

# **ISSUED FOR BID** July-August 2016

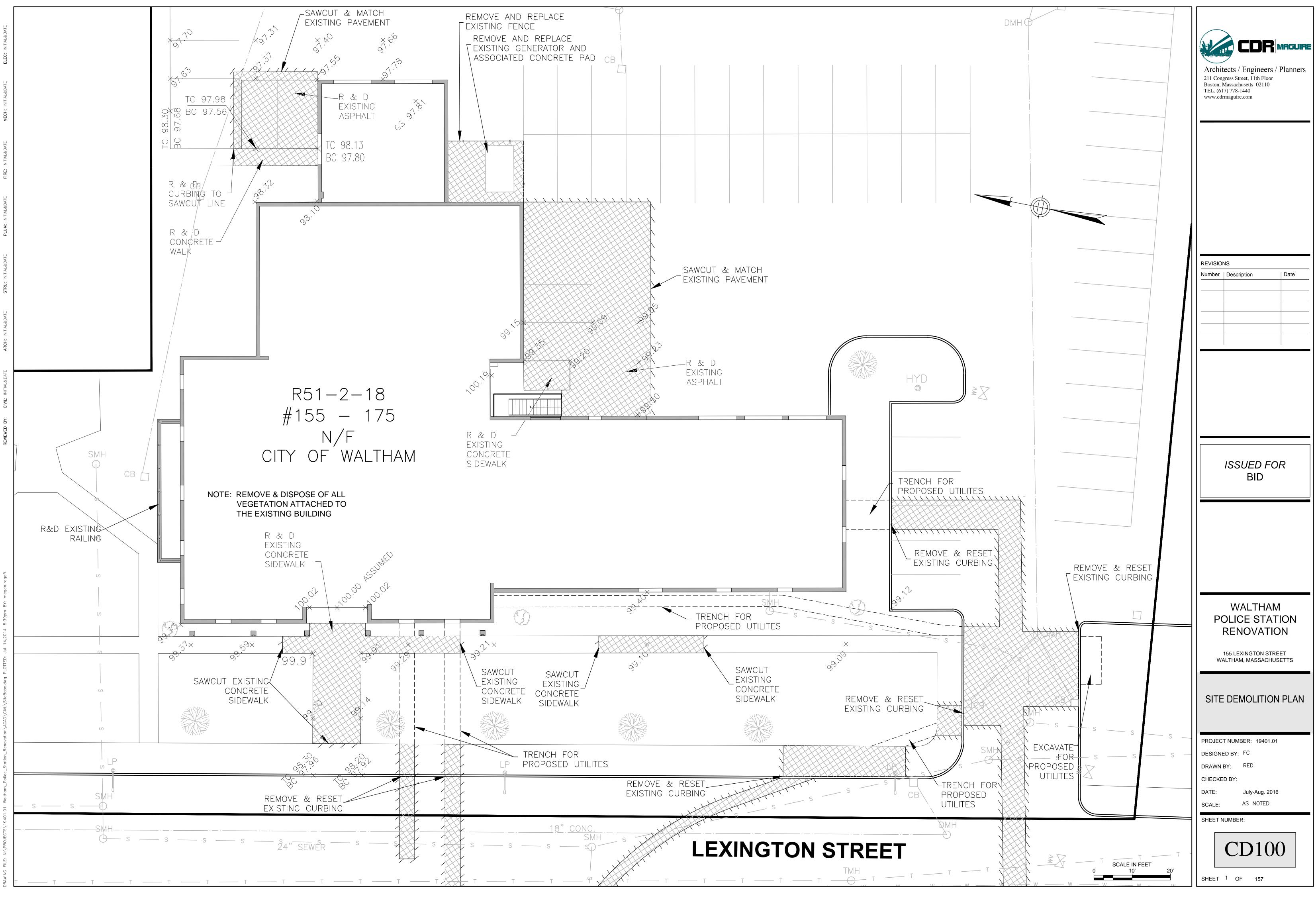
# **LIST OF DRAWINGS**

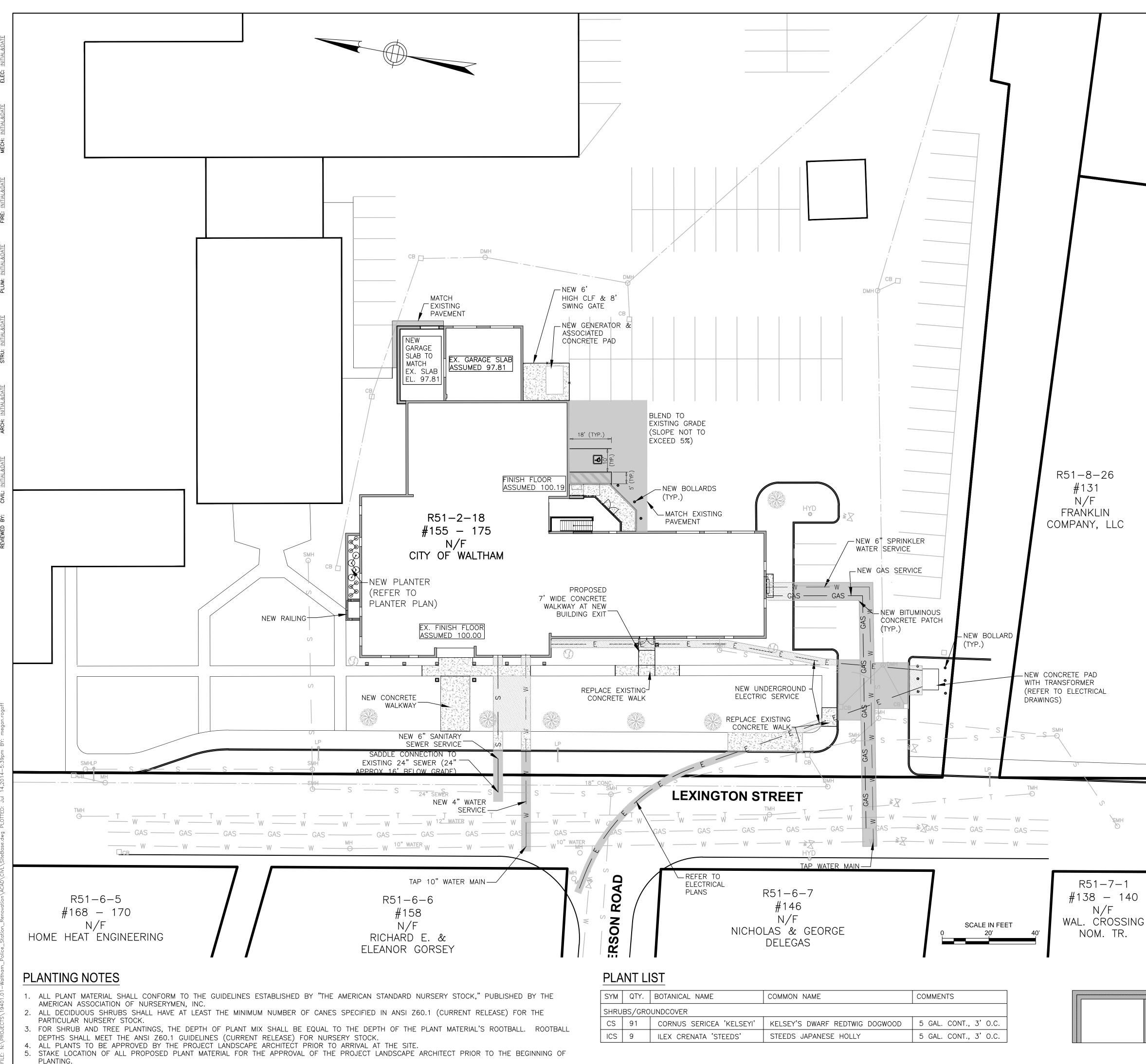
### COVERSHEE<sup>-</sup>

CIVIL

### MECHANICAL

|   | CIVIL  |   |  |
|---|--|---|--|
| C100<br>C101<br>C102<br>C103<br>C104  | SITE DEMOLITION<br>SITE PLAN<br>SITE DETAILS<br>SITE DETAILS-2<br>SITE DETAILS-3<br>STRUCTURAL   | HD101<br>HD102<br>HD103<br>HD104<br>H000<br>H101<br>H102<br>H103              | HVAC BASEMENT FLOOR DEMO PLAN<br>HVAC FIRST FLOOR DEMO PLAN<br>HVAC SECOND FLOOR DEMO PLAN<br>HVAC ROOF DEMO PLAN<br>HVAC LEGEND, NOTES AND ABBREVIATIONS<br>HVAC BASEMENT FLOOR PLAN<br>HVAC FIRST FLOOR PLAN<br>HVAC SECOND FLOOR PLAN   |
| SD101<br>SD102<br>S001<br>S101  | BASEMENT DEMOLITION PLAN<br>FIRST/SECOND FLOOR DEMOLITION PLANS<br>GENERAL NOTES<br>BASEMENT PLAN  | H104<br>H800<br>H801<br>PD101<br>PD102<br>PD103                               | HVAC ROOF PLAN<br>HVAC SCHEDULES<br>HVAC SCHEDULESPLUMBING DEMOLITION<br>PLUMBING BASEMENT FLOOR DEMO PLAN<br>PLUMBING FIRST FLOOR DEMO PLAN<br>PLUMBING SECOND FLOOR DEMO PLAN  |
| S102  | FIRST FLOOR FRAMING PLAN   |   | PLUMBING   |
| S103<br>S104<br>S301<br>S302<br>S303<br>S304<br>S401<br>S402<br>S501<br>S502  | SECOND FLOOR FRAMING PLAN<br>ROOF FRAMING PLAN<br>SECTION AND DETAILS<br>SECTIONS AND DETAILS<br>SECTIONS AND DETAILS<br>SECTIONS AND DETAILS<br>STAIR PLAN AND SECTION<br>ENLARGED FRAMING PLANS<br>TYPICAL DETAILS<br>TYPICAL DETAILS  | P000<br>P101U<br>P101<br>P102<br>P103<br>P104<br>P600<br>P601<br>P700<br>P701 | PLUMBING LEGEND, NOTES AND ABBREVIATIONS<br>PLUMBING UNDERSLAB PLAN<br>PLUMBING BASEMENT FLOOR PLAN<br>PLUMBING FIRST FLOOR PLAN<br>PLUMBING SECOND FLOOR PLAN<br>PLUMBING ROOF PLAN<br>PLUMBING DETAILS<br>PLUMBING SCHEDULES<br>PLUMBING SCHEDULES   |
| S502  | TYPICAL DETAILS  |   | FIRE PROTECTION  |
| S504<br>S505<br>S506<br>S601  | TYPICAL DETAILS<br>TYPICAL DETAILS<br>TYPICAL DETAILS<br>COLUMN SCHEDULE, BASE PLATE AND PIER DETAILS  | FP000<br>FP101<br>FP102<br>FP103<br>FP600<br>FP601                            | FIRE PROTECTION LEGEND, NOTES AND ABBREVIATI<br>FIRE PROTECTION BASEMENT FLOOR PLAN<br>FIRE PROTECTION FIRST FLOOR PLAN<br>FIRE PROTECTION SECOND FLOOR PLAN<br>FIRE PROTECTION DETAILS<br>FIRE PROTECTION DETAILS   |
|   | ARCHITECTURAL  |   | ELECTRICAL   |
| AD101<br>AD102<br>AD103<br>AD104<br>AD120<br>AD121<br>AD122<br>A001<br>A002<br>A009<br>A010<br>A011<br>A012<br>A100<br>A111<br>A102<br>A100<br>A101<br>A102<br>A103<br>A111<br>A122<br>A103<br>A111<br>A122<br>A113<br>A120<br>A121<br>A122<br>A201<br>A202<br>A310<br>A311<br>A312<br>A401<br>A402<br>A521 | BASEMENT DEMOLITION PLAN<br>FIRST FLOOR DEMOLITION PLAN<br>SECOND FLOOR DEMOLITION PLAN<br>ROOF DEMOLITION PLAN<br>BASEMENT DEMOLITION RCP<br>FIRST FLOOR DEMOLITION RCP<br>SECOND FLOOR DEMOLITION RCP<br>SYMBOLS AND ABBREVIATIONS<br>WALL TYPES<br>LIFE SAFETY DATA SHEET<br>BASEMENT LIFE SAFETY PLAN<br>FIRST FLOOR LIFE SAFETY PLAN<br>SECOND FLOOR LIFE SAFETY PLAN<br>SECOND FLOOR PLAN<br>FIRST FLOOR PLAN<br>SECOND FLOOR PLAN<br>SECOND FLOOR PLAN<br>ENLARGED FLOOR PLANS<br>ENLARGED FLOOR PLANS<br>ENLARGED FLOOR REFLECTED CEILING PLAN<br>FIRST FLOOR REFLECTED CEILING PLAN<br>FIRST FLOOR REFLECTED CEILING PLAN<br>FIRST FLOOR REFLECTED CEILING PLAN<br>SECOND FLOOR REFLECTED CEILING PLAN<br>FIRST FLOOR REFLECTED CEILING PLAN<br>SECOND FLOOR REFLECTED CEILING PLAN<br>FIRST FLOOR REFLECTED CEILING PLAN<br>SECOND FLOOR RCP<br>EXTERIOR ELEVATION<br>TYP. WALL SECTIONS<br>TYP. WALL SECTIONS<br>STAIR PLAN, SECTIONS, DETAILS<br>STAIR PLAN, SECTIONS, DETAILS<br>PLAN DETAILS | ESD102<br>ESD103<br>ES101<br>ES102<br>ES103<br>ES701<br>ES702                 | ELECTRICAL BASEMENT FLOOR DEMOLITION PLAN<br>ELECRICAL FIRST FLOOR DEMOLITION PLAN<br>ELECTRICAL SECOND FLOOR DEMO<br>ELECTRICAL LEGEND, NOTES AND ABBREVIATIONS<br>ELECTRICAL LIGHTING BASEMENT FLOOR PLAN<br>ELECTRICAL LIGHTING FIRST FLOOR PLAN<br>ELECTRICAL LIGHTING SECOND FLOOR PLAN<br>ELECTRICAL LIGHTING SECOND FLOOR PLAN<br>ELECTRICAL POWER BASEMENT FLOOR PLAN<br>ELECTRICAL POWER BASEMENT FLOOR PLAN<br>ELECTRICAL POWER SECOND FLOOR PLAN<br>ELECTRICAL POWER ROOF PLAN<br>ELECTRICAL FIRE ALARM BASEMENT FLOOR PLAN<br>ELECTRICAL FIRE ALARM BASEMENT FLOOR PLAN<br>ELECTRICAL FIRE ALARM SECOND FLOOR PLAN<br>ELECTRICAL ON LINE DIAGRAM<br>ELECTRICAL ONE LINE DIAGRAM<br>ELECTRICAL SCHEDULES<br>ELECTRICAL SCHEDULES<br>ELECTRICAL SCHEDULES<br>ELECTRICAL SCHEDULES<br>ELECTRICAL SCHEDULES<br>ELECRICY BASEMENT DEMO PLAN<br>SECURITY SECOND FLOOR PLAN<br>SECURITY FIRST FLOOR PLAN<br>SECURITY FIRST FLOOR PLAN<br>SECURITY SECOND FLOOR PLAN<br>SECURITY SECOND FLOOR PLAN<br>SECURITY SECOND FLOOR PLAN<br>SECURITY DETAILS<br>BLOOD VISUAL |
| A531<br>A532<br>A541<br>A571<br>A572<br>A581<br>A601<br>A602<br>A630<br>A631<br>A632<br>A701<br>A702<br>A703<br>A704<br>A705<br>A801<br>A900<br>A901<br>A902<br>A903<br>A904  | SECTION DETAILS<br>SECTION DETAILS<br>DOOR & WINDOW DETAILS<br>MISCELLANEOUS DETAILS<br>MISCELANEOUS DETAILS<br>CEILING DETAILS<br>CEILING DETAILS<br>ROOM FINISH SCHEDULE<br>WINDOW & DOOR TYPE ELEVATIONS<br>BASEMENT FINISH PLAN<br>FIRST FLOOR FINISH PLAN<br>SECOND FLOOR FINISH PLAN<br>TOILET ROOM PLANS AND ELEVATIONS<br>TOILET ROOM PLANS AND ELEVATIONS<br>INTERIOR ELEVATIONS<br>INTERIOR ELEVATIONS<br>MILLWORK DETAILS<br>BASEMENT FLOOR FURNITURE PLAN<br>FIRST FLOOR FURNITURE PLAN<br>SECOND FLOOR FURNITURE PLAN<br>SECOND FLOOR FURNITURE PLAN<br>NOT IN PROJECT<br>NOT IN PROJECT  | AV000<br>AV202<br>AV301<br>AV400<br>AV500<br>AV700                            | AUDIO VISUAL LEGEND, NOTES AND ABBREVIATIONS<br>AUDIO VISUAL FIRST FLOR PLAN<br>AUDIOVISUAL SIGNAL FLOWS<br>AUDIOVISUAL CONDUIT RISER<br>AUDIOVISUAL DETAILS   |





PLANTING.

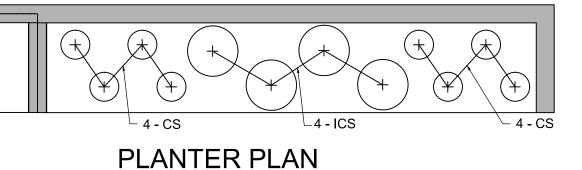
### **EROSION & SEDIMENT CONTROL NOTES**

- 1. ALL SEDIMENTS SPILLED, DROPPED, WASHED OR TRACKED ONTO THE PUBLIC RIGHT OF WAY MUST BE CLEANED UP/REMOVED PRIOR TO THE END OF THE WORK DAY.
- 2. EXPOSED AREAS SHALL NOT BE LEFT UNATTENDED OR EXPOSED IN AREAS WHERE WORK IS TO CEASE FOR A PERIOD OF 14 DAYS OR GREATER OR DURING THE INACTIVE WINTER SEASON. AREAS EXPOSED FOR THE DESCRIBED PERIODS SHALL RECEIVE TEMPORARY VEGETATIVE COVER AND
- BE COMPLETELY COVERED WITH LOOSE HAY MULCH. 3. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
- 4. GRASS AREAS DISTURBED DURING CONSTRUCTION ACTIVITIES WHICH ARE NOT DESIGNATED TO HAVE ASPHALT OR CONCRETE INSTALLED SHALL RECEIVE PERMANENT LOAM AND SEED AS REQUIRED IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION ACTIVITIES IN THE AREA.

### **GENERAL NOTES**

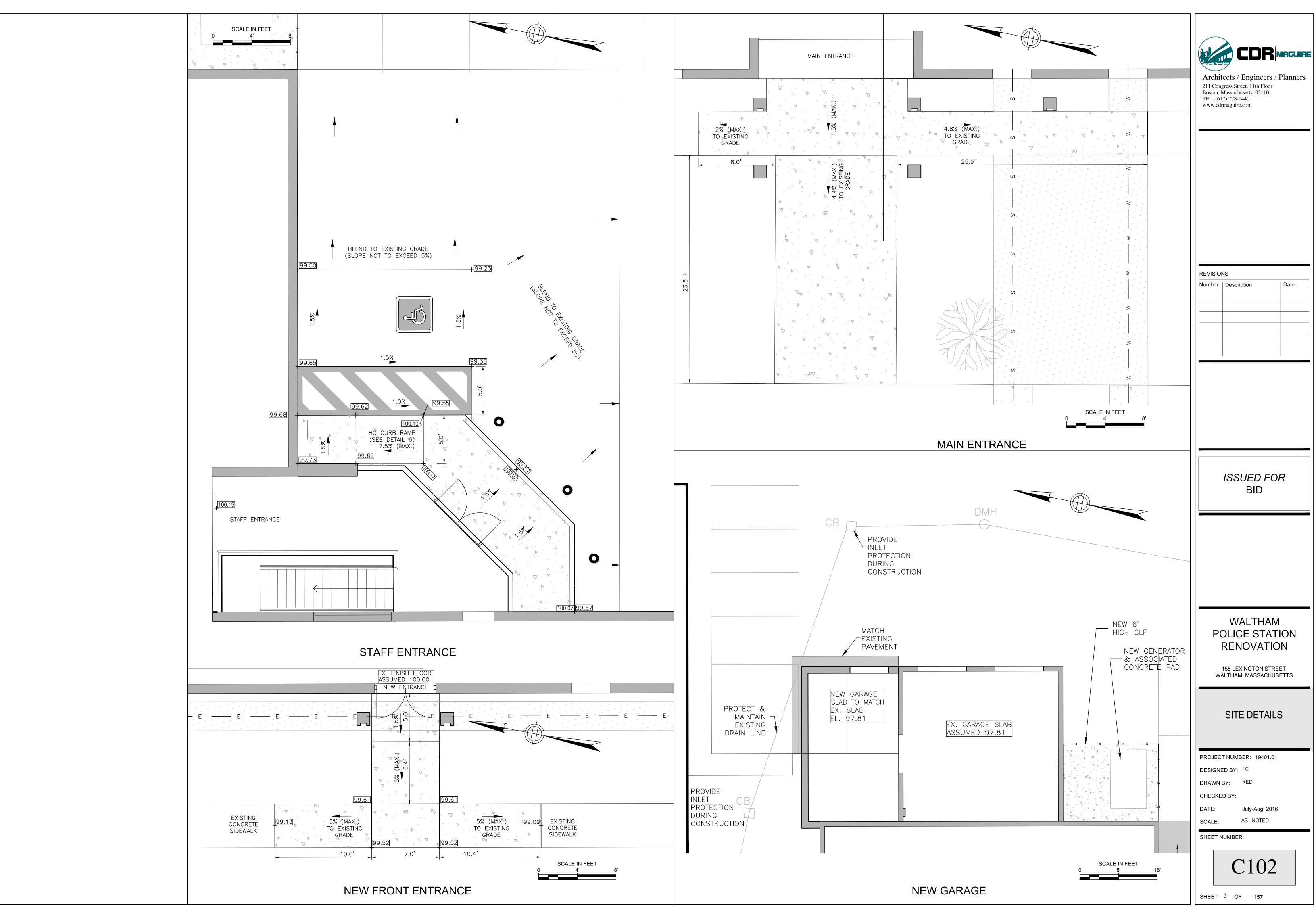
- 1. EXISTING CONDITIONS INFORMATION WAS COMPILED WITH INFORMATION OBTAINED FROM MASS GIS SUPPLEMENTED BY SITE INVESTIGATION.
- 2. EXISTING SPOT GRADES AND LOCATION OF WATER GATES WERE OBTAINED THE FIELD ON JUNE 19, 2014. 3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF THE LOCATION (
- EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE ENGINEER IF CONDITIONS ARE ENCOUNTERED IN THE FIELD WHICH IMPACT OR INTERFE WITH THE PROPOSED CONSTRUCTION. 4. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS AS DIRECTED E
- THE CONTRACT DOCUMENTS. 5. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH ALL PERMITS, LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT
- OF THE WORK AS DRAWN AND SPECIFIED. 6. THE CONTRACTOR'S WORK SHALL BE SUBJECT TO INSPECTION BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 7. THE LIMIT OF DISTURBANCE WILL BE KEPT TO A MINIMUM. 8. ASPHALT AND CONCRETE REMOVED DURING THE DEMOLITION PROCESS SHALL BE DISPOSED OF OFF SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS AND THE CONTRACT DOCUMENTS.
- 9. THE CONTRACTOR SHALL SATISFY HIMSELF/HERSELF AS TO THE EXTENT, DEPTH, TYPE AND LOCATION OF ALL ASPHALT AREAS, CONCRETE AREAS, WALLS AND UNDERGROUND UTILITIES, ETC. WHICH MAY BE ENCOUNTERED DURING THE DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. INFORMATION ON THE PLANS IS GENERAL AND SHALL NOT RELIEVE THE CONTRACTOR ( FAMILIARIZING HIMSELF/HERSELF WITH THE EXISTING CONDITIONS.
- 10. THE COST INCURRED BY DAMAGE TO ANY UTILITIES, INCLUDING THOSE NO SHOWN SHALL BE BORNE BY THE CONTRACTOR. 11. SAFE ACCESS TO THE BUILDING SHALL BE PROVIDED DURING THE
- CONSTRUCTION ACTIVITIES.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL CONSTRUCTION ACTIVITIES FOLLOW OSHA SAFETY RULES AND GUIDELINES AS APPROPRIATI
- 13. THE CONTRACTOR SHALL CONTACT DIG SAFE AT 888-DIG-SAFE A MINIMUI OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 14. GRAVEL AND BITUMINOUS CONCRETE GRADATIONS AS SHOWN ABOVE WERE OBTAINED FROM THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATION FOR HIGHWAYS AND BRIDGES"

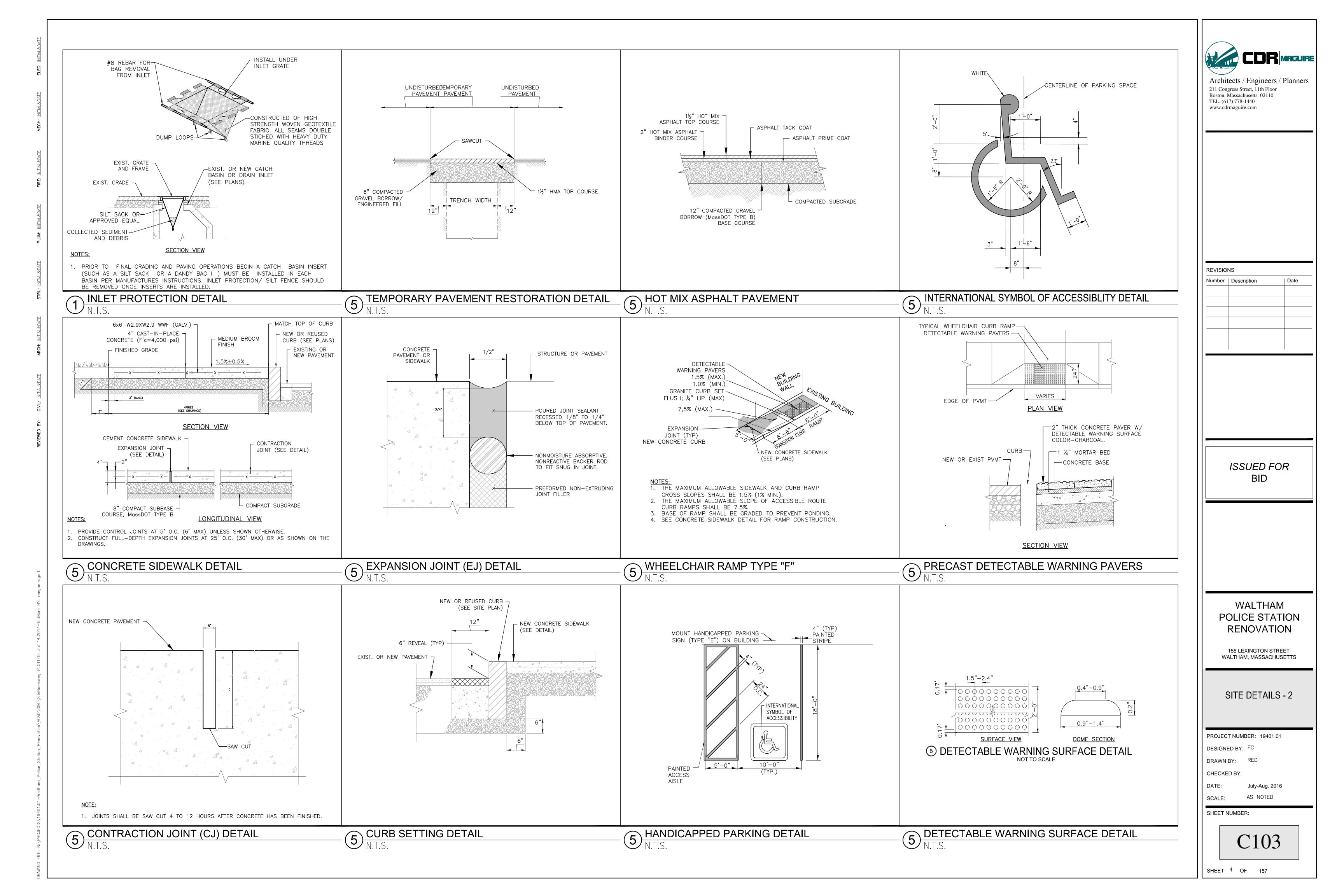
| EXISTING        | TE LEGEND                   | PROPOSED     |
|-----------------|-----------------------------|--------------|
|                 | APPROX. TREE/SHRUB          | (+) $(+)$    |
|                 | SPOT GRADE                  | 99.13 +      |
| 0.×<br>TC 98.30 | GRADE TOP OF CURB           | 00.10        |
| × BC 97.96      | GRADE BOTTOM OF CUR         | В            |
| HYD             | HYDRANT                     |              |
| $\sim$          | WATER GATE                  |              |
| — W —           | WATER LINE                  | — W —        |
|                 | SEWER LINE -                |              |
|                 | ELECTRIC -                  |              |
| SMH O           | SEWER MANHOLE               |              |
| DMH O           | DRAINAGE MANHOLE            |              |
|                 | CATCH BASIN                 |              |
| MHO             | MANHOLE                     |              |
|                 | DRAIN LINE -                |              |
|                 | APPROX. UTILITY POLE W/LIGH | ΗT           |
| R&D             | REMOVE & DISPOSE            |              |
|                 | SAWCUT                      | <u>`````</u> |
|                 | AREA TO BE REMOVED          |              |
|                 | BITUMINOUS CONCRETE         |              |
|                 | CEMENT CONCRETE             | P            |
|                 |                             |              |
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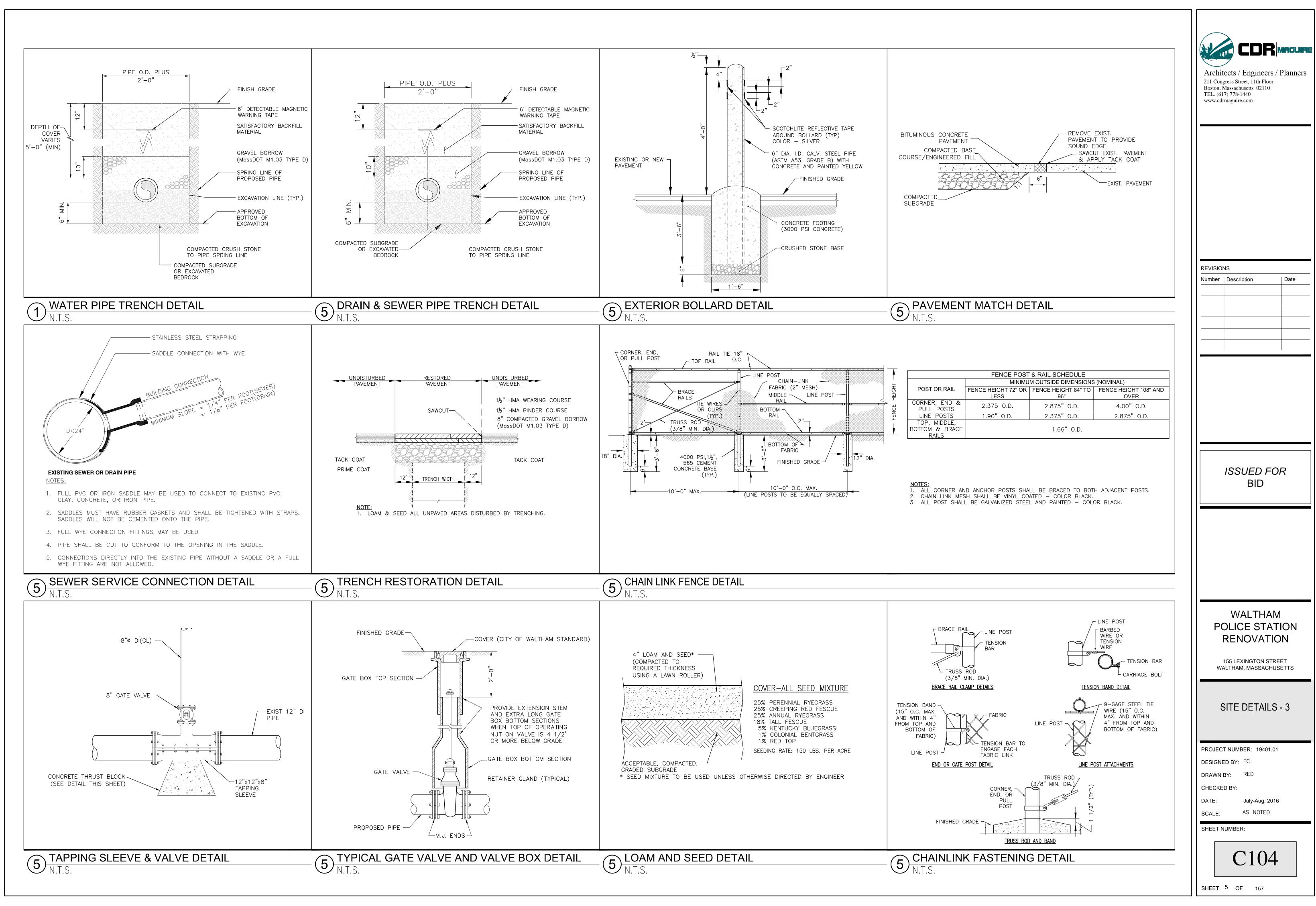


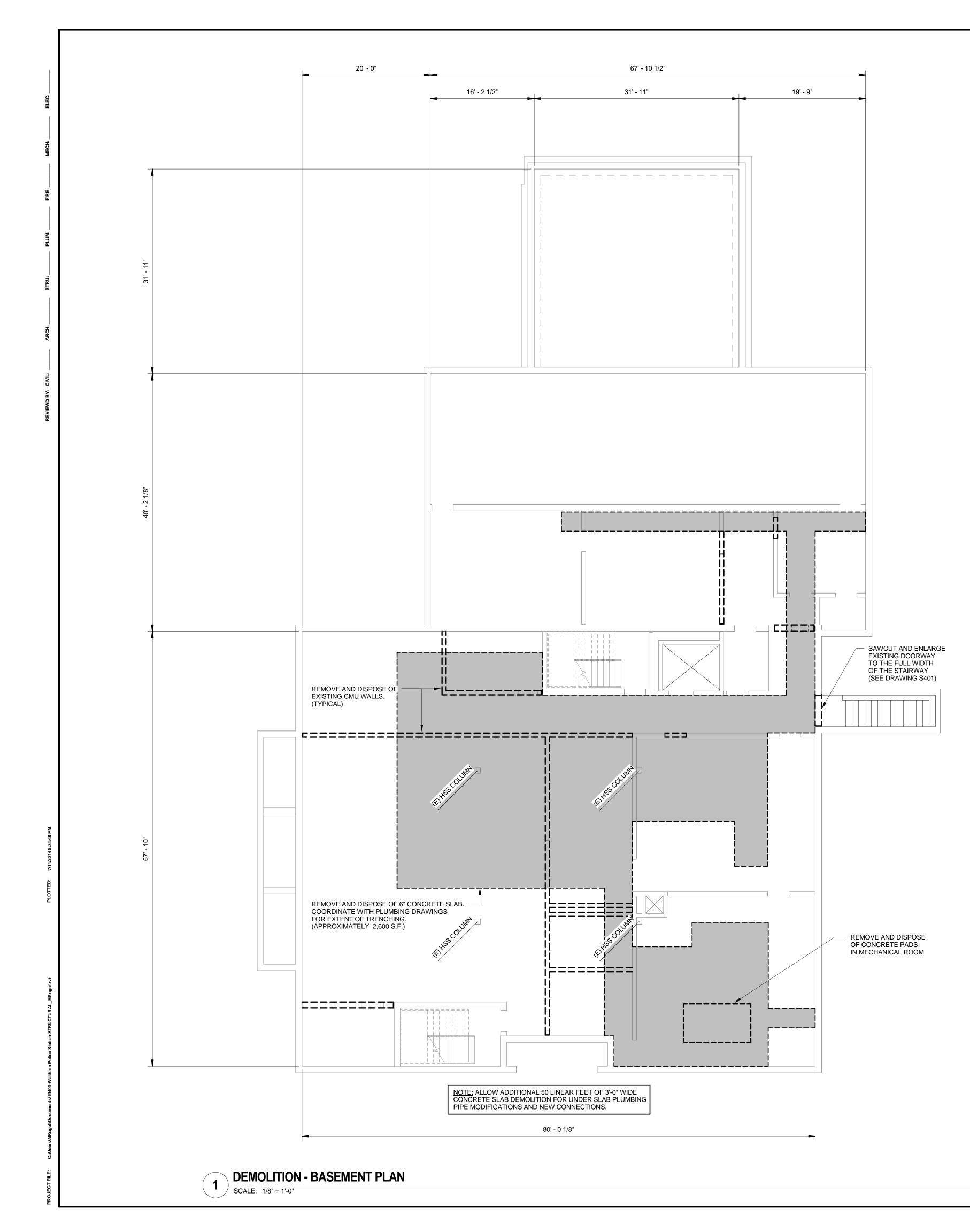
NOT TO SCALE

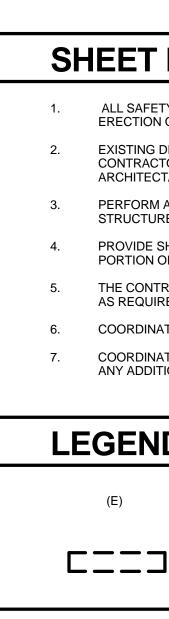
| 5                   | COR MACURE<br>Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
|---------------------|--|
| IN<br>DF<br>RE<br>Y |  |
| )F<br>IT            | REVISIONS         Number       Description       Date  |
| M                   |  |
|                     | ISSUED FOR<br>BID  |
|                     | WALTHAM<br>POLICE STATION<br>RENOVATION<br>155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
|                     | SITE PLAN<br>PROJECT NUMBER: 19401.01<br>DESIGNED BY: FC   |
|                     | DRAWN BY: RED<br>CHECKED BY:<br>DATE: July-Aug. 2016<br>SCALE: AS NOTED<br>SHEET NUMBER:<br>C101   |
|                     | SHEET <sup>2</sup> OF 157  |











## **SHEET NOTES:**

1. ALL SAFETY REGULATIONS TO BE FOLLOWED STRICTLY. METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS IS CONTRACTOR'S RESPONSIBILITY.

EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

PERFORM ALL DEMOLITION PROCEDURES WITH CARE TO AVOID DAMAGE TO ADJACENT STRUCTURES AND FINISHES. PATCH ANY DAMAGE TO MATCH EXISTING.

PROVIDE SHORING UNDER THE EXISTING JOISTS PRIOR TO CUTTING OR REMOVING OF ANY PORTION OF THE JOIST UNTIL STRUCTURAL RE-FRAMING IS COMPLETE.

THE CONTRACTOR SHALL DESIGN AND CONSTRUCT SHORING AND TEMPORARY WALLS AS REQUIRED TO PROTECT EXISTING AND NEW WORK.

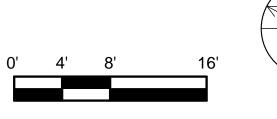
COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXTENT OF CMU WALL DEMOLITION. COORDINATE WITH ARCHITECTURAL, HVAC, ELECTRICAL AND PLUMBING DRAWINGS FOR

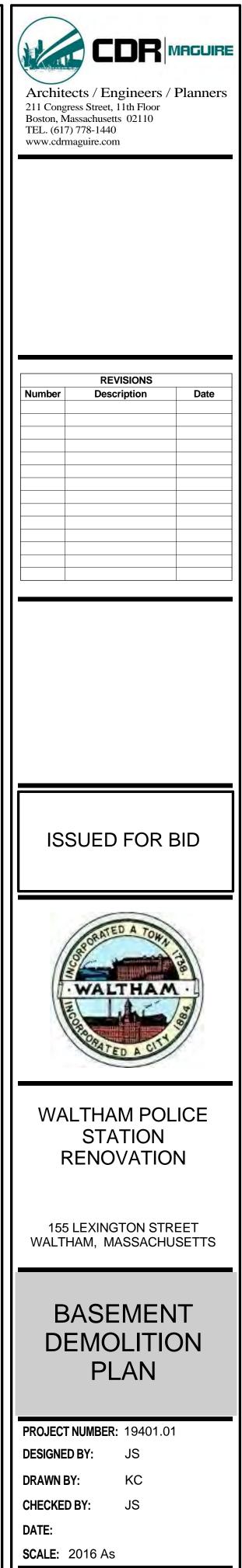
ANY ADDITIONAL OPENINGS THAT MAY NEED TO BE PROVIDED OR FILLED IN.

### LEGEND:

(E) INDICATES EXISTING MEMBER.

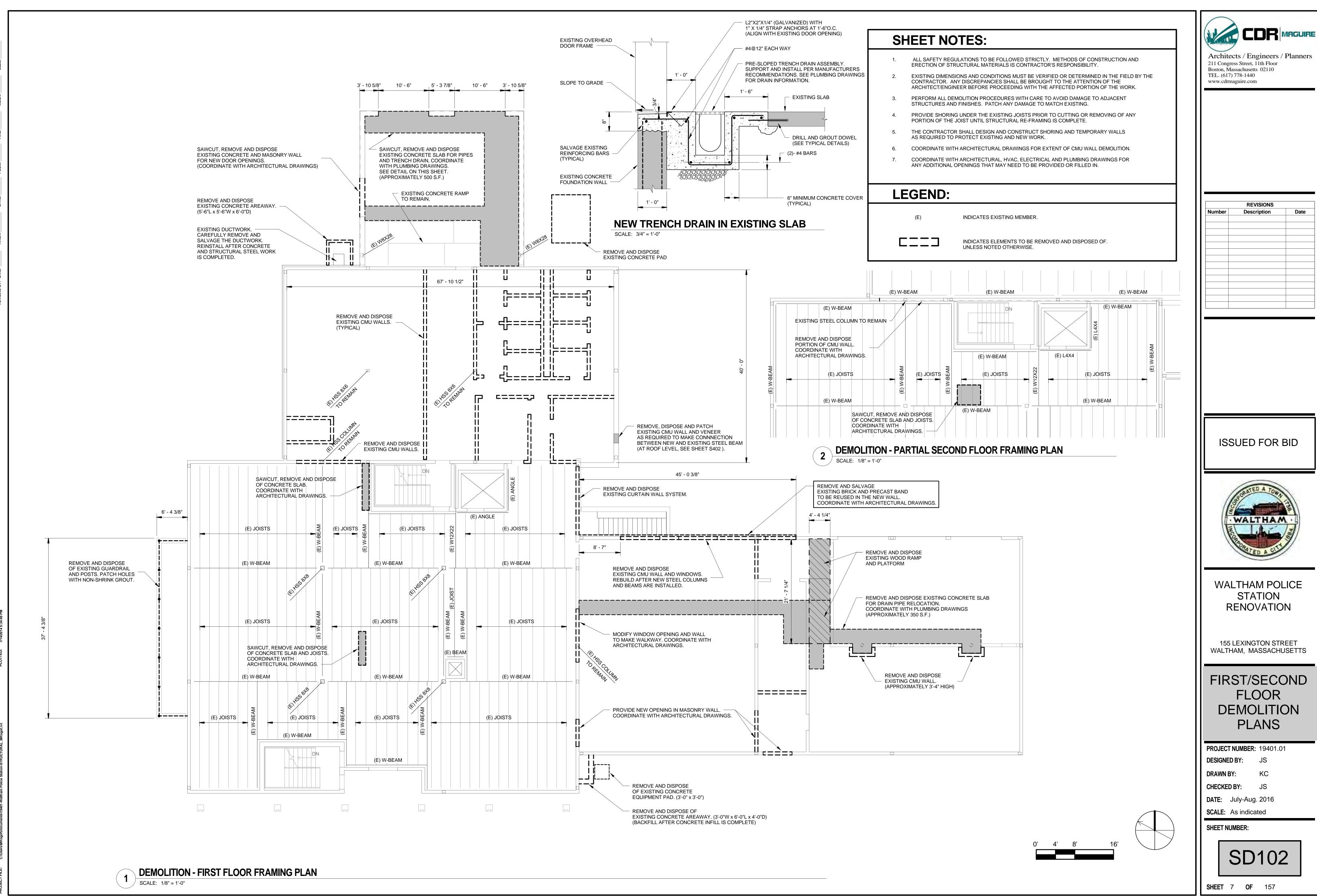
> INDICATES ELEMENTS TO BE REMOVED AND DISPOSED OF. UNLESS NOTED OTHERWISE.





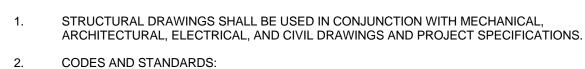
SHEET NUMBER **SD101** 

**SHEET** 6 **OF** 157



### GENERAL

6.



- A. MASSACHUSETTS STATE BUILDING CODE 8th EDITION B. ACI 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- 2. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS. D. ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- ALL SAFETY REGULATIONS SHALL BE FOLLOWED STRICTLY. METHODS OF CONSTRUCTION 3. AND ERECTION OF STRUCTURAL MATERIALS IS CONTRACTOR'S RESPONSIBILITY.
- UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED
- TYPICAL FOR ALL SIMILAR CONDITIONS. EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD 5. BY THE GENERAL CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE
- ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK. THE CONTRACTOR SHALL PROVIDE A FIRE WATCH AT ALL TIMES AT AREAS WHERE
- FIELD WELDING AND/OR BURNING OPERATIONS ARE BEING DONE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY FIRE.

### **DESIGN CRITERIA**

| 1. | SNOW LOAD:<br>GROUND SNOW LOAD<br>SNOW EXPOSURE FACTOR<br>SNOW IMPORTANCE FACTOR<br>SNOW THERMAL FACTOR<br>DESIGN ROOF SNOW LOAD                                    | Pg = 40 PSF<br>Ce = 1.0<br>Is = 1.2<br>Ct = 1.0<br>Pf = 34 PSF |   |  |
|----|---|--|---|--|
| 2. | WIND LOAD:<br>BASIC WIND SPEED:<br>WIND IMPORTANCE FACTOR:<br>WIND EXPOSURE CATEGORY:<br>BUILDING ENCLOSURE:  | 105 MPH<br>lw = 1.15<br>B<br>ENCLOSED                          |   |  |
| 3. | EARTHQUAKE DESIGN DATA:<br>MAPPED SPECTRAL RESPONSE ACCEL<br>SITE CLASS:<br>SEISMIC DESIGN CATEGORY:<br>ANALYSIS PROCEDURE USED:<br>EXISTING BUILDING FRAME SYSTEM: | C<br>C<br>EQUIVALENT L/  | Ss = 0.28,<br>ATERAL FORCE<br>EL MOMENT FRA |  |

### **FOUNDATIONS**

| 1.  | ALLOWABLE BEARING CAPACITY, 2.0 KSF.   |
|-----|--|
| 2.  | ALL EXTERIOR BUILDING FOUNDATION INVERTS SHALL BE A MINIMUM OF<br>4'-0" BELOW FINISHED GRADE FOR FROST PROTECTION, UNLESS OTHERWISE SHOWN.   |
| 3.  | COMPLETELY REMOVE ALL UNSUITABLE AND UNSATISFACTORY MATERIALS FROM BENEATH<br>SLABS-ON-GRADE, FOOTINGS, FOUNDATIONS AND UTILITIES.<br>REFER TO SPECIFICATION SECTION 312000.   |
| 4.  | REFILL ALL EXCAVATIONS FOR SLABS-ON-GRADE, FOOTINGS AND FOUNDATIONS<br>WITH ENGINEERED FILL OR SOIL MATERIAL FROM ON-SITE SOURCES MEETING<br>THE REQUIREMENTS FOR ENGINEERED FILL. REFER TO SPECIFICATION SECTION<br>312000.   |
| 5.  | ALL FILL MATERIALS WITHIN THE BUILDING AREA SHALL BE COMPACTED TO NOT<br>LESS THAN 95-PERCENT OF THE ASTM 1557 MAXIMUM DRY DENSITY.  |
| 6.  | A MINIMUM OF 12 INCHES OF COMPACTED ENGINEERED FILL SHALL BE PLACED<br>BENEATH ALL FOUNDATION WALLS, FOOTINGS AND SLAB-ON-GRADE ELEMENTS, UNLESS<br>OTHERWISE SHOWN. THE 12 INCH ENGINEERED FILL LAYER DIRECTLY BENEATH NEW<br>FOOTINGS AND SLABS SHALL BE PLACED AND COMPACTED IN TWO LIFTS OF EQUAL<br>THICKNESS. THE EXPOSED FINAL SUBGRADE SURFACE SHALL BE PROOF COMPACTED BY<br>AN OBSERVED 4 TO 6 PASSES WITH APPROVED VIBRATORY COMPACTION EQUIPMENT.<br>ANY LOOSE OR UNSUITABLE SOILS SHALL BE REMOVED AND REPLACED WITH<br>COMPACTED ENGINEERED FILL. SUBGRADE AND ENGINEERED FILL COMPACTION IN/AROUND<br>FOOTING INVERT ELEVATION SHALL BE SUBJECT TO GOOD ENGINEERING JUDGEMENT<br>RELATIVE TO EXISTING SOIL AND GROUND WATER CONDITIONS. |
| 7.  | FINAL FOOTING EARTHWORK, FINAL FOOTING EXCAVATION, SUBGRADE PROOF COMPACTION<br>AND MINIMUM 12 INCH LAYER OF COMPACTED ENGINEERED FILL PLACEMENT FOR AN<br>INDIVIDUAL COLUMN FOOTING SHALL BE INITIATED/COMPLETED IN ONE WORKING DAY.<br>PARTICULAR ATTENTION SHALL BE DIRECTED TO EARTHWORK PERFORMED ADJACENT TO<br>AND BELOW EXISTING FOOTING INVERT ELEVATION. IF SIGNIFICANT UNDERMINING OF<br>EXISTING FOOTINGS IS OBSERVED AS A RESULT OF NEW FOOTING EARTHWORK, THE<br>CONTRACTOR SHALL STOP WORK AND PROPOSE TO THE ENGINEER ALTERNATIVE<br>MEANS AND METHODS.  |
| 8.  | GROUNDWATER LEVELS SHALL BE MAINTAINED A MINIMUM OF 2'-0" BELOW THE DEEPEST EXCAVATION ELEVATION.  |
| 9.  | ALL WALLS RETAINING EARTH SHALL BE SHORED AGAINST LATERAL EARTH<br>PRESSURE UNTIL FLOOR SLABS AND WALLS ABOVE ARE IN PLACE AND<br>CONCRETE HAS ATTAINED ITS 28 DAY COMPRESSIVE STRENGTH.   |
| 10. | DO NOT PLACE CONCRETE ON FROZEN GROUND OR IN WATER. FOUNDATIONS<br>SHALL NOT BE PARTLY SUPPORTED ON ROCK AND PARTLY ON SOIL.<br>ALL NEW FOOTINGS SHALL BE SUPPORTED ON A MINIMUM 6 INCH LAYER OF<br>COMPACTED ENGINEERED FILL.   |
| 11. | DO NOT PLACE BACKFILL UNBALANCED BY MORE THAN 2'-0" ON EITHER<br>SIDE OF FOUNDATION WALLS AND PIERS, OR BY THE AMOUNT OF FINISH GRADE DIFFERENTIAL.  |
| 12. | PROVIDE TEMPORARY OR PERMANENT SUPPORTS TO PREVENT HORIZONTAL MOVEMENT OR<br>VERTICAL SETTLEMENT OF EXISTING STRUCTURES, STREETS, SOIL OR UTILITIES<br>ADJACENT TO OR ON THE PROJECT SITE. DESIGN OF SUCH SUPPORT IS THE RESPONSIBILITY<br>OF THE CONTRACTOR.  |
| 13. | PROVIDE CONTINUOUS CONTROL OF SURFACE AND SUBSURFACE WATER<br>DURING CONSTRUCTION AS NECESSARY TO PERFORM FOUNDATION WORK<br>IN THE DRY AND ON UNDISTURBED SUBGRADE MATERIAL.  |
| 14. | PROTECT FOUNDATIONS AND SLABS FROM FROST FOR A MINIMUM OF 28 DAYS.   |
| 15. | FOUNDATION CONSTRUCTION SHALL COMPLY WITH ALL OSHA REGULATIONS.  |
|     |  |
|     |  |

### DEMOI ITION

| 1. | PERFORM ALL DEMOLITION PROCEDURES WITH CARE TO AVOID DAMAGE TO ADJACENT STRUCTURAL ELEMENTS & FINISHES.   |
|----|---|
| 2. | A SAW-CUT TO A MAXIMUM DEPTH OF 1/2-INCH SHALL BE MADE ALONG<br>ALL BOUNDARIES OF CONCRETE TO BE DEMOLISHED.  |
| 3. | CONCRETE AND REINFORCING STEEL SURFACES EXPOSED BY DEMOLITION SHALL BE<br>FREE OF RUST, OIL SOLVENTS, GREASE, DIRT, DUST, BITUMEN, LOOSE PARTICLES,<br>AND OTHER FOREIGN MATTER.  |
| 4. | WHERE NEW CONCRETE IS TO BE PLACED AGAINST EXISTING SURFACES, ANY EXPOSED<br>REINFORCING BARS AND NEWLY EXPOSED CONCRETE SURFACES SHALL BE<br>THOROUGHLY CLEANED BY GRIT BLASTING OR OTHER MECHANICAL ABRASION METHODS<br>AS APPROVED BY THE ENGINEER.  |
| 5. | PROVIDE ANY SHORING NECESSARY FOR SAFETY AND PROTECTION OF EXISTING<br>ELEMENTS TO REMAIN IN ORDER TO MAINTAIN LATERAL STABILITY OF THE BUILDING<br>UNTIL ALL PERMANENT SHEARWALLS AND LATERAL BRACING ARE INSTALLED.<br>CONTRACTOR IS RESPONSIBLE TO DESIGN AND PROVIDE ANY NECESSARY SHORING. |
|    |   |

### ALL CONCRETE SHALL HAVE ULTIMATE COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED. ALL CONCRETE WORK SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301). ALL CONCRETE SUBJECT TO FREEZE-THAW SHALL BE AIR-ENTRAINED. VERIFY AIR CONTENT BEFORE PLACEMENT OF ALL CONCRETE. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 (UNLESS OTHERWISE NOTED), OR ASTM A706 WHERE DOWELS ARE INDICATED TO BE WELDED. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. MINIMUM CONCRETE COVER FROM FACE OF CONCRETE TO MAIN REINFORCING SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE: SLABS AND WALLS (NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND)......1" FACE OF WALLS AND TOP OF SLABS EXPOSED TO EARTH, WEATHER, OR IMMERSED. FOOTINGS, BOTTOM OF WALLS AND STRUCTURAL SLABS CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ... BAR PLACING SHALL CONFORM TO CONCRETE REINFORCING STEEL INSTITUTE'S "RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS". REINFORCING BARS SHALL BE DETAILED IN ACCORDANCE WITH LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315) UNLESS INDICATED OTHERWISE ON THE DRAWINGS, REBAR SPLICES SHALL BE STAGGERED WITH NOT MORE THAN 50 PERCENT OF THE REBARS SPLICED WITHIN A REQUIRED LAP LENGTH LOCATIONS OF ALL SPLICES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. REINFORCING BARS SHALL BE LAPPED ACCORDING TO SCHEDULE BELOW 10. UNLESS INDICATED OTHERWISE ON THE DRAWINGS CONCRETE COVER CONCRETE (PSI) #7 NOTES a. LENGTHS ARE BASED ON fy = 60 KSI, NORMAL WEIGHT CONCRETE, UNCOATED BARS, WITH SPACING OVER 6 BAR DIAMETERS. b. LAP SPLICE LENGTHS ARE FOR CLASS "B" SPLICES. CLASS "A" SPLICES (77% OF THE TABLE VALUES) MAY BE USED WHERE APPROVED BY THE ENGINEER. c. BARS THAT HAVE OVER 12" OF FRESH CONCRETE PLACED BELOW THE LAPS SHALL HAVE THEIR SPLICE AND DEVELOPMENT LENGTHS MULTIPLIED BY 1.3. d. MINIMUM DEVELOPMENT LENGTHS ARE 77% OF THE TABLE VALUES. 11. WELDED WIRE FABRIC SHALL BE LAPPED 2 MESHES AT SIDES AND ENDS. 12. ALL EXPOSED CORNERS OF CONCRETE SHALL HAVE A 3/4" x 45 DEGREE CHAMFER, UNLESS OTHERWISE NOTED. PROVIDE WELDED WIRE FABRIC IN ALL SLABS-ON-GRADE, CONCRETE SIDEWALKS AND RAMPS AS FOLLOWS UNLESS SHOWN OTHERWISE: 4" SLABS-ON-GRADE 6x6-W1.4xW1.4 5" SLABS-ON-GRADE 6x6-W2.9xW2.9 14. SLABS-ON-GRADE SHALL BE PLACED IN ALTERNATE STRIPS BOUNDED BY CONSTRUCTION AND CONTROL JOINTS. ALLOW 72 HOURS TO ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS. MAXIMUM LENGTH OF CONCRETE WALL POUR SHALL BE 40 FEET. CONSTRUCTION JOINTS SHALL NOT BE LOCATED AT ANY CORNER OF WALLS. CONCRETE SHALL BE POURED IN LEVEL COURSES FULL HEIGHT. CONCRETE WALLS SHALL BE PLACED IN ALTERNATE SECTIONS BETWEEN VERTICAL CONSTRUCTION JOINTS. 16. FOR LOCATIONS OF VENTS, PIPES, OPENINGS, INSERTS, HANGERS, EQUIPMENT PADS, SUPPORTS, AND FLOOR DRAINS, CONSULT MECHANICAL DRAWINGS. 17. CUT NO BARS AND OMIT NO BARS BECAUSE OF SLEEVE OR DUCT OPENINGS IN FLOORS OR WALLS. BARS MAY BE MOVED ASIDE WITHOUT CHANGING THE DISTANCE FROM THE FACE OF CONCRETE. BEND NO BARS IN FIELD WITHOUT APPROVAL OF THE ENGINEER. CONCRETE SLABS, INCLUDING CONCRETE PLACED ON STEEL DECK, SHALL 18. BE PLACED SO THAT THE SLAB THICKNESS IS AT NO POINT LESS THAN THAT INDICATED ON THE DRAWINGS. THIS WILL REQUIRE THAT THE SLAB NOT BE CAST DEAD LEVEL WHERE SUPPORTING BEAMS, GIRDERS, OR TRUSSES HAVE AN UPWARD CAMBER. PROVIDE ADDITIONAL CONCRETE AS REQUIRED TO COMPENSATE FOR DEFLECTIONS OF STEEL BEAMS AND DECK. PROVIDE THE NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY 19. IN POSITION. MINIMUM REQUIREMENTS SHALL BE: HIGH CHAIRS, 4'-0" O.C. WITH CONTINUOUS #5 SUPPORT BAR; SLAB BOLSTERS, CONTINUOUS AND 3'-6" O.C.; BEAM BOLSTERS, 5'-0" O.C. WHERE REINFORCEMENT IS NOT SHOWN ON DRAWINGS, PROVIDE REINFORCEMENT 20. IN ACCORDANCE WITH THE NEAREST APPLICABLE DETAILS AS DETERMINED BY THE ENGINEER. IN NO CASE SHALL REINFORCEMENT BE LESS THAN THE MINIMUM REINFORCEMENT PERMITTED BY THE APPLICABLE CODES, AND NOT LESS THAN THE FOLLOWING: (A) BEAM STIRRUPS: #3 @ 12" O.C.

- 22. IN THE SLAB WITHOUT APPROVAL OF THE ENGINEER.

CONCRETE

6

| E ON THE BRAWINGS. |      |      |            |      |
|--------------------|------|------|------------|------|
|                    | 1"   |      | 2" OR MORE |      |
|                    | 3000 | 4000 | 3000       | 4000 |
|                    | 22"  | 19"  | 22"        | 19"  |
|                    | 34"  | 29"  | 27"        | 23"  |
|                    | 44"  | 37"  | 32"        | 28"  |
|                    | 54"  | 54"  | 42"        | 35"  |

(B) BEAM STIRRUPS SUPPORTS: (1)- #5 @ EACH STIRRUP BEND (C) FACE REINFORCEMENT IN BEAMS OR PORTIONS OF BEAMS: #4@12" EACH FACE (D) STRUCTURAL SLABS: 0.0020 x GROSS CONCRETE AREA IN EACH DIRECTION (E) CONCRETE WALLS: 0.0025 x GROSS CONCRETE AREA IN EACH DIRECTION

21. DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN BARS, UNLESS OTHERWISE NOTED. NO PIPES, CONDUITS OR SIMILAR NON-STRUCTURAL ELEMENTS SHALL BE EMBEDDED

### MASONRY

- ALL MASONRY CONSTRUCTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (ACI 530) AND TO "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1)
- ALL MASONRY UNITS SHALL CONFORM TO ASTM C90 TYPE 1, MINIMUM F'm = 2000 PSI. 2.
- ALL GROUT SHALL CONFORM TO ASTM C476, FINE OR COARSE GROUT, MINIMUM COMPRESSIVE STRENGTH, 3000 PSI.
- ALL MORTAR FOR CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C270, TYPE S.
- MORTAR FOR BRICK VENEER SHALL CONFORM TO ASTM C270, TYPE N. 5.
- REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60, DEFORMED. 6.
- ALL CORES OF MASONRY CONTAINING REINFORCING BARS AND ALL BOND BEAMS SHALL BE FILLED SOLID WITH GROUT. VERTICAL BARS SHALL BE LOCATED AT THE CENTER OF WALL. FILLING CORES AND BOND BEAMS WITH MORTAR IS STRICTLY PROHIBITED. EXERCISE CARE TO KEEP CORES FREE FROM MORTAR DROPPINGS.
- VERTICAL AND HORIZONTAL REINFORCING SHALL BE SECURELY HELD IN PROPER 8. ALIGNMENT AND POSITION DURING GROUTING OPERATIONS BY USING HOT-DIPPED GALVANIZED REBAR POSITIONERS.
- GROUT SHALL BE PLACED USING LOW-LIFT GROUTING PROCEDURES CONFORMING TO ACI 530 REQUIREMENTS. THE MAXIMUM GROUT LIFT SHALL NOT EXCEED 4'-8". ALTERNATE GROUT POURS 1 1/2" BELOW TOP COURSE OF POUR. REINFORCING SHALL BE SPLICED A MINIMUM OF 48 BAR DIAMETERS.
- REINFORCEMENT FOR CONCRETE MASONRY BOND BEAMS SHALL BE 10. (2)- #5 BARS CONTINUOUS, UNLESS OTHERWISE NOTED.
- 11. WHERE STEEL BEAMS, STEEL JOISTS, OR LINTELS ARE SUPPORTED ON CONCRETE MASONRY. THE MASONRY SHALL BE FILLED SOLID WITH GROUT CONTINUOUSLY FOR TWO COURSES UNDER BEAM, JOIST, OR LINTEL. FILL AFTER STEEL HAS BEEN ERECTED AND PLUMBED.
- ALL BEAMS SUPPORTED ON MASONRY SHALL BEAR ON A BEARING PLATE 12. 6 INCHES x 1/2 INCH x (FLANGE WIDTH PLUS 4 INCHES) WITH (2)- 1/2" DIAMETER HEADED ANCHOR RODS, UNLESS SHOWN OTHERWISE.
- 13. WHEN STEEL BEAMS RUN INSIDE MASONRY WALLS, THE BEAMS SHALL BE INSTALLED FIRST, FOLLOWED BY MASONRY INSTALLATION FROM THE BOTTOM UP (THE WALL AT THE LOWER FLOOR INSTALLED BEFORE THE WALL ABOVE).
- 14. MINIMUM VERTICAL WALL REINFORCEMENT SHALL BE, UNLESS OTHERWISE NOTED: 6" CMU: #4 @ 32" ON CENTER 8" CMU UP TO 10'-0" UNSUPPORTED LENGTH: #5 @ 32" ON CENTER 8" CMU UP TO 20'-0" UNSUPPORTED LENGTH: #5 @ 16" ON CENTER 12" CMU: #6 @ 8" ON CENTER
  - PROVIDE ADDED BARS AT WALL ENDS, AND CORNERS AS SHOWN. PROVIDE MATCHING DOWELS, LAP 40 BAR DIAMETERS TO VERTICAL BARS.
- PROVIDE CUT OUTS IN EXISTING MASONRY WALL FOR THE NEW DUCT WORK. 15. COORDINATE WITH MECHANICAL AND PLUMBING DRAWINGS.

### STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC); "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS & BRIDGES" (AISC): AND "STRUCTURAL WELDING CODE - STEEL" (AWS D1.1).
- STRUCTURAL STEEL SHALL BE DETAILED IN ACCORDANCE WITH 2. "DETAILING FOR STEEL CONSTRUCTION" (AISC).
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:

| (A) ROLLED BEAM SHAPES  | ASTM A992 GRADE 50 (Fy=50 KSI)              |
|-------------------------|---|
| (B) ANGLES AND PLATES   | ASTM A36 (Fy = 36 KSI)                      |
| (C) TUBES               | ASTM A500 GRADE B (Fy = 46 KSI)             |
| (D) PIPES               | ASTM A501; OR ASTM A53, TYPE E OR S GRADE B |
| (E) ANCHOR RODS         | ASTM F1554-99 (36 KSI MIN.)                 |
| (F) HIGH STRENGTH BOLTS |   |
| (G) THREADED ROD        | ASTM A449 GRADE 81 FOR 1"Ø AND UNDER        |
|                         | ASTM A449 GRADE 92 FOR OVER 1"Ø             |

ANCHOR BOLTS, LEVELING PLATES, AND BEARING PLATES SHALL BE SET BY TEMPLATES.

- BOLTED CONNECTIONS SHALL BE AS FOLLOWS:

5.

(A) MINIMUM BOLT DIAMETER - 3/4"; TWO BOLTS, MINIMUM. (B) STANDARD, OVERSIZED, OR HORIZONTAL SHORT SLOTTED HOLES IN WEBS

- OF BEAMS. (C) SHEAR CONNECTIONS FOR MOMENT CONNECTED MEMBERS - FRICTION TYPE HIGH
- STRENGTH BOLTS IN SINGLE SHEAR. (D) SHEAR CONNECTIONS FOR OTHER MEMBERS - SIMPLE SHEAR CONNECTIONS
- WITH EITHER FRICTION TYPE HIGH STRENGTH BOLTS IN SINGLE SHEAR OR BEARING TYPE HIGH STRENGTH BOLTS (THREADS INCLUDED IN SHEAR PLANE)
- IN SINGLE OR DOUBLE SHEAR. (E) SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION PER AISC REQUIREMENTS FOR "UNRESTRAINED MEMBERS."
- BEAM CONNECTIONS, UNLESS NOTED OTHERWISE, SHALL PROVIDE CONNECTION CAPACITY AS FOLLOWS:
  - (A) NON-COMPOSITE BEAMS: SUPPORT A REACTION "R" EQUAL TO 1/2 THE TOTAL UNIFORM LOAD CAPACITY OF BEAM FOR A GIVEN SHAPE, SPAN, AND GRADE OF STEEL PER "ALLOWABLE LOADS ON BEAMS" PART 2 AISC MANUAL OF STEEL CONSTRUCTION, 9TH EDITION.
  - (B) ADD TO "R" THE LOADS OR REACTIONS OF MEMBERS SUPPORTED BY THE BEAM NEAR SUPPORTS AND FORCES FROM LATERAL BRACING MEMBERS.
- WELDED CONNECTIONS SHALL BE MADE BY AWS CERTIFIED WELDERS USING FILLER METAL CONFORMING TO E70XX WITH LOW HYDROGEN.
- STRUCTURAL STEEL ENCASED IN MASONRY SHALL BE COVERED WITH MASTIC COATING 8. PER SPECIFICATIONS.
- NO FIELD CUTTING OF STRUCTURAL STEEL OR FIELD MODIFICATIONS OF STRUCTURAL STEEL SHALL BE DONE WITHOUT PRIOR WRITTEN APPROVAL BY ENGINEER FOR EACH SPECIFIC CASE.
- MOMENT CONNECTIONS INDICATED IN PLANS SHALL BE DESIGNED FOR FULL MOMENT 10. CAPACITY OF MEMBER PER ASCE-7 AND AISC. (INCLUDE SEISMIC PROVISION). STEEL FABRICATOR MUST PROVIDE CALCULATIONS AND SHOP DETAILS FOR APPROVAL PREPARED AND SIGNED BY A STRUCTURAL ENGINEER REGISTERED IN MASSACHUSETTS.
- GENERAL CONTRACTOR SHALL COAT ALL STEEL COLUMNS AND BASE PLATES BELOW 11. TOP OF SLABS WITH ASPHALTIC PAINT. PRIOR TO POURING BOX OUT CONCRETE.
- 12. ALL EXPOSED EXTERIOR STEEL FRAMING SHALL BE HOT DIP GALVANIZED PER ASTM A123.

## **METAL DECK**

- STEEL DECK SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO ASTM A653. GRADE 33 OR HIGHER, TYPE B. BEFORE FORMING, SHEETS SHALL BE COATED WITH ZINC COATING CONFORMING TO ASTM A653, G-90 COATING.
- BEAR DECK A MINIMUM OF 2" ON STEEL FRAMING AND 4" ON MASONRY. WHEN TWO UNITS ABUT, WELD BOTH TO THE SUPPORT.

SCREW OR WELD ALL AROUND TO EACH CELL.

- STEEL DECK UNITS SHALL SPAN THREE OR MORE SUPPORTS WHERE POSSIBLE. SINGLE SPAN DECK UNITS ARE NOT ACCEPTABLE.
- ROOF DECK UNITS SHALL BE WELDED AT ALL SUPPORTS WITH 5/8" DIAMETER FUSION WELDS AT EACH DECK VALLEY (6" O.C. MAX.). SIDE LAPS SHALL BE FASTENED IN THE FIELD WITH #10 TEK SCREWS AT 12" O.C. MAXIMUM AND 6" O.C. IN THE CORNERS AND EDGE STRIP ZONE. (EDGE STRIP ZONE IS DEFINED AS EDGE STRIP AREA WITH A WIDTH OF 10 PERCENT OF LEAST HORIZONTAL DIMENSION OR 40 PERCENT OF EAVE HEIGHT, WHICH EVER IS SMALLER, BUT NOT LESS THAN 4 PERCENT OF LEAST HORIZONTAL DIMENSION OR 3 FEET)
- FLOOR DECK UNITS SHALL BE WELDED AT ALL SUPPORTS WITH 5/8" DIAMETER FUSION WELDS SPACED AT EACH DECK VALLEY. SIDE LAPS SHALL BE FASTENED WITH #10 TEK SCREWS AT 2'-0" O.C. MAXIMUM.
- NOTHING SHALL BE HUNG FROM THE METAL DECK, UNLESS APPROVED BY THE ENGINEER. ALL OPENINGS IN METAL DECK WILL REQUIRE ADDITIONAL FRAMING AS SHOWN
- ON THE DRAWINGS. FOR DECK OPENINGS OF 13" OR LESS, NOT ADJACENT TO SUPPORTS, PLACE A 14 GAGE SHEET ON TOP OF THE DECK (OVERLAP THE OPENING A MINIMUM OF 6 INCHES ON ALL SIDES).

## **MECHANICAL EQUIPMENT SUPPORTS**

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL INDICATING LOCATION, FRAMING, AND SUPPORT DETAILS OF ALL EQUIPMENT, INCLUDING DIMENSIONS, DETAILS, AND OPERATING AND DESIGN LOADS. NO EQUIPMENT SHALL BE SET IN PLACE WITHOUT SUCH APPROVAL.

### **STEEL JOISTS**

- GRADE OF STEEL, DESIGN, FABRICATION, AND ERECTION OF K-SERIES STEEL JOISTS SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS, K-SERIES" AND "RECOMMENDED CODE OF STANDARD PRACTICE FOR STEEL JOISTS", BOTH ADOPTED BY STEEL JOIST INSTITUTE.
- GRADE OF STEEL, DESIGN, FABRICATION, AND ERECTION OF LH-SERIES AND DLH-SERIES STEEL JOISTS SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS LH-SERIES AND DEEP LONGSPAN STEEL JOISTS, DLH-SERIES, AND "RECOMMENDED CODE OF STANDARD PRACTICE FOR STEEL JOISTS," BOTH ADOPTED BY STEEL JOIST INSTITUTE.
- WELD JOISTS TO STRUCTURAL STEEL SHAPE AND PLATE SUPPORTS WITH 2" OF 1/8" FILLET WELDS EACH SIDE OF JOISTS, UNLESS NOTED OTHERWISE.
- ROOF JOISTS AND THEIR CONNECTIONS SHALL BE DESIGNED FOR A NET UPLIFT LOAD OF 25 LBS. PER SQUARE FOOT. PROVIDE UPLIFT BRIDGING AT FIRST PANEL POINT OF ALL ROOF JOISTS.
- ROOF JOISTS SHALL SUPPORT AN ADDITIONAL 300 LB CONCENTRATED LOAD CONCURRENT WITH LIVE LOAD AT ANY PANEL POINT. THE CONTRACTOR SHALL REINFORCE THE JOIST FOR ANY CONCENTRATED LOAD OF MORE THAN 100 POUNDS PER THE TYPICAL DETAILS.
- ROOF JOIST CONNECTIONS SHALL BE DESIGNED TO TAKE AND TRANSFER 600 LBS. LATERAL FORCE PER CONNECTION. (PERPENDICULAR TO LENGTH OF JOIST)

## LINTELS AT DOORS AND WINDOWS

- FOR ALL OPENINGS IN INTERIOR AND EXTERIOR CMU WALLS UP TO 6'-4" WIDE, CMU LINTEL BEAMS WITH (2)- #5 BARS AND 8" MINIMUM END BEARING SHALL BE USED. UNLESS OTHERWISE NOTED.
- FOR ALL OPENINGS IN INTERIOR AND EXTERIOR BRICK WALLS. PROVIDE LINTEL ANGLES FOR EACH 4 INCH WALL THICKNESS AS FOLLOWS: (LINTELS CONSISTING OF MORE THAN ONE ANGLE SHALL BE BOLTED OR WELDED TOGETHER) SPANS UP TO 5'-0" L4" X 3 1/2" X 5/16" WITH 6" END BEARING

L5" X 3 1/2" X 5/16"

L6" X 4" X 3/8"

WITH 8" END BEARING

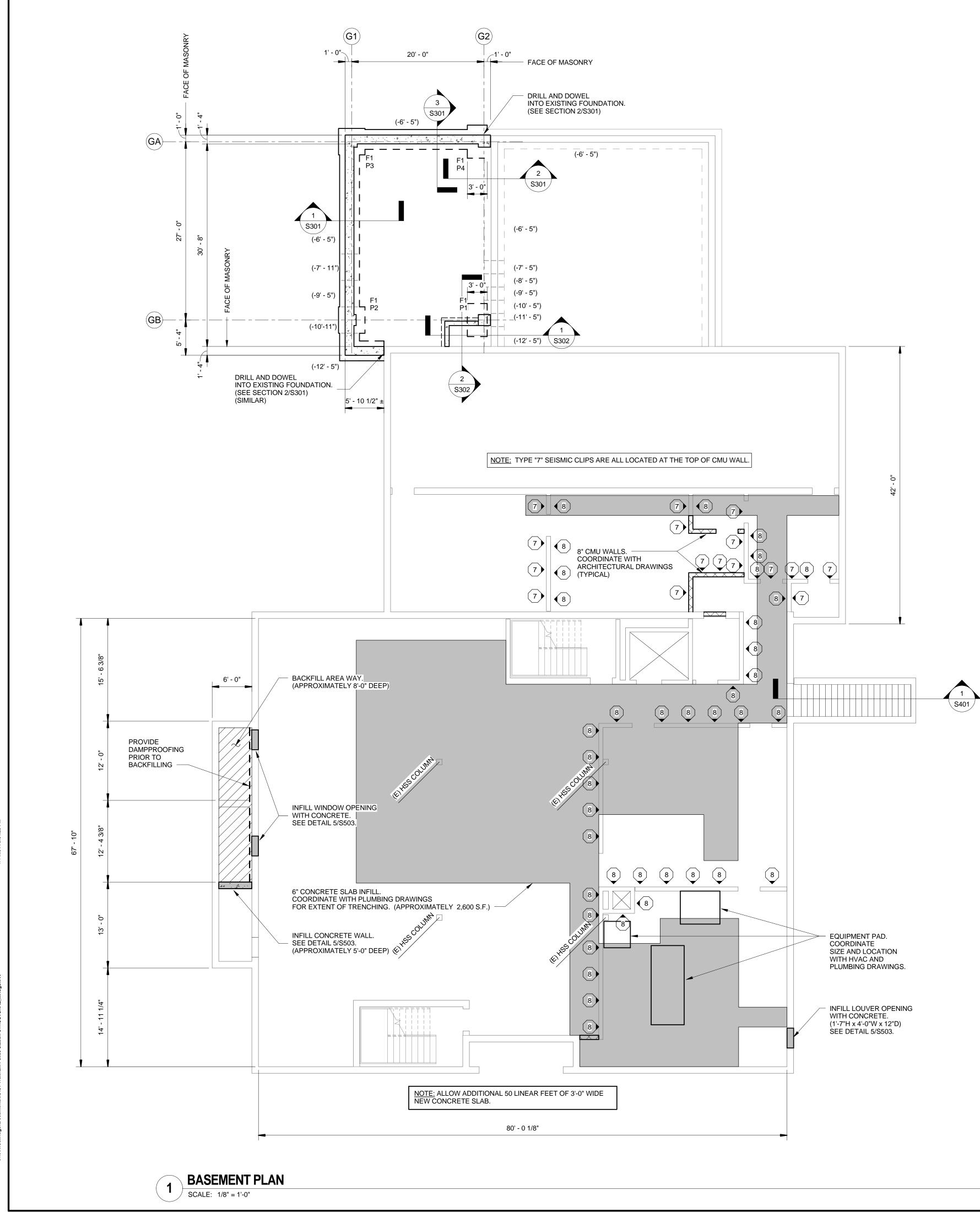
WITH 10" END BEARING

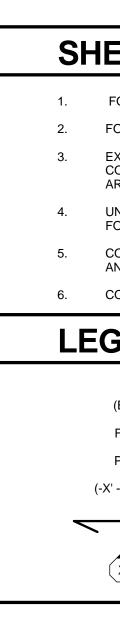
- SPANS 5'-1" TO 7'-0"
- SPANS 7'-1" TO 8'-0"
- SPANS 8'-1" AND LARGER
  - W8X24 & 5/16" PLATE WELDED TOGETHER WITH 10" END BEARING
- ALL STEEL LINTELS EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.

## **POST INSTALLED ANCHORS**

| POST-INSTALLED AN<br>OR APPROVED EQU | NCHORS SHALL BE OF THE TYPE AND SIZE SHOWN ON THE DRAWINGS,<br>AL.  |
|--------------------------------------|---|
|                                      | ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS,<br>TENTION TO CLEANING OF HOLES TO ASSURE DEVELOPMENT<br>GTH.   |
|                                      | L ARRANGE FOR SITE VISITS BY THE ANCHOR MANUFACTURER<br>DICALLY DURING CONSTRUCTION TO REVIEW INSTALLATION PRACTICES.   |
| HILTI HIT HY-70 IN O                 | OR ALL POST-INSTALLED ANCHORS IN CONCRETE/SOLID CMU AND<br>LLOW CMU, UNLESS NOTED OTHERWISE.<br>ISTURB POST-INSTALLED ANCHORS UNTIL EPOXY GROUT IS FULLY CURED. |
|                                      | O THE PROPER "STANDARD" EMBEDMENT DEPTH AS PUBLISHED<br>JRER'S LITERATURE EXCEPT AS SHOWN OTHERWISE ON THE DRAWINGS.  |
| EMBED REBAR DOW<br>ON THE DRAWINGS:  | ELS TO THE FOLLOWING DEPTHS UNLESS SHOWN OTHERWISE  |
| BAR SIZE                             | MINIMUM EMBEDMENT DEPTH   |
| #4                                   | 6"  |
| #5<br>#6                             | 9"<br>9 1/2"  |
| POST-INSTALLED AN                    | NCHORS SHALL BE FIELD TESTED AS FOLLOWS:  |
|                                      |   |

| CCR MAGUIRE<br>Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
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| REVISIONS           Number         Description         Date   |
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| WALTHAM POLICE<br>STATION<br>RENOVATION   |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| GENERAL<br>NOTES  |
| PROJECT NUMBER: 19401.01<br>DESIGNED BY: JS   |
| DRAWN BY: KC  |
| CHECKED BY: JS<br>DATE: July-Aug. 2016  |
| SCALE: 12" = 1'-0"  |
| SHEET NUMBER:   |
| S001  |
|   |
| <b>SHEET</b> 8 <b>OF</b> 157  |





## **SHEET NOTES:**

1. FOR GENERAL NOTES, SEE DRAWING S001.

2. FOR TYPICAL DETAILS, SEE DRAWINGS S501 - S506.

EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

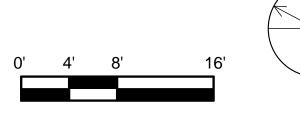
UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS. COORDINATE WITH ARCHITECTURAL, HVAC, ELECTRICAL AND PLUMBING DRAWINGS FOR

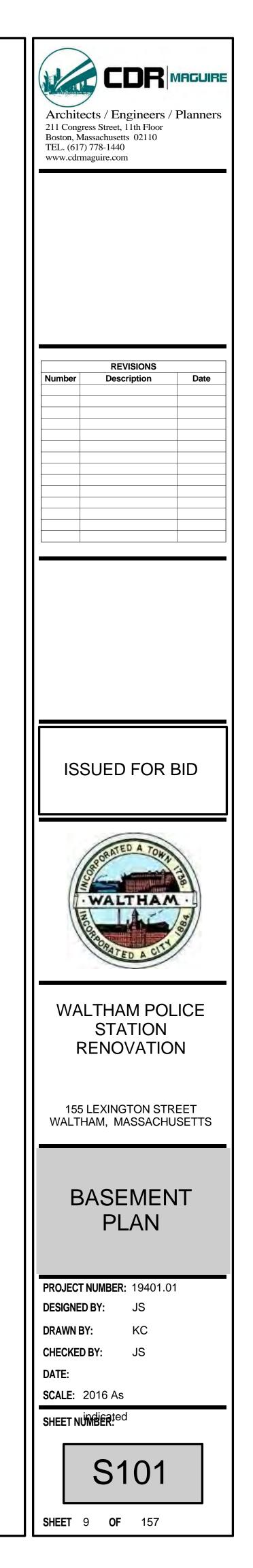
ANY OPENINGS THAT MAY BE REQUIRED.

