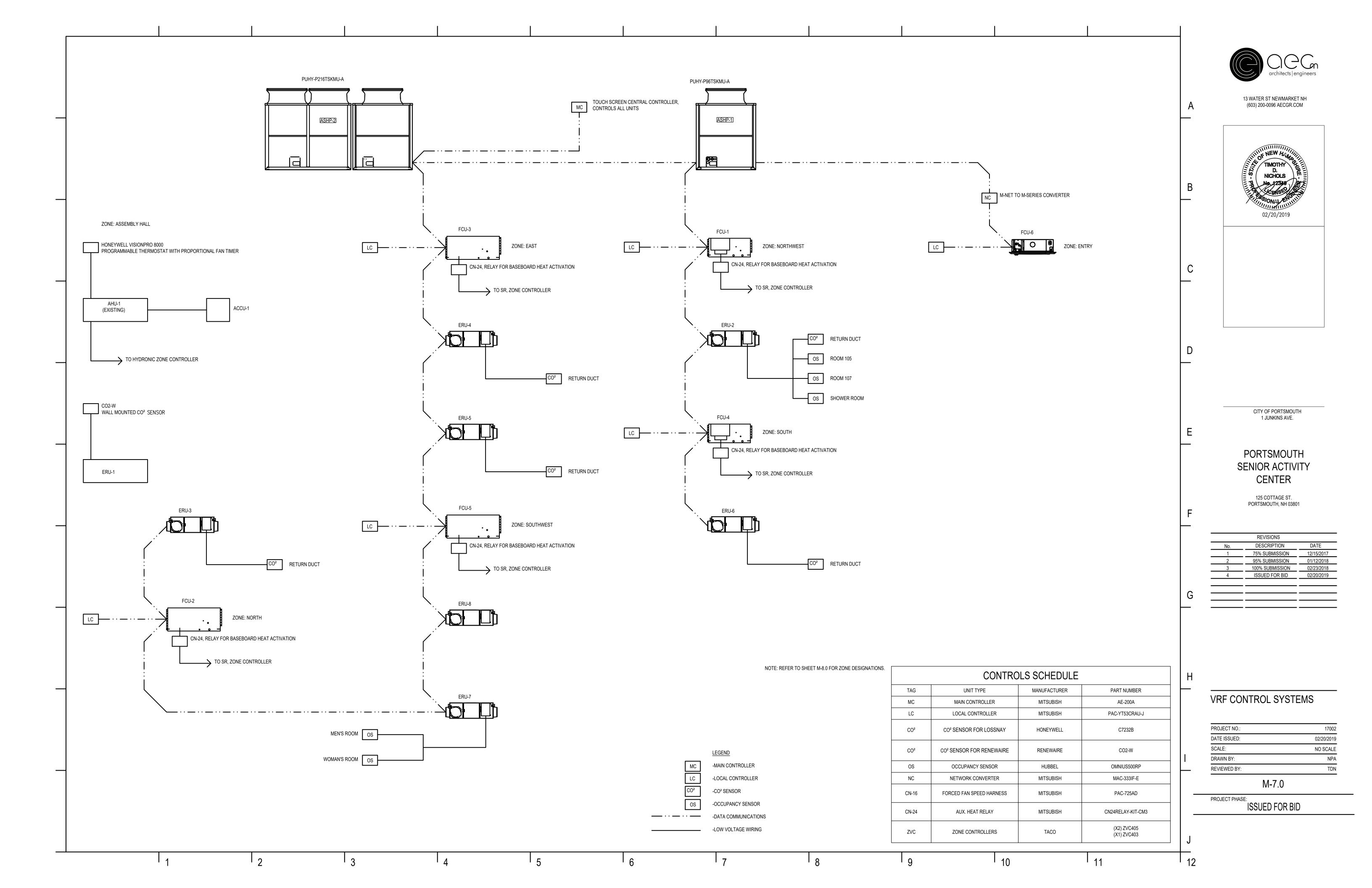












## FCU SEQUENCE OF OPERATIONS

- THE TEMPERATURE IS DETERMINED WITHIN THE UNIT, NOT AT THE THERMOSTAT.
- THE SET POINT IS ADJUSTABLE AT THE LOCAL CONTROLLER OR THE CENTRAL CONTROLLER.

- THE FAN RUNS CONTINUOUSLY WHILE OCCUPIED, AS THE TEMPERATURE IS DETERMINED VIA SENSOR IN THE RETURN PLENUM.
- DURING NIGHT SETBACK, THE SYSTEM WILL CYCLE ON DURING UNOCCUPIED PERIODS AS NEEDED TO MAINTAIN UNOCCUPIED TEMPERATURE SET

#### HEATING CONTROL:

- WHEN SPACE TEMPERATURE IS 1.5°F BELOW SET POINT, THE HEAT PUMP WILL ACTIVATE TO MAINTAIN SET POINT. WHEN SPACE IS AT SET POINT, THE HEAT PUMP WILL BE DEACTIVATED.
- WHEN SPACE TEMPERATURE IS 3°F BELOW SET POINT FOR ANY REASON, THE BOILERS AND ZONE VALVES FOR THE RESPECTIVE ZONE ARE ACTIVATED TO MAINTAIN SET POINT. WHEN SPACE IS AT SET POINT, THE BOILERS AND ZONE VALVES WILL BE DEACTIVATED.
- DURING A DEFROST CYCLE OR FAULT, THE BOILERS AND ZONE VALVES FOR THE RESPECTIVE ZONE WILL BE ACTIVATED. WHEN SPACE IS AT SET POINT, THE BOILERS AND ZONE VALVES WILL BE DEACTIVATED.
- WHEN OUTDOOR TEMPERATURE IS 15°F OR COLDER, THE ASHPs SHUT OFF THEIR COMPRESSORS AND THE BOILERS BECOME THE SOLE SUPPLIER OF

#### SPACE HEAT. COOLING CONTROL:

• WHEN SPACE TEMPERATURE IS 1.5°F ABOVE SET POINT, THE HEAT PUMP WILL ACTIVATE TO MAINTAIN SET POINT. WHEN SPACE IS AT SET POINT, ALL WILL DEACTIVATE.

## LOSSNAY ERU SEQUENCE OF OPERATIONS

- THE ON/OFF FUNCTION OF THE ERU MIRRORS THE FCU.
- THE ERU CAN BE ADJUSTED INDEPENDENTLY VIA THE CENTRAL CONTROLLER.

- EACH ERU WILL HAVE A SPECIFIED STANDBY OPERATION FAN SPEED.
- PSC-12 WILL BE CONTROLLED INDEPENDENTLY FROM ANY FCU.
- SEE SCHEDULE BELOW FOR ALL FAN SPEED DETAILS. AUTOMATIC VENTILATION:
- LOSSNAYS MONITOR INDOOR, OUTDOOR, AND SPACE SET POINTS AND ADJUSTS THE CORE BYPASS ACCORDINGLY TO MAXIMIZE EFFICIENCY.

#### OVERRIDE CONTROL:

- A CO<sup>2</sup> SENSOR IN THE RETURN PLENUM WILL DETERMINE CO<sup>2</sup> LEVELS WITHIN THE CONDITIONED SPACE.
- WHEN CO<sup>2</sup> LEVELS EXCEED 800PPM THE FAN SPEED WILL BE OVERRIDDEN, AT 700PPM, STANDBY SPEED RESUMES. WHEN AN OCCUPANCY SENSOR IS TRIGGERED THE FAN SPEED WILL BE OVERRIDDEN FOR A MINIMUM OF 8 MINUTES.
- SEE SCHEDULE BELOW FOR ALL OVERRIDE DETAILS.

#### AHU (PSC-19) SEQUENCE OF OPERATIONS

- THE TEMPERATURE IS DETERMINED AT THE THERMOSTAT.
- THE SET POINT IS ADJUSTABLE AT THE THERMOSTAT.
- FAN CONTROL:
- THE FAN IS AUTOMATICALLY CONTROLLED BY THE HEATING AND COOLING MODES.

# • THE FAN IS ON A PROPORTIONAL TIMER CONTROLLED BY THE THERMOSTAT, RUNNING THE FAN ~35% OF THE TIME, REGARDLESS OF MODE.

#### HEATING CONTROL: • WHEN SPACE TEMPERATURE IS 2°F BELOW SET POINT, THE BOILERS, RESPECTIVE ZONE VALVE AND FAN WILL ENERGIZE TO MAINTAIN SET POINT.

WHEN SPACE IS AT SET POINT, ALL WILL DE-ENERGIZE. COOLING CONTROL:

ERU (PSC-1) SEQUENCE OF OPERATIONS

• WHEN SPACE TEMPERATURE IS 2°F ABOVE SET POINT, THE ACCU AND FAN WILL ENERGIZE TO MAINTAIN SET POINT. WHEN SPACE IS AT SET POINT, ALL

#### WILL DE-ENERGIZE.

- CO² SENSOR WITH READOUT SHALL BE LOCATED ON A WALL SURFACE ADJACENT TO THE THERMOSTAT.
- THE ERU WILL VARY FAN SPEEDS FROM 0 100% DEPENDENT ON CO2 VALUES IN THE CONDITIONED SPACE. (0% @ 350PPM AND 100% @ 1000PPM)
- IF THE CO<sup>2</sup> LEVELS ARE BELOW SAFE PARAMETERS, THE UNIT IS IN STANDBY MODE.

# ZONE/BOILER CONTROLS SEQUENCE OF OPERATIONS

## ON A CALL FOR HEAT:

- A CALL FOR HEAT FROM ANY ONE OF THE SIX ZONES WILL ENERGIZE THE EXISTING TEKMAR BOILER CONTROL AND OPEN THE RESPECTIVE ZONE
- WHEN THERE ARE NO CALLS FOR HEAT, ALL ZONE VALVES ARE CLOSED, AND BOILERS AND ALL ASSOCIATED PUMPS ARE OFF.

- BOILER TEMP WILL VARY DEPENDANT ON OUTDOOR TEMPERATURE. • 0°F OUTDOOR AIR TEMPERATURE=190°F BOILER WATER TEMPERATURE.
- 60°F OUTDOOR AIR TEMPERATURE=140°F BOILER WATER TEMPERATURE.
- 62°F OUTDOOR AIR TEMPERATURE=WARM WEATHER SHUTDOWN. BOILERS AND ASSOCIATED PUMPS REMAIN OFF REGARDLESS OF CALL FOR HEAT.

## SMOKE/FIRE DAMPER AND SMOKE SENSOR SEQUENCE OF OPERATIONS

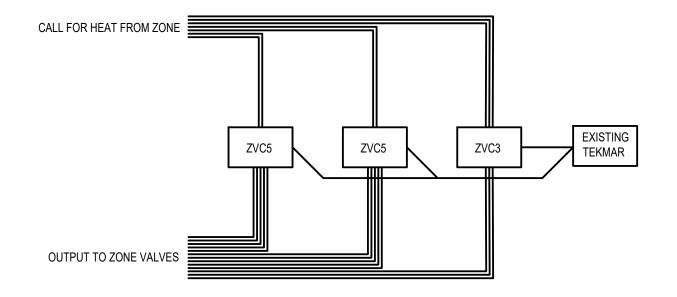
## GENERAL:

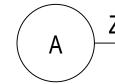
- SMOKE IS SENSED AT THE RETURN OF EACH FCU, AHU-1, ERU-1, AND ERU-7.
- DAMPERS ARE POWERED BY THE SERVICE SWITCH OF EACH UNIT.
- (POWER=OPEN, NO POWER=CLOSED "FAIL-SAFE")
- UPON THE DETECTION OF SMOKE IN DUCTWORK:

ERU-8

- THE SMOKE SENSOR SENDS A SIGNAL TO THE FIRE PANEL.
- THE FIRE CONTROL PANEL RELEASES A RELAY WHICH INTERRUPTS THE POWER TO THE RESPECTIVE UNIT.
- WHEN POWER IS INTERRUPTED TO ANY UNIT. THE ASSOCIATED DAMPERS SPRING CLOSE. A TROUBLE ALARM IS PRESENT AT THE FIRE PANEL, AN AUDIO VISUAL SIGNAL WILL SOUND AND A TROUBLE SIGNAL WILL BE SENT TO A SUPERVISING
- LOSSNAY ERU CFM AND OVERRIDE SCHEDULE STANDBY OPERATION FAN SPEED NUMBER OF CO<sup>2</sup> NUMBER OF OCCUPANCY SENSORS FOR OVERRIDE FAN SPEED (CFM) UNIT CALLOUT OVERRIDE SENSORS FOR OVERRIDE ERU-2 470 1 ERU-3 147 420 ERU-4 330 147 0 1 147 330 0 1 147 330 1 0 PSC-7 147 470 2 0

420





# ZONE/BOILER CONTROL DIAGRAM

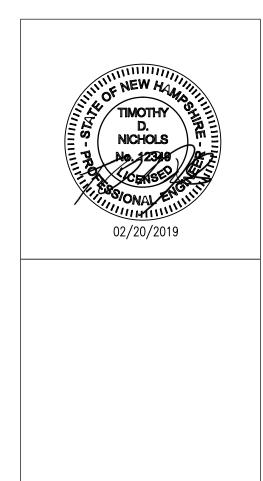
	NO SCALE
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	ZON	IE/BOILER CONTROL	SCHEDULE	
	ZONE SLOT	SPACE	# OF VALVES	ZONE
	#1	WEST HALL	1	
	#2	SHOWERS: 113->116	1	NODTHWEST
TACO ZVC405	#3	REST RM. #1: 118 RESR RM. #2: 117	1	NORTHWEST
(00)		NORTH HALL	1	
<sup>1</sup>	#4	STORAGE RM.: 108	1	
		PRIVACY RM.: 106	1	
	#5	DIRECTORS OFFICE: 104	1	NORTH
		WORK AREA: 102A		
	#1		1	
10	#2	ACTIVITY RM. B: 101B	1	FACT
TACO ZVC405	#3	ACTIVITY RM. A: 101A	1	EAST
ACO	#4		1	
	#4	EAST HALL	1	
	#5	LOUNGE: 103	1	SOUTH
603	8 #1 KITCHEN: 121		1	KITCHEN
TACO ZVC403	#2	ASS. HALL: 120	1	ASS. HALL
TAC	#3	SPARE	0	SPARE