6. COORDINATE ALL CMU WALL LOCATIONS WITH ARCHITECTURAL DRAWINGS.

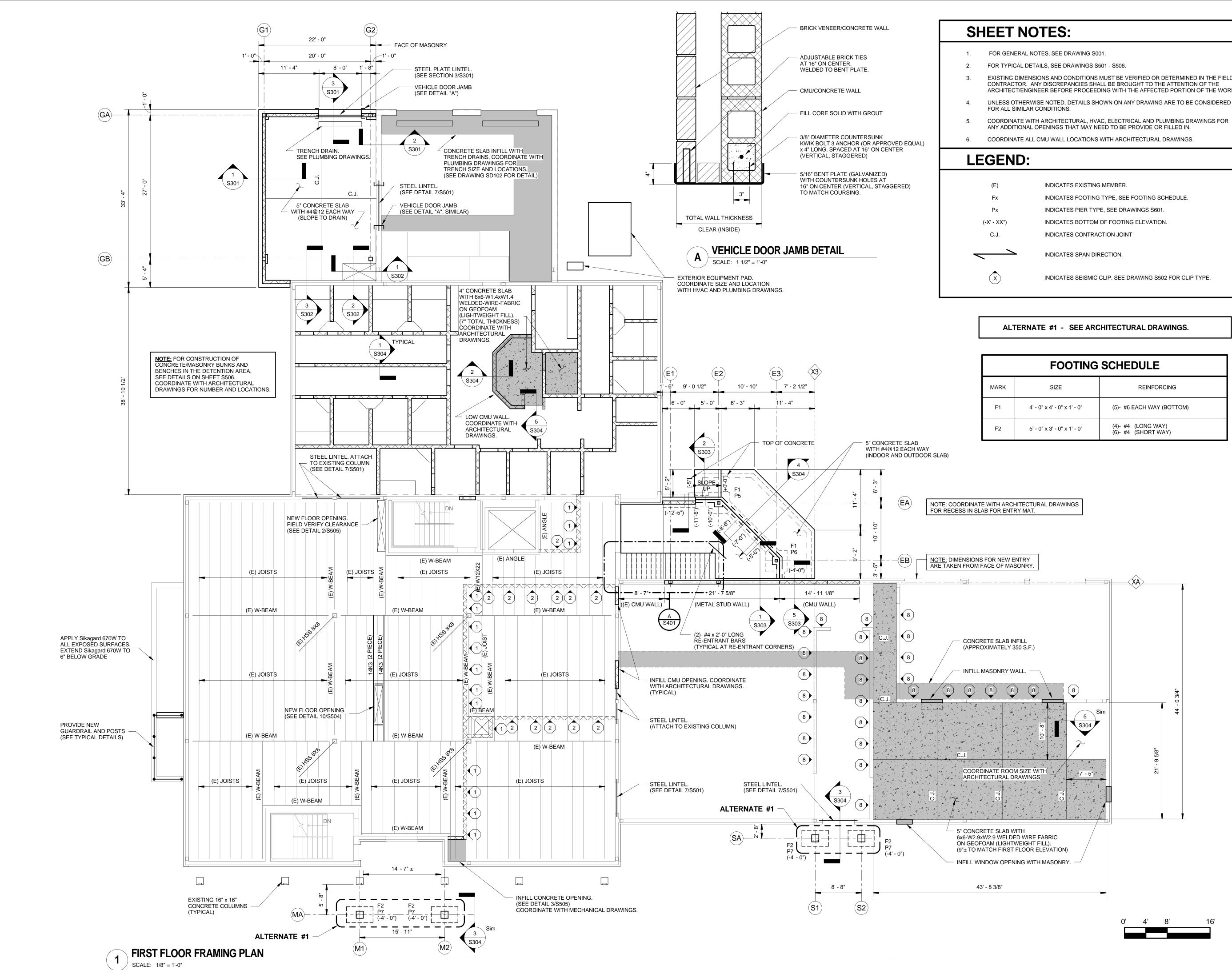
### LEGEND:

| (E)       | INDICATES EXISTING MEMBER.                                    |
|-----------|---|
| Fx        | INDICATES FOOTING TYPE, SEE FOOTING SCHEDULE ON DRAWING S102. |
| Px        | INDICATES PIER TYPE, SEE DRAWINGS S601.                       |
| K' - XX") | INDICATES BOTTOM OF FOOTING ELEVATION.                        |
|           | INDICATES SPAN DIRECTION.                                     |
| x         | INDICATES SEISMIC CLIP. SEE DRAWING S502 FOR CLIP TYPE.       |









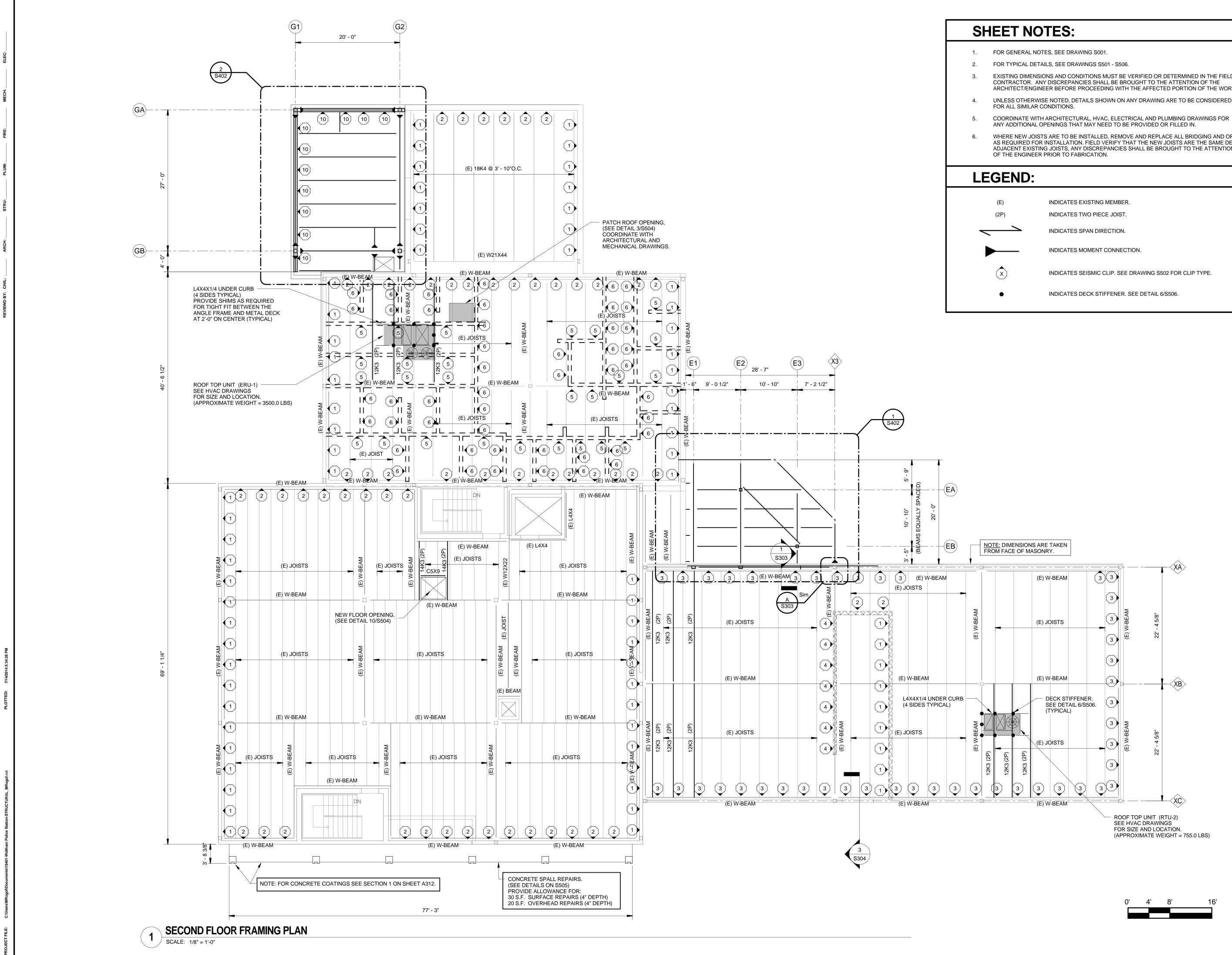
EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL

| (E)       | INDICATES EXISTING MEMBER.                    |
|-----------|---|
| Fx        | INDICATES FOOTING TYPE, SEE FOOTING SCHEDULE. |
| Px        | INDICATES PIER TYPE, SEE DRAWINGS S601.       |
| (' - XX") | INDICATES BOTTOM OF FOOTING ELEVATION.        |
| C.J.      | INDICATES CONTRACTION JOINT                   |
|           | INDICATES SPAN DIRECTION.                     |
|           |   |

16'





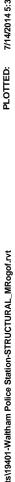
EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD BY THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

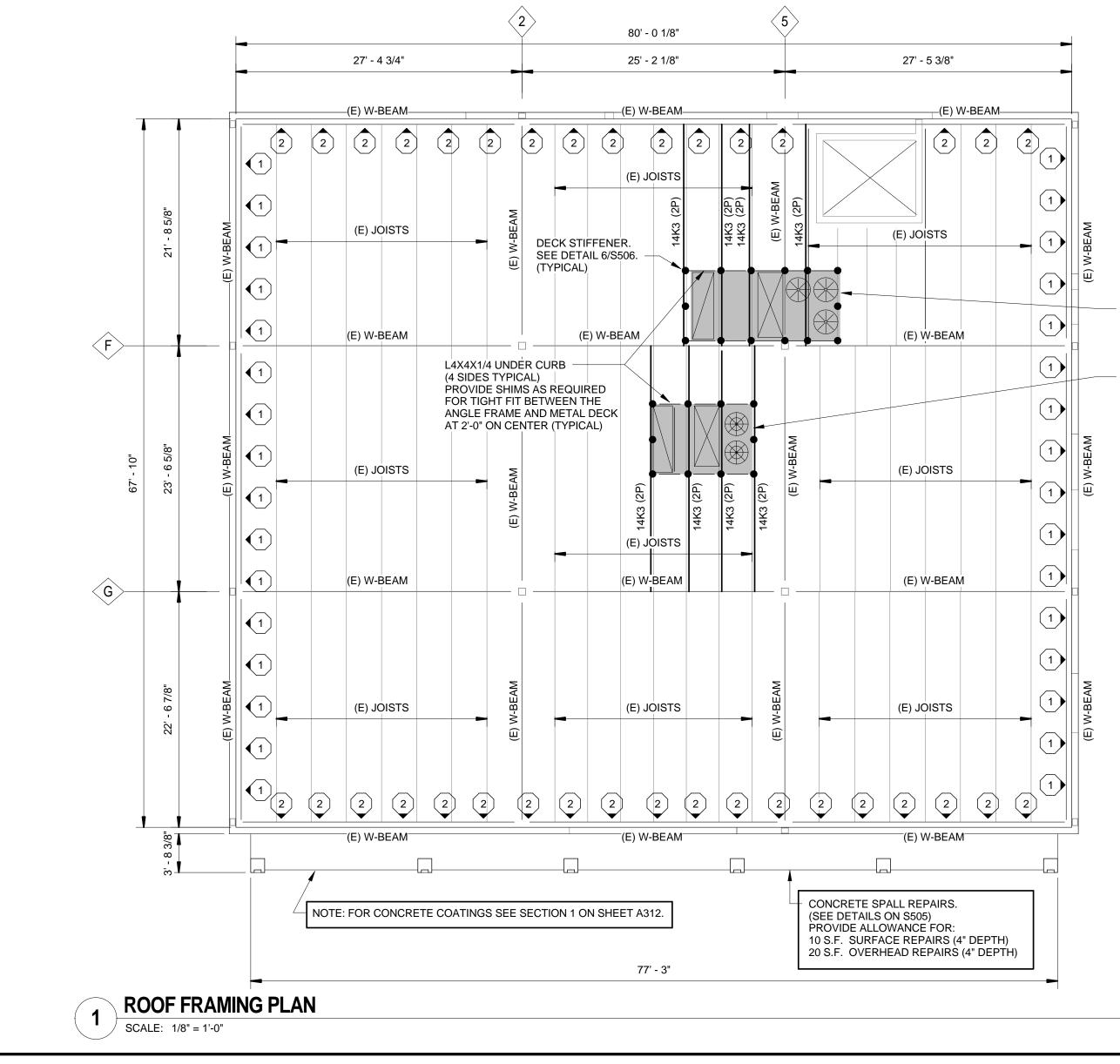
UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL

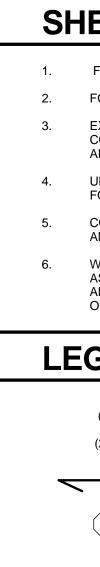
WHERE NEW JOISTS ARE TO BE INSTALLED, REMOVE AND REPLACE ALL BRIDGING AND OR BRACING AS REQUIRED FOR INSTALLATION. FIELD VERIFY THAT THE NEW JOISTS ARE THE SAME DEPTH AS ADJACENT EXISTING JOISTS, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION

| (E)      | INDICATES EXISTING MEMBER.                              |
|----------|---|
| (2P)     | INDICATES TWO PIECE JOIST.                              |
|          | INDICATES SPAN DIRECTION.                               |
| <u> </u> | INDICATES MOMENT CONNECTION.                            |
| X        | INDICATES SEISMIC CLIP. SEE DRAWING S502 FOR CLIP TYPE. |
| •        | INDICATES DECK STIFFENER. SEE DETAIL 6/S506.            |
|          |   |









ROOF TOP UNIT (RTU-1)
 SEE HVAC DRAWINGS
 FOR SIZE AND LOCATION.
 (APPROXIMATE WEIGHT = 4220.0 LBS)

ROOF TOP UNIT (RTU-3)
 SEE HVAC DRAWINGS
 FOR SIZE AND LOCATION.
 (APPROXIMATE WEIGHT = 2129.0 LBS)

## SHEET NOTES:

1. FOR GENERAL NOTES, SEE DRAWING S001.

2. FOR TYPICAL DETAILS, SEE DRAWINGS S501 - S506.

3. EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

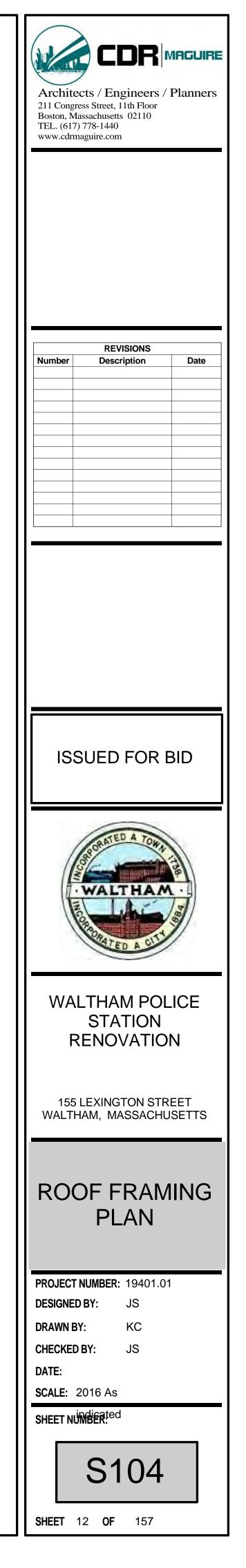
COORDINATE WITH ARCHITECTURAL, HVAC, ELECTRICAL AND PLUMBING DRAWINGS FOR ANY ADDITIONAL OPENINGS THAT MAY NEED TO BE PROVIDED OR FILLED IN.

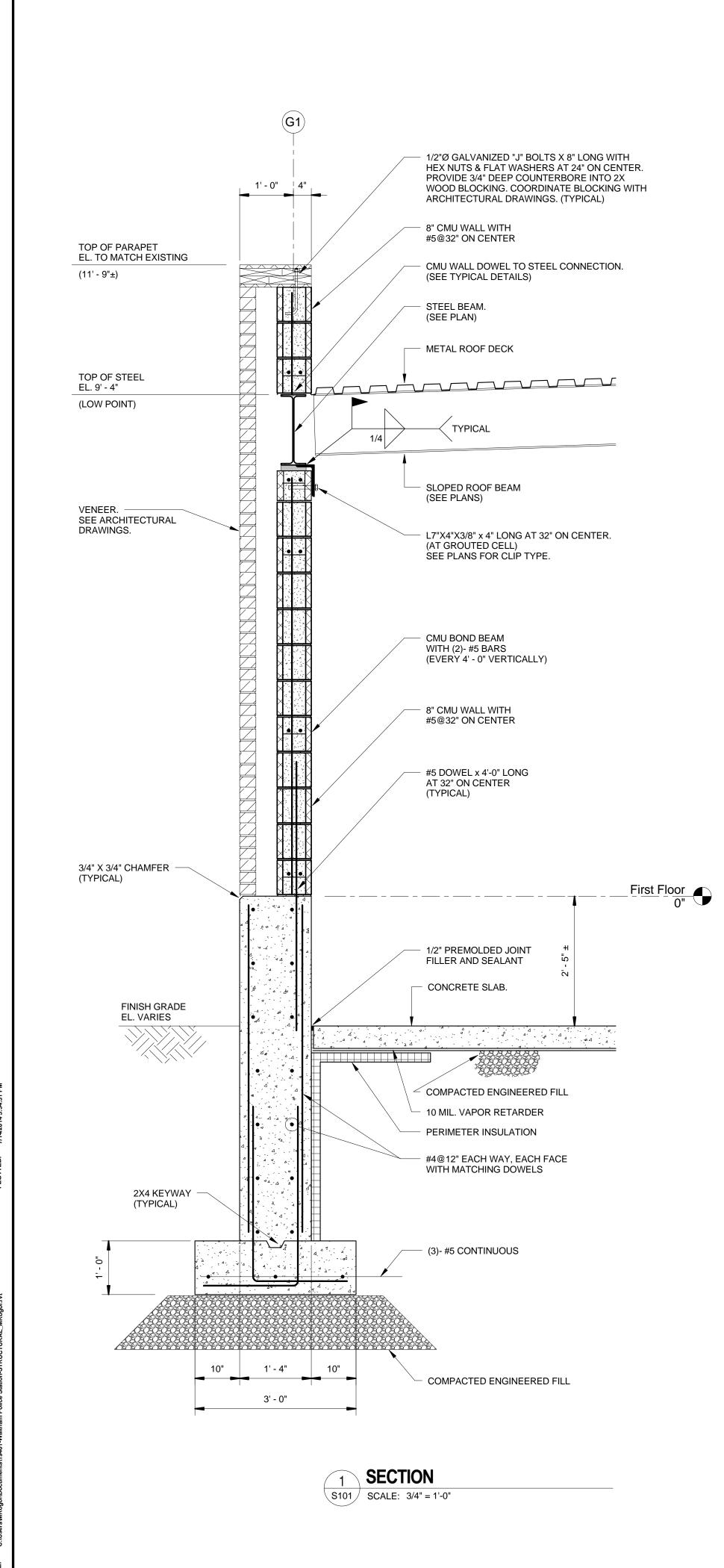
WHERE NEW JOISTS ARE TO BE INSTALLED, REMOVE AND REPLACE ALL BRIDGING AND OR BRACING AS REQUIRED FOR INSTALLATION. FIELD VERIFY THAT THE NEW JOISTS ARE THE SAME DEPTH AS ADJACENT EXISTING JOISTS, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO FABRICATION.

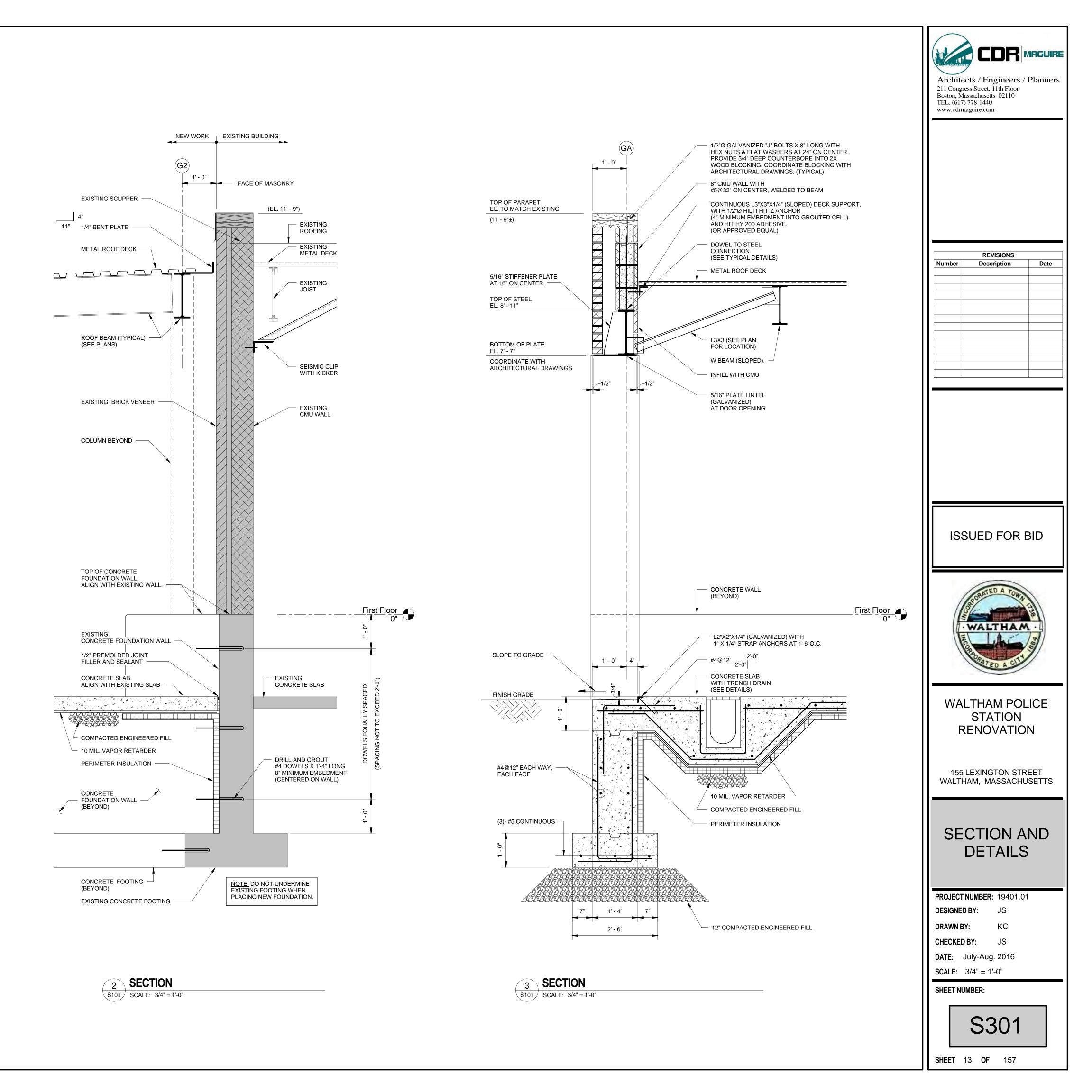
### LEGEND:

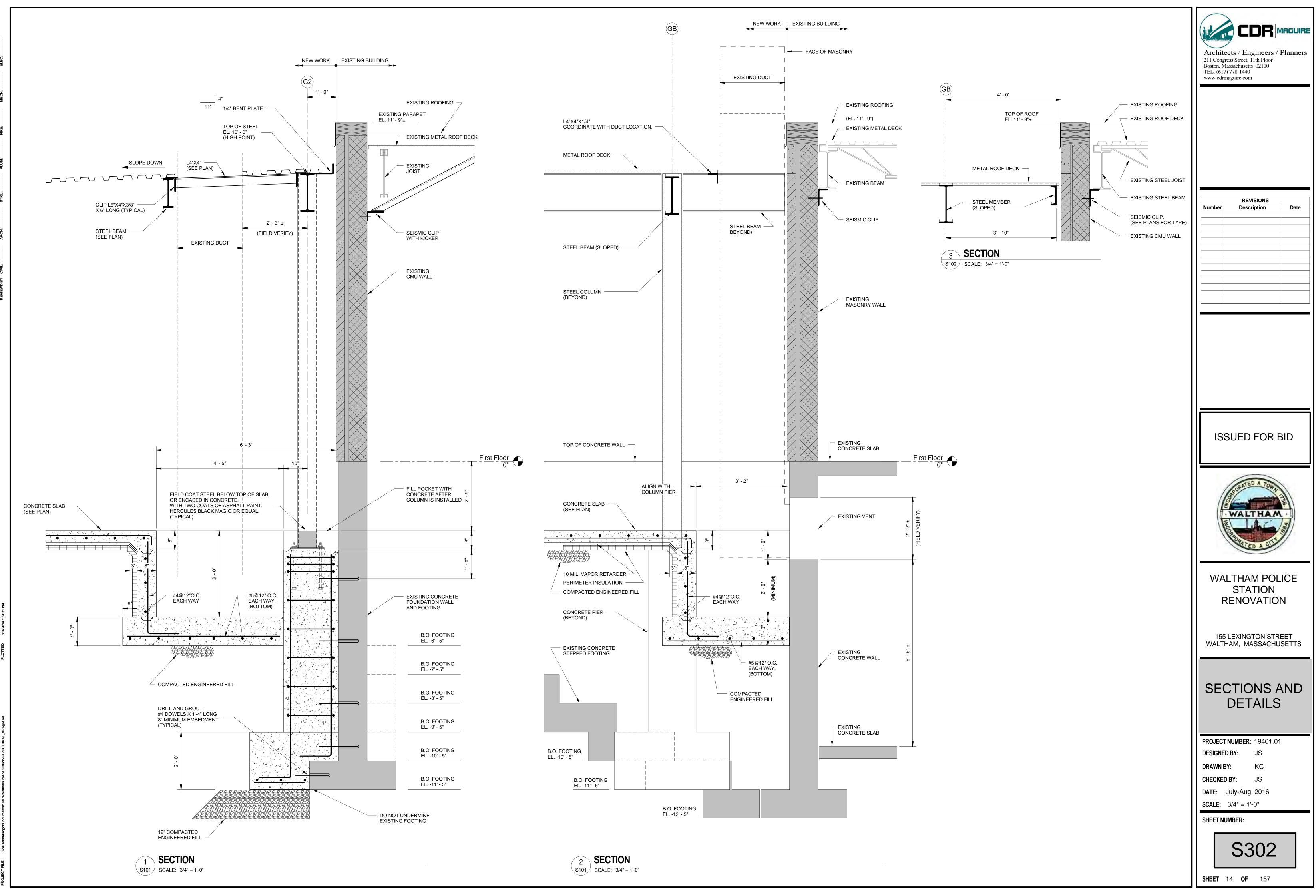
| (E)<br>(2P) | INDICATES EXISTING MEMBER.<br>INDICATES TWO PIECE JOIST. |
|-------------|--|
|             | INDICATES SPAN DIRECTION.                                |
| ×           | INDICATES SEISMIC CLIP. SEE DRAWING S502 FOR CLIP TYPE.  |
| •           | INDICATES DECK STIFFENER. SEE DETAIL 6/S506.             |

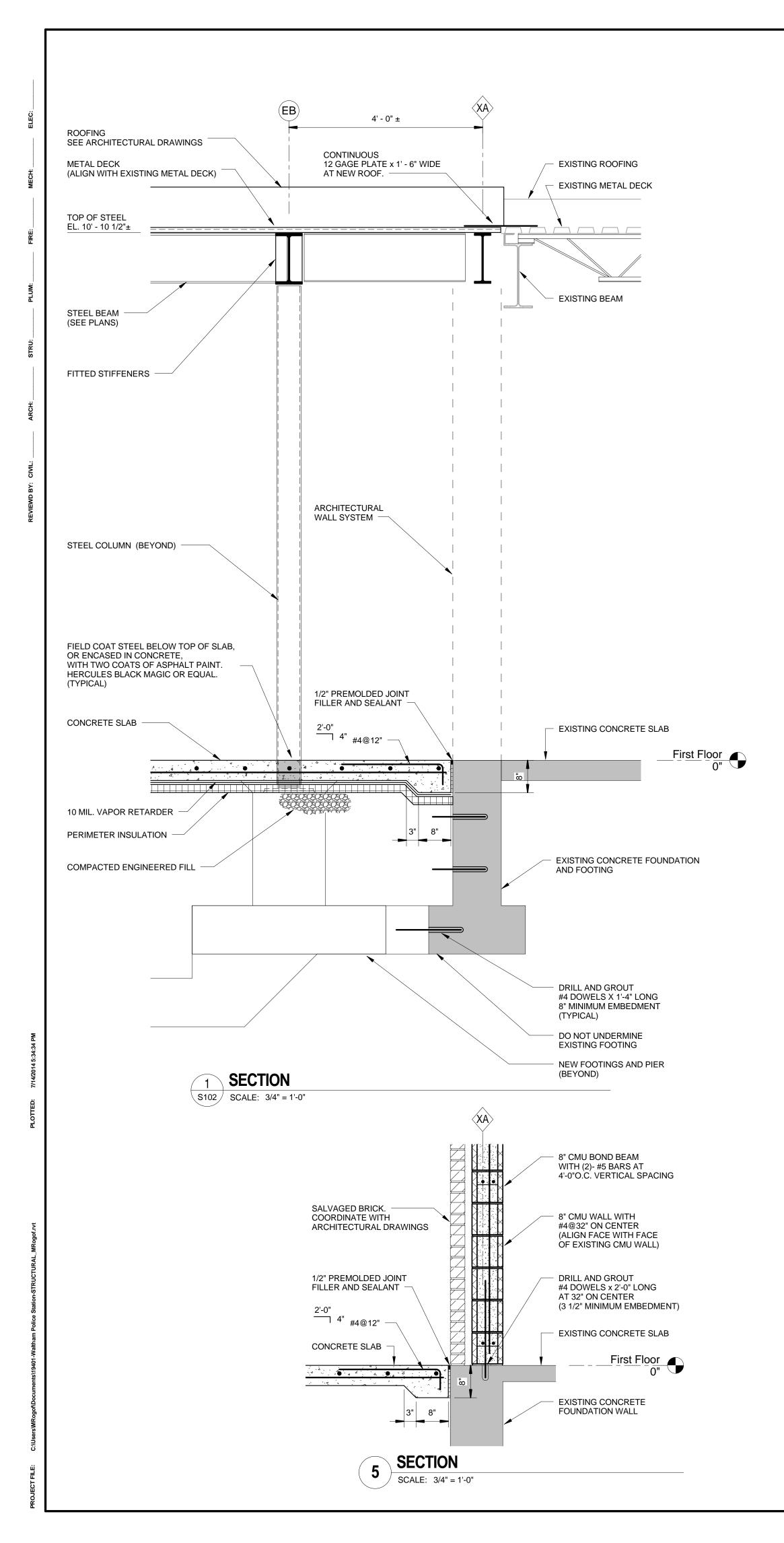


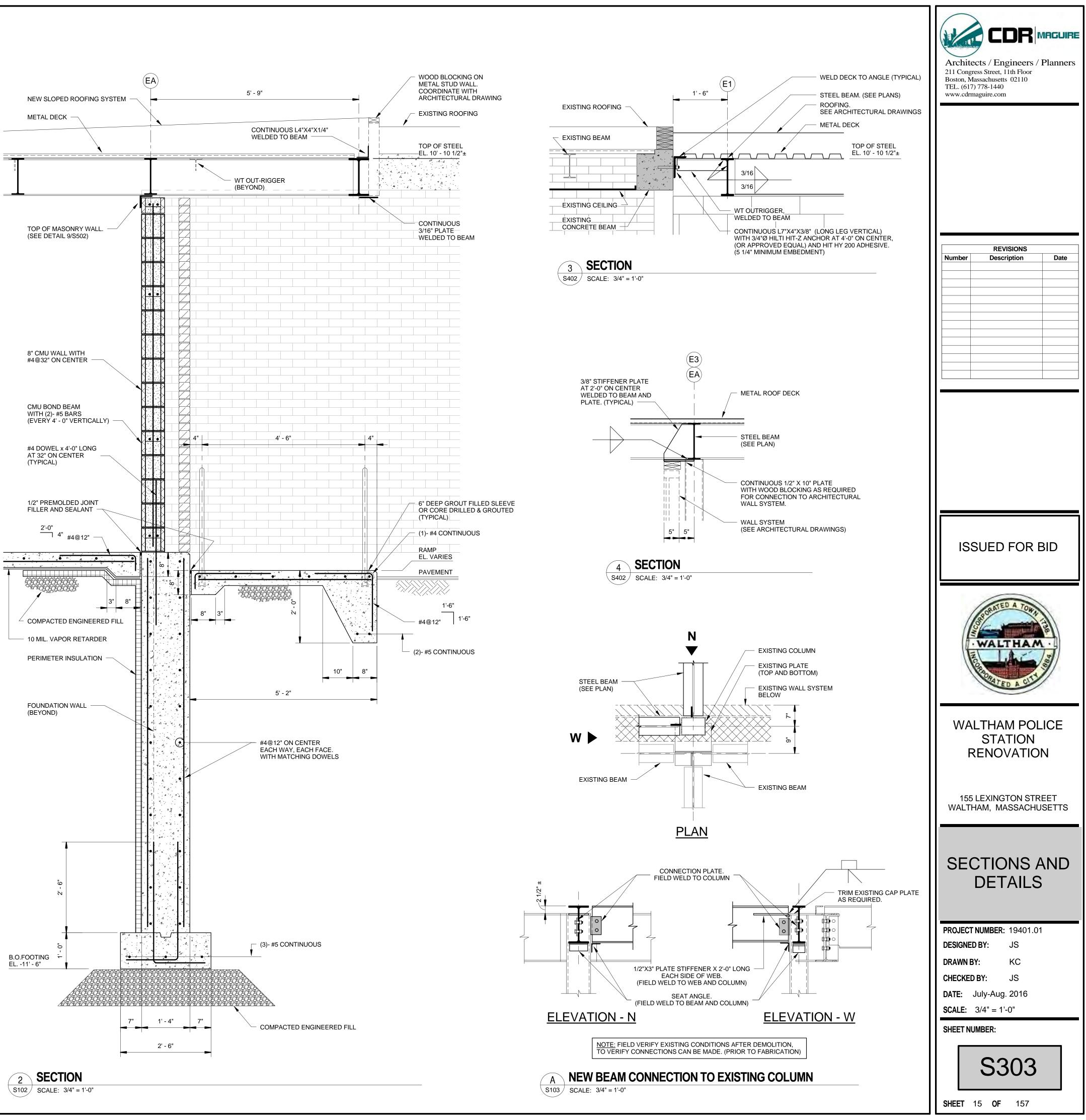


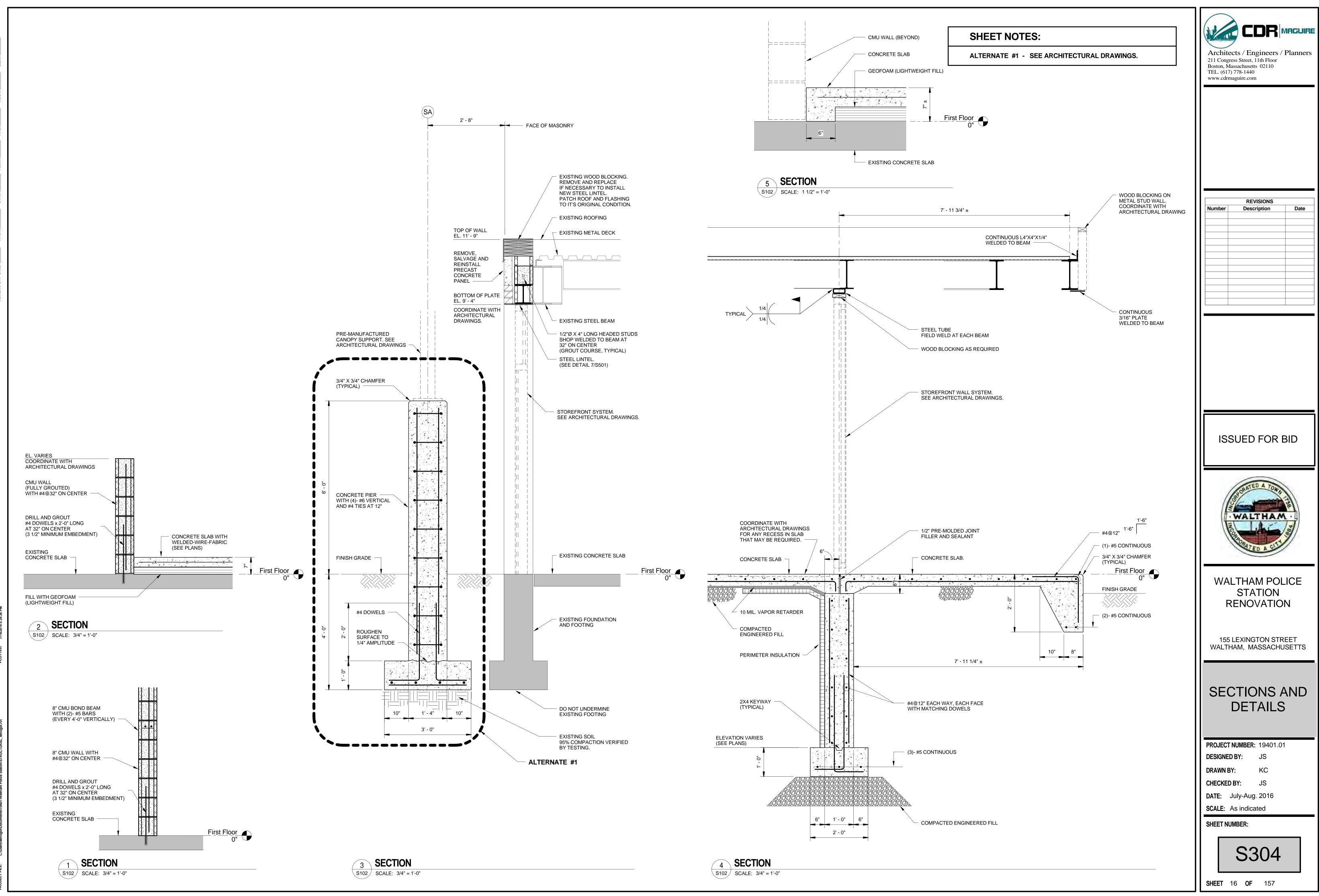


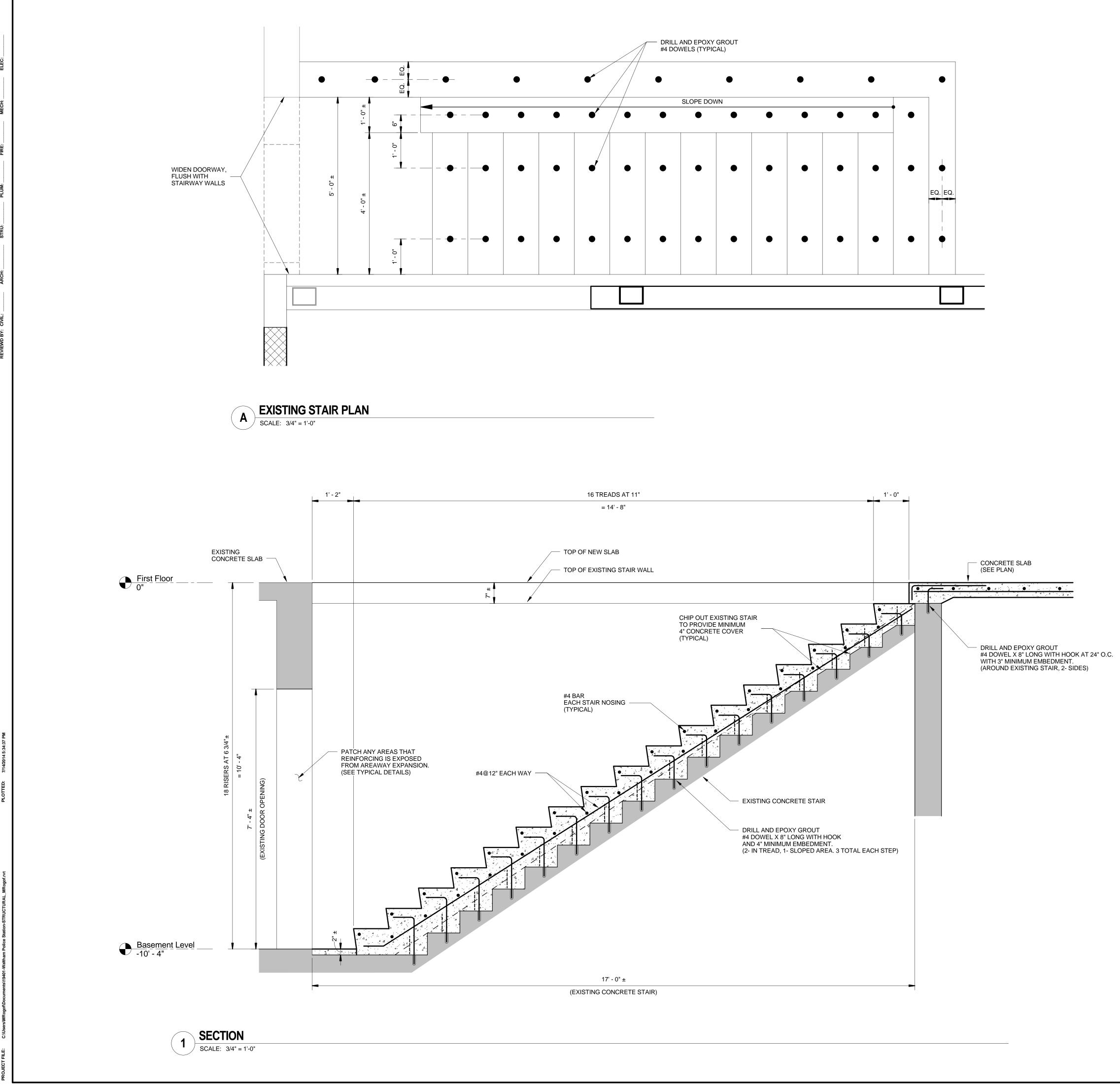




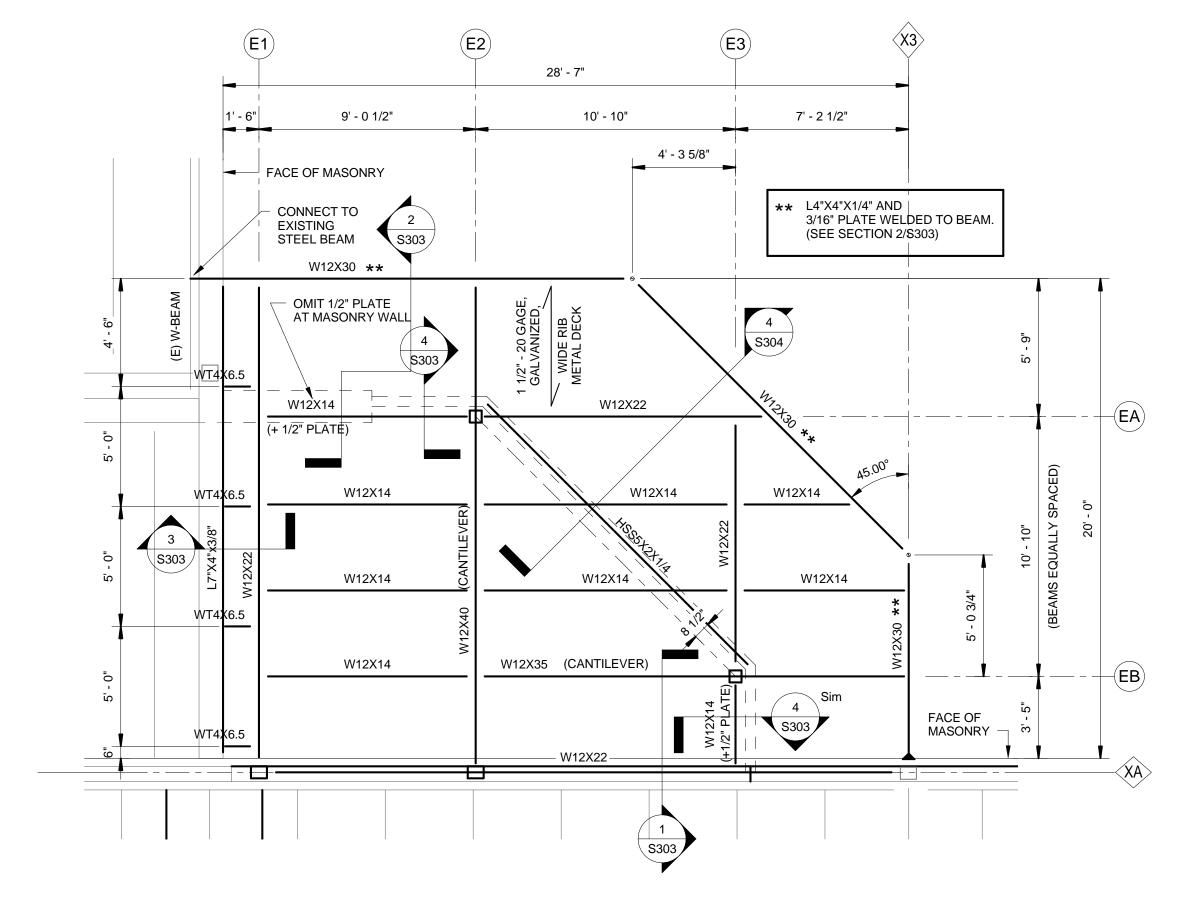






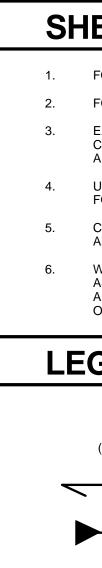


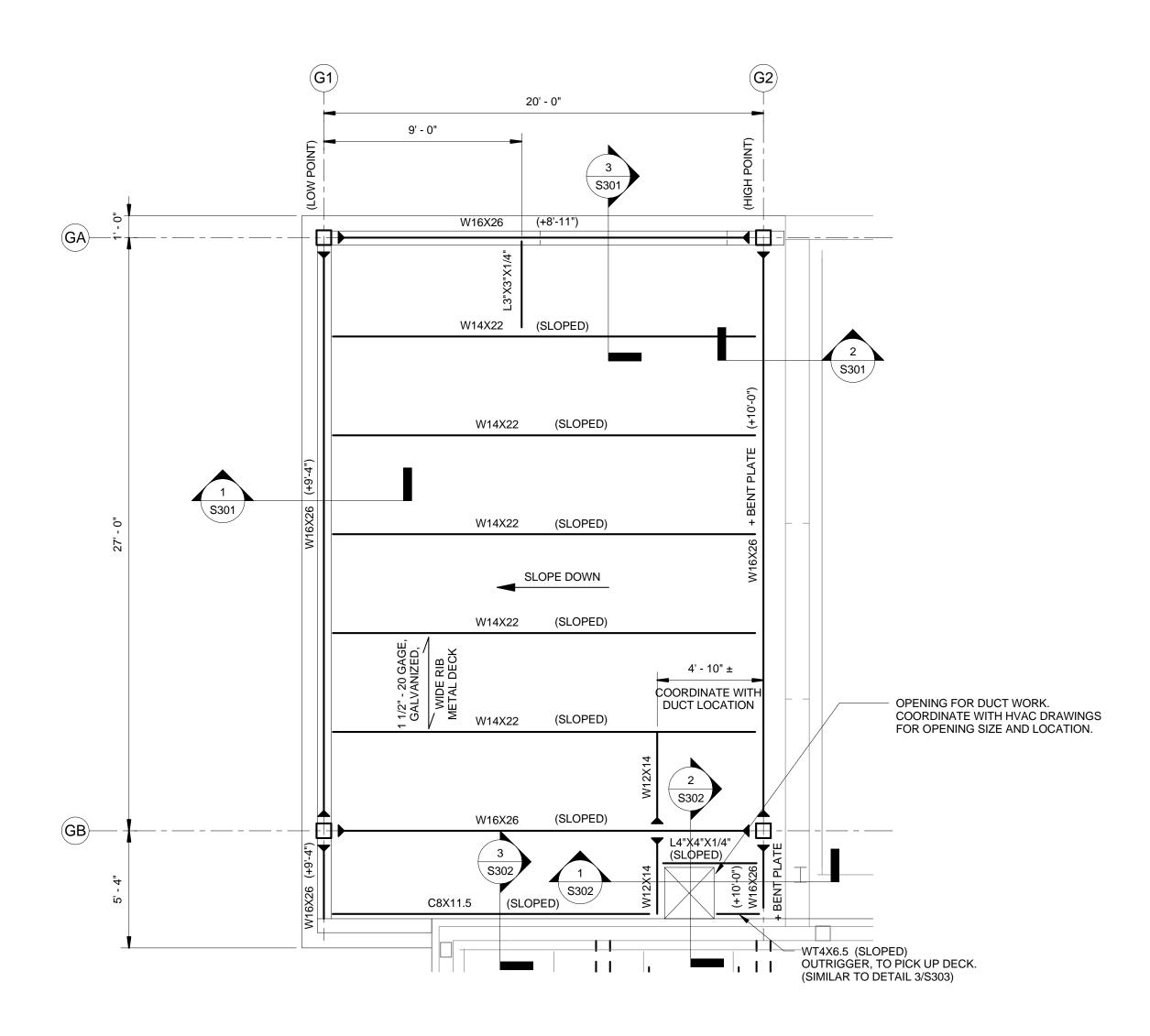
| 211 Congr<br>Boston, M<br>TEL. (617)    | CCDR<br>ects / Engineers /<br>ess Street, 11th Floor<br>assachusetts 02110<br>) 778-1440<br>aguire.com |           |
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| DESIGNED<br>DRAWN B<br>CHECKED<br>DATE: | BY: JS<br>July-Aug. 2016<br>3/4" = 1'-0"   | 1         |
| SHEET                                   | <b>S401</b><br>17 <b>OF</b> 157  |           |





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2 ROOF FRAMING PLAN (Motorcycle/Bike Storage) SCALE: 1/4" = 1'-0"

## SHEET NOTES:

1. FOR GENERAL NOTES, SEE DRAWING S001.

2. FOR TYPICAL DETAILS, SEE DRAWINGS S501 - S506.

EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

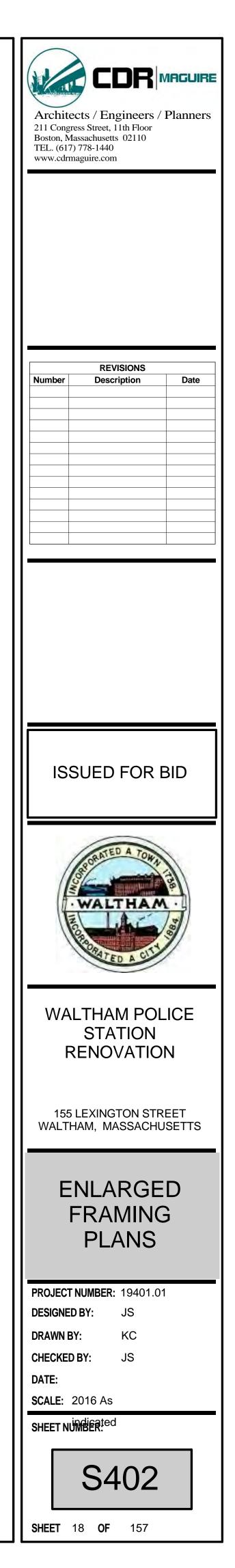
UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

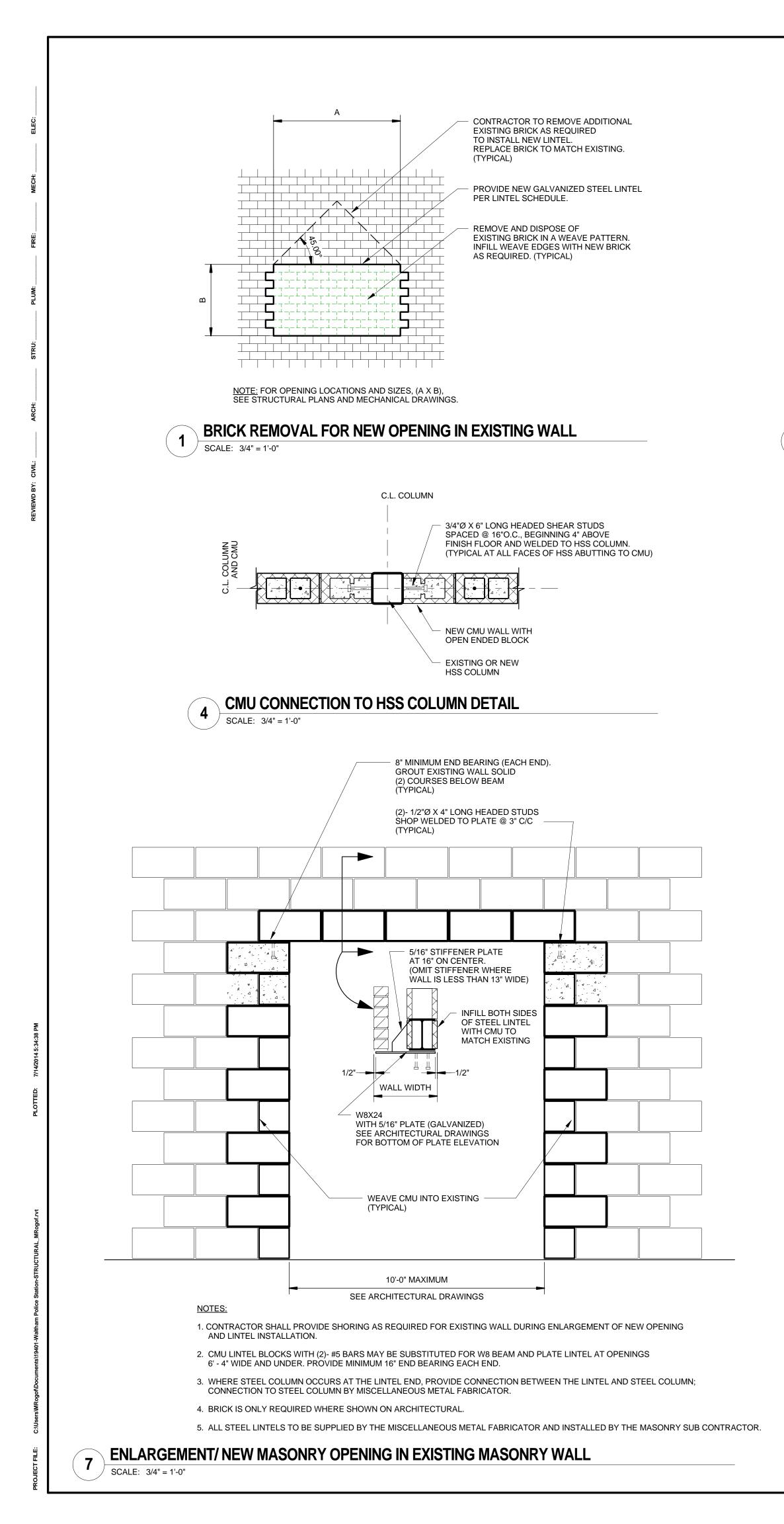
COORDINATE WITH ARCHITECTURAL, HVAC, ELECTRICAL AND PLUMBING DRAWINGS FOR ANY ADDITIONAL OPENINGS THAT MAY NEED TO BE PROVIDED OR FILLED IN.

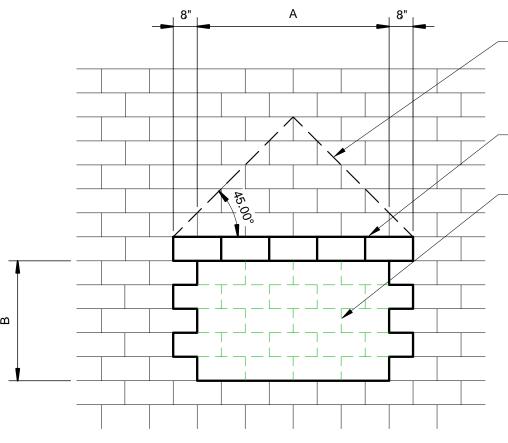
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### LEGEND:

| (E)  | INDICATES EXISTING MEMBER.                              |
|------|---|
| (2P) | INDICATES TWO PIECE JOIST.                              |
|      | INDICATES SPAN DIRECTION.                               |
|      | INDICATES MOMENT CONNECTION.                            |
| x    | INDICATES SEISMIC CLIP. SEE DRAWING S502 FOR CLIP TYPE. |
| •    | INDICATES DECK STIFFENER. SEE DETAIL 6/S506.            |
|      |   |

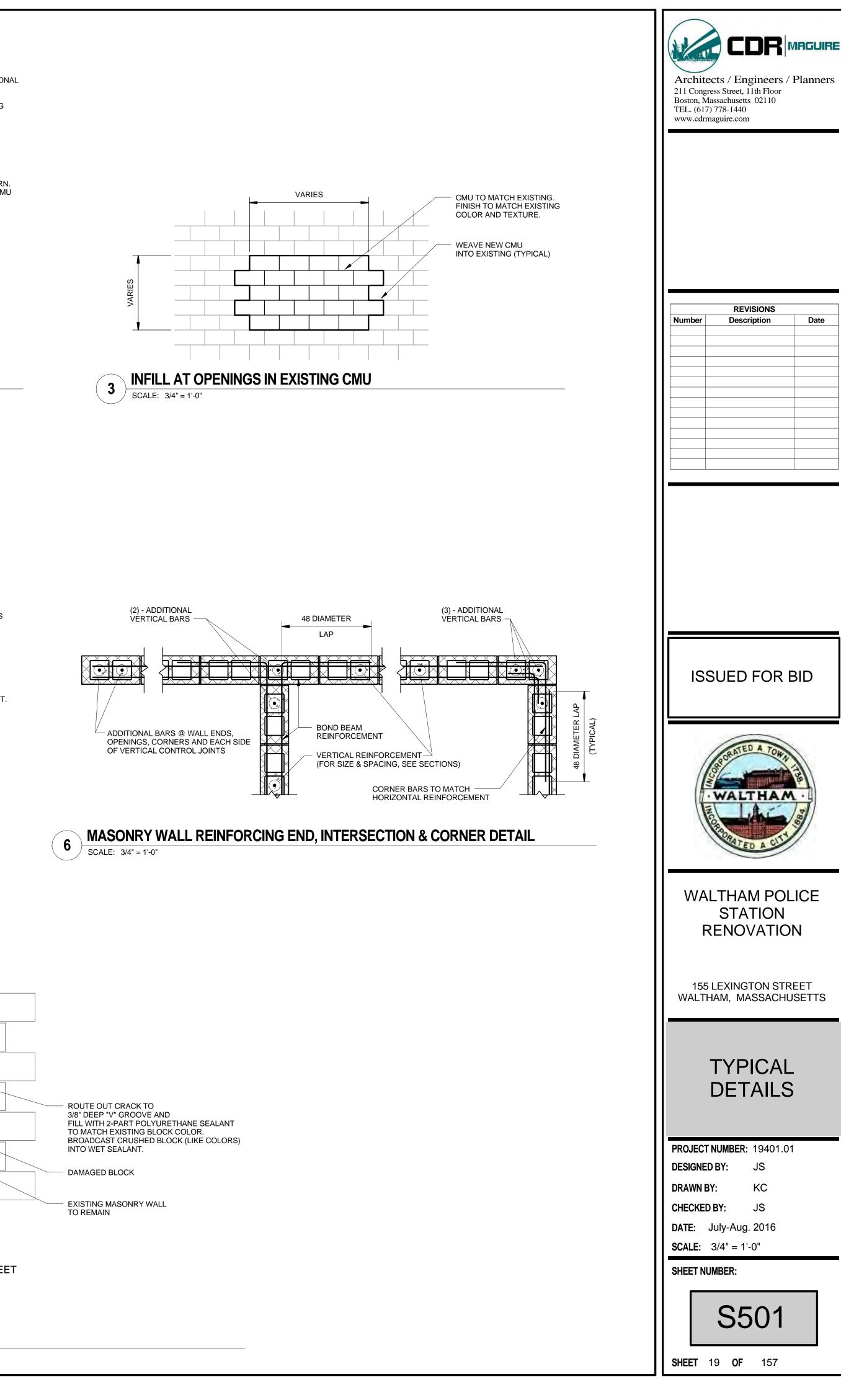


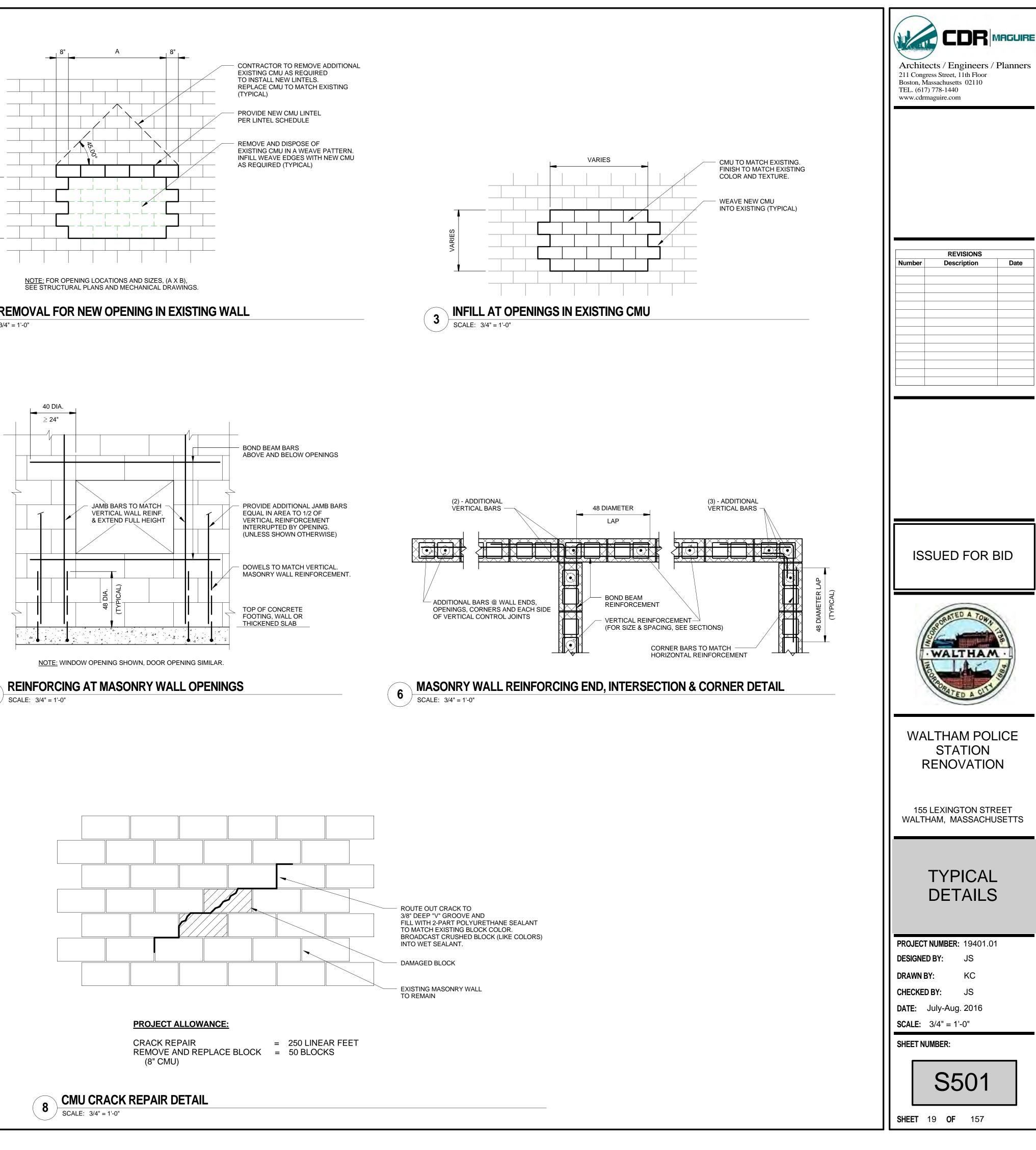




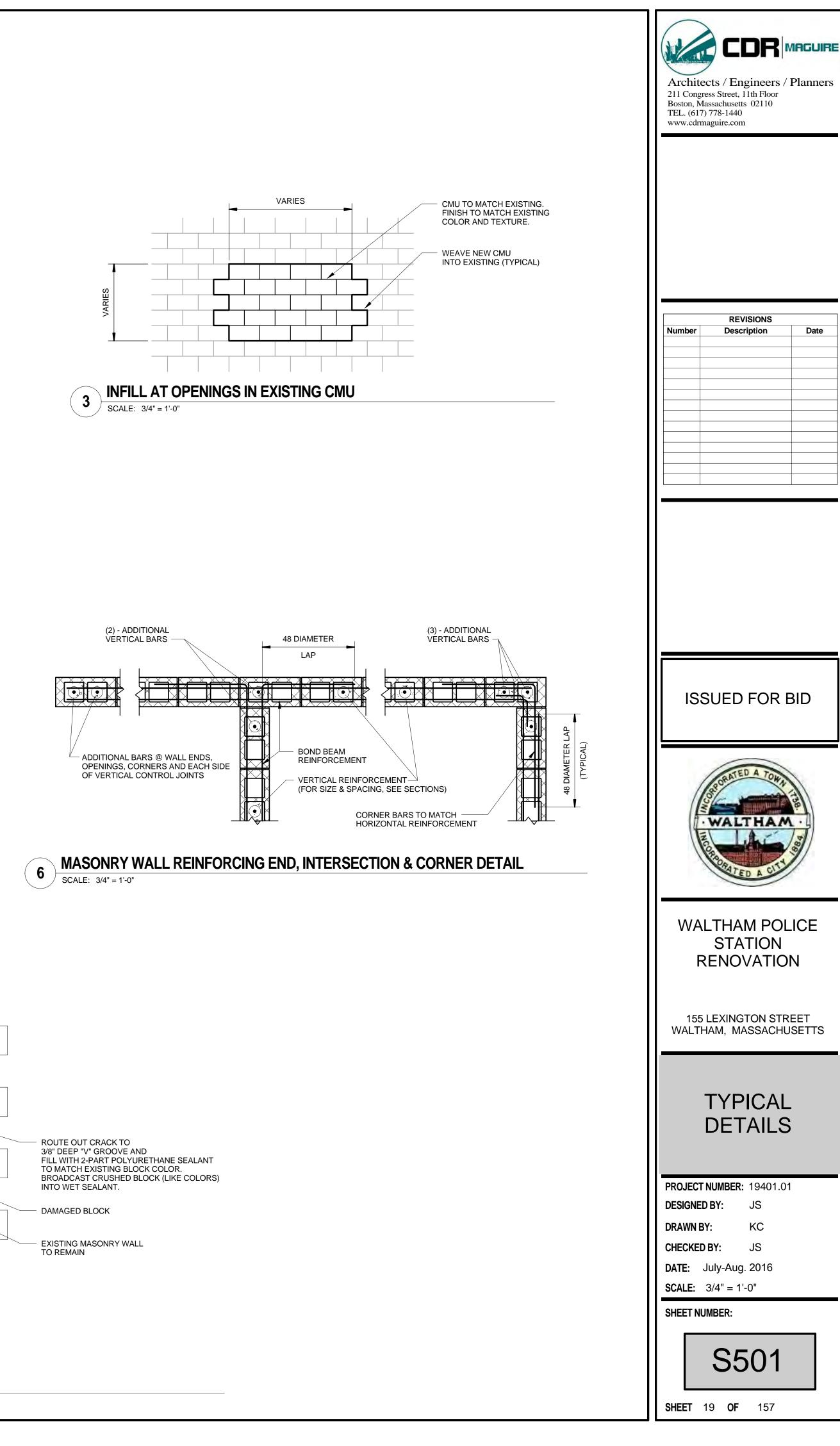
### CMU REMOVAL FOR NEW OPENING IN EXISTING WALL SCALE: 3/4" = 1'-0"

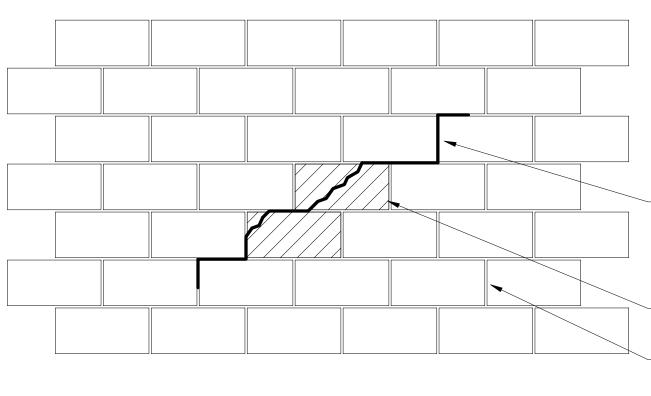
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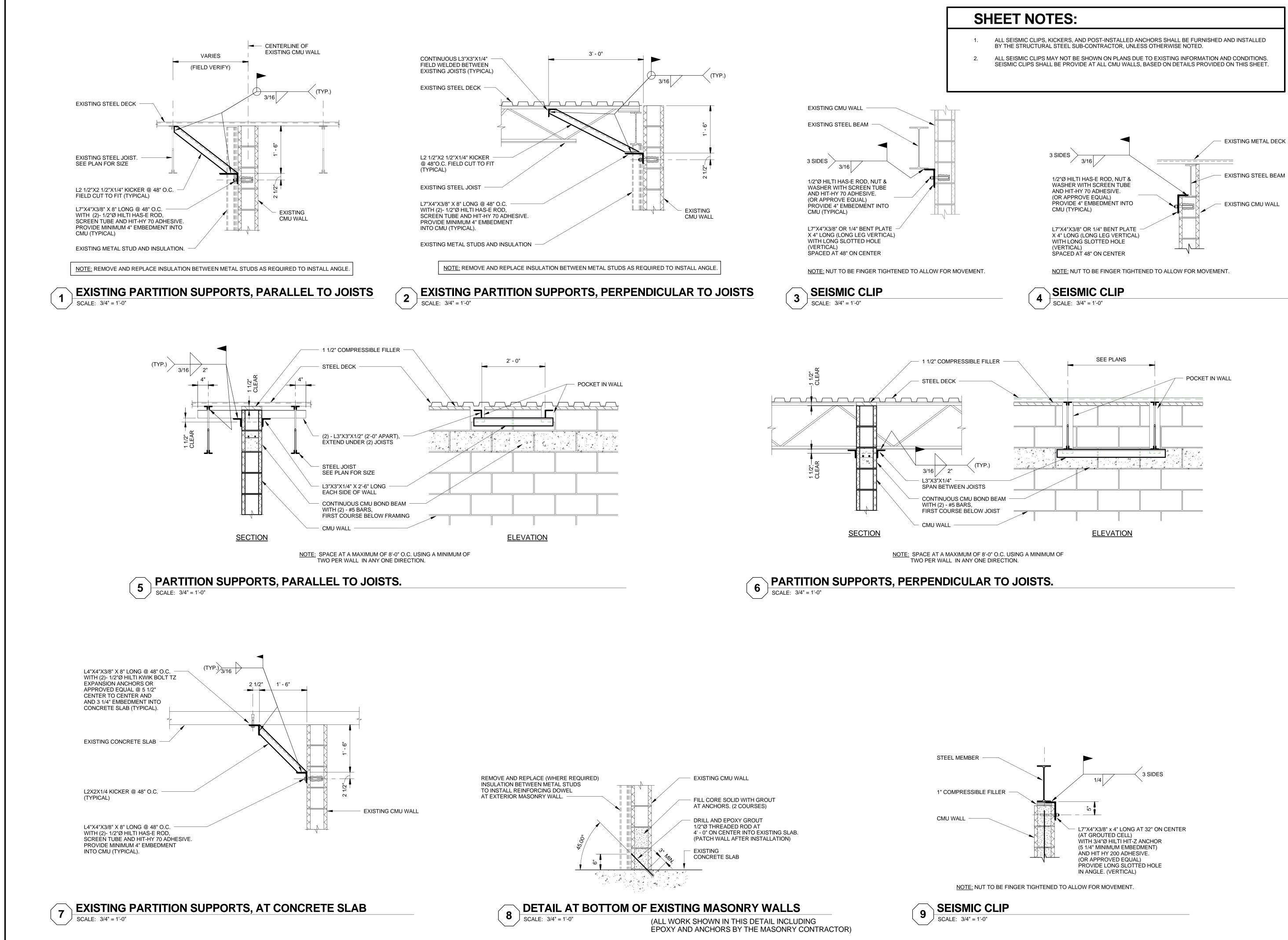




**REINFORCING AT MASONRY WALL OPENINGS** 5



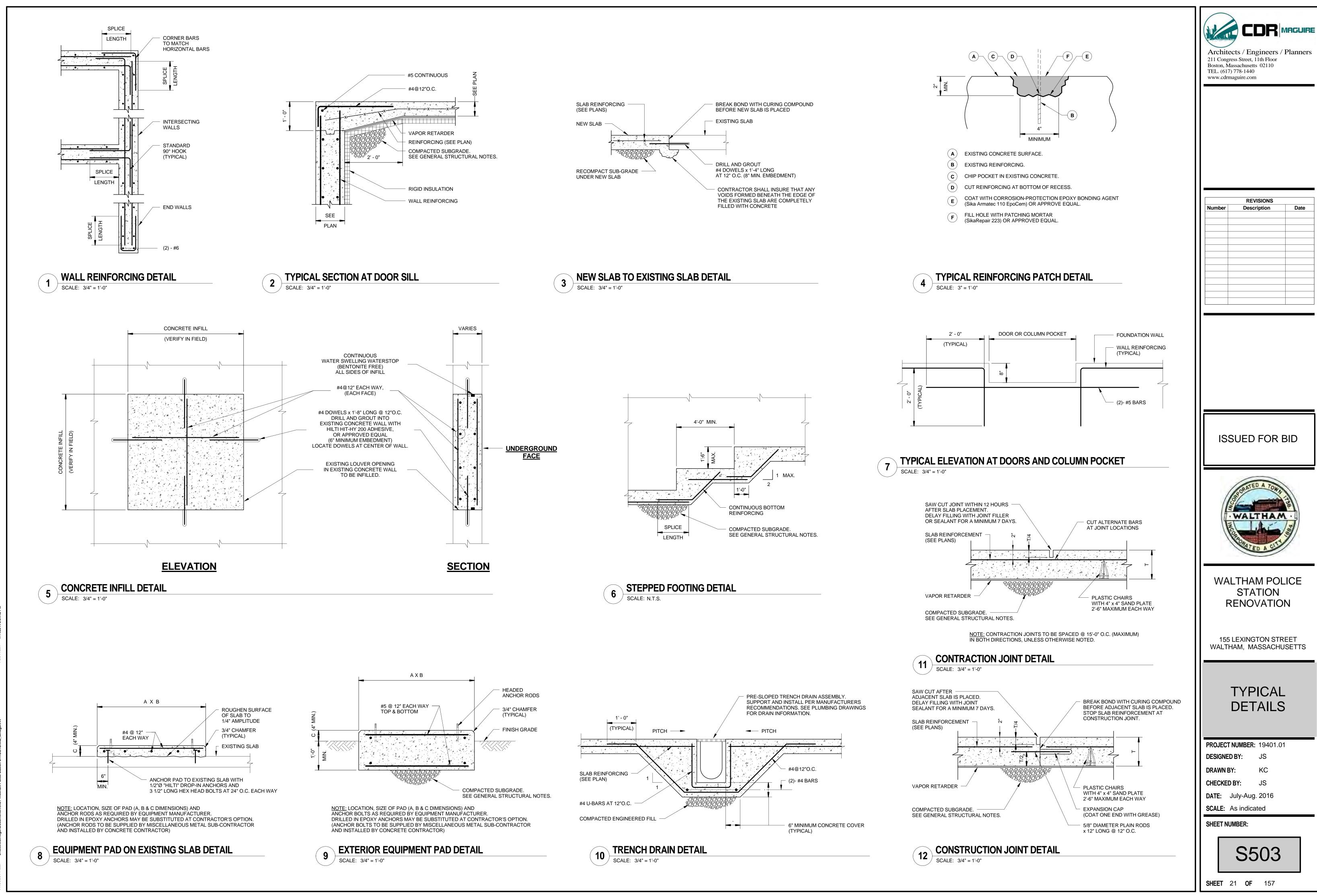


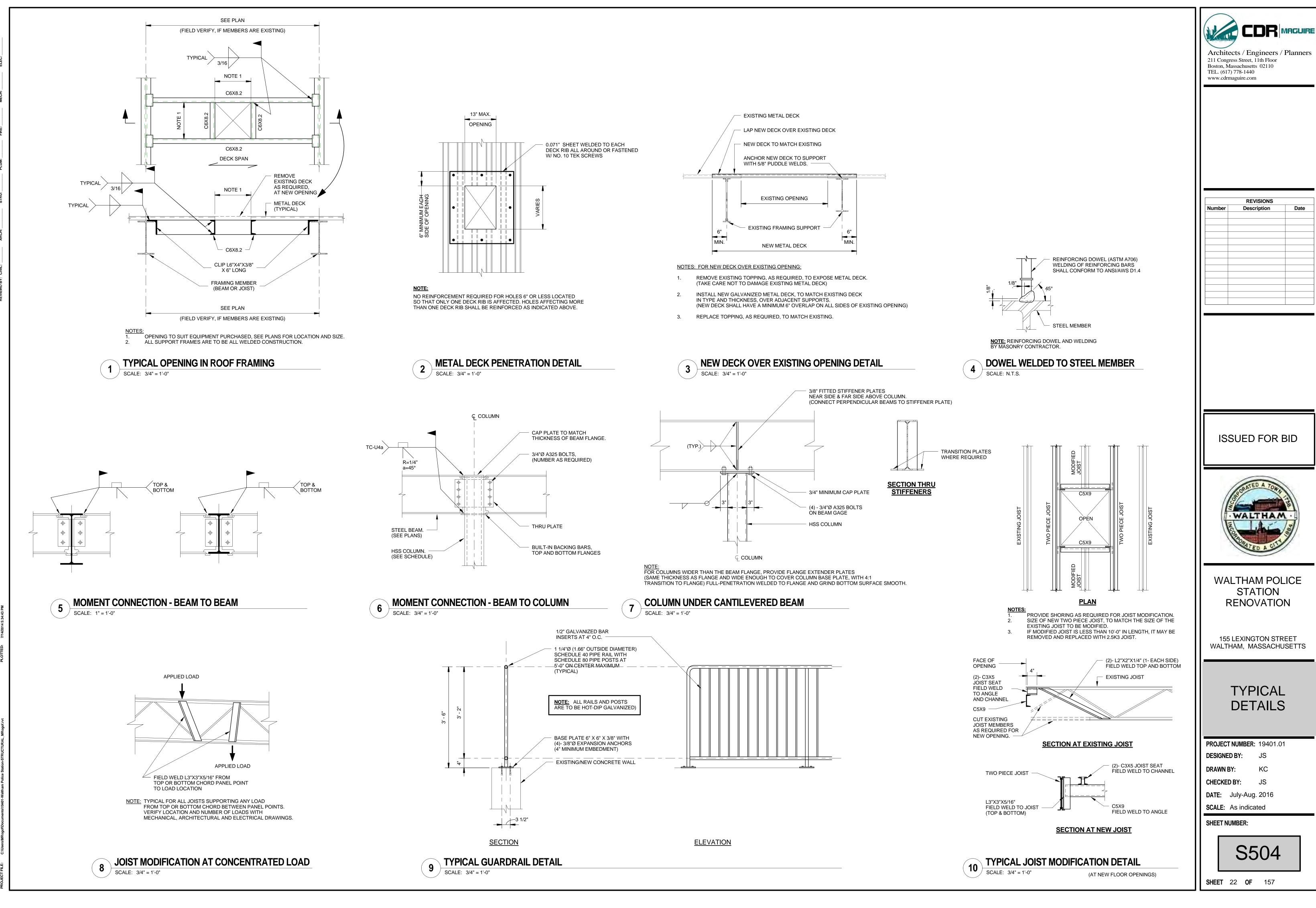


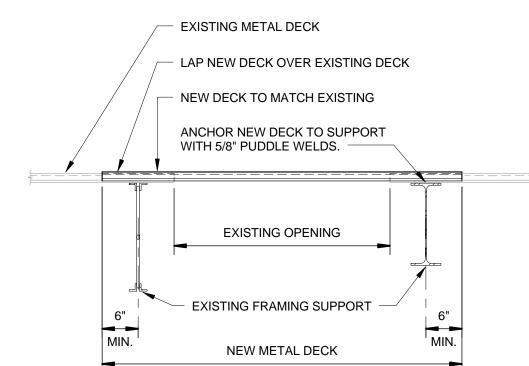
|   | TEL. (61                       | Aassachusetts 02110<br>7) 778-1440<br>maguire.com |   |
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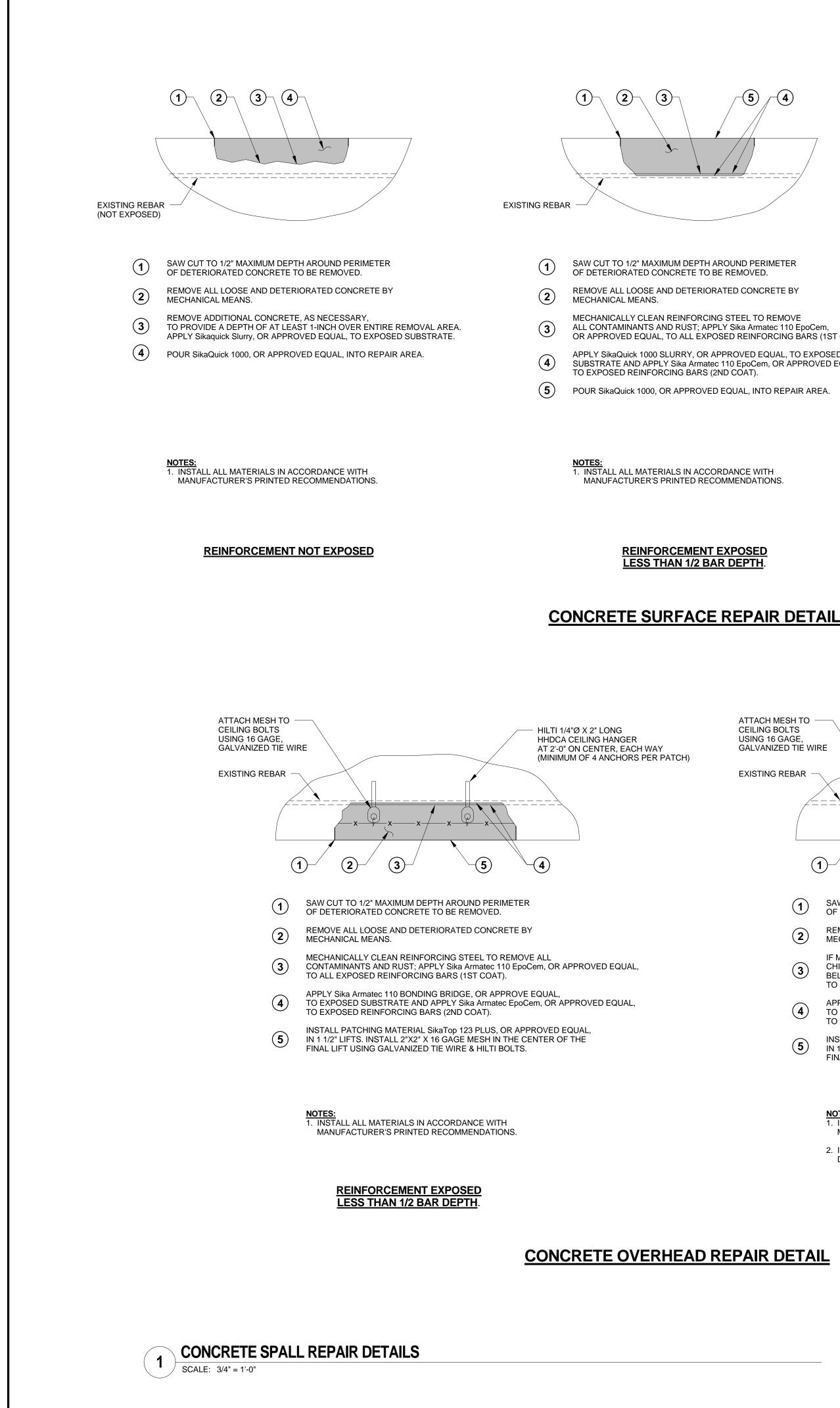
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211 Congress Street, 11th Floor









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|                |         |
| EXISTING REBAR | MINIMUM |

| HAROUND PERIMETER<br>DBE REMOVED.   |  |
|---|--|
| DRATED CONCRETE BY  |  |
| NG STEEL TO REMOVE<br>PPLY Sika Armatec 110 EpoCem,<br>POSED REINFORCING BARS (1ST COAT). |  |
| APPROVED EQUAL, TO EXPOSED<br>tec 110 EpoCem, OR APPROVED EQUAL,<br>(2ND COAT).           |  |
| ED EQUAL, INTO REPAIR AREA.   |  |
|   |  |

SAW CUT TO 1/2" MAXIMUM DEPTH AROUND PERIMETER OF DETERIORATED CONCRETE TO BE REMOVED.

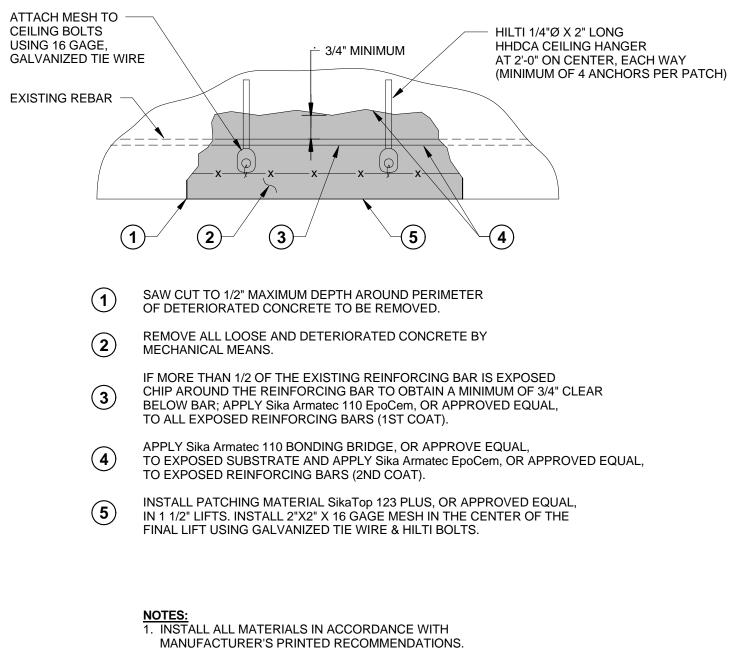
- REMOVE ALL LOOSE AND DETERIORATED CONCRETE BY (2) MECHANICAL MEANS.
- IF MORE THAN 1/2 OF THE EXISTING REINFORCING BAR IS EXPOSED CHIP AROUND THE REINFORCING BAR TO OBTAIN A MINIMUM OF 3/4" CLEAR (3) BELOW BAR; APPLY Sika Armatec 110 EpoCem, OR APPROVED EQUAL, TO ALL EXPOSED REINFORCING BARS (1ST COAT).
- APPLY SikaQuick 1000 SLURRY, OR APPROVED EQUAL, TO EXPOSED (4) SUBSTRATE AND APPLY Sika Armatec 110 EpoCem, OR APPROVED EQUAL, TO EXPOSED REINFORCING BARS (2ND COAT).
- (5) POUR SikaQuick 1000, OR APPROVED EQUAL, INTO REPAIR AREA.

NOTES: 1. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S PRINTED RECOMMENDATIONS.

**REINFORCEMENT EXPOSED** 

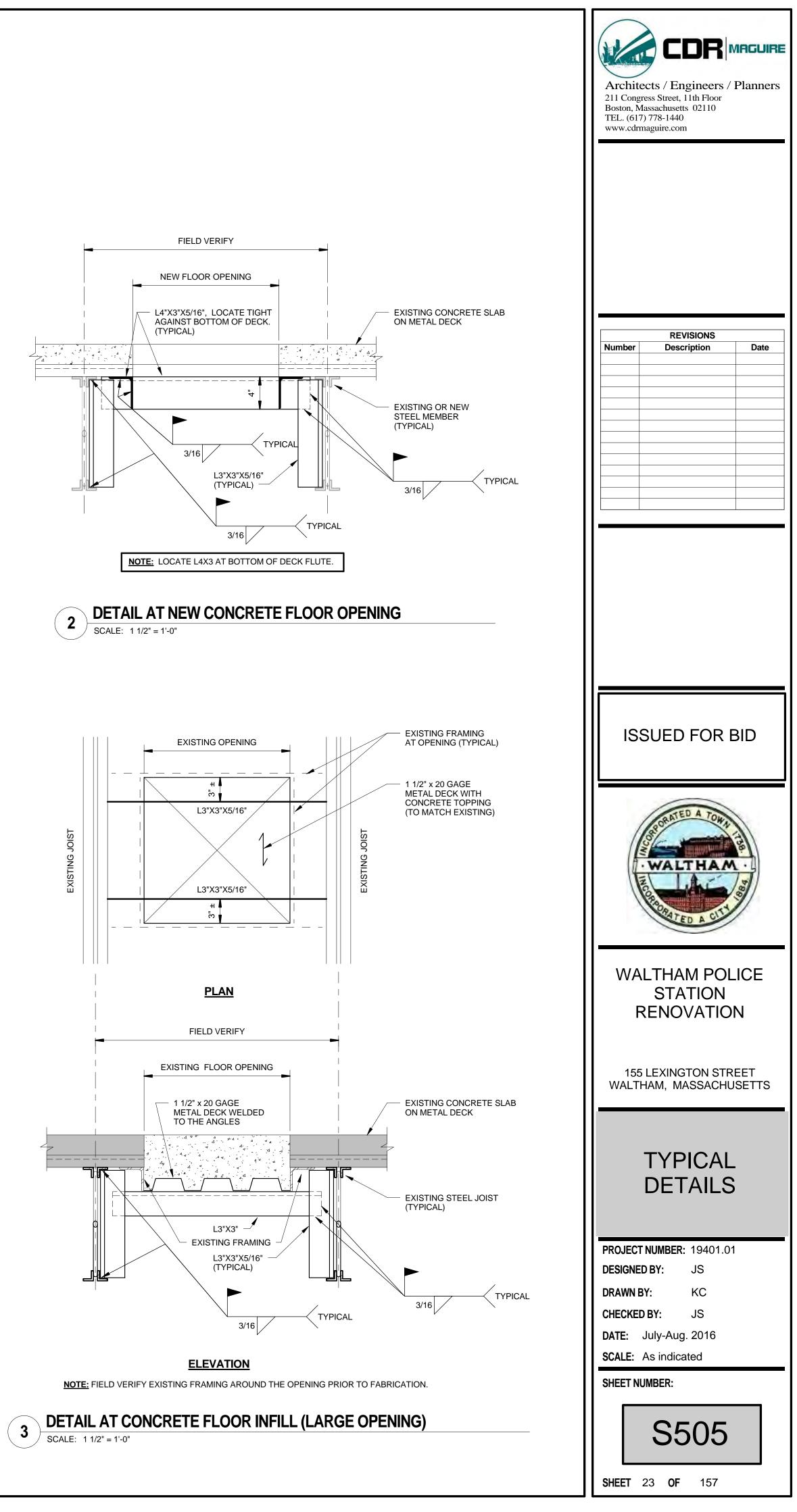
MORE THAN 1/2 BAR DEPTH

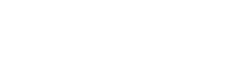
2. IF MORE THAN 25% OF EXISTING REINFORCEMENT IS DETERIORATED, CONTACT ENGINEER BEFORE CONTINUING.