		ZONE VALVE SCHEDULE		
UNIT	MANUFACTURER & MODEL	SIZE & TYPE	PO	WER
UNII	TACO	SIZE & TIFE	SOURCE	CONSUMPTION
ZONE VALVE	SENTRY, Z100C2	1", SWEAT	24VAC	11.4W



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# **PORTSMOUTH** SENIOR ACTIVITY

125 COTTAGE ST. PORTSMOUTH, NH 03801

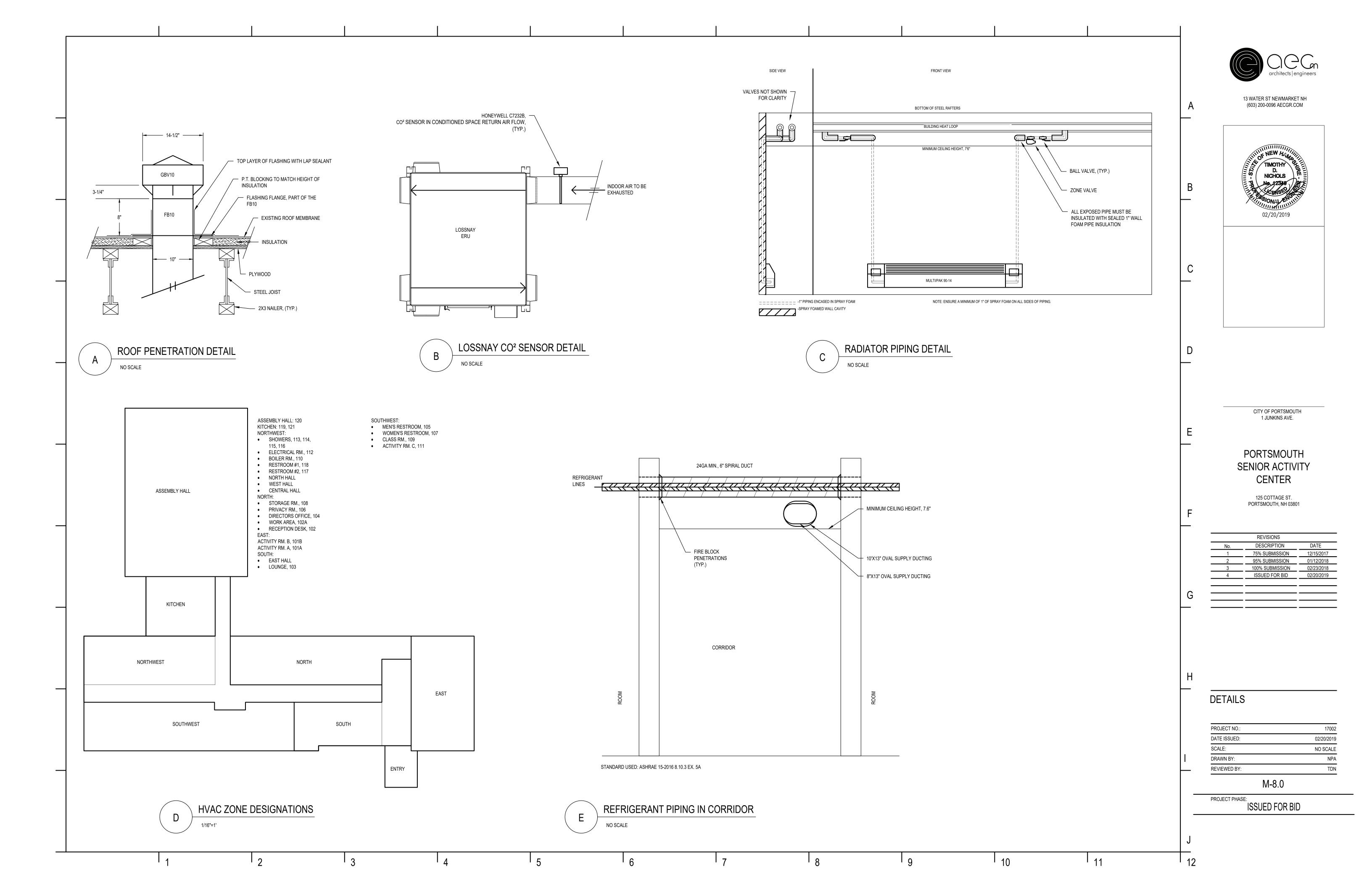
	REVISIONS	
No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	ISSUED FOR BID	02/20/2019