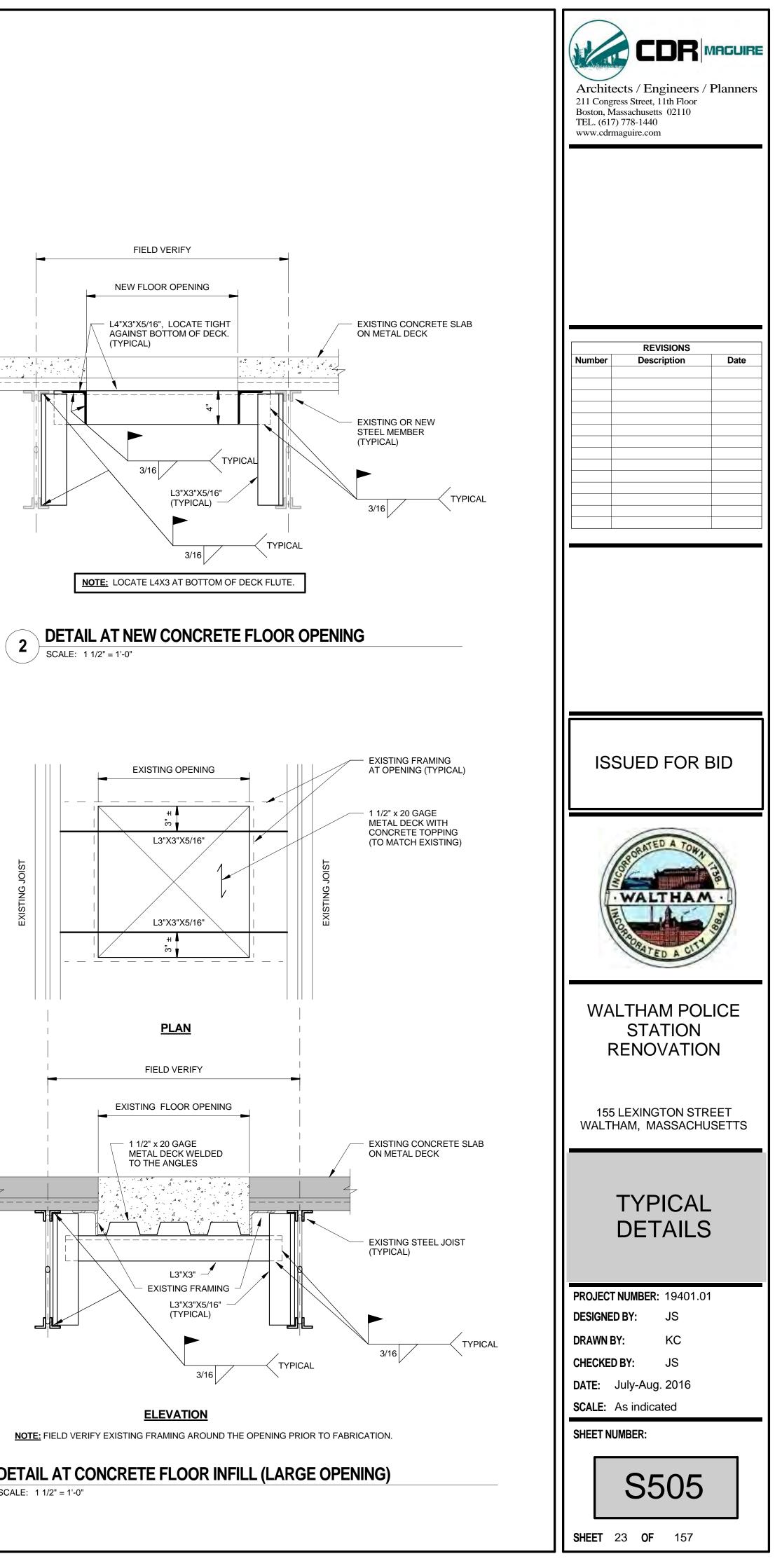


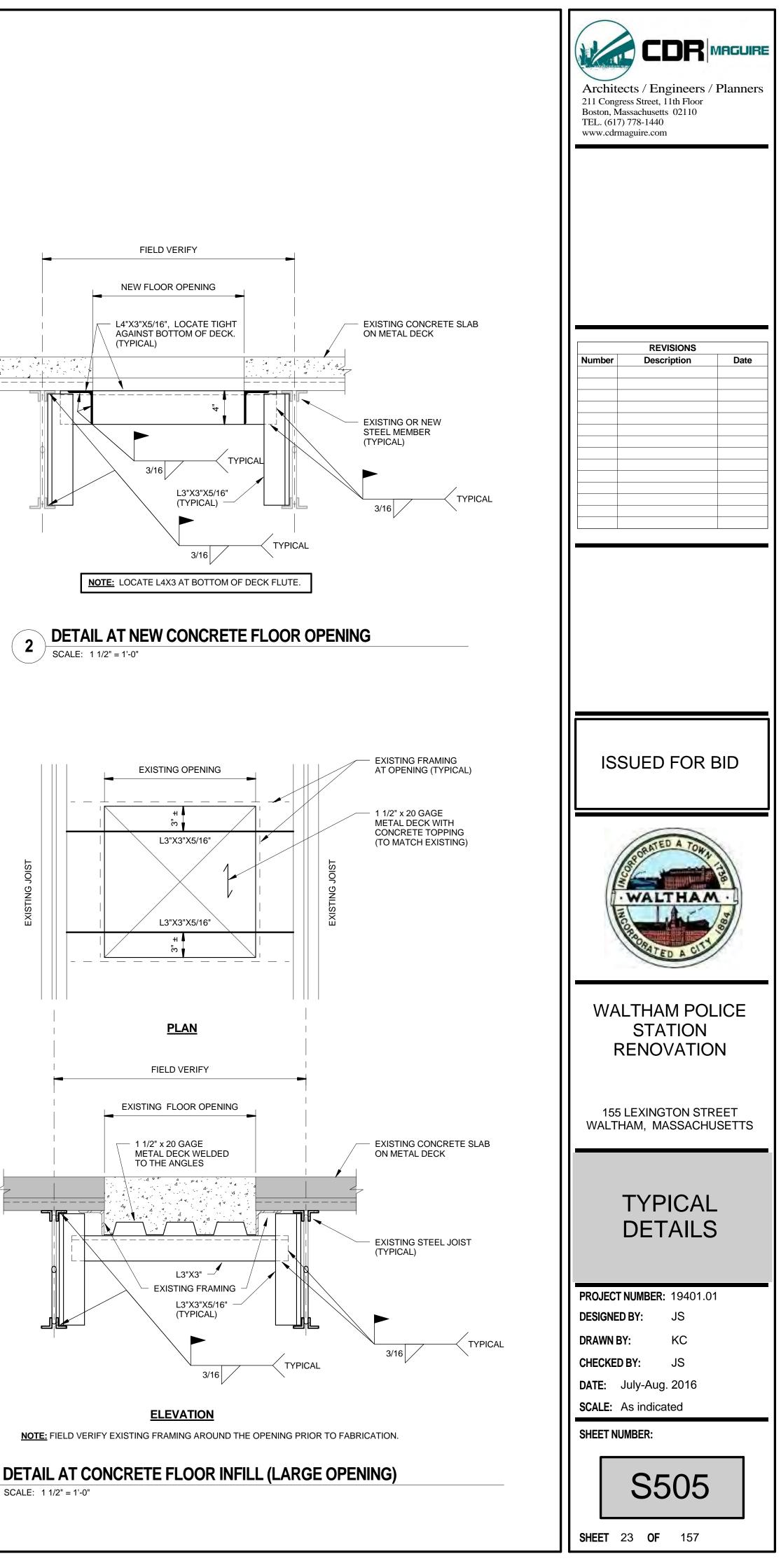
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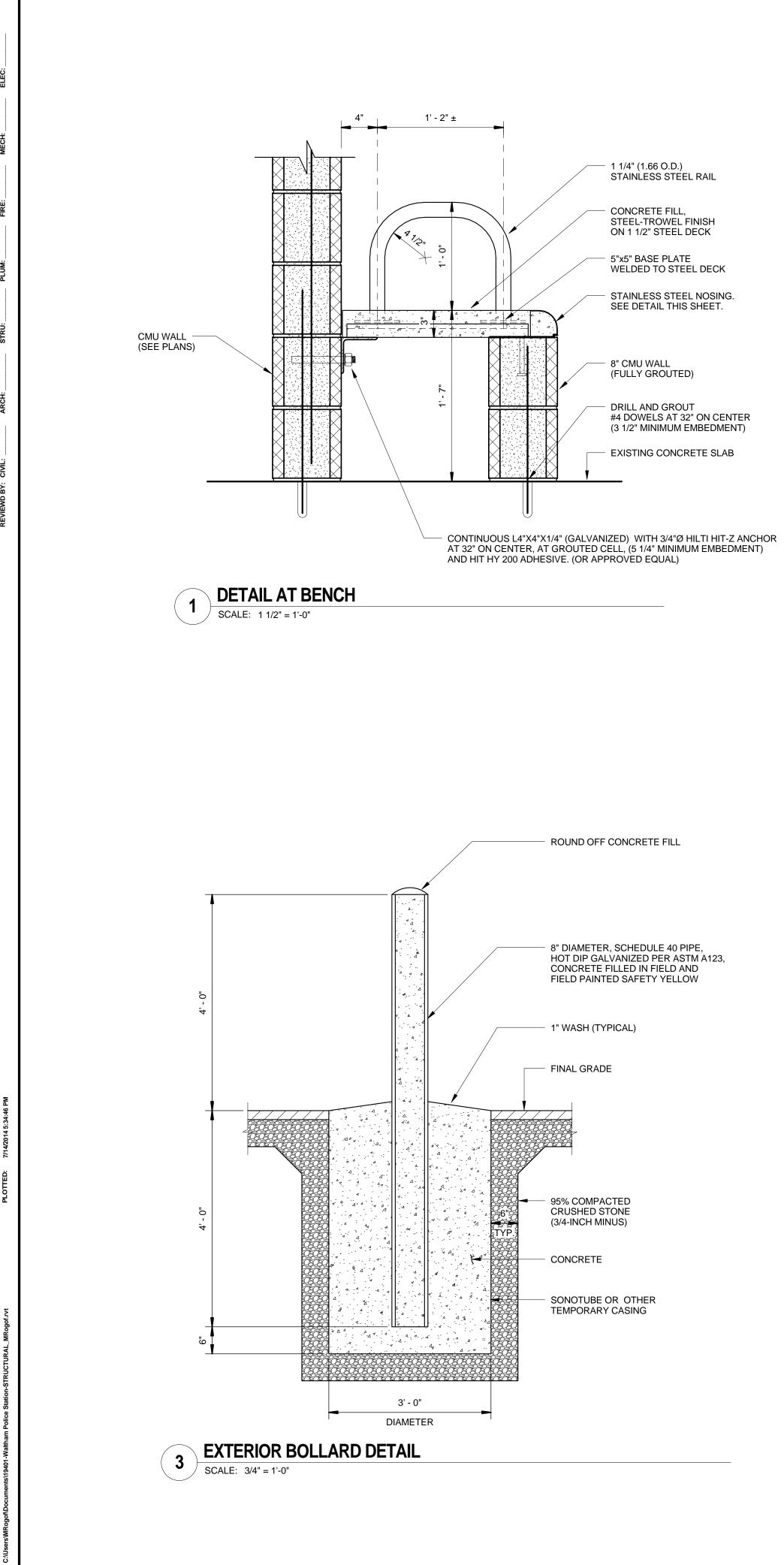
### **REINFORCEMENT EXPOSED** MORE THAN 1/2 BAR DEPTH

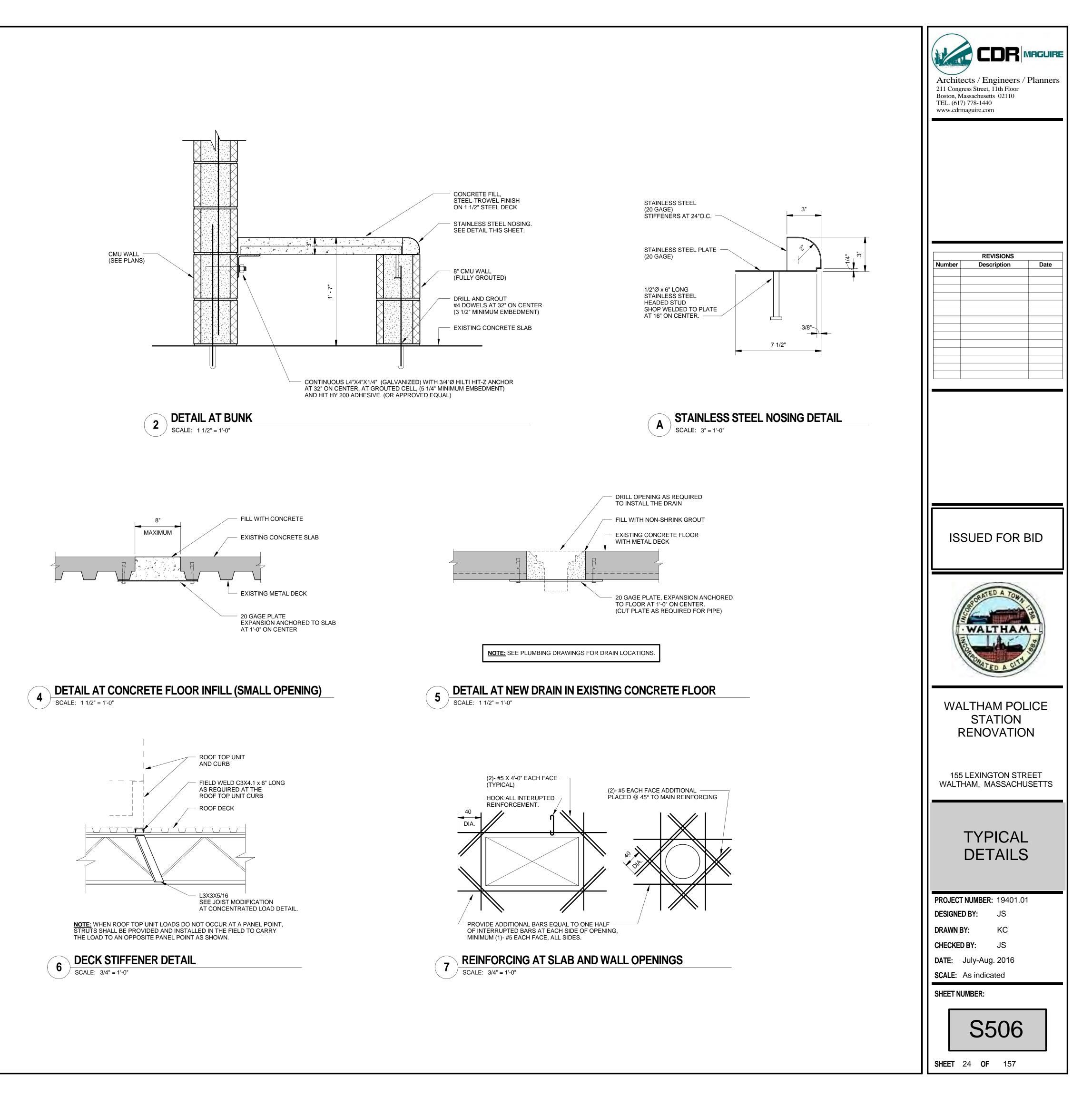


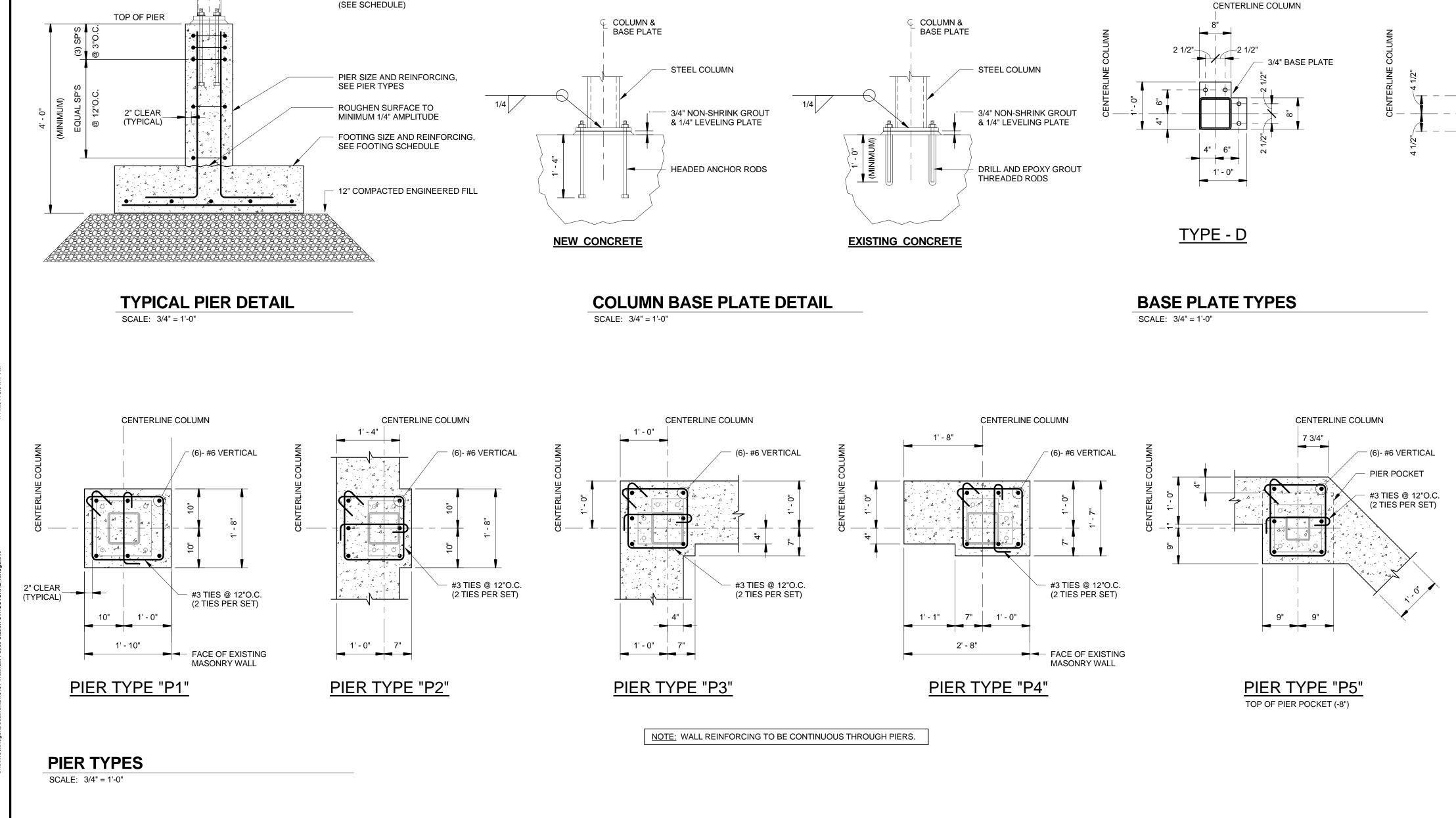












1. ALL COLUMN MATERIAL ASTM A500 GRADE B. 2. ALL BASE PLATE MATERIAL ASTM A572 GRADE 50.

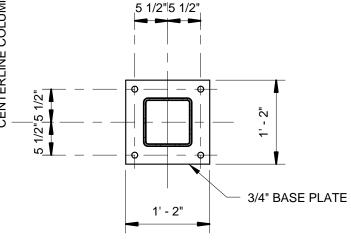
**ÇENTERLINE OF PIER & COLUMN** 

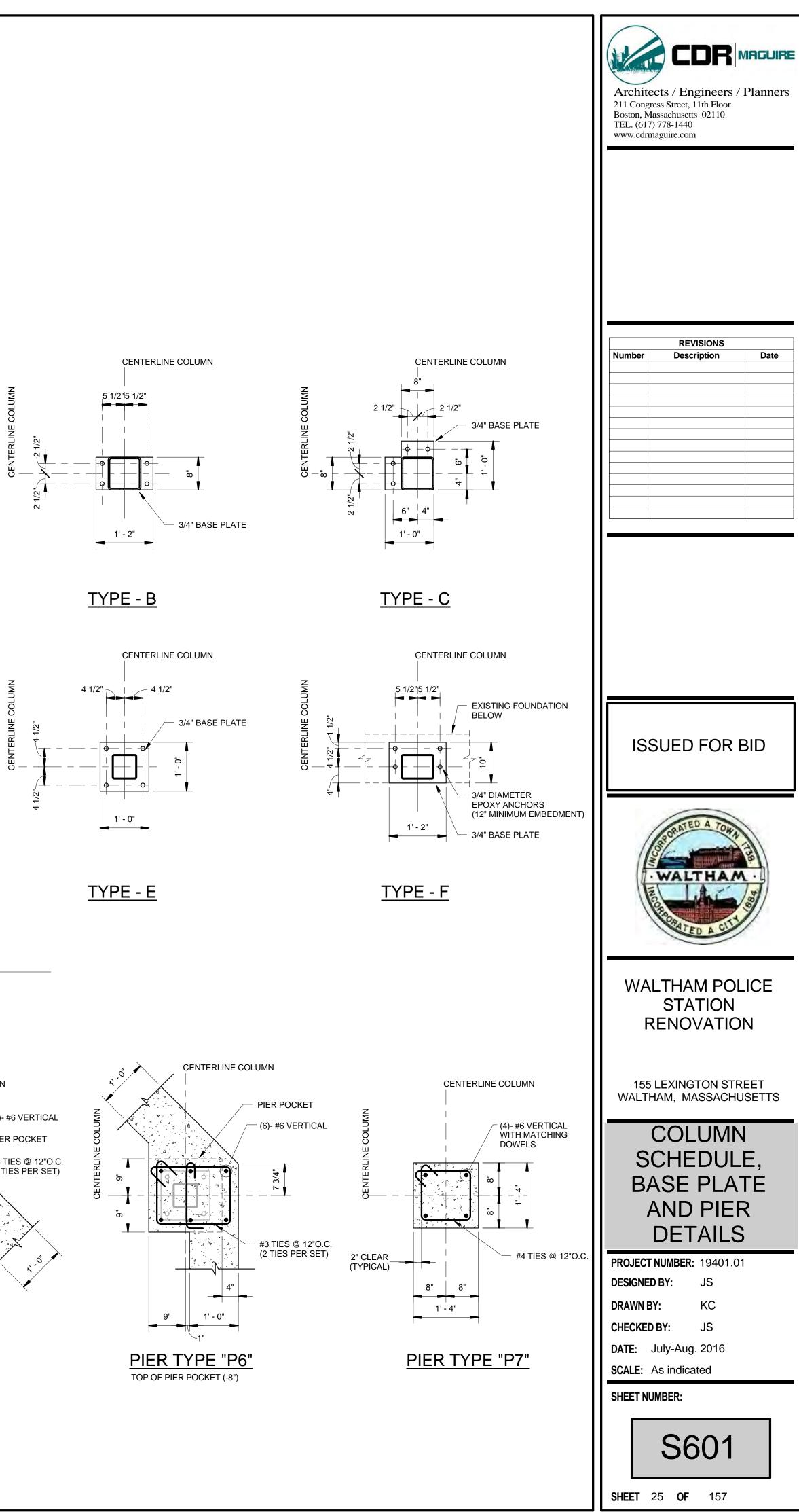
STEEL COLUMN

COLUMN NOTES:

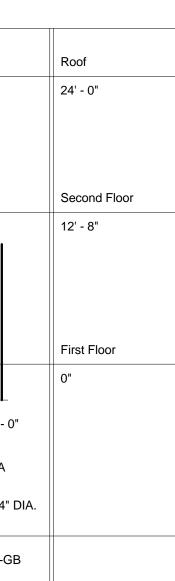
COLUMN SCHEDULE Roof 24' - 0" Second Floor  $\rightarrow$ >\_\_\_\_\_ \\_\_\_\_\_ 12' - 8"  $\square$ \_\_\_\_( First Floor 1" Bottom of Base Plate -7" -7" 1" 1" -3' - 0" 1" 1" Elevation: Base Plate Type: F Е F В D Α С (4)- 3/4" DIA. Anchor Rod: (4)- 3/4" DIA. EPOXY EPOXY ANCHORS ANCHORS Column Locations E1-XA E2-XA E3-EB E2-EA G1-GA G1-GB G2-GA G2-GB

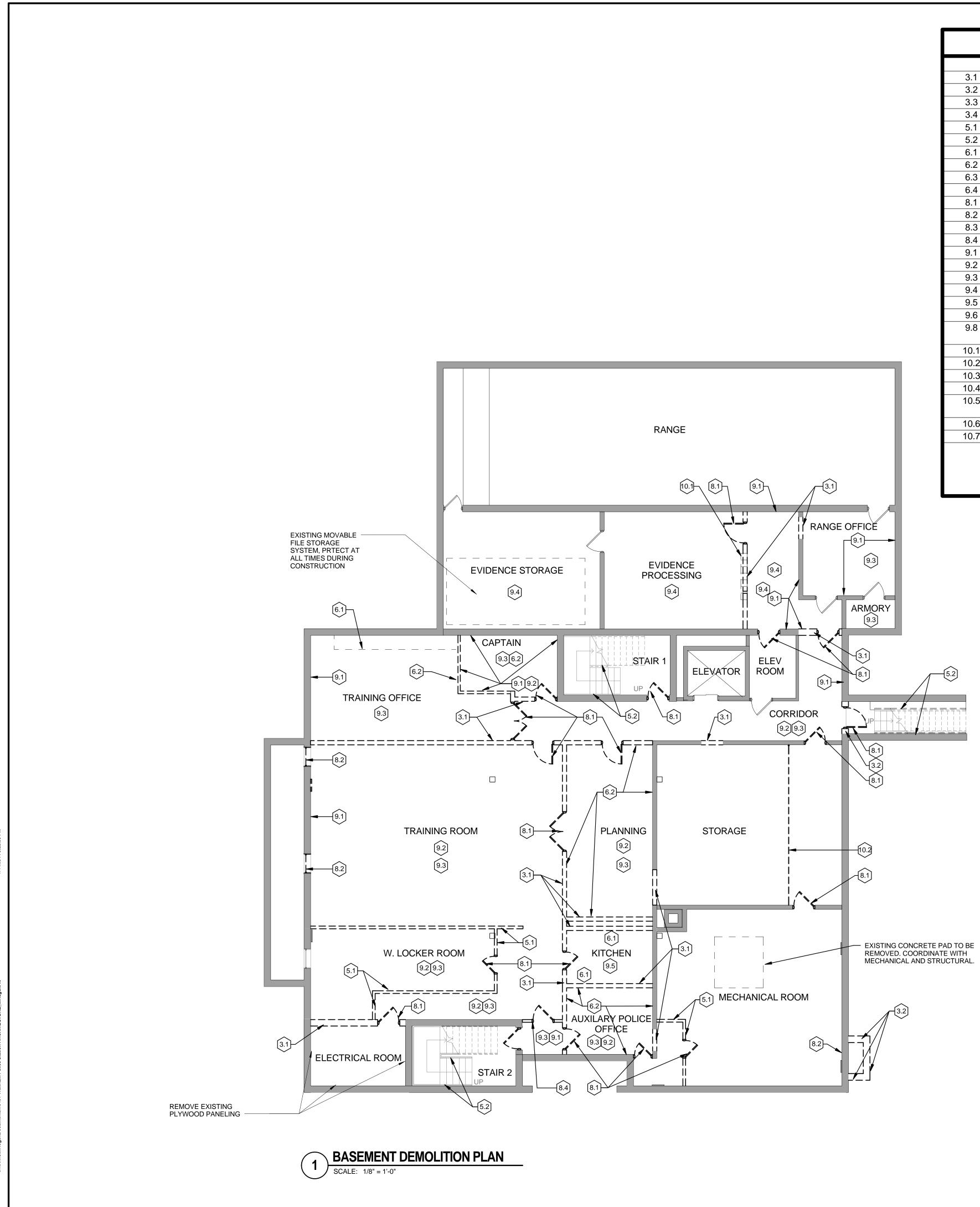
<u>TYPE - A</u>





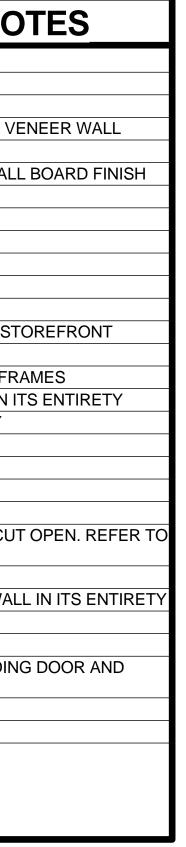
CENTERLINE COLUMN



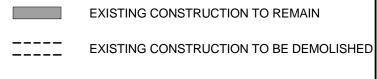


|      | <b>KEYED DEMO PLAN WORK NO</b>  |
|------|---|
|      |   |
| 3.1  | REMOVE PORTION OF EXISTING CMU  |
| 3.2  | REMOVE PORTION OF EXISTING CONCRETE WALL  |
| 3.3  | REMOVE PORTION OF EXISTING EXTERIOR CMU, BRICK V  |
| 3.4  | REMOVE PORTION OF EXISTING AIRWAY   |
| 5.1  | REMOVE EXISTING METAL STUD WALL AND GYPSUM WAL  |
| 5.2  | REMOVE EXISTING STAIR GUARD RAILS & RAILINGS  |
| 6.1  | REMOVE EXISTING WOOD MILLWORK IN ITS ENTIRETY   |
| 6.2  | REMOVE WOOD WAINSCOTING IN ITS ENTIRETY   |
| 6.3  | REMOVE EXISTING BUILT UP RAMP   |
| 6.4  | REMOVE EXISTING WOOD PARTITION WALL   |
| 8.1  | REMOVE EXISTING DOOR & FRAMES   |
| 8.2  | REMOVE EXISTING EXTERIOR WINDOW/LOUVER/ALUM ST  |
| 8.3  | REMOVE EXISTING INTERIOR WINDOW   |
| 8.4  | REMOVE EXISTING STOREFRONT DOOR SIDELIGHTS & FR   |
| 9.1  | REMOVE GYPSUM WALL BOARD FINISH AND FURRING IN I  |
| 9.2  | REMOVE EXISTING CARPET FLOORING IN ITS ENTIRETY   |
| 9.3  | REMOVE EXISTING VAT IN ITS ENTIRETY   |
| 9.4  | REMOVE EXISTING VCT FLOORING IN ITS ENTIRETY  |
| 9.5  | REMOVE EXISTING TILE FLOORING IN ITS ENTIRETY   |
| 9.6  | REMOVE EXISTING TILE WALL FINISH IN ITS ENTIRETY  |
| 9.8  | PORTION OF EXISTING KITCHEN CHASE FLOOR TO BE CU<br>MECHANICAL AND STRUCTURAL DRAWINGS. |
| 10.1 | REMOVE EXISTING EVIDENCE LOCKERS  |
| 10.2 | REMOVE EXISTING WOOD FRAME AND METAL FENCE WAI  |
| 10.3 | REMOVE EXISTING BATHROOM STALL PARTITIONS   |
| 10.4 | REMOVE EXISTING TRANSACTION COUNTERS  |
| 10.5 | REMOVE EXISTING DETENTION CELL UNITS (WALL, SLIDIN<br>BENCH) IN ITS ENTIRETY            |
| 10.6 | REMOVE EXISTING CANOPY ABOVE DOOR   |
| 10.7 | REMOVE AND RELOCATE EXISTING PISTOL LOCKER  |

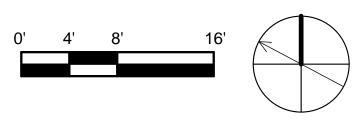
\* PLEASE NOTE: NOT ALL WORK NOTES LISTED APPEAR ON THIS SHEET.



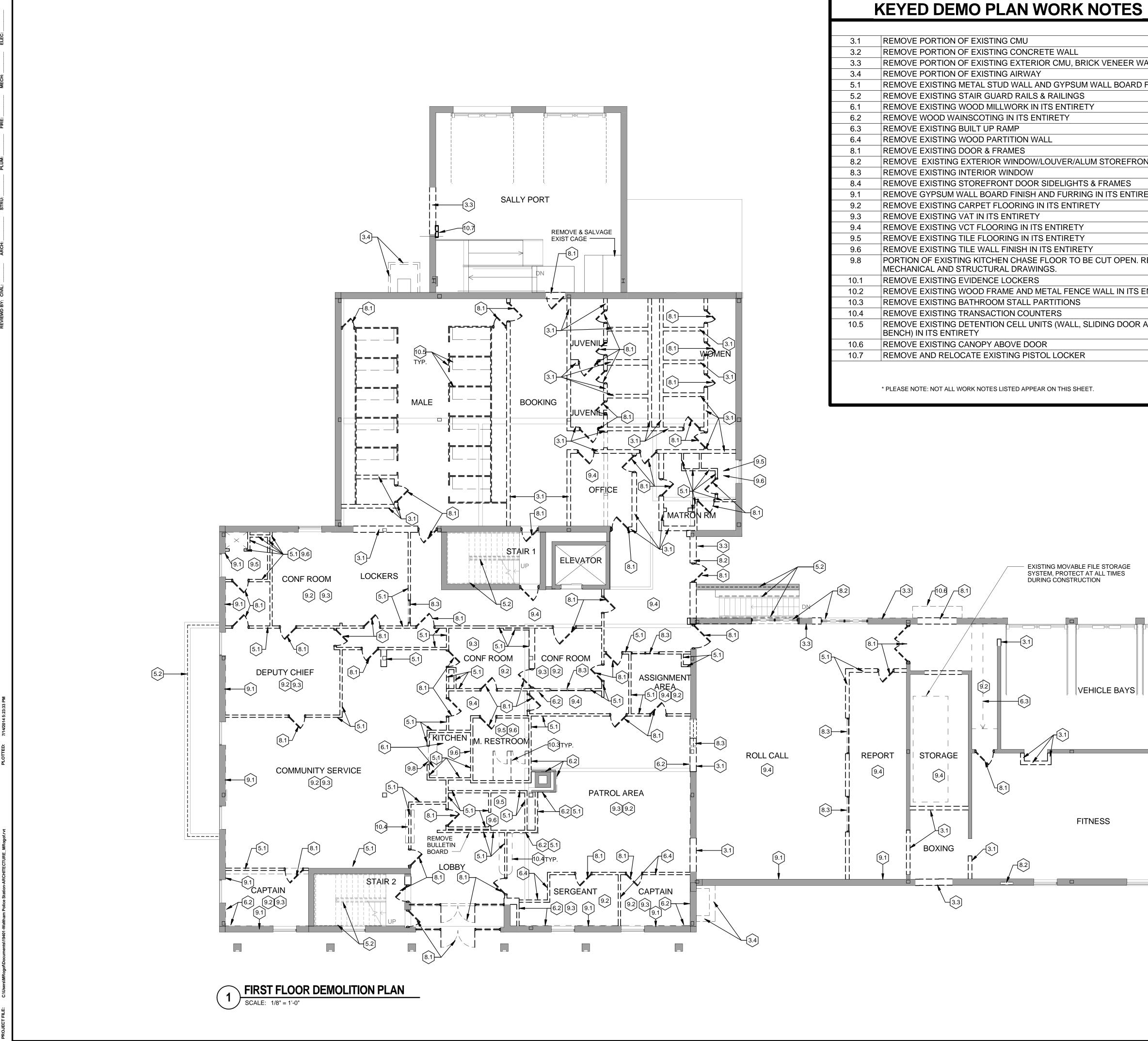
| 1. | REMOVAL OF ANY WORK OR ITEM SHALL INCLUDE<br>LEGAL DISPOSAL OF SAME UNLESS INDICATED TO BE<br>SALVAGED. ALL REMOVAL AND DISPOSAL WORK SHALL<br>BE PERFORMED IN A SAFE AND LEGAL MANNER.<br>DOCUMENTATION OF RECYCLED WASTE IS REQUIRED.  |
|----|--|
| 2. | CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE<br>FIELD PRIOR TO COMMENCEMENT OF DEMOLITION. ANY<br>DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTIO<br>OF THE OWNER'S ARCHITECT IN WRITING<br>IMMEDIATELY UPON DISCOVERY.  |
| 3. | DRAWINGS MAY NOT FULLY SHOW EVERY DETAIL OR<br>CONDITION. CONTRACTOR SHALL COORDINATE WITH<br>NEW CONSTRUCTION WORK TO PROVIDE ALL<br>DEMOLITION WORK REQUIRED TO MEET NEW DESIGN<br>BASED ON ALL INFORMATION PROVIDED.  |
| 4. | CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF<br>ALL STRUCTURAL MEMBERS PRIOR TO DEMOLITION AND<br>SHALL PROVIDE ALL NECESSARY SHORING, BRACING<br>AND TEMPORARY SUPPORTS REQUIRED TO ENSURE<br>STRUCTURAL STABILITY AND PREVENT COLLAPSE OF<br>EXISTING STRUCTURE AND CONSTRUCTION TO REMAIN |
| 5. | CONTRACTOR SHALL PROTECT ALL ADJACENT<br>CONSTRUCTION THAT IS TO REMAIN AND SHALL REPAIR<br>AND PATCH ANY EXISTING TO REMAIN CONSTRUCTION<br>THAT IS DAMAGED DURING DEMOLITION OPERATIONS.<br>REPAIRS SHALL MATCH EXISTING IN APPEARANCE AND<br>INTEGRITY.                                     |
| 6. | REFER TO THE MECHANICAL, PLUMBING, FIRE<br>PROTECTION AND ELECTRICAL NOTES FOR REMOVAL<br>AND DISPOSAL OF EQUIPMENT, PIPES, CONDUITS,<br>WIRING OR OTHER ITEMS THAT ARE INCLUDED AS PART<br>OF THE SCOPE OF DEMOLITION WORK IN THIS<br>CONTRACT.   |
| 7. | REFER TO STRUCTURAL DRAWINGS FOR CUTTING OF<br>EXISTING CONCRETE SLAB. COORDINATE EXTENT WITH<br>PLUMBING CONTRACTORS.   |
| 8. | PATCH ALL ROOF PENETRATIONS FROM REMOVED<br>EQUIPMENT  |



DEMOLITION PLAN LEGEND



| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com  |
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| WALTHAM POLICE<br>STATION<br>RENOVATION   |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| BASEMENT<br>DEMOLITION<br>PLAN  |
| PROJECT NUMBER:19401.01DESIGNED BY:FCDRAWN BY:EKM   |
| CHECKED BY:FCDATE:July-Aug. 2016SCALE:As indicated  |
| SHEET NUMBER:   |
| <b>SHEET</b> 26 <b>OF</b> 157   |

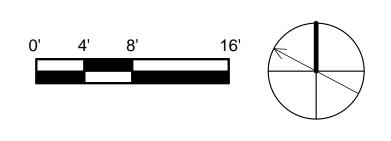


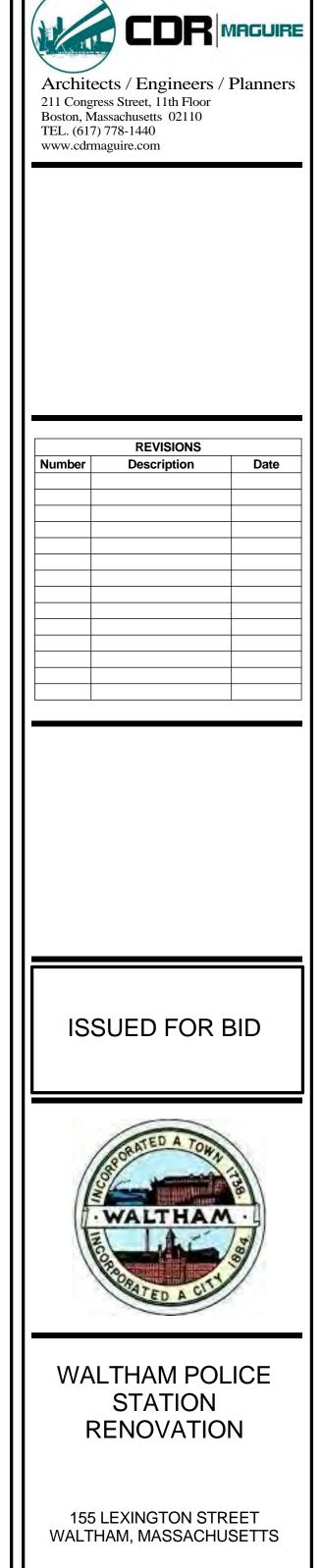


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| T OPEN. REFER TO    |
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| <ul> <li>OF THE OWNER'S ARCHITECT IN WRITING<br/>IMMEDIATELY UPON DISCOVERY.</li> <li>3. DRAWINGS MAY NOT FULLY SHOW EVERY DETAIL OR<br/>CONDITION. CONTRACTOR SHALL COORDINATE WITH<br/>NEW CONSTRUCTION WORK TO PROVIDE ALL<br/>DEMOLITION WORK REQUIRED TO MEET NEW DESIGN<br/>BASED ON ALL INFORMATION PROVIDED.</li> <li>4. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF</li> </ul>  | G       | SENERAL DEMO NOTES   |
|---|---------|--|
| <ol> <li>CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE<br/>FIELD PRIOR TO COMMENCEMENT OF DEMOLITION, ANY<br/>DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION<br/>OF THE OWNERS ARCHITECT IN WRITING<br/>IMMEDIATELY UPON DISCOVERY.</li> <li>DRAWINGS MAY NOT FULLY SHOW EVERY DETAIL OR<br/>CONSTRUCTION WORK TO PROVIDE ALL<br/>DEMOLITION WORK NOT PROVIDE ALL<br/>DEMOLITION WORK REQUIRED TO MEET NEW DESIGN<br/>BASED ON ALL INFORMATION PROVIDED.</li> <li>CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF<br/>ALL STRUCTURAL MEMBERS PRIOR TO DEMOLITION AND<br/>SHALL PROVIDE ALL NECESSARY SHORING, BRACING<br/>AND TEMPORARY SUPPORTS REQUIRED TO ENSURE<br/>STRUCTURAL STABLITY AND PREVENT COLLAPSE OF<br/>EXISTING STRUCTURE AND CONSTRUCTION TO REMAIN.</li> <li>CONTRACTOR SHALL PROTECT ALL ADJACENT<br/>CONSTRUCTION STRUCTURE AND CONSTRUCTION TO REMAIN.</li> <li>CONTRACTOR SHALL PROTECT ALL ADJACENT<br/>CONSTRUCTION STALL PROTECT ALL ADJACENT<br/>CONSTRUCTION STRUCTURE AND CONSTRUCTION THAT IS TO REMAIN AND SHALL REPAIR<br/>AND PATCH ANY EXISTING TO REMAIN AND SHALL REPAIR<br/>AND PATCH ANY EXISTING TO REMAIN CONSTRUCTION<br/>THAT IS DAMAGED DURIND DEMOLITION OPERATIONS.<br/>REPAIRS SHALL MATCH EXISTING IN APPEARANCE AND<br/>INTEGRITY.</li> <li>REFER TO THE MECHANICAL, PLUMBING, FIRE<br/>PROTECTION AND ELECTRICAL NOTES FOR REMOVAL<br/>AND DISPOSAL OF EQUIPMENT, PIPES, CONDUITS,<br/>WIRING OR OTHER TEMS THAT ARE INCLUDED AS PART<br/>OF THE SCOPE OF DEMOLITION WORK IN THIS<br/>CONTRACT.</li> <li>REFER TO THE MECHANICAL DRAWINGS FOR CUTTING OF<br/>EXISTING CONCRETE SLABCOORDINATE EXTENT WITH<br/>PLUMBING CONTRACTORS.</li> <li>PATCH ALL ROOF PENETRATIONS FROM REMOVED<br/>EQUIPMENT</li> </ol> | 1.      | LEGAL DISPOSAL OF SAME UNLESS INDICATED TO BE<br>SALVAGED. ALL REMOVAL AND DISPOSAL WORK SHALL<br>BE PERFORMED IN A SAFE AND LEGAL MANNER.   |
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| 8. PATCH ALL ROOF PENETRATIONS FROM REMOVED EQUIPMENT   | 7.      | REFER TO STRUCTURAL DRAWINGS FOR CUTTING OF<br>EXISTING CONCRETE SLAB. COORDINATE EXTENT WITH  |
|   | 8.      | PATCH ALL ROOF PENETRATIONS FROM REMOVED   |
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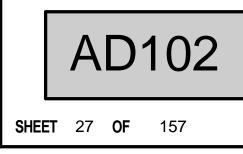
### DEMOLITION PLAN LEGEND EXISTING CONSTRUCTION TO REMAIN \_\_\_\_\_ EXISTING CONSTRUCTION TO BE DEMOLISHED \_\_\_\_



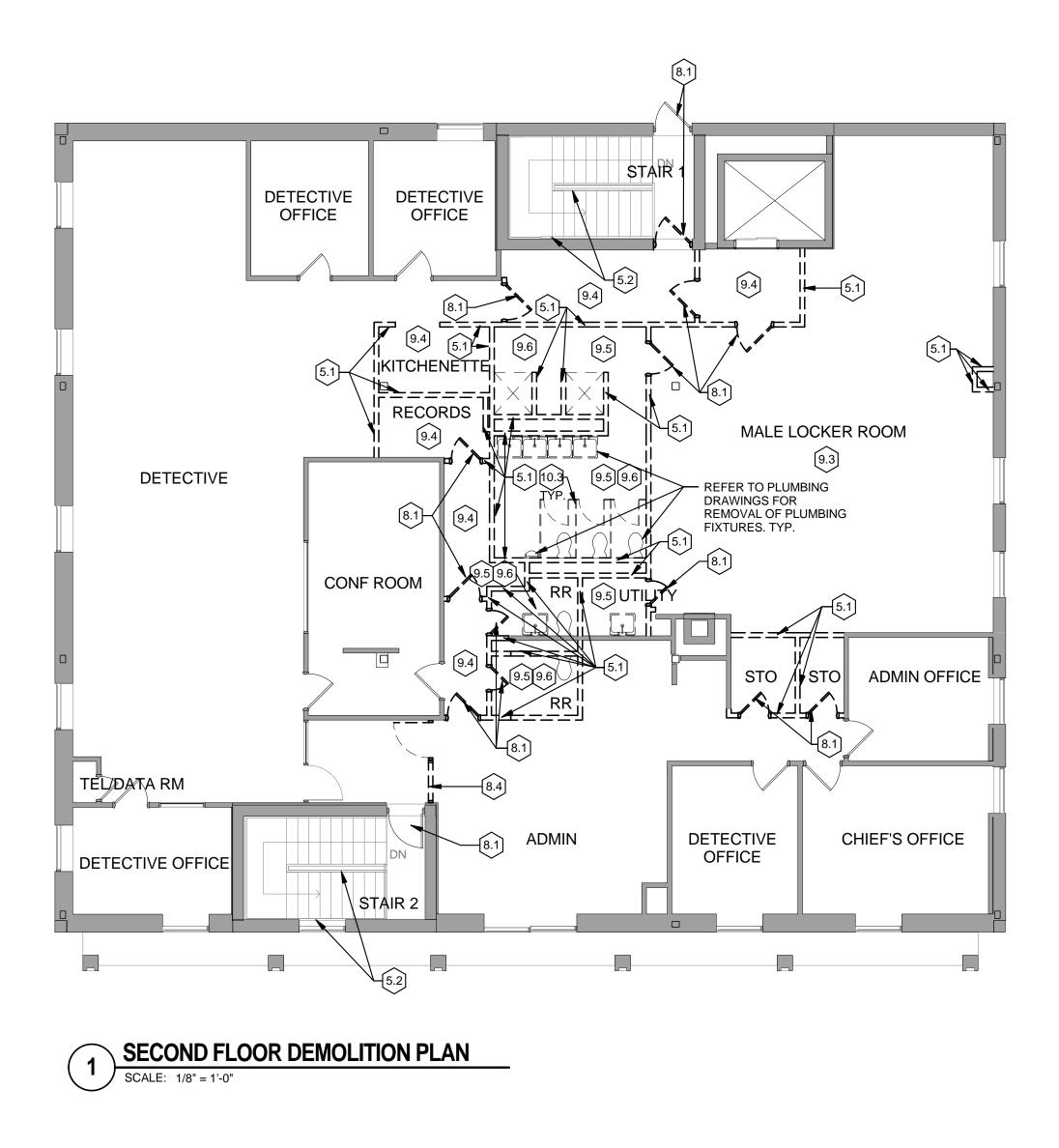


FIRST FLOOR DEMOLITION PLAN

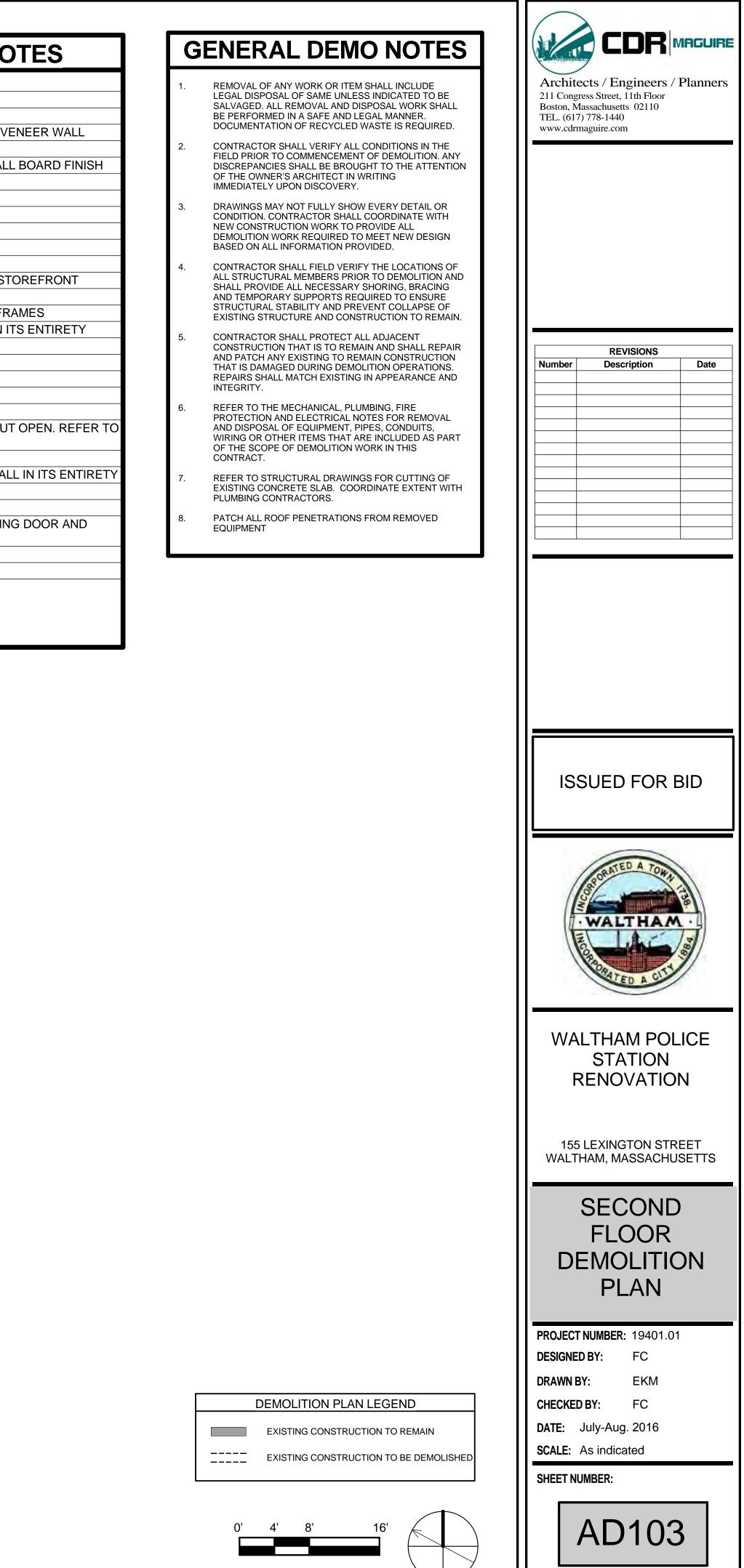
| PROJEC  | T NUMBER:  | 19401.01 |
|---------|------------|----------|
| DESIGNE | DBY:       | FC       |
| DRAWN   | BY:        | EKM      |
| CHECKE  | D BY:      | FC       |
| DATE:   | July-Aug.  | 2016     |
| SCALE:  | As indicat | ted      |
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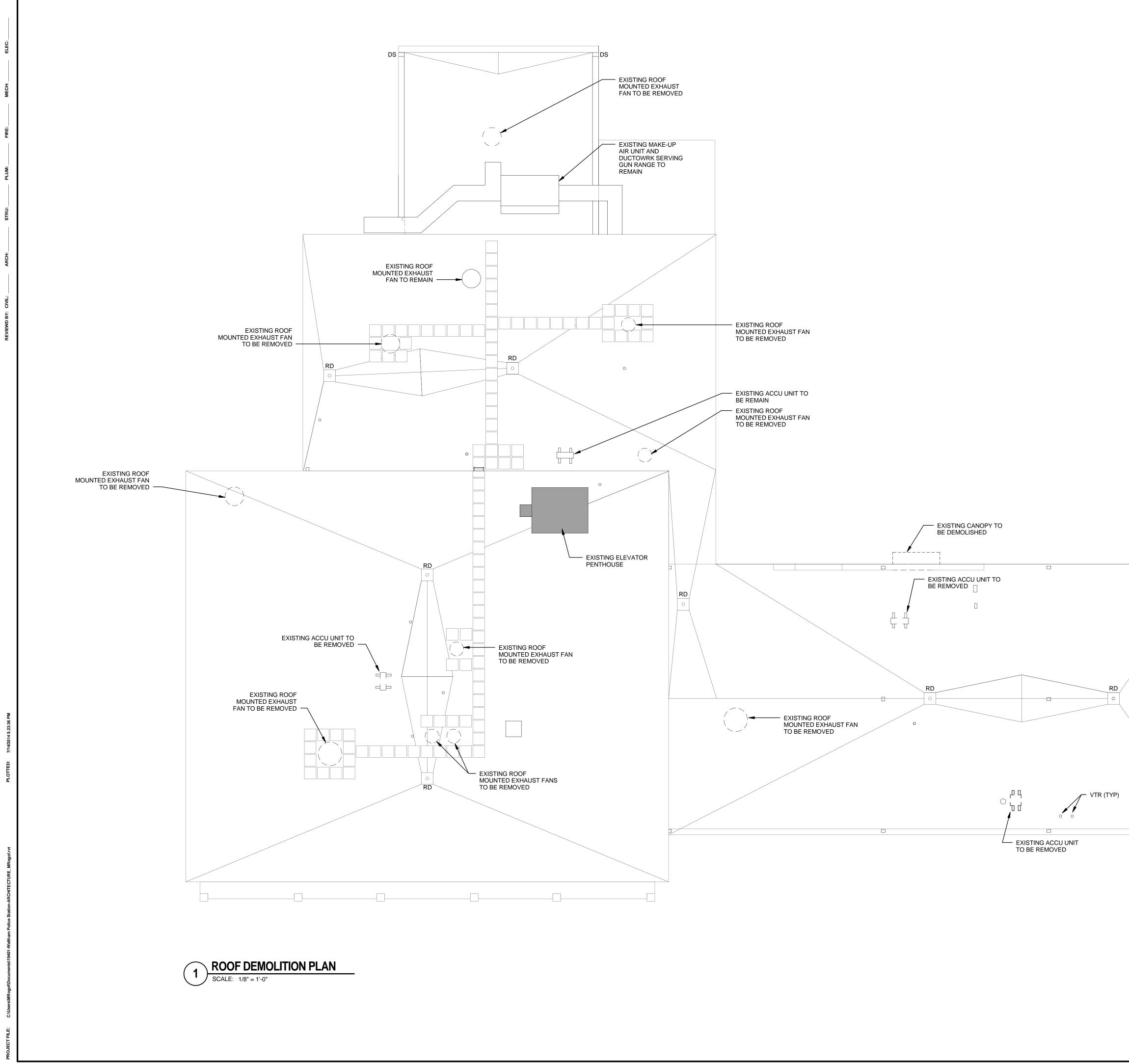


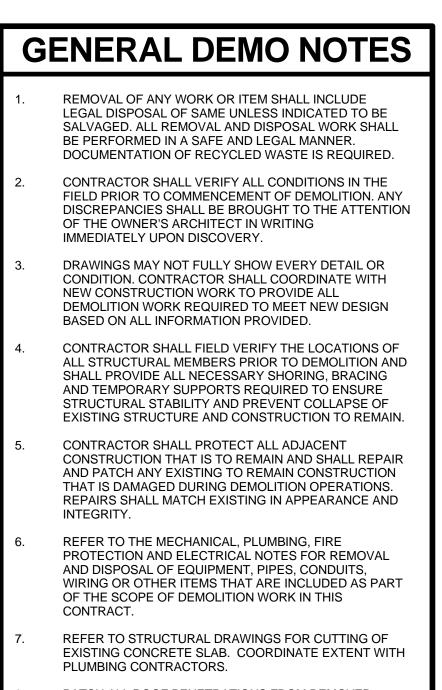


|      | <b>KEYED DEMO PLAN WORK NO</b>  |
|------|---|
|      |   |
| 3.1  | REMOVE PORTION OF EXISTING CMU  |
| 3.2  | REMOVE PORTION OF EXISTING CONCRETE WALL  |
| 3.3  | REMOVE PORTION OF EXISTING EXTERIOR CMU, BRICK VI                                       |
| 3.4  | REMOVE PORTION OF EXISTING AIRWAY   |
| 5.1  | REMOVE EXISTING METAL STUD WALL AND GYPSUM WAL  |
| 5.2  | REMOVE EXISTING STAIR GUARD RAILS & RAILINGS  |
| 6.1  | REMOVE EXISTING WOOD MILLWORK IN ITS ENTIRETY   |
| 6.2  | REMOVE WOOD WAINSCOTING IN ITS ENTIRETY   |
| 6.3  | REMOVE EXISTING BUILT UP RAMP   |
| 6.4  | REMOVE EXISTING WOOD PARTITION WALL   |
| 8.1  | REMOVE EXISTING DOOR & FRAMES   |
| 8.2  | REMOVE EXISTING EXTERIOR WINDOW/LOUVER/ALUM ST  |
| 8.3  | REMOVE EXISTING INTERIOR WINDOW   |
| 8.4  | REMOVE EXISTING STOREFRONT DOOR SIDELIGHTS & FR   |
| 9.1  | REMOVE GYPSUM WALL BOARD FINISH AND FURRING IN I  |
| 9.2  | REMOVE EXISTING CARPET FLOORING IN ITS ENTIRETY   |
| 9.3  | REMOVE EXISTING VAT IN ITS ENTIRETY   |
| 9.4  | REMOVE EXISTING VCT FLOORING IN ITS ENTIRETY  |
| 9.5  | REMOVE EXISTING TILE FLOORING IN ITS ENTIRETY   |
| 9.6  | REMOVE EXISTING TILE WALL FINISH IN ITS ENTIRETY  |
| 9.8  | PORTION OF EXISTING KITCHEN CHASE FLOOR TO BE CU<br>MECHANICAL AND STRUCTURAL DRAWINGS. |
| 10.1 | REMOVE EXISTING EVIDENCE LOCKERS  |
| 10.2 | REMOVE EXISTING WOOD FRAME AND METAL FENCE WAL  |
| 10.3 | REMOVE EXISTING BATHROOM STALL PARTITIONS   |
| 10.4 | REMOVE EXISTING TRANSACTION COUNTERS  |
| 10.5 | REMOVE EXISTING DETENTION CELL UNITS (WALL, SLIDIN<br>BENCH) IN ITS ENTIRETY            |
| 10.6 | REMOVE EXISTING CANOPY ABOVE DOOR   |
| 10.7 | REMOVE AND RELOCATE EXISTING PISTOL LOCKER  |
|      |   |
|      | *NOTE: NOT ALL WORK NOTES LISTED APPEAR ON THIS SHEET                                   |

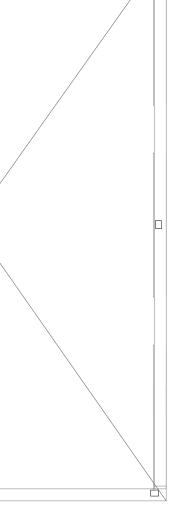


**SHEET** 28 **OF** 157





8. PATCH ALL ROOF PENETRATIONS FROM REMOVED EQUIPMENT



| 0' 4' 8' | 16' |  |
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DEMOLITION PLAN LEGEND

EXISTING CONSTRUCTION TO BE DEMOLISHED

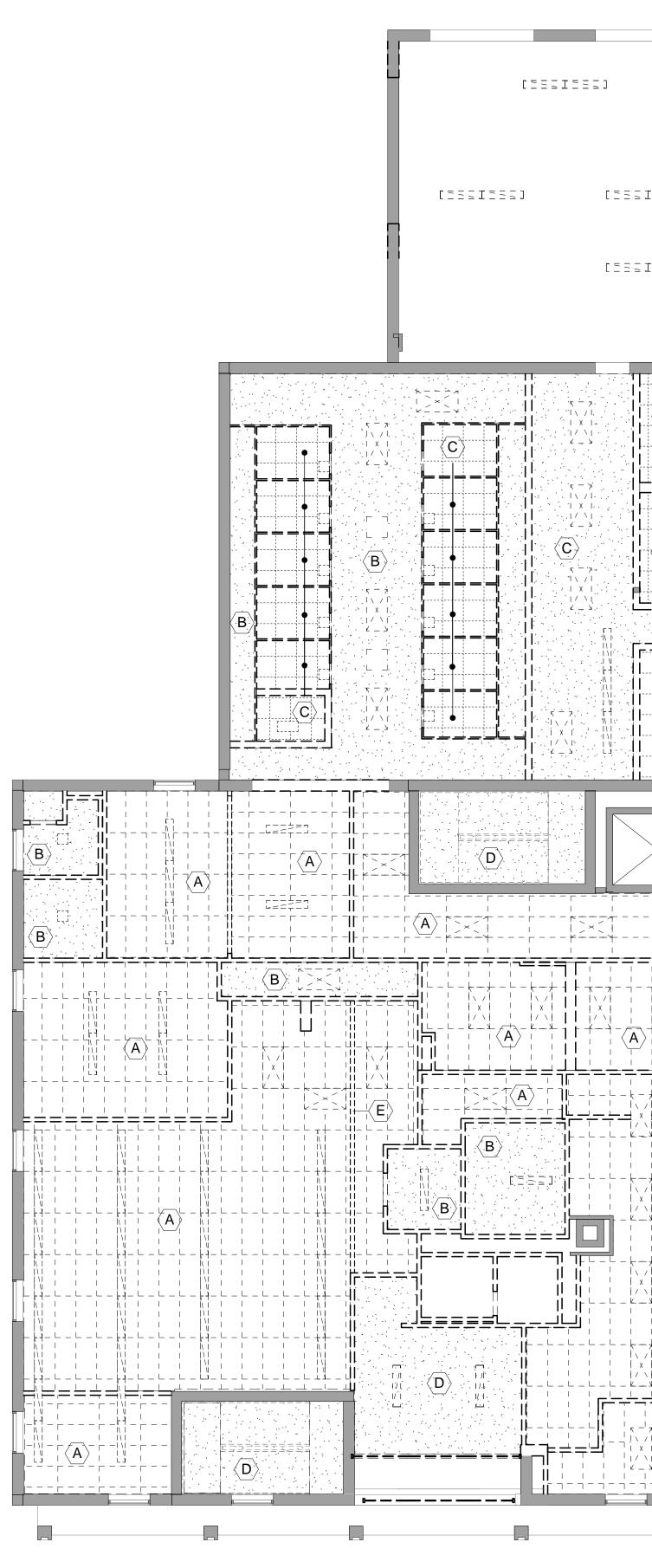
EXISTING CONSTRUCTION TO REMAIN

| CCR MAGUIRE<br>Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
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| REVISIONS       Number     Description     Date   |
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| ISSUED FOR BID  |
| WALTHAM .<br>TOWNSON  |
| WALTHAM POLICE<br>STATION<br>RENOVATION   |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| ROOF<br>DEMOLITION<br>PLAN  |
| PROJECT NUMBER: 19401.01<br>DESIGNED BY: Designer   |
| DRAWN BY: Author<br>CHECKED BY: Checker<br>DATE:  |
| SCALE: 2016 As<br>SHEET NUMBER:   |
| AD104   |
| SHEET 29 OF 157   |



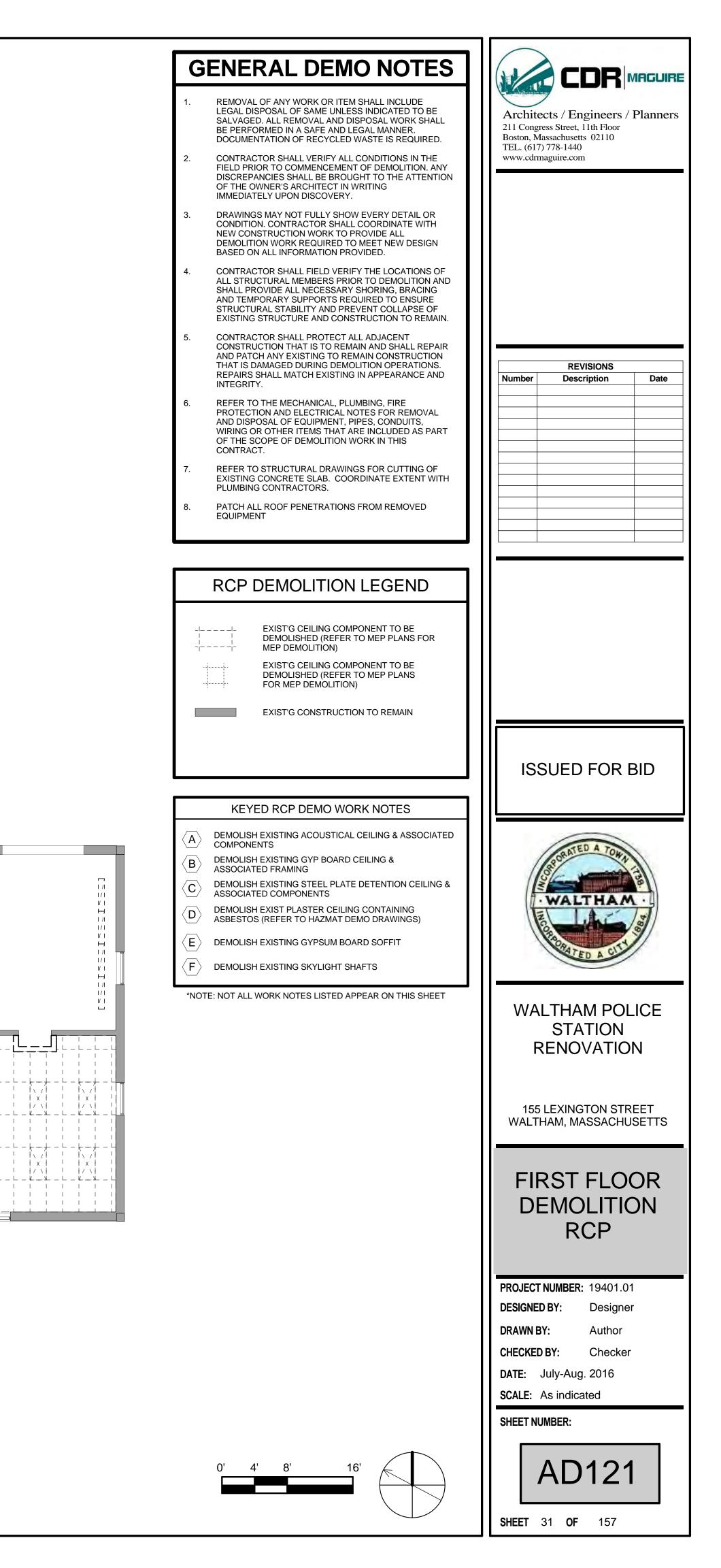
| G   | ENERAL DEMO NOTES  |  |
|---|--|--|
| 1.  | REMOVAL OF ANY WORK OR ITEM SHALL INCLUDE<br>LEGAL DISPOSAL OF SAME UNLESS INDICATED TO BE<br>SALVAGED. ALL REMOVAL AND DISPOSAL WORK SHALL<br>BE PERFORMED IN A SAFE AND LEGAL MANNER.<br>DOCUMENTATION OF RECYCLED WASTE IS REQUIRED.  | Architects / Engineers / Plann<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110 |
| 2.  | CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE<br>FIELD PRIOR TO COMMENCEMENT OF DEMOLITION. ANY<br>DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION<br>OF THE OWNER'S ARCHITECT IN WRITING<br>IMMEDIATELY UPON DISCOVERY.   | TEL. (617) 778-1440<br>www.cdrmaguire.com  |
| 3.  | DRAWINGS MAY NOT FULLY SHOW EVERY DETAIL OR<br>CONDITION. CONTRACTOR SHALL COORDINATE WITH<br>NEW CONSTRUCTION WORK TO PROVIDE ALL<br>DEMOLITION WORK REQUIRED TO MEET NEW DESIGN  |  |
| 4.  | BASED ON ALL INFORMATION PROVIDED.<br>CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF<br>ALL STRUCTURAL MEMBERS PRIOR TO DEMOLITION AND<br>SHALL PROVIDE ALL NECESSARY SHORING, BRACING<br>AND TEMPORARY SUPPORTS REQUIRED TO ENSURE<br>STRUCTURAL STABILITY AND PREVENT COLLAPSE OF<br>EXISTING STRUCTURE AND CONSTRUCTION TO REMAIN |  |
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| 6.  | REFER TO THE MECHANICAL, PLUMBING, FIRE<br>PROTECTION AND ELECTRICAL NOTES FOR REMOVAL<br>AND DISPOSAL OF EQUIPMENT, PIPES, CONDUITS,<br>WIRING OR OTHER ITEMS THAT ARE INCLUDED AS PART<br>OF THE SCOPE OF DEMOLITION WORK IN THIS  |  |
| 7.  | CONTRACT.<br>REFER TO STRUCTURAL DRAWINGS FOR CUTTING OF<br>EXISTING CONCRETE SLAB. COORDINATE EXTENT WITH<br>PLUMBING CONTRACTORS.  |  |
| 8.  | PATCH ALL ROOF PENETRATIONS FROM REMOVED<br>EQUIPMENT  |  |
|   | RCP DEMOLITION LEGEND  |  |
| _!!<br>_!<br>_!   | EXIST'G CEILING COMPONENT TO BE     DEMOLISHED (REFER TO MEP PLANS FOR     MEP DEMOLITION)     EXIST'G CEILING COMPONENT TO BE     DEMOLISHED (REFER TO MEP PLANS  |  |
|   | FOR MEP DEMOLITION)       EXIST'G CONSTRUCTION TO REMAIN   |  |
|   |  | ISSUED FOR BID   |
|   | KEYED RCP DEMO WORK NOTES  |  |
| $ \begin{array}{c} \langle A \rangle \\ \langle B \rangle \\ \langle C \rangle \\ \langle D \rangle \end{array} $ | DEMOLISH EXISTING ACOUSTICAL CEILING & ASSOCIATED<br>COMPONENTS<br>DEMOLISH EXISTING GYP BOARD CEILING &<br>ASSOCIATED FRAMING<br>DEMOLISH EXISTING STEEL PLATE DETENTION CEILING &<br>ASSOCIATED COMPONENTS<br>DEMOLISH EXIST PLASTER CEILING CONTAINING<br>ASBESTOS (REFER TO HAZMAT DEMO DRAWINGS)                                | WALTHAM .  |
|   | DEMOLISH EXISTING GYPSUM BOARD SOFFIT<br>DEMOLISH EXISTING SKYLIGHT SHAFTS   | BADEATED A CITY  |
| *N01  | E: NOT ALL WORK NOTES LISTED APPEAR ON THIS SHEET  | WALTHAM POLICE<br>STATION<br>RENOVATION  |
|   |  | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETT  |
|   |  | BASEMENT<br>DEMOLITION<br>RCP  |
|   |  | PROJECT NUMBER:19401.01DESIGNED BY:DesignerDRAWN BY:AuthorCHECKED BY:CheckerDATE:SCALE:2016 As   |
|   |  | SHEET NUMBER   |
|   | 0' 4' 8' 16'   | AD120  |





FIRST FLOOR RCP DEMOLITION SCALE: 1/8" = 1'-0"

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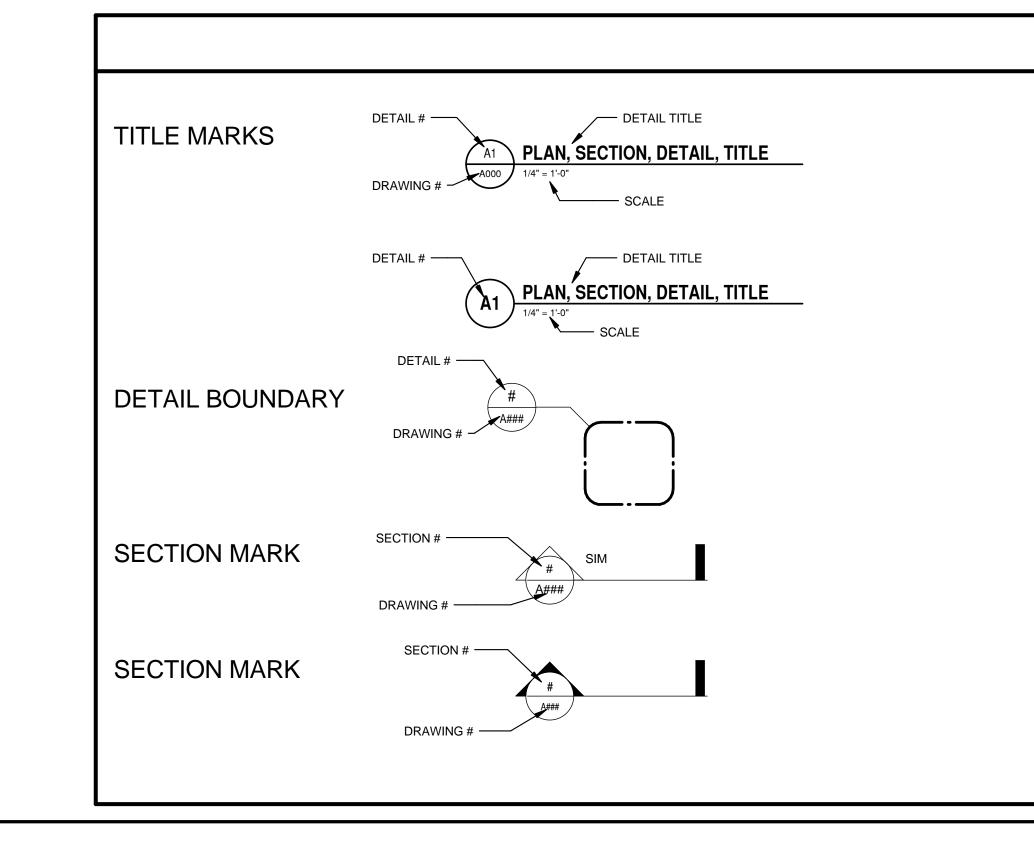
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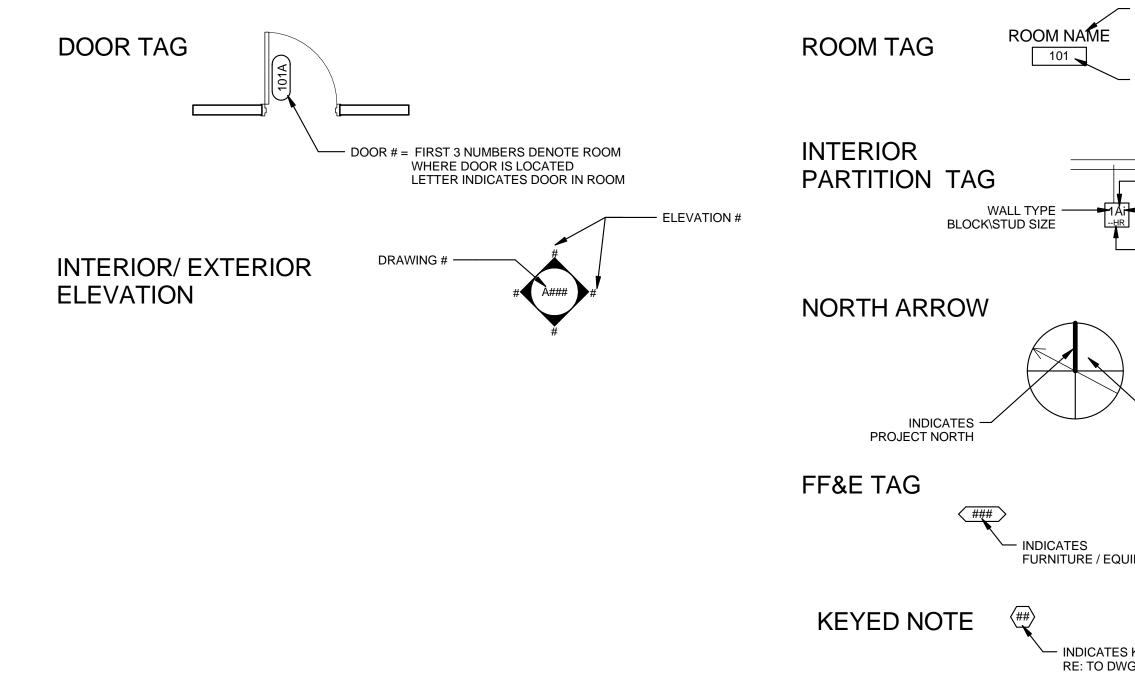


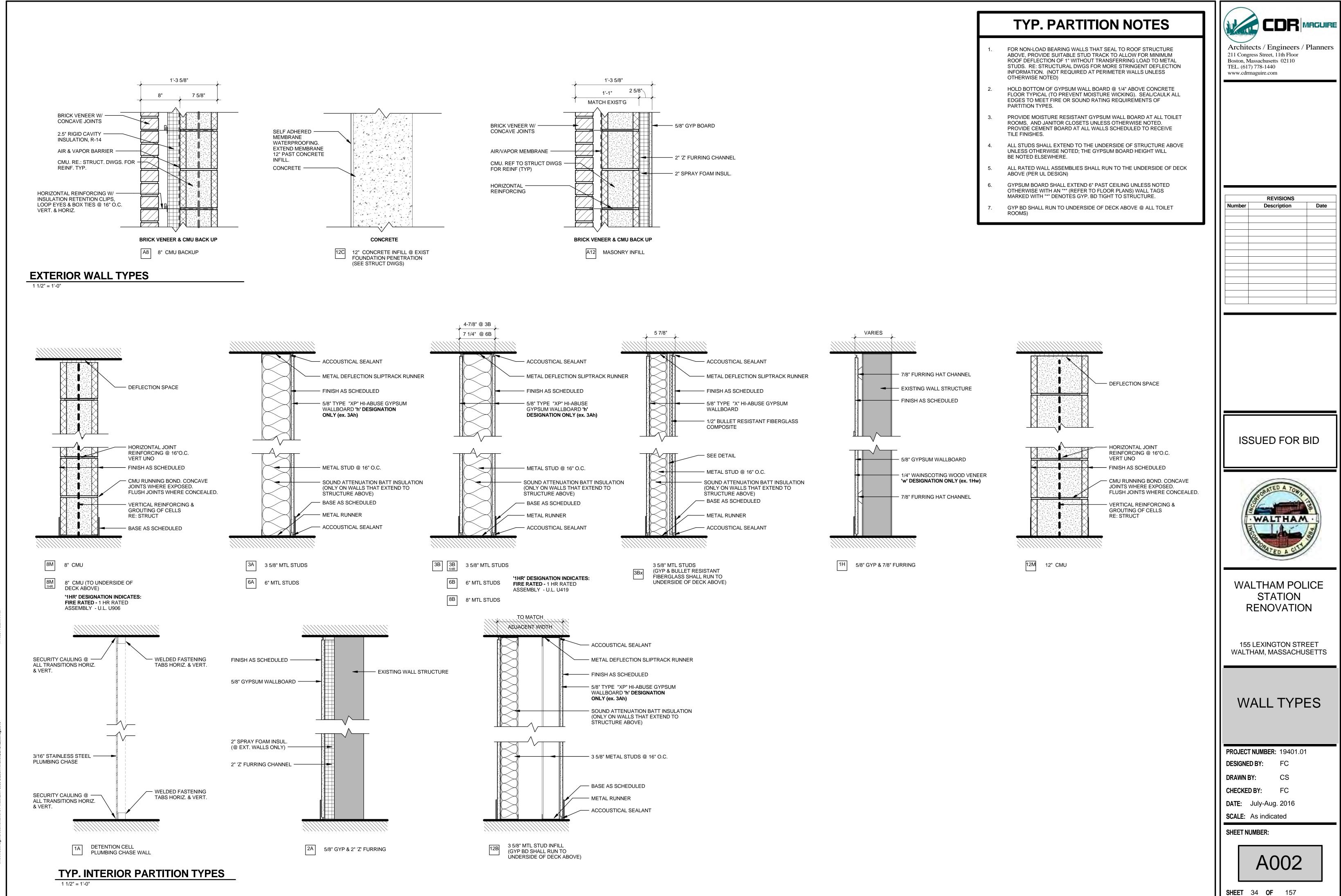
|  | $\frown$   |
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| GENERAL DEMO NOTES   |  |
| 1. REMOVAL OF ANY WORK OR ITEM SHALL INCLUDE<br>LEGAL DISPOSAL OF SAME UNLESS INDICATED TO BE<br>SALVAGED. ALL REMOVAL AND DISPOSAL WORK SHALL<br>BE PERFORMED IN A SAFE AND LEGAL MANNER.<br>DOCUMENTATION OF RECYCLED WASTE IS REQUIRED.   | Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
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| <ol> <li>REFER TO STRUCTURAL DRAWINGS FOR CUTTING OF<br/>EXISTING CONCRETE SLAB. COORDINATE EXTENT WITH<br/>PLUMBING CONTRACTORS.</li> </ol>   |  |
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|  |  |
| RCP DEMOLITION LEGEND  |  |
|  |  |
| DEMIDLISHED (REPERTIONEP PLANS FOR          MEP DEMOLITION)         EXIST'G CEILING COMPONENT TO BE         DEMOLISHED (REFER TO MEP PLANS         FOR MEP DEMOLITION)   |  |
| EXIST'G CONSTRUCTION TO REMAIN   |  |
|  | ISSUED FOR BID   |
| KEYED RCP DEMO WORK NOTES  |  |
| <ul> <li>A DEMOLISH EXISTING ACOUSTICAL CEILING &amp; ASSOCIATED COMPONENTS</li> <li>B DEMOLISH EXISTING GYP BOARD CEILING &amp; ASSOCIATED FRAMING</li> <li>C DEMOLISH EXISTING STEEL PLATE DETENTION CEILING &amp; ASSOCIATED COMPONENTS</li> <li>D DEMOLISH EXIST PLASTER CEILING CONTAINING ASBESTOS (REFER TO HAZMAT DEMO DRAWINGS)</li> <li>E DEMOLISH EXISTING GYPSUM BOARD SOFFIT</li> </ul> | WALTHAM .  |
| F DEMOLISH EXISTING SKYLIGHT SHAFTS  |  |
| *NOTE: NOT ALL WORK NOTES LISTED APPEAR ON THIS SHEET  | WALTHAM POLICE<br>STATION<br>RENOVATION  |
|  | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
|  | SECOND<br>FLOOR<br>DEMOLITION<br>RCP   |
|  | PROJECT NUMBER:19401.01DESIGNED BY:DesignerDRAWN BY:AuthorCHECKED BY:CheckerDATE:SCALE:2016 As   |
|  | SHEET NUMBER   |
| 0' 4' 8' 16'   | AD122<br>SHEET 32 OF 157   |