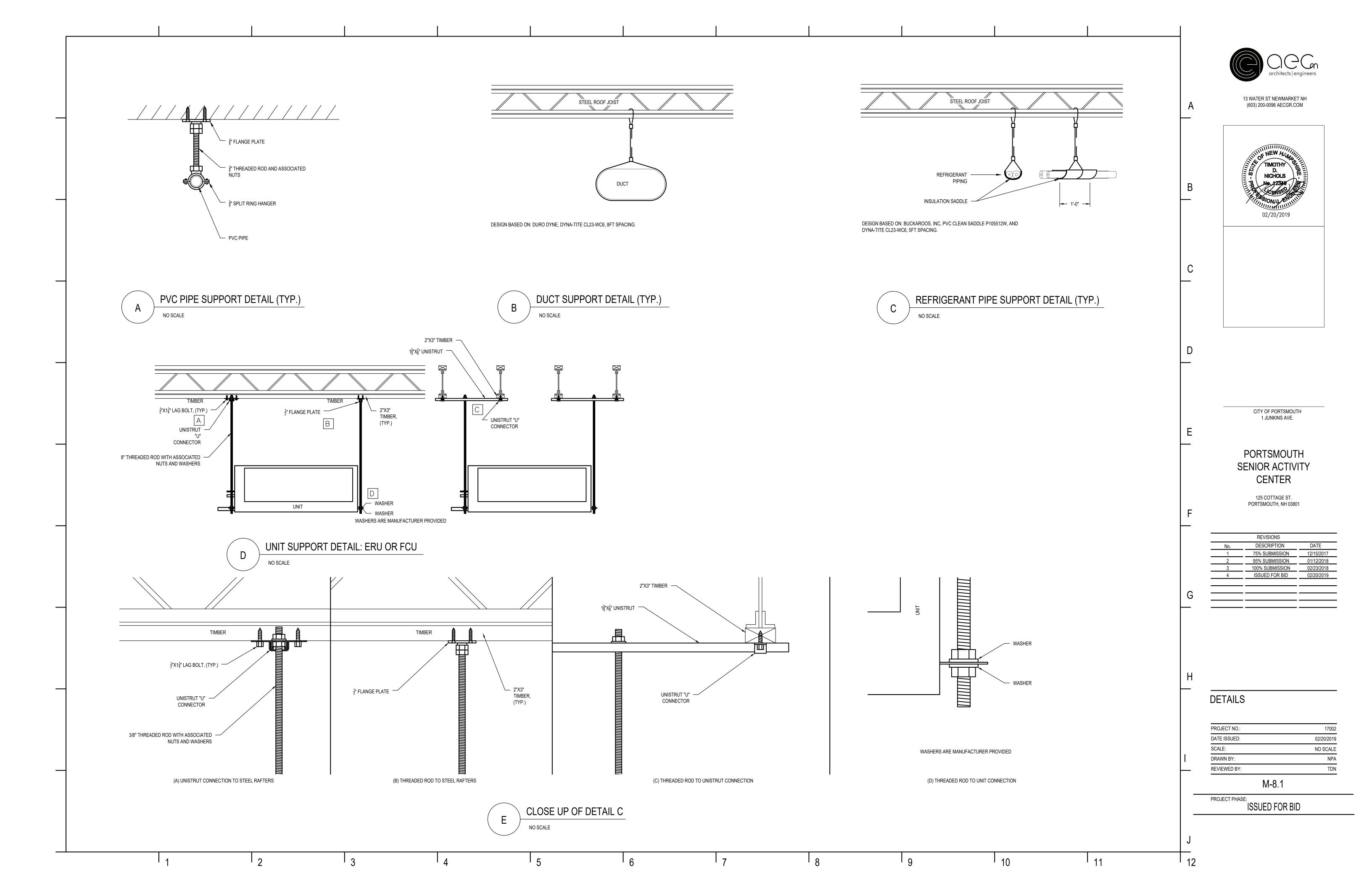
SEQUENCE OF OPERATIONS

PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	NO SCALE
DRAWN BY:	NPA
REVIEWED BY:	TDN

M-7.1

ISSUED FOR BID





	MANUFACTURER AND MODEL MITSUBISHI	SERVICE (ZONE)			SUPPLY FAN						POWER				CAPACI	TY BTU/H	ACCESS	ORIES
TAG			ASSOCIATED HEAT PUMP	OFM.	OTATIO DDECCUDE (IN		SOUND LEVEL (LOW-HIGH)		CONSUMPTION (KW)			CURRENT (A)						
			PUMP	CFM (LOW-HIGH)	STATIC PRESSURE (IN. WG)	QUANTITY		SOURCE	HEATING	COOLING	HEATING	COOLING	MCA	MOCP	HEATING	COOLING	FILTER BOX MODEL NUMBER	DRAIN PUMP
FCU-1	PEFY-P48NMHU-E	NORTHWEST	HP-1	936-1342	0.20*	2	31-41 dB(A)	208, 1PH, 60HZ	0.683	0.683	3.38	3.38	4.23	15	54,000	48,000	PAC-KE140TB-F	PAC-KE04DM-F
FCU-2	PEFY-P72NMHU-E	NORTH	HP-2	2048**	0.28-0.64	2	45 dB(A)**	208V, 3PH, 60HZ	1.352	1.352	4.48	4.48	5.60	15	80,000	72,000	PAC-KE250TB-F	PAC-KE04DM-F
FCU-3	PEFY-P96NMHU-E	EAST	HP-2	2541**	0.28-0.64	3	52 dB(A)**	208V, 3PH, 60HZ	1.690	1.690	5.69	5.69	7.12	15	108,000	96,000	PAC-KE250TB-F	PAC-KE04DM-F
FCU-4	PEFY-P54NMHU-E	SOUTH	HP-1	989-1412	0.20*	2	31-41 dB(A)	208, 1PH, 60HZ	0.695	0.695	3.43	3.43	4.29	15	60,000	54,000	PAC-KE140TB-F	PAC-KE04DM-F
FCU-5	PEFY-P72NMHU-E	SOUTHWEST	HP-2	2048**	0.28-0.64	2	45 dB(A)**	208V, 3PH, 60HZ	1.352	1.352	4.48	4.48	5.60	15	80,000	72,000	PAC-KE250TB-F	PAC-KE04DM-F
FCU-6	SLZ-KA15NA	ENTRY	HP-3	(LOW, MED, HI)	DUCTLESS	1	(LOW, MED, HI)	208V, 1PH, 60HZ	N/A	N/A	N/A	N/A	1	15	15,000	18,000	N/A	N/A
				280, 320, 390			31, 35, 40	1711, 00112										

AIR SOURCE HEAT PUMP (ASH	P) SCHEDULE
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								,									
TAG	SERVES (ZONES)	OUTDOOR	MANUFACTURER	MODEL		COMPRESSOR	SOUND PRESSURE LEVEL (DBA)	OPERATING TEMPI	ERATURE RANGE (°F)	CAPACIT	Y KBTU/H		POWER		A	CCESSORIES FROM MITSUBIS	HI
IAO	OLIVEO (ZOIVEO)	LOCATION	WANDIACIONEN	WODEL	OP. RANGE	QUANTITY AND TYPE	COOLING HEATING	COOLING	HEATING	COOLING	HEATING	SOURCE	MCA	MOCP	BASE PAN HEATER	TWINNING KIT	STAND
ASHP-1	NORTHWEST, SOUTH	NORTH CENTRAL	MITSUBISHI	PUHY-P96TSKMU-A	8-100%	INVERTER DRIVEN SCROLL, 1	58	23 - 115	-13 - 60	96	108	208V, 3PH, 60HZ	34	40	SBPH-T2	N/A	SS100M, SS48M
ASHP-2	NORTH, EAST, SOUTWEST	NODTH CENTRAL	MITSUBISHI	DILLIN DOLOTOVALL A*	8-100%	INVERTER DRIVEN SCROLL, 1	60.5	23 - 115	-13 - 60	120	135	208V, 3PH, 60HZ	45	50	SBPH-T3	ONNY MADOCRIYA	SS100M, SS101M, SS48M,
ASHP-2	NORTH, EAST, SOUTWEST	NORTH CENTRAL	MITSORISHI	PUHY-P216TSKMU-A*	8-100%	INVERTER DRIVEN SCROLL, 1	62.5	23 - 115	-13 - 60	96	108	208V, 3PH, 60HZ	34	40	SBPH-T2	- CMY-Y100CBK3	SS70M
ASHP-3	ENTRY	SOUTH CENTRAL	MITSUBISHI	SUZ-KA15NA	20-100%	INVERTER DRIVEN TWIN ROTARY, 1	49 51	14 - 115	-4 - 70	15	18	208V, 1PH, 60HZ	12	15	MAC-640BH-U	N/A	DSD-400N

NOTE: \* = UNIT IS MADE UP OF TWO UNITS TWINNED TOGETHER.

			RADIATOR (BB) SCHEE	DULE	
	TAG	MANUFACTURER	MODEL	# OF TIERS	BTU/FOOT, 1" COPPER @ 180°F
	BB-1	SLANT/FIN	MULTI/PAK 90-14	1	1346
1	BB-2	SLANT/FIN	MULTI/PAK 90-21	2	2063

NOTE: LENGTHS ARE SHOWN ON TAGS ADJACENT TO RESPECTIVE RADIATOR.

# UNIT HEATER (UH) SCHEDULE

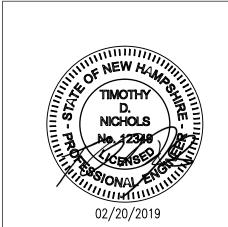
				POWER			
TAG	MANUFACTURER	MODEL	KBTU OUTPUT ON HIGH @ 180°F	VOLTS	WAT TS		
UH-1	SMITH'S	CASPIAN SKYLINE CT60	17.5	120VAC, 1PH, 60HZ	40		

ROUNE	O AND FLAT OVAL DUCT	WORK
MANUFACTURER/SERIES (DESIGN)	SEAL TYPE	SIZE
EASTERN SHEET METAL/EASTERN TIGHT	GASKETED	REFER TO DESIGN

	05/505/01/54/05 (05/4)	0/5541 0/35 (4)			MANUFACTURER AND MODEL NUMBER	E10EVEL00(E) (FDII)	MAX. NEGATIVE STATIC		
TAG	SELECTION RANGE (CFM)	OVERALL SIZE (IN)	CONNECTION TYPE & SIZE	SERVICE	(BASIS OF DESIGN)	FACE VELOCITY (FPM)	PRESSURE	MAX NC	MATERIAL
SA-1	56	10X3	DUCT MOUNTED	SUPPLY AIR	TITUS, US300	400	0.20	20	ALUMINUM
SA-2	84	10X4	DUCT MOUNTED	SUPPLY AIR	TITUS, US300	400	0.20	20	ALUMINUM
SA-3	156	12X6	DUCT MOUNTED	SUPPLY AIR	TITUS, US300	400	0.20	20	ALUMINUM
SA-4	208	16X6	DUCT MOUNTED	SUPPLY AIR	TITUS, US300	400	0.20	20	ALUMINUM
SA-5	264	20X6	DUCT MOUNTED	SUPPLY AIR	TITUS, US300	400	0.20	20	ALUMINUM
SA-6	215	12X6	DUCT MOUNTED	SUPPLY AIR	TITUS, US-DL	400	0.20	20	ALUMINUM
SA-7	2250	24X24	WALL/CUST. BOX	SUPPLY AIR	TITUS, 300RS	600	0.07	28	STEEL
SA-8	196	24X24	CEILING/6"Ø	SUPPLY AIR	TITUS, OMNI-AA	N/A	0.20	21	ALUMINUM
SA-9	148	8X8	CEILING/CUST. BOX	SUPPLY AIR	HART&COOLEY 92	400	0.20	20	STEEL
SA-10	76	6X6	CEILING/CUST. BOX	SUPPLY AIR	HART&COOLEY 92	400	0.20	20	STEEL
SA-11	228	12X6	CEILING/CUST. BOX	SUPPLY AIR	HART&COOLEY 92	400	0.20	20	STEEL
RA-1	288	20X6	DUCT MOUNTED	RETURN AIR	TITUS, US8F	400	0.20	20	ALUMINUM
RA-2	352	24X6	DUCT MOUNTED	RETURN AIR	TITUS, US8F	400	0.20	20	ALUMINUM
RA-3	444	18X10	DUCT MOUNTED	RETURN AIR	TITUS, US8F	400	0.20	20	ALUMINUM
RA-4	728	24X12	DUCT MOUNTED	RETURN AIR	TITUS, US8F	400	0.20	20	ALUMINUM
RA-5	488	14X14	WALL/CUST. BOX	RETURN AIR	TITUS, 350	N/A	0.20	20	ALUMINUM
RA-6	856	24X14	WALL/CUST. BOX	RETURN AIR	TITUS, 350	N/A	0.20	20	ALUMINUM
RA-6	355	24x8	CEILING/CUST. BOX	RETURN AIR	HART&COOLEY, PFG	N/A	0.20	20	STEEL
EA-1	196	24X24	CEILING/6"Ø	EXHAUST AIR	TITUS, OMNI-AA	N/A	0.20	21	ALUMINUM
EA-2	300	24X24	CEILING/8"Ø	EXHAUST AIR	TITUS, OMNI-AA	N/A	0.20	20	ALUMINUM
EA-3	436	24X24	CEILING/10"Ø	EXHAUST AIR	TITUS, OMNI-AA	N/A	0.20	20	ALUMINUM
EA-4	222	8X8	WALL/6"Ø	EXHAUST AIR	TITUS, 350	N/A	0.20	20	ALUMINUM
EA-5	528	12X12	WALL/8"Ø	EXHAUST AIR	TITUS, 350	N/A	0.20	20	ALUMINUM
EA-6	810	16X16	WALL/10"Ø	EXHAUST AIR	TITUS, 350	N/A	0.20	20	ALUMINUM
EA-7	2250	24X24	WALL/CUST. BOX	EXHAUST AIR	TITUS, 300RS	600	0.07	28	STEEL
FA-1	600	15X10	STACK/10"Ø	FRESH AIR	FAMCO, GBV10	N/A	0.20	30	ALUMINUM
DA-1	600	15X10	STACK/10"Ø	DISCHARGE AIR	FAMCO, GBV10	N/A	0.20	30	ALUMINUM



13 WATER ST NEWMARKET NH (603) 200-0096 AECGR.COM



CITY OF PORTSMOUTH 1 JUNKINS AVE.

PORTSMOUTH SENIOR ACTIVITY CENTER

> 125 COTTAGE ST. PORTSMOUTH, NH 03801

1		
ı	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	ISSUED FOR BID	02/20/2019

SCHEDULES

PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	NO SCALE
DRAWN BY:	NP.
REVIEWED BY:	TDN

M-9.0

PROJECT PHASE:

ISSUED FOR BID

							L	DSSNAY ENERGY REC	OVERY UI	NIT (ERU) SO	CHEDULE									
TAG	SERVES (Z	DNE) LOCAT	TION (ROOM)	MANUFACTURER	MODEL	CFM (EXTRA LOW, LC	DW, HIGH, EXT	FAN STATIC PRESSURE (EXTRA L' HIGH)		XTRA	MOTOR QUANTITY AND T	YPE	ENTERING TEMPERATURE OPERATION RANGE (°F)	SOURCE	POWER	MCA	MOCP			
ERU-2	NORTHWE	EST	110	MITSUBISHI	LGH-F470RX5-E	147, 330	0, 420, 470	0.07, 0.33, 0.8		2, 4 POLE CA	PACITOR PERMANENT SPLIT	r-Phase induction	14 TO 104 UP TO 80%RH*	208V, 1PH, 60HZ	0.6-2.5	3.1	15		A	
ERU-3	NORTH	1	106	MITSUBISHI	LGH-F470RX5-E	147, 330	0, 420, 470	0.07, 0.33, 0.5	54, .080	2, 4 POLE CA	PACITOR PERMANENT SPLIT	r-Phase induction	14 TO 104 UP TO 80%RH*	208V, 1PH, 60HZ	0.6-2.5	3.1	15		_	
ERU-4	EAST		101B	MITSUBISHI	LGH-F470RX5-E	147, 330	0, 420, 470	0.07, 0.33, 0.5	54, .080	2, 4 POLE CA	PACITOR PERMANENT SPLIT	r-PHASE INDUCTION	14 TO 104 UP TO 80%RH*	208V, 1PH, 60HZ	0.6-2.5	3.1	15			
ERU-5	EAST		101A	MITSUBISHI	LGH-F470RX5-E	147, 330	0, 420, 470	0.07, 0.33, 0.5	54, .080	2, 4 POLE CA	PACITOR PERMANENT SPLIT	r-PHASE INDUCTION	14 TO 104 UP TO 80%RH*	208V, 1PH, 60HZ	0.6-2.5	3.1	15			
ERU-6	SOUTH		103	MITSUBISHI	LGH-F470RX5-E	147, 330	0, 420, 470	0.07, 0.33, 0.5	54, .080	2, 4 POLE CA	PACITOR PERMANENT SPLIT	r-PHASE INDUCTION	14 TO 104 UP TO 80%RH*	208V, 1PH, 60HZ	0.6-2.5	3.1	15		В	
ERU-7	SOUTHWE	EST	105	MITSUBISHI	LGH-F470RX5-E	147, 330	0, 420, 470	0.07, 0.33, 0.8	54, .080	2, 4 POLE CA	PACITOR PERMANENT SPLIT MOTOR	r-PHASE INDUCTION	14 TO 104 UP TO 80%RH*	208V, 1PH, 60HZ	0.6-2.5	3.1	15			
ERU-8	SOUTHWE	EST	109	MITSUBISHI	LGH-F470RX5-E	147, 330	0, 420, 470	0.07, 0.33, 0.5	54, .080	2, 4 POLE CA	PACITOR PERMANENT SPLIT MOTOR	r-PHASE INDUCTION	14 TO 104 UP TO 80%RH*	208V, 1PH, 60HZ	0.6-2.5	3.1	15			
* = WHEN E	BELOW 14°F TO 5°F THE UI	NIT RUNS 10 MINUTES OFF F	OR EVERY 60MIN ON AS A DE	EFROST CYCLE.																
						HE ENERG	Y RECC	OVERY UNIT (ERU) SCH	HEDULE											
TAG	SERVES (ZO	NE) OUTD	OOR LOCATION	CO <sup>2</sup> SENSOR	MANUFACTURER	MODEL	CFM	FAN STATIC PRESSURE QU	MOTOR ANTITY	TYPE	HP VOLTS	ELECTRICAL SPECIFICA FLA/MOTOR	TIONS MCA MOCP	ACCESSORIES STAND						
ERU-1	ASS. HALI	- NOF	RTH OF HALL	C02-W	RENEWAIRE		1940	0.25	2	VFD	3 208V, 3PH, 60		40.2 45	24" MIN.						
				ΔΙΙΤΟ	MATIC SMOKE	DAMPER SCH	EDIII E													
		SERVES								VOLTAGE	DERTU								D	
AG	UNIT		CT FUNCTION	SIZE	MANUFACTURER			CLASS ACTUATION		VOLTAGE	DEPTH									
-1 -2			a, MAIN HALL	Ø6" 28"X12" OVAL	ABI	FS1		1		120VAC 120VAC	1'-6" 1'-6"									
D-3	FCU-1		, MAIN HALL	18"X12" OVAL	ABI	FS1		1		120VAC	1'-6"									_
)-4 )-5		,	REST ROOMS , MAIN HALL	12"X6" OVAL Ø8"	ABI	FS1		1 CLOSE ON INTERUPTION O (FAIL SAFE)	F POWER,	120VAC 120VAC	1'-6"									
D-6	FCU-4		, EAST HALL	13"X10" OVAL	ABI	FS1		1		120VAC	1'-6"								E	
-7 -8	FCU-5		, EAST HALL , MAIN HALL	13"X10" OVAL 14"X14" SQUARE	ABI	FS1 FS1G/F		1		120VAC 120VAC	1'-6"									
		I				I		I												
			DUCT S	SMOKE SENSO	OR SCHEDULE								SPACE HEAT C	IRCULATION PUMI	<b>D</b>					
	SE	RVES					COMP	ATIBLE WITH	TAG	LOCATION	GPM	MAX. FT. OF HEAD	CONNECTIVITY	POWER SUPPLY	N	МСА	MANUFAC	TURE/MODEL	F	
	UNIT	ZONE	MANUFACTURER	SERIES	MODEL	MANUFACT	TURER	SERIES	P-1	BOILER RM.	0-30	40	BACNET CAPABLE	230VAC, 60HZ	2	2.70A	GRUI MAGNA:	NDFOS/ 3 D 40-150 F		
	ERU-1	ASS. HALL	GAMEWELL	INNOVAIRFLEX	DNR/DNRW	GAMEW	ÆLL	7100	NOTE: SET PUM	MP TO "AUTOADAPT".										N
	AHU-1	ASS. HALL	GAMEWELL	INNOVAIRFLEX		GAMEW		7100					HEATING AN	O FIRE SUPPRESS	ION WATER PIF	PE VALVE				3
	FCU-1 FCU-2	NORTHEAST NORTH	GAMEWELL GAMEWELL	INNOVAIRFLEX		GAMEW		7100				SIZE	MAX PRESS	URE (PSI)	TYPE		CONSTRI	UCTION/MATERIAL		
	FCU-3	EAST	GAMEWELL	INNOVAIRFLEX		GAMEW		7100				<sup>3</sup> / <sub>8</sub> " TO 2"	60		BALL			PART/BRASS	_	_
	FCU-4	SOUTH	GAMEWELL	INNOVAIRFLEX	DNR/DNRW	GAMEW	ÆLL	7100				2-1/2" TO 4"	25		BALL			PART/BRASS 		
	ERU-7	SOUTHWEST	GAMEWELL	INNOVAIRFLEX		GAMEW		7100				0			GATE		GATE	/DOCTILE IRON		
	FCU-5	SOUTHWEST	GAMEWELL	INNOVAIRFLEX	DNR/DNRW	GAMEW	ÆLL	7100						OMESTIC WATER	PIPE VALVE					
			Λ									SIZE	MAX PRESS		TYPE		CONSTR	UCTION/MATERIAL	$\exists$	
	ACCOCIATED LIMIT (FCIII)			IR FILTER SCI		DED.		DADTAWARED				½" TO 2"	60	)	BALL		2 F	PART/BRASS	_]   H	
	ASSOCIATED UNIT (FCU)  1 & 4		MERV/NBS 14/90%		MANUFACTUR MITSUBISHI			PART NUMBER PAC-KE44AF					DOMESTIC, HEATI	NG AND FIRE SLIDI	PRESSION PIPI	NG SCHEDI			$\neg \vdash$	SCH
	2, 3 & 5		14/90%		MITSUBISH			PAC-KE45AF				SIZE	MAX PRESS		TYPE			UCTION/MATERIAL	-	JOIL
		<u> </u>		DOMESTIC								<sup>1</sup> / <sub>4</sub> " TO 2- <sup>1</sup> / <sub>2</sub> "	1596 To		L			S DRAWN/COPPER		PROJECT
				DOMESTIC F	HOT WATER (DI	UAN) OCHEDUL						6"	59	5	K		SEAMLES	S DRAWN/COPPER		SCALE:
AG	INPUT (BTU)	HW PRODUCTION (FIRS	ST HOUR) THERMAL EFFICIENCY	TANK MATERIAL	COMBUSTION TYPE	INLET/OUTLET SIZE (Ø)	VENT SIZE	INPUT (BTU) POWER MCOF	MFGR.	MODEL NO.										DRAWN BY:
V-1	40K TO 160K	265 GAL. @	96%	STAINLESS STEEL	CONDENSING	0'-1 1/2"	3"	160K 120VAC, 60HZ 15A	НТР	PH-160-80			MINIMUM PIF	PE INSULATION TH	ICKNESS FOR	ALL PIPE			7	
'	7010 10 10010	100° RISE	90 /0	O IMINELOG STEEL	CONDENSING	V-1 1/2	5	1001.	1117	111-100-00			C17E				ON THICKNESS		<b>⊣</b>	DDO IECT

PH-160-80

265 GAL. @ 100° RISE

DHW-2

40K TO 160K

STAINLESS STEEL

CONDENSING

0'-1 1/2"

160K 120VAC, 60HZ 15A

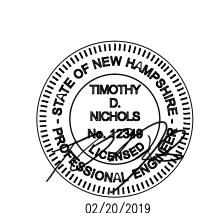
SIZE

½" TO 1-½"

1-½" TO 2-½"



ER ST NEWMARKET NH 200-0096 AECGR.COM



TY OF PORTSMOUTH 1 JUNKINS AVE.