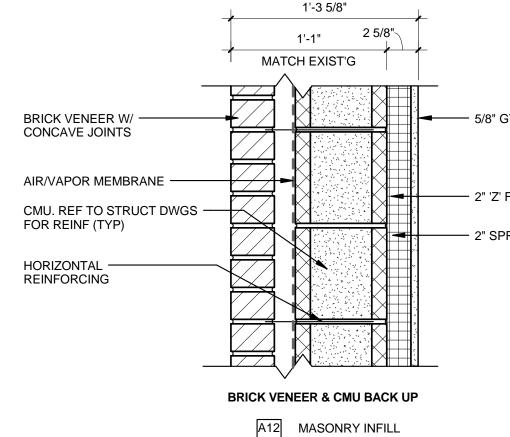




| <u> </u>   | Δ   |  |   |
|--|---|--|---|
|  | A   | BBREVIATIONS LIST  |   |
| S.       AND         Q.       AT       DBL         Q.       C.       CENTRLINE       DBL         E.       C.       CHANNEL       DEM         Q.       DIAMETER OR ROUND       DEPT         P. PL, PLS       PLATE(S)       DF.         P. NO, NOS       NUMBER(S)       DF.         AB       ANCHOR BOLT       DM         AV       ABOVE       DN         AC       AR CONDITIONING       DN         AC       ARGONDENT       DN         AC       ARGONDENT       E.         ACOUSTICAL CEILING TILE       DWR         ADDM       ADDENDUM       ADJ         ADJA       ADJACENT       E.         ALT       ALUTRINATE       E.L         APR       ACCESS PANEL       ELEC         APPROX.       APRONIMATE       ELEV         APPROX.       APRONIMATE       ELEV         ASPH.       ASPHALT       ENC         BLG.       BOARD       EXT         BLG.       BOARD       EXT         BLG.       BOARD       EXT         BLG.       BOARD       EXT         BLG.       BOARD | DEPRESSED     DEPARTMENT     DETAIL     DRINKING FOUNTAIN     DIMETER     DIMENSION     DISPENSER     DEMAIN MANHOLE     DOWN     DOOR     DOWNSPOUT     DRAYSTANDPIPE     DRAWER     E     EAST     EACH     EAST     EAST     EACH     EAST     EAST     EAST     EACH     EAST     EAST     EAST     EAST     EAST     EACH     EAST     EACH     EAST     EACH     EAST     EACH     EAST     EACH     EACH     EACH     EAST     EACH     EACH | H H H H H H H H H H H H H H H H H H H  |   |
| OOR TAG  | UMBERS DENOTE ROOM<br>DOR IS LOCATED<br>DICATES DOOR IN ROOM  | ROOM TAG<br>NTERIOR<br>PARTITION TAG<br>ROOM NAME<br>TO<br>ROOM NAME<br>TO<br>ROOM NAME<br>ROOM NAME<br>ROOM NAME<br>ROOM NAME<br>ROOM NAME<br>ROOM NAME<br>ROOM #<br>DEMO NOTE<br>SCHEDULE<br>REVISION<br>TAG<br>NDICATES REVISION #  | WALTHAM POLICE<br>STATION<br>RENOVATION<br>155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| TERIOR/ EXTERIOR   | ELEVATION #   | WALL TYPE<br>BLOCKISTUD SIZE<br>INDICATES<br>FIRE RATED ASSEMBLY<br>NORTH ARROW<br>INDICATES<br>PROJECT NORTH<br>INDICATES<br>PROJECT NORTH<br>INDICATES<br>FROJECT NORTH<br>INDICATES<br>FURNITURE / EQUIPMENT #<br>KEYED NOTE<br>INDICATES KEYED NOTE<br>RE: TO JWG FOR SCHEDULE<br>INDICATES KEYED NOTE<br>INDICATES | ABBREVIATIONS<br>PROJECT NUMBER: 19401.01<br>DESIGNED BY: FC<br>DRAWN BY: EKM<br>CHECKED BY: FC<br>DATE: July-Aug. 2016<br>SCALE: As indicated<br>SHEET NUMBER: |







| BUILDING CODE:<br>(IBC) INTERNATIONAL BUILDIN   |  |   |   |  |   |   |   |  |  |  |
|---|--|---|---|--|---|---|---|--|--|--|
|   | IG CODF  | 2009  |   |  |   |   | L <b>IFE SAFETY CODE:</b><br>NFPA 101 LIFE SAFETY CODE  |  |  |  |
| ÎNTÉRNATIONAL EXISTING BUILDING CODE 2009<br>780 CMR: MASSACHUSETTS BUILDING CODE - 8TH EDITION   |  |   |   |  |   | <b>م</b>  | ACCESSIBILITY CODE:<br>ADA STANDARDS FOR ACCESSIBLE DESIGN  |  |  |  |
| MECHANICAL CODE:<br>(IMC) INTERNATIONAL MECHANICAL CODE 2009  |  |   |   |  |   |   | 521 CMR: MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGUL4<br>ENERGY CODE:  |  |  |  |
| PLUMBING CODE:<br>248 CMR 10.00: UNIFORM STATE PLUMBING CODE<br>ELECTRICAL CODE:  |  |   |   |  |   | ( <br>7<br>0  | ENERGY CODE:<br>(IECC) INTERNATIONAL ENERGY CONSERVATION CODE 2009<br>780 CMR: MASSACHUSETTS BUILDING CODE - 8TH EDITION<br>CHAPTER 13 - ENERGY CONSERVATION<br>CHAPTER 115 APPENDIX AA - STRETCH ENERGY CODE |  |  |  |
| 527 CMR 12.00: MASSACHUSE <sup>-</sup><br>(NEC) NFPA 70: NATIONAL ELE   |  |   |   |  |   |   |   |  |  |  |
| FIRE CODE:<br>(IFC) INTERNATIONAL FIRE CO<br>527 CMR: MASSACHUSETTS FI  |  |   | I REGUL   | ATIONS   | i   | C   | <b>SIGN CODE:</b><br>CITY OF WALTHAM GENERAL ORDINANCES<br>CHAPTER Z. ZONING<br>ARTICLE VI. SPECIAL PROVISIONS RELATING TO SIGNS  |  |  |  |
| STATE/CITY AMENDMENTS:<br>780 CMR: MASSACHUSETTS BI   | UILDING  | CODE -  | 8TH EDI   | tion an  | IENDME                                    |   | ELEVATOR CODE:<br>ANSI/ASME A17.1-2007 SAFETY CODE FOR ELEVATORS AND ESCALATO   |  |  |  |
| CITY OF WALTHAM GENERAL (<br>CHAPTER Z: ZONING<br>SEC. 3.7. EXISTING BUILDINGS  |  |   | AND USI   | ES.  |   | 5   | 524 CMR: MASSACHUSETTS ELEVATOR CODE  |  |  |  |
| BUILDING INFORMATION  |  |   |   |  |   |   |   |  |  |  |
| WALTHAM POLICE DEPARTME<br>155 LEXINGTON ST<br>WALTHAM, MA 02454  | NT   |   |   |  |   |   |   |  |  |  |
| PARCEL ID:<br>OWNER:<br>LAND USE:   |  | CITY C<br>MUNIC   |   | HAM  | 6 (3.216)                                 | (EXISTING 1   | NONCONFORMING)  |  |  |  |
| YEAR BUILT:<br>ORIGINAL USE:  | POLICE   | 50 YEAR   | ON  |  |   |   |   |  |  |  |
| CURRENT OCCUPANCY:POLIC   | ESTATIC  | AŠSEN<br>BUSIN<br>INSTIT  | IBLY GR<br>ESS GR<br>UTIONA                           | OUP A-:<br>OUP B<br>L GROU                             | 3<br>P I-3                                | 15 SF PE<br>100 SF PE<br>240 SF PE                        | ER OCC<br>ER OCC  |  |  |  |
| PROPOSED OCCUPANCY:<br>CONSTRUCTION:  | UNCHA  | ANGED<br>CONS <sup>-</sup><br>NONCO   | OMBUST  | ON TYPE<br>TBLE M                                      | E II B (UN<br>ATERIAL                     |   | D)  |  |  |  |
| FIRE PROTECTION:  |  | BRICK<br><u>EXISTI</u>  |   | IEEL FF  |   | MEMBRANE<br>PROPOSE                                       | ED  |  |  |  |
|   | 24'-9"   |   |   | -0   | FULLY                                     | ' SPRINKLEF   | RED   |  |  |  |
| EXISTING STORIES:<br>AREA:  | BASEN  |   | STORIE<br>SF (BAS                                     |  | )   |   |   |  |  |  |
| CLASSIFICATION OF WORK:<br>IBEC CHAPTER 3 - PRE<br><u>ZONING</u><br>ZONING:   | ESCRIPTI   | 28,536<br>1,311<br>29,847<br>ATIONS<br>VE COM   | SF (TOT<br>OF 100%                                    | <u>STING A</u><br>DRAGE A<br>TAL)<br>% OF EX<br>E METH | <u>rea)</u><br>NDDITION<br>ISTING /<br>OD | AREA AND A  | ITRY, AND CANOPIES)<br>ADDITION OF STORAGE AREA PER   |  |  |  |
| FRONT YARD:<br>SIDE YARD:   | <u>ALLOW</u><br>15'  |   | EIGHT =   | 12'  | <u>EXIST</u><br>6'                        | <u>ING</u><br>30'   |   |  |  |  |
| REAR YARD:<br>MAXIMUM HEIGHT:   | 25'<br>80'   |   |   |  | 70'<br>24'-9"                             |   |   |  |  |  |
| MAXIMUM STORIES:<br>FAR BY RIGHT:   | 8<br>.4  |   |   |  | 2<br>N/A                                  |   |   |  |  |  |
| FAR BY SPECIAL PERMIT:<br>LOT AREA:<br>LOT FRONTAGE:  | 2.0  | 10,000<br>50 FT   | SF  |  | N/A                                       | N/A<br>N/A  |   |  |  |  |
| PARKING :   |  | 1 PER   | 300 SF (<br>SSIBLE S                                  |  | S)  | 15-25   | 1   |  |  |  |
|   |  |   |   |  |   | 26-50<br>51-75  | 2<br>3  |  |  |  |
|   |  | <u>REQUI</u><br>N/A   | RED   |  |   | 76- 100 4<br><u>EXISTING</u><br>N/A                       |   |  |  |  |
|   |  |   |   |  |   |   |   |  |  |  |
| ALLOWABLE AREA AND HEIGH  | <u>IT</u>  |   |   |  |   |   |   |  |  |  |
|   | E AND AL   | LOWS U  | REQUI   |  | S AND 1                                   |   | R STORY WHEN SPRINKLERED. THE ENTIRE BUILDING IS 29,847 SF < 5  |  |  |  |
| A-3 IS THE MORE RESTRICTIVE   | E AND AL   | LOWS U<br>DNS ARE<br><u>ALLOV</u><br>3 STOI   | EREQUIE<br><u>VED</u><br>RIES                         |  | S AND 1                                   | PROPOSE<br>2 STORIES                                      | ED<br>IS  |  |  |  |
| A-3 IS THE MORE RESTRICTIVI<br>A-3 LIMIT. THEREFORE NO SE<br>STORIES:<br>AREA:<br>HEIGHT:   | E AND AL   | LOWS U<br>NS ARE<br><u>ALLOV</u>  | EREQUIE<br><u>VED</u><br>RIES                         |  | S AND 1                                   | PROPOSE   | ED<br>IS  |  |  |  |
| A-3 IS THE MORE RESTRICTIVI<br>A-3 LIMIT. THEREFORE NO SE<br>STORIES:<br>AREA:<br>HEIGHT:<br><u>STRUCTURAL</u>  | E AND AL   | LOWS U<br>DNS ARE<br><u>ALLOV</u><br>3 STOI<br>57,000<br>75 FT  | : REQUII<br><u>VED</u><br>RIES<br>SF                  | RED.   |   | PROPOSE<br>2 STORIE:<br>29,847 SF<br>24'-9"               | ED<br>IS  |  |  |  |
| A-3 IS THE MORE RESTRICTIVI<br>A-3 LIMIT. THEREFORE NO SE<br>STORIES:<br>AREA:<br>HEIGHT:   | E AND AL   | LOWS U<br>DNS ARE<br><u>ALLOV</u><br>3 STOI<br>57,000<br>75 FT  | : REQUII<br><u>VED</u><br>RIES<br>SF                  | RED.   |   | PROPOSE<br>2 STORIE:<br>29,847 SF<br>24'-9"               | ED<br>IS  |  |  |  |
| A-3 IS THE MORE RESTRICTIVI<br>A-3 LIMIT. THEREFORE NO SE<br>STORIES:<br>AREA:<br>HEIGHT:<br><u>STRUCTURAL</u><br>TABLE 1604.11 GROUND SNOV   | E AND AL   | LOWS U<br>DNS ARE<br><u>ALLOV</u><br>3 STOI<br>57,000<br>75 FT  | : REQUII<br><u>VED</u><br>RIES<br>SF                  | RED.   |   | PROPOSE<br>2 STORIE:<br>29,847 SF<br>24'-9"               | ED<br>IS  |  |  |  |
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| A-3 IS THE MORE RESTRICTIVE<br>A-3 LIMIT. THEREFORE NO SE<br>STORIES:<br>AREA:<br>HEIGHT:<br>STRUCTURAL<br>TABLE 1604.11 GROUND SNOW<br>DESIGN FACTORS<br>CITY/TOWN<br>WALTHAM<br>*CALCULATED FLAT ROOF SNO<br>ENERGY CONSERVATION  | e and al<br>Paratic<br>V Loads<br>Ow Loae  | LOWS UNS ARE<br>ALLOV<br>3 STOF<br>57,000<br>75 FT<br>; BASIC   | EREQUIF<br>VED<br>RIES<br>SF<br>WIND SF<br>Pf         | RED.<br>PEEDS;<br>V                                    | EARTHQ                                    | PROPOSE<br>2 STORIE:<br>29,847 SF<br>24'-9"<br>WAKE<br>S1 | ED<br>S<br>STRETCH CODE   |  |  |  |
| A-3 IS THE MORE RESTRICTIVE<br>A-3 LIMIT. THEREFORE NO SE<br>STORIES:<br>AREA:<br>HEIGHT:<br>STRUCTURAL<br>TABLE 1604.11 GROUND SNOV<br>DESIGN FACTORS<br>CITY/TOWN<br>WALTHAM<br>*CALCULATED FLAT ROOF SNO<br>ENERGY CONSERVATION<br>ROOFS - INSULATION ENTIREL<br>WALLS, ABOVE GRADE - MASS<br>SLAB-ON-GRADE FLOORS   | e and Al<br>Paratic<br>V Loads<br>Ow Loae  | LOWS UNS ARE<br>ALLOV<br>3 STOF<br>57,000<br>75 FT<br>; BASIC   | EREQUIF<br>VED<br>RIES<br>SF<br>WIND SF<br>Pf         | RED.<br>PEEDS;<br>V                                    | EARTHQ                                    | PROPOSE<br>2 STORIE:<br>29,847 SF<br>24'-9"<br>WAKE<br>S1 | ED<br>S<br>STRETCH CODE<br>R-25 CI<br>R-11.4 CI<br>R-11.4 CI<br>R-10 FOR 24 IN. BELOW   |  |  |  |
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| A-3 IS THE MORE RESTRICTIVE<br>A-3 LIMIT. THEREFORE NO SE<br>STORIES:<br>AREA:<br>HEIGHT:<br>STRUCTURAL<br>TABLE 1604.11 GROUND SNOW<br>DESIGN FACTORS<br>CITY/TOWN<br>WALTHAM<br>*CALCULATED FLAT ROOF SNO<br>ENERGY CONSERVATION<br>ENERGY CONSERVATION<br>ROOFS - INSULATION ENTIREL<br>WALLS, ABOVE GRADE - MASS<br>SLAB-ON-GRADE FLOORS<br>OPAQUE DOORS - SWINGING<br>OPAQUE DOORS - ROLL-UP OF<br>FENESTRATION - ENTRANCE D                               | E AND AL<br>PARATIC<br>V LOADS<br>V LOADS<br>OW LOAE<br>LY ABOVE<br>R SLIDING<br>ALL/STOR<br>DOOR U-F<br>J-FACTO | LOWS UNS ARE<br>ALLOV<br>3 STOF<br>57,000<br>75 FT<br>; BASIC<br>Pg<br>40<br>C<br>E DECK<br>G<br>EFRON<br>FACTOR<br>R | E REQUIF<br>VED<br>RIES<br>SF<br>WIND SF<br>Pf<br>*34 | RED.<br>PEEDS;<br>V<br>105                             | EARTHQ                                    | PROPOSE<br>2 STORIE:<br>29,847 SF<br>24'-9"<br>WAKE<br>S1 | ED<br>S<br>STRETCH CODE<br>R-25 CI<br>R-11.4 CI<br>R-10 FOR 24 IN. BELOW<br>U – 0.37<br>R – 4.75<br>0.42<br>0.80  |  |  |  |
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EVIEWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_ PLUM: \_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ E

### EGRESS

OCCUPANT LOAD: BASEMENT:

| BASEMENT:<br>BUSINESS GF                          | ROUP B 8,601 SF                            | ÷ 100 SF PER OCC (E                        | 3) = 87 OC0 | 2                  |                  |                      |                |                    |
|---|--|--|-------------|--------------------|------------------|----------------------|----------------|--------------------|
| SUBTOTAL BASEMEN                                  | Т  | *ACTUAL BY                                 | ROOM GRE    | EATER              |                  | =                    |                | 102 OCC<br>102 OCC |
| FIRST FLOOR:<br>ASSEMBLY G                        |  | 39 SF ÷ 15 SF PER C                        |             | _                  |                  | 56 OCC               |                |                    |
| BUSINESS GR                                       | ROUP B 1                                   | 04 SF ÷ 100 SF PER                         | OCC(B) = 0  | (2 OCC)            |                  | 50 000               |                |                    |
| BUSINESS GF                                       |  | ,354 SF ÷ 100 SF PEI<br>*ACTUAL BY         | ROOM ĠŔI    | EATER              | <i>(</i> C)      | =                    |                | 238 OCC            |
| INSTITUTION                                       | AL GROUP B,3584 SF                         | ÷ 240 SF PER OCC (E<br>*ACTUAL BY          |             |                    |                  | =                    |                | 30 OCC             |
| STORAGE GR<br>STORAGE GR                          |  | 640 SF ÷ 200 SF PEI<br>993 SF ÷ 200 SF PEI | R OCC (B)   |                    | =                |                      | 4 OCC<br>5 OCC |                    |
| SUBTOTAL FIRST FLC                                |  | 993 61 ÷ 200 61 1 E1                       | к ОСС (В)   |                    | -                |                      | 3000           | <u>333 OCC</u>     |
| SECOND FLOOR:<br>BUSINESS GF                      | OUP B 5                                    | ,727 SF ÷ 100 SF PEI                       |             |                    |                  |                      |                |                    |
| SUBTOTAL SECOND F                                 | LOOR                                       | *ACTUAL BY                                 | ROOM GRE    | EATER              | =                | _                    | 83 OCC         | 83 OCC             |
| <u>TOTAL:</u><br>NUMBER OF EXITS:                 | REQUIRED                                   |  |             | PROVI              | DED              |                      |                | <u>518 OCC</u>     |
| BASEMENT:<br>FIRST FLOOR:                         | 2  |  |             |                    | 2                | 1 (I-3) = 4          |                |                    |
| SECOND FLOOR2                                     |  |  |             | 2                  | . ,              | 1 (1-3) = 4          |                |                    |
| SEPARATION:<br>BASEMENT:                          | REQUIRED<br>143' ÷ 3 = 48'                 |  |             | PROVII<br>54'      | JED              |                      |                |                    |
| FIRST FLOOR:<br>SECOND FLOOR: 108' ÷              | 185' ÷ 3 = 62'<br>· 3 = 36'                |  | 54'         | 82'                |                  |                      |                |                    |
| EGRESS WIDTH: REQU<br>STAIRS:                     | JIRED<br>48"                               |  | PROVID      | DED                | 48" TRF          | -<br>ADS, 40"        | LANDINGS (     | *NON COMPLIANT)    |
| CORRIDORS:  | 24" MECH (1018.2<br>36" (521 0             |  |             | 26" ME             | СН               | ) OCC (10            |                |                    |
|   |  | H SIDE (521 CMR 26)                        | )           | 60" MIN            |                  | 0000 (10             | 10.2)          |                    |
| BASEMENT:<br>STAIR 1:                             | 0.3" X 102 = 30.6"                         |  |             | 48"                |                  |                      |                |                    |
| DOOR:<br>STAIR 3:                                 | 0.2" X 102 = 20.4"<br>0.3" X 102 = 30.6"   |  |             | 36"<br>48"         |                  |                      |                |                    |
| DOOR:   | 0.2" X 102 = 20.4"                         | ÷ 2 = 10.2"                                |             | 36"                |                  |                      |                |                    |
| FIRST FLOOR:<br>DOOR 1:                           | 0.2" X 333 = 66.6"                         | · 3 – 22 2"                                |             | 72"                |                  |                      |                |                    |
| DOOR 2:   | 0.2" X 333 = 66.6"                         | ÷ 3 = 22.2"                                |             | 72"                |                  |                      |                |                    |
| DOOR 3:<br>DOOR 4 (I-3 ONLY):                     | 0.2" X 333 = 66.6"<br>0.2" X 30 = 6"       |  |             | 72"<br>35.5"       |                  |                      |                |                    |
| SECOND FLOOR:                                     |  |  |             |                    |                  |                      |                |                    |
| STAIR 1:<br>DOOR:                                 | 0.3" X 83 = 24.9" ÷<br>0.2" X 83 = 16.6" ÷ |  |             | 48"<br>36"         |                  |                      |                |                    |
| STAIR 2:<br>DOOR:                                 | 0.3" X 83 = 24.9" ÷<br>0.2" X 83 = 16.6" ÷ | 2 = 12.45"                                 |             | 48"<br>36"         |                  |                      |                |                    |
| EXIT ACCESS TRAVEL DISTAN                         | ICE:                                       |  |             | 30                 |                  |                      |                |                    |
| ASSEMBLY GROUP A-3 250'                           | REQUIRE                                    | D  |             | 170'               | PROVIE           | DED                  |                |                    |
| BUSINESS GROUP B<br>INSTITUTIONAL GROUP 200'      | 300'                                       |  |             | 143'               | 261'             |                      |                |                    |
| STORAGE GROUP S-2<br>FIRE PROTECTION              | 400'                                       |  |             |                    | 150'             |                      |                |                    |
| PRIMARY STRUCTUR                                  | AL FRAME                                   |  |             | 0                  |                  |                      |                |                    |
| EXTERIOR  |  |  |             |                    |                  | 2 HOUR               |                |                    |
| INTERIOR<br>NONBEARING WALLS                      | AND PARTITIONS                             |  |             |                    |                  | 0                    |                |                    |
| INTERIOR<br>FLOOR CONSTRUCTIO                     | ON   |  |             | 0                  |                  | 0                    |                |                    |
| ROOF CONSTRUCTIO<br>NONBEARING EXTERI             |  |  |             | 0                  |                  |                      |                |                    |
|   | X < 5'<br>5' ≤ X< 10                       | ,  |             |                    |                  | 1 HOUR<br>1 HOUR     |                |                    |
|   | 10' ≤ X< 3<br>X ≥ 30 '                     |  |             |                    | 0                | 0                    |                |                    |
| EXTERIOR WALL UNP                                 | ROTECTED OPENIN                            | GS: ALLC                                   | WABLE AF    | REA                | -                |                      |                |                    |
|   | 5' < 10'<br>10' < 15'                      |  |             |                    | 25%              | 45%                  |                |                    |
|   | 15' < 20'<br>20' OR GI                     | REATER                                     |             | NO LIM             | IIT              | 75%                  |                |                    |
| SHAFTS:<br>ELEVATOR:                              |  |  |             |                    | 1 HOUF<br>1 HOUF | -                    |                |                    |
| ELEVATOR MACHINE<br>STAIRS 1 AND 2:               | ROOM:                                      |  |             | 1 HOUF             |                  |                      |                |                    |
| STAIR 1 AND 2 DOORS                               |  |  |             | 1 HOUF             | २                |                      |                |                    |
| EXIT PASSAGEWAY W<br>EXIT PASSAGEWAY F            | LOOR AND STRUCT                            | URE: 1 HO                                  | UR          |                    | 1 HOUF           |                      |                |                    |
| EXIT PASSAGEWAY C<br>EXIT PASSAGEWAY D            | OORS:                                      |  |             |                    | 1 HOUF<br>1 HOUF |                      |                |                    |
| EXIT PASSAGEWAY S<br>MECHANICAL ROOM (            |  |  |             | 1 HOUF<br>1 HOUF   |                  |                      |                |                    |
| ELECTRICAL ROOM (N<br>SMOKE DOORS                 |  |  |             | 1 HOUF             | २<br>1/3 HOL     | IR                   |                |                    |
| FIRE EXTINGUISHERS<br>10 LBS 4A-60B:C (UL F       |  |  |             |                    | 1,01100          |                      |                |                    |
| ORDINARY (MODÈRA                                  | TE) HAŹARD OCCUP                           | ANCY                                       | <b>.</b> .  |                    |                  |                      |                |                    |
| MINIMUM RATED SINC<br>MAXIMUM FLOOR ARE           | EA PER UNIT OF A                           |  | 2-A         | 1,500 S            | F X 5 = 6        | 6,000 SF             |                |                    |
| MAXIMUM TRAVEL DIS<br>8,601 SF (BASEMENT)         |  | UISHER<br>=                                | 75'         |                    | 2 EXTIN          | IGUISHEF             | RS             |                    |
| 14,208 SF (FIRST FLO<br>5,727 SF (SECOND FL       |  | =  | 1 EXTIN     | 3 EXTIN<br>IGUISHE | NGUISHE<br>Er    | RS                   |                |                    |
| PLUMBING FIXTURE COUNT                            | REQUIRE                                    |  |             |                    | PROVID           | )ED                  |                |                    |
| WATER CLOSETS - FEMALE<br>WATER CLOSETS - MALEN/A | N/A  | -  |             | 12                 | 8                | (5 ACCES<br>ESSIBLE) | SSIBLE)        |                    |
| WATER CLOSETS - MALEN/A<br>WATER CLOSETS - UNISEX | N/A  |  |             | 12                 | 1                | (1 ACCÉS             |                |                    |
| URINALS - MALE<br>LAVATORIES - FEMALE             | N/A<br>N/A                                 |  |             |                    | 3<br>8           | (2 ACCES<br>(5 ACCES | SSIBLE)        |                    |
| LAVATORIES - MALE<br>LAVATORIES - UNISEX          | N/A<br>N/A                                 |  |             |                    | 13<br>1          | (5 ACCES<br>(1 ACCES |                |                    |
| SHOWERS - MALE<br>SHOWERS - FEMALE                | N/A<br>N/A                                 |  |             |                    | 3<br>1           | (1 ACCES<br>(1 ACCES | SSIBLE)        |                    |
| DRINKING FOUNTAINS N/A<br>SERVICE SINKS           | N/A  |  |             | 6                  | (3 ACCI<br>2     |                      | HIGH-LOW T     | YPE)               |
| KITCHEN SINKS                                     | N/A<br>N/A                                 |  |             |                    | 2                | (2 ACCES             | SSIBLE)        |                    |
|   |  |  |             |                    |                  |                      |                |                    |

EXCEPTIONS

715.4.7.1 SIZE LIMIT OF NFPA 80. EXCEPTIONS:

EXCEPTIONS: 1. FIRE-PROTECTIOI IN A HORIZONTAL E 100 SQUARE INCHE

1007.3 STAIRWAYS. AS PERMITTED BY S HANDRAILS AND SH ACCESSED FROM E

EXCEPTIONS: 1. THE AREA OF REF 1022.1 IN BUILDINGS WITH SECTION 903.3

2. THE CLEAR WIDT PERMITTED BY SEC SYSTEM INSTALLED

3. AREAS OF REFUG SPRINKLER SYSTEM \*EXISTING STAIRWA

1009.5 STAIRWAY LA OF LANDINGS SHAL DIMENSION MEASUF EXCEED 48 INCHES

1015.2.1 TWO EXITS PORTION OF THE EX NOT LESS THAN ON SERVED MEASURED STAIRS SHALL BE C

EXCEPTIONS: 2. WHERE A BUILDIN 903.3.1.1 OR 903.3.1. ONE-THIRD OF THE

1018.4 DEAD ENDS. WHERE MORE THAN THERE ARE NO DEAI

EXCEPTIONS: 1. IN OCCUPANCIES SHALL NOT EXCEED 2. IN OCCUPANCIES AUTOMATIC SPRINK NOT EXCEED 50 FEE 3. A DEAD-END COR 2.5 TIMES THE LEAS

TABLE 1021.1 MINIMU OCCUPANT LOAD (PI 1-500 501-1,000

TABLE 1021.2 STORI SECOND STORY, B 1022.1 ENCLOSURES HOUR WHERE CONN

EXCEPTIONS: 1.1. THE STAIRWAY 1.2. THE STAIRWAY

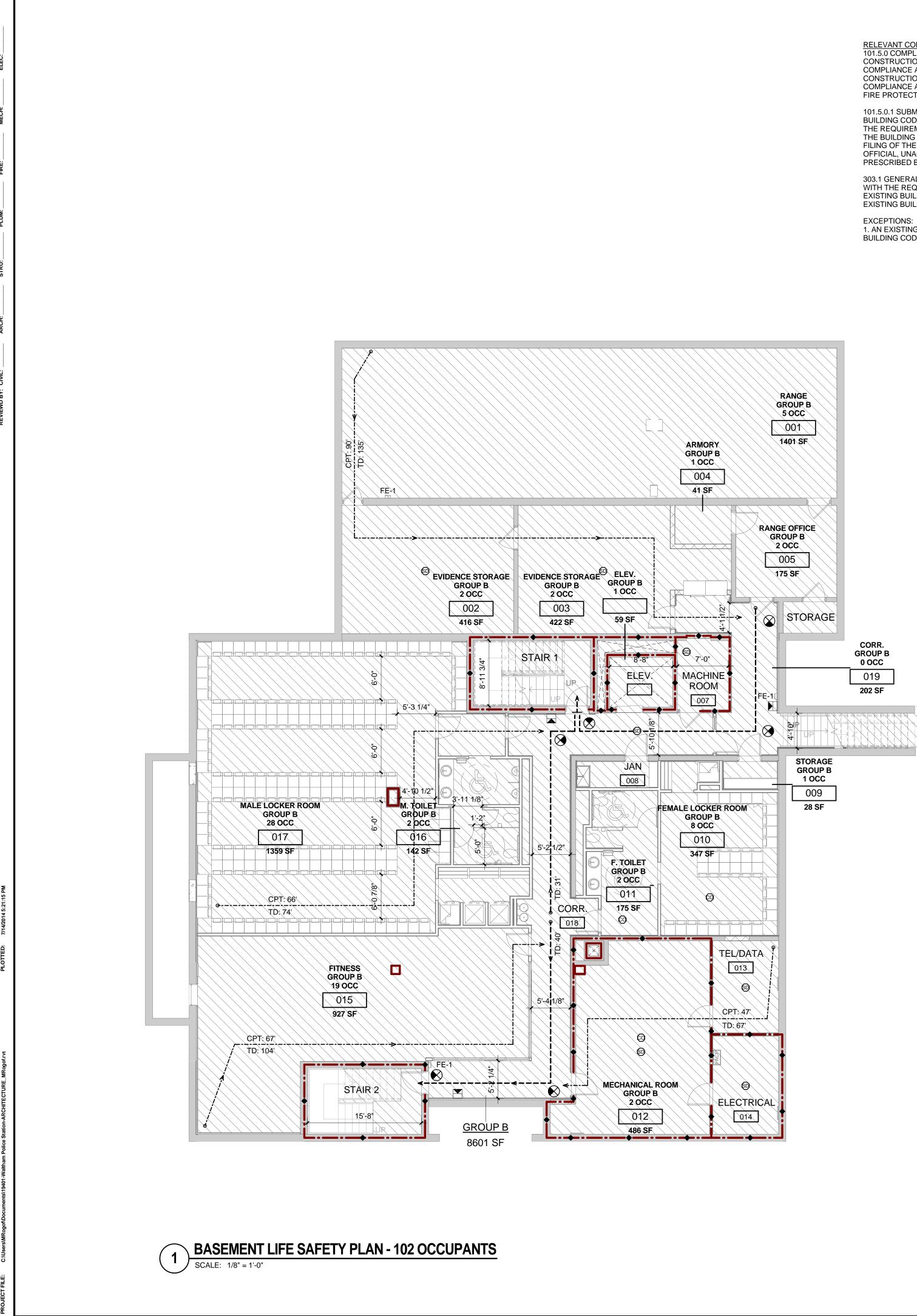
1022.2 TERMINATION EXCEPTION: AN EXI 1023, PROVIDED TH

1023.5 OPENINGS A REQUIREMENTS OF

EXCEPT AS PERMITT LIMITED TO THOSE N EGRESS FROM THE ELEVATORS SHALL N

521 CMR 20.00: ACC SHALL BE PROVIDE REQUIREMENTS: EXCEPTION: AREAS A. EXISTING BUILDI

| TATIONS. FIRE-PROTECTION-RATED GLAZING USED IN FIRE DOORS SHALL COMPLY WITH THE SIZE LIMITATIONS  |   |
|---|---|
| ON-RATED GLAZING LOCATED IN FIRE WALLS SHALL BE PROHIBITED EXCEPT WHERE SERVING IN A FIRE DOOR<br>EXIT, A SELF-CLOSING SWINGING DOOR SHALL BE PERMITTED TO HAVE A VISION PANEL OF NOT MORE THAN<br>ES (0.065 M2) WITHOUT A DIMENSION EXCEEDING 10 INCHES (254 MM).  | Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440                      |
| 5. IN ORDER TO BE CONSIDERED PART OF AN ACCESSIBLE MEANS OF EGRESS, AN EXIT ACCESS STAIRWAY<br>SECTION 1016.1 OR EXIT STAIRWAY SHALL HAVE A CLEAR WIDTH OF 48 INCHES (1219 MM) MINIMUM BETWEEN<br>HALL EITHER INCORPORATE AN AREA OF REFUGE WITHIN AN ENLARGED FLOOR-LEVEL LANDING OR SHALL BE<br>EITHER AN AREA OF REFUGE COMPLYING WITH SECTION 1007.6 OR A HORIZONTAL EXIT.  | www.cdrmaguire.com  |
| EFUGE IS NOT REQUIRED AT OPEN EXIT ACCESS OR EXIT STAIRWAYS AS PERMITTED BY SECTIONS 1016.1 AND<br>SS THAT ARE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE<br>3.3.1.1 OR 903.3.1.2.  |   |
| TH OF 48 INCHES (1219 MM) BETWEEN HANDRAILS IS NOT REQUIRED AT EXIT ACCESS STAIRWAY AS<br>CTION 1016.1 OR EXIT STAIRWAYS IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER<br>D IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2.   |   |
| IGE ARE NOT REQUIRED AT EXIT STAIRWAYS IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC<br>EM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.<br>/AY LANDINGS ARE NOT 48" WIDE IN THE DIRECTION OF TRAVEL  |   |
| LANDINGS. THERE SHALL BE A FLOOR OR LANDING AT THE TOP AND BOTTOM OF EACH STAIRWAY. THE WIDTH<br>ALL NOT BE LESS THAN THE WIDTH OF STAIRWAYS THEY SERVE. EVERY LANDING SHALL HAVE A MINIMUM<br>URED IN THE DIRECTION OF TRAVEL EQUAL TO THE WIDTH OF THE STAIRWAY. SUCH DIMENSION NEED NOT<br>S (1219 MM) WHERE THE STAIRWAY HAS A STRAIGHT RUN.  | REVISIONS   |
| S OR EXIT ACCESS DOORWAYS. WHERE TWO EXITS OR EXIT ACCESS DOORWAYS ARE REQUIRED FROM ANY<br>EXIT ACCESS, THE EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL BE PLACED A DISTANCE APART EQUAL TO<br>NE-HALF OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE<br>ED IN A STRAIGHT LINE BETWEEN EXIT DOORS OR EXIT ACCESS DOORWAYS. INTERLOCKING OR SCISSOR<br>COUNTED AS ONE EXIT STAIRWAY.  | Number     Description     Date   |
| ING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION<br>1.2, THE SEPARATION DISTANCE OF THE EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL NOT BE LESS THAN<br>E LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED.   |   |
| S.<br>AN ONE EXIT OR EXIT ACCESS DOORWAY IS REQUIRED, THE EXIT ACCESS SHALL BE ARRANGED SUCH THAT<br>EAD ENDS IN CORRIDORS MORE THAN 20 FEET (6096 MM) IN LENGTH.   |   |
| AS IN GROUP I-3 OF OCCUPANCY CONDITION 2, 3 OR 4 (SEE SECTION 308.5), THE DEAD END IN A CORRIDOR<br>ED 50 FEET (15 240 MM).<br>IS IN GROUPS B, E, F, I-1, M, R-1, R-2, R-4, S AND U, WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN<br>IKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1, THE LENGTH OF THE DEAD-END CORRIDORS SHALL<br>EET (15 240 MM).<br>IRRIDOR SHALL NOT BE LIMITED IN LENGTH WHERE THE LENGTH OF THE DEAD-END CORRIDOR IS LESS THAN<br>AST WIDTH OF THE DEAD-END CORRIDOR.<br>MUM NUMBER OF EXITS FOR OCCUPANT LOAD<br>(PER STORY) MINIMUM NUMBER OF EXITS (PERSONS PER STORY) |   |
| 2<br>3  |   |
| RIES WITH ONE EXIT<br>B OCCUPANCY, 29 OCCUPANTS AND 75 FEET TRAVEL DISTANCE<br>ES REQUIRED. INTERIOR EXIT STAIRWAYSSHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN1<br>NNECTING LESS THAN FOUR STORIES.  |   |
| Y IS OPEN TO NOT MORE THAN ONE STORY ABOVE ITS LEVEL OF EXIT DISCHARGE; OR<br>Y IS OPEN TO NOT MORE THAN ONE STORY BELOW ITS LEVEL OF EXIT DISCHARGE.<br>ON. EXIT ENCLOSURES SHALL TERMINATE AT AN EXIT DISCHARGE OR A PUBLIC WAY.<br>KIT ENCLOSURE SHALL BE PERMITTED TO TERMINATE AT AN EXIT PASSAGEWAY COMPLYING WITH SECTION<br>HE EXIT PASSAGEWAY TERMINATES AT AN EXIT DISCHARGE OR A PUBLIC WAY.<br>AND PENETRATIONS. EXIT PASSAGEWAY OPENING PROTECTIVES SHALL BE IN ACCORDANCE WITH THE<br>DF SECTION 715.   | ISSUED FOR BID  |
| ITTED IN SECTION 402.4.6, OPENINGS IN EXIT PASSAGEWAYS OTHER THAN EXTERIOR OPENINGS SHALL BE<br>ENECESSARY FOR EXIT ACCESS TO THE EXIT PASSAGEWAY FROM NORMALLY OCCUPIED SPACES AND FOR<br>E EXIT PASSAGEWAY.<br>L NOT OPEN INTO AN EXIT PASSAGEWAY.<br>CESSIBLE ROUTE: 20.12 AREAS OF RESCUE ASSISTANCE<br>ED WHERE AN ACCESSIBLE MEANS OF EGRESS IS NOT PROVIDED AND SHALL COMPLY WITH THE FOLLOWING<br>S OF RESCUE ASSISTANCE ARE NOT REQUIRED IN:<br>DINGS UNDERGOING ALTERATIONS, REMODELING, RECONSTRUCTION   | WALTHAM .   |
|   | WALTHAM POLICE<br>STATION<br>RENOVATION   |
|   | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
|   | LIFE SAFETY<br>DATA SHEET   |
|   | PROJECT NUMBER: 19401.01<br>DESIGNED BY: Designer<br>DRAWN BY: Author<br>CHECKED BY: Checker<br>DATE: July-Aug. 2016<br>SCALE:<br>SHEET NUMBER: |
|   | <b>SHEET</b> 35 <b>OF</b> 157   |





RELEVANT CODE SECTIONS AND EXCEPTIONS 101.5.0 COMPLIANCE ALTERNATIVES. EXCEPT FOR STRUCTURAL WORK, WHERE COMPLIANCE WITH THE PROVISIONS OF THE CODE FOR NEW CONSTRUCTION, REQUIRED BY THIS CODE, IS IMPRACTICAL BECAUSE OF CONSTRUCTION DIFFICULTIES OR REGULATORY CONFLICTS, COMPLIANCE ALTERNATIVES MAY BE ACCEPTED BY THE BUILDING OFFICIAL. EXAMPLES OF COMPLIANCE ALTERNATIVES AND ARCHAIC CONSTRUCTION SYSTEMS CAN BE FOUND AT THE FAQ LINK AT WWW.MASS.GOV/DPS. THE BUILDING OFFICIAL MAY ACCEPT THESE COMPLIANCE ALTERNATIVES, ARCHAIC CONSTRUCTION SYSTEMS, OR OTHERS PROPOSED. IF THE COMPLIANCE ALTERNATIVE INVOLVES FIRE PROTECTION SYSTEMS THE BUILDING OFFICIAL SHALL CONSULT WITH THE FIRE OFFICIAL.

101.5.0.1 SUBMITTALS. THE APPLICATION FOR A BUILDING PERMIT SHALL BE IN ACCORDANCE WITH SUBSECTION 107.2.1 OF THE INTERNATIONAL BUILDING CODE 2009 WITH MASSACHUSETTS AMENDMENTS (780 CMR 107.2.1) AND IDENTIFY ALL ITEMS OF NON- OR PARTIAL COMPLIANCE WITH THE REQUIREMENTS OF THIS CODE, AND COMPLIANCE ALTERNATIVES, IF ANY ARE PROPOSED, FOR APPROVAL BY THE BUILDING OFFICIAL. THE BUILDING OFFICIAL SHALL RESPOND TO THE ACCEPTABILITY OF ANY PROPOSED COMPLIANCE ALTERNATIVES WITHIN 30 DAYS OF THE FILING OF THE BUILDING PERMIT APPLICATION. WHERE PROPOSED COMPLIANCE ALTERNATIVES ARE, IN THE OPINION OF THE BUILDING OFFICIAL, UNACCEPTABLE, OR WHERE ISSUES OF NON-COMPLIANCE REMAIN, THE PERMIT APPLICANT SHALL HAVE THE REMEDIES PRESCRIBED BY SECTION 113 OF THE INTERNATIONAL BUILDING CODE 2009 WITH THE MASSACHUSETTS AMENDMENTS (780 CMR 113).

303.1 GENERAL. EXCEPT AS PROVIDED BY SECTION 301.2 OR THIS SECTION, ALTERATIONS TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE IS NO LESS CONFORMING TO THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATION.

1. AN EXISTING STAIRWAY SHALL NOT BE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF SECTION 1009 OF THE INTERNATIONAL BUILDING CODE WHERE THE EXISTING SPACE AND CONSTRUCTION DOES NOT ALLOW A REDUCTION IN PITCH OR SLOPE.

## OCCUPANCY LEGEND

GROUP B

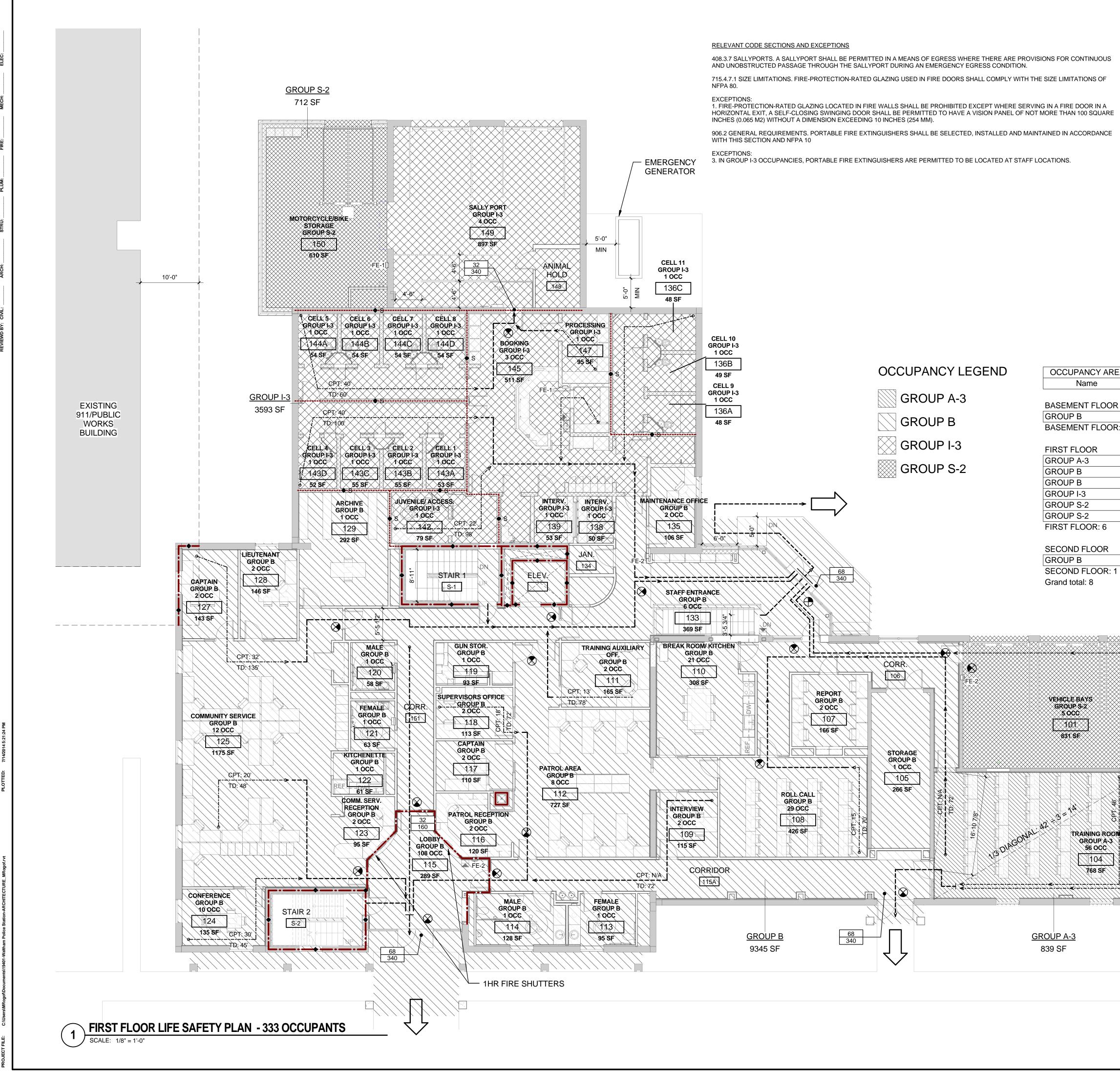
OCCUPANCY AREA Name

BASEMENT FLOOR **GROUP B BASEMENT FLOOR: 1** 

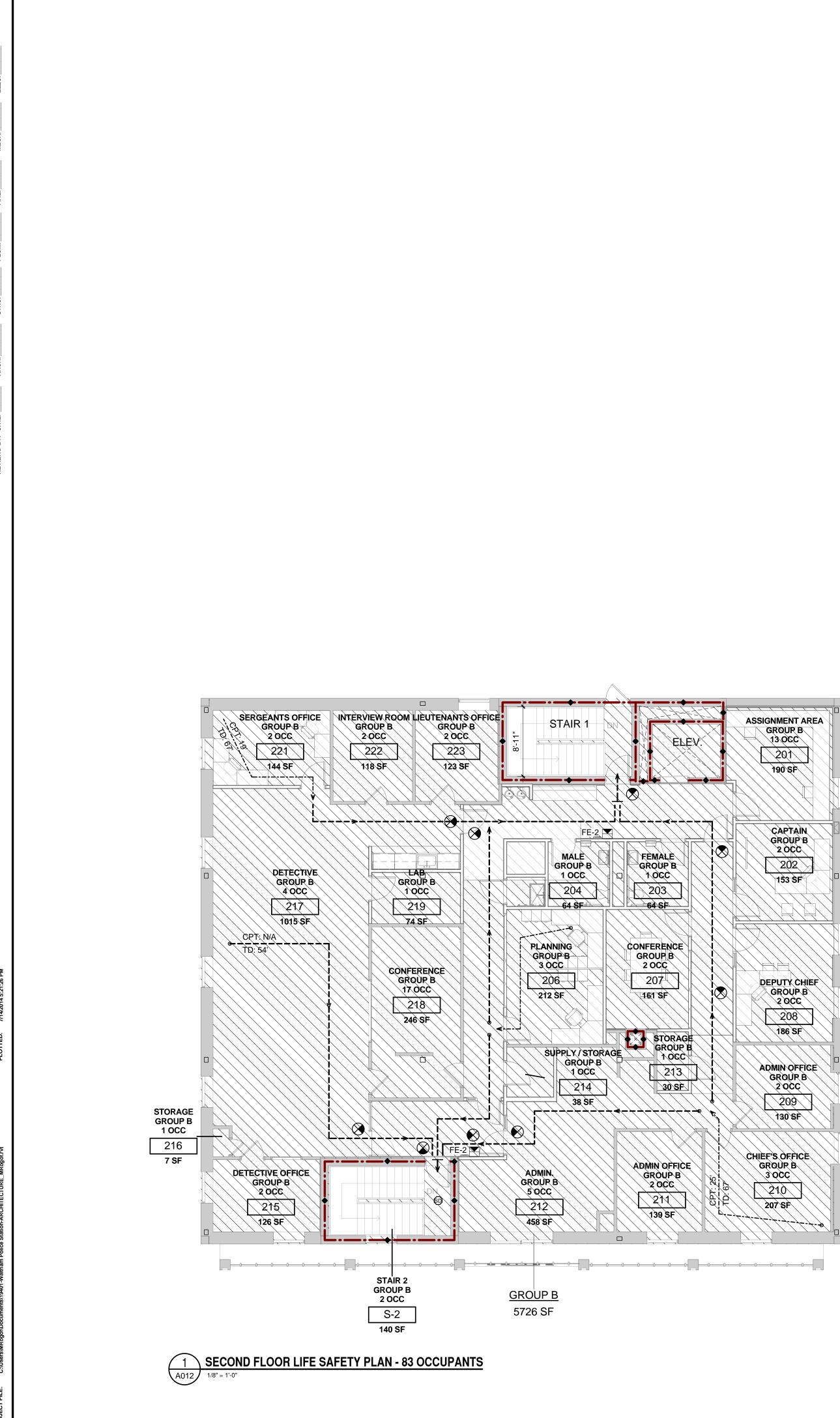
| FIRST FLOOR    |
|----------------|
| GROUP A-3      |
| GROUP B        |
| GROUP B        |
| GROUP I-3      |
| GROUP S-2      |
| GROUP S-2      |
| FIRST FLOOR: 6 |
|                |

SECOND FLOOR GROUP B SECOND FLOOR: 1 Grand total: 8

|  | <b>LIFE SAFETY LEGEND</b><br>OCCUPANT LOAD: IBC 2009 SECTION 1004  | Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440 |
|--|--|--|
|  | Room - ROOM NUMBER<br>GROUP Rm_Occupancy OCC OCCUPANCY TYPE<br>Occupancy OCC NUMBER OF OCC<br>101 ROOM NUMBER<br>150 SF - AREA | www.cdrmaguire.com   |
|  | EXIT ACCESS TRAVEL DISTANCE:<br>IBC 2009 SECTION 1016  |  |
|  | PATH OF TRAVEL (TD)     COMMON PATH OF TRAVEL (CPT)     EXIT SIGN  |  |
|  | EGRESS WIDTH: IBC 2009 SECTION 1005  | REVISIONS       Number     Description     Date  |
|  | FIRE-RESISTANCE RATED WALL SYMBOLS:<br>IBC SECTION 703   |  |
|  |  |  |
| SCHEDULE<br>Area                                   |  |  |
| 8601 SF  | FIRE EXTINGUISHER LEGEND (NFPA 10)   |  |
| 8601 SF<br>839 SF<br>104 SF                        | FIRE EXTINGUISHER<br>FIRE EXTINGUISHER<br>(3" MAX PROJECTION)<br>FIRE EXTINGUISHER &<br>CABINET                                |  |
| 9345 SF<br>3593 SF<br>712 SF<br>993 SF<br>15586 SF | FIRE ALARM LEGEND         FACP         FACP         FIRE ALARM         CONTROL PANEL         FAA         FIRE ALARM            | ISSUED FOR BID   |
| 5726 SF<br>5726 SF<br>29913 SF                     | ANNUNCIATOR<br>PANEL<br>© CARBON MONOXIDE<br>DETECTOR  | OR OR ATED A TOWN  |
|  | SMOKE DETECTOR<br>FIRE ALARM MANUAL<br>PULL STATION<br>FIRE DEPARTMENT<br>CONNECTION   | · WALTHAM ·  |
|  |  | WALTHAM POLICE<br>STATION<br>RENOVATION  |
|  |  | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
|  |  | BASEMENT<br>LIFE SAFETY<br>PLAN  |
|  |  | PROJECT NUMBER:19401.01DESIGNED BY:DesignerDRAWN BY:AuthorCHECKED BY:CheckerDATE:July-Aug. 2016                            |
|  | 0' 4' 8' 16'   | SCALE: 1/8" = 1'-0"<br>SHEET NUMBER:   |
|  |  | <b>A010</b><br>SHEET 36 OF 157   |



|                               | LIFE SAFETY LEGEND  | Architects / Engineers / Planners  |
|-------------------------------|---|--|
|                               | OCCUPANT LOAD: IBC 2009 SECTION 1004  | 211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440  |
|                               | Room - ROOM NUMBER<br>GROUP Rm_Occupancy OCC OCCUPANCY TYPE<br>Occupancy OCC NUMBER OF OCC<br>101 ROOM NUMBER<br>150 SF - AREA  | www.cdrmaguire.com   |
|                               | EXIT ACCESS TRAVEL DISTANCE:<br>IBC 2009 SECTION 1016   |  |
|                               | PATH OF TRAVEL (TD)   |  |
|                               | COMMON PATH OF TRAVEL (CPT)   |  |
|                               | EGRESS WIDTH: IBC 2009 SECTION 1005   | REVISIONS         Number       Description       Date  |
|                               | FIRE-RESISTANCE RATED WALL SYMBOLS:<br>IBC SECTION 703<br>1 HR FIRE   |  |
|                               | <ul> <li>→ S</li> <li>→ S</li></ul> |  |
| A SCHEDULE<br>Area            | FIRE EXTINGUISHER LEGEND (NFPA 10)  |  |
| 8601 SF                       | FE-1 SURFACE MOUNTED<br>FIRE EXTINGUISHER   |  |
| 1 8601 SF<br>839 SF<br>104 SF | FE-2<br>SEMI RECESSED<br>(3" MAX PROJECTION)<br>FIRE EXTINGUISHER &<br>CABINET  |  |
| 9345 SF<br>3593 SF            |   |  |
| 712 SF<br>993 SF<br>15586 SF  | FIRE ALARM LEGEND<br>FIRE ALARM<br>CONTROL PANEL  | ISSUED FOR BID   |
| 5726 SF                       | FIRE ALARM<br>ANNUNCIATOR   |  |
| 5726 SF<br>29913 SF           | PANEL<br>© CARBON MONOXIDE  | BORATED A TOWA   |
|                               | DETECTOR<br>SMOKE DETECTOR  | WALTHAM  |
| ****                          | FIRE ALARM MANUAL<br>PULL STATION   | The state of the s |
|                               | © FDC FIRE DEPARTMENT<br>CONNECTION   | ORATED A CITY  |
|                               | UP S-2  | WALTHAM POLICE<br>STATION  |
| 99.<br>89.                    | 3 SF  | RENOVATION   |
| STORAGE<br>GROUPIB            |   | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| <u></u>                       | <u>DUP B</u><br>4 SF  | FIRST FLOOR<br>LIFE SAFETY<br>PLAN   |
| FDC                           |   | PROJECT NUMBER:19401.01DESIGNED BY:DesignerDRAWN BY:AuthorCHECKED BY:CheckerDATE:July-Aug.2016SCALE:1/8" = 1'-0"   |
|                               |   | SHEET NUMBER:  |
|                               | 0' 4' 8' 16'  | A011   |
|                               |   | SHEET 37 OF 157  |



SECTION 1016 EXIT ACCESS TRAVEL DISTANCE

1016.1 TRAVEL DISTANCE LIMITATIONS. EXITS SHALL BE SO LOCATED ON EACH STORY SUCH THAT THE MAXIMUM LENGTH OF EXIT ACCESS TRAVEL, MEASURED FROM THE MOST REMOTE POINT WITHIN A STORY ALONG THE NATURAL AND UNOBSTRUCTED PATH OF EGRESS TRAVEL TO AN EXTERIOR EXIT DOOR AT THE LEVEL OF EXIT DISCHARGE, AN ENTRANCE TO A VERTICAL EXIT ENCLOSURE, AN EXIT PASSAGEWAY, A HORIZONTAL EXIT, AN EXTERIOR EXIT STAIRWAY OR AN EXTERIOR EXIT RAMP, SHALL NOT EXCEED THE DISTANCES GIVEN IN TABLE 1016.1.

EXCEPTIONS:

3. IN OTHER THAN OCCUPANCY GROUPS H AND I, THE EXIT ACCESS TRAVEL DISTANCE TO A MAXIMUM OF 50 PERCENT OF THE EXITS IS PERMITTED TO BE MEASURED FROM THE MOST REMOTE POINT WITHIN A BUILDING TO AN EXIT USING UNENCLOSED EXIT ACCESS STAIRWAYS OR RAMPS WHEN CONNECTING A MAXIMUM OF TWO STORIES. THE TWO CONNECTED STORIES SHALL BE PROVIDED WITH AT LEAST TWO MEANS OF EGRESS. SUCH INTERCONNECTED STORIES SHALL NOT BE OPEN TO OTHER STORIES.

4. IN OTHER THAN OCCUPANCY GROUPS H AND I, EXIT ACCESS TRAVEL DISTANCE IS PERMITTED TO BE MEASURED FROM THE MOST REMOTE POINT WITHIN A BUILDING TO AN EXIT USING UNENCLOSED EXIT ACCESS STAIRWAYS OR RAMPS IN THE FIRST AND SECOND STORIES ABOVE GRADE PLANE IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1. THE FIRST AND SECOND STORIES ABOVE GRADE PLANE SHALL BE PROVIDED WITH AT LEAST TWO MEANS OF EGRESS. SUCH INTERCONNECTED STORIES SHALL NOT BE OPEN TO OTHER STORIES.

WHERE APPLICABLE, TRAVEL DISTANCE ON UNENCLOSED EXIT ACCESS STAIRWAYS OR RAMPS AND ON CONNECTING STORIES SHALL ALSO BE INCLUDED IN THE TRAVEL DISTANCE MEASUREMENT. THE MEASUREMENT ALONG STAIRWAYS SHALL BE MADE ON A PLANE PARALLEL AND TANGENT TO THE STAIR TREAD NOSINGS IN THE CENTER OF THE STAIRWAY.

> OCCUPANCY AREA SCHEDULE Name

BASEMENT FLOOR **GROUP B** BASEMENT FLOOR:

FIRST FLOOR **GROUP A-3** GROUP B GROUP B GROUP I-3 GROUP S-2 GROUP S-2 FIRST FLOOR: 6

SECOND FLOOR **GROUP B** SECOND FLOOR: 1 Grand total: 8

## OCCUPANCY LEGEND



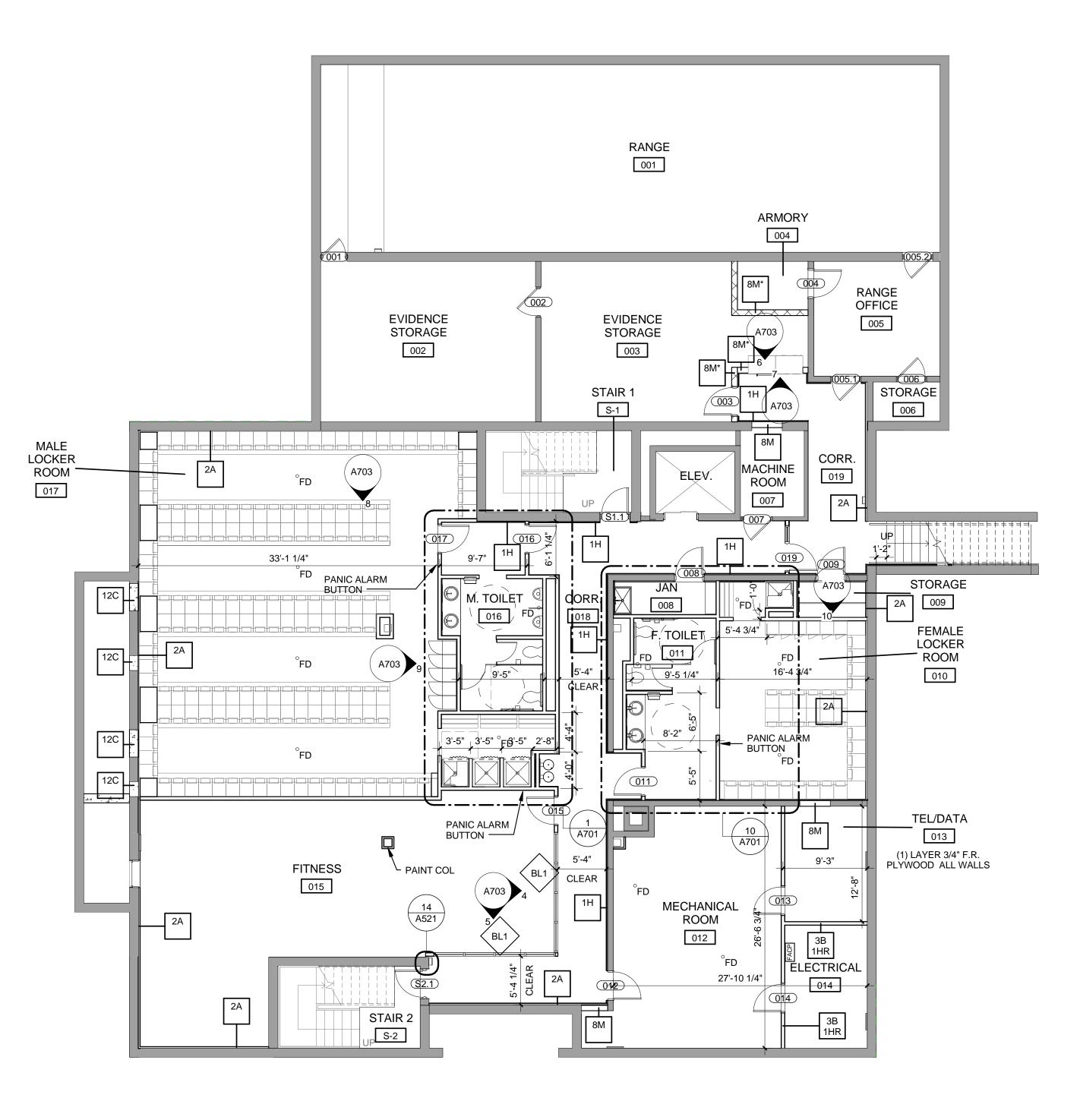
| LIFE SAFET   | Y LEGEND   | Archite                                 | ects / Engineers / Planners<br>ess Street, 11th Floor  |
|--|--|---|--|
| OCCUPANT LOAD: IBC                                   | 2009 SECTION 1004  | Boston, Ma<br>TEL. (617)                | assachusetts 02110<br>) 778-1440   |
| GROUP Rm_Occupancy<br>Occupancy OCC<br>101<br>150 SF | NUMBER OF OCC<br>ROOM NUMBER<br>AREA                             | www.cdrm                                | naguire.com  |
| EXIT ACCESS TRAVEL<br>IBC 2009 SECTION 1016          |  |   |  |
|  |  |   |  |
| EXIT SI  | PATH OF TRAVEL (CPT)<br>GN                                       |   |  |
| EGRESS WIDTH: IBC 20                                 | 09 SECTION 1005<br>EGRESS WIDTH<br>EGRESS CAPACITY               | Number                                  | REVISIONS Description Date   |
| FIRE-RESISTANCE RAT                                  | ED WALL SYMBOLS:   |   |  |
| +  | 1 HR FIRE<br>2 HR FIRE   |   |  |
| •••• S   | 1 HR FIRE/SMOKE<br>2 HR FIRE/SMOKE                               |   |  |
| FIRE EXTINGUISHER LE                                 | GEND (NFPA 10)   |   |  |
|  | JRFACE MOUNTED<br>RE EXTINGUISHER                                |   |  |
| (3)  | EMI RECESSED<br>' MAX PROJECTION)<br>RE EXTINGUISHER &<br>ABINET |   |  |
|  |  |   |  |
| FIRE ALARM LEGEND                                    | FIRE ALARM   | ISS                                     | SUED FOR BID   |
| FAA  | CONTROL PANEL  |   |  |
|  | ANNUNCIATOR<br>PANEL   | - k                                     | ORATED A TOWA  |
| Ø  | CARBON MONOXIDE<br>DETECTOR                                      |   |  |
| 0  | SMOKE DETECTOR<br>FIRE ALARM MANUAL                              |   | WALTHAM  |
|  | PULL STATION   | 1                                       | Contraction of the second seco |
| ₿ FDC  | FIRE DEPARTMENT<br>CONNECTION                                    |   | ED A   |
|  |  |   | LTHAM POLICE<br>STATION<br>RENOVATION  |
|  |  |   | LEXINGTON STREET<br>HAM, MASSACHUSETTS   |
|  |  | FL                                      | SECOND<br>LOOR LIFE<br>FETY PLAN   |
|  |  | DESIGNED<br>DRAWN B<br>CHECKED<br>DATE: | Y: Author<br>BY: Checker<br>July-Aug. 2016<br>1/8" = 1'-0"   |
| )' 4' 8' 1   | 6'   |   | A012<br>38 OF 157  |

|     | Area     |  |  |  |
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|     | 3593 SF  |  |  |  |
|     | 712 SF   |  |  |  |
|     | 993 SF   |  |  |  |
|     | 15586 SF |  |  |  |

5726 SF 5726 SF 29913 SF

ice Station-ARCHITECTURE\_MRogof.rvt PLOTTED: 7/14/2

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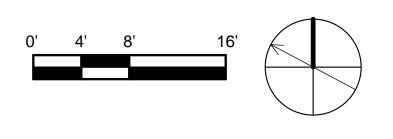
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| G   | ENERAL PLAN NOTES  |
| 1.  | COORDINATE ALL NEW WORK w/ STRUCTURAL,<br>PLUMBING, MECHANICAL & ELECTRICAL DRAWINGS.<br>NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE<br>PROCEEDING WITH WORK. |
| 2.  | ALL DIMENSIONS TO NEW CONSTRUCTION ARE TO<br>CENTERLINE OF <u>STUD</u> AND FACE OF <u>MASONRY</u> UNLESS<br>NOTED OTHERWISE.                                   |
| 3.  | ALL DIMENSIONS TO EXISTING CONSTRUCTION ARE TO FACE OF <u>FINISH</u> UNLESS NOTED OTHERWISE  |
| 4.  | ALL NEW INTERIOR WALLS ARE TYPE 3B UNLESS NOTED OTHERWISE.   |
| 5.  | ALL INTERIOR GYPSUM WALL BOARD CORNERS WITHOUT WAINSCOTING SHALL HAVE STEEL CORNER GUARDS.   |
| 6.  | ALL EXISTING DOOR FRAMES TO REMAIN SHALL BE SCRAPED, PRIMED AND PAINTED.   |
| 7.  | ALL EXISTING WOOD DOORS TO REMAIN SHALL BE SANDED AND REFINISHED.  |
| 8.  | ALL EXISTING METAL DOORS TO REMAIN SHALL BE SCRAPED, PRIMED AND PAINTED.   |
| 9.  | SEE FINISH PLANS FOR THE EXTENT OF WAINSCOTTING.   |
| 10. | REFER TO STRUCTURAL DRAWINGS FOR PATCHING OF CONCRETE SLAB.  |
| 11. | WALL TAGS MARKED WITH <sup>1*!</sup> DENOTES GYP BOARD SHALL<br>RUN TO THE UNDERSIDE OF DECK ABOVE   |

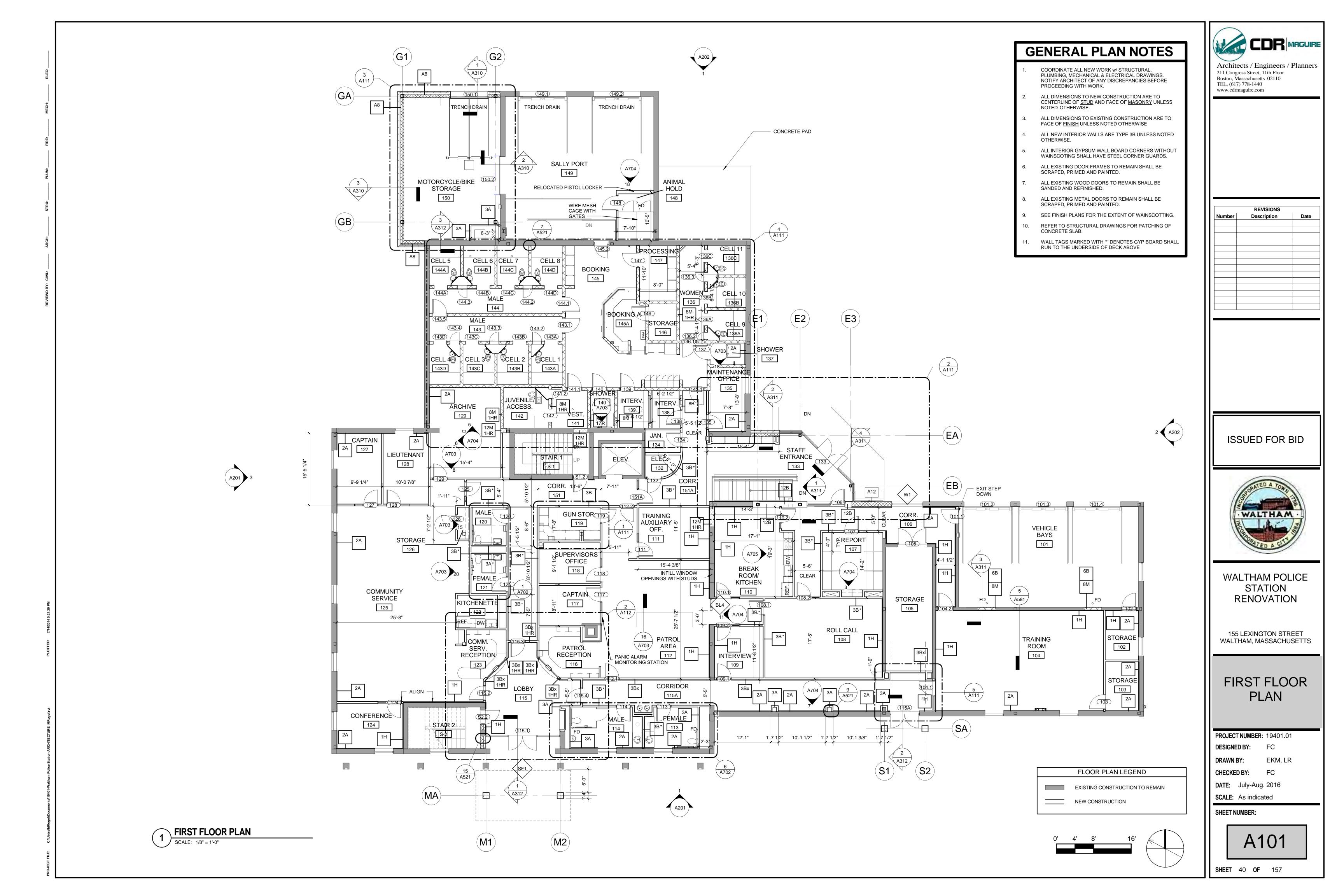
| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110 |
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| 155 LEXINGTON STREET  |
| WALTHAM, MASSACHUSETTS  |
|   |
| BASEMENT<br>FLOOR PLAN  |
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| PROJECT NUMBER: 19401.01<br>DESIGNED BY: FC   |
| DRAWN BY: EKM, LR<br>CHECKED BY: FC   |
| DATE:   |
| SCALE: 2016 As  |
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| SHEET 39 OF 157   |
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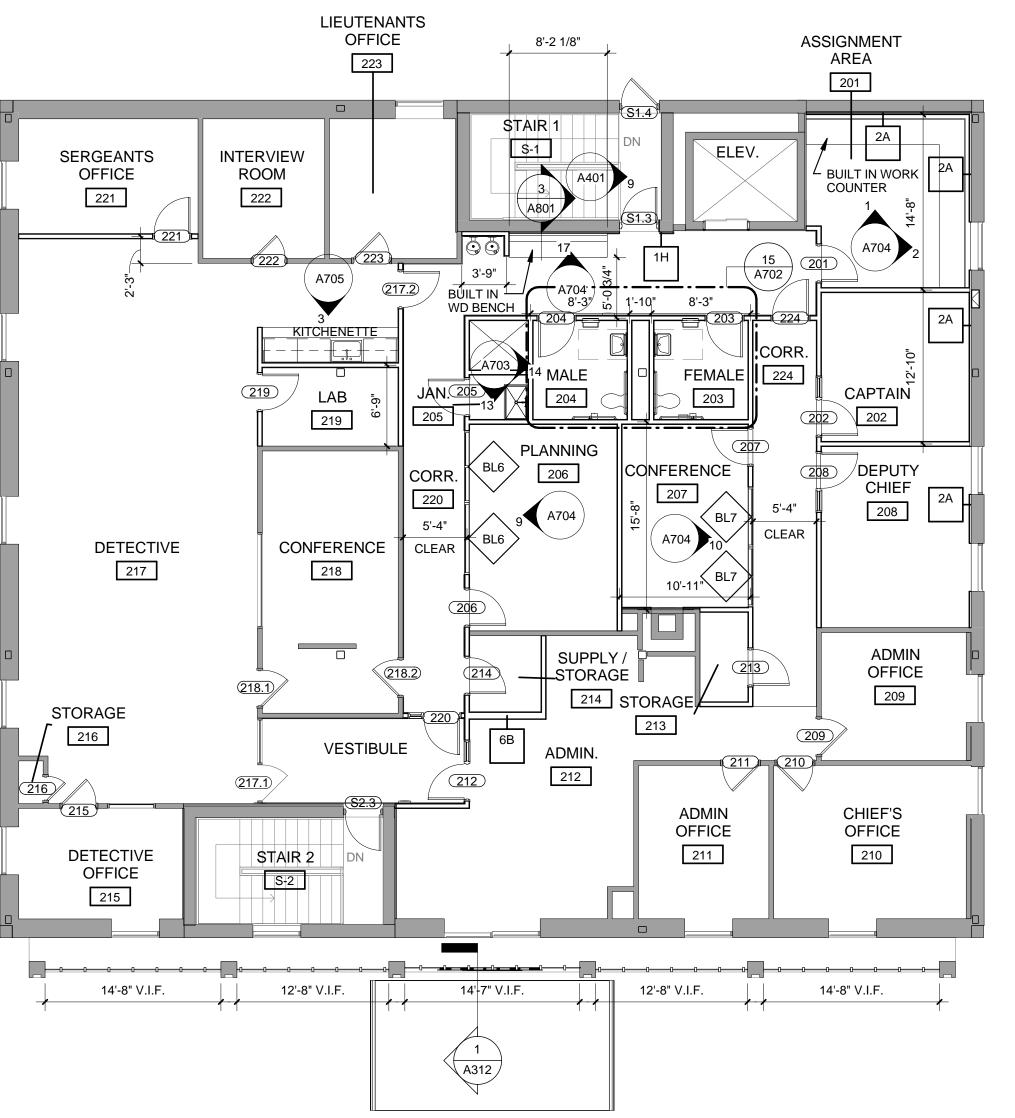
| FLOOR PLAN LEGEND |  |
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|                   |  |

EXISTING CONSTRUCTION TO REMAIN

NEW CONSTRUCTION









# **GENERAL PLAN N**

- COORDINATE ALL NEW WORK w/ STRUCTURAL, PLUMBING, MECHANICAL & ELECTRICAL DRAWINGS. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK. ALL DIMENSIONS TO NEW CONSTRUCTION ARE TO CENTERLINE OF STUD AND FACE OF MASONRY UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO EXISTING CONSTRUCTION ARE TO FACE OF FINISH UNLESS NOTED OTHERWISE ALL NEW INTERIOR WALLS ARE TYPE 3B UNLESS NOTED OTHERWISE. ALL INTERIOR GYPSUM WALL BOARD CORNERS WITHOUT 5. WAINSCOTING SHALL HAVE STEEL CORNER GUARDS. ALL EXISTING DOOR FRAMES TO REMAIN SHALL BE 6. SCRAPED, PRIMED AND PAINTED. ALL EXISTING WOOD DOORS TO REMAIN SHALL BE 7. SANDED AND REFINISHED. ALL EXISTING METAL DOORS TO REMAIN SHALL BE SCRAPED, PRIMED AND PAINTED. 8.
- 9. SEE FINISH PLANS FOR THE EXTENT OF WAINSCOTTING.
- 10. REFER TO STRUCTURAL DRAWINGS FOR PATCHING OF CONCRETE SLAB.
- 11. WALL TAGS MARKED WITH '\*' DENOTES GYP BOARD SHALL RUN TO THE UNDERSIDE OF DECK ABOVE

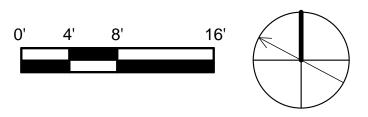
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| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| SECOND<br>FLOOR PLAN   |
| PROJECT NUMBER: 19401.01   |
| DESIGNED BY: FC<br>DRAWN BY: EKM, LR   |
| CHECKED BY: FC   |
| DATE:<br>SCALE: 2016 As  |
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| SHEET 41 OF 157  |

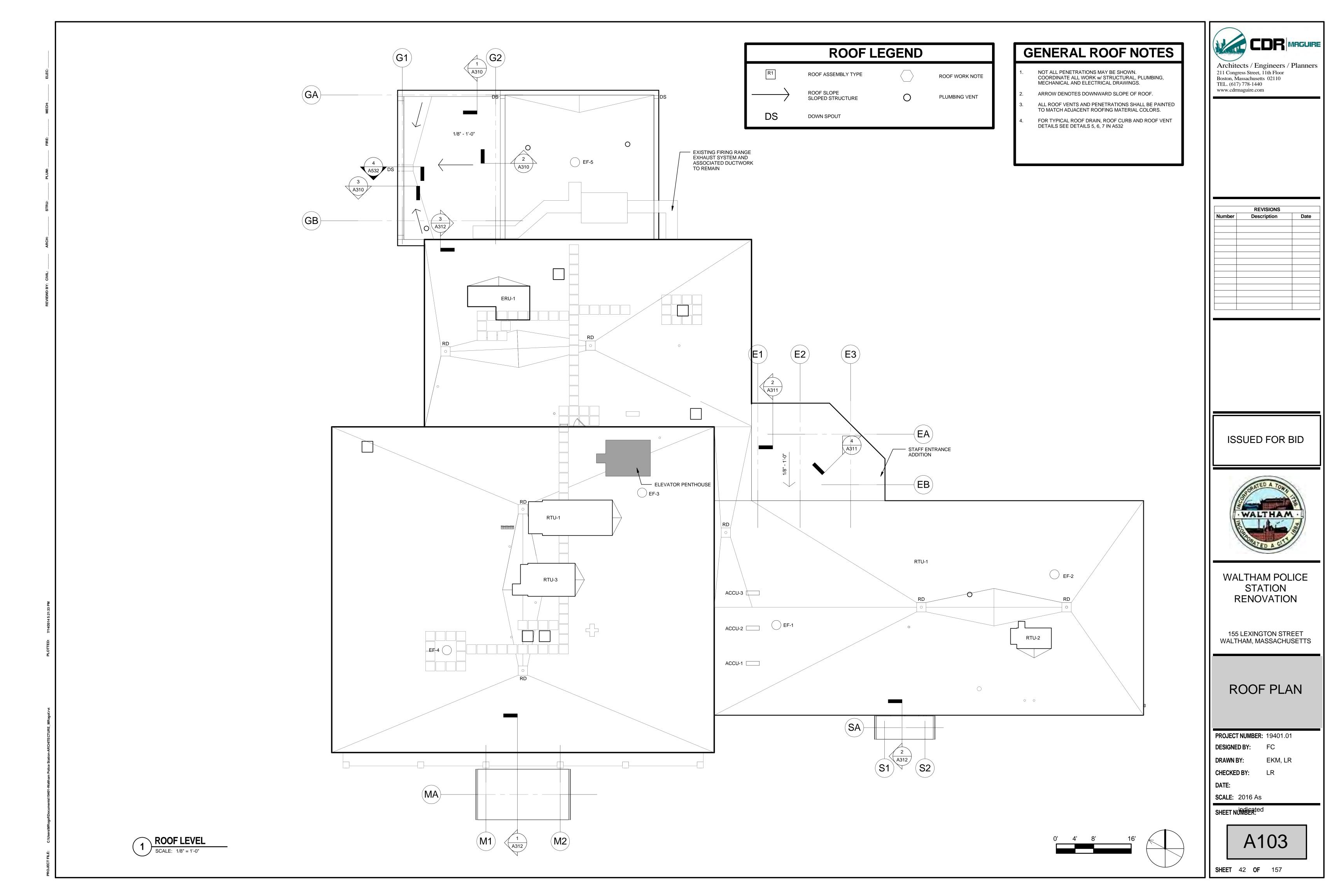
| NOTES |  |
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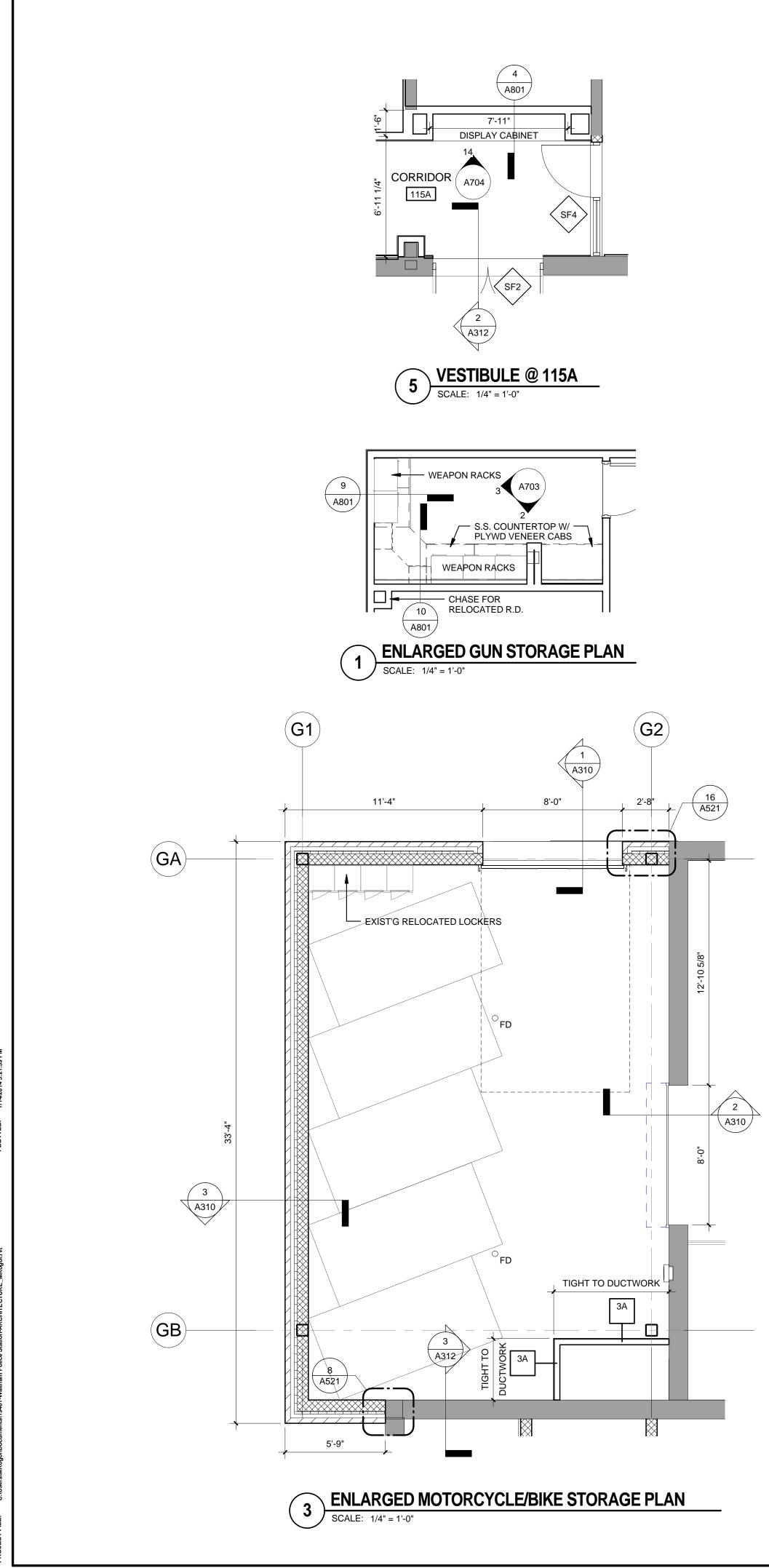
FLOOR PLAN LEGEND