# RTSMOUTH OR ACTIVITY CENTER

25 COTTAGE ST. ISMOUTH, NH 03801

2 95% SUBMISSION 01/12/20° 3 100% SUBMISSION 02/23/20°	No.	DESCRIPTION	DATE
3 100% SUBMISSION 02/23/20 <sup>-</sup>	1	75% SUBMISSION	12/15/2017
	2	95% SUBMISSION	01/12/2018
/ ISSUED EOD BID 02/20/20/	3	100% SUBMISSION	02/23/2018
4 1330LD FOR BID 02/20/20	4	ISSUED FOR BID	02/20/2019

PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	NO SCALE
DRAWN BY:	NPA
REVIEWED BY:	TDN

M-9.1

PROJECT PHASE:

ISSUED FOR BID

INSULATION THICKNESS

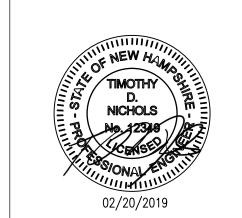
1-1/2"



- 1. ALL CONDITIONS ARE SUBJECT TO CHANGE UNTIL PLANS ARE FINALIZED.
- CLOUD CEILING (CC) DEFINITION USED IS DEFINED BY THE NFPA 13 3.3.5.1.
   GC IS RESPONSIBLE FOR DESIGN OF FIRE SUPPRESSION SYSTEM. SUBMIT DESIGN TO THE CITY OF PORTSMOUTH FIRE DEPARTMENT FOR REVIEW AND APPROVAL.



13 WATER ST NEWMARKET NH (603) 200-0096 AECGR.COM



CITY OF PORTSMOUTH

1 JUNKINS AVE.

# PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST. PORTSMOUTH, NH 03801

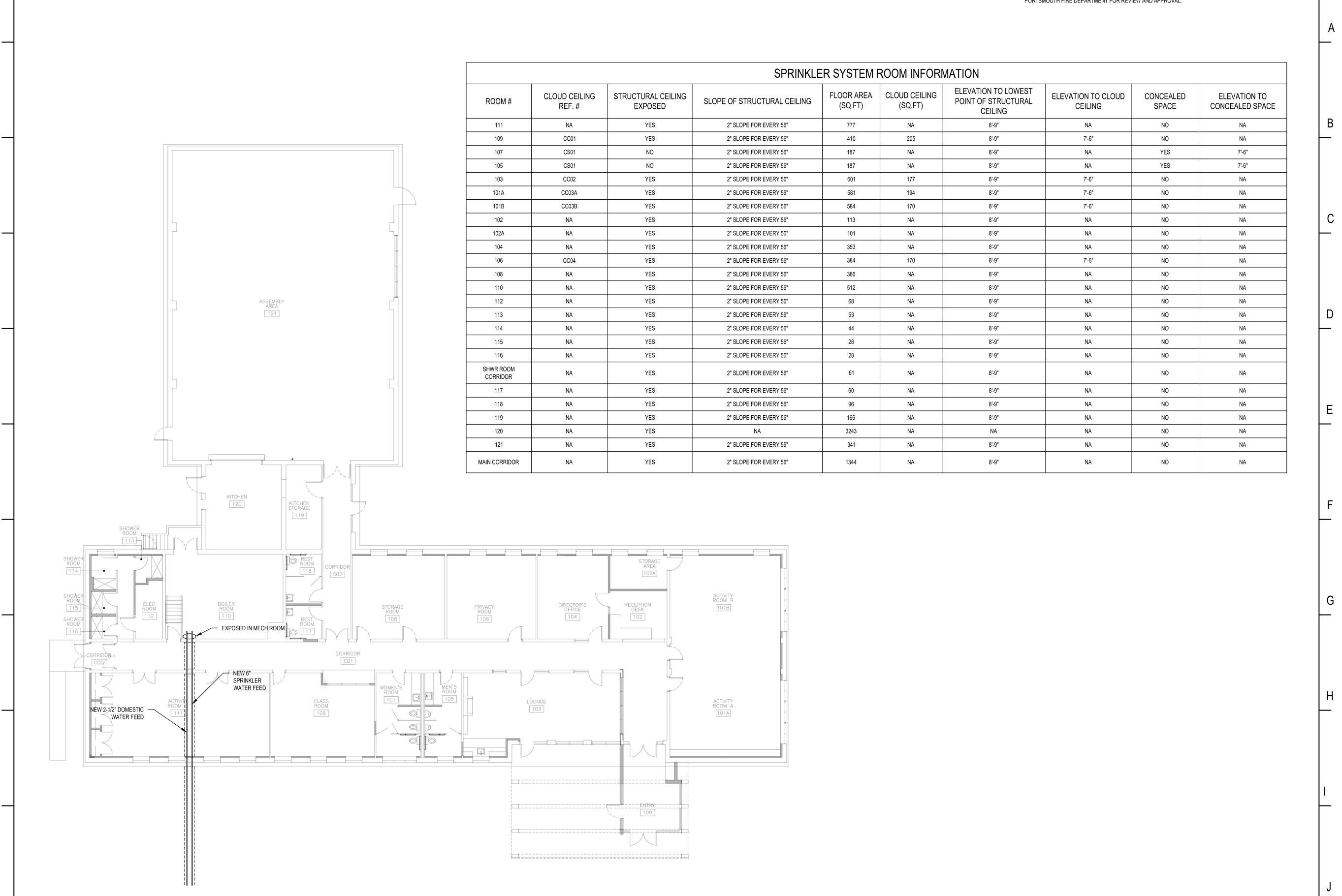
	REVISIONS	
No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	LIGHT PLAN REVISION	09/25/2018
5	ISSUED FOR BID	02/20/2019

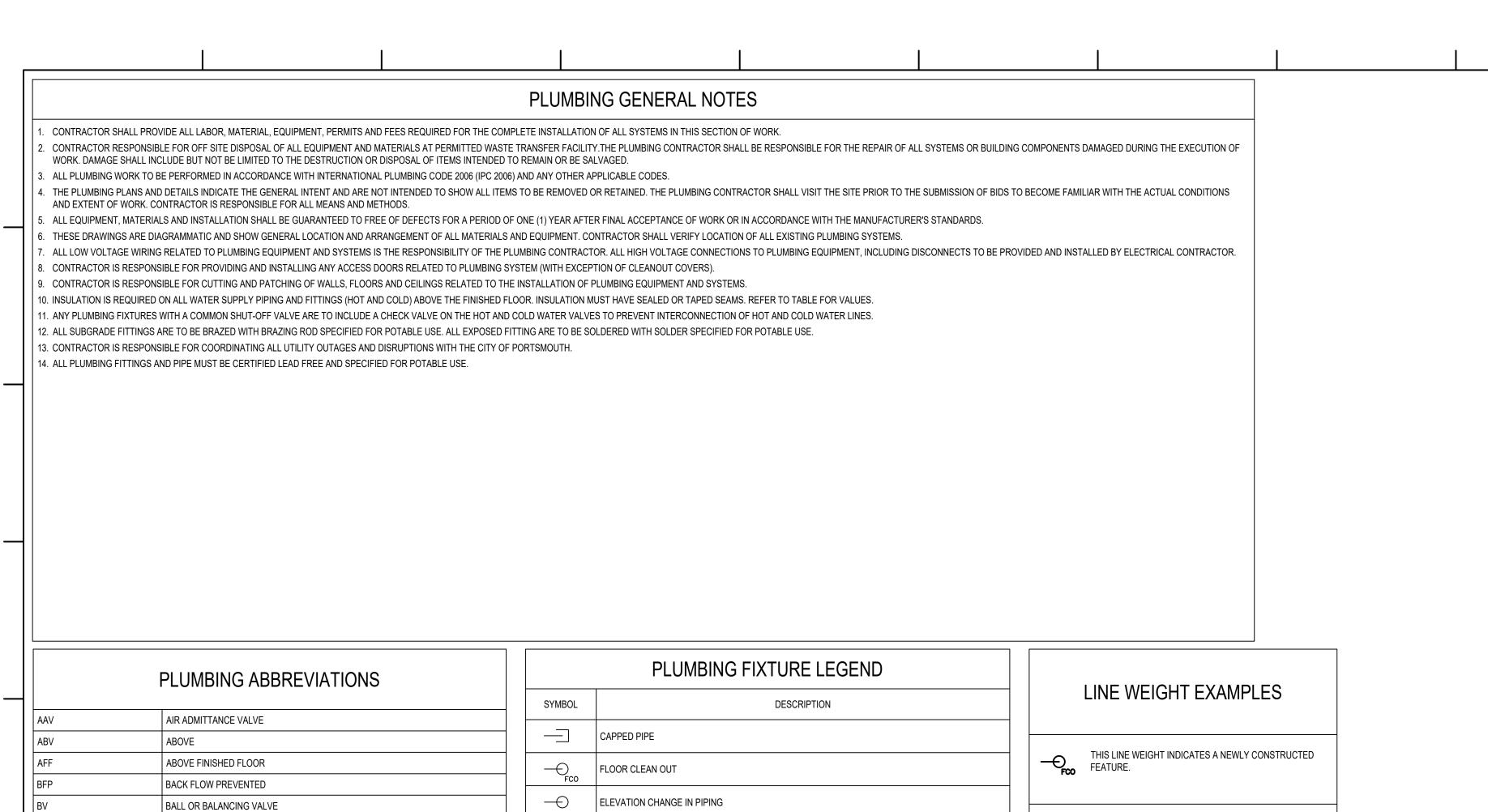
# CONCEPTUAL FIRE SPRINKLER PLAN

PROJECT NO.:	17002
DATE ISSUED:	02/20/2019
SCALE:	3/32" = 1
DRAWN BY:	NPA
REVIEWED BY:	TDN

M-10.0

ISSUED FOR BID





	PLUMBING FIXTURE LEGEND			LINIE MEIOLIT EVANADI EO
SYMBOL	DESCRIPTION			LINE WEIGHT EXAMPLES
	CAPPED PIPE	-		
FCO	FLOOR CLEAN OUT		FCO	THIS LINE WEIGHT INDICATES A NEWLY CONSTRUCTED FEATURE.
$\ominus$	ELEVATION CHANGE IN PIPING			
	P-TRAP		——— FCO	THIS LINE WEIGHT INDICATES A FEATURE THAT ALREADY EXISTS.

DOMESTIC WATER PIPE VALVE					
SIZE	MAX PRESSURE (PSI)	TYPE	CONSTRUCTION/MATERIAL		
1/4" TO 2-1/2"	600	BALL	2 PART/BRASS		

	DOMESTIC PIPING/F	TITTINGS SCHEDULE	
SIZE	MAX PRESSURE (PSI)	TYPE	CONSTRUCTION/MATERIAL
<sup>1</sup> / <sub>4</sub> " TO 2- <sup>1</sup> / <sub>2</sub> "	1596 TO 577	L	SEAMLESS DRAWN/COPPER

	WASTE PIPING/FIT	TINGS SCHEDULE	
SIZE	CONNECTION TYPE	SCHEDULE	MATERIAL
1- <sup>1</sup> " TO 4"	SOLVENT-CEMENTED & NO-HUB COUPLINGS	40	PVC

MINIMUM PIPE INSULATION	I THICKNESS FOR ALL PIPE
SIZE	INSULATION THICKNESS
<sup>1</sup> / <sub>4</sub> " TO 1- <sup>1</sup> / <sub>2</sub> "	1"
1-½" TO 2-½"	1- <del>1</del> "

ASHRAE STANDARD 90.1-2010, SECTION 7.4.3

CLEAN OUT

CHECK VALVE

COLD WATER

FLOOR CLEAN OUT

GENERAL CONTRACTOR

FLOOR DRAIN

HOT WATER

ELECTRICAL SUB-CONTRACTOR

MECHANICAL SUB-CONTRACTOR

PLUMBING SUB-CONTRACTOR

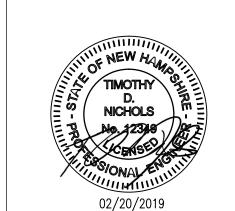
PRESSURE REDUCING VALVE

SANITARY SEWER

	DOMESTIC HOT WATER (DHW) SCHEDULE											
TAG	INPUT (BTU)	HW PRODUCTION (FIRST HOUR)	THERMAL EFFICIENCY	TANK MATERIAL	COMBUSTION TYPE	INLET/OUTLET SIZE (Ø)	VENT SIZE	INPUT (BTU)	POWER	MCOP	MFGR.	MODEL NO.
DHW-1	40K TO 160K	265 GAL. @ 100° RISE	96%	STAINLESS STEEL	CONDENSING	0'-1 1/2"	3"	160K	120VAC, 60HZ	15A	НТР	PH-160-80
DHW-2	40K TO 160K	265 GAL. @ 100° RISE	96%	STAINLESS STEEL	CONDENSING	0'-1 1/2"	3"	160K	120VAC, 60HZ	15A	НТР	PH-160-80



13 WATER ST NEWMARKET NH (603) 200-0096 AECGR.COM



CITY OF PORTSMOUTH 1 JUNKINS AVE.

PORTSMOUTH SENIOR ACTIVITY

> 125 COTTAGE ST. PORTSMOUTH, NH 03801

No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	ISSUED FOR BID	02/20/2019

**GENERAL NOTES** 

D 4.0	`
REVIEWED BY:	TDN
DRAWN BY:	NPA
SCALE:	NO SCALE
DATE ISSUED:	02/20/201
PROJECT NO.:	17002

P-1.0

ISSUED FOR BID