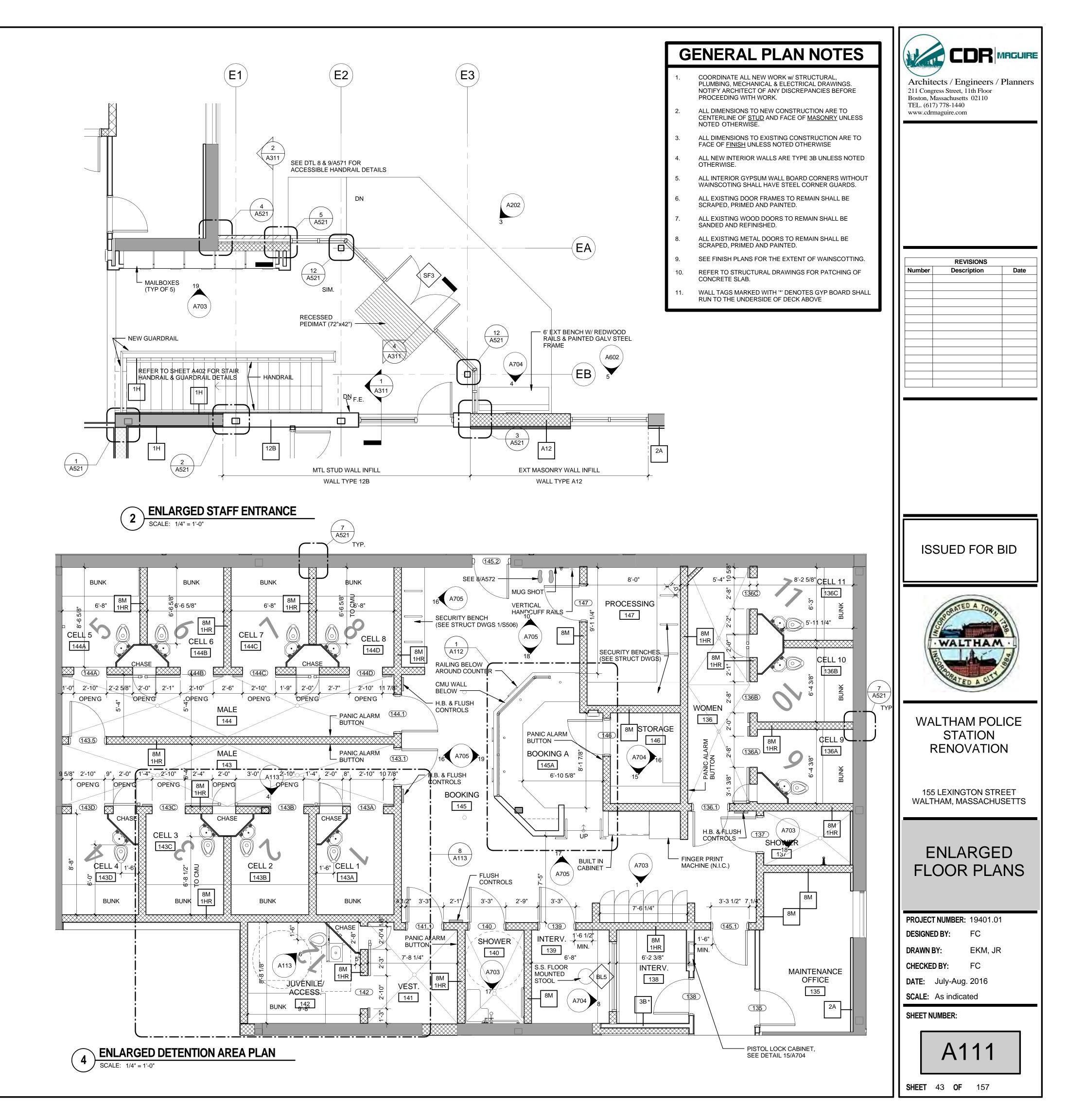
EXISTING CONSTRUCTION TO REMAIN

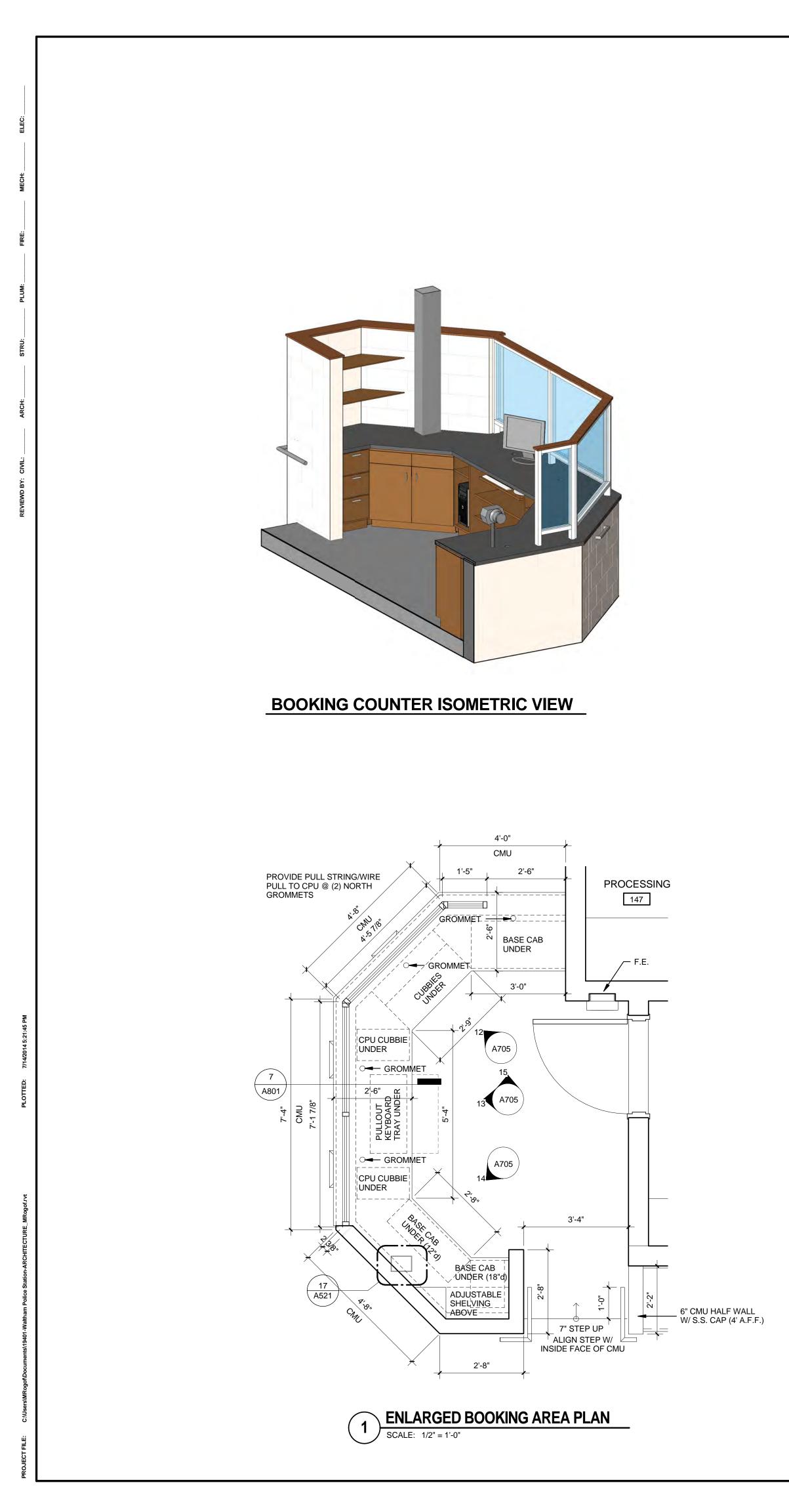
NEW CONSTRUCTION

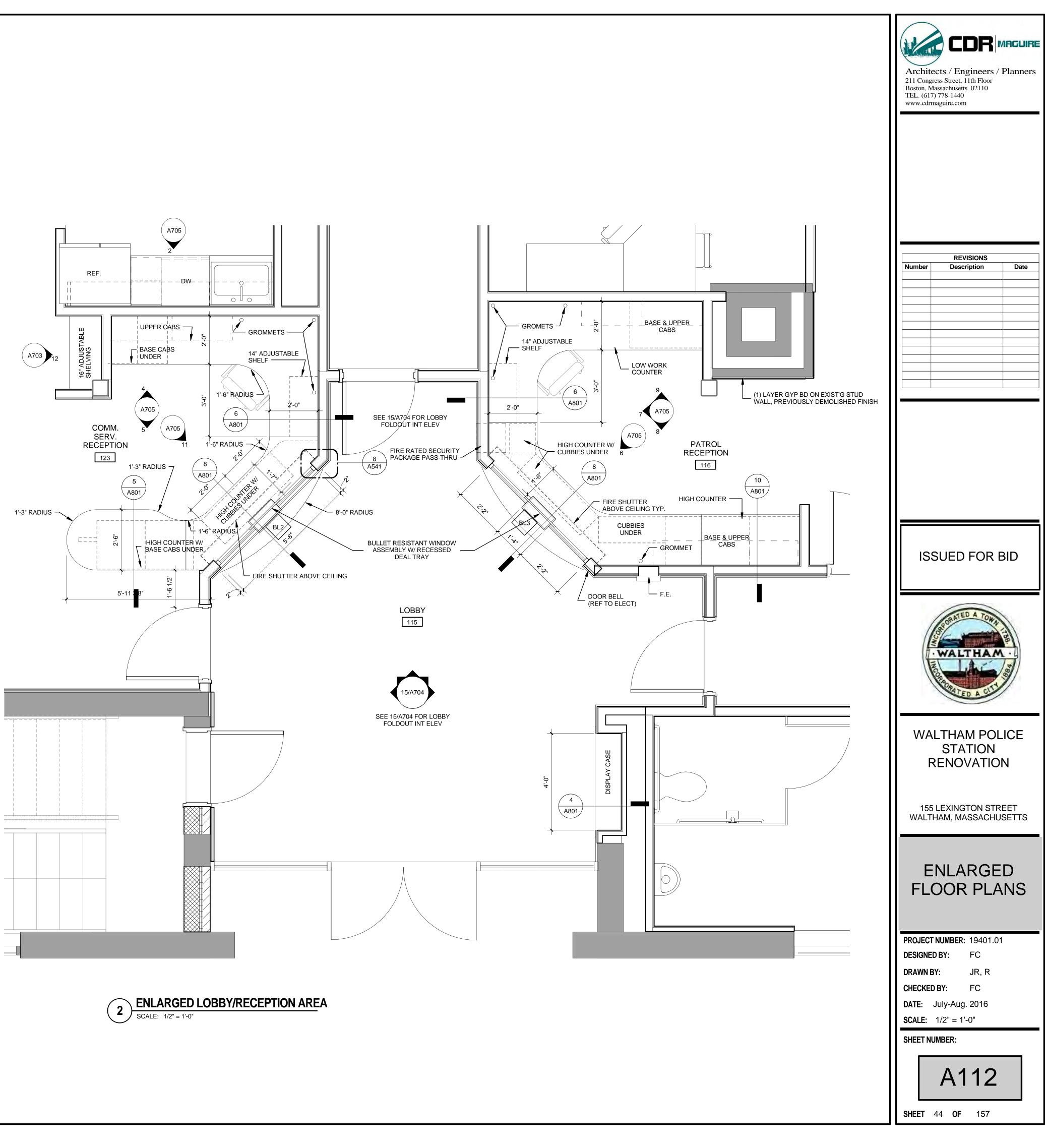


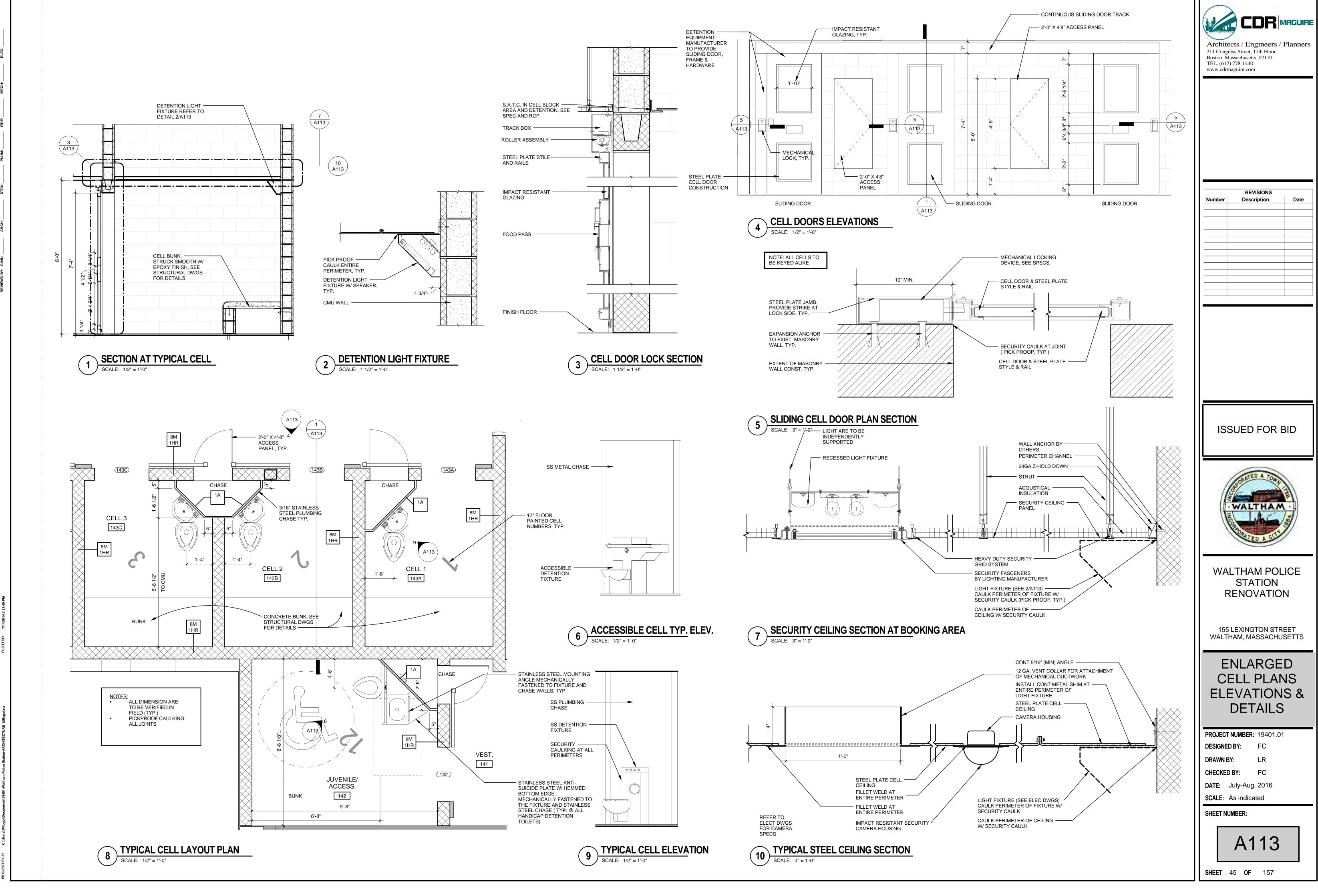


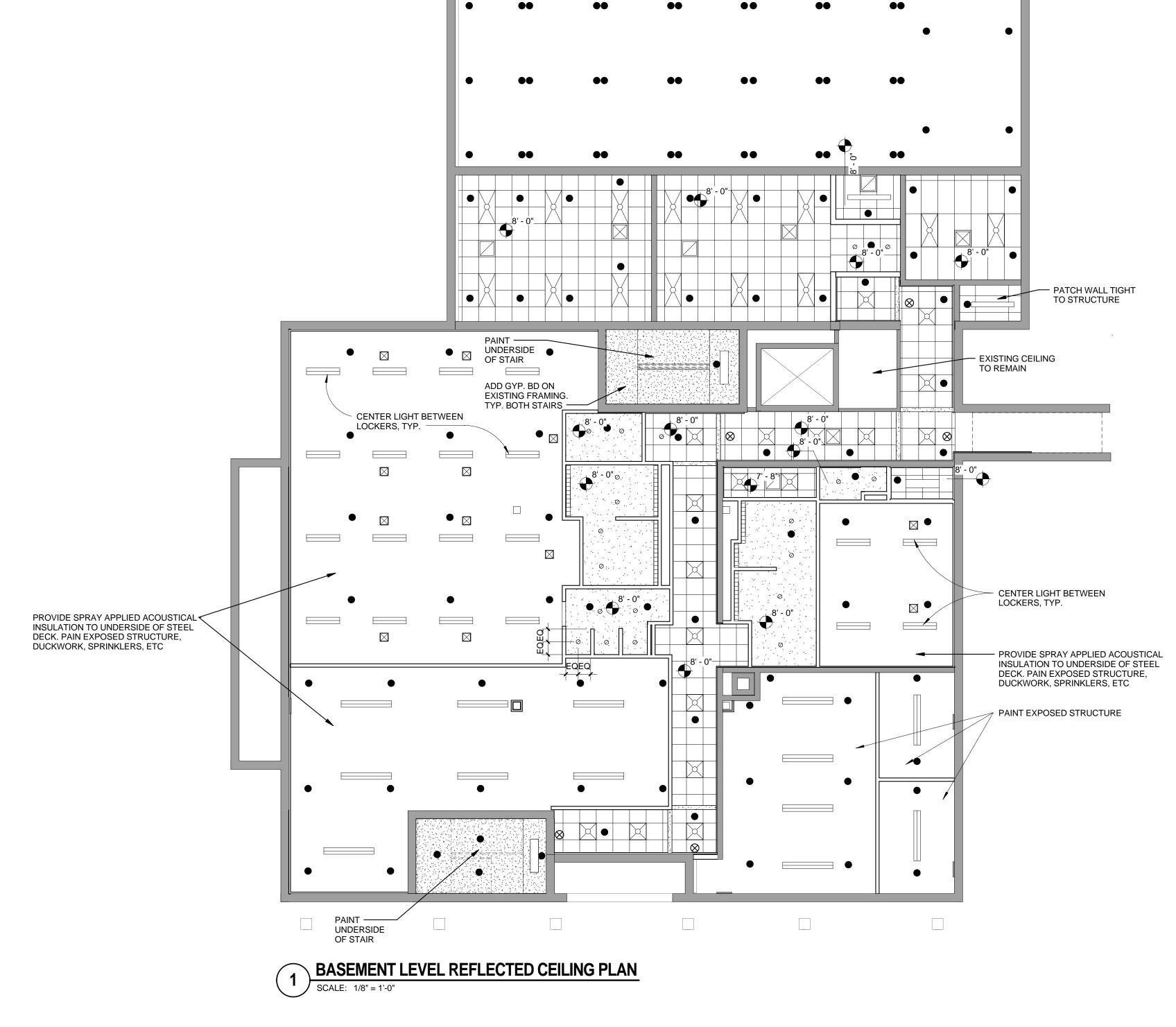


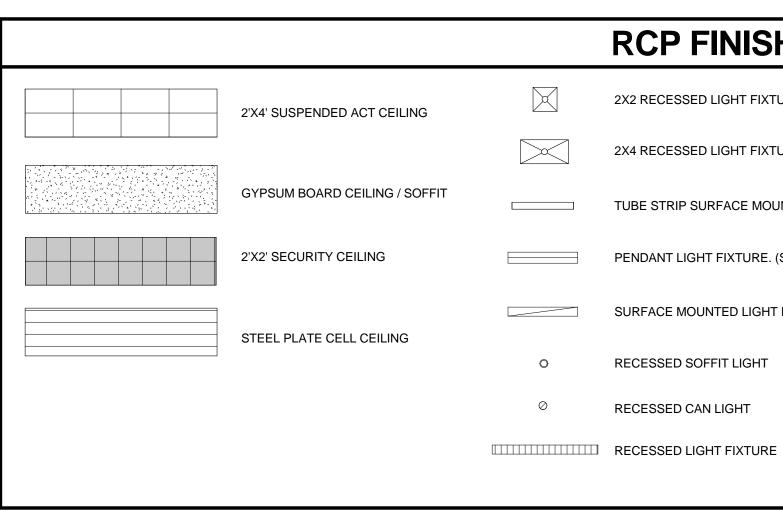












# **RCP FINISH LEGEND**

| IXTURE. (SEE ELEC.)               | $\otimes$ | EXIT SIGN. (SEE ELEC.)                      |
|-----------------------------------|-----------|---|
| IXTURE. (SEE ELEC.)               | S         | SPEAKERS (SEE TD DRAWINGS.)                 |
| IOUNTED LIGHT FIXTURE (SEE ELEC.) | •         | SPRINKLER HEADS (SEE FIRE SUPPRESSION)      |
| RE. (SEE ELEC.)                   | OS        | MECHANICAL DIFFUSER / REGISTER. (SEE MECH.) |
| GHT FIXTURE (SEE ELEC.)           |           | MECHANICAL DIFFUSER / REGISTER. (SEE MECH.) |
| IT                                |           |   |

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|  |   | Number |   |
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| <b>GENERAL RCP NOTES</b>   |   |        |   |
| NOT ALL CEILING MOUNTED ITEMS MAY BE SHOWN.<br>CONTRACTOR TO COORDINATE w/ STRUCTURAL,<br>PLUMBING, MECHANICAL, ELECTRICAL & I.T. DRAWINGS<br>AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES<br>BEFORE STARTING WORK. | 3 |        |   |
| ALL CEILING MOUNTED ITEMS ARE TO BE CENTERED IN CEILING TILES UNLESS NOTED OTHERWISE.  |   |        |   |
| SPRINKER HEAD LAYOUT IS APPROXIMATE AND NOT<br>ALL HEADS MAY BE SHOWN. COORDINATE W/ SPRINKLE<br>DWGS AND NOTIFY ARCHITECT OF ANY DISCREPANCIE<br>BEFORE STARTING WORK.  |   |        |   |
| PROVIDE WHITE GROMMET TRIM @ ALL SUPPORT<br>CABLE PENETRATIONS FOR SUSPENDED ELEMENTS.   |   |        |   |
| ALL EXPOSED PIPING UTILITIES, HVAC SHALL BE  |   |        |   |

- PAINTED IN EXPOSED CEILING AREAS.
- REFER TO ELECTRICAL DRAWINGS FOR LIGHT LOCATIONS.

SEE SHEET A581 FOR TYPICAL CEILING DETAILS.

**ISSUED FOR BID** WALTHAM WALTHAM POLICE STATION RENOVATION 155 LEXINGTON STREET WALTHAM, MASSACHUSETTS BASEMENT FLOOR REFLECTED CEILING PLAN PROJECT NUMBER: 19401.01 DESIGNED BY: FC DRAWN BY: EKM, LR CHECKED BY: FC DATE: SCALE: 2016 As SHEET NUMBER

A120

**SHEET** 46 **OF** 157

Architects / Engineers / Planners

REVISIONS

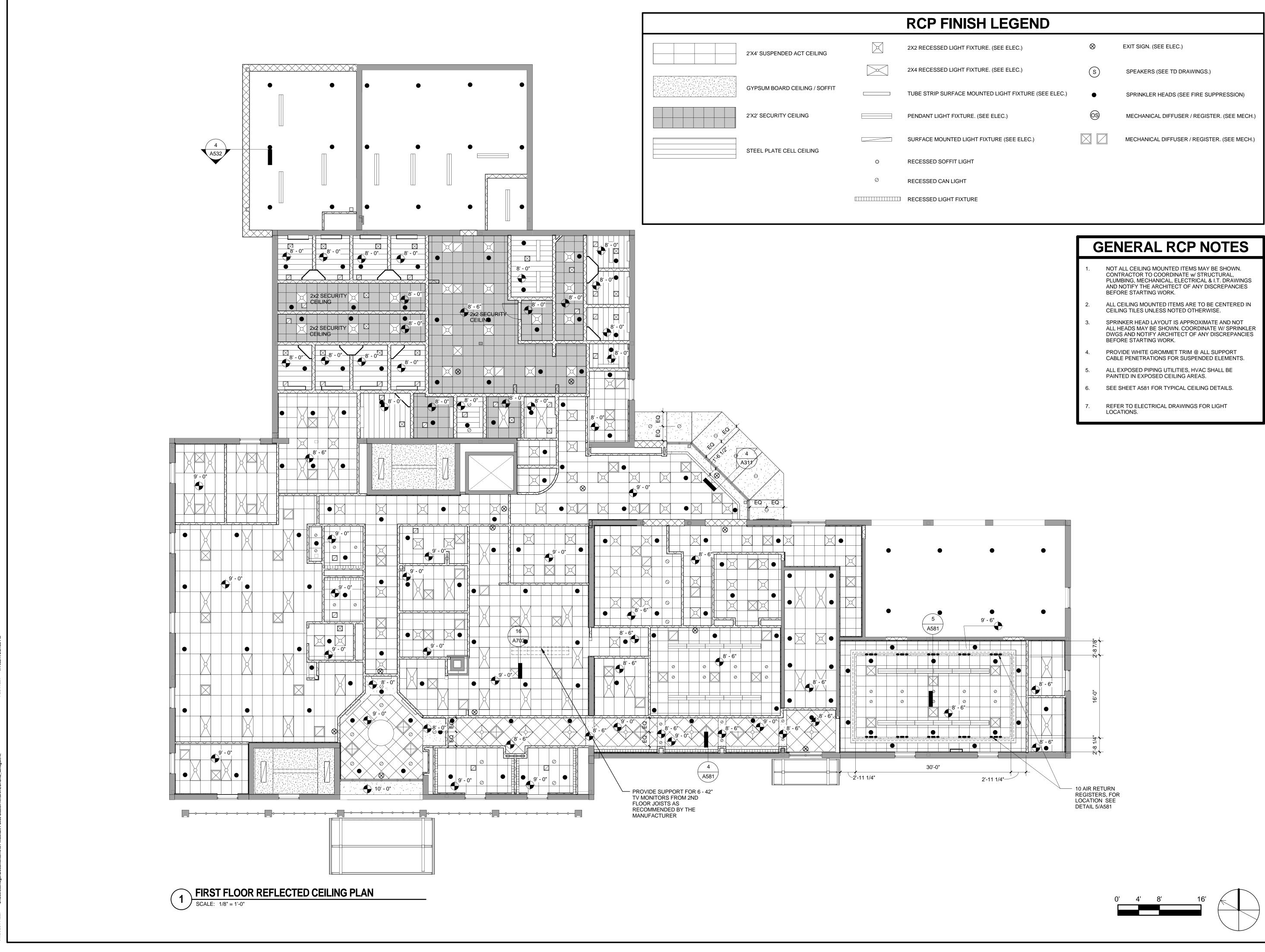
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Description

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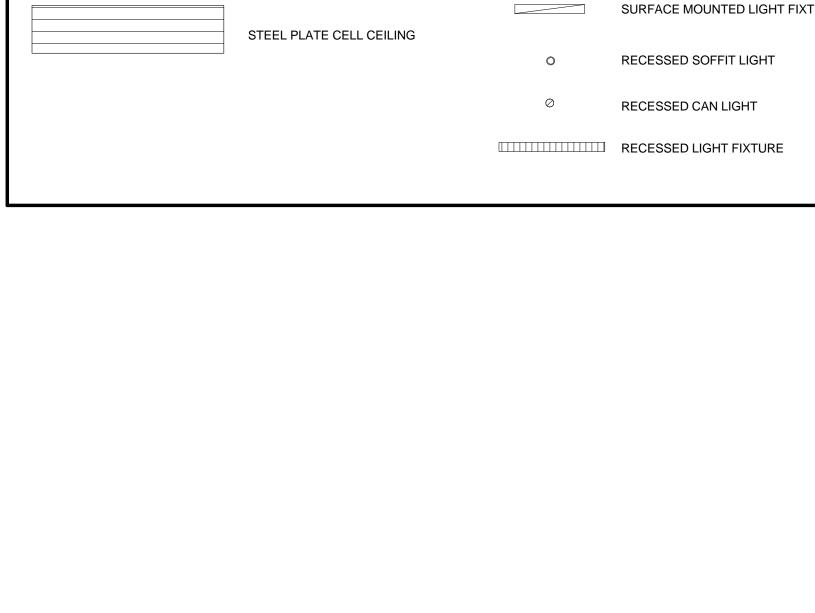




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| UNTED LIGHT FIXTURE (SEE ELEC.) | •         | SPRINKLER HEADS (SEE FIRE SUPPRESSION)      |
| (SEE ELEC.)                     | OS        | MECHANICAL DIFFUSER / REGISTER. (SEE MECH.) |
| T FIXTURE (SEE ELEC.)           |           | MECHANICAL DIFFUSER / REGISTER. (SEE MECH.) |
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| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor  |  |  |  |  |  |  |
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| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |  |  |  |  |  |  |
| FIRST FLOOR   |  |  |  |  |  |  |
| REFLECTED<br>CEILING PLAN   |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| PROJECT NUMBER: 19401.01<br>DESIGNED BY: FC   |  |  |  |  |  |  |
| DRAWN BY: EKM, LR<br>CHECKED BY: FC   |  |  |  |  |  |  |
| DATE:<br>SCALE: 2016 As   |  |  |  |  |  |  |
| SHEET NUMBER!   |  |  |  |  |  |  |
| A121  |  |  |  |  |  |  |
| <b>SHEET</b> 47 <b>OF</b> 157   |  |  |  |  |  |  |

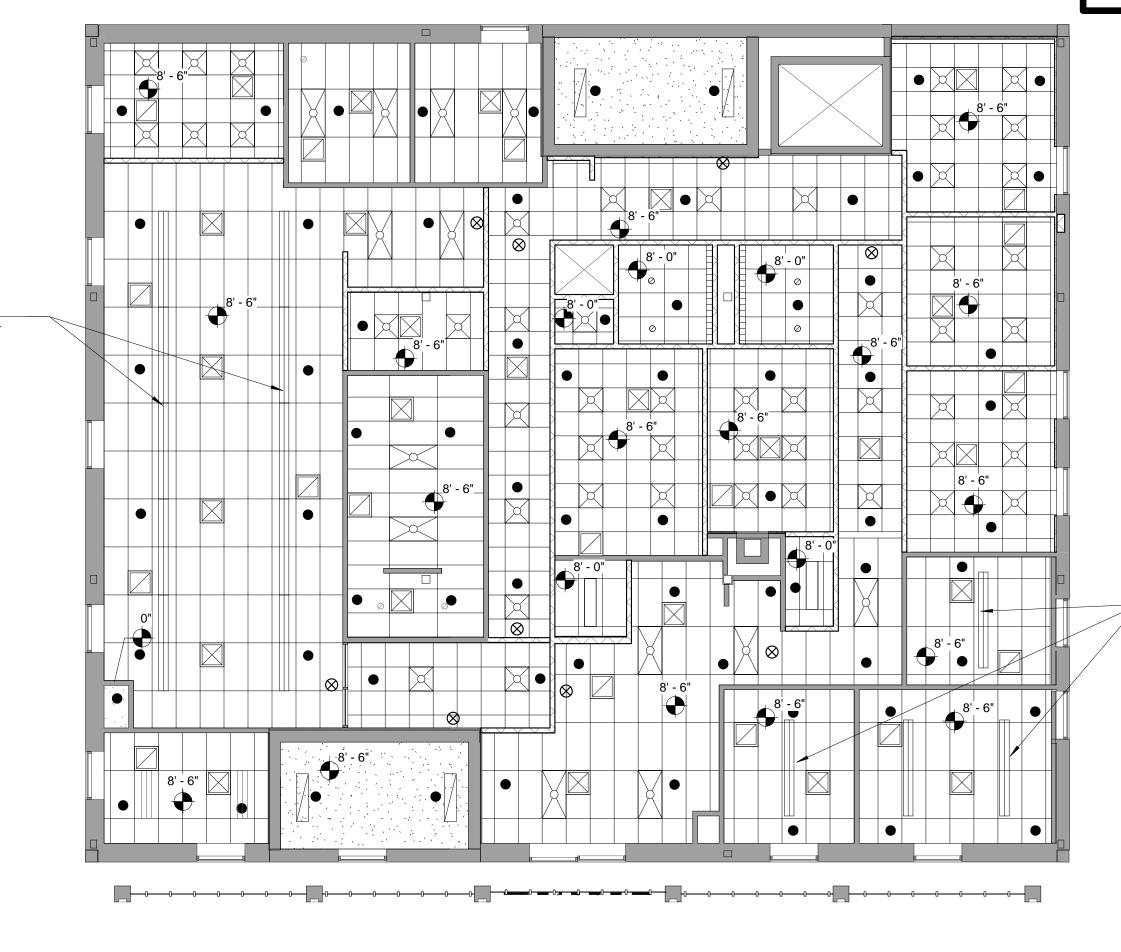




2'X4' SUSPENDED ACT CEILING

GYPSUM BOARD CEILING / SOFFIT

2'X2' SECURITY CEILING



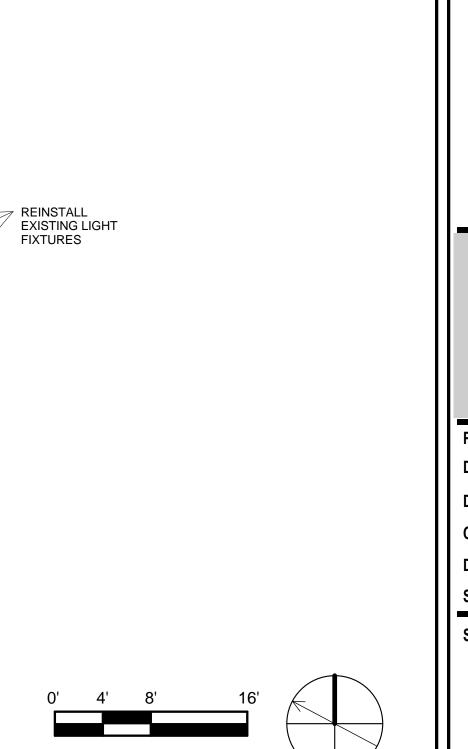


# **RCP FINISH LEGEND**

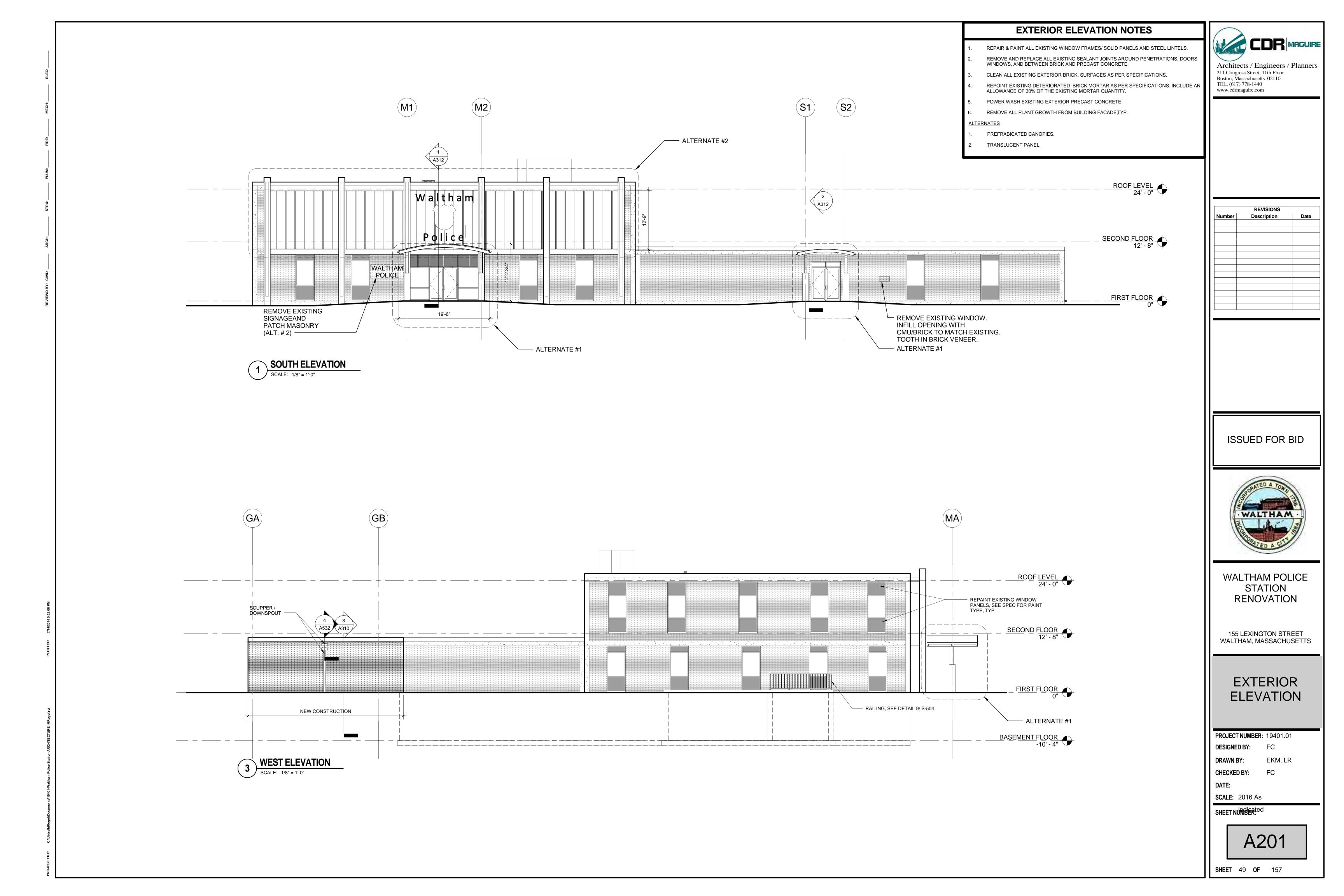
| X | 2X2 RECESSED LIGHT FIXTURE. (SEE ELEC.)              | $\otimes$ | EXIT SIGN. (SEE ELEC.)                      |
|---|--|-----------|---|
|   | 2X4 RECESSED LIGHT FIXTURE. (SEE ELEC.)              | S         | SPEAKERS (SEE TD DRAWINGS.)                 |
|   | TUBE STRIP SURFACE MOUNTED LIGHT FIXTURE (SEE ELEC.) | •         | SPRINKLER HEADS (SEE FIRE SUPPRESSION)      |
|   | PENDANT LIGHT FIXTURE. (SEE ELEC.)                   | OS        | MECHANICAL DIFFUSER / REGISTER. (SEE MECH.) |
|   | SURFACE MOUNTED LIGHT FIXTURE (SEE ELEC.)            |           | MECHANICAL DIFFUSER / REGISTER. (SEE MECH.) |
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- NOT ALL CEILING MOUNTED ITEMS MAY BE SHOWN. CONTRACTOR TO COORDINATE w/ STRUCTURAL, PLUMBING, MECHANICAL, ELECTRICAL & I.T. DRAWINGS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
- ALL CEILING MOUNTED ITEMS ARE TO BE CENTERED IN CEILING TILES UNLESS NOTED OTHERWISE. SPRINKER HEAD LAYOUT IS APPROXIMATE AND NOT ALL HEADS MAY BE SHOWN. COORDINATE W/ SPRINKLER
- DWGS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
- PROVIDE WHITE GROMMET TRIM @ ALL SUPPORT CABLE PENETRATIONS FOR SUSPENDED ELEMENTS.
- ALL EXPOSED PIPING UTILITIES, HVAC SHALL BE PAINTED IN EXPOSED CEILING AREAS.
- 6. SEE SHEET A581 FOR TYPICAL CEILING DETAILS.
- REFER TO ELECTRICAL DRAWINGS FOR LIGHT LOCATIONS.

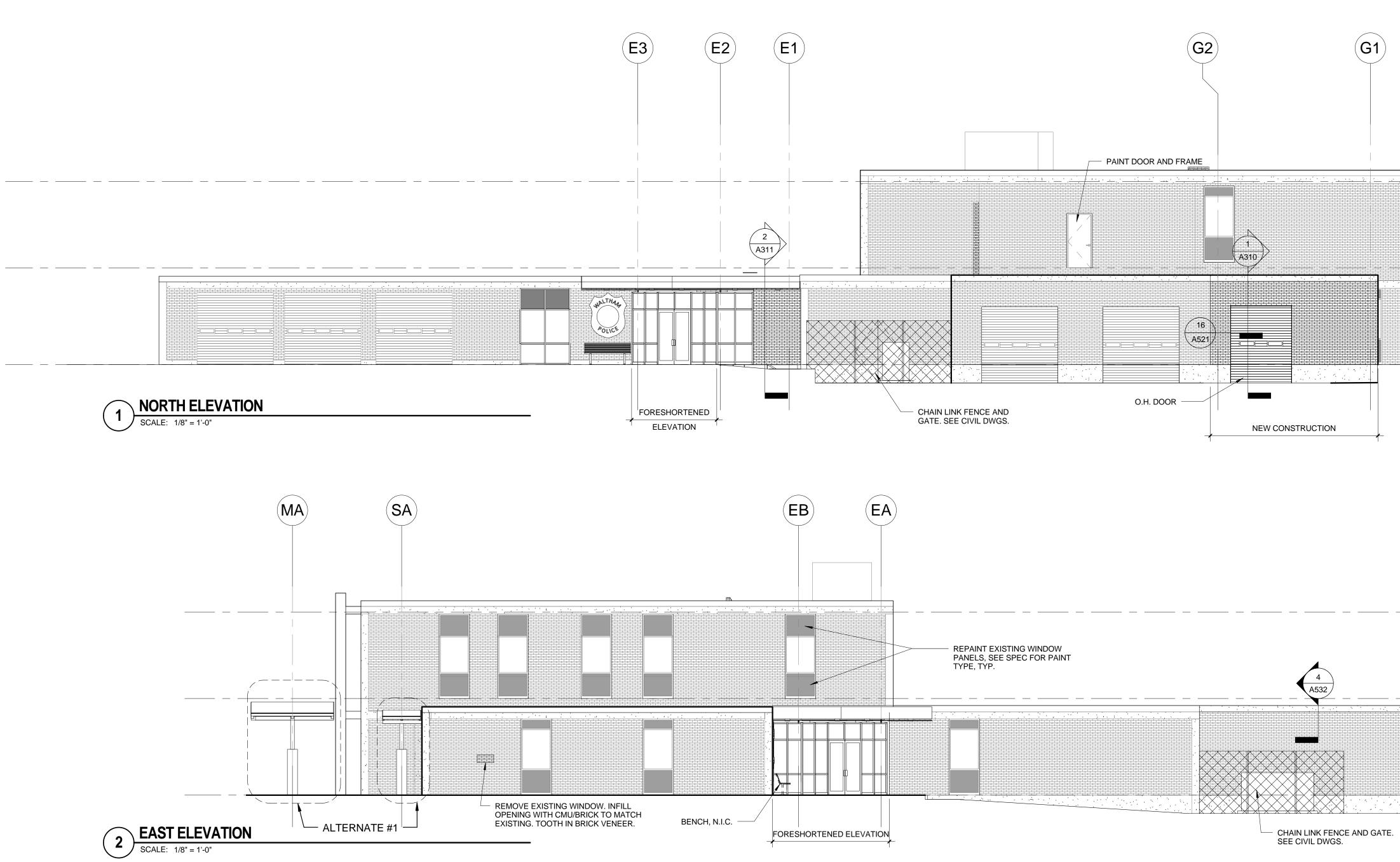


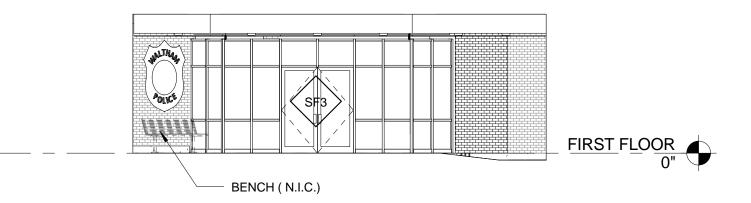
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| CCCR MAGUIRE<br>Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com  |  |  |  |  |  |
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| RENOVATION<br>155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS<br>SECOND<br>FLOOR RCP   |  |  |  |  |  |
| PROJECT NUMBER:19401.01DESIGNED BY:FCDRAWN BY:EKM, LRCHECKED BY:CheckerDATE:SCALE:2016 As   |  |  |  |  |  |
| SHEET NUMBER!<br>A122<br>SHEET 48 OF 157  |  |  |  |  |  |



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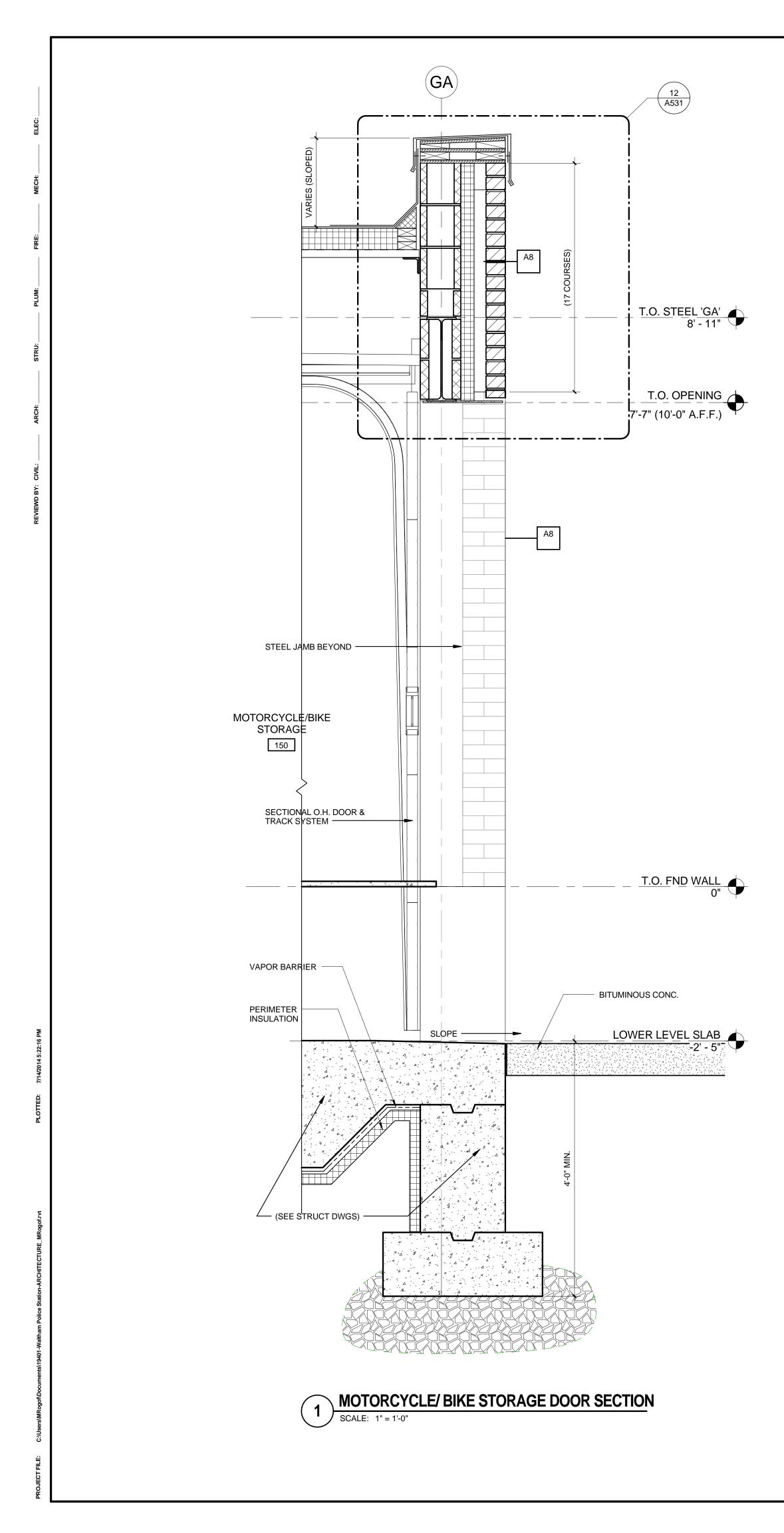


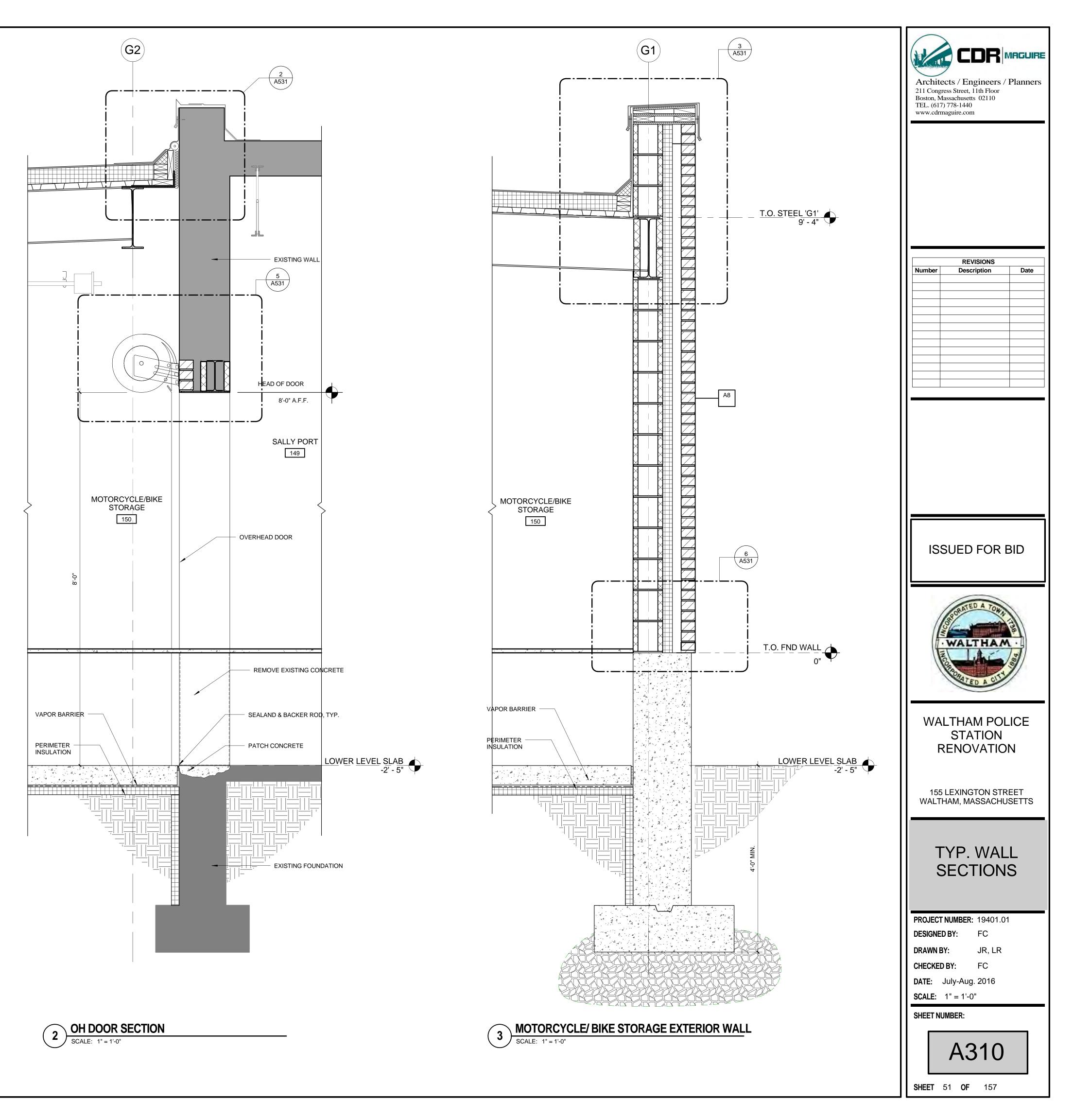


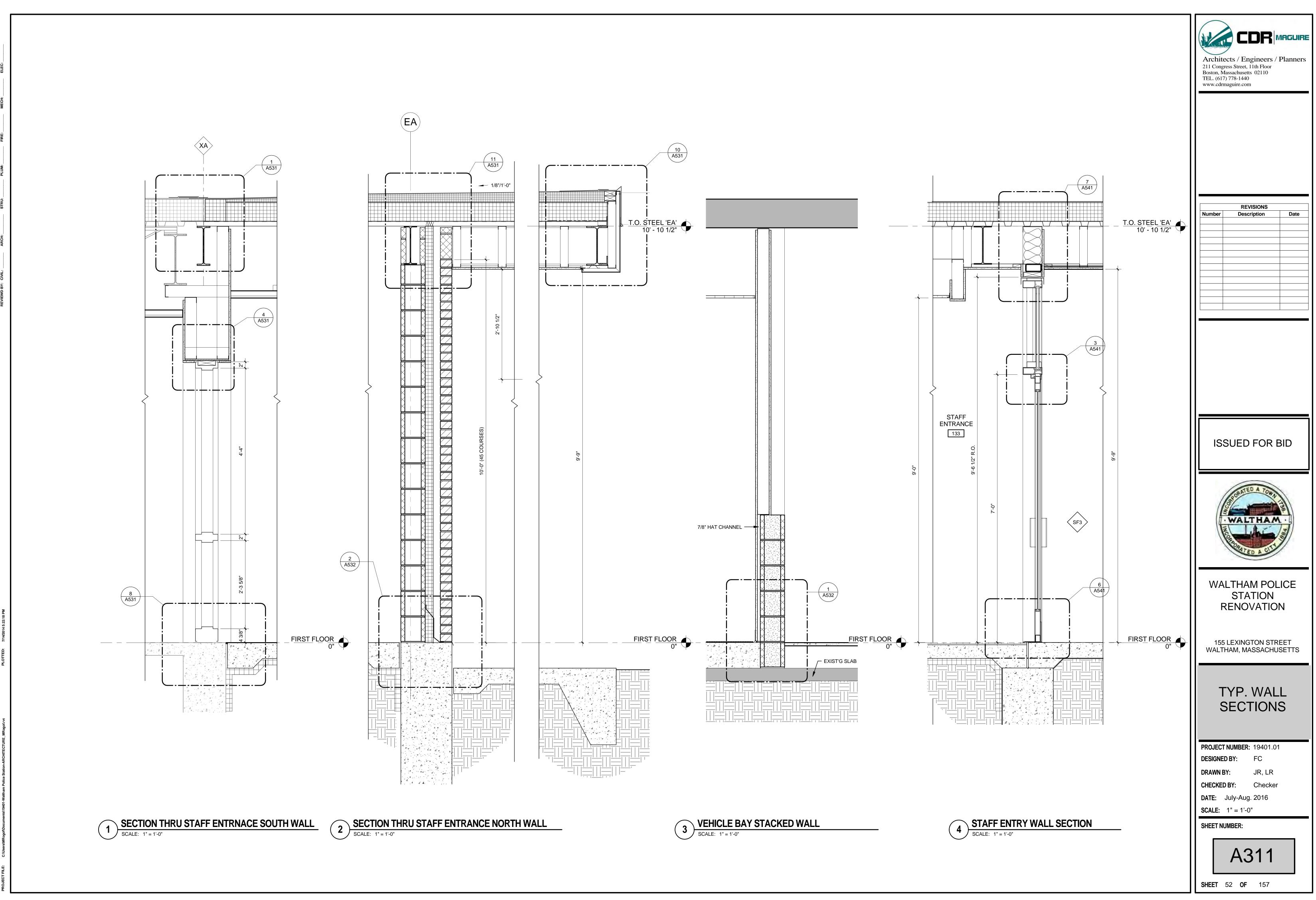


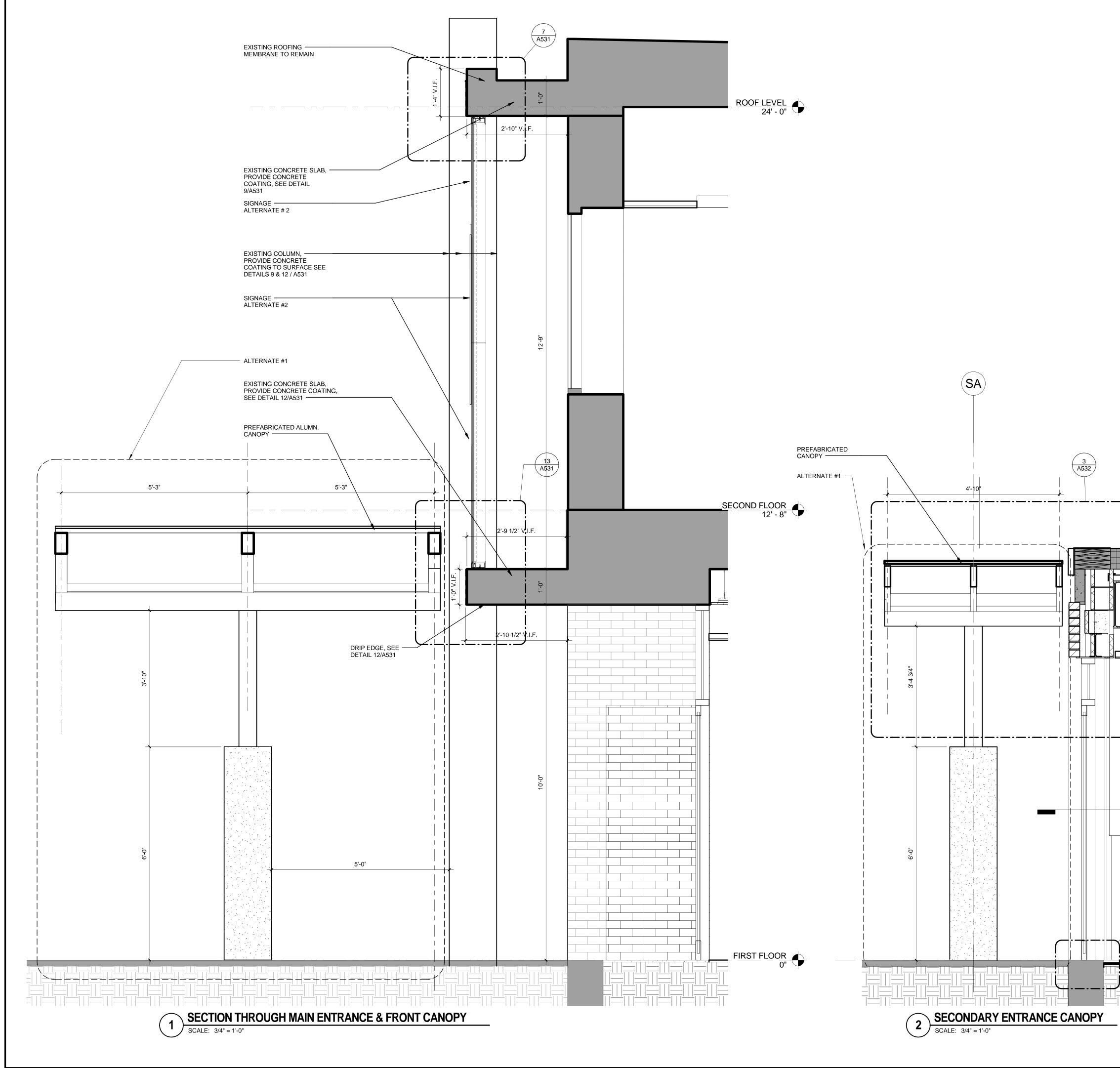
3 STAFF ENTRY ELEVATION NORTHEAST SCALE: 1/8" = 1'-0"

| EXTERIOR ELEVATION NOTES   |   |
|--|---|
| <ol> <li>REPAIR &amp; PAINT ALL EXISTING WINDOW FRAMES/ SOLID PANELS AND STEEL LINTELS.</li> <li>REMOVE AND REPLACE ALL EXISTING SEALANT JOINTS AROUND PENETRATIONS, DOORS, WINDOWS, AND BETWEEN BRICK AND PRECAST CONCRETE.</li> <li>CLEAN ALL EXISTING EXTERIOR BRICK, SURFACES AS PER SPECIFICATIONS. INCLUDE AN ALLOWANCE OF 30% OF THE EXISTING MORTAR QUANTITY.</li> <li>POWER WASH EXISTING EXTERIOR PRECAST CONCRETE.</li> <li>REMOVE ALL PLANT GROWTH FROM BUILDING FACADE, TYP.</li> <li>PREFRABICATED CANOPIES.</li> <li>TRANSLUCENT PANEL</li> </ol> | CCOR MAGURE<br>Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
| $\frac{\text{SECOND FLOOR}}{12' - 8"} \bigoplus$   | REVISIONS         Number       Description       Date   |
|  | ISSUED FOR BID  |
| $ \begin{array}{c}                                     $   | WALTHAM .   |
|  | WALTHAM POLICE<br>STATION<br>RENOVATION<br>155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
|  | EXTERIOR<br>ELEVATION   |
|  | PROJECT NUMBER: 19401.01<br>DESIGNED BY: FC<br>DRAWN BY: EKM, LR<br>CHECKED BY: FC<br>DATE:<br>SCALE: 2016 As<br>SHEET NUMBER:                                  |
|  | <b>A202</b><br>Sheet 50 of 157  |





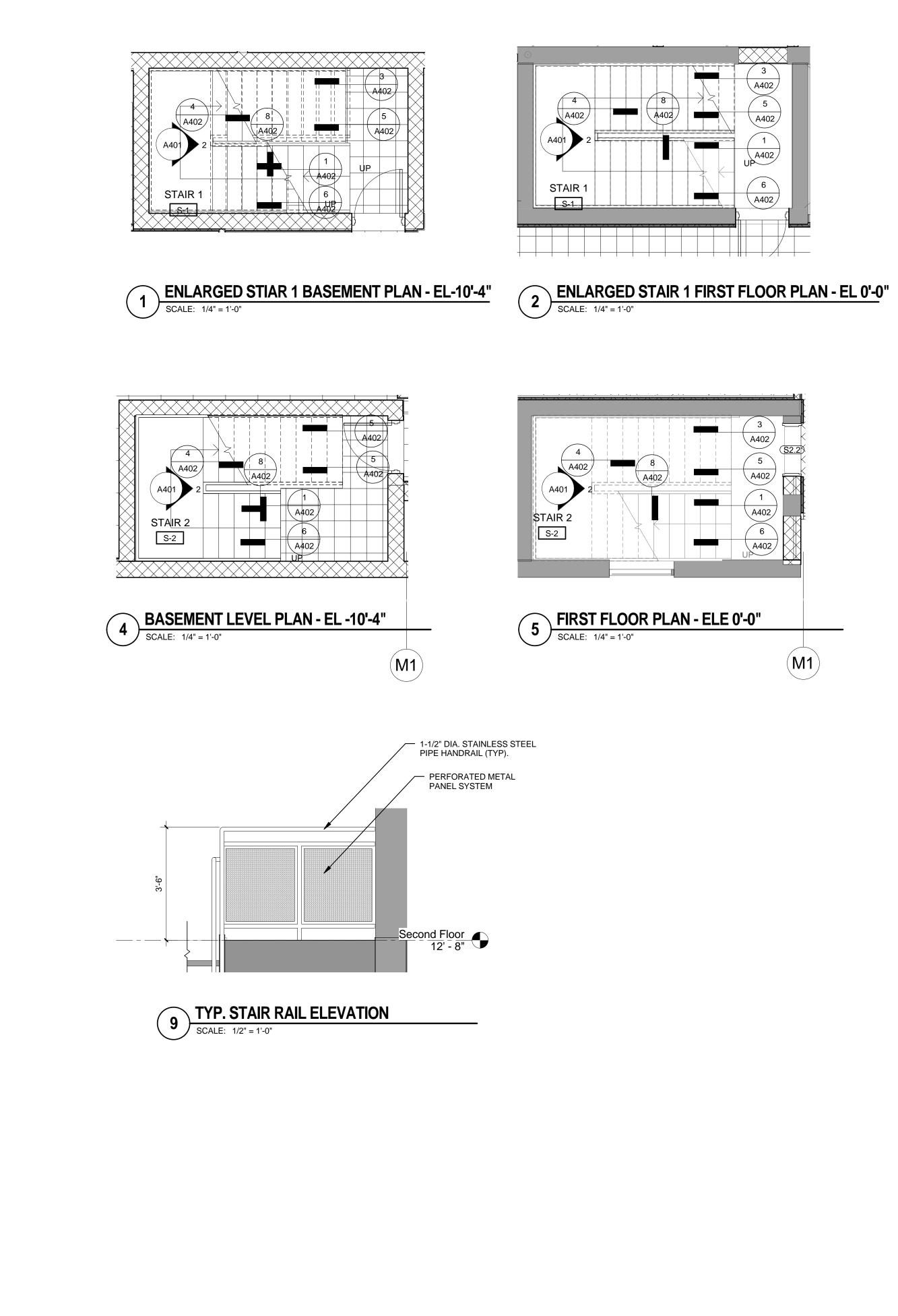


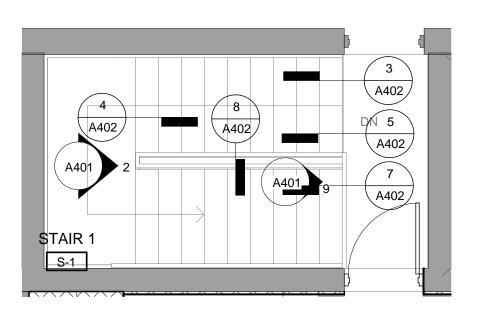


VIEWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_\_ PLUM: \_\_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ ELEC: \_\_\_\_\_

OJECT FILE: C:\Users\utis.riobueno\Documents\19401-Waltham Police Station-ARCHITECTURE\_Iuls.riobueno.rvt PLOTTED: 7/15/2014 8:22

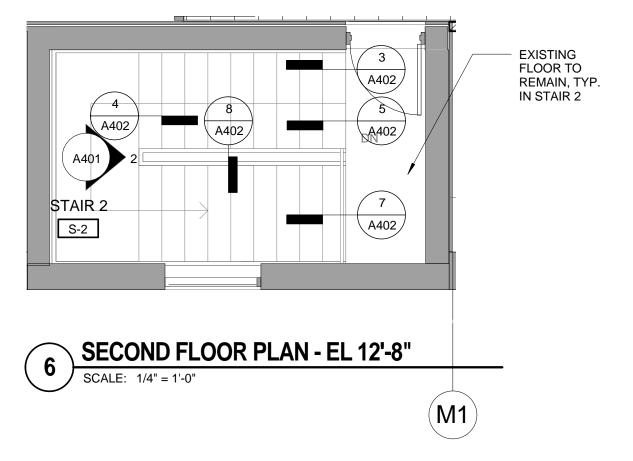
|  | CCCR MAGUIRE<br>Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com  |
|--|---|
|  | REVISIONS         Number       Description       Date         Image: Im |
|  | ISSUED FOR BID  |
|  | WALTHAM .   |
|  | WALTHAM POLICE<br>STATION<br>RENOVATION<br>155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
|  | TYP. WALL<br>SECTIONSPROJECT NUMBER: 19401.01DESIGNED BY: DesignerDRAWN BY: LR  |
| FIRST FLOOR<br>0"<br>0"<br>0"<br>FIRST FLOOR<br>0"<br>0"<br>0"<br>0"<br>0"<br>0"<br>0"<br>0" | CHECKED BY: Checker<br>DATE: July-Aug. 2016<br>SCALE: 3/4" = 1'-0"<br>SHEET NUMBER:<br>A312<br>SHEET 53 OF 157  |





3 ENLARGED STAIR 1 SECOND FLOOR PLAN - EL 12'-8" SCALE: 1/4" = 1'-0"

(M1)



# Architects / Engineers / Planners 211 Congress Street, 11th Floor Boston, Massachusetts 02110 TEL. (617) 778-1440 www.cdrmaguire.com REVISIONS Number Description Date **ISSUED FOR BID** WALTHAM Ar WALTHAM POLICE STATION RENOVATION **155 LEXINGTON STREET** WALTHAM, MASSACHUSETTS STAIR PLAN, SECTIONS, DETAILS PROJECT NUMBER: 19401.01 DESIGNED BY: FC EKM DRAWN BY: CHECKED BY: FC

DATE: July-Aug. 2016

SCALE: As indicated

**SHEET** 54 **OF** 157

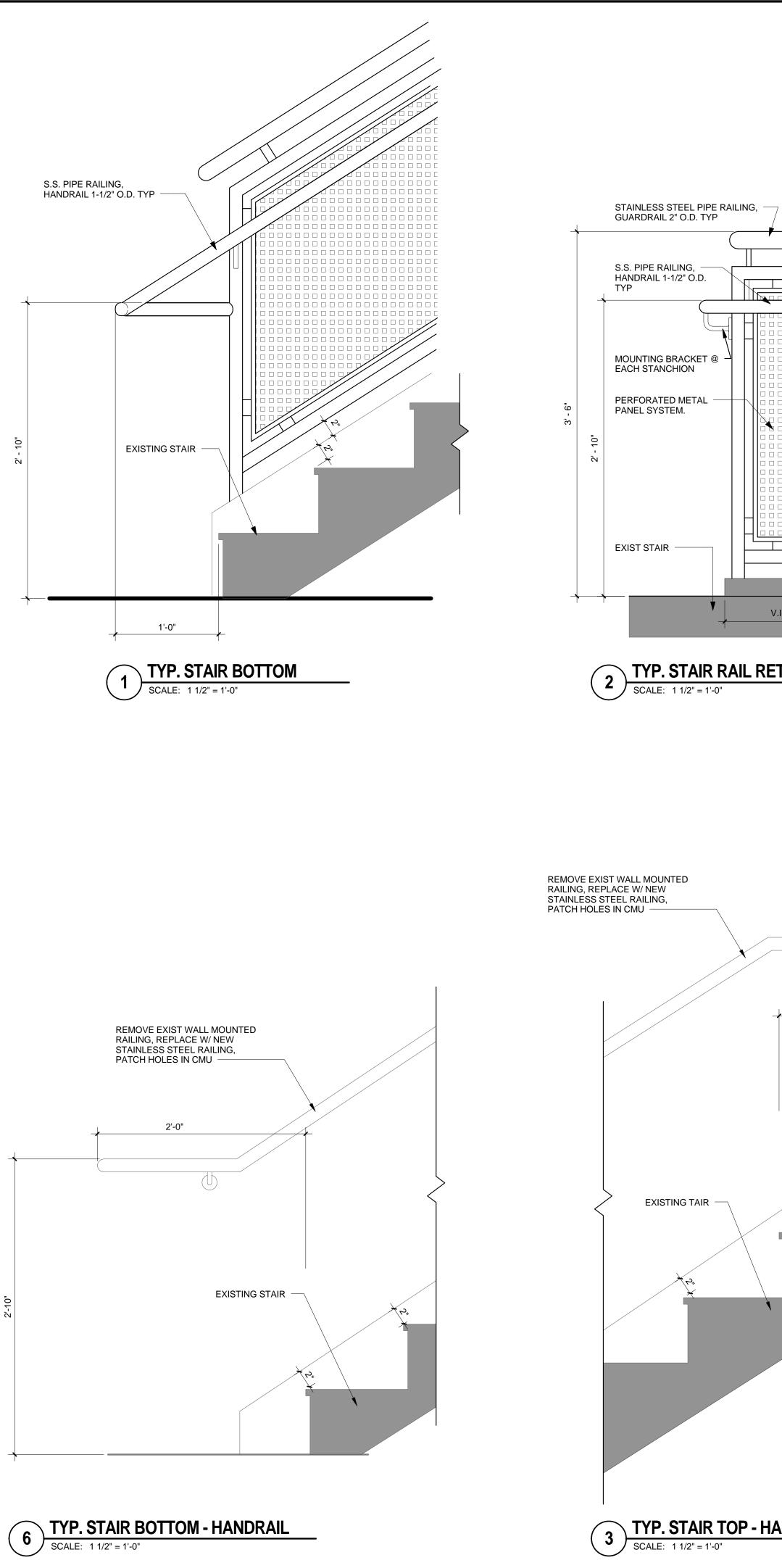
A401

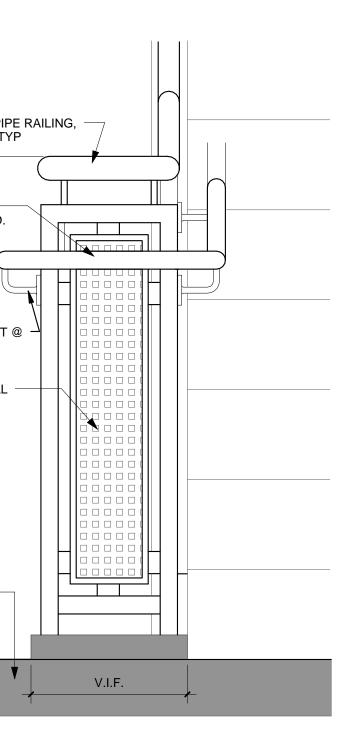
SHEET NUMBER:

## **STAIR NOTES**

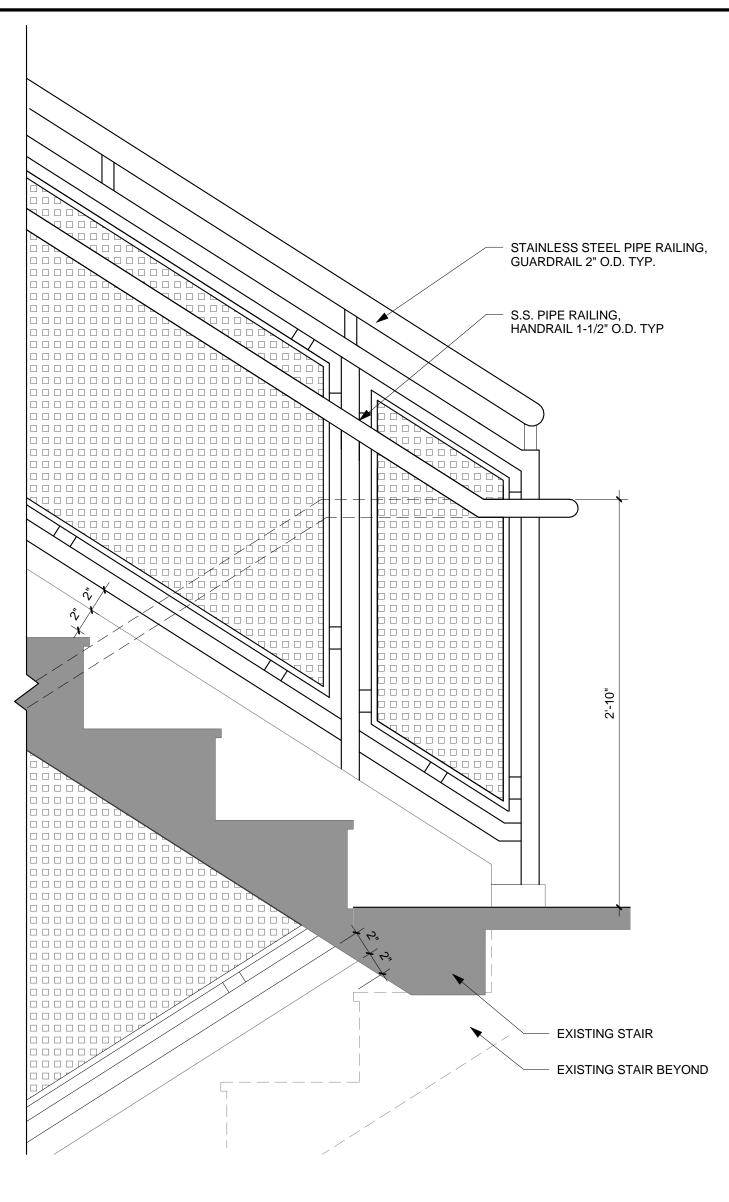
- REMOVE EXISTING GUARDRAILS AND HANDRAILS.
- NEW GUARDRAILS AND HANDRAILS, SEE DETAILS ON A402
- REMOVE DOOR, PATCH MASONRY.
- PAINT CMU, POLYMIX, SEE SPECIFICATIONS. 4.
- REFINISH TERRAZO FLOORING / TREADS IN STAIR 2
- NEW GWB CEILING AND UNDERSIDE OF STAIR. 6. PAINT UNDERSIDE OF STAIR. 7
- 8. PAINT DOORS & WINDOW FRAME.



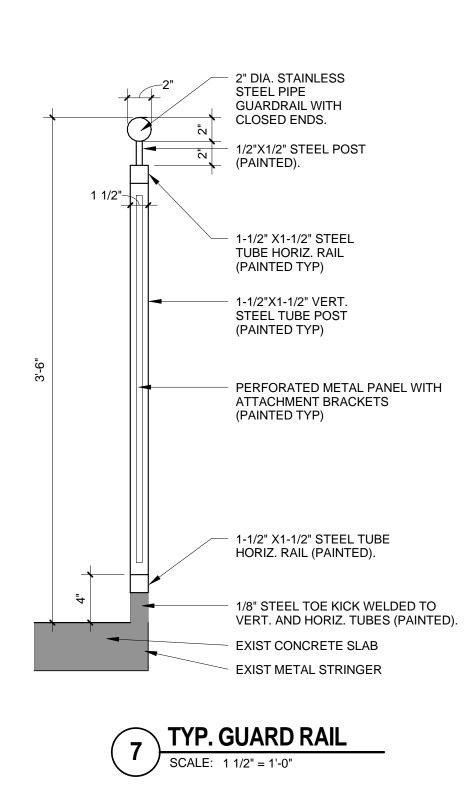


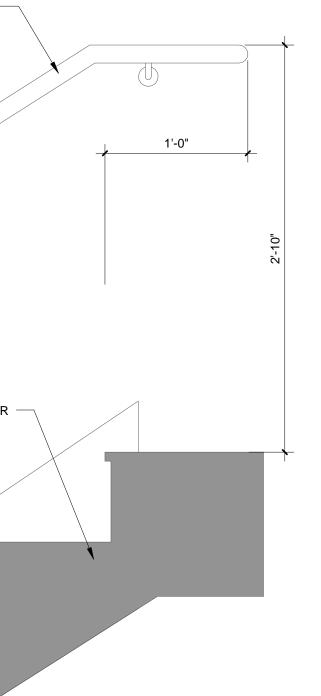




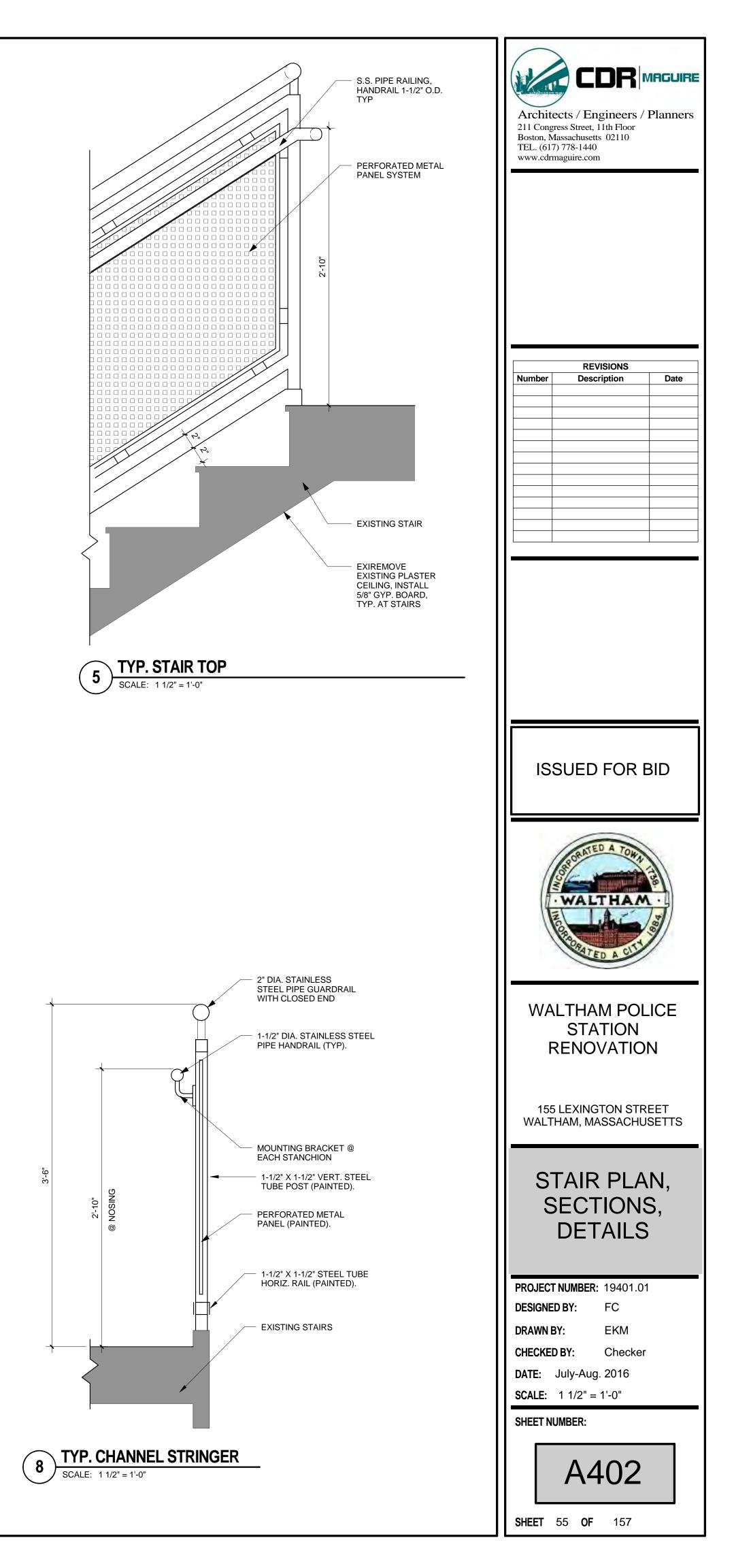


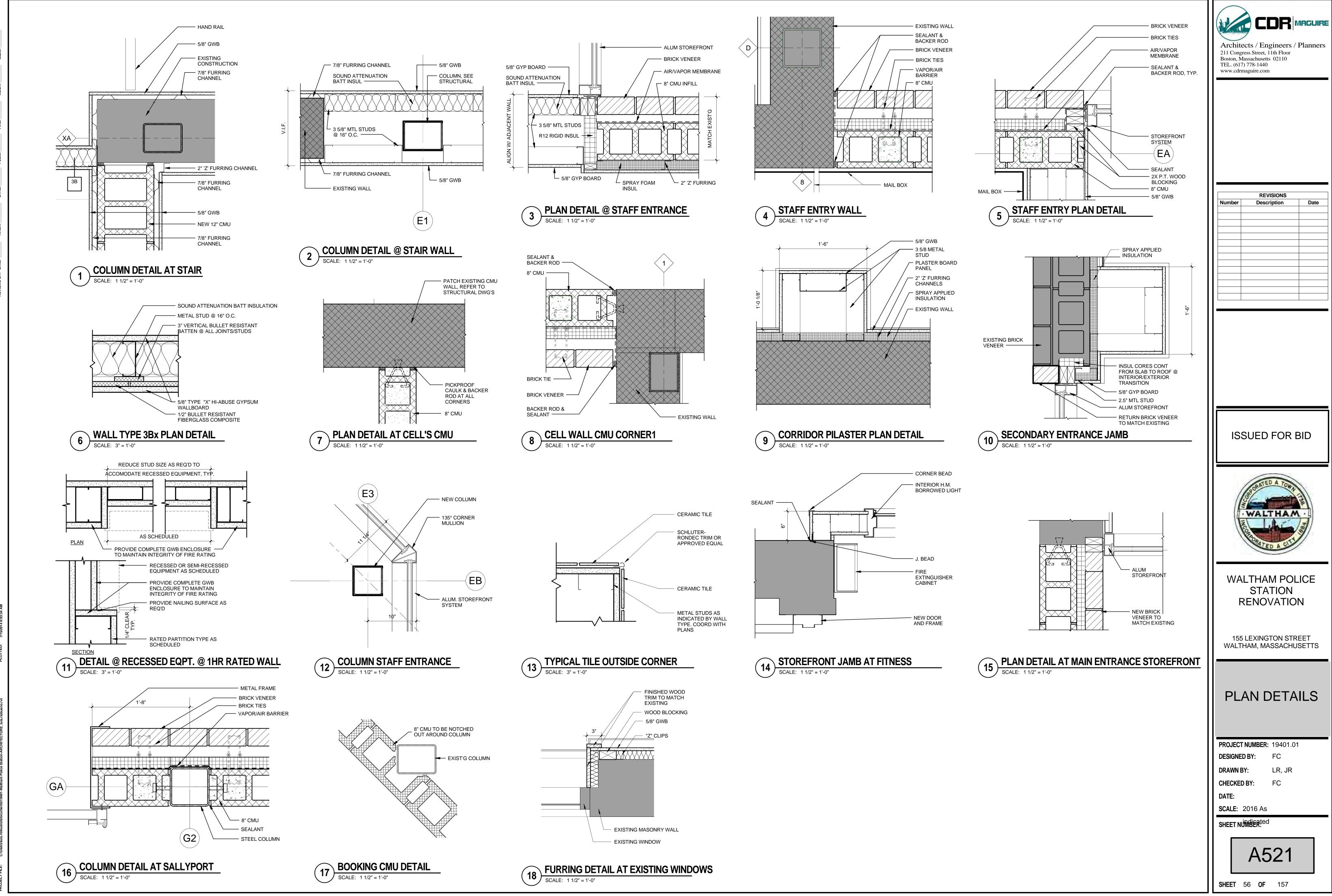


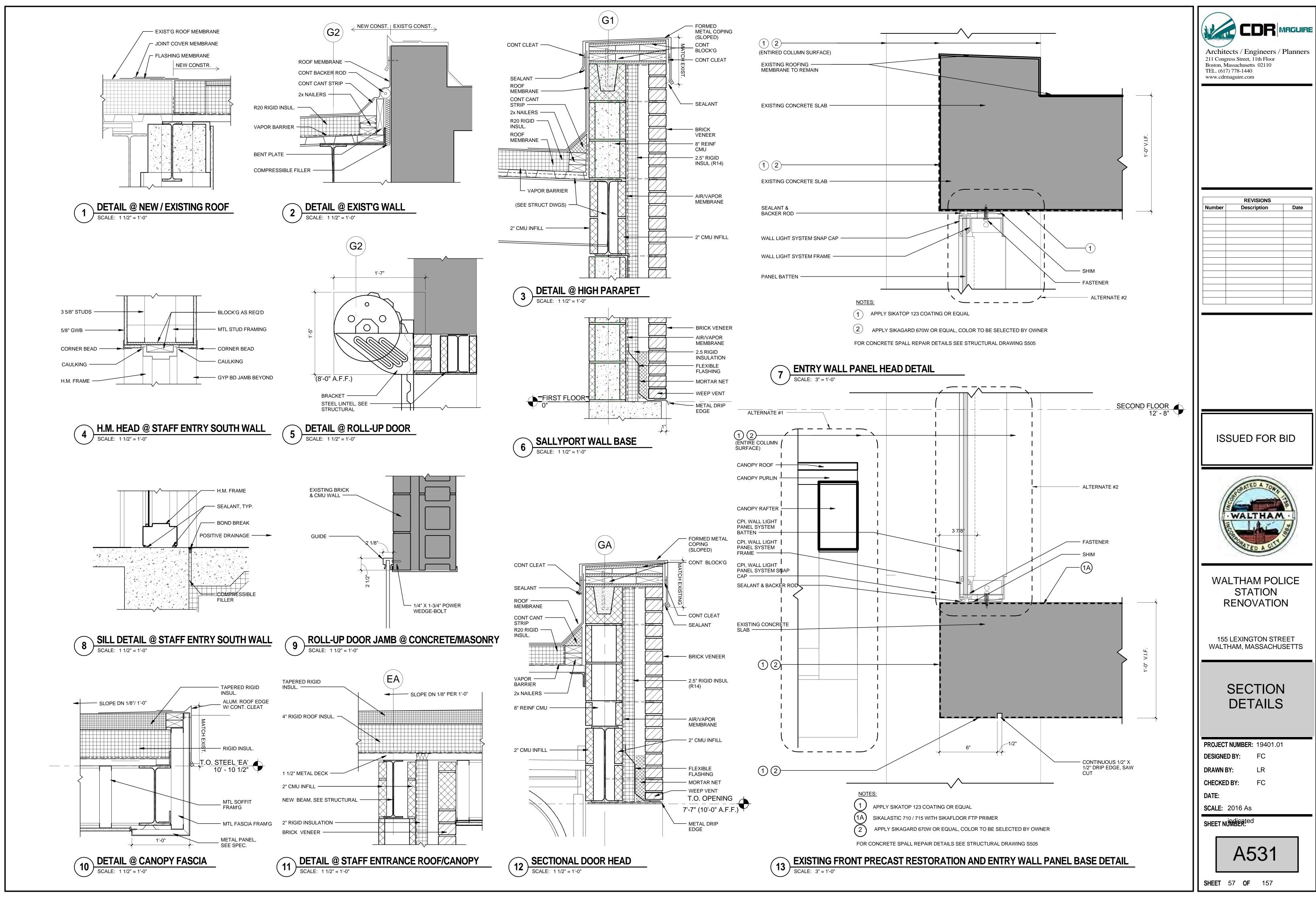


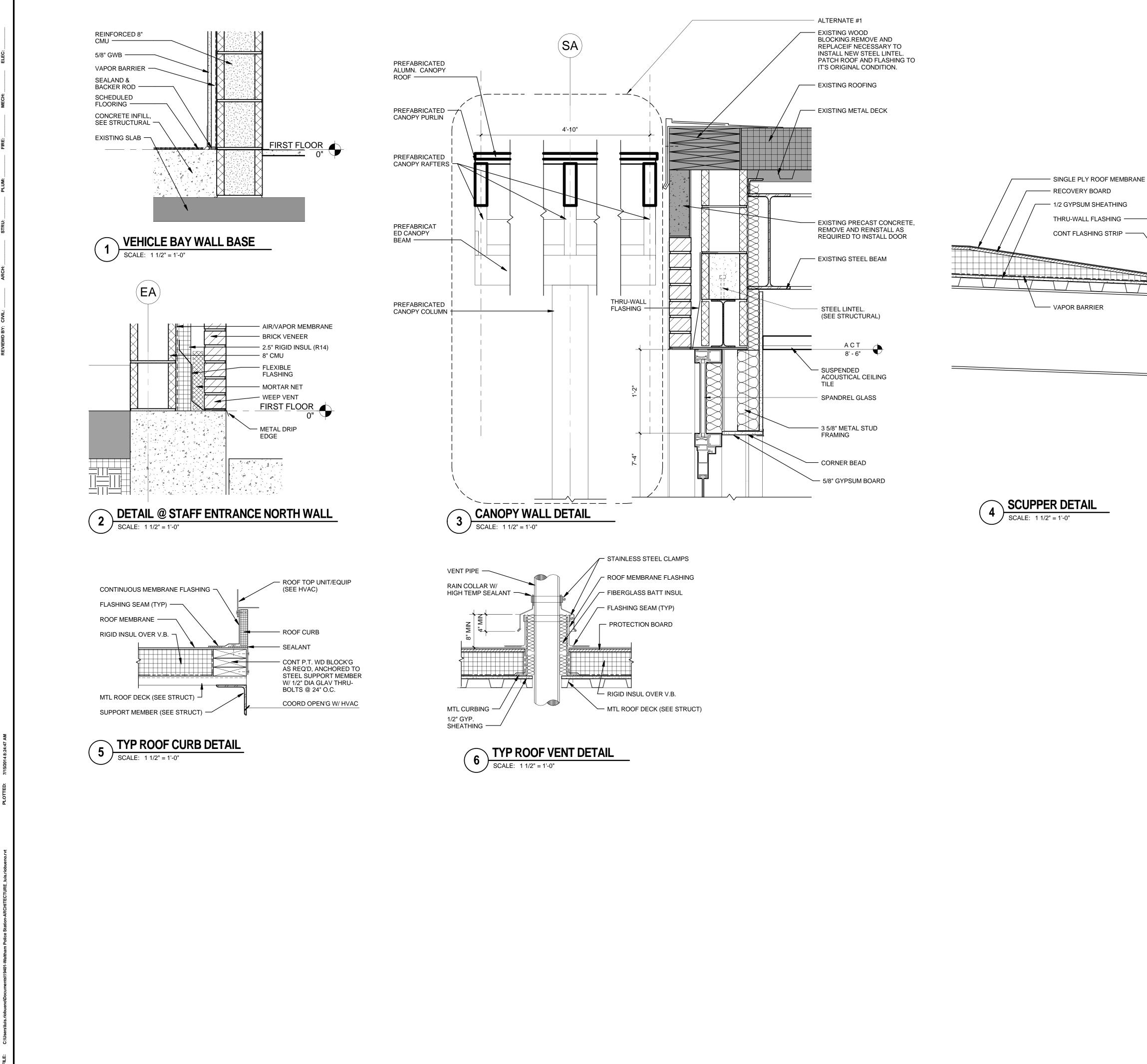


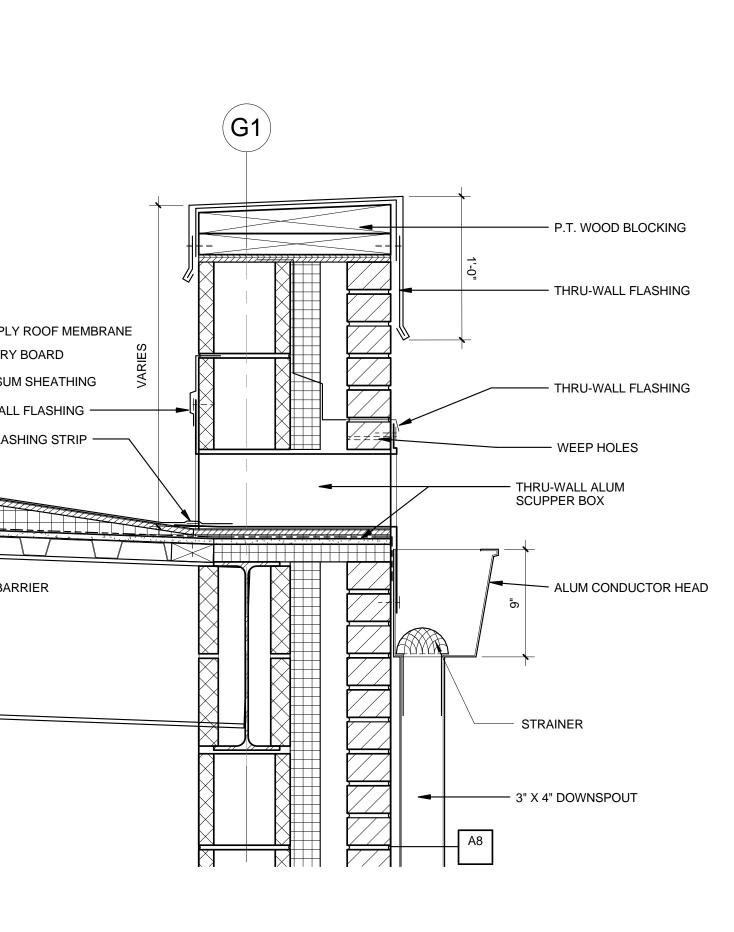
**TYP. STAIR TOP - HANDRAIL** 

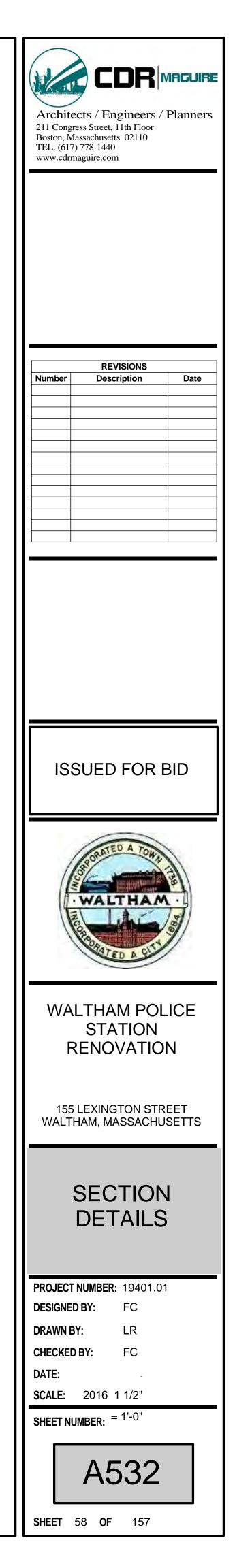


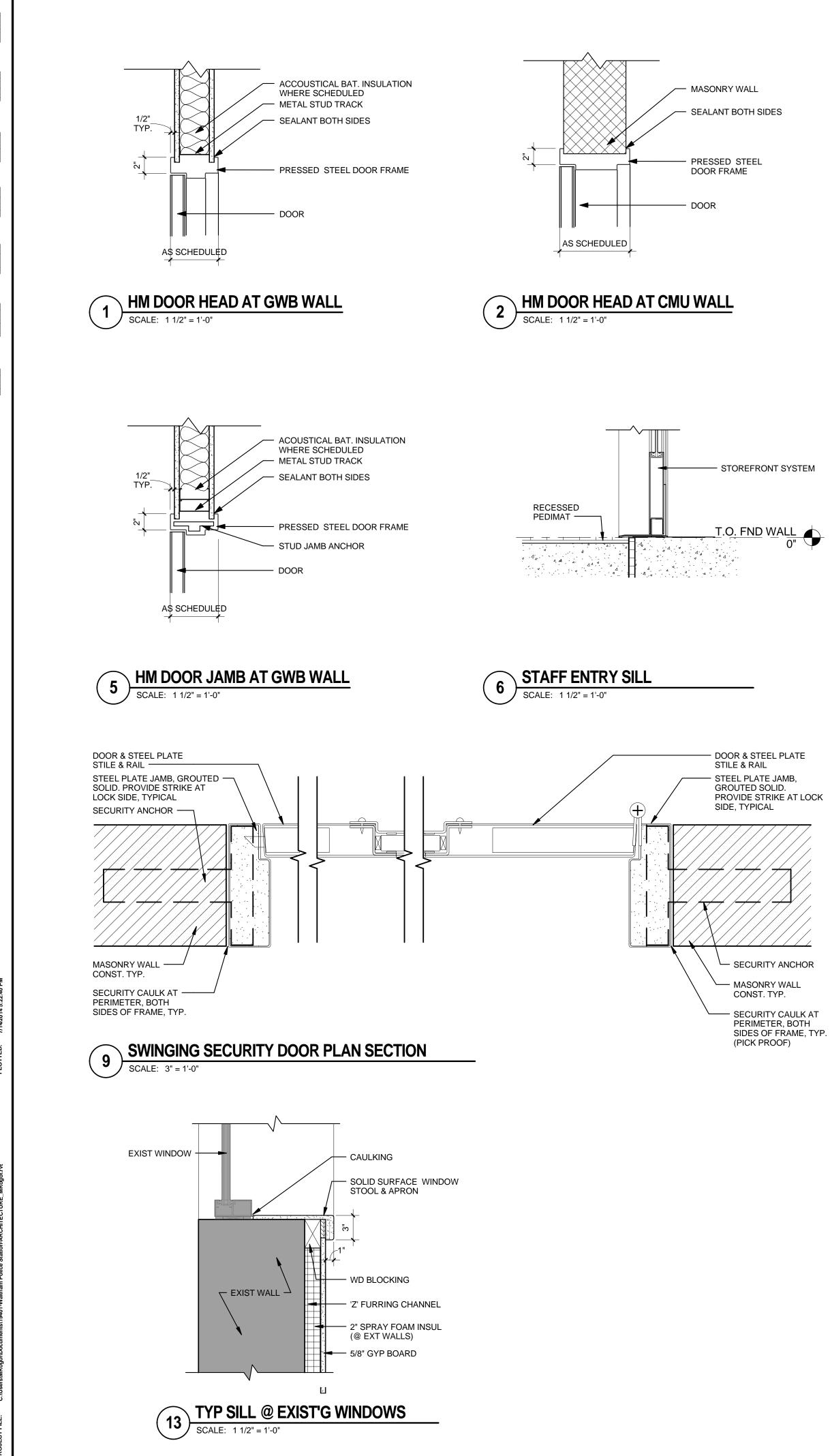


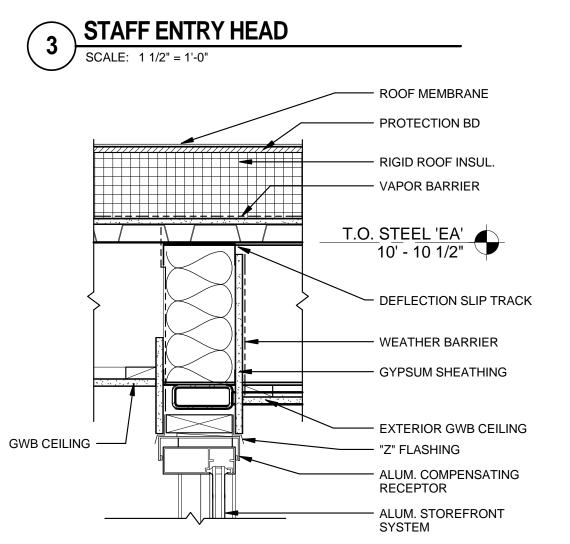




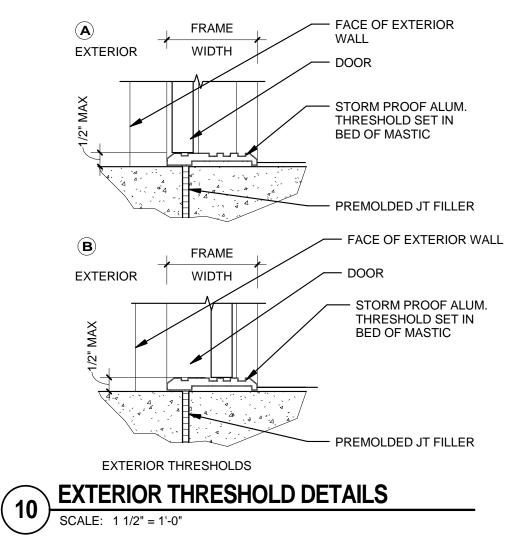


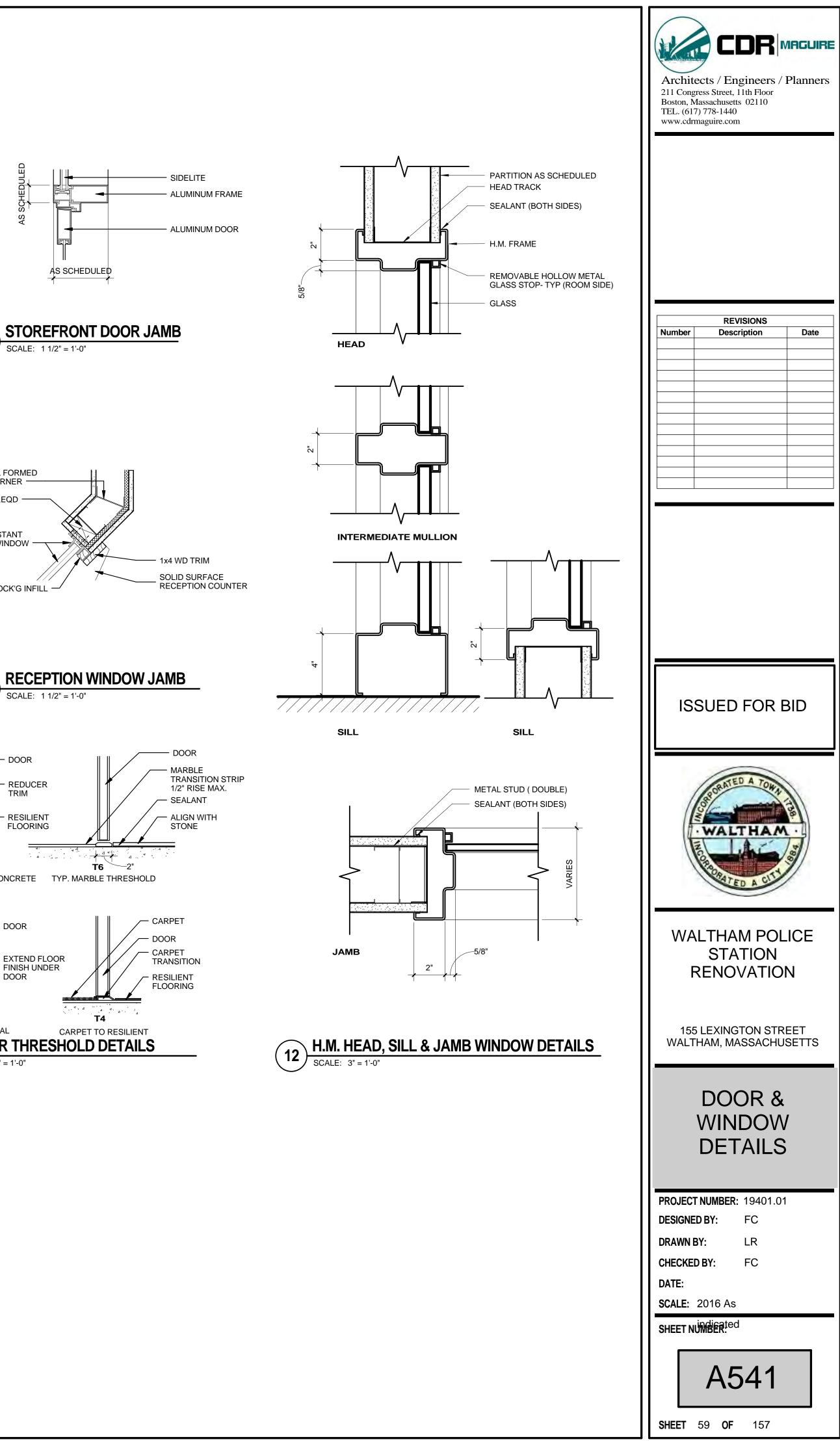


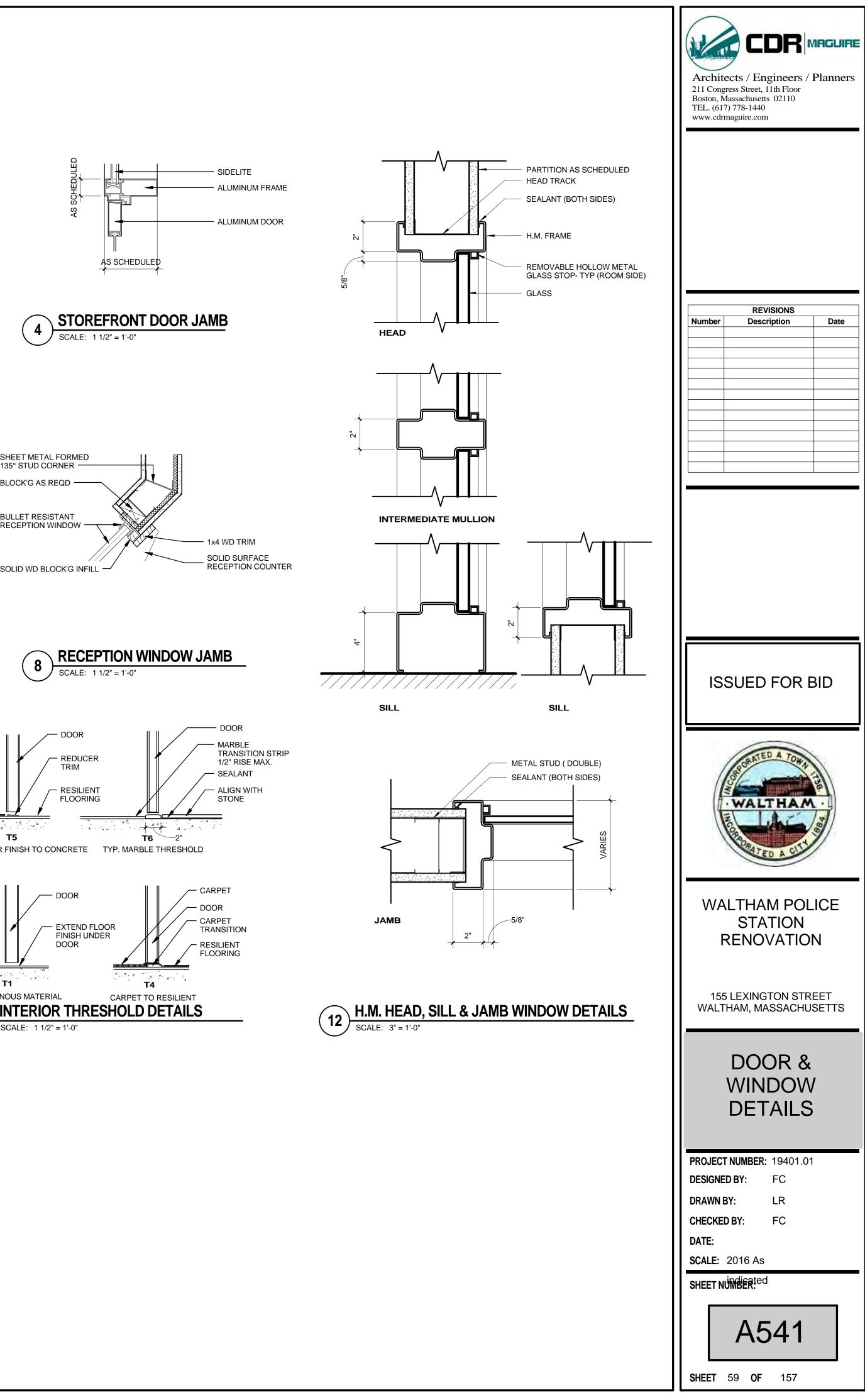


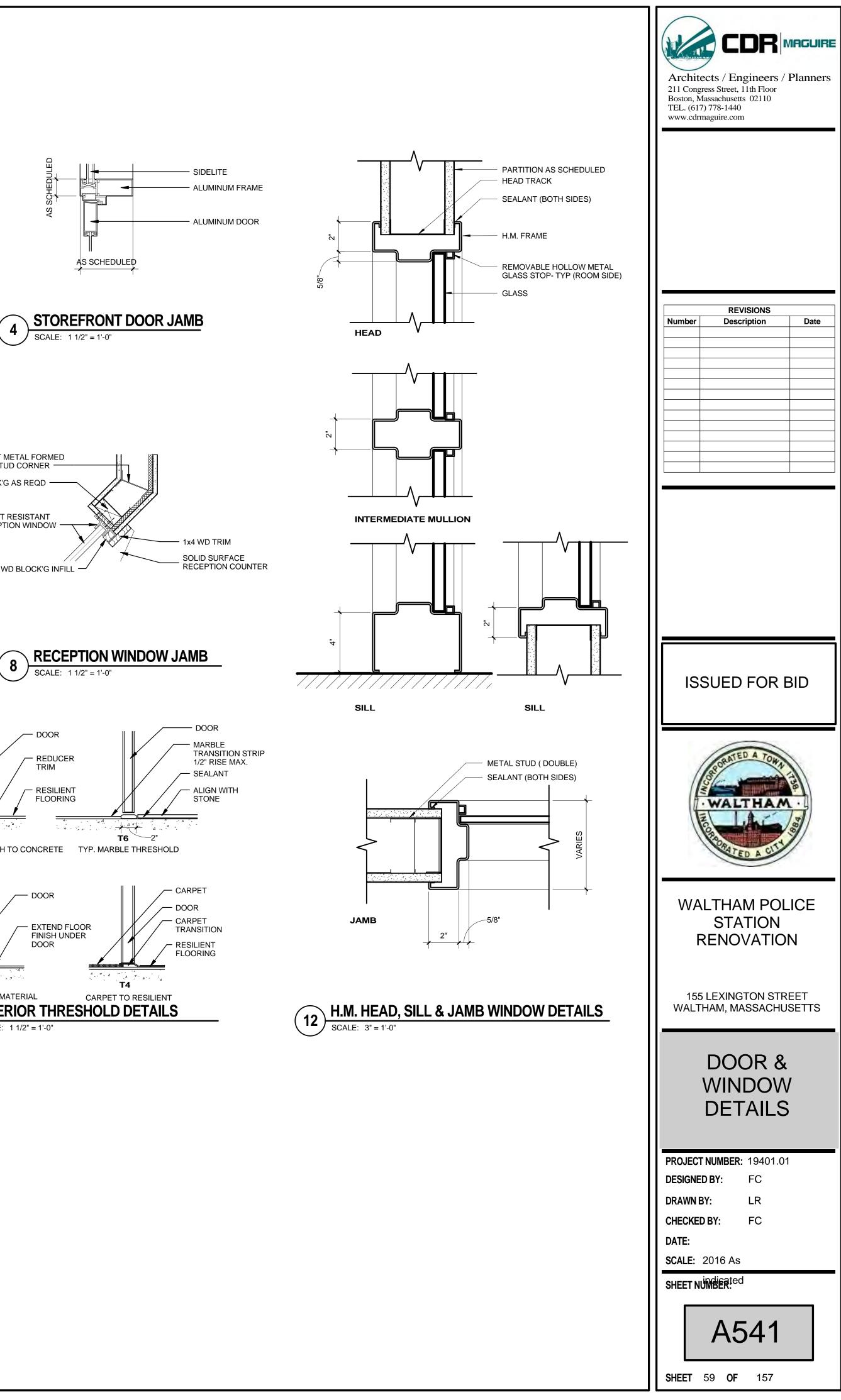


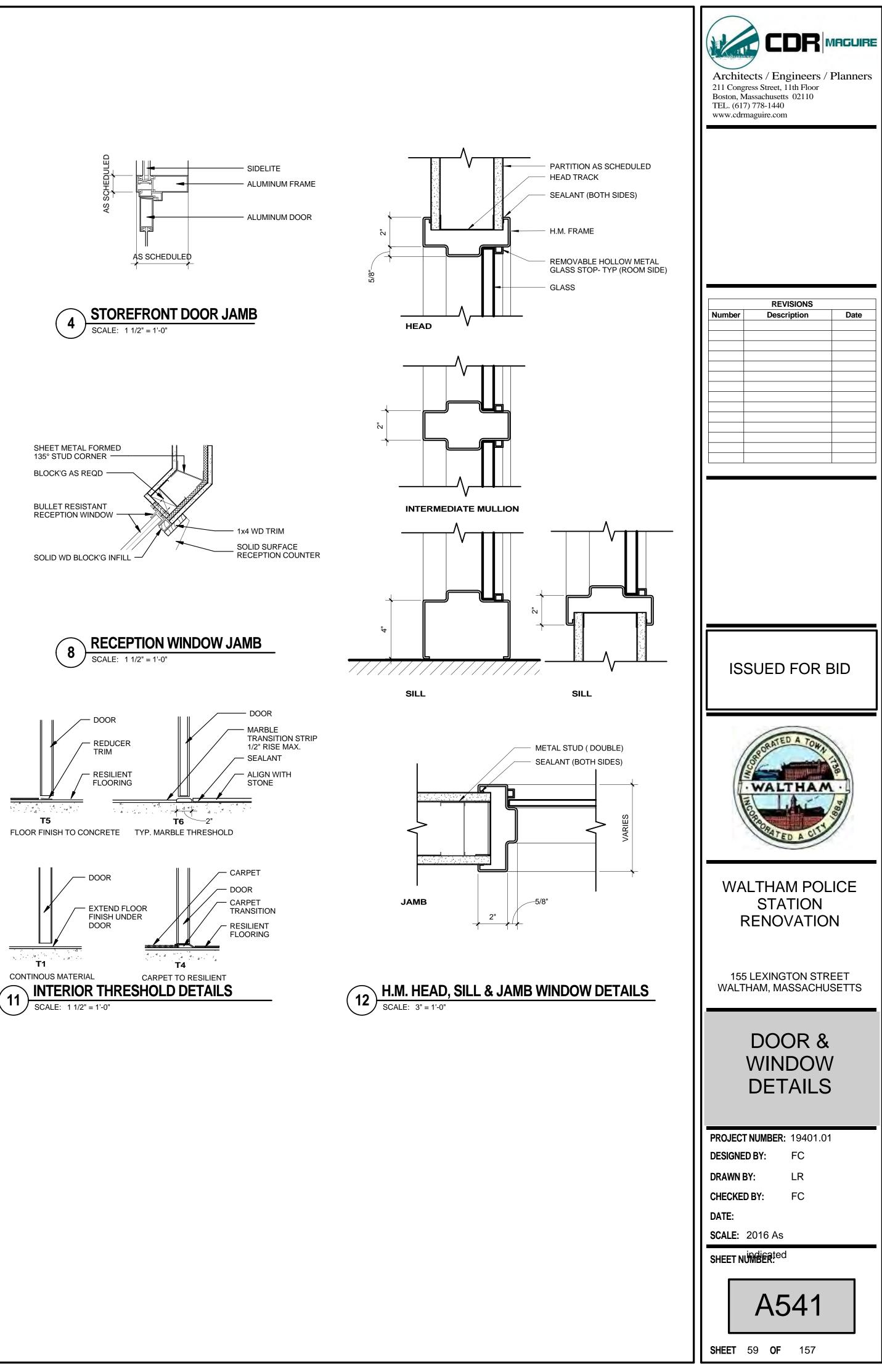




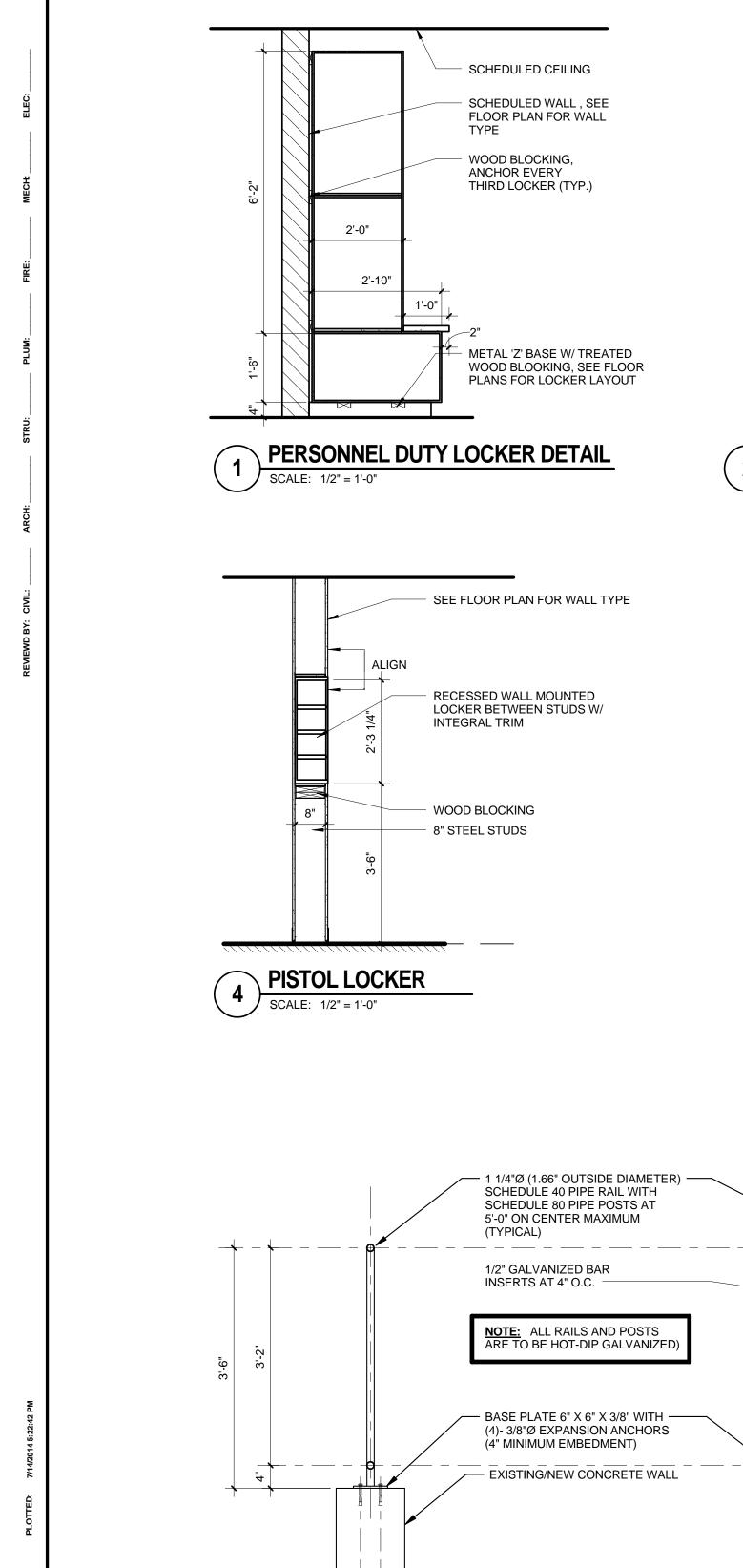


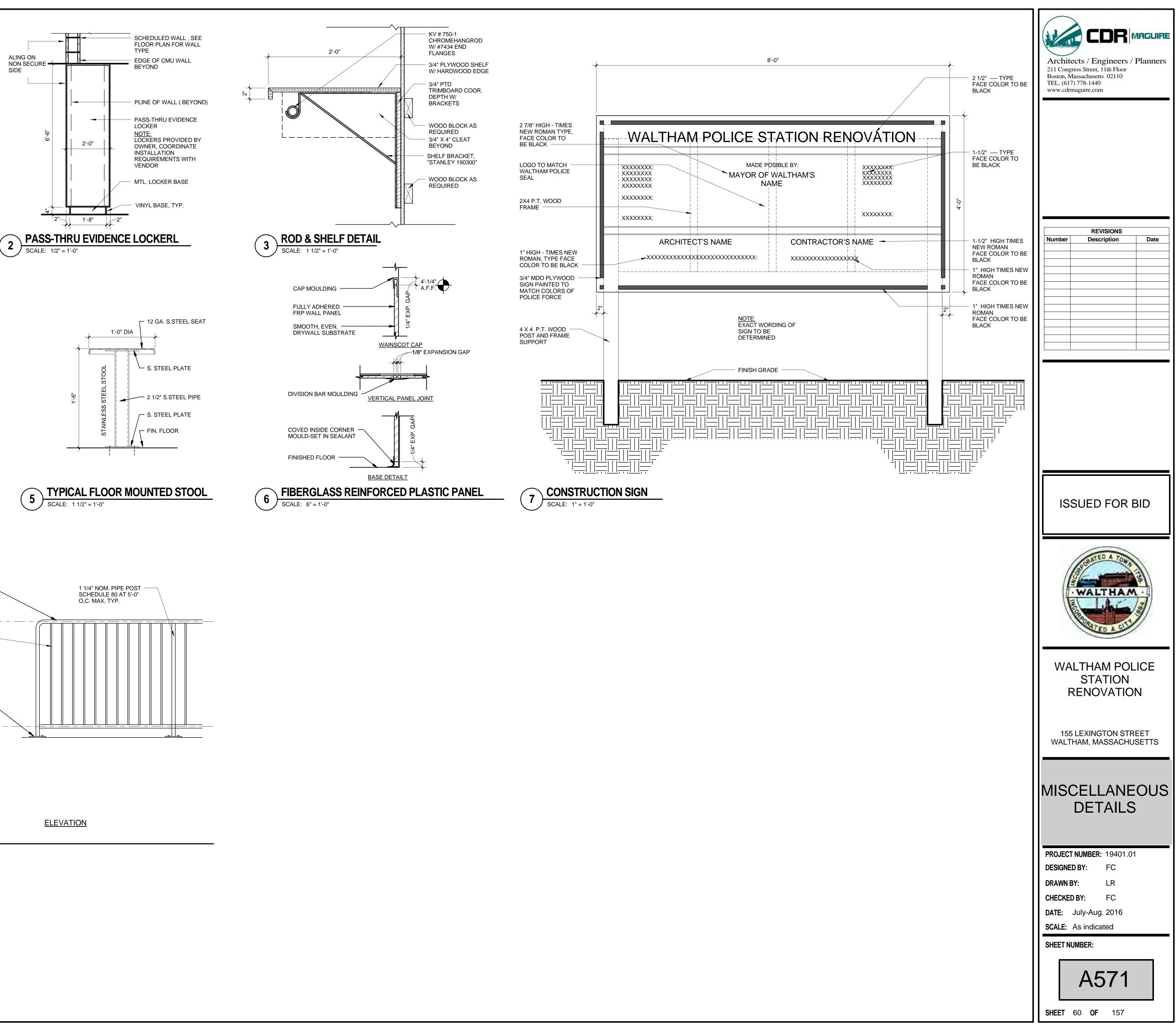


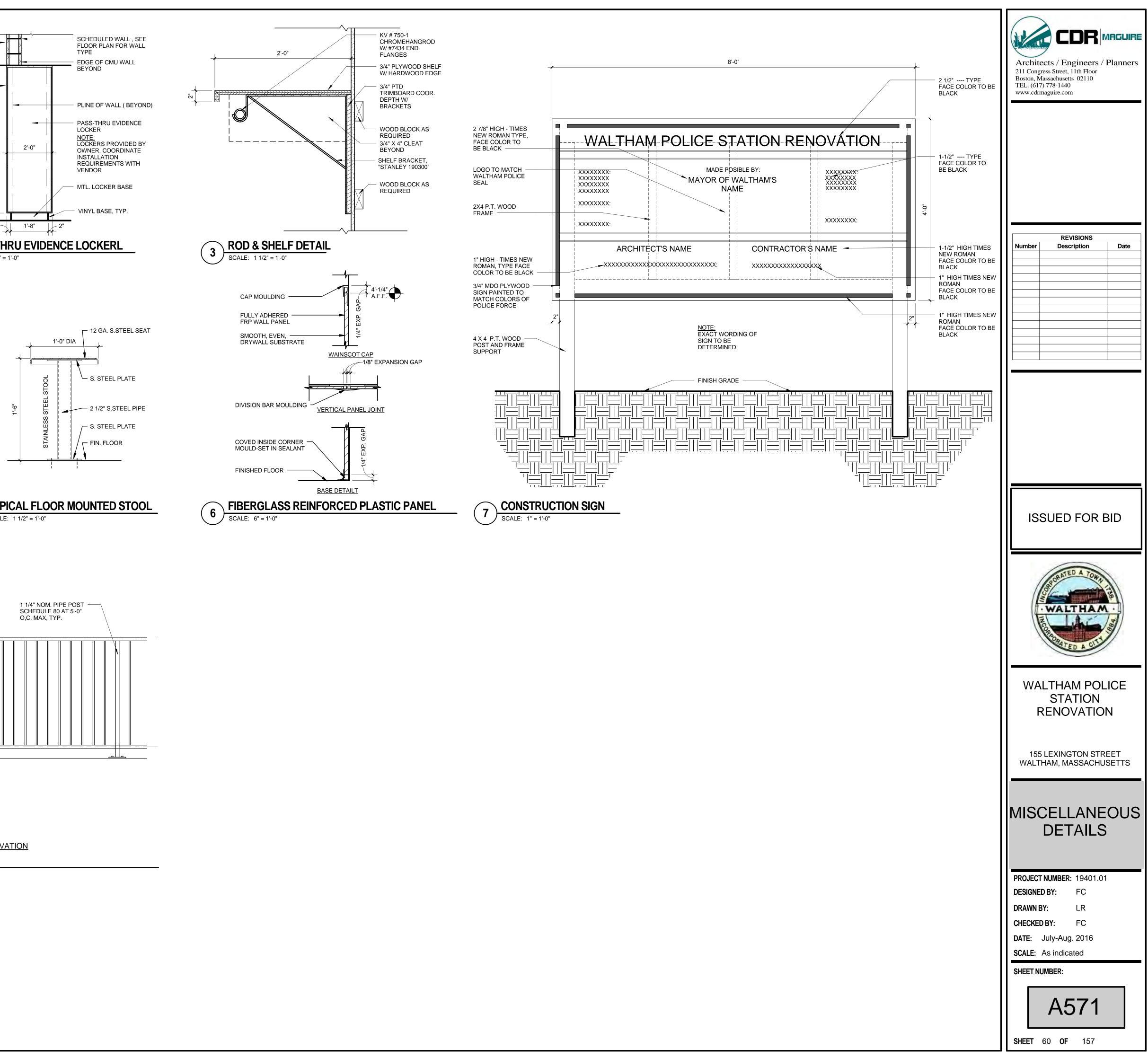


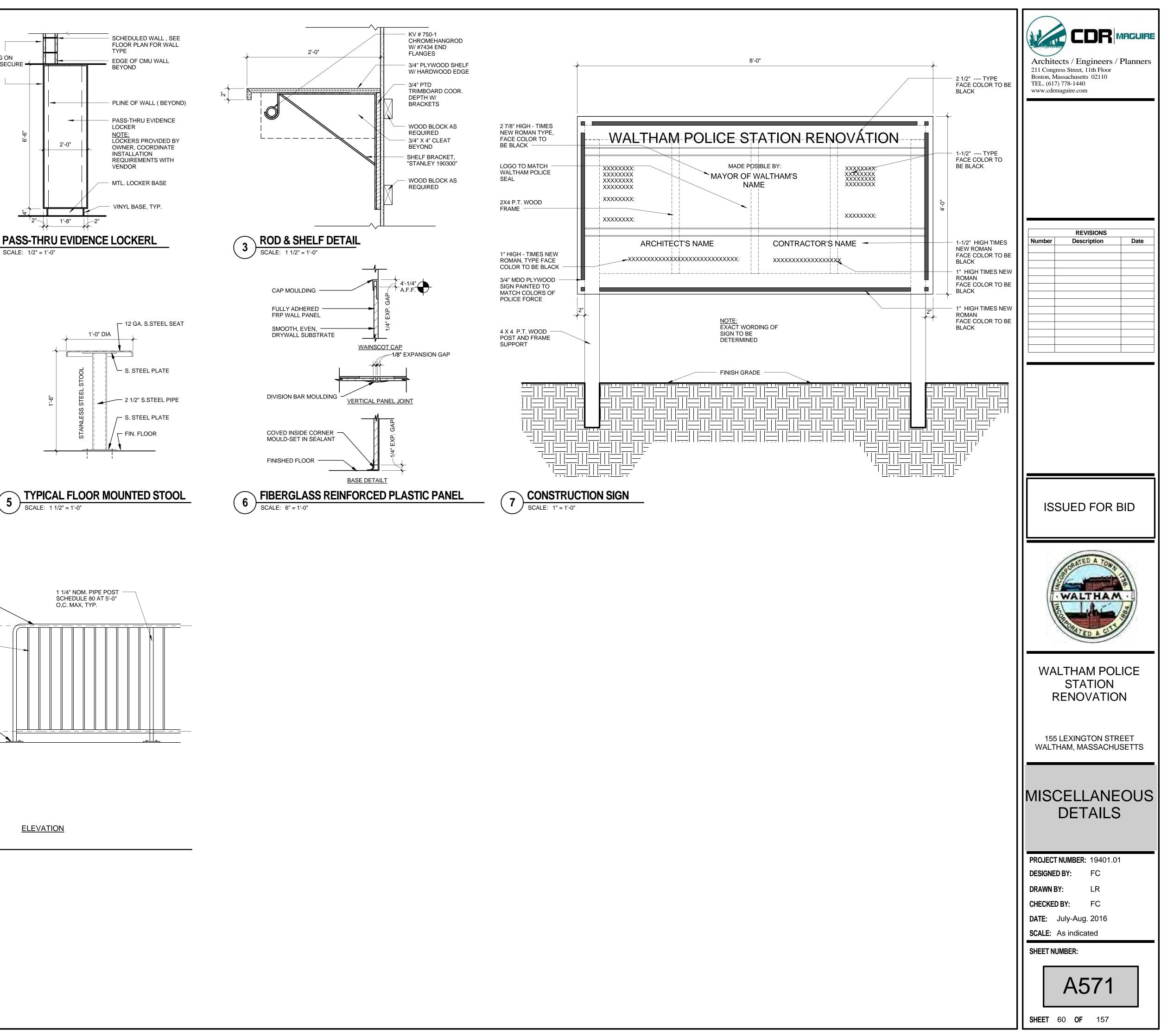


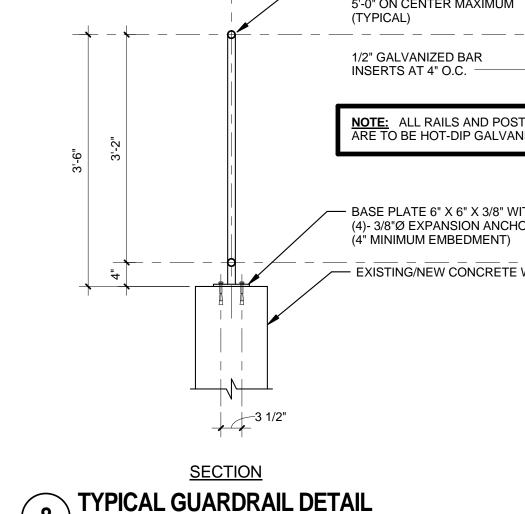
- STOREFRONT SYSTEM







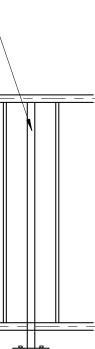


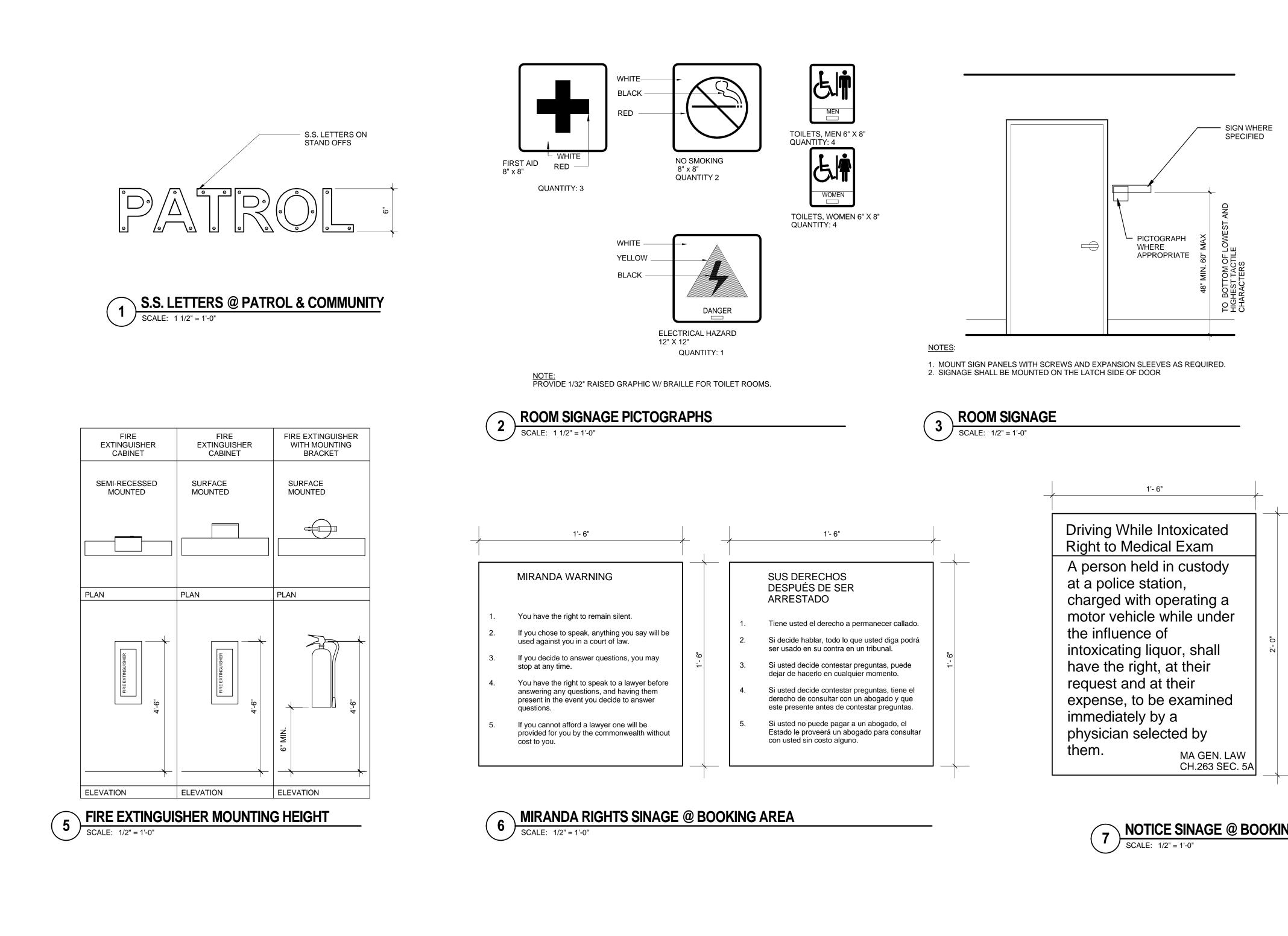




8

SCALE: 3/4" = 1'-0"



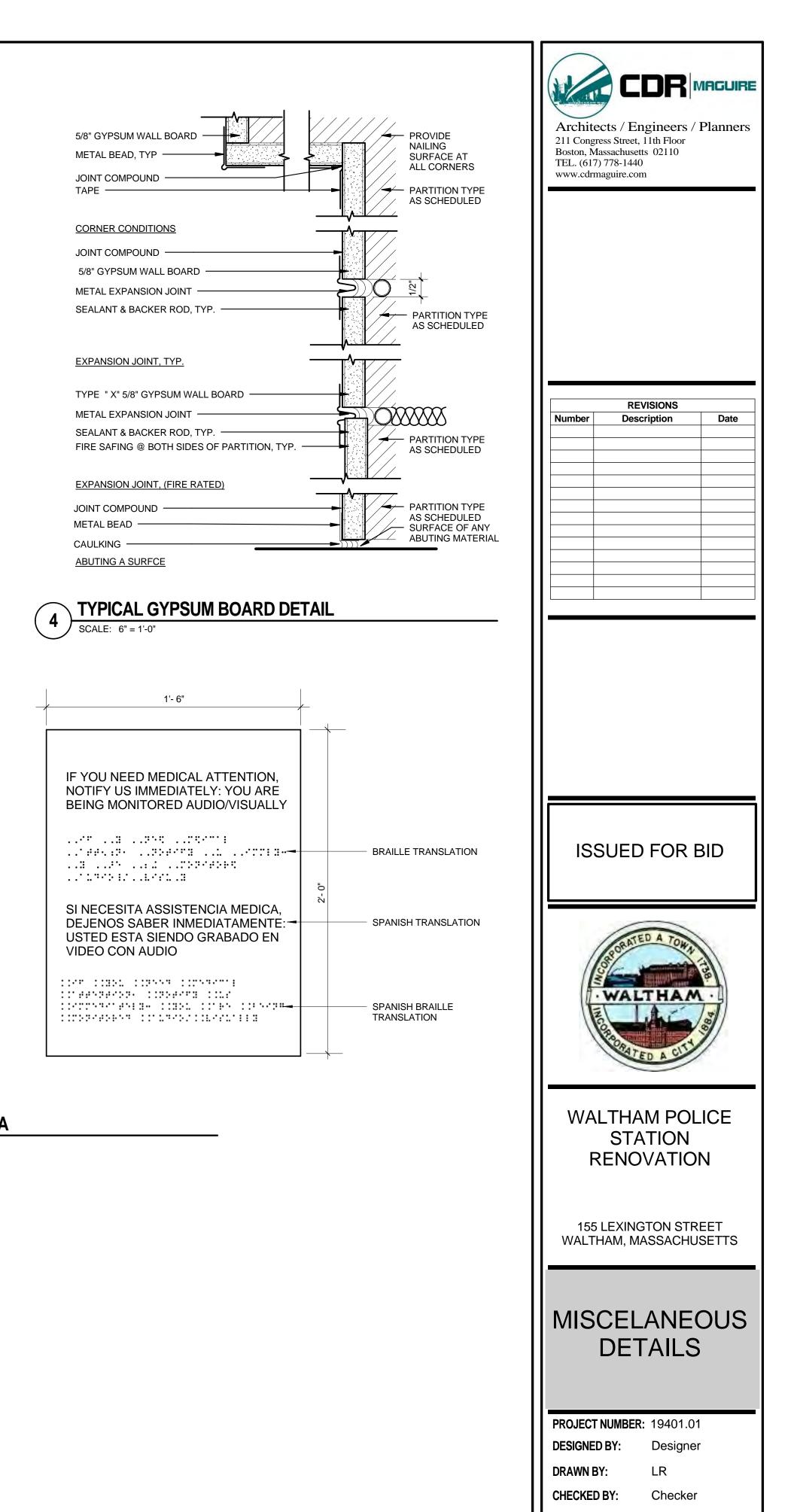


INSTALL GRAPHIC AS SHOWN IN EPOXY FLOORING BELOW CLEAR TOPCOAT IN CONTRASTING COLOR \*1"x1" SQUARES

**FOOTPRINT GRAPHIC** 

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

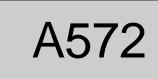
7 NOTICE SINAGE @ BOOKING AREA SCALE: 1/2" = 1'-0"



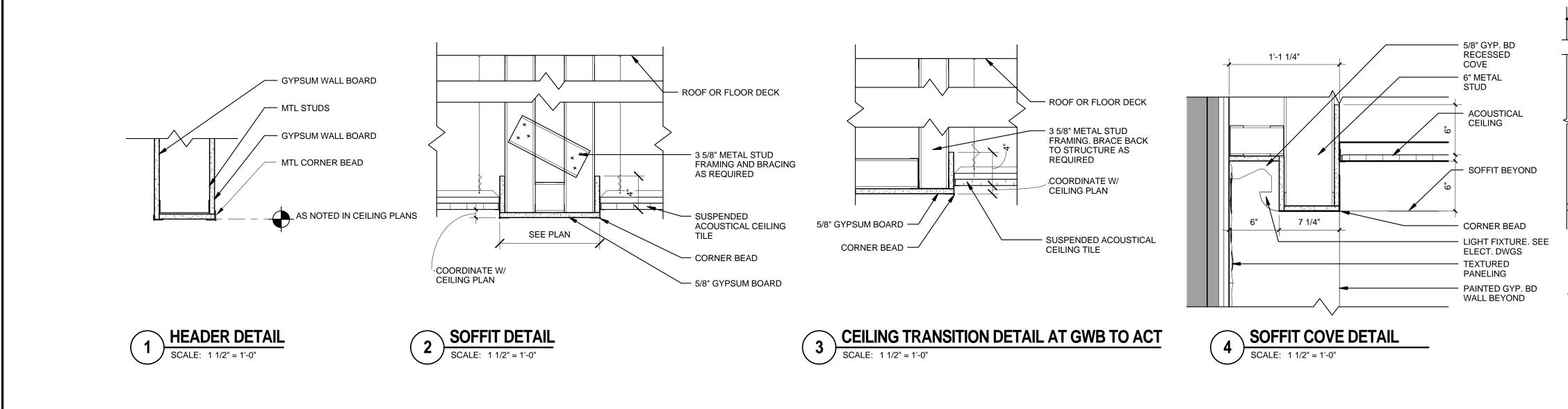
| DATE:  | July-Aug. 2016 |
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| SCALE: | As indicated   |

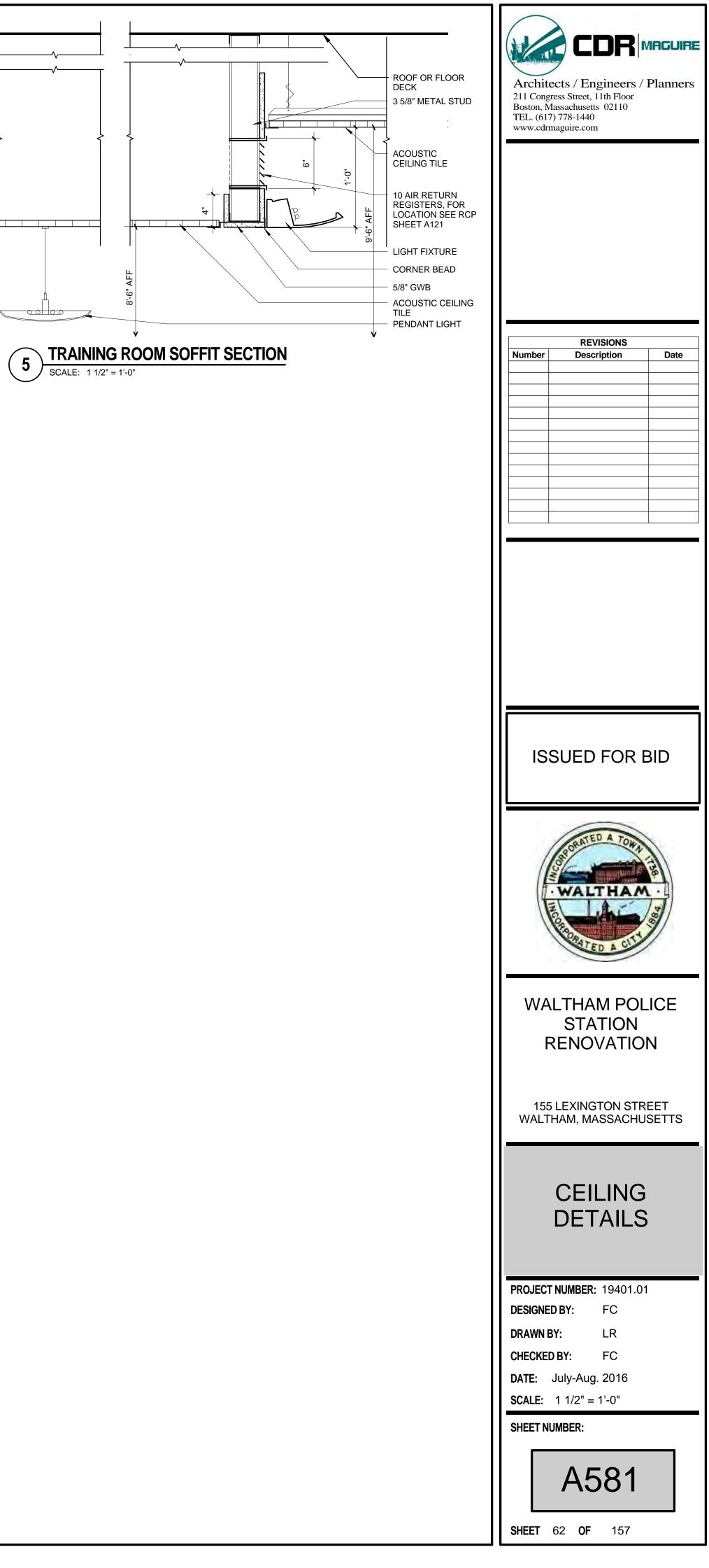
**SHEET** 61 **OF** 157

SHEET NUMBER:









## INTERIOR

1. G.C. OR THEIR SUBCONTRACTORS SHALL SUBMIT MANUFACTURER'S COLOR SELECTION FOR ALL SPECIFIED MATERIALS. (COLOR SCHEDULE TO BE COMPLETED UPON RECEIPT AND APPROVAL OF ALL SPECIFIED FINISHES) 2. G.C. OR THEIR SUBCONTRACTORS SHALL INSTALL FRT WOOD BLOCKING AT ALL AREAS INDICATED TO RECEIVE WALL MOUNTED ITEMS, CABINETRY, SHELVING, TOILET ACCESSORIES ETC. 3. REFER TO REFLECTED CEILING PLANS, SECTIONS AND DETAILS FOR CEILING HEIGHTS AND SOFFITS. 4. ALL SPECIFIED FINISHES SHALL BE CONTINUOUS BEHIND ALL MOUNTED OR APPLIED ITEMS i.e.: MIRRORS, TACK BOARDS, ETC. 5. FOR MILLWORK FINISHES & DETAILS RE: A801 AND OTHER RELATED DRAWINGS. 6. SEE FLOOR FINISH PLANS FOR FLOORING PATTERNS. 7. ALL RESILIENT BASE WILL BE STRAIGHT AT CARPETS AND COVED AT RESILIENT FLOORING 8. PAINT ALL EXPOSED DUCTS, CONDUITS, PIPING, STRUCTURE, ETC, NOT CONCEALED BY ROOM FINISHES. COORDINATE WITH MEP & STRUCTURAL DRAWINGS (NOT FACTORY FINISH) 9. PAINT ALL STEEL HANDRAILS, RISERS, STAIR STRINGERS AND UNDERSIDE OF STAIR AT AL EXPOSED AREAS. 10. G.C. AND THEIR SUBCONTRACTORS SHALL DETERMINE AVAILABILITY OF ALL FINISH MATERIALS. ANY DELIVERY SCHEDULE THAT POTENTIALLY MAY CAUSE COORDINATION PROBLEMS DURING THE CRITICAL PATH OF CONSTRUCTION/INSTALLATION SHALL BE BROUG TO ATTENTION OF THE ARCHITECT, EARLY ON, FOR POSSIBLE RE-EVALUATION OF MATERIAL DESIGNATION. THE LACK OF A TIMELY ORDER DOES NOT CONSTITUTE A RE-SELECTION.

11. A MINIMUM QUANTITY OF TWO (2) 1'-0" X 1'-0" FINISH SAMPLES OF ALL SPECIFIED FINISHES AND CURRENT STOCK CUTTINGS OF ALL SPECIFIED FABRICS SHALL BE PROVIDED FOR APPROVAL PRIOR TO ORDERING.

12. G.C. AND THEIR SUBCONTRACTORS SHALL ASSURE THAT NO ELECTRIC RECEPTACLE OR TELECOMMUNICATIONS OUTLET COVERPLATES HAVE BEEN INSTALLED PRIOR TO COMPLETIN OF APPLICATION OF ANY WALL FINISH MATERIALS. ANY SUCH COVERPLATES OR SURFACE HARDWARE, ETC., IN PLACE, SHALL BE REMOVED PRIOR TO WALL FINISH APPLICATION.

13. UPON COMPLETION OF FINISH PHASE OF JOB, G.C. SHALL REMOVE ALL PAINT, WALLCOVERING PASTE, ETC., FROM WHERE IT HAS SPILLED, SPLASHED, OR SPATTERED.

14. ALL FINISH FLOORING MATERIAL INSTALLATION SHALL BE PER MANUFACTURERS RECOMMENDATION. SEAMS SHALL BE TIGHT/INVISIBLE. G.C. OR THEIR SUBCONTRACTORS SHALL PROVIDE AND MAINTAIN ADEQUATE PROTECTION FOR ALL NEWLY INSTALLED FLOORING MATERIALS FOR THE DURATION OF CONSTRUCTION AND REMOVE PROTECTION ONLY IMMEDIATELY BEFORE JOB COMPLETION, FLOOR WILL BE THOROUGHLY CLEANED OF ALL ADHESIVE, GROUT, CONSTRUCTION STAINS, ETC.

15. PROVIDE MOISTURE MITIGATION UNDERLAYMENT UNDERNEATH ALL VCT AND PAINTED FLOORING AT FIRST FLOOR (TYPE 1). SECOND FLOOR USE TYPE 2 UNDERLAYMENT.

TYPE 1 UNDERLAYMENT: MOISTURE CONTROL UNDERLAYMENTS AND PATCHING COMPOUNDS TWO-COAT 100% SOLID EPOXY MOISTURE MANAGEMENT SYSTEM WHERE MOISTURE EMISSIONS FROM NEW AND EXISTING CONCRETE SLABS EXCEEDS TILE MANUFACTURER'S REQUIREMENTS OR APPROVED BY TILE MANUFACTURER FOR APPLICATIONS RECOMMENDED BY THE FLOORING MANUFACTURER. 1. SIMILAR TO ARDEX MC PLUS.

TYPE 2 UNDERLAYMENT: TROWELABLE UNDERLAYMENTS AND PATCHING COMPOUNDS: LATE MODIFIED, PORTLAND-CEMENT-BASED FORMULATION PROVIDED OR APPROVED BY TILE MANUFACTURER FOR APPLICATIONS RECOMMENDED BY THE FLOORING MANUFACTURER. 1. SIMILAR TO LEVELASTIC. 2. SIMILAR TO GYP-CRETE. 3. SIMILAR TO ARDEX K-15.

**INTERIOR FINISH** ABBREVIATIONS

ACT CPT CT EPX E.T.R. GWB PP PTD RES RUB ST VCT

2. OR EQUAL.

4. OR EQUAL

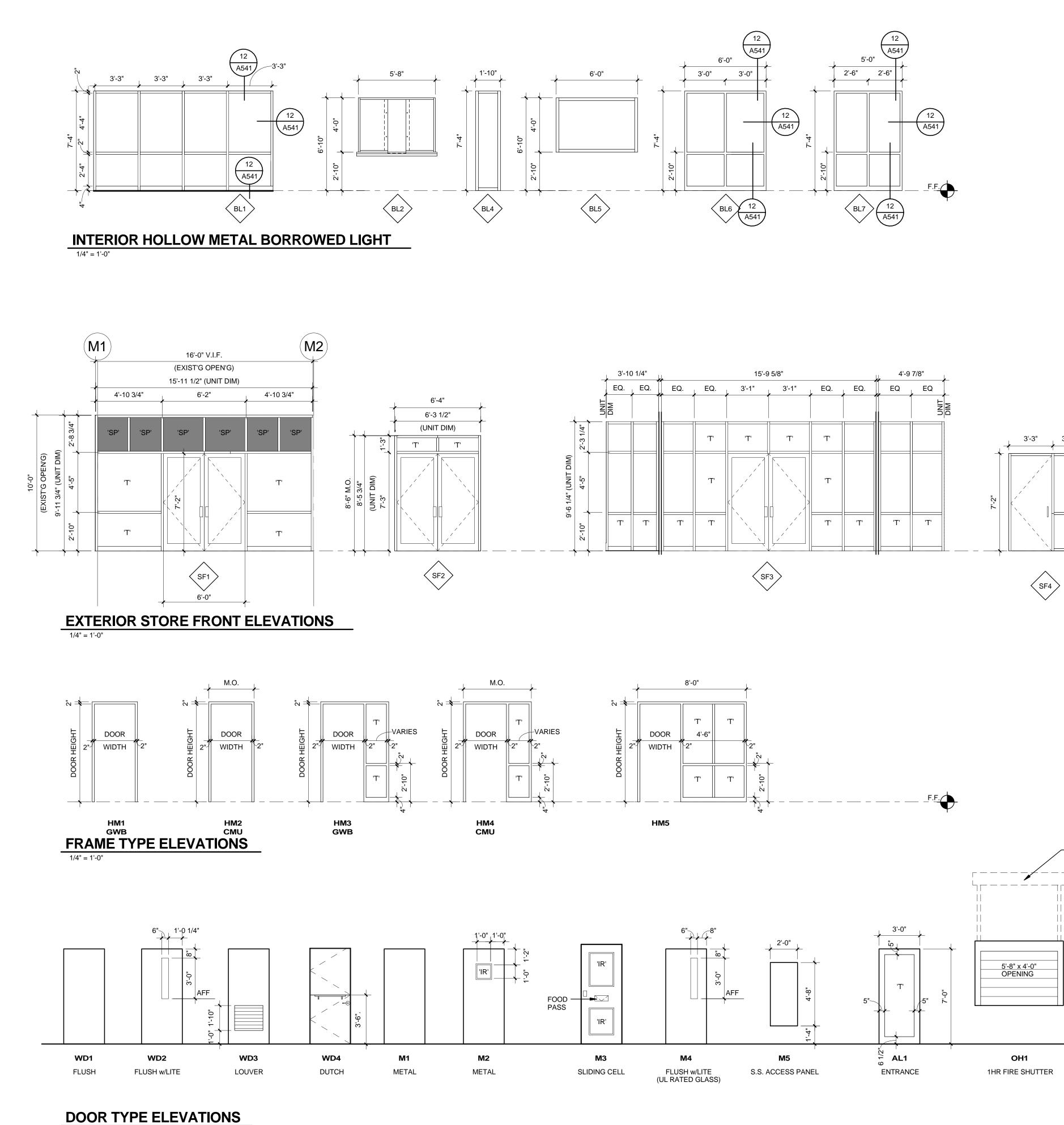
CARPET TILES CERAMIC TILE EPOXY EXISTING TO REMAIN GYPSUM WALL BOARD PORCELAIN PAVERS PAINTED RESINOUS FLOORING RUBBER BASE

ACOUSTICAL CEILING TILE

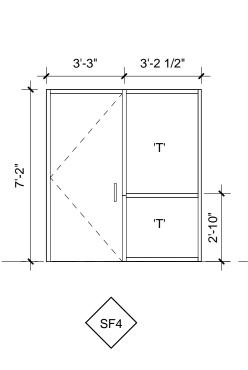
SPORTS TILE FLOORING VINYL COMPOSITE TILE

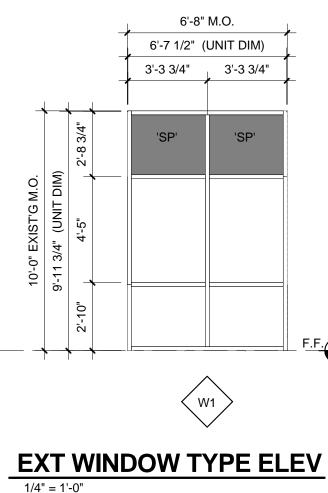
| INISH NOTES   | ו 📖                  |  |                            |                            |                            |                            | FINISH SCH                 | EDULE                      |   |                                  |   |   |
|---|----------------------|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---|----------------------------------|---|---|
|   | ROOM NO.             | ROOM NAME  | FLOOR                      | BASE                       | NORTH                      | SOUTH                      | LLS<br>EAST                | WEST                       | CEILING<br>FINISH   | HEIGHT                           | NOTES   | Architects / Engineers / ]  |
| 16. G.C. AND THEIR SUBCONTRACTORS ARE RESPONSIBLE FOR ALL FLASH PATCHING AND TO HAVE THE FLOOR IN A CONDITION TO RECEIVE FLOORING MATERIALS.  |                      | ELEV.<br>ELEV.<br>ELEV.                                | E.T.R.<br>E.T.R.<br>E.T.R. | E.T.R.<br>E.T.R.<br>E.T.R. | E.T.R.<br>E.T.R.<br>E.T.R. | E.T.R.<br>E.T.R.<br>E.T.R. | E.T.R.<br>E.T.R.<br>E.T.R. | E.T.R.<br>E.T.R.<br>E.T.R. | EXPOSED<br>EXPOSED<br>EXPOSED                               | 10' - 0"<br>10' - 0"<br>10' - 0" |   | 211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440 |
| 17. CARPET SUPPLIER/INSTALLER SHALL PROVIDE CURRENT STOCK SAMPLES OF SPECIFIED CARPET FINISHES FOR APPROVAL PRIOR TO ORDERING. PROVIDE TRANSITION STRIPS AS   | 001                  | VESTIBULE<br>RANGE                                     | E.T.R.<br>CONC             | WD<br>E.T.R.               | PTD<br>E.T.R.              | PTD<br>E.T.R.              | PTD<br>E.T.R.              | PTD<br>E.T.R.              | ACT<br>E.T.R.   | 8' - 0"<br>10' - 0"              |   | www.cdrmaguire.com  |
| SPECIFIED OR NECESSARY (VINYL, IF NOT SPECIFIED).<br>18. G.C. AND VENDORS/SUBCONTRACTORS ARE RESPONSIBLE FOR FIELD VERIFICATION OF  | 002<br>003<br>004    | EVIDENCE STORAGE<br>EVIDENCE STORAGE<br>ARMORY         | VCT<br>VCT<br>VCT          | RUB-2<br>RUB-2<br>RUB-2    | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 8' - 0"<br>8' - 0"<br>8' - 0"    |   |   |
| ALL DIMENSIONS, QUANTITIES ETC., OF THEIR RESPECTIVE WORK.<br>19. FOR FLOOR MATERIAL CHANGE LOCATIONS, SEE FLOOR PLANS, THRESHOLD DETAILS   | 005<br>006           | RANGE OFFICE<br>STORAGE                                | CPT<br>VCT                 | RUB-2<br>RUB-2             | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT<br>ACT  | 8' - 0"<br>7' - 9"               |   |   |
| AND/OR FLOOR FINISH PLANS<br>20. FOR WALL MATERIAL FINISH CHANGE LOCATIONS, SEE INTERIOR WALL ELEVATIONS  | 007<br>008<br>009    | MACHINE ROOM<br>JAN<br>STORAGE                         | E.T.R.<br>VCT<br>VCT       | E.T.R.<br>RUB-2<br>RUB-2   | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | E.T.R.<br>ACT<br>ACT  | 9' - 0"<br>7' - 8"<br>8' - 0"    | FRP PANEL AT MOP SINK   |   |
| 21. FOR ADDITIONAL WORK REQUIRED, SEE INTERIOR WALL ELEVATIONS  | 009<br>010<br>011    | FEMALE LOCKER ROOM<br>F. TOILET                        | EPX<br>CT-1                | RUB-2<br>RUB-2<br>CT-2     | PTD/CT-3<br>PTD/CT-3       | PTD<br>PTD<br>PTD/CT-3     | PTD/CT-3<br>PTD/CT-3       | PTD<br>PTD<br>PTD/CT-3     | EXPOSED PAINTED<br>GWB                                      | 9' - 0"<br>8' - 0"               | PROVIDE SPRAY ACOUSTICAL INSULATION ON CEILING  |   |
| 22. PROVIDE SPLASH TRIM AT ALL WALLS ADJACENT TO COUNTER TOPS U.O.N. TYPICAL<br>23. PROVIDE BASE FINISH AT TOE KICKS OF ALL CABINETRY KITCHENS & VANITIES   | 012<br>013           | MECHANICAL ROOM<br>TEL/DATA                            | CONC<br>CONC               | RUB-2<br>RUB-2             | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | EXPOSED<br>EXPOSED  | 9' - 4"<br>9' - 4"               |   |   |
| 24. PROVIDE BASE FINISH AT ALL FINISH CABINETRY END PANELS  | 014<br>015           | ELECTRICAL<br>FITNESS<br>M. TOILET                     | CONC<br>ST<br>CT-1         | RUB-2<br>RUB-2             | PTD<br>PTD<br>PTD/CT-3     | PTD<br>PTD<br>PTD/CT-3     | PTD<br>PTD<br>PTD/CT-3     | PTD<br>PTD<br>PTD/CT-3     | EXPOSED<br>EXPOSED<br>GWB                                   | 9' - 4"<br>10' - 0"<br>8' - 0"   |   |   |
| 25. PROVIDE WALL BASE BEHIND ALL REFRIGERATORS, RANGE AND OTHER APPLIANCES.<br>PROVIDE PAINTED FINISH AND CAULKING.   | 016<br>017<br>018    | MALE LOCKER ROOM<br>CORR.                              | EPX<br>VCT                 | CT-2<br>RUB-2<br>WAIN      | PTD/CT-3<br>PTD<br>PTD     | PTD/CT-3<br>PTD<br>PTD     | PTD/CT-3<br>PTD<br>PTD     | PTD/CT-3<br>PTD<br>PTD     | EXPOSED<br>ACT/ GWB   | 9' - 0"<br>8' - 0"               | PROVIDE SPRAY ACOUSTICAL INSULATION ON CEILING  | REVISIONS   |
| 26. PROVIDE PAINTED FINISH AND CAULKING BEHIND SINKS, TYP   | 019<br>101           | CORR.<br>VEHICLE BAYS                                  | VCT<br>E.T.R.              | WAIN<br>E.T.R.             | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT/ GWB<br>EXPOSED   | 8' - 0"<br>10' - 0"              |   | Number Description  |
| 27. NOT ALL WALL OBJECTS MAY BE SHOWN. COORDINATE WITH MECHANICAL; PLUMBING;<br>ELECTRICAL DRAWINGS. ALSO REFER TO ARCHITECTURAL DWGS & SPECIFICATIONS FOR<br>ADDITIONAL ITEMS                          | 102<br>103<br>104    | STORAGE<br>STORAGE<br>TRAINING ROOM                    | CONC<br>CPT<br>CPT         | RUB-2<br>RUB-2<br>RUB-2    | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 8' - 6"<br>8' - 6"<br>8' - 6"    |   |   |
| 28. INSULATE ALL EXPOSED PIPES AND SINK BOTTOM WITH TRAP WRAP PROTECTIVE KIT  | 104<br>105<br>106    | STORAGE<br>CORR.                                       | VCT<br>VCT                 | RUB-2<br>WD                | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 8' - 6"<br>8' - 6"               |   |   |
| 29. ALL WINDOW SILLS SHALL BE SOLID, CLEAR FINISHED MAPLE UNLESS NOTED OTHERWISE.<br>30. PAINT CONCRETE BLOCK AND PAINT PIERS AT COLUMNS AND PROVIDE SEALED   | 107<br>108           | REPORT<br>ROLL CALL                                    | CPT<br>VCT                 | RUB-2<br>RUB-2             | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT<br>ACT  | 9' - 0"<br>8' - 6"               |   |   |
| CONCRETE AT STAIR TREADS AND PAINT ALL EXPOSED STAIR STRUCTURE AND RAILINGS.<br>31. FOR TOILET ACCESSORIES SCHEDULE SEE A701.   | 109<br>110<br>111    | INTERVIEW BREAK ROOM/ KITCHEN TRAINING ALLYII JARY OFF | CPT<br>VCT                 | RUB-2<br>RUB-2             | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT/ GWB   | 8' - 6"<br>8' - 6"               |   |   |
| 31. FOR TOILET ACCESSORIES SCHEDULE SEE A701.<br>32. PAINT CONCRETE BLOCK AND PAINT PIERS AT COLUMNS AND PROVIDE SEALED<br>CONCRETE AT STAIR TREADS AND PAINT ALL EXPOSED STAIR STRUCTURE AND RAILINGS. | 111<br>112<br>113    | TRAINING AUXILIARY OFF.<br>PATROL AREA<br>FEMALE       | CPT<br>CPT<br>CT-1         | RUB-2<br>RUB-2<br>CT-2     | PTD<br>PTD<br>CT-3         | PTD<br>PTD<br>CT-3         | PTD<br>PTD<br>CT-3         | PTD<br>PTD<br>CT-3         | ACT<br>ACT<br>ACT   | 9' - 0"<br>8' - 6"<br>9' - 0"    |   |   |
| 33. FIELD PAINT ALL EXPOSED FRAMING, STEEL AND IRON WORK, BARE AND COVERED PIPES,   | 114<br>115           | MALE<br>LOBBY  | CT-1<br>PP                 | CT-2<br>WD                 | CT-3<br>PTD                | CT-3<br>PTD                | CT-3<br>PTD                | CT-3<br>PTD                | ACT<br>ACT/ GWB   | 9' - 0"<br>9' - 0"               |   |   |
| HANGERS, PLYWOOD, CMU, STEEL DECK, RAILING, UNDERNEATH THE STAIRS AND PRIMED<br>METAL SURFACES OF MECHANICAL AND ELECTRICAL WORK.   | 115A<br>116          | CORRIDOR<br>PATROL RECEPTION                           | PP<br>CPT                  | WD<br>RUB-2                | PTD<br>PTD                 | PTD<br>PTD<br>PTD          | PTD<br>PTD                 | PTD<br>PTD                 | ACT/ GWB<br>ACT   | 9' - 0"<br>9' - 0"               |   | <b> </b>  |
| 34. ALL CORRIDOR WALLS SHALL RECEIVE ABUSE RESISTAND, HIGH IMPACT GYPSUM BOARD.   | 117<br>118<br>119    | CAPTAIN<br>SUPERVISORS OFFICE<br>GUN STOR.             | CPT<br>CPT<br>VCT          | RUB-2<br>RUB-2<br>RUB-2    | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 9' - 0"<br>9' - 0"<br>9' - 0"    |   |   |
|   | 120<br>121           | MALE<br>FEMALE   | CT-1<br>CT-1               | CT-2<br>CT-2               | CT-3<br>CT-3               | CT-3<br>CT-3               | CT-3<br>CT-3               | CT-3<br>CT-3               | ACT<br>ACT  | 9' - 0"<br>9' - 0"               |   | 1   |
|   | 122<br>123           | KITCHENETTE<br>COMM. SERV. RECEPTION                   | VCT<br>CPT                 | RUB-2<br>RUB-2             | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT<br>ACT  | 9' - 0"<br>9' - 0"               |   |   |
|   | 124<br>125<br>126    | CONFERENCE<br>COMMUNITY SERVICE<br>STORAGE             | CPT<br>CPT<br>CPT          | RUB-2<br>RUB-2<br>RUB-2    | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 9' - 0"<br>9' - 0"<br>9' - 0"    |   |   |
|   | 120<br>127<br>128    | CAPTAIN<br>LIEUTENANT                                  | CPT<br>CPT                 | RUB-2<br>RUB-2<br>RUB-2    | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT   | 9' - 0"<br>9' - 0"               |   |   |
|   | 129<br>132           | ARCHIVE<br>ELEC.                                       | CPT<br>VCT                 | RUB-2<br>RUB-2             | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT<br>ACT  | 8' - 6"<br>8' - 0"               |   |   |
|   | 133<br>134<br>135    | JAN.<br>MAINTENANCE OFFICE                             | VCT<br>VCT<br>CPT          | WD<br>RUB-2<br>RUB-2       | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT/ GWB<br>ACT<br>ACT                                      | 9' - 0"<br>8' - 0"<br>8' - 0"    | FRP PANEL AT MOP SINK   | ISSUED FOR I  |
|   | 136<br>136A          | WOMEN<br>CELL 9  | RES-1<br>RES-1             | RES-2<br>RES-2             | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | SECURITY CEILING<br>DETENTION CEILING                       | 8' - 0"<br>8' - 0"               |   |   |
|   | 136B<br>136C         | CELL 10<br>CELL 11                                     | RES-1<br>RES-1             | RES-2<br>RES-2             | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | DETENTION CEILING<br>DETENTION CEILING                      | 8' - 0"<br>8' - 0"               |   |   |
| FINISH MATERIAL SCHEDULE  | 137<br>138<br>139    | SHOWER<br>INTERV.<br>INTERV.                           | RES-1<br>VCT<br>RES-1      | RES-2<br>RUB-2<br>RES-2    | EPX<br>PTD<br>EPX          | EPX<br>PTD<br>EPX          | EPX<br>PTD<br>EPX          | EPX<br>PTD<br>EPX          | DETENTION CEILING<br>SECURITY CEILING<br>SECURITY CEILING   | 8' - 0"<br>8' - 0"<br>8' - 0"    |   | ITED A TO   |
| MARKDESCRIPTIONMANUF., LINECOLORCT-1CERAMIC TILEDALTILE, NATURAL HUES-FLOOR TILE 6x6TBD   | 140<br>141           | SHOWER<br>VEST.  | RES-1<br>RES               | RES-2<br>RES-2<br>RES-2    | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | DETENTION CEILING<br>DETENTION CEILING                      | 8' - 0"<br>8' - 0"               |   | 38 CRA  |
| CT-2 CERAMIC TILE DALTILE, NATURAL HUES-WALL BASE TBD   | 142<br>143           | JUVENILE/ ACCESS.<br>MALE                              | RES-1<br>RES-1             | RES-2<br>RES-2             | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | DETENTION CEILING<br>SECURITY CEILING                       | 8' - 0"<br>8' - 0"               |   | WALTHAN   |
| CT-3     CERAMIC TILE     DALTILE, NATURAL HUES-WALL TILE 6x6     TBD   | 143A<br>143B<br>143C | CELL 1<br>CELL 2<br>CELL 3                             | RES-1<br>RES-1<br>RES-1    | RES-2<br>RES-2<br>RES-2    | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | DETENTION CEILING<br>DETENTION CEILING<br>DETENTION CEILING | 8' - 0"<br>8' - 0"<br>8' - 0"    |   | ELAS  |
| CPT CARPET TILE MANNINGTON, MODERN WEAR TBD   | 1430<br>143D<br>144  | CELL 3<br>CELL 4<br>MALE                               | RES-1<br>RES-1             | RES-2<br>RES-2<br>RES-2    | EPX<br>EPX                 | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX                 | DETENTION CEILING<br>DETENTION CEILING<br>SECURITY CEILING  | 8' - 0"<br>8' - 0"               |   | PROPATED A CITY   |
| PX EPOXY PAINT SEE SPECIFICATIONS TBD   | 144A<br>144B         | CELL 5<br>CELL 6                                       | RES-1<br>RES-1             | RES-2<br>RES-2             | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | EPX<br>EPX                 | DETENTION CEILING<br>DETENTION CEILING                      | 8' - 0"<br>8' - 0"               |   |   |
| -PTD-1 MULTI-COLORED PAINT TBD  | 144C<br>144D<br>145  | CELL 7<br>CELL 8<br>BOOKING                            | RES-1<br>RES-1<br>RES-1    | RES-2<br>RES-2<br>RES-2    | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | DETENTION CEILING<br>DETENTION CEILING<br>SECURITY CEILING  | 8' - 0"<br>8' - 0"<br>8' - 6"    |   | WALTHAM POL   |
|   | 145<br>145A<br>146   | BOOKING A<br>BOOKING A<br>STORAGE                      | RES-1<br>RES-1<br>RES-1    | RES-2<br>RES-2<br>RES-2    | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | EPX<br>EPX<br>EPX          | SECURITY CEILING<br>SECURITY CEILING<br>SECURITY CEILING    | 8' - 6"<br>8' - 0"               |   | STATION   |
| AR-1 SOLID WOOD PARQUET ARMSTRONG, URETHANE PARQUET TBD   | 147<br>148           | PROCESSING<br>ANIMAL HOLD                              | RES-1<br>E.T.R.            | RES-2<br>N/A               | EPX<br>PTD                 | EPX<br>PTD                 | EPX<br>PTD                 | EPX<br>PTD                 | DETENTION CEILING<br>EXPOSED                                | 8' - 0"<br>10' - 0"              |   | RENOVATIO   |
| P PORCELAIN PAVER TILE DALTILE, COLOUR SCHEME TBD   | 149<br>150           | SALLY PORT<br>MOTORCYCLE/BIKE STORAGE                  | E.T.R.<br>CONC             | N/A<br>N/A                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | EXPOSED<br>EXPOSED  | 10' - 0"<br>10' - 0"             |   |   |
| TD PAINT SHERWIN WILLIAMS TBD   | 151<br>151A<br>201   | CORR.<br>CORR.<br>ASSIGNMENT AREA                      | VCT<br>VCT<br>CPT          | WAIN<br>WAIN<br>RUB-2      | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 8' - 6"<br>9' - 0"<br>8' - 6"    |   | 155 LEXINGTON STR   |
| ES-1 RESILIENT FLOORING DUR-A-FLEX, DUR-A-QUARTZ TBD  | 202<br>203           | CAPTAIN<br>FEMALE                                      | CPT<br>CT-1                | RUB-2<br>CT-2              | PTD<br>CT-3                | PTD<br>CT-3                | PTD<br>CT-3                | PTD<br>CT-3                | ACT<br>ACT  | 8' - 6"<br>8' - 0"               |   | WALTHAM, MASSACHU   |
| ES-2 RESILIENT WALL BASE DUR-A-FLEX, DUR-A-QUARTZ TBD   | 204<br>205<br>206    | MALE<br>JAN.<br>PLANNING                               | CT-1<br>VCT                | CT-2<br>WD                 | CT-3<br>PTD                | CT-3<br>PTD<br>PTD         | CT-3<br>PTD<br>PTD         | CT-3<br>PTD<br>PTD         | ACT<br>ACT  | 8' - 0"<br>8' - 6"               | FRP PANEL AT MOP SINK   |   |
| UB-1 RUBBER FLOORING TBD  | 206<br>207<br>208    | PLANNING<br>CONFERENCE<br>DEPUTY CHIEF                 | CPT<br>CPT<br>CPT          | WD<br>WD<br>WD             | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 8' - 6"<br>8' - 6"<br>8' - 6"    |   | ROOM FINI   |
| RUBBER WALL BASE     TBD  | 209<br>210           | ADMIN OFFICE<br>CHIEF'S OFFICE                         | E.T.R.<br>E.T.R.           | E.T.R.<br>E.T.R.           | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT<br>ACT  | 8' - 6"<br>8' - 6"               |   | SCHEDUL   |
| T-1 SPORTS TILE FLOORING JOHNSONITE, TRIUMPH SPORTS RUBBER TILE TBD   | 211<br>212<br>213    | ADMIN OFFICE<br>ADMIN.<br>STORAGE                      | E.T.R.<br>CPT              | E.T.R.<br>WD<br>RUB-2      | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT  | 8' - 6"<br>8' - 6"<br>8' - 0"    |   |   |
| CT-1 VINYL COMPOSITION TILE ARMSTRONG, IMPERIAL TEXTURE TBD   | 213<br>214<br>215    | STORAGE<br>SUPPLY / STORAGE<br>DETECTIVE OFFICE        | VCT<br>VCT<br>CPT          | RUB-2<br>RUB-2<br>WD       | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 8' - 0"<br>8' - 0"<br>8' - 6"    | BASE TO MATCH EXISTING  |   |
| AIN-1 WAINSCOTTING TBD  | 213<br>216<br>217    | STORAGE<br>DETECTIVE                                   | VCT<br>CPT                 | WD<br>WD<br>WD             | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | GWB<br>ACT  | 8' - 6"<br>8' - 6"               | BASE TO MATCH EXISTING  | PROJECT NUMBER: 19401.0   |
|   | 218<br>219           | CONFERENCE<br>LAB                                      | E.T.R.<br>VCT              | E.T.R.<br>WD               | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | PTD<br>PTD                 | ACT<br>ACT  | 8' - 6"<br>8' - 6"               |   | DESIGNED BY: FC<br>DRAWN BY: EKM  |
| /D-1     WOOD WALL BASE     TBD   | 220<br>221<br>222    | CORR.<br>SERGEANTS OFFICE<br>INTERVIEW ROOM            | VCT<br>CPT<br>CPT          | WAIN<br>WD<br>WD           | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT<br>ACT<br>ACT   | 8' - 6"<br>8' - 6"<br>8' - 6"    | BASE TO MATCH EXISTING<br>BASE TO MATCH EXISTING  | CHECKED BY: FC  |
|   | 222<br>223<br>224    | LIEUTENANTS OFFICE<br>CORR.                            | CPT<br>CPT<br>PQT          | WD<br>WD<br>WD             | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | PTD<br>PTD<br>PTD          | ACT   | 8' - 6"<br>8' - 6"               | BASE TO MATCH EXISTING<br>BASE TO MATCH EXISTING  | DATE: July-Aug. 2016  |
|   | S-1                  | STAIR 1  | RUB-1                      | RUB-2                      | MC-PTD                     | MC-PTD                     | MC-PTD                     | MC-PTD                     | GWB   | EXISTING                         | MULTI-COLORED PAINT ON WALLS. STEEL TO BE PAINTED.<br>RUBBER FLOORING AND THREAD/RISER WEARING SURFACE.   | <b>SCALE</b> : 12" = 1'-0"  |
|   | S-1<br>              | STAIR 1<br>STAIR 1                                     | RUB-1<br>RUB-1             | RES-2<br>RUB-2             | MC-PTD<br>MC-PTD           | MC-PTD<br>MC-PTD           | MC-PTD<br>MC-PTD           | MC-PTD<br>MC-PTD           | GWB   | EXISTING                         | MULTI-COLORED PAINT ON WALLS. STEEL TO BE PAINTED.<br>RUBBER FLOORING AND THREAD/RISER WEARING SURFACE.<br>MULTI-COLORED PAINT ON WALLS. STEEL TO BE PAINTED. | SHEET NUMBER:   |
|   | S-2                  | STAIR 2  | TER                        | RUB-2                      | MC-PTD                     | MC-PTD                     | MC-PTD                     | MC-PTD                     | GWB   |                                  | RUBBER FLOORING AND THREAD/RISER WEARING SURFACE.<br>IULTI-COLORED PAINT ON WALLS. TERRAZZO TO BE CLEANED.  |   |
|   | S-2                  | STAIR 2  | TER                        | RUB-2                      | MC-PTD                     | MC-PTD                     | MC-PTD                     | MC-PTD                     | GWB   | EXISTING M                       | STEEL TO BE PAINTED<br>IULTI-COLORED PAINT ON WALLS. TERRAZZO TO BE CLEANED.<br>STEEL TO BE PAINTED   | A601  |
|   | S-2                  | STAIR 2  | TER                        | RUB-2                      | MC-PTD                     | MC-PTD                     | MC-PTD                     | MC-PTD                     | GWB   | EXISTING M                       | IULTI-COLORED PAINT ON WALLS. TERRAZZO TO BE CLEANED.<br>STEEL TO BE PAINTED  |   |





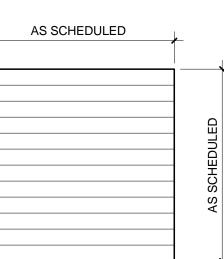
1/4" = 1'-0"



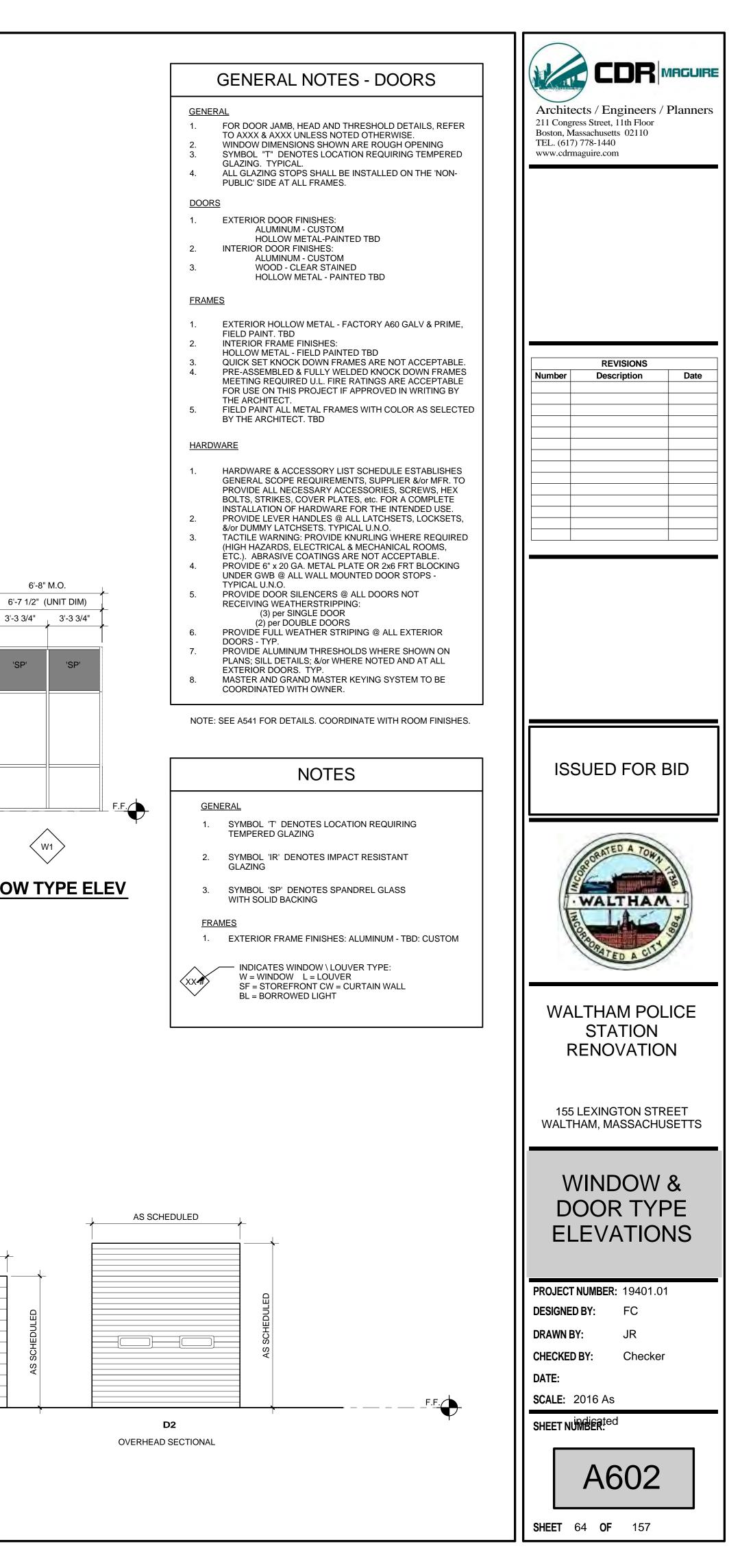


- HOUSING FOR ROLLING COUNTER DOOR. TO BE

ABOVE CEILING.



D1 COIL/ROLL-UP

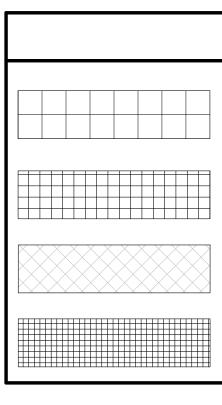


PROJECT FILE: C:\Users\MRogof\Documents\19401-Waltham Police Station-ARCHITECTURE\_MRogof.rvt

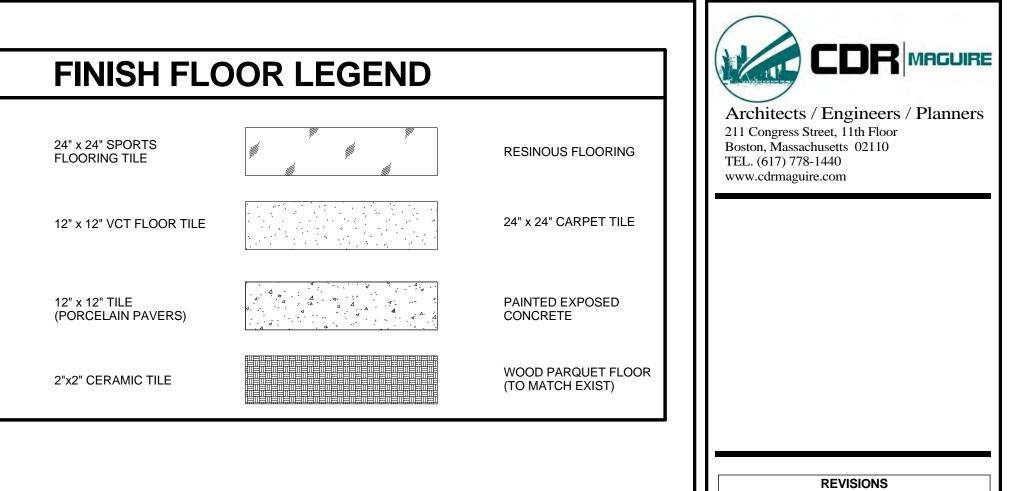
EVIEWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_ PLUM: \_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ ELEC: \_\_\_\_\_



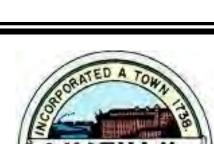




BASEMENT LEVEL FINISH PLAN



|    | WALL FINISH LEGEND                |
|----|-----------------------------------|
|    | TYP WOOD WAINSCOTING (12/A704)    |
| FH | WOOD WAINSCOTING (FLR TO CEILING) |
| SP | SCULPTURED PANEL BOARD (7/A704)   |

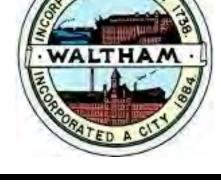


**ISSUED FOR BID** 

Number

Description

Date



WALTHAM POLICE STATION RENOVATION

155 LEXINGTON STREET WALTHAM, MASSACHUSETTS



PROJECT NUMBER:19401.01DESIGNED BY:DesignerDRAWN BY:MRCHECKED BY:CheckerDATE:

A630

SHEET NUMBER ted

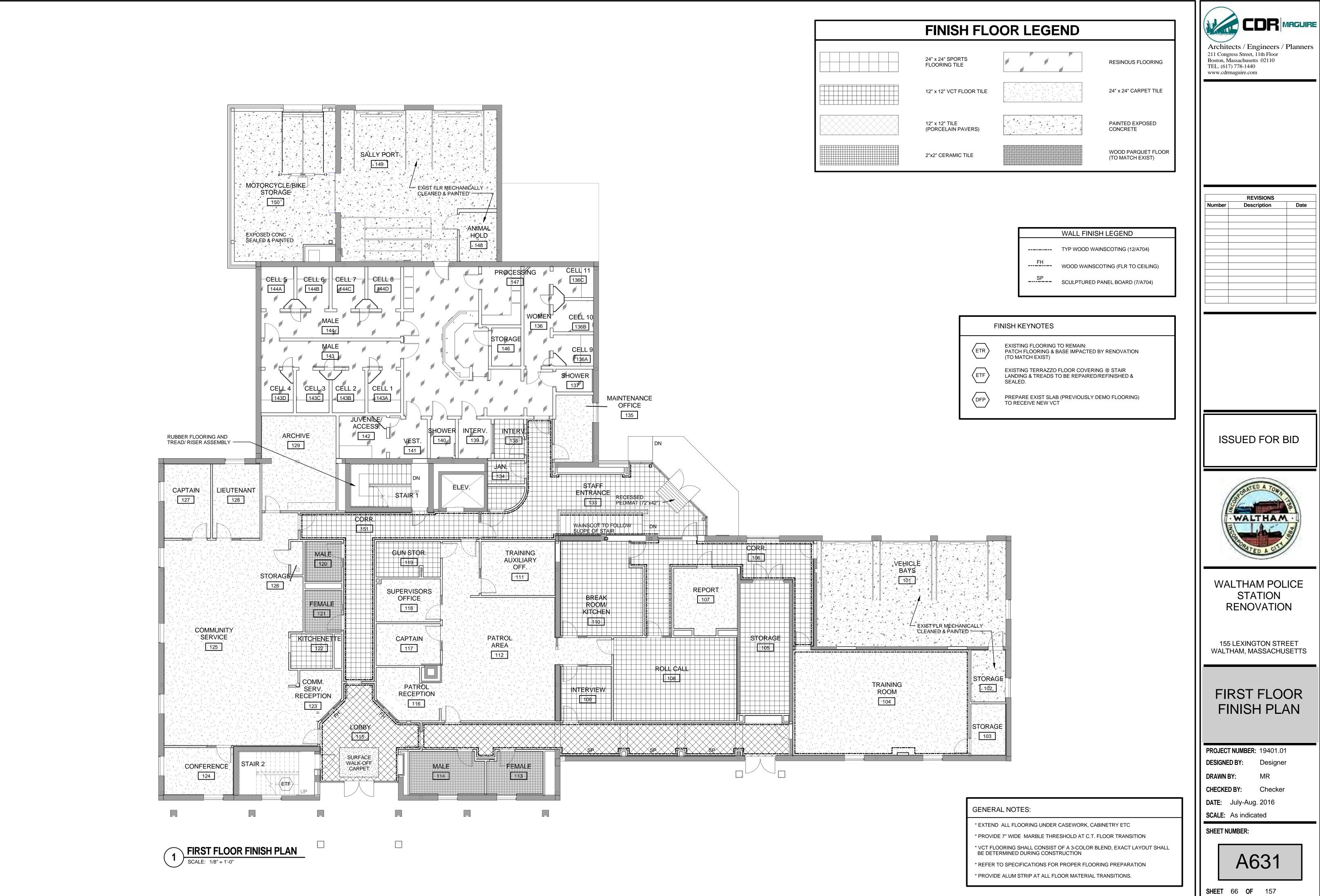
**SHEET** 65 **OF** 157

SCALE: 2016 As

## GENERAL NOTES:

\* EXTEND ALL FLOORING UNDER CASEWORK, CABINETRY ETC

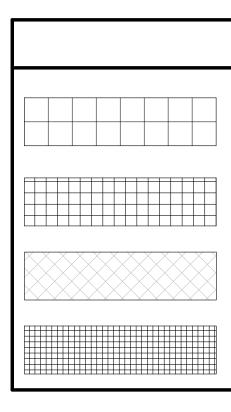
- \* PROVIDE 7" WIDE MARBLE THRESHOLD AT C.T. FLOOR TRANSITION
- \* VCT FLOORING SHALL CONSIST OF A 3-COLOR BLEND, EXACT LAYOUT SHALL BE DETERMINED DURING CONSTRUCTION
- \* REFER TO SPECIFICATIONS FOR PROPER FLOORING PREPARATION
- \* PROVIDE ALUM STRIP AT ALL FLOOR MATERIAL TRANSITIONS.



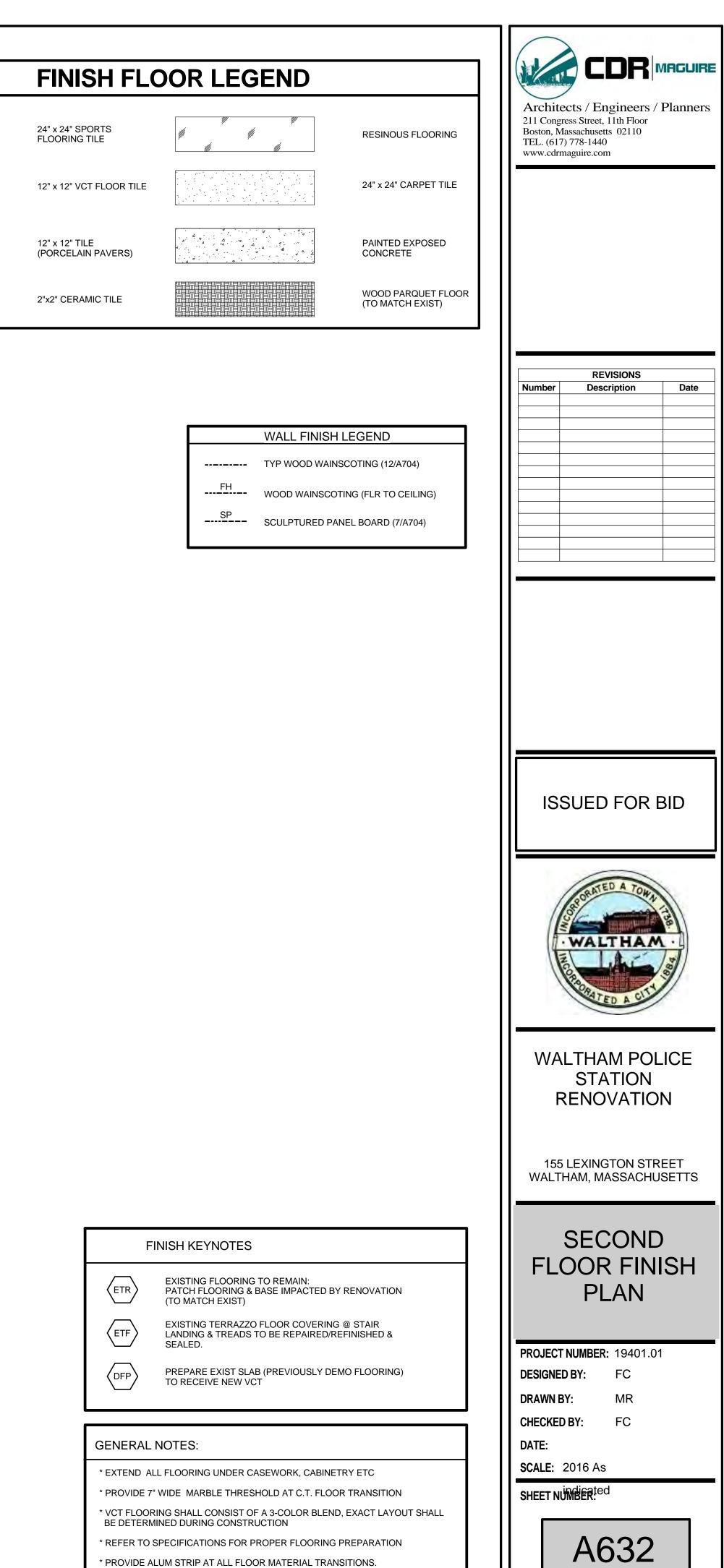
| PROJEC       | T NUMBER:  | 19401.01 |  |
|--------------|------------|----------|--|
| DESIGNED BY: |            | Designer |  |
| DRAWN        | BY:        | MR       |  |
| CHECKED BY:  |            | Checker  |  |
| DATE:        | July-Aug.  | 2016     |  |
| SCALE:       | As indicat | ted      |  |
|              |            |          |  |



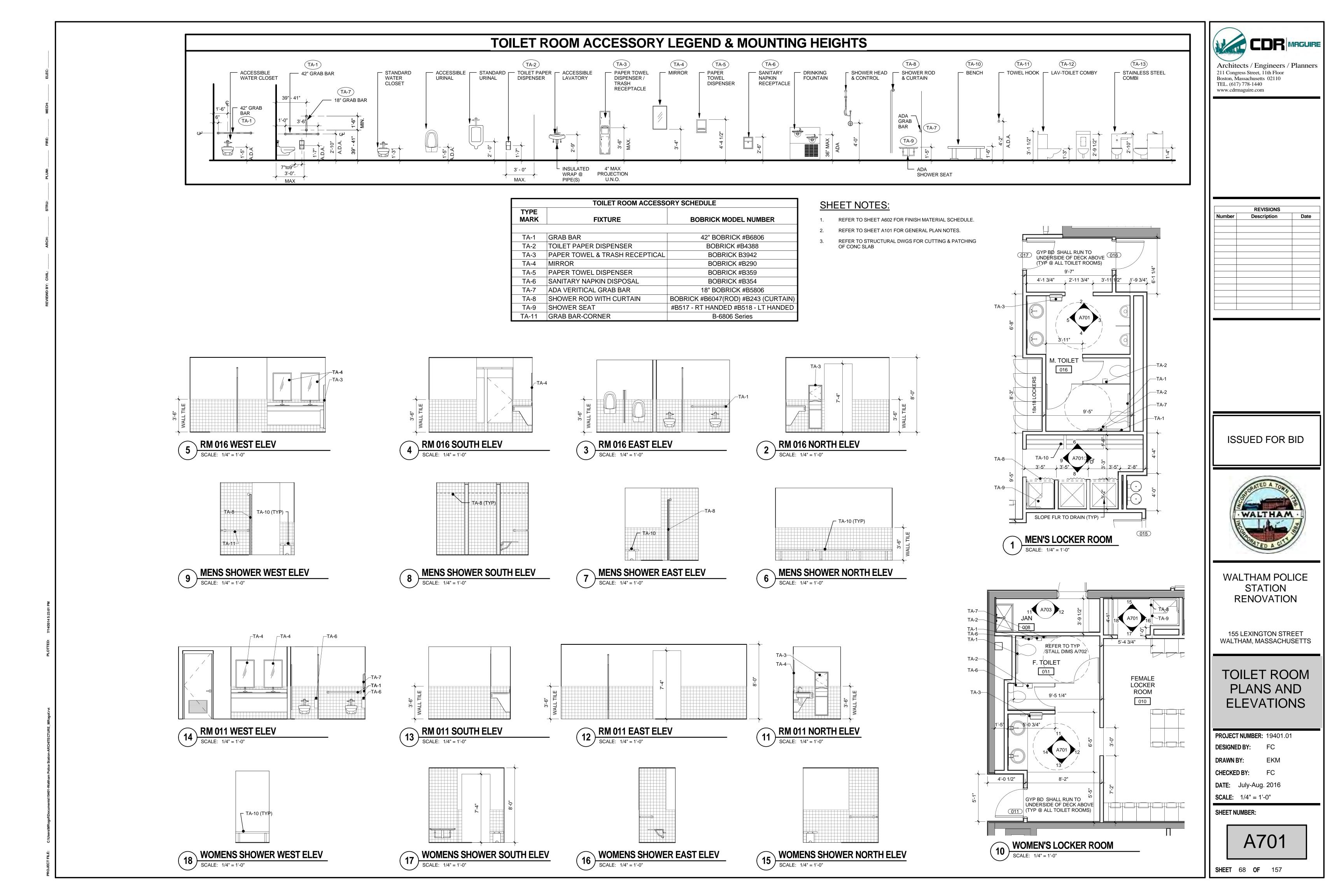
1 SCALE: 1/8" = 1'-0"

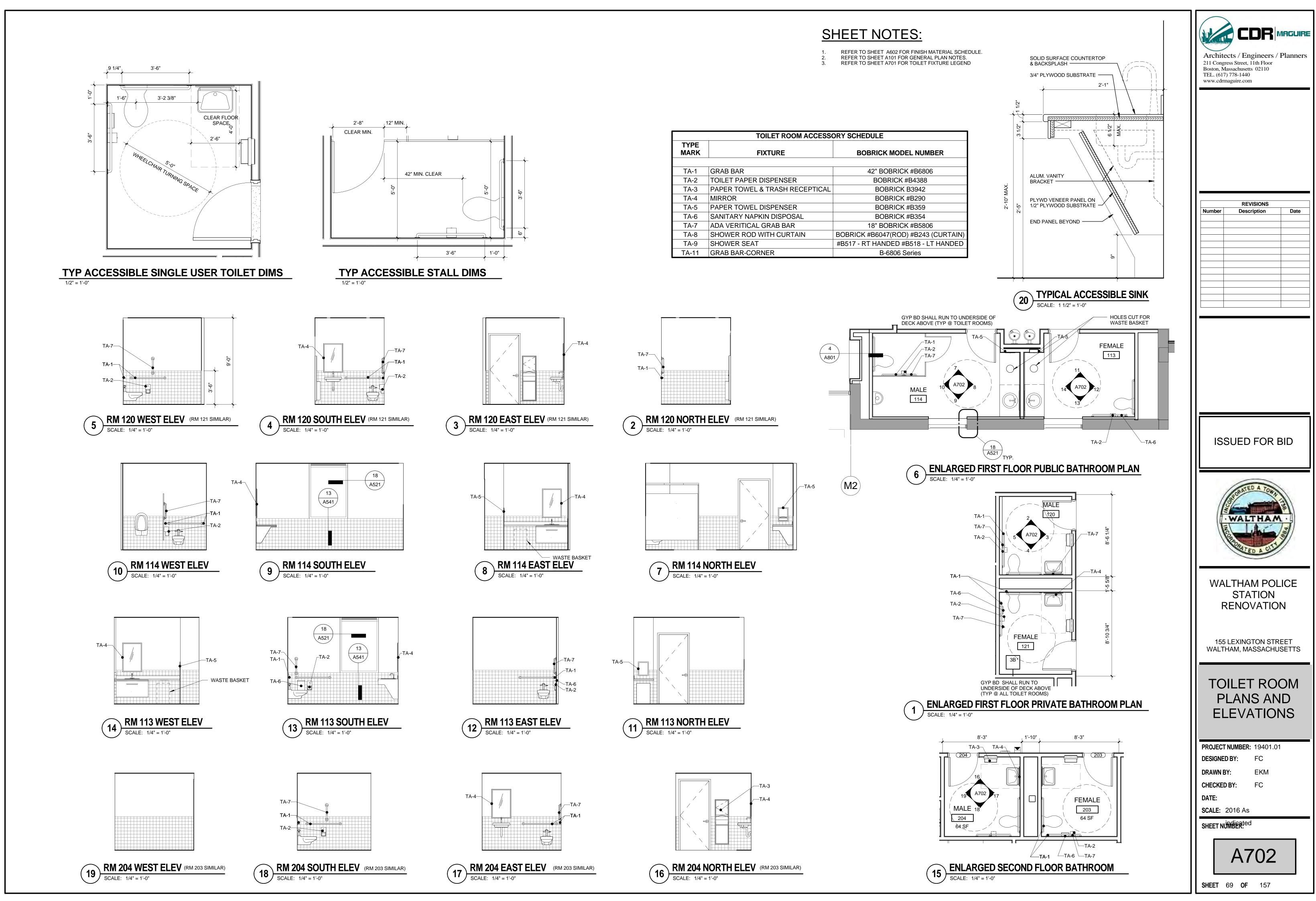


SECOND FLOOR FINISH PLAN

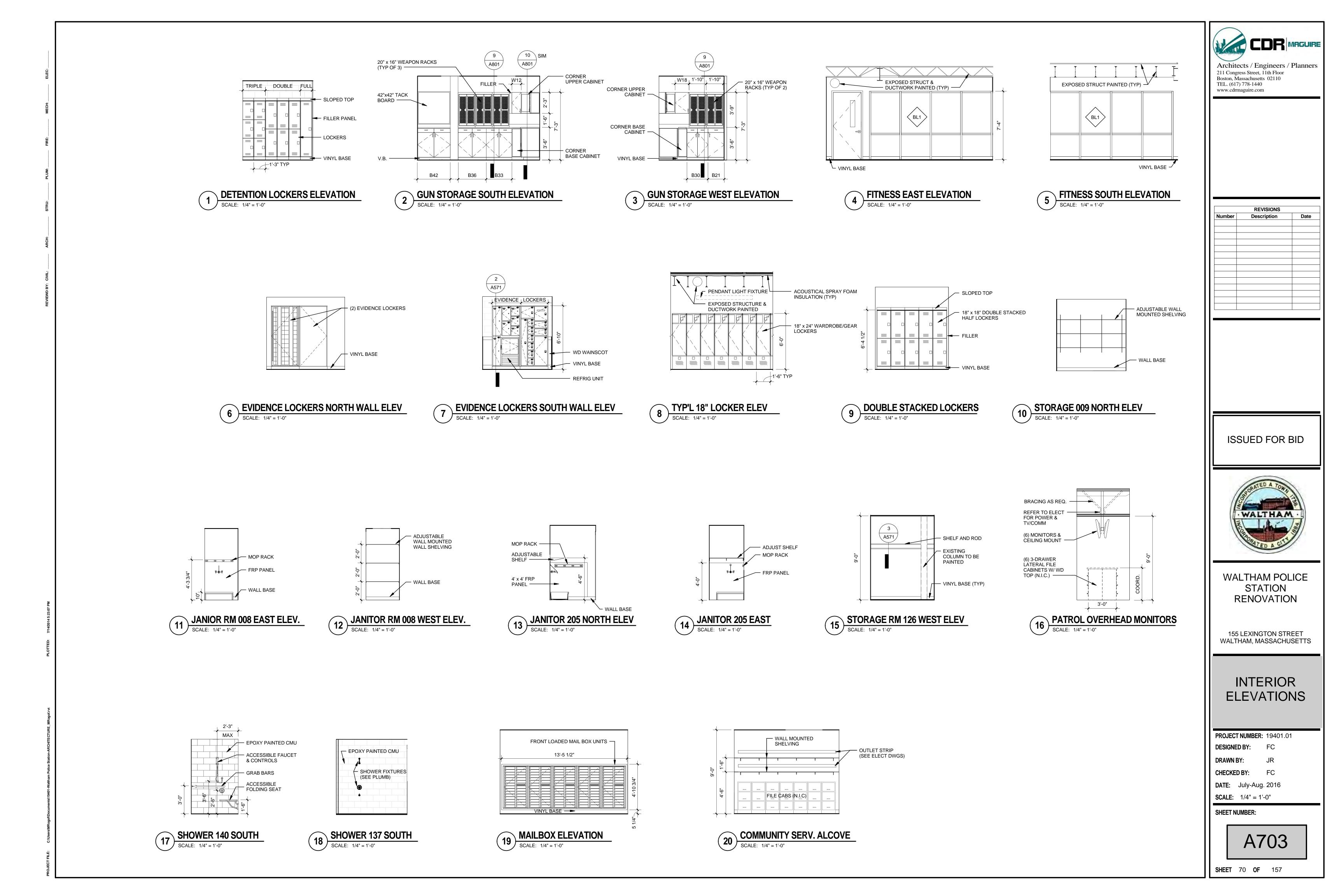


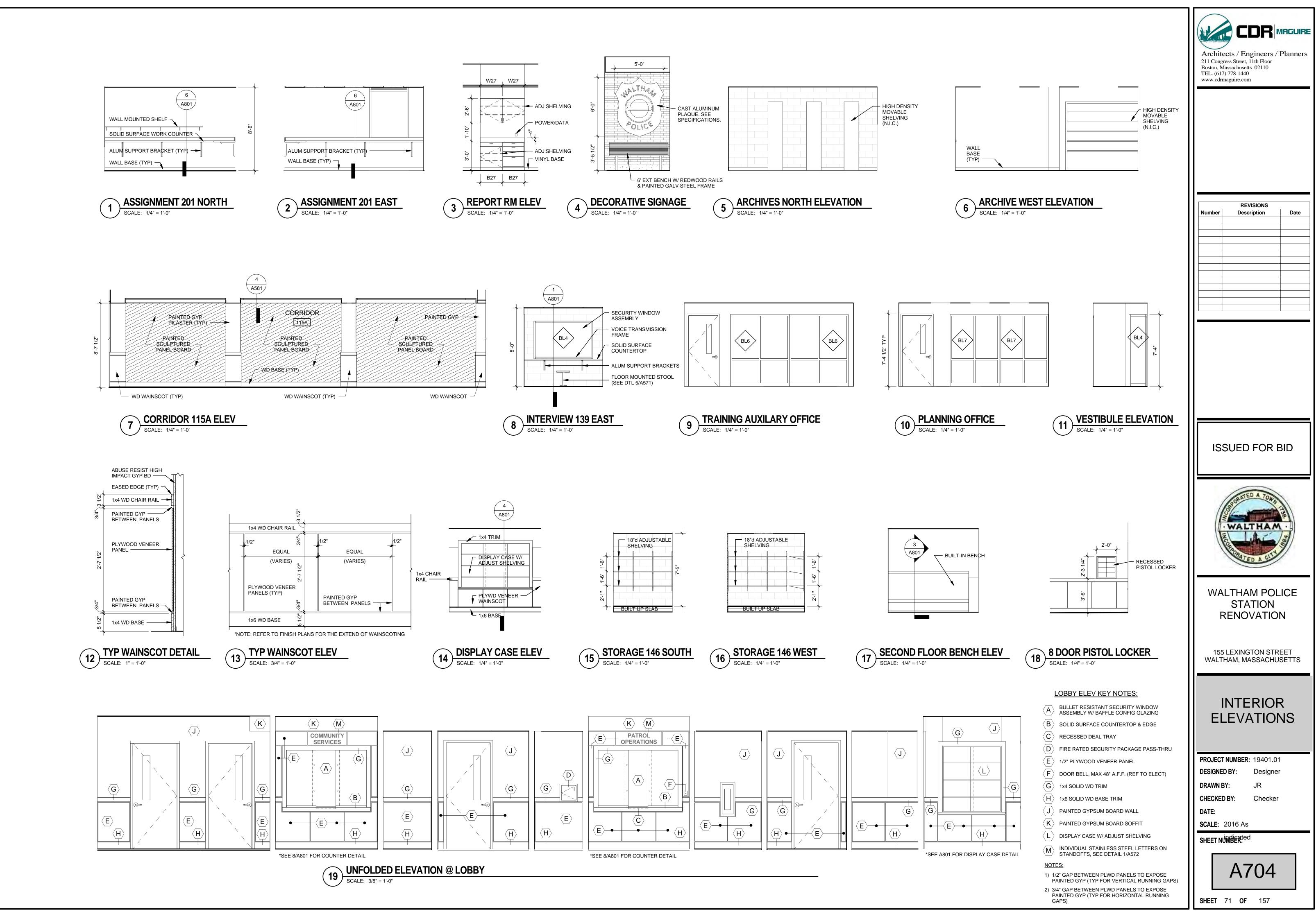
**SHEET** 67 **OF** 157





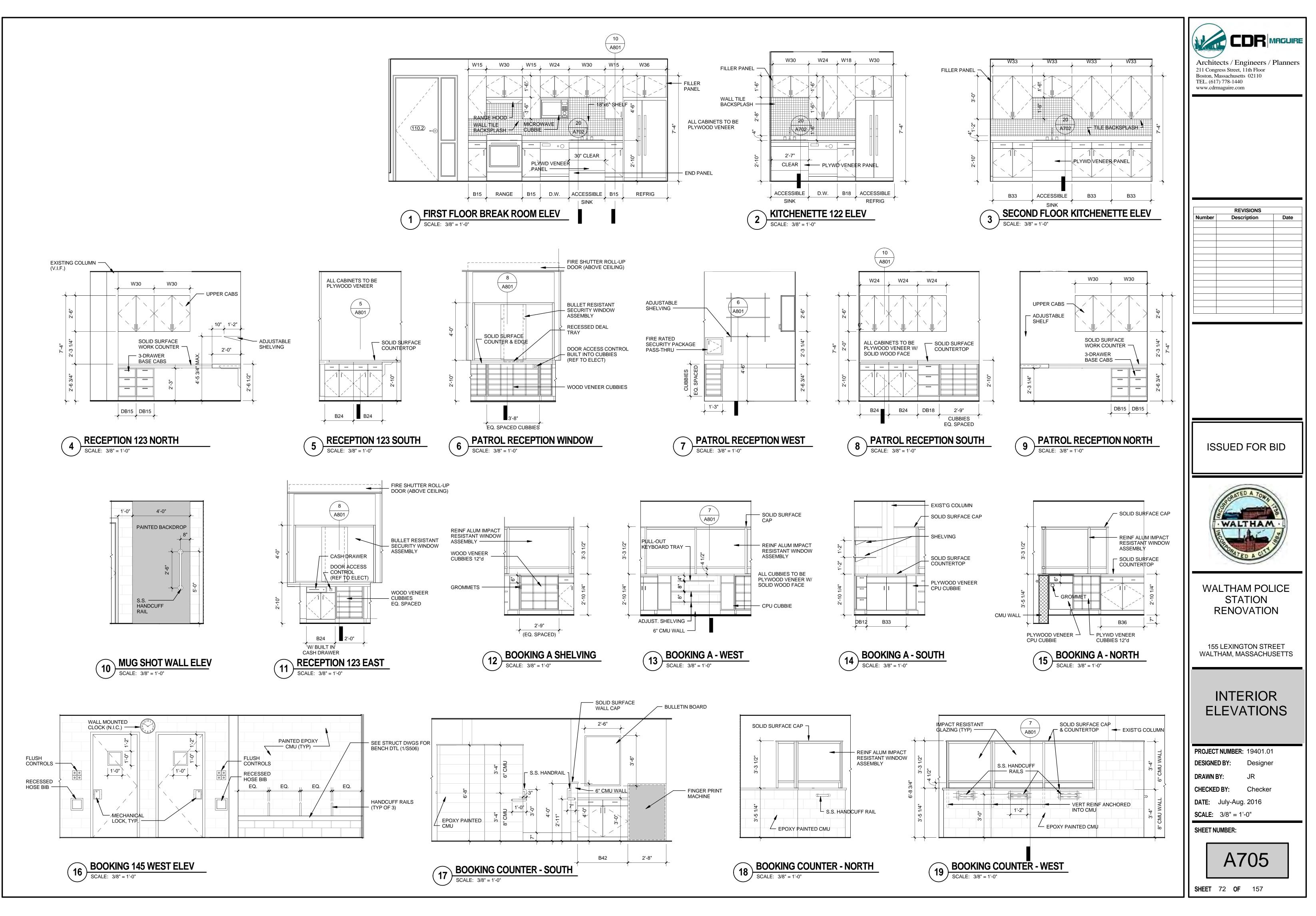
|              | TOILET ROOM ACCESSORY SCHEDULE |                       |  |  |  |  |  |
|--------------|--------------------------------|-----------------------|--|--|--|--|--|
| TYPE<br>MARK | FIXTURE                        | BOBRICK MODEL         |  |  |  |  |  |
|              |                                |                       |  |  |  |  |  |
| TA-1         | GRAB BAR                       | 42" BOBRICK #         |  |  |  |  |  |
| TA-2         | TOILET PAPER DISPENSER         | BOBRICK #B            |  |  |  |  |  |
| TA-3         | PAPER TOWEL & TRASH RECEPTICAL | BOBRICK B3            |  |  |  |  |  |
| TA-4         | MIRROR                         | BOBRICK #E            |  |  |  |  |  |
| TA-5         | PAPER TOWEL DISPENSER          | BOBRICK #E            |  |  |  |  |  |
| TA-6         | SANITARY NAPKIN DISPOSAL       | BOBRICK #E            |  |  |  |  |  |
| TA-7         | ADA VERITICAL GRAB BAR         | 18" BOBRICK #         |  |  |  |  |  |
| TA-8         | SHOWER ROD WITH CURTAIN        | BOBRICK #B6047(ROD) # |  |  |  |  |  |
| TA-9         | SHOWER SEAT                    | #B517 - RT HANDED #B5 |  |  |  |  |  |
| TA-11        | GRAB BAR-CORNER                | B-6806 Ser            |  |  |  |  |  |





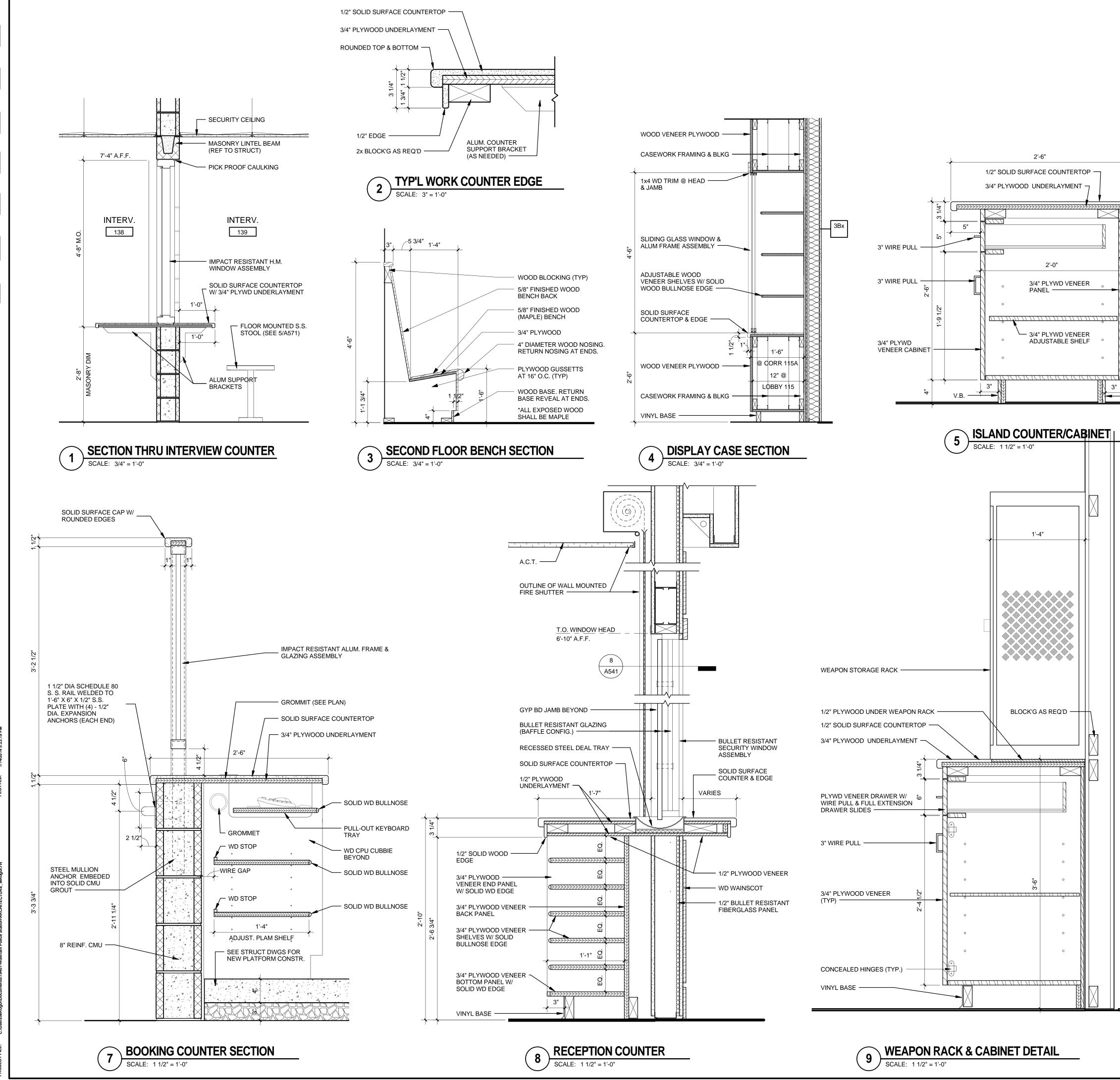
| STORAGE 146 |  |
|-------------|--|

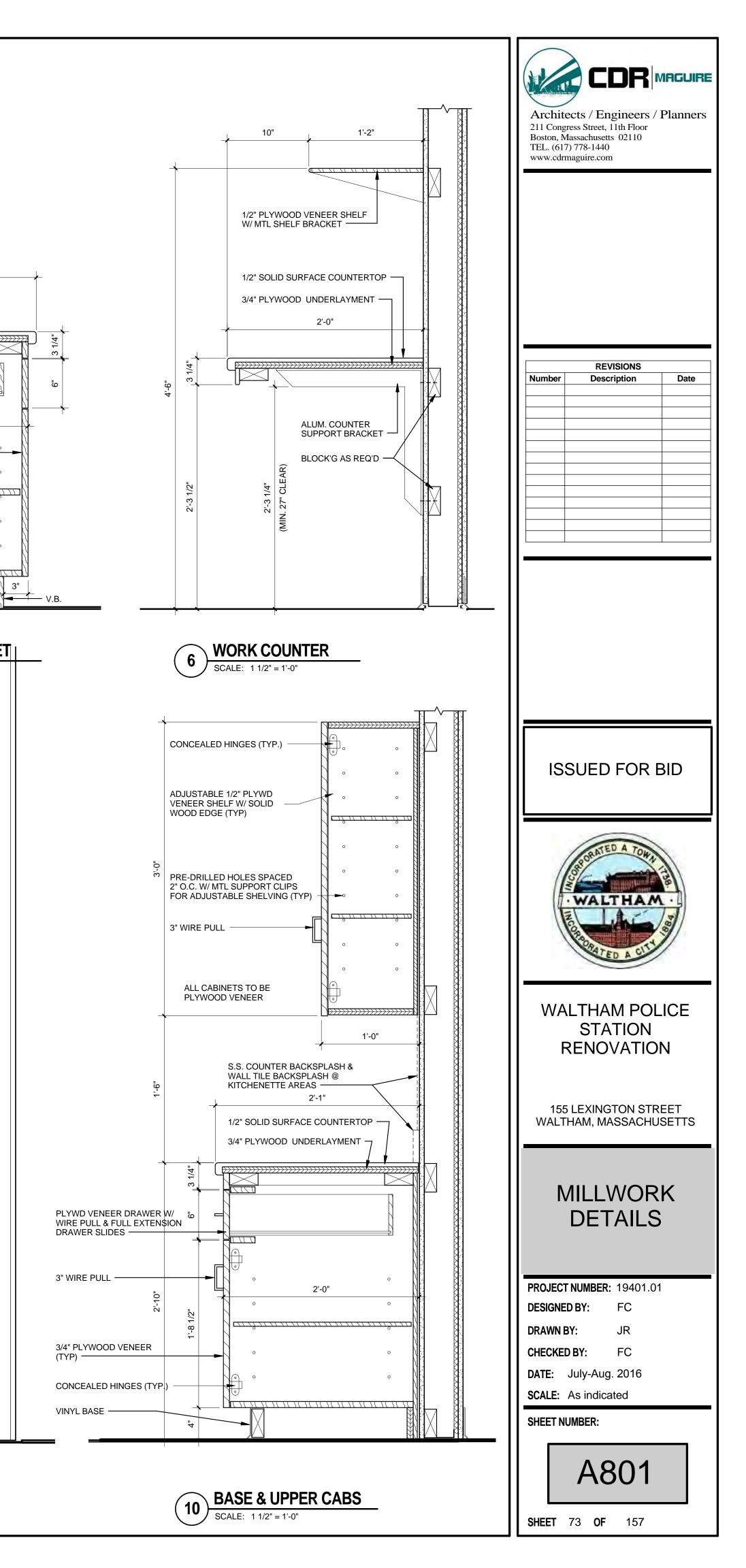
|   | 18"d ADJUSTABLE<br>SHELVING |                 |
|---|-----------------------------|-----------------|
|   |                             |                 |
|   |                             | $ \rightarrow $ |
| 5 |                             | 2'-1            |



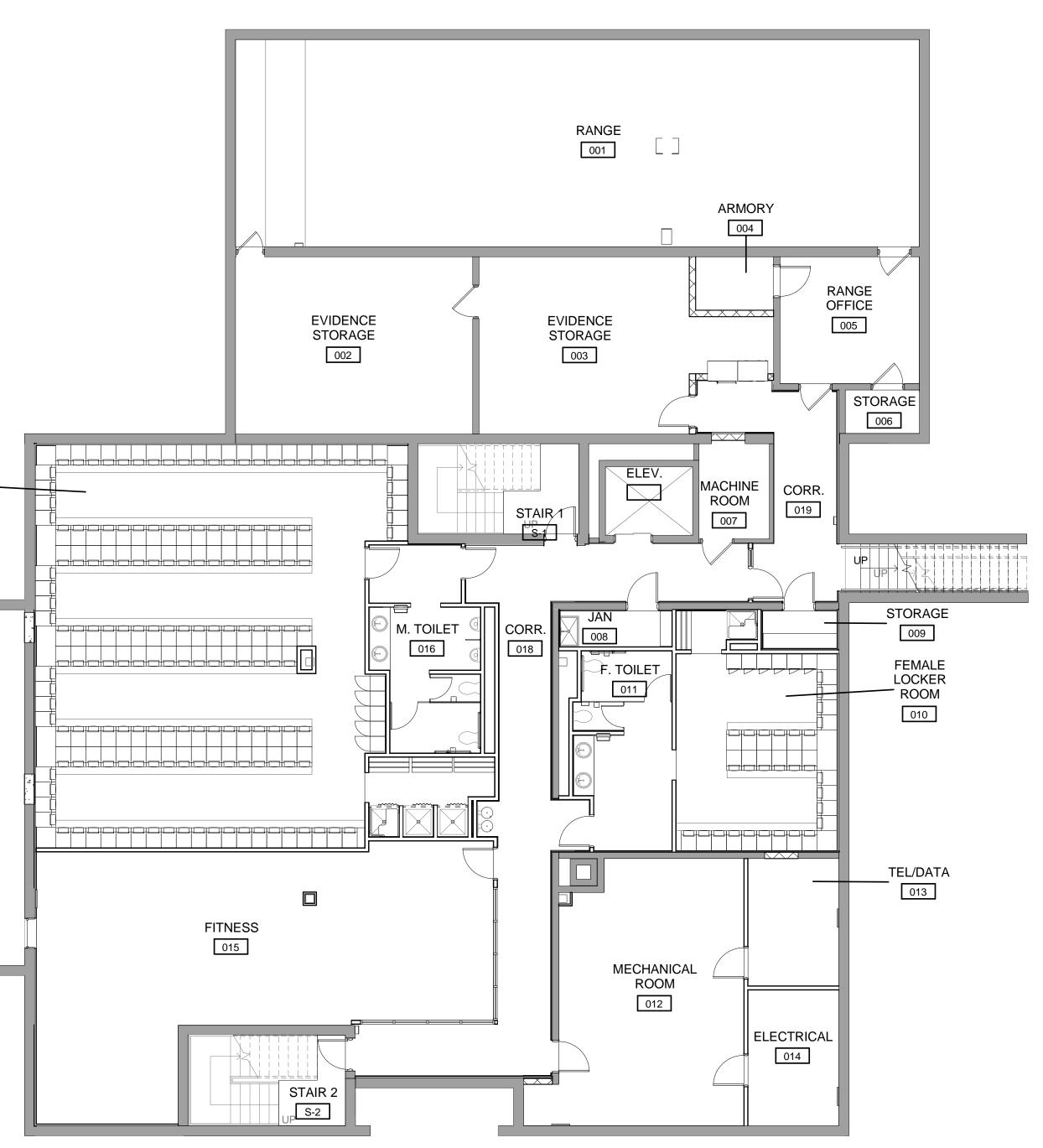
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MALE LOCKER ROOM 017

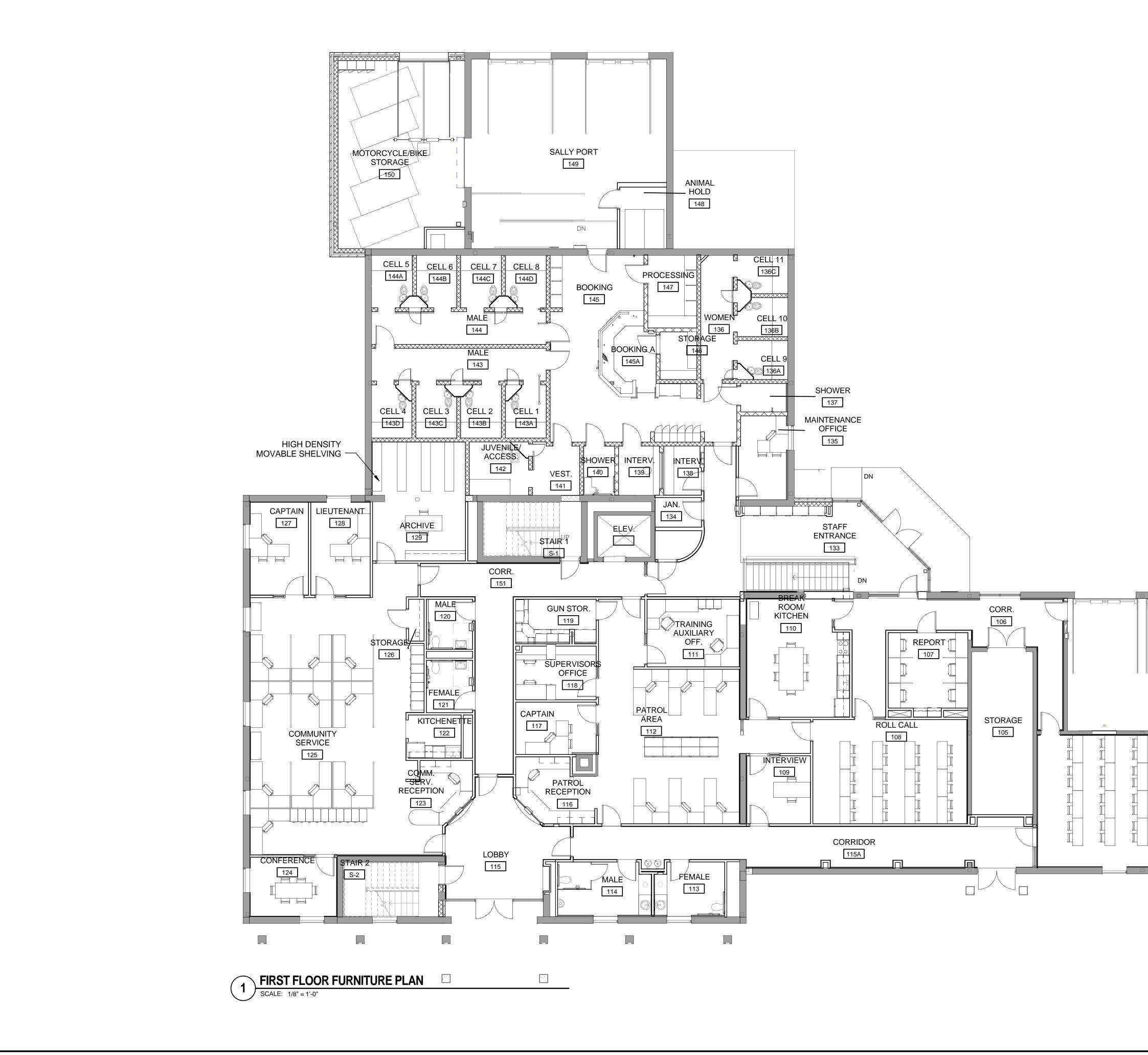


# 1 BASEMENT LEVEL FURNITURE PLAN SCALE: 1/8" = 1'-0"

## FURNITURE PLAN NOTES

ALL FURNITURE AND EQUIPMENT SHALL BE PURCHASED AND INSTALLED BY THE CITY UNLESS OTHERWISE NOTED. GM TO COORDINATE POWER / DATA WITH VENDOR.





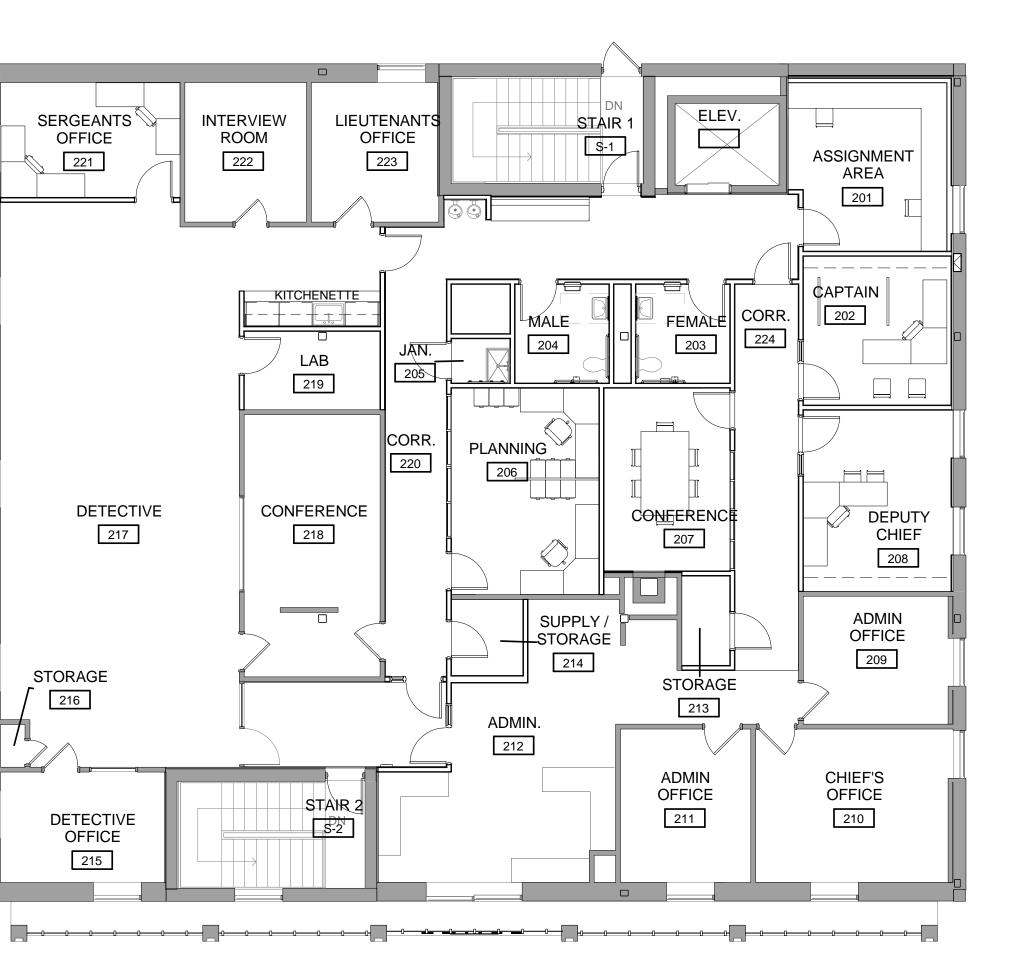
## FURNITURE PLAN NOTES

ALL FURNITURE AND EQUIPMENT SHALL BE PURCHASED AND INSTALLED BY THE CITY UNLESS OTHERWISE NOTED. GM TO COORDINATE POWER / DATA WITH VENDOR.



VEHICLE BAYS 101 STORAGE 102 - TRAINING ROOM 104 STORAGE 103

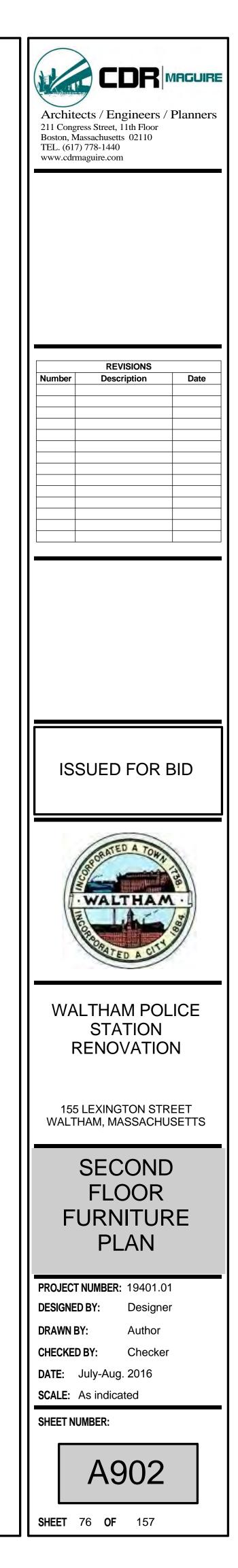




SECOND FLOOR FURNITURE PLAN SCALE: 1/8" = 1'-0"

## FURNITURE PLAN NOTES

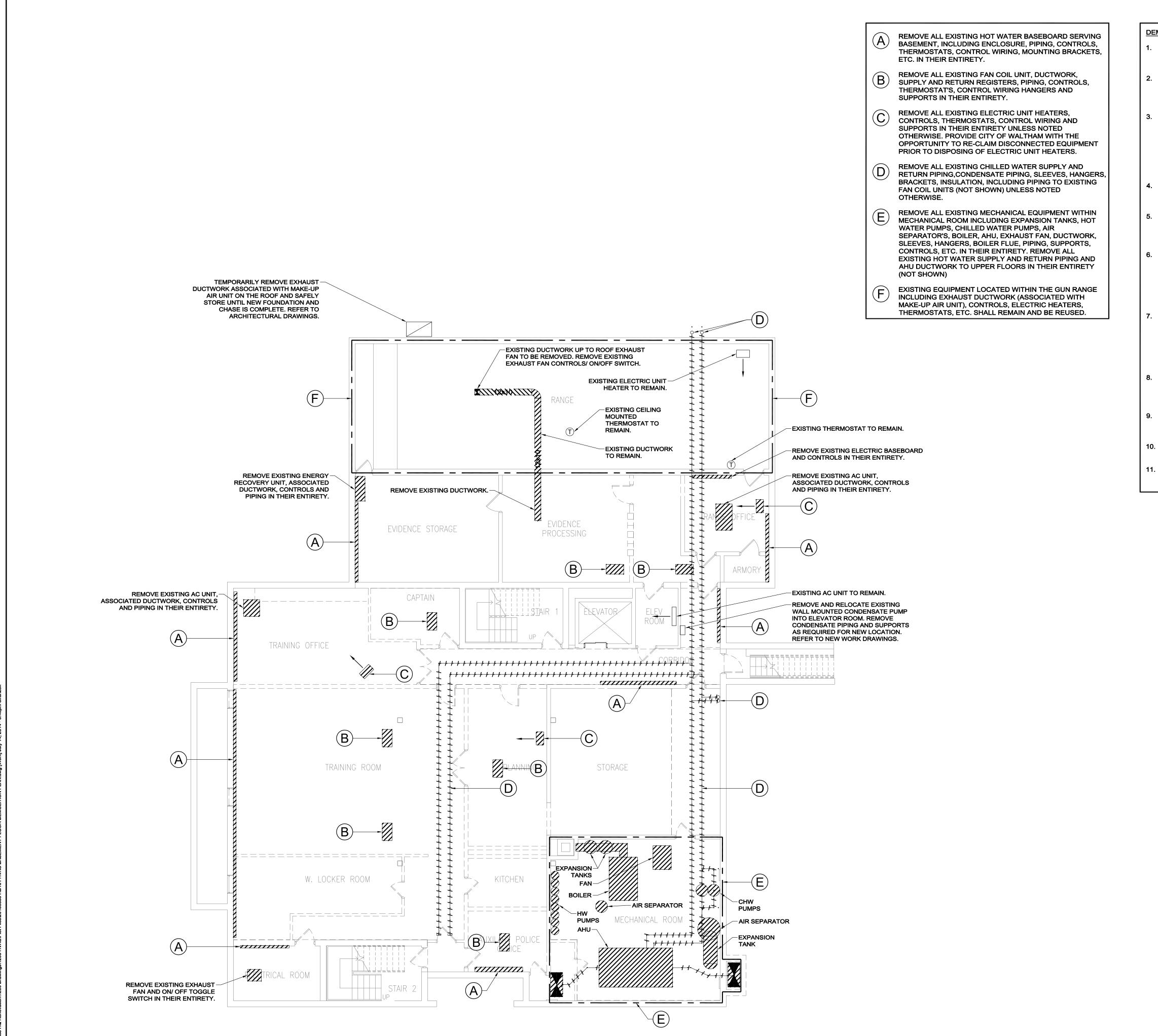
ALL FURNITURE AND EQUIPMENT SHALL BE PURCHASED AND INSTALLED BY THE CITY UNLESS OTHERWISE NOTED. GM TO COORDINATE POWER / DATA WITH VENDOR.



## ABBREVIATIONS

| 4<br>AD                             | COMPRESSED AIR<br>ACCESS DOOR  | QTY           | QUANTITY  | ιφι<br>ιΓ                             |
|-------------------------------------|--|---------------|---|---------------------------------------|
| ADD'L<br>AF                         | ADDITIONAL<br>AIR FOIL   | R<br>RA       | RADIUS<br>RETURN AIR  |                                       |
| ÅFF<br>AFR                          | ABOVE FINISHED FLOOR<br>ABOVE FINISHED ROOF  | RET           | RETURN  | d₽                                    |
| ALT                                 | ALTITUDE OR ALTERNATE  | REQ'D<br>RH   | REQUIRED<br>RELATIVE HUMIDITY                                 |                                       |
| ∖MP<br>\P                           | AMPERE<br>ACCESS PANEL   | RLA<br>RLF    | RUNNING LOAD AMPS<br>RELIEF                                   | <u>k</u>                              |
| APD<br>ARCH                         | AIR PRESSURE DROP<br>ARCHITECT   | RM<br>RPM     | ROOM<br>REVOLUTIONS PER MINUTE                                |                                       |
| ATC<br>ATM                          | AUTOMATIC TEMPERATURE CONTROL<br>ATMOSPHERE  | SCH           | SCHEDULE  | SD                                    |
| AVE                                 | AVERAGE  | SCR<br>SDET   | SCREEN  | S                                     |
| 3HP<br>3I                           | BRAKE HORSEPOWER<br>BACKWARDS INCLINED   | SEN           | SMOKE DETECTOR<br>SENSIBLE                                    |                                       |
| BLDG<br>BOD                         | BUILDING<br>BOTTOM OF DUCT   | SHC<br>SP     | SENSIBLE HEAT CAPACITY<br>STATIC PRESSURE                     | &                                     |
| BSMT<br>BTU                         | BASEMENT<br>BRITISH THERMAL UNIT   | SPECS<br>SQ   | SPECIFICATIONS<br>SQUARE                                      |                                       |
| зтин                                | BTU PER HOUR   | SF<br>SS      | SQUARE FEET<br>STAINLESS STEEL                                |                                       |
| C TO C<br>CENT                      | CENTER TO CENTER<br>CENTRIFUGAL  | STL<br>SUP    | STEEL   | Š                                     |
| CF                                  | CUBIC FEET   | 50P           | SUPPLY  |                                       |
| CFM<br>CL                           | CUBIC FEET PER MINUTE<br>CENTERLINE  | т             | TEMPERATURE   |                                       |
| CLG<br>CO                           | CEILING OR COOLING<br>CARBON MONOXIDE  | TA<br>TEL     | THROWAWAY<br>TELEPHONE  | <u></u> FS                            |
| COL<br>CONC                         | COLUMN<br>CONCRETE   | TEFC          | TOTALLY ENCLOSED FAN COOLED<br>TEMPERATURE                    | ~ 本                                   |
| CONN                                | CONNECTION   | TSTAT         | THERMOSTAT  | <u> </u>                              |
|                                     | CONTRACTOR<br>DRAIN OR DEPTH   | TON<br>TOT    | 12,000 BTUH COOLING CAPACITY<br>TOTAL                         |                                       |
| ЪВ                                  | DRY BULB TEMPERATURE   | TYP           | TYPICAL   |                                       |
| DEG<br>DDC                          | DEGREE<br>DIRECT DIGITAL CONTROL   | UC            | UNDERCUT DOOR   | ]                                     |
| DIA<br>DIM                          | DIAMETER<br>DIMENSION  | V<br>VEL      | VOLTS (ELECTRICAL)<br>VELOCITY                                | φ                                     |
| DN<br>DP                            | DOWN<br>DIFFERENTIAL PRESSURE  |               |   | <br>                                  |
| EA                                  |  | W<br>W/       | WIDTH OR WATT<br>WITH   | · · · · · · · · · · · · · · · · · · · |
| EAT                                 | EACH OR EXHAUST AIR<br>ENTERING AIR TEMPERATURE  | WB<br>WC      | WET BULB TEMPERATURE WATER COLUMN                             | <u> </u>                              |
| FF<br>LEC                           | EFFICIENCY<br>ELECTRICAL   | WG<br>W/O     | WATER GAUGE<br>WITHOUT  | T <sup>PT</sup>                       |
| ELEV<br>EMER                        | ELEVATION<br>EMERGENCY   | WPD<br>WTD    | WATER PRESSURE DROP<br>WATER TEMPERATURE DIFFERENCE           | Q AV                                  |
| EMS<br>ENT                          | ENERGY MANAGEMENT SYSTEM   |               |   |                                       |
| SP<br>WT                            | EXTERNAL STATIC PRESSURE   | DUCT<br>ACD   | AUTOMATIC CONTROL DAMPER                                      |                                       |
| EXH                                 | ENTERING WATER TEMPERATURE<br>EXHAUST  | AFMS<br>BDD   | AIR FLOW MEASURING STATION<br>BACKDRAFT DAMPER                | │                                     |
| EXIST.<br>EXT                       | EXISTING<br>EXTERNAL   | BOD<br>DIFF   | BOTTOM OF DUCT<br>DIFFUSER                                    | EJ                                    |
| EXP                                 | EXPANSION  | EA<br>EG      | EXHAUST AIR   |                                       |
| <del>.</del><br>A                   |  | ER            | EXHAUST GRILLE<br>EXHAUST REGISTER                            |                                       |
| C                                   | FREE AREA<br>FLEXIBLE CONNECTION   | FBD<br>FD     | FLAT BOTTOM DUCT<br>FIRE DAMPER (W/ ACCESS DOOR)              | X                                     |
| <sup>:</sup> LA<br><sup>:</sup> LEX | FULL LOAD AMPS<br>FLEXIBLE   | LD<br>MD      | LINEAR DIFFUSER<br>MOTOR OPERATED DAMPER                      |                                       |
| FLRDR<br>FPM                        | FLOOR DRAIN<br>FEET PER MINUTE   | OA<br>OED     | OUTSIDE AIR<br>OPEN END DUCT                                  | o                                     |
| PS<br>S                             | FEET PER SECOND<br>FLOW SWITCH   | RA            | RETURN AIR  |                                       |
| -T                                  | FEET   | RG<br>RR      | RETURN GRILLE<br>RETURN REGISTER                              |                                       |
| G                                   | GAS  | SA<br>SD      | SUPPLY AIR<br>SMOKE DAMPER                                    |                                       |
| ga<br>Gal                           | GAUGE<br>GALLONS   | SFD           | COMBINATION AUTOMATIC SMOKE/FIRE<br>DAMPER WITH ACCESS DOOR   | O                                     |
| GALV<br>GC                          | GALVANIZED<br>GENERAL CONTRACTOR   | TA            | THROW AWAY OR TRANSFER AIR                                    |                                       |
| GPH<br>GPM                          | GALLONS PER HOUR<br>GALLONS PER MINUTE   | TG<br>TOD     | TRANSFER GRILLE<br>TOP OF DUCT                                |                                       |
| GRD<br>GWB                          | GRADE<br>GYPSUM WALL BOARD   | TR<br>TSP     | TRANSFER<br>TOTAL STATIC PRESSURE (IN. WG)                    |                                       |
|                                     | HOSE BIBB CONN.  | VD<br>VAV     | VOLUME DAMPER<br>VARIABLE AIR VOLUME SUPPLY AIR TERMINAL      |                                       |
| HD                                  | HEAD   | WMS           | WIRE MESH SCREEN  | Со                                    |
| IGT<br>IP                           | HEIGHT<br>HORSEPOWER   |               |   |                                       |
| HR<br>HTG                           | HOUR<br>HEATING  | EQUIPME<br>AC | AIR CONDITIONING OR AIR CONDITIONING UNIT                     |                                       |
| ΗZ                                  | HERTZ (FREQUENCY, CYCLES PER SECOND)   | ACC<br>ACU    | AIR COOLED CONDENSING UNIT<br>AIR CONDITIONING UNIT           |                                       |
| D<br>N                              | INSIDE DIAMETER<br>INCHES  | В             | BOILER  |                                       |
|                                     |  | CUH<br>DDC    | CABINET UNIT HEATER<br>DIRECT DIGITAL CONTROL                 |                                       |
| Ŵ                                   | KILOWATT   | DX<br>EF      | DIRECT EXPANSION<br>EXHAUST FAN                               |                                       |
| AT                                  | LENGTH<br>LEAVING AIR TEMPERATURE  | ET<br>F       | EXPANSION TANK  |                                       |
| .B<br>.F                            | POUND<br>LINEAR FEET   | FTR           | FAN<br>FINNED TUBE RADIATION                                  |                                       |
| .P                                  | LOW POINT  | HC<br>HP      | HEATING COIL<br>HEAT PUMP                                     | L                                     |
| UVR                                 | LOCKED ROTOR AMPS<br>LOUVER  | HWC<br>P      | HOT WATER HEATING COIL<br>PUMP                                |                                       |
| VDR                                 | LOUVERED DOOR<br>LEAVING   | REG           | REGISTER  |                                       |
| .WT                                 | LEAVING WATER TEMPERATURE  | RF<br>RHC     | RETURN FAN<br>REHEAT COIL                                     |                                       |
| MAX                                 |  | RTU<br>SA     | ROOF TOP UNIT<br>SOUND ATTENUATOR                             |                                       |
| MBH<br>MCA                          | THOUSAND BTUH<br>MINIMUM CIRCUIT AMPS  | SF            | SUPPLY FAN  |                                       |
| ЛЕСН<br>ЛF'R                        | MECHANICAL<br>MANUFACTURER   | UH<br>UV      | UNIT HEATER<br>UNIT VENTILATOR                                |                                       |
| /IN<br>//U                          | MINIMUM<br>MAKE-UP WATER   | VAV<br>VFD    | VARIABLE AIR VOLUME TERMINAL UNIT<br>VARIABLE FREQUENCY DRIVE |                                       |
| //A                                 | NOT APPLICABLE   | HOT WAT       |   |                                       |
|                                     | NORMALLY CLOSED OR NOISE CRITERIA<br>NOT IN CONTRACT   | HW            | HOT WATER   |                                       |
| NO<br>No.                           | NORMALLY OPEN<br>NUMBER  | HWR<br>HWS    | HOT WATER RETURN<br>HOT WATER SUPPLY                          |                                       |
| MOM                                 | NOMINAL  |               |   |                                       |
|                                     |  | PIPING<br>AAV |   |                                       |
| DA<br>DAI                           | OUTSIDE AIR<br>OUTSIDE AIR INTAKE  | ACV<br>AS     | AUTOMATIC CONTROL VALVE<br>AIR SEPARATOR                      |                                       |
| DC<br>DD                            | ON CENTER<br>OUTSIDE DIAMETER  | ATV<br>BOP    | ATMOSPHERIC VENT<br>BOTTOM OF PIPE                            |                                       |
| DDP<br>DV                           | OPEN DRIP PROOF  | CO            | CLEAN-OUT   |                                       |
|                                     |  | DOV<br>MAV    | DRAIN-OFF VALVE<br>MANUAL AIR VENT                            |                                       |
| PCF<br>PD                           | POUNDS PER CUBIC FOOT<br>PRESSURE DROP   | MU<br>TOP     | MAKE-UP WATER<br>TOP OF PIPE                                  |                                       |
| эН<br>ЭВG                           | PHASE<br>PLUMBING  | V             | VENT  |                                       |
| POS                                 | PROVIDED BY OTHER SECTION  |               |   |                                       |
|                                     | PARTS PER MILLION  | DX<br>RG      | DIRECT EXPANSION<br>REFRIGERANT GAS                           |                                       |
| PPM<br>PSI                          | POUNDS PER SQUARE INCH   |               |   |                                       |
|                                     | POUNDS PER SQUARE INCH<br>POUNDS PER SQUARE INCH ABSOLUTE<br>POUNDS PER SQUARE INCH DIFFERENTIAL | RL<br>RS      | REFRIGERANT LIQUID<br>REFRIGERANT SUCTION                     |                                       |

| PIPING LEGEND  | DUCTWORK PIPING ABBREVIATIONS   |  |
|--|---|--|
| → 1 0 →       BALL VALVE         → 1 1 →       BUTTERFLY VALVE         → 1 0 →       HOSE END BALL VALVE WITH CAP AND CHAIN         → 1 0 →       HOSE END BALL VALVE WITH CAP AND CHAIN         → 1 0 →       CHECK VALVE (SILENT CHECK TYPE ON PUMP DISCHARGE)         → 1 →       STRAINER WITH HOSE END BLOWOFF VALVE, CAP AND CHAIN   | SINGLE LINE     DOUBLE LINE     SINGLE LINE     DOUBLE LINE       WxD     RECTANGULAR<br>SUPPLY DUCT<br>W=WIDTH, D=DEPTH<br>(INCHES UNLESS NOTED<br>OTHERWISE) AS VIEWED     W_D     RECTANGULAR<br>RETURN/EXHAUST DUCT<br>W=WIDTH, D=DEPTH<br>(INCHES UNLESS NOTED<br>OTHERWISE) AS VIEWED     W_D     HOT WATER RETURN<br>HOT WATER SUPPLY       DIA"Ø     DIA"Ø     DIA"Ø     DIA"Ø     DIA"Ø     DIA"Ø       DIA"Ø     DIA"Ø     DIA"Ø     DIA"Ø     DIA"Ø       DIA"Ø     DIA"Ø     DIA"Ø     DIA"Ø     DIA"Ø  | Architects / Engineers / Planner<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com  |
| Image: Substantial constraints       Substantial constraints         Image: Substantial constraints  | STANDARD RADIUS ELBOW   STANDARD RADIUS ELBOW   SUPPLY DUCT UP   SUPPLY DUCT UP   SUPPLY DUCT DOWN   SUPPLY DUCT DOWN <tr< td=""><td>Andover, MA - Boston, MA - Amnerst, MA<br/>Durham, NC - Charlotte, NC<br/>RDK Engineers<br/>200 Brickstone Square<br/>Andover, MA 01810-1488<br/>T. 978-296-6200<br/>REVISIONS           Number         Description         Date</td></tr<>   | Andover, MA - Boston, MA - Amnerst, MA<br>Durham, NC - Charlotte, NC<br>RDK Engineers<br>200 Brickstone Square<br>Andover, MA 01810-1488<br>T. 978-296-6200<br>REVISIONS           Number         Description         Date |
| Image: Image   | JOWN       JOWN       RECTANGULAR       Image: constraint of the second secon                            |  |
| $\blacksquare$ | EXHAUST DUCT UP       45° TAKEOFF       45° TAKEOFF       45° TAKEOFF       SCHEDULED EQUIPMENT UNIT NUMBER         Image: Schedular duct down   | ISSUED FOR<br>BID  |
| REDUCER - ECCENTRIC   CLEANOUT FOR CONDENSATE DRAIN   CO   DIRT LEG   RISE (DOUBLE LINE - PLAN VIEW)   DROP (DOUBLE LINE - PLAN VIEW)   PIPE BREAK (DOUBLE LINE)   | Image: Substant of the second seco | WALTHAM POLICE   |
| ςς ςς PIPE BREAK (SINGLE LINE)   | DIFFUSER/GRILLE       (W/SHEETMETAL<br>PLENUM, LINING &<br>BRANCH CONN. FOR<br>EVERY 4' OF LINEAR.)         SHANCH CONN. FOR<br>EVERY 4' OF LINEAR.)       (W/SHEETMETAL<br>PLENUM, LINING &<br>BRANCH CONN. FOR<br>EVERY 4' OF LINEAR.)         SHANCH CONN. FOR<br>EVERY 4' OF LINEAR.)       (W/SHEETMETAL<br>PLENUM, LINING &<br>BRANCH CONN. FOR<br>UPLENUM<br>BY LD MFR         SHANCH CONN. FOR<br>UPLENUM<br>BY LD MFR       (W/SHEETMETAL<br>PLENUM, LINING &<br>BRANCH CONN. FOR<br>UPLENUM<br>BY LD MFR         SHANCH CONN. FOR<br>UPLENUM<br>BY LD MFR       (W/SHEETMETAL<br>PLENUM, LINING &<br>BRANCH CONN. FOR<br>UPLENUM<br>BY LD MFR         SHANCH CONN. FOR<br>UPLENUM<br>BY LD MFR       (W/SHEETMETAL<br>PLENUM, LINING &<br>BRANCH CONN. FOR<br>UPLENUM<br>BY LD MFR         SHANCH CONTROL<br>DAMPER W/ ACCESS DOOR<br>VD       (W/SHEETMETAL<br>PLENUM, LINING &<br>UPLENUM, BLOW<br>SUPPLY DIFFUSER  | STATION<br>RENOVATION<br>155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
|  | FD       SELF-CLOSING FIRE DAMPER W/ ACCESS DOOR       Image: SFD       3-WAY BLOW SUPPLY DIFFUSER         SFD       COMBINATION SMOKE/FIRE DAMPER W/ ACCESS DOOR       Image: OR image:  | HVAC<br>LEGEND, NOTES<br>& ABBRVS.<br>PROJECT NUMBER: 20130535<br>DESIGNED BY: JJK<br>DRAWN BY: JJK<br>CHECKED BY: CH<br>DATE: July-Aug.   |
|  |   | SCALE: 2016 N.T.S.<br>SHEET NUMBER:<br>HOOOO<br>SHEET 79 OF 157  |



REVIEWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_\_ PLUM: \_\_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ ELI

13/20130535 - Waltham Police HQ Renovation/1200 Drawings/1203 HVAC/Plot Files/20130535 HD101 HVAC BASEMENT FLOOR DEMOLITION PLAN.dwg [Work] July 14, 2014 - 5:48pm dfranzek

### **DEMOLITION WORK NOTES:**

IF THERE IS A QUESTION AS TO WHETHER EXISTING EQUIPMENT SHALL REMAIN AND BE REUSED OR REMOVED CONTACT THE ARCHITECT AND ENGINEER PRIOR TO DEMOLISHING FOR CLARIFICATION.

PRIOR TO DEMOLITION, COORDINATE WITH THE CITY OF WALTHAM TO CONFIRM IF ANY EXISTING EQUIPMENT TO BE DEMOLISHED CAN BE TURNED OVER TO THE CITY FOR RE-USE (I.E. EXISTING ACU/ACCU'S, ELECTRIC UNIT HEATERS, ETC.)

THE DEMOLITION DRAWINGS AND EQUIPMENT LOCATIONS ARE DIAGRAMMATIC AND ARE NOT REPRESENTATIVE OF ALL EXISTING EQUIPMENT, PIPING, CONTROLS, ETC. TO BE DEMOLISHED - I.E. ROOMS WITHIN THE SCOPE OF WORK WITH BASEBOARD RADIATION NOT SHOWN ON DEMOLITION PLANS SHALL BE REMOVED IN SAME MANNER AS SIMILAR EQUIPMENT DESCRIBED ON THE PLANS AT NO ADDITIONAL COST TO THE OWNER UNLESS EQUIPMENT IS TO BE TURNED OVER TO CITY FOR RE-USE, SEE NOTE ABOVE.

THE EQUIPMENT ASSOCIATED WITH THE ELEVATOR MACHINE ROOM AND GUN RANGE SHALL REMAIN AND BE REUSED UNLESS OTHERWISE NOTED.

IF EXISTING EQUIPMENT IS FOUND DURING DEMOLITION THAT IS NOT EXPLICITLY OR GENERICALLY DESCRIBED OR NOTED WITHIN THESE DOCUMENTS, CONTACT THE ARCHITECT AND ENGINEER FOR FURTHER GUIDANCE PRIOR TO DEMOLISHING SAID EQUIPMENT.

PROVIDE DEMOLITION OF EXISTING HOT WATER SYSTEM, BOILER, PUMPS, PIPING, HANGERS, SLEEVES, SUPPORTS, EXPANSION TANK, EXPANSION LOOPS, AIR SEPARATOR, TERMINAL EQUIPMENT, COMBUSTION DUCTWORK, CONTROLS, VALVES, ACTUATORS, AND COMPONENTS IN THEIR ENTIRETY. NO PART OF THE EXISTING SYSTEM SHALL REMAIN AND BE REUSED. EXISTING HOT WATER PIPING DISTRIBUTION NOT SHOWN ON PLANS.

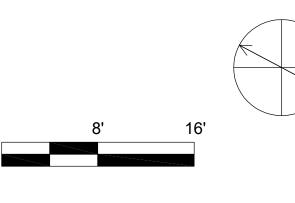
PROVIDE DEMOLITION OF EXISTING CHILLED WATER SYSTEM, AIR COOLED CHILLER, EXPANSION TANK, AIR SEPARATOR, CHILLED WATER PUMPS, PIPING, CONDENSATE DRAINS, HANGERS, SLEEVES, SUPPORTS, CONTROLS, VALVES ACTUATORS AND COMPONENTS IN THEIR ENTIRETY. NO PART OF THE EXISTING SYSTEM SHALL REMAIN AND BE REUSED. EXISTING CHILLED WATER MAINS SHOWN (V.I.F. EXACT RUNS AND LOCATIONS.

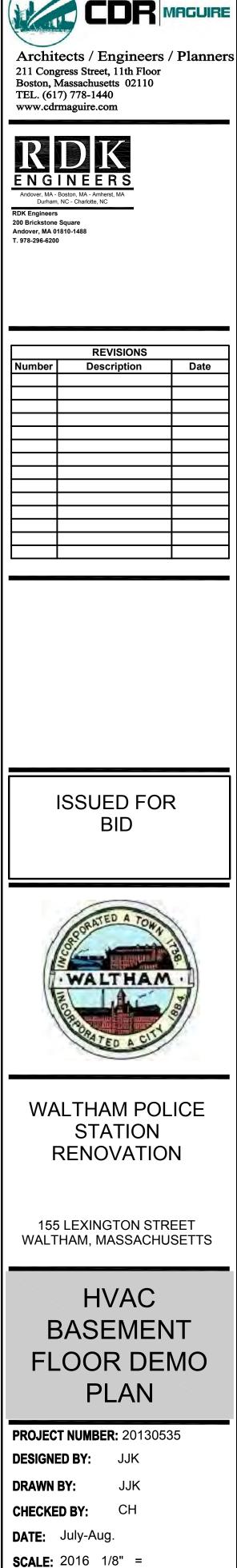
ALL EXISTING SUPPLY, RETURN, AND EXHAUST DUCTWORK AND ASSOCIATED EQUIPMENT LOCATED IN THE BASEMENT, FIRST FLOOR, SECOND FLOOR AND ROOF SHALL BE REMOVED IN IT'S ENTIRETY UNLESS EXPLICITLY CALLED OUT TO REMAIN AND BE REUSED.

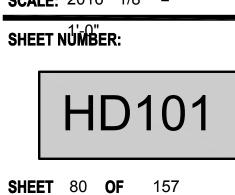
ALL SIZES, ROUTING AND EQUIPMENT LOCATIONS INDICATED AND ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY EXACT SIZES AND ROUTING IN THE FIELD.

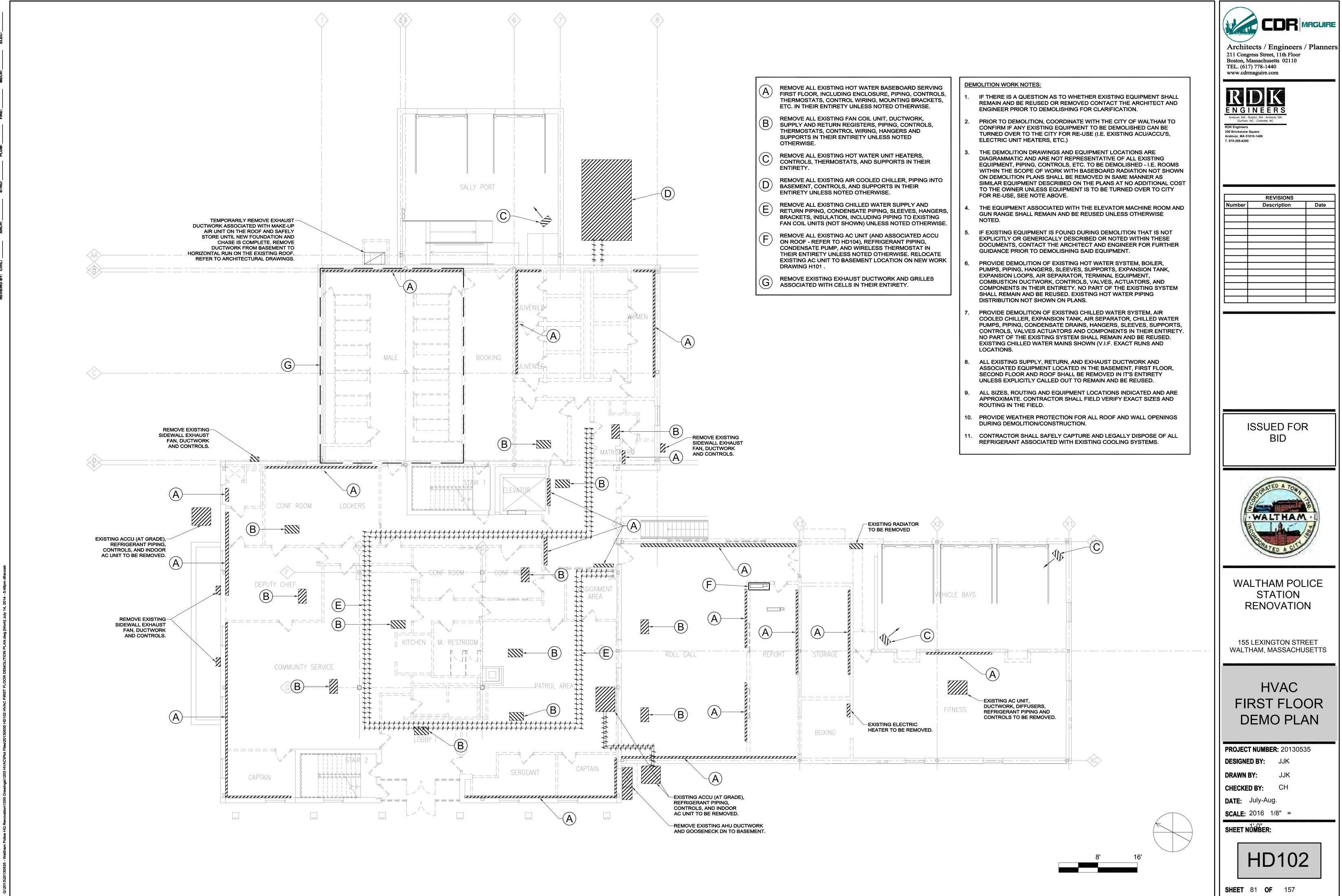
10. PROVIDE WEATHER PROTECTION FOR ALL ROOF AND WALL OPENINGS DURING DEMOLITION/CONSTRUCTION.

11. CONTRACTOR SHALL SAFELY CAPTURE AND LEGALLY DISPOSE OF ALL REFRIGERANT ASSOCIATED WITH EXISTING COOLING SYSTEMS.

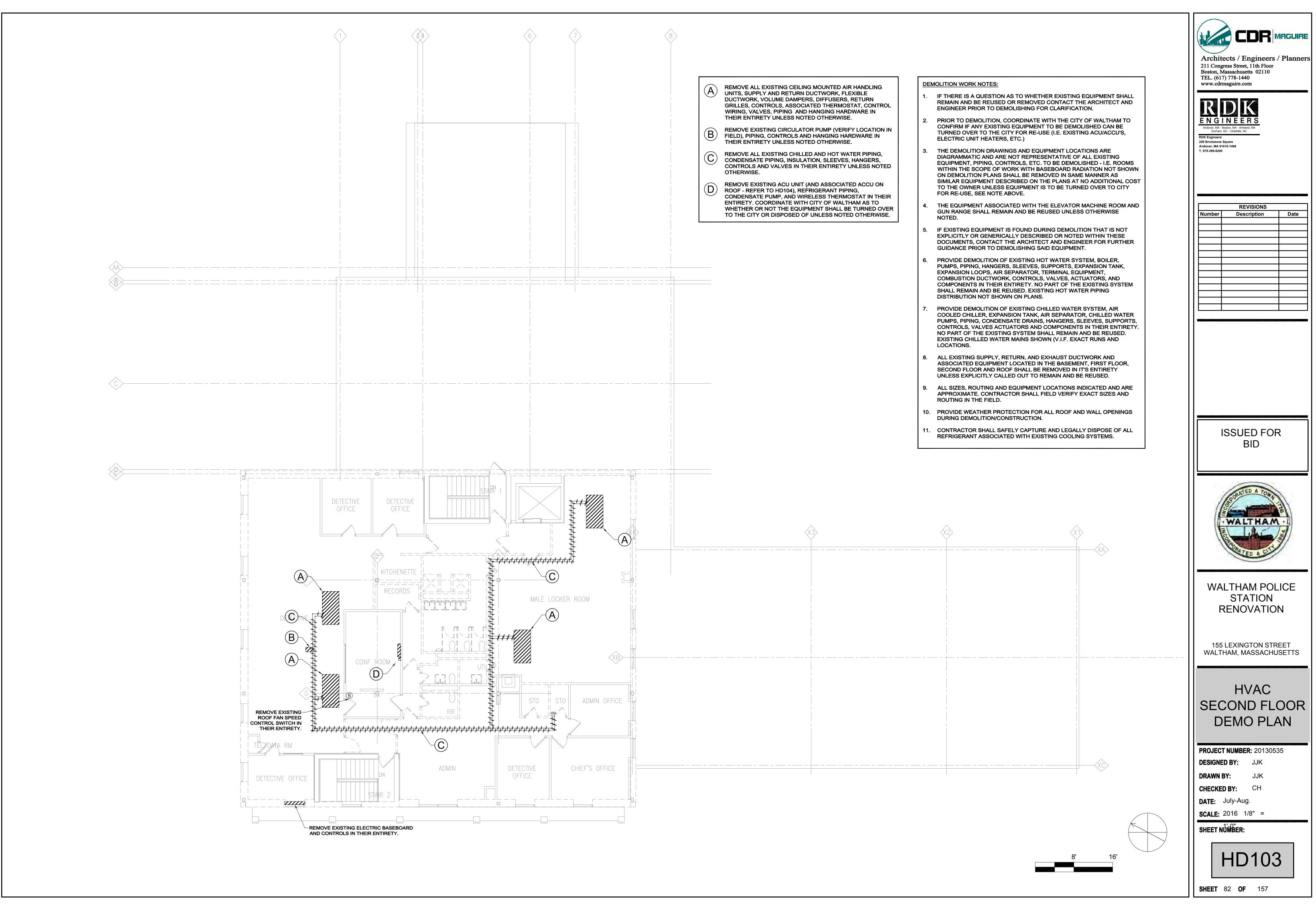


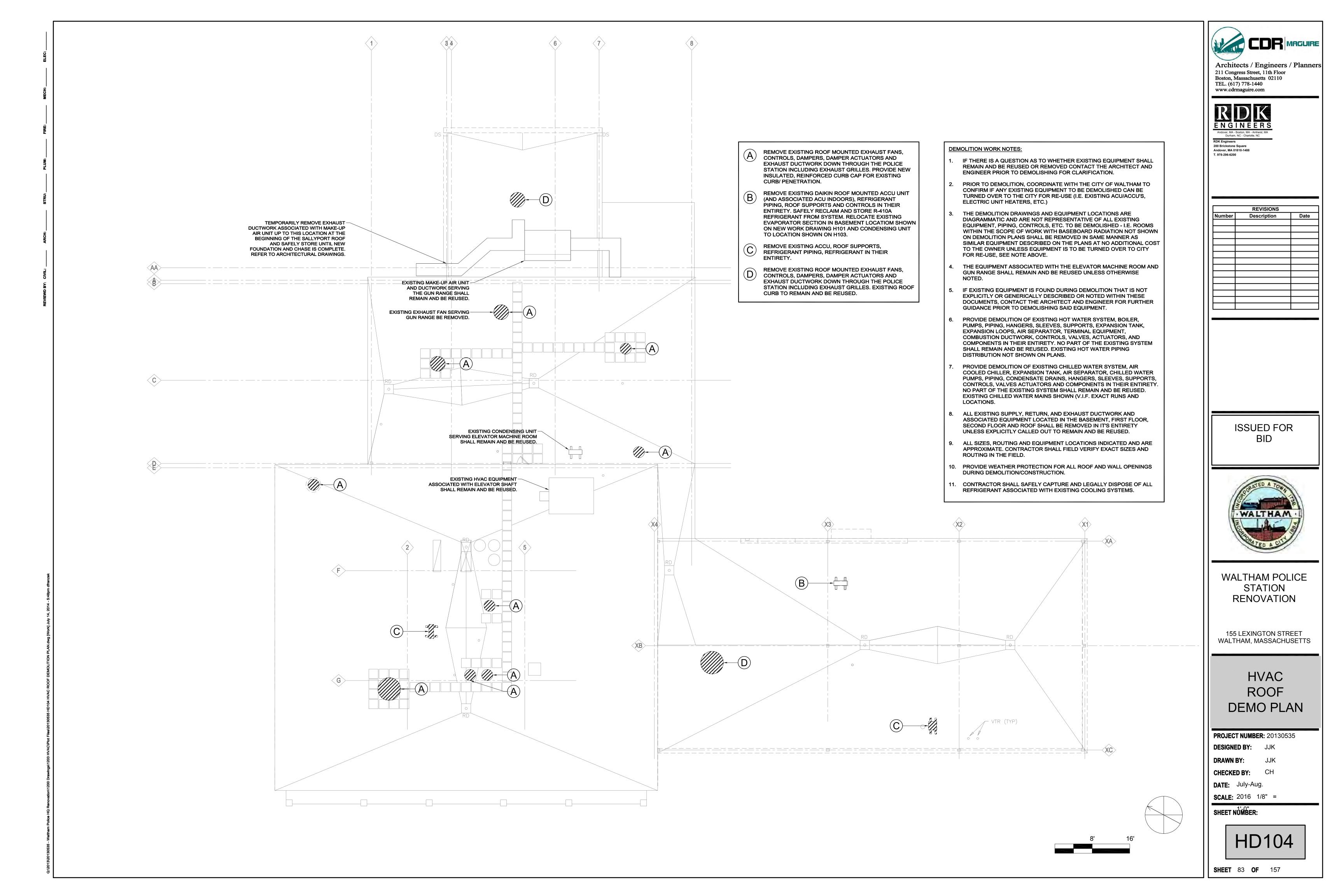


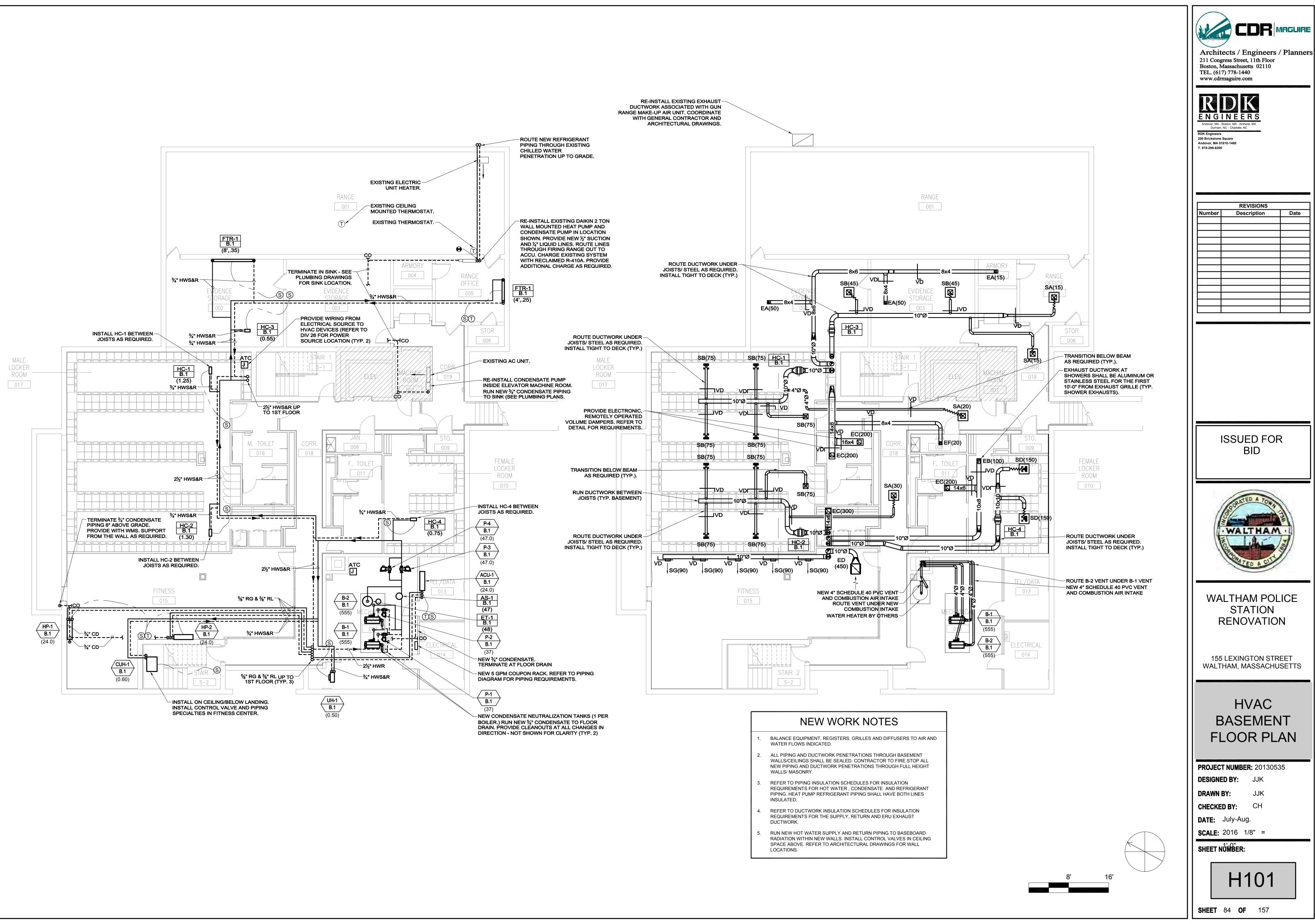


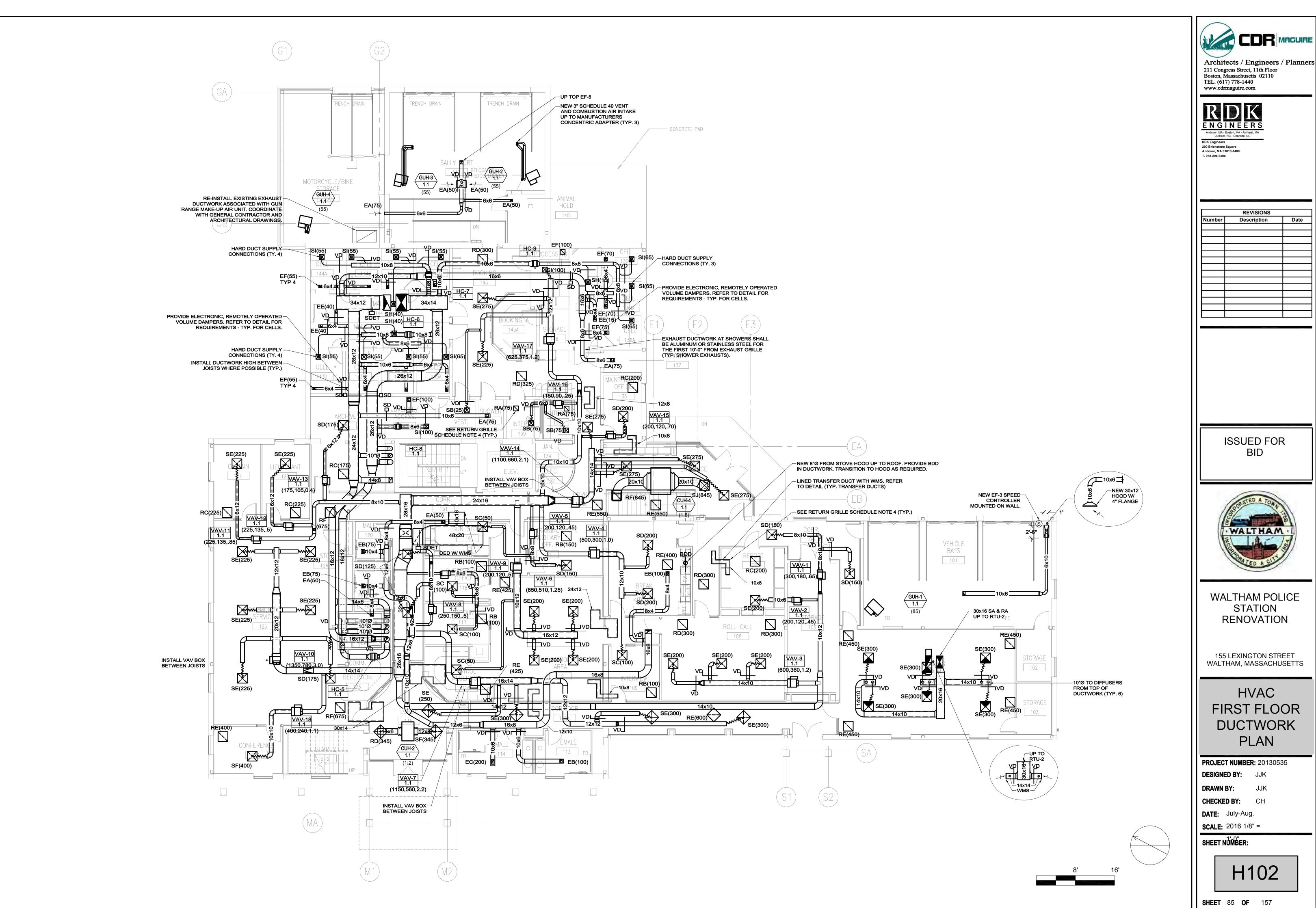


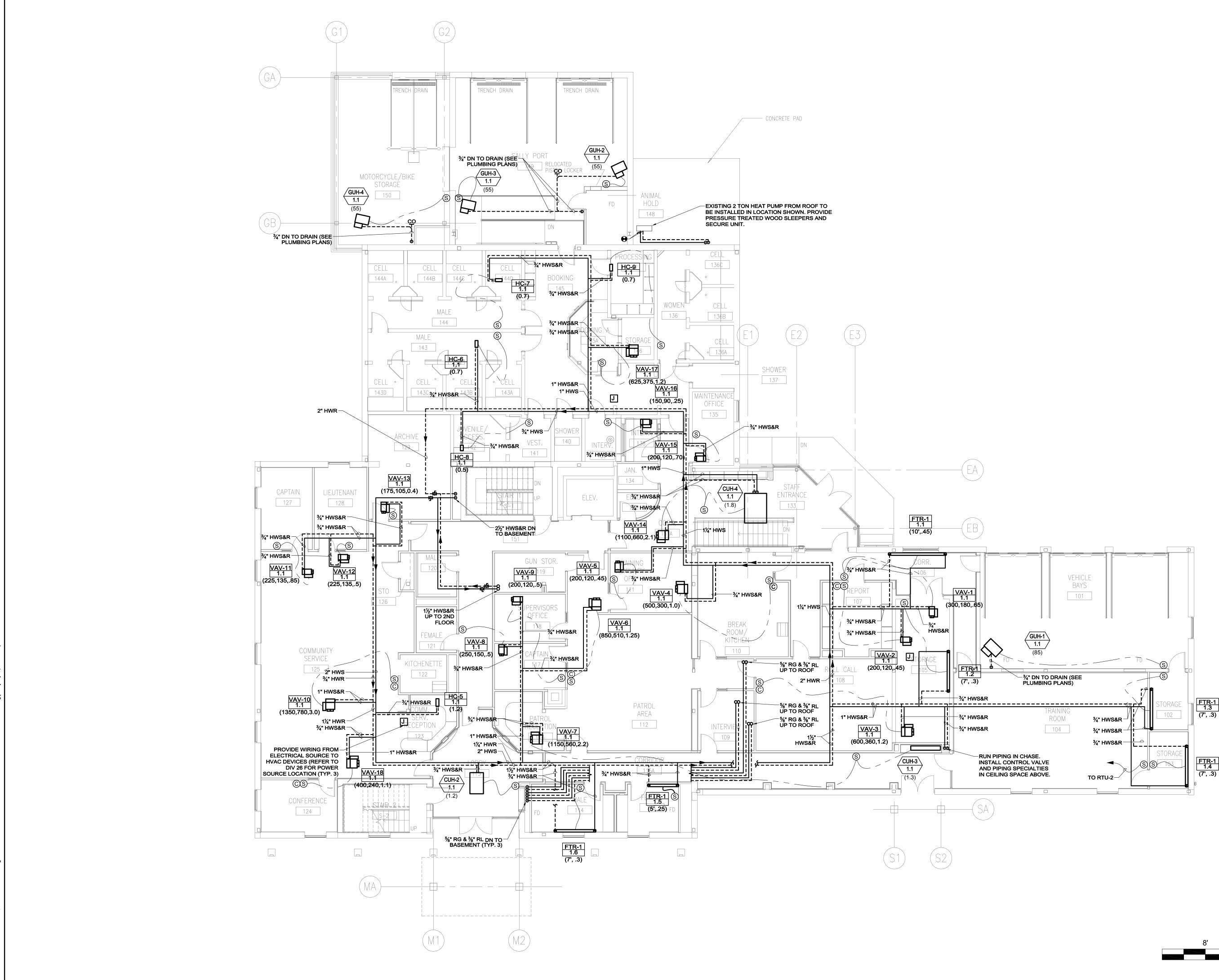






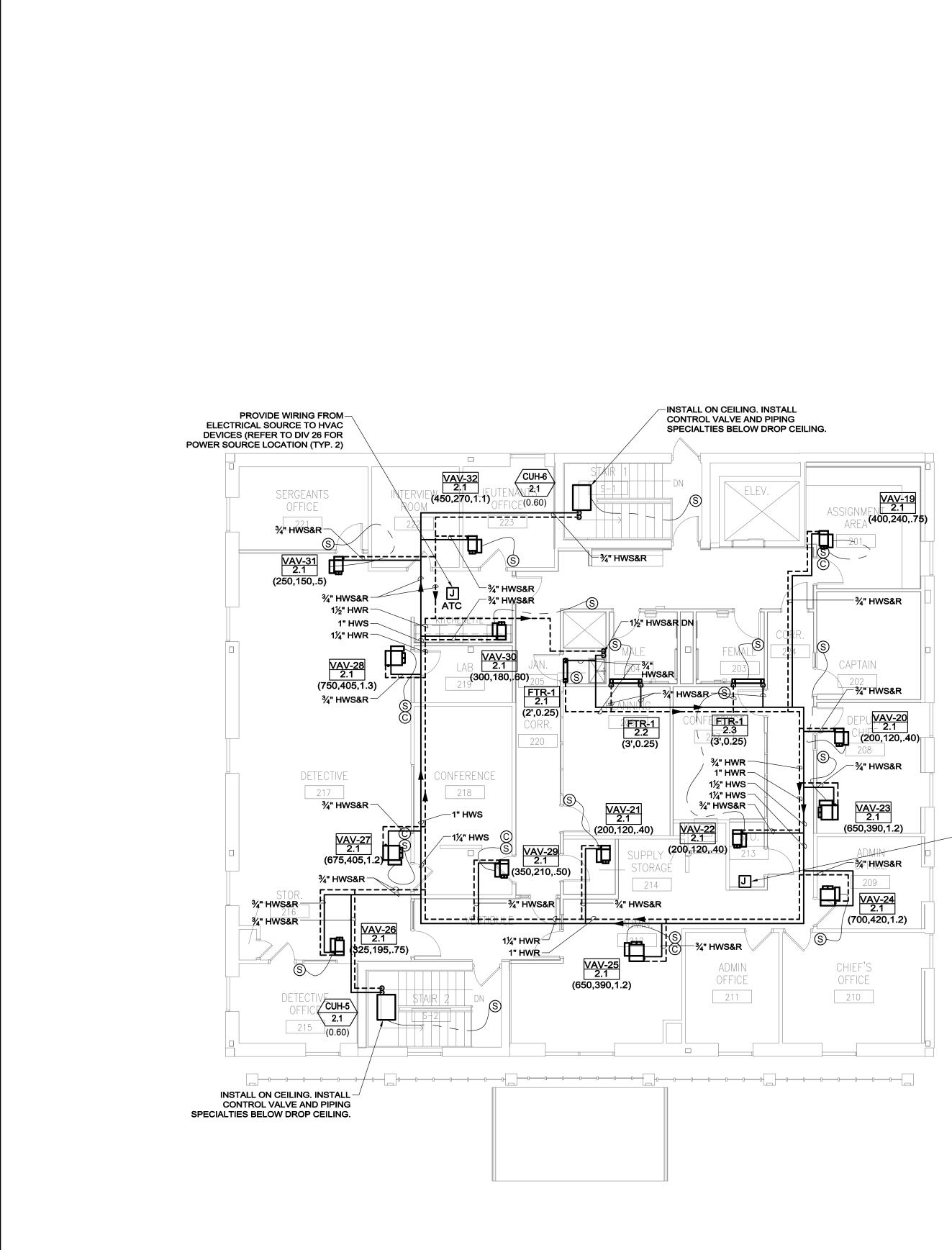




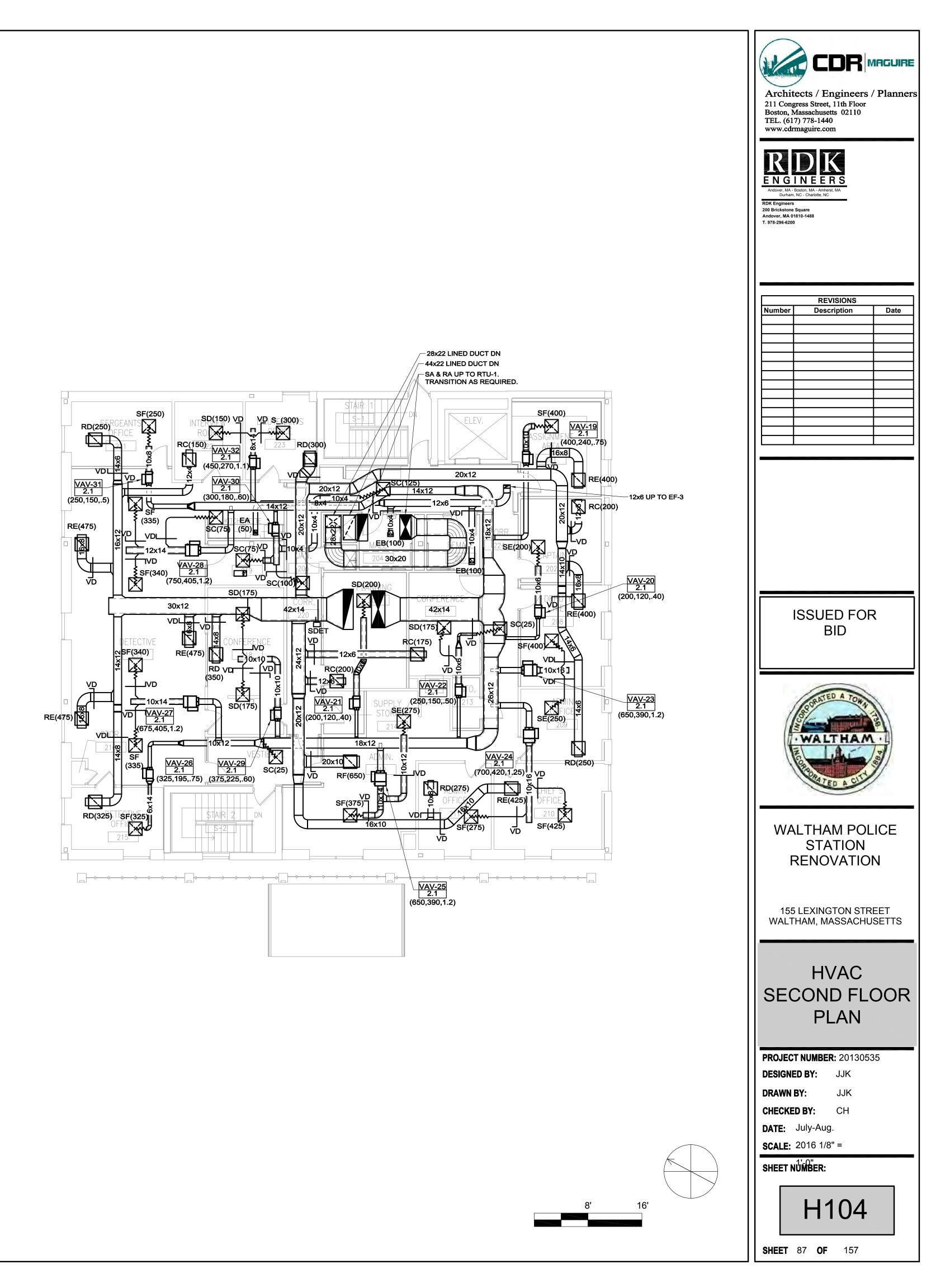


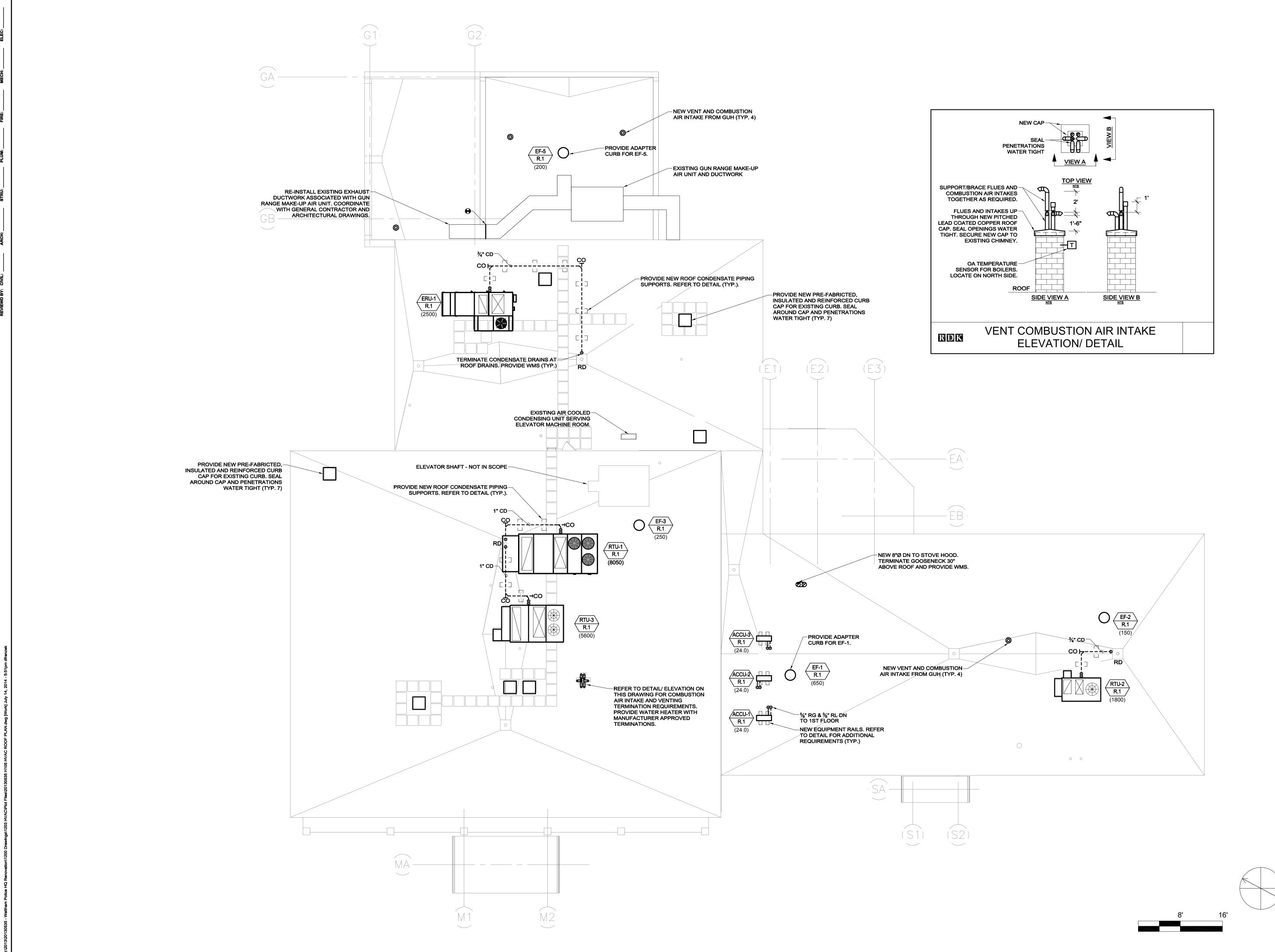
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|---|
| REVISIONS         Number       Description       Date   |
| ISSUED FOR<br>BID   |
| WALTHAM POLICE         STATION         RENOVATION         155 LEXINGTON STREET         WALTHAM, MASSACHUSETTS         HVAC                                |
| FIRST FLOOR<br>PIPING<br>PLAN<br>PROJECT NUMBER: 20130535<br>DESIGNED BY: JJK<br>DRAWN BY: JJK<br>CHECKED BY: CH<br>DATE: July-Aug.<br>SCALE: 2016 1/8" = |
| H103<br>Sheet 86 of 157   |

16'



--PROVIDE WIRING FROM ELECTRICAL SOURCE TO HVAC DEVICES (REFER TO DIV 26 FOR POWER SOURCE LOCATION (TYP. 2)



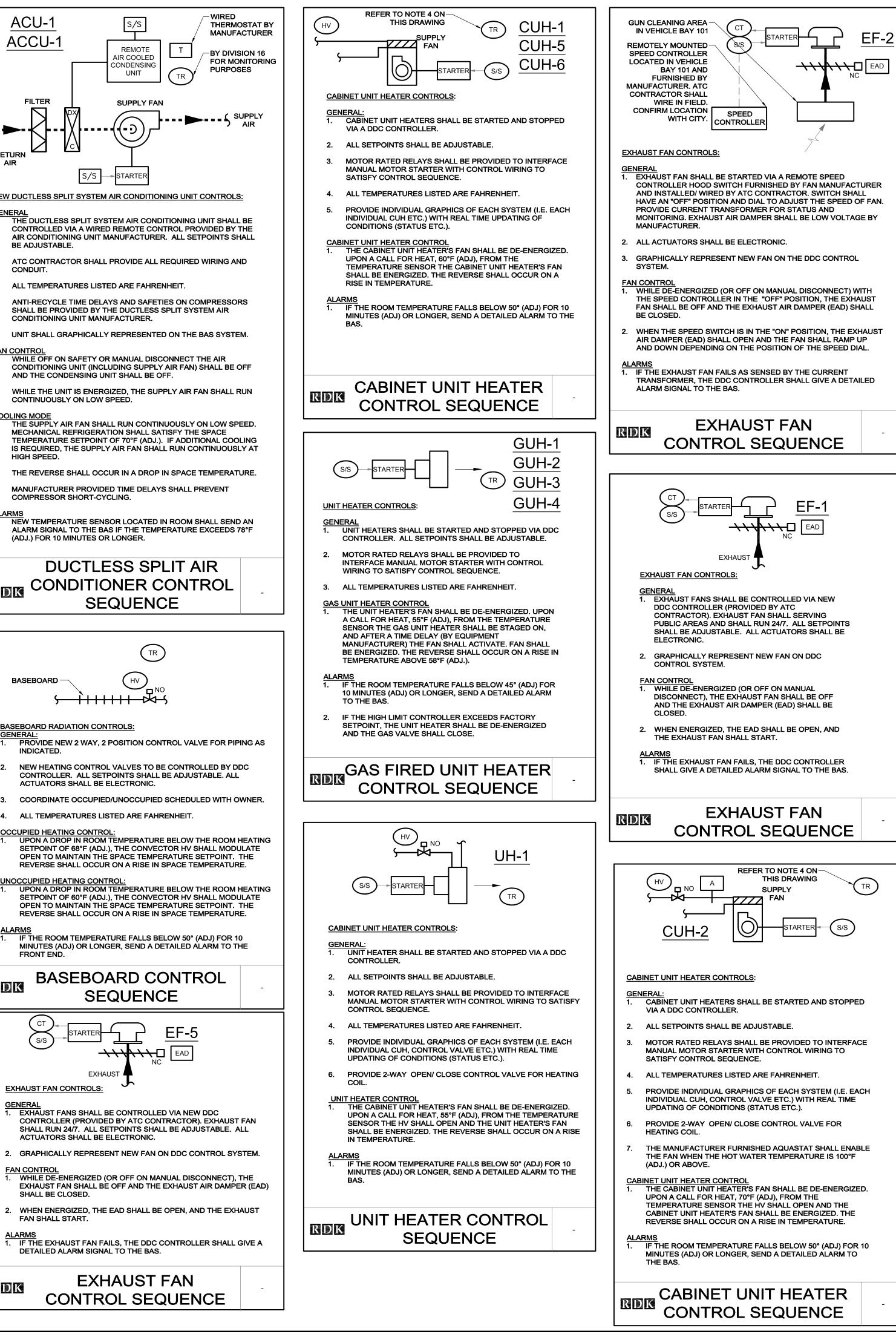




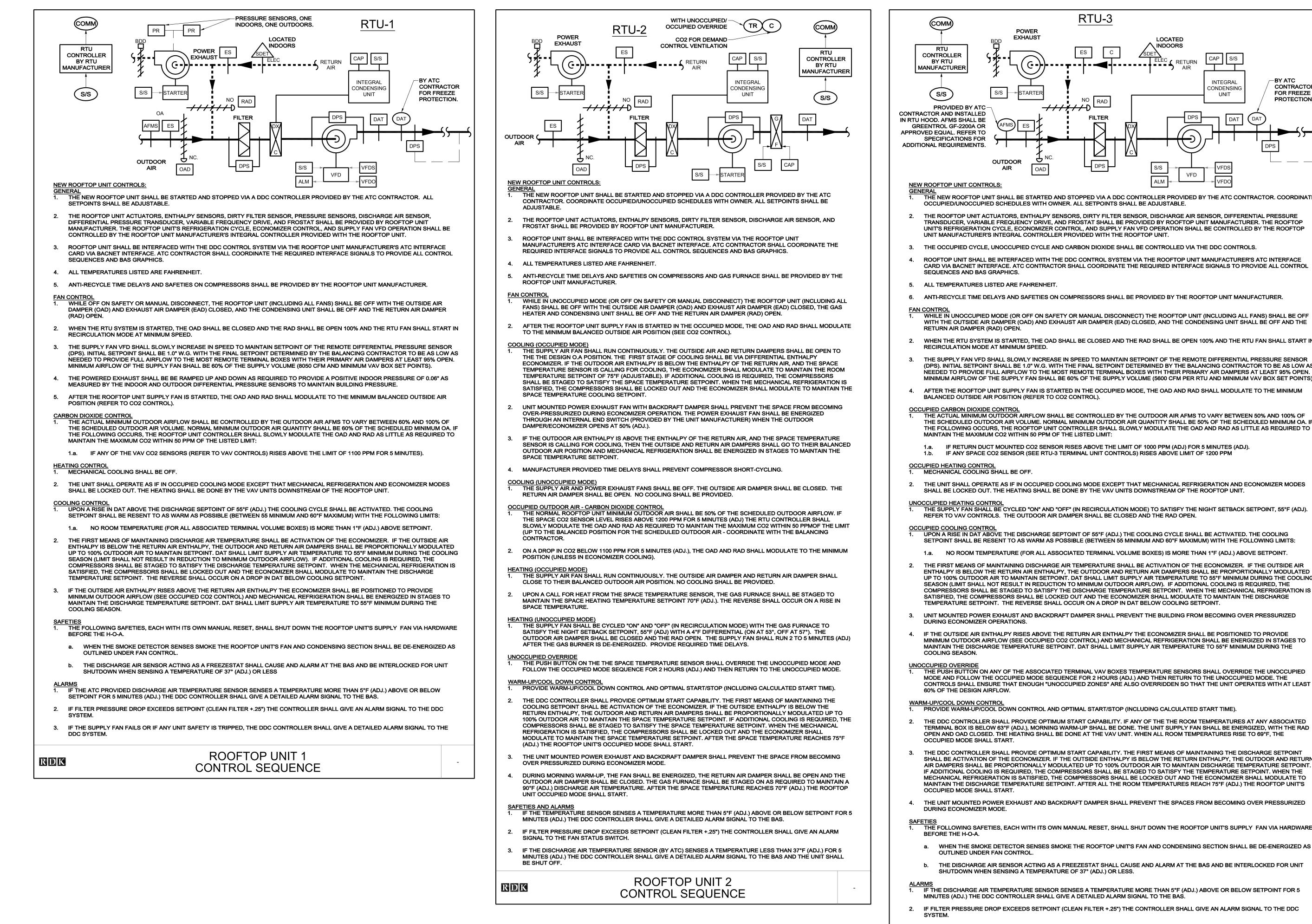
DETAILED ALARM SIGNAL TO THE BAS. EXHAUST FAN RDK

SHALL BE CLOSED.

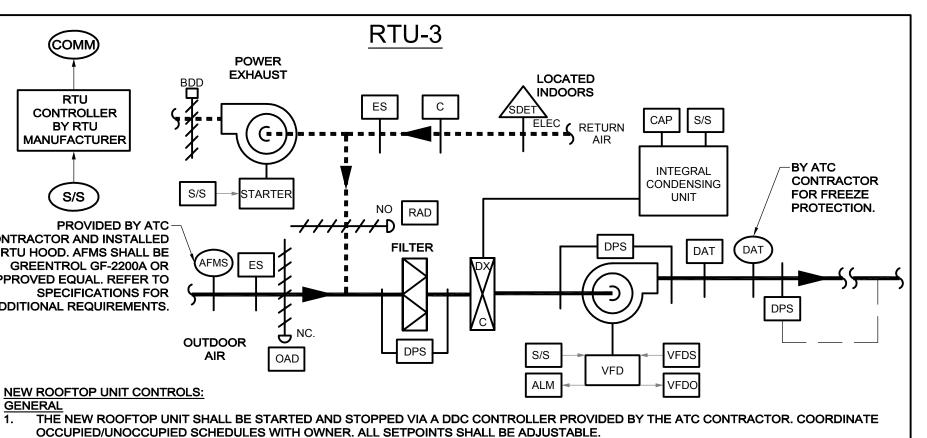
FAN SHALL START.



| ATC NOTES:<br>1. PROVIDE NEW DDC TEMPERATURE CONTROL SYSTEM PER DRAWINGS AND<br>SPECIFICATIONS. NEW DDC SYSTEM SHALL INTERFACE AND CONTROL ALL SYSTEMS ON<br>DRAWINGS AND IN SPECIFICATIONS. CONTRACTOR SHALL PROVIDE NEW DDC<br>CONTROLLERS AS REQUIRED TO SATISFY THE CONTROL SEQUENCES OUTLINED ON<br>AUTOMATIC CONTROL DRAWINGS.   |  |
|--|--|
| 2. PROVIDE INDIVIDUAL EQUIPMENT GRAPHICS WITH REAL TIME UPDATING OF CONDITIONS<br>(STATUS, TEMPERATURE, FLOWS, ETC) FOR ALL SYSTEMS WITHIN EACH CONTROL<br>SEQUENCE. PROVIDE THE CITY OF WALTHAM WITH 1 SERVICE TOOL LAPTOP COMPUTER<br>DEDICATED TO THE NEW DDC CONTROL SYSTEM - REFER TO ATC SPECIFICATIONS FOR<br>SERVICE TOOL REQUIREMENTS.  | Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
| 3. PROVIDE SECURITY ACCESS/PASSWORD PROGRAMMING FOR DDC CONTROL SYSTEM.<br>ALL ALARMS SHALL BE SENT TO THE DDC SYSTEM AND SHALL BE VIEWABLE WHEN<br>LOGGED ON FROM ANY COMPUTER WITH AN AUTHORIZED USER VIA THE INTERNET.  | RDK  |
| 4. PROVIDE STAINLESS STEEL WALL PLATE TEMPERATURE SENSOR IN ALL PUBLIC AREAS<br>(I.E. CORRIDORS, BATHROOMS, ETC.) AND IN THE CELLS.  | ENGINEERS<br>Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC  |
| <ol> <li>REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS AND TRAINING REQUIREMENTS.</li> <li>ALL NEW ROOM TEMPERATURE SENSORS SHALL BE MOUNTED AT 48" ABOVE FINISHED<br/>FLOOR UNLESS OTHERWISE INDICATED BY ARCHITECT.</li> </ol>  | RDK Engineers<br>200 Brickstone Square<br>Andover, MA 01810-1488<br>T. 978-296-6200  |
| 7. ALL ATC CONTROLS SHALL BE HARDWIRED. NO WIRELESS TECHNOLOGY SHALL BE<br>ALLOWED. ALL EXPOSED WIRING SHALL BE IN WIRE MOLD, NO CONDUIT SHALL BE USED IN<br>EXPOSED AREAS.  |  |
| 8. ON SITE TRAINING SHALL ALSO INCLUDE A MINIMUM OF 40 HOURS OF HANDS ON<br>INSTRUCTION GEARED TOWARD OPERATION AND MAINTENANCE OF THE SYSTEMS. PRIOR<br>TO TRAINING, THE NECESSARY LESSON PLANS, TRAINING DOCUMENTS, HANDOUTS, ETC.<br>SHALL BE PROVIDED WITH THE CURRICULUM OUTLINE, WHICH SHALL INCLUDE AS A<br>MINIMUM:  | REVISIONS  |
| 8.a.INITIAL SESSION:8 HRS8.b.2ND SESSION, 2 WEEKS LATER8 HRS8.c.3RD SESSION, 2 WEEKS LATER8 HRS8.d.4TH SESSION, 1 MONTH LATER8 HRS8.e.REMAINING 8 HRS TO BE SCHEDULED BY AS NEEDED   | Number     Description     Date  |
| 9. THE CONTRACTOR SHALL CARRY 24 HOURS OF ADDITIONAL ON-SITE PROGRAMMING<br>(ABOVE BASE CONTRACT) IN THEIR BID PROPOSAL TO ALLOW FOR FIELD MODIFICATIONS<br>THAT MAY BE NEEDED TO OPTIMIZE THE VARIOUS SYSTEMS TO FULLY CONFORM TO THE<br>REQUIREMENTS OF THE VARIOUS SYSTEMS TO FULLY CONFORM TO THE REQUIREMENTS<br>OF THE SPECIFICATIONS, SEQUENCE OF CONTROLS AND WORK WITH THE ACTUAL<br>OPERATING CONDITIONS AS INSTALLED. THIS WORK SHALL BE DONE AT NO ADDITIONAL<br>COST. |  |
| 10. SUBMIT ACCEPTANCE TESTING PLAN, PRE-FUNCTIONAL PERFORMANCE TEST<br>FORMS/NARRATIVES AND FUNCTIONAL TEST FORMS/NARRATIVES TO THE ENGINEER FOR<br>REVIEW AND APPROVAL.   |  |
| 11. REFER TO FLOOR PLANS FOR ELECTRICAL SOURCES TO SERVE MISCELLANEOUS ATC DEVICES - COORDINATE WITH DIVISION 16.  |  |
| RDK ATC NOTES -  |  |
| ELEC CT EAD<br>S/S STARTER EF-3<br>ELEC EAD<br>EXHAUST   | ISSUED FOR   |
| <u>EXHAUST FAN CONTROLS:</u> <u>GENERAL</u> 1. EXHAUST FAN SHALL BE CONTROLLED VIA NEW DDC CONTROLLER (PROVIDED BY ATC CONTRACTOR).  | BID  |
| <ol> <li>ALL SETPOINTS SHALL BE ADJUSTABLE. ALL ACTUATORS SHALL BE ELECTRONIC.</li> <li>EF-3 SHALL BE CONTROLLED/INTERFACED WITH THE LIGHTING MOTION SENSORS.</li> </ol>   |  |
| <ol> <li>COORDINATE OCCUPANCY SENSOR WITH DIVISION 16.</li> <li>GRAPHICALLY REPRESENT NEW FAN ON DDC CONTROL SYSTEM.</li> </ol>  | Segerated A TOWN   |
| FAN CONTROL         1. WHILE DE-ENERGIZED (OR OFF ON MANUAL DISCONNECT), THE EXHAUST FAN         SHALL BE OFF AND THE EXHAUST AIR DAMPER (EAD) SHALL BE CLOSED.  | WALTHAM  |
| <ol> <li>WHEN AN OS SENSOR IS TRIPPED, THE EAD SHALL OPEN, AND THE EXHAUST FAN<br/>SHALL START.</li> <li><u>ALARMS</u></li> <li>1. IF THE EXHAUST FAN FAILS, THE DDC CONTROLLER SHALL GIVE A DETAILED ALARM<br/>SIGNAL TO THE EXISTING BAS.</li> </ol>   | A CITY SE  |
| ROOF MOUNTED EXHAUST FAN<br>CONTROL SEQUENCE   | WALTHAM POLICE<br>STATION<br>RENOVATION  |
|  | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
|  | HVAC<br>AUTOMATIC  |
|  | TERMPERATURE<br>CONTROLS   |
|  | PROJECT NUMBER: 20130535<br>DESIGNED BY: JJK   |
|  | DRAWN BY: JJK  |
|  | CHECKED BY: CH<br>DATE: July-Aug.  |
|  | SCALE: 2016 N.T.S.<br>SHEET NUMBER:  |
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|  | H600<br>Sheet 89 of 157  |
|  | L  |



- DDC SYSTEM.
- RDK



THE ROOFTOP UNIT ACTUATORS, ENTHALPY SENSORS, DIRTY FILTER SENSOR, DISCHARGE AIR SENSOR, DIFFERENTIAL PRESSURE TRANSDUCER, VARIABLE FREQUENCY DRIVE, AND FROSTAT SHALL BE PROVIDED BY ROOFTOP UNIT MANUFACTURER. THE ROOFTOP UNIT'S REFRIGERATION CYCLE, ECONOMIZER CONTROL, AND SUPPLY FAN VFD OPERATION SHALL BE CONTROLLED BY THE ROOFTOP UNIT MANUFACTURER'S INTEGRAL CONTROLLER PROVIDED WITH THE ROOFTOP UNIT.

3. THE OCCUPIED CYCLE, UNOCCUPIED CYCLE AND CARBON DIOXIDE SHALL BE CONTROLLED VIA THE DDC CONTROLS.

ROOFTOP UNIT SHALL BE INTERFACED WITH THE DDC CONTROL SYSTEM VIA THE ROOFTOP UNIT MANUFACTURER'S ATC INTERFACE CARD VIA BACNET INTERFACE. ATC CONTRACTOR SHALL COORDINATE THE REQUIRED INTERFACE SIGNALS TO PROVIDE ALL CONTROL

S/S

6. ANTI-RECYCLE TIME DELAYS AND SAFETIES ON COMPRESSORS SHALL BE PROVIDED BY THE ROOFTOP UNIT MANUFACTURER.

WHILE IN UNOCCUPIED MODE (OR OFF ON SAFETY OR MANUAL DISCONNECT) THE ROOFTOP UNIT (INCLUDING ALL FANS) SHALL BE OFF WITH THE OUTSIDE AIR DAMPER (OAD) AND EXHAUST AIR DAMPER (EAD) CLOSED, AND THE CONDENSING UNIT SHALL BE OFF AND THE

WHEN THE RTU SYSTEM IS STARTED, THE OAD SHALL BE CLOSED AND THE RAD SHALL BE OPEN 100% AND THE RTU FAN SHALL START IN

THE SUPPLY FAN VFD SHALL SLOWLY INCREASE IN SPEED TO MAINTAIN SETPOINT OF THE REMOTE DIFFERENTIAL PRESSURE SENSOR (DPS). INITIAL SETPOINT SHALL BE 1.0" W.G. WITH THE FINAL SETPOINT DETERMINED BY THE BALANCING CONTRACTOR TO BE AS LOW AS NEEDED TO PROVIDE FULL AIRFLOW TO THE MOST REMOTE TERMINAL BOXES WITH THEIR PRIMARY AIR DAMPERS AT LEAST 95% OPEN.

MINIMUM AIRFLOW OF THE SUPPLY FAN SHALL BE 60% OF THE SUPPLY VOLUME (5600 CFM PER RTU AND MINIMUM VAV BOX SET POINTS). AFTER THE ROOFTOP UNIT SUPPLY FAN IS STARTED IN THE OCCUPIED MODE, THE OAD AND RAD SHALL MODULATE TO THE MINIMUM BALANCED OUTSIDE AIR POSITION (REFER TO CO2 CONTROL).

THE ACTUAL MINIMUM OUTDOOR AIRFLOW SHALL BE CONTROLLED BY THE OUTDOOR AIR AFMS TO VARY BETWEEN 50% AND 100% OF THE SCHEDULED OUTDOOR AIR VOLUME. NORMAL MINIMUM OUTDOOR AIR QUANTITY SHALL BE 50% OF THE SCHEDULED MINIMUM OA. IF THE FOLLOWING OCCURS, THE ROOFTOP UNIT CONTROLLER SHALL SLOWLY MODULATE THE OAD AND RAD AS LITTLE AS REQUIRED TO MAINTAIN THE MAXIMUM CO2 WITHIN 50 PPM OF THE LISTED LIMIT:

1.a. IF RETURN DUCT MOUNTED CO2 SENSOR RISES ABOVE THE LIMIT OF 1000 PPM (ADJ) FOR 5 MINUTES (ADJ). 1.b. IF ANY SPACE CO2 SENSOR (SEE RTU-3 TERMINAL UNIT CONTROLS) RISES ABOVE LIMIT OF 1200 PPM

THE UNIT SHALL OPERATE AS IF IN OCCUPIED COOLING MODE EXCEPT THAT MECHANICAL REFRIGERATION AND ECONOMIZER MODES SHALL BE LOCKED OUT. THE HEATING SHALL BE DONE BY THE VAV UNITS DOWNSTREAM OF THE ROOFTOP UNIT.

THE SUPPLY FAN SHALL BE CYCLED "ON" AND "OFF" (IN RECIRCULATION MODE) TO SATISFY THE NIGHT SETBACK SETPOINT, 55°F (ADJ). REFER TO VAV CONTROLS. THE OUTDOOR AIR DAMPER SHALL BE CLOSED AND THE RAD OPEN.

UPON A RISE IN DAT ABOVE THE DISCHARGE SEPTOINT OF 55°F (ADJ.) THE COOLING CYCLE SHALL BE ACTIVATED. THE COOLING SETPOINT SHALL BE RESENT TO AS WARM AS POSSIBLE (BETWEEN 55 MINIMUM AND 60°F MAXIMUM) WITH THE FOLLOWING LIMITS: 1.a. NO ROOM TEMPERATURE (FOR ALL ASSOCIATED TERMINAL VOLUME BOXES) IS MORE THAN 1°F (ADJ.) ABOVE SETPOINT.

THE FIRST MEANS OF MAINTAINING DISCHARGE AIR TEMPERATURE SHALL BE ACTIVATION OF THE ECONOMIZER. IF THE OUTSIDE AIR ENTHALPY IS BELOW THE RETURN AIR ENTHALPY, THE OUTDOOR AND RETURN AIR DAMPERS SHALL BE PROPORTIONALLY MODULATED UP TO 100% OUTDOOR AIR TO MAINTAIN SETPOINT. DAT SHALL LIMIT SUPPLY AIR TEMPERATURE TO 55°F MINIMUM DURING THE COOLING SEASON (LIMIT SHALL NOT RESULT IN REDUCTION TO MINIMUM OUTDOOR AIRFLOW). IF ADDITIONAL COOLING IS REQUIRED, THE COMPRESSORS SHALL BE STAGED TO SATISFY THE DISCHARGE TEMPERATURE SETPOINT. WHEN THE MECHANICAL REFRIGERATION IS SATISFIED, THE COMPRESSORS SHALL BE LOCKED OUT AND THE ECONOMIZER SHALL MODULATE TO MAINTAIN THE DISCHARGE

TEMPERATURE SETPOINT. THE REVERSE SHALL OCCUR ON A DROP IN DAT BELOW COOLING SETPOINT. UNIT MOUNTED POWER EXHAUST AND BACKDRAFT DAMPER SHALL PREVENT THE BUILDING FROM BECOMING OVER PRESSURIZED

IF THE OUTSIDE AIR ENTHALPY RISES ABOVE THE RETURN AIR ENTHALPY THE ECONOMIZER SHALL BE POSITIONED TO PROVIDE MINIMUM OUTDOOR AIRFLOW (SEE OCCUPIED CO2 CONTROL) AND MECHANICAL REFRIGERATION SHALL BE ENERGIZED IN STAGES TO MAINTAIN THE DISCHARGE TEMPERATURE SETPOINT. DAT SHALL LIMIT SUPPLY AIR TEMPERATURE TO 55°F MINIMUM DURING THE

THE PUSH BUTTON ON ANY OF THE ASSOCIATED TERMINAL VAV BOXES TEMPERATURE SENSORS SHALL OVERRIDE THE UNOCCUPIED MODE AND FOLLOW THE OCCUPIED MODE SEQUENCE FOR 2 HOURS (ADJ.) AND THEN RETURN TO THE UNOCCUPIED MODE. THE

PROVIDE WARM-UP/COOL DOWN CONTROL AND OPTIMAL START/STOP (INCLUDING CALCULATED START TIME).

THE DDC CONTROLLER SHALL PROVIDE OPTIMUM START CAPABILITY. IF ANY OF THE THE ROOM TEMPERATURES AT ANY ASSOCIATED TERMINAL BOX IS BELOW 63°F (ADJ.), MORNING WARM-UP SHALL BE DONE. THE UNIT SUPPLY FAN SHALL BE ENERGIZED, WITH THE RAD OPEN AND OAD CLOSED. THE HEATING SHALL BE DONE AT THE VAV UNIT. WHEN ALL ROOM TEMPERATURES RISE TO 69°F, THE

THE DDC CONTROLLER SHALL PROVIDE OPTIMUM START CAPABILITY. THE FIRST MEANS OF MAINTAINING THE DISCHARGE SETPOINT SHALL BE ACTIVATION OF THE ECONOMIZER. IF THE OUTSIDE ENTHALPY IS BELOW THE RETURN ENTHALPY, THE OUTDOOR AND RETURN AIR DAMPERS SHALL BE PROPORTIONALLY MODULATED UP TO 100% OUTDOOR AIR TO MAINTAIN DISCHARGE TEMPERATURE SETPOINT. IF ADDITIONAL COOLING IS REQUIRED, THE COMPRESSORS SHALL BE STAGED TO SATISFY THE TEMPERATURE SETPOINT. WHEN THE MECHANICAL REFRIGERATION IS SATISFIED, THE COMPRESSORS SHALL BE LOCKED OUT AND THE ECONOMIZER SHALL MODULATE TO MAINTAIN THE DISCHARGE TEMPERATURE SETPOINT. AFTER ALL THE ROOM TEMPERATURES REACH 75°F (ADJ.) THE ROOFTOP UNIT'S

THE UNIT MOUNTED POWER EXHAUST AND BACKDRAFT DAMPER SHALL PREVENT THE SPACES FROM BECOMING OVER PRESSURIZED

SAFETIES 1. THE FOLLOWING SAFETIES, EACH WITH ITS OWN MANUAL RESET, SHALL SHUT DOWN THE ROOFTOP UNIT'S SUPPLY FAN VIA HARDWARE

WHEN THE SMOKE DETECTOR SENSES SMOKE THE ROOFTOP UNIT'S FAN AND CONDENSING SECTION SHALL BE DE-ENERGIZED AS

THE DISCHARGE AIR SENSOR ACTING AS A FREEZESTAT SHALL CAUSE AND ALARM AT THE BAS AND BE INTERLOCKED FOR UNIT SHUTDOWN WHEN SENSING A TEMPERATURE OF 37° (ADJ.) OR LESS.

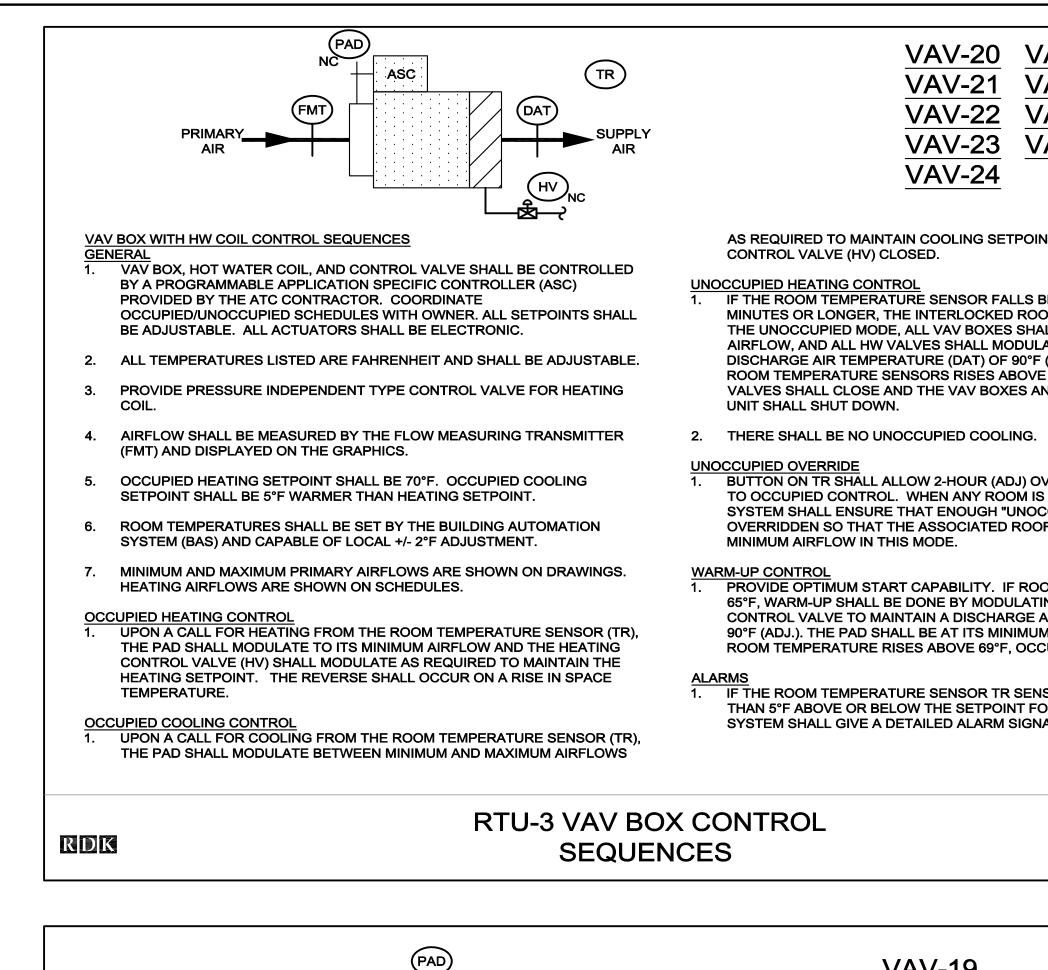
IF THE DISCHARGE AIR TEMPERATURE SENSOR SENSES A TEMPERATURE MORE THAN 5°F (ADJ.) ABOVE OR BELOW SETPOINT FOR 5 MINUTES (ADJ.) THE DDC CONTROLLER SHALL GIVE A DETAILED ALARM SIGNAL TO THE BAS.

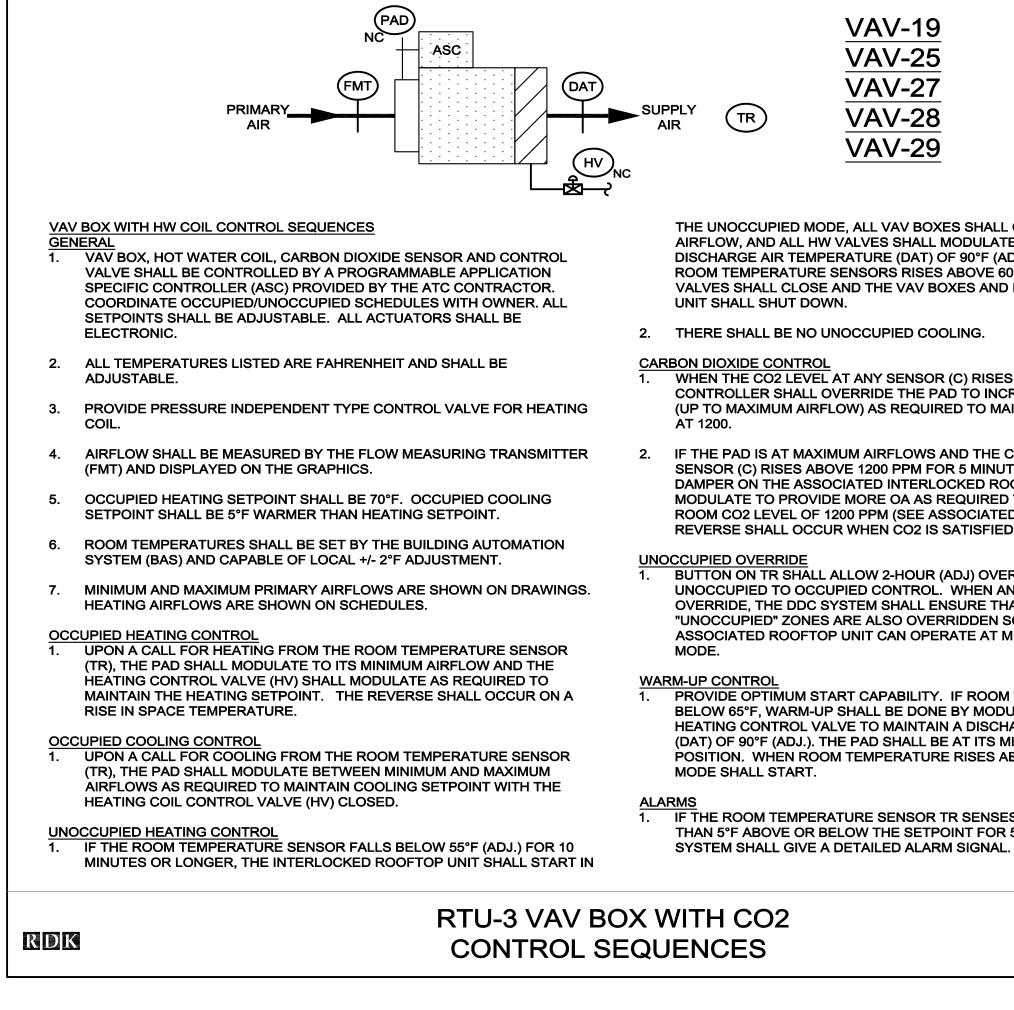
2. IF FILTER PRESSURE DROP EXCEEDS SETPOINT (CLEAN FILTER +.25") THE CONTROLLER SHALL GIVE AN ALARM SIGNAL TO THE DDC

3. IF THE SUPPLY FAN FAILS OR IF ANY UNIT SAFETY IS TRIPPED, THE DDC CONTROLLER SHALL GIVE A DETAILED ALARM SIGNAL TO THE

**ROOFTOP UNIT 3** CONTROL SEQUENCE

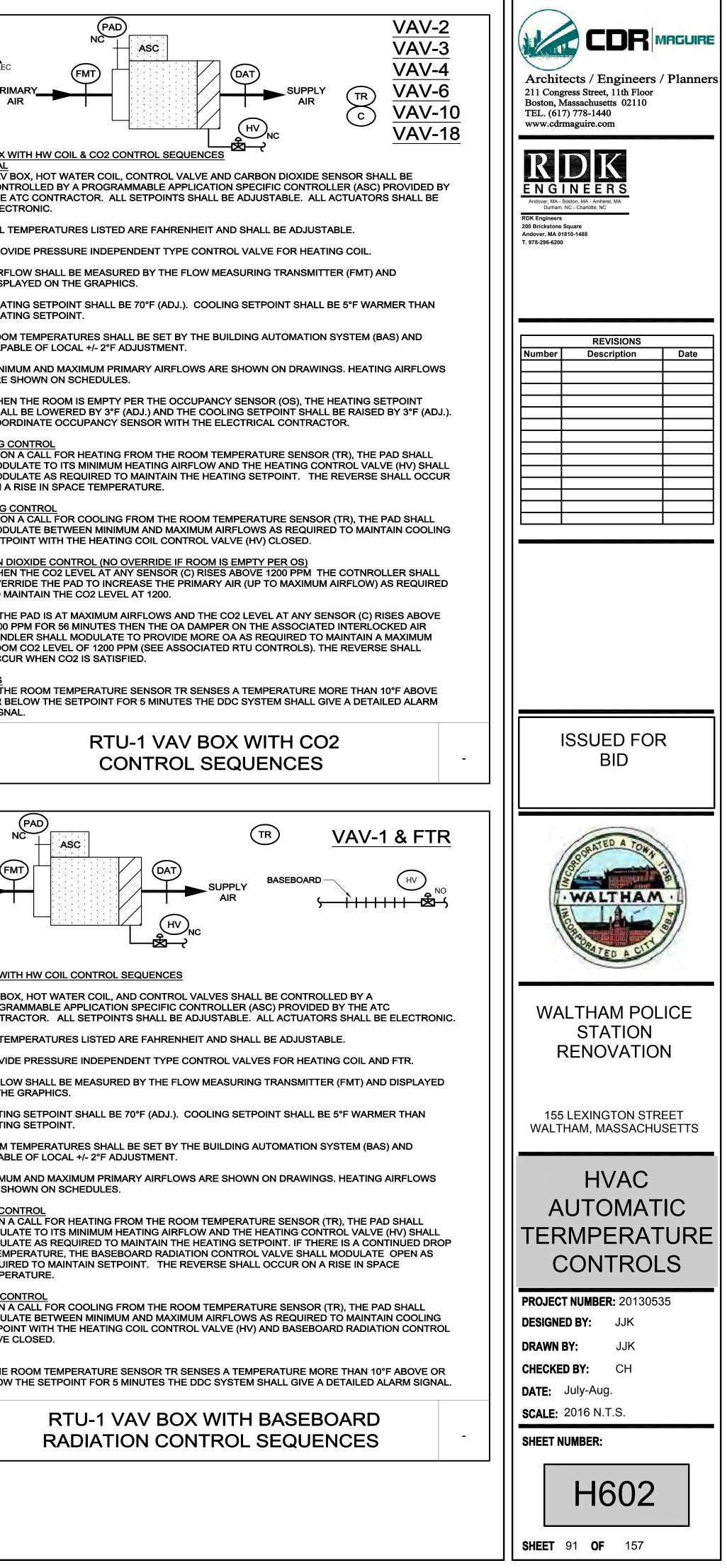
| 211 Congr                          | ects / Engineers / Planners<br>ess Street, 11th Floor<br>assachusetts 02110 |
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| TEL. (617)                         | ) 778-1440<br>haguire.com   |
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| <u>ENGI</u>                        | <b>D</b> IN<br>N E E R S  |
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| Andover, MA 018<br>T. 978-296-6200 |   |
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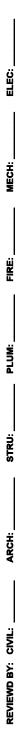




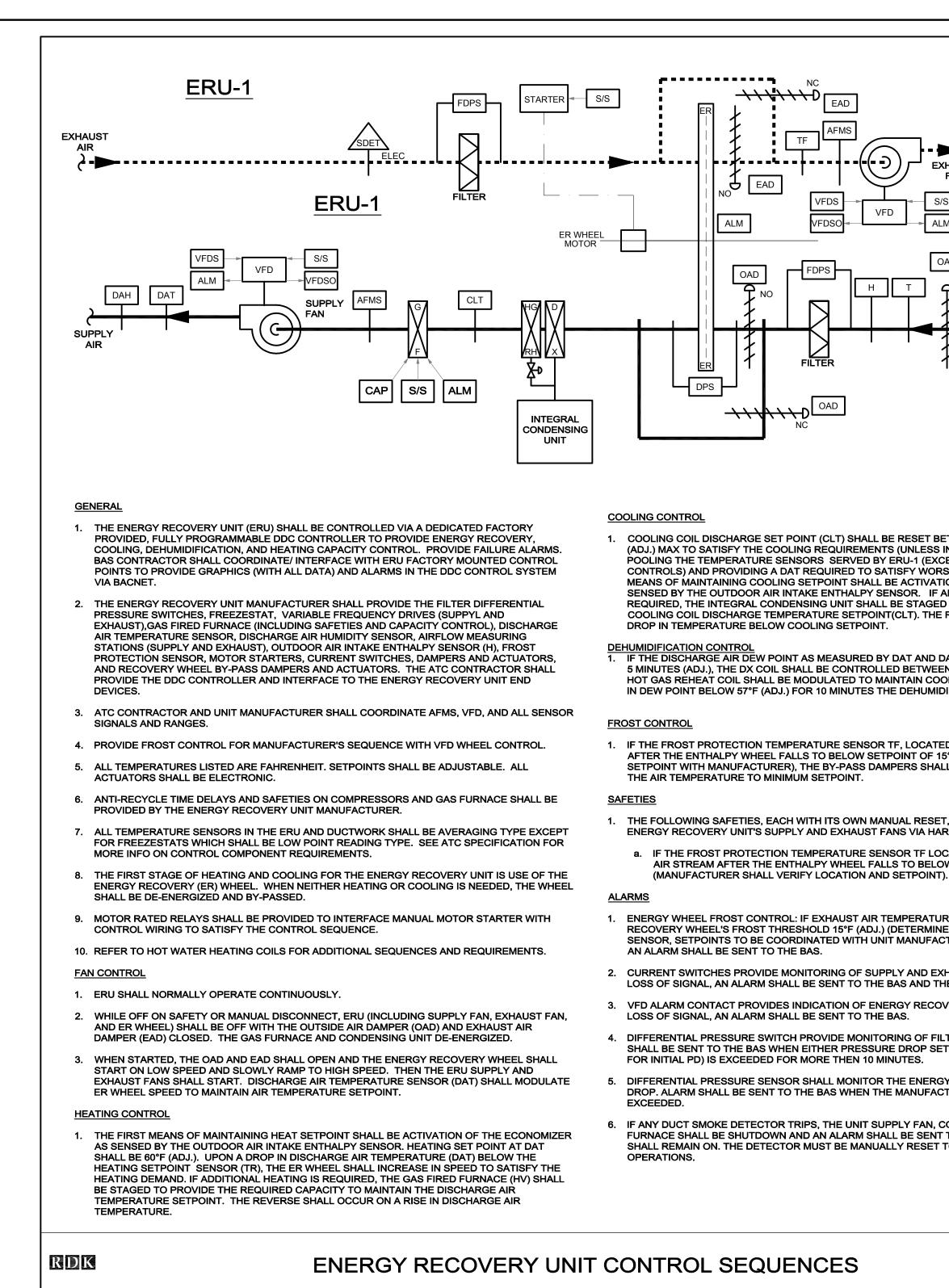
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|--|---------------------------------|---|---------------------------------|---------------------------|
| AV-26  |                                 |   | <u>VAV-5</u>                    |                           |
| AV-30  |                                 |   | ) <u>VAV-8</u>                  | OS                        |
| AV-31  |                                 |   | VAV-9                           | ELEC                      |
| AV-32  | PRIMAR                          |   | VAV-11                          | PRI                       |
|  | AIR                             |   | VAV-12                          | /                         |
|  |                                 |   | VAV-13                          |                           |
|  |                                 |   | VAV-15                          | VAV BOX                   |
| IT WITH THE HEATING COIL   |                                 |   | VAV-16                          | GENERAL<br>1. VAV         |
|  |                                 |   | VAV-10<br>VAV-17                | CON                       |
| BELOW 55°F (ADJ.) FOR 10   | VAV BOX WITH H<br>GENERAL       | IW COIL CONTROL SEQUENCES   |                                 | ELEC                      |
| DEFTOP UNIT SHALL START IN<br>LL OPEN TO THEIR MINIMUM                   | 1. VAV BOX, H                   | IOT WATER COIL, AND CONTROL VALVE SHALL BE CONTR<br>ON SPECIFIC CONTROLLER (ASC) PROVIDED BY THE ATC    |                                 | 2. ALL 1                  |
| ATE TO MAINTAIN A<br>(ADJ.). WHEN EACH OF THE                            |                                 | DJUSTABLE. ALL ACTUATORS SHALL BE ELECTRONIC.   | CONTRACTOR. ALL OL IT ONTO      | 3. PRO                    |
| E 60°F (ADJ.), THEN THE<br>ND INTERLOCKED ROOFTOP                        | 2. ALL TEMPE                    | RATURES LISTED ARE FAHRENHEIT AND SHALL BE ADJU   | STABLE.                         | 4. AIRF                   |
|  | 3. PROVIDE PR                   | RESSURE INDEPENDENT TYPE CONTROL VALVE FOR HEA  | ATING COIL.                     | DISP                      |
|  |                                 | HALL BE MEASURED BY THE FLOW MEASURING TRANSM   | ITTER (FMT) AND DISPLAYED ON    | 5. HEAT                   |
| VERRIDE FROM UNOCCUPIED  | THE GRAPH                       |   |                                 | 6. ROO                    |
| IN THIS OVERRIDE, THE DDC<br>CUPIED" ZONES ARE ALSO                      | 5. HEATING SE<br>SETPOINT.      | ETPOINT SHALL BE 70°F (ADJ.). COOLING SETPOINT SHAL   | LL BE 5°F WARMER THAN HEATING   | CAPA                      |
| FTOP UNIT CAN OPERATE AT   |                                 | PERATURES SHALL BE SET BY THE BUILDING AUTOMATIC  | ON SYSTEM (BAS) AND CAPABLE OF  | 7. MININ<br>ARE           |
|  |                                 |   |                                 | 8. WHE                    |
| OM TEMPERATURE IS BELOW<br>NG THE HW HEATING<br>AIR TEMPERATURE (DAT) OF | SHOWN ON                        | ND MAXIMUM PRIMARY AIRFLOWS ARE SHOWN ON DRAW<br>I SCHEDULES.   |                                 | SHAL<br>COO               |
| A HEATING POSITION. WHEN<br>CUPIED MODE SHALL START.                     | LOWERED E                       | ROOM IS EMPTY PER THE OCCUPANCY SENSOR (OS), TH<br>BY 3°F (ADJ.) AND THE COOLING SETPOINT SHALL BE RAI  |                                 | HEATING (<br>1. UPON      |
|  |                                 | SY SENSOR WITH THE ELECTRICAL CONTRACTOR.   |                                 | MOD<br>MOD                |
| SES A TEMPERATURE MORE   | HEATING CONTR<br>1. UPON A CAI  | <u>COL</u><br>LL FOR HEATING FROM THE ROOM TEMPERATURE SENS   | OR (TR), THE PAD SHALL MODULATE | ON A                      |
| AL.  | TO ITS MINI                     | MUM HEATING AIRFLOW AND THE HEATING CONTROL VA  | ALVE (HV) SHALL MODULATE AS     |                           |
|  | TEMPERAT                        |   |                                 | 1. UPON<br>MOD            |
|  |                                 | <u>ROL</u><br>LL FOR COOLING FROM THE ROOM TEMPERATURE SENS   |                                 | SETF                      |
|  | MODULATE                        | BETWEEN MINIMUM AND MAXIMUM AIRFLOWS AS REQUI   |                                 | <u>CARBON E</u><br>1. WHE |
| _  |                                 | WITH THE HEATING COIL CONTROL VALVE (HV) CLOSED.  |                                 | OVEF<br>TO M              |
|  |                                 | M TEMPERATURE SENSOR TR SENSES A TEMPERATURE  |                                 | 2. IF TH                  |
|  | BELOW THE                       | E SETPOINT FOR 5 MINUTES THE DDC SYSTEM SHALL GIV   | /E A DETAILED ALARM SIGNAL.     | 1200<br>HANI              |
|  |                                 | RTU-1 VAV BOX CONTI   | ROI                             | ROO                       |
|  | RDK                             | SEQUENCES   | -                               | ALARMS                    |
|  |                                 | 020020020   |                                 | 1. IF TH<br>OR B          |
|  |                                 |   |                                 | SIGN                      |
|  |                                 |   |                                 |                           |
|  | NC                              |   |                                 | RDK                       |
|  | (FMT)                           |   | <u>VAV-14 &amp; CUH-4</u>       |                           |
|  |                                 |   | 1) SUPPLY                       |                           |
| OPEN TO THEIR MINIMUM  |                                 |   |                                 |                           |
| E TO MAINTAIN A<br>DJ.). WHEN EACH OF THE                                |                                 |   |                                 |                           |
| 0°F (ADJ.), THEN THE<br>INTERLOCKED ROOFTOP                              |                                 |   | STARTER S/S                     | (F                        |
|  | VAV BOX WITH H                  | HW COIL CONTROL SEQUENCES   |                                 |                           |
|  | <u>GENERAL</u><br>1. VAV BOX, 0 | CUH, HOT WATER COIL, AND CONTROL VALVES SHALL BE  | E CONTROLLED BY A               | AIR                       |
| S ABOVE 1200 PPM THE   |                                 | MABLE APPLICATION SPECIFIC CONTROLLER (ASC) PROV<br>TOR. ALL SETPOINTS SHALL BE ADJUSTABLE. ALL ACTU    |                                 |                           |
| REASE THE PRIMARY AIR  |                                 | ERATURES LISTED ARE FAHRENHEIT AND SHALL BE ADJU  |                                 |                           |
| AINTAIN THE CO2 LEVEL  |                                 | PRESSURE INDEPENDENT TYPE CONTROL VALVE FOR HE  |                                 |                           |
| CO2 LEVEL AT ANY   |                                 |   |                                 | VAV BOX WI<br>GENERAL     |
| TES THEN THE OA<br>DOFTOP UNIT SHALL                                     | 4. AIRFLOW S<br>ON THE GR       | SHALL BE MEASURED BY THE FLOW MEASURING TRANSM<br>RAPHICS.  |                                 | 1. VAV BO<br>PROGF        |
| D TO MAINTAIN A MAXIMUM<br>D RTU CONTROLS). THE                          |                                 | ETPOINT SHALL BE 70°F (ADJ.). COOLING SETPOINT SHA  | ALL BE 5°F WARMER THAN          | CONTR                     |
| D.   | HEATING S<br>6. ROOM TEM        | ETPOINT.<br>IPERATURES SHALL BE SET BY THE BUILDING AUTOMATI  | ION SYSTEM (BAS) AND            | 2. ALL TE<br>3. PROVID    |
| RRIDE FROM<br>NY ROOM IS IN THIS   | CAPABLE C                       | OF LOCAL +/- 2°F ADJUSTMENT.  |                                 | 4. AIRFLC                 |
| IAT ENOUGH<br>SO THAT THE  |                                 | AND MAXIMUM PRIMARY AIRFLOWS ARE SHOWN ON DRAM<br>IN ON SCHEDULES.                                      | WINGS. HEATING AIRFLOWS         | ON THE                    |
| INIMUM AIRFLOW IN THIS   | HEATING CONTR                   | ROL   |                                 | 5. HEATIN<br>HEATIN       |
|  | 1. UPON A CA                    | ALL FOR HEATING FROM THE ROOM TEMPERATURE SENSE<br>TO ITS MINIMUM HEATING AIRFLOW AND THE HEATING (     |                                 | 6. ROOM                   |
| I TEMPERATURE IS<br>ULATING THE HW                                       | MODULATE                        | E AS REQUIRED TO MAINTAIN THE HEATING SETPOINT. IF<br>RATURE, THE ASSOCIATED CABINET UNIT HEATER'S CONT | THERE IS A CONTINUED DROP       | САРАВ                     |
| IARGE AIR TEMPERATURE  | AND THE F                       | AN SHALL BE ENERGIZED UNTIL THE HEATING SETPOINT<br>SHALL OCCUR ON A RISE IN SPACE TEMPERATURE.         |                                 | 7. MINIMU                 |
| BOVE 69°F, OCCUPIED  | COOLING CONTI                   |   |                                 |                           |
|  | 1. UPON A CA                    | ALL FOR COOLING FROM THE ROOM TEMPERATURE SENS  |                                 | HEATING CC<br>1. UPON     |
| S A TEMPERATURE MORE   | SETPOINT                        | E BETWEEN MINIMUM AND MAXIMUM AIRFLOWS AS REQU<br>WITH THE HEATING COIL CONTROL VALVE (HV) CLOSED,      |                                 | MODUL<br>MODUL            |
| 5 MINUTES THE DDC  |                                 | ED, AND THE CUH DE-ENERGIZED.   |                                 | IN TEM<br>REQUI           |
|  |                                 | OM TEMPERATURE SENSOR TR SENSES A TEMPERATURE   |                                 | TEMPE                     |
|  | BELOW TH                        | E SETPOINT FOR 5 MINUTES THE DDC SYSTEM SHALL GIV   | VE A DETAILED ALARM SIGNAL.     | COOLING CO                |
|  |                                 | RTU-1 VAV BOX WITH (  | СПН                             | MODUL                     |
|  | RDK                             |   |                                 | VALVE                     |
| 1  |                                 | CONTROL SEQUENCE  | _0                              | ALARMS<br>1. IF THE       |
|  |                                 |   |                                 |                           |

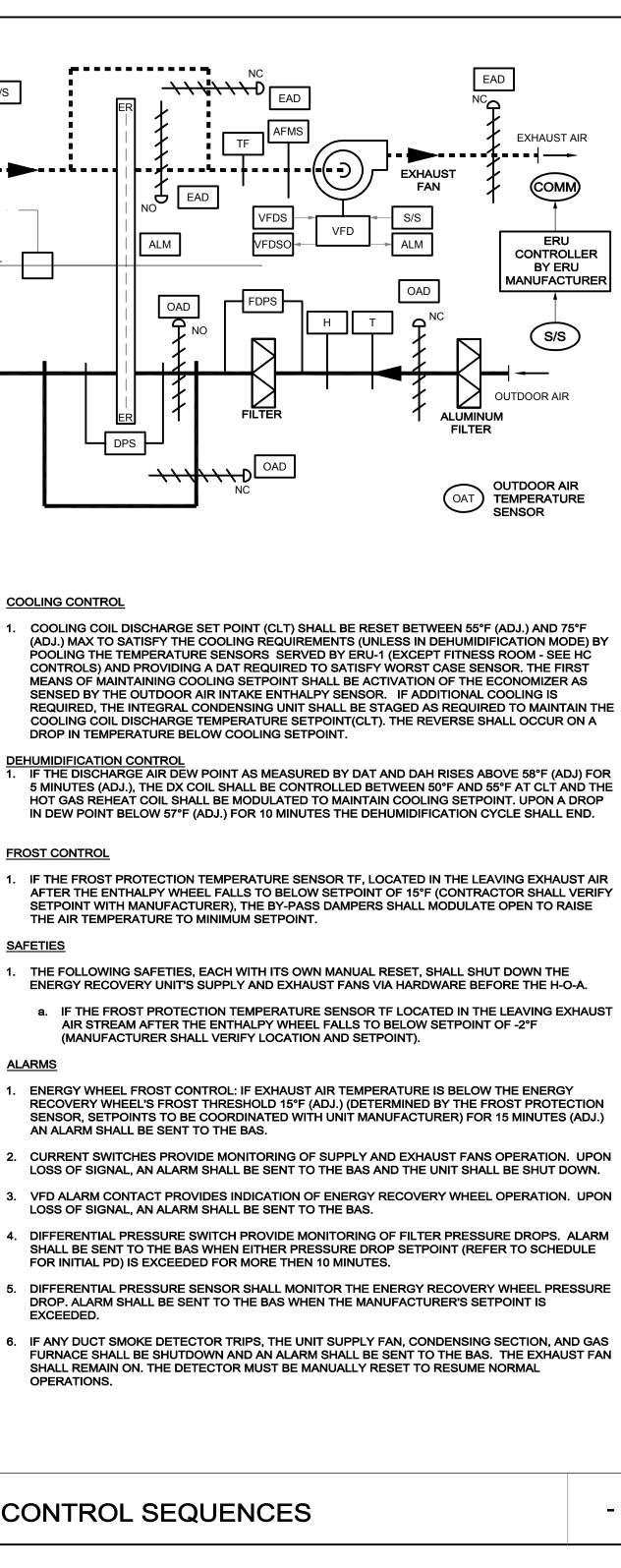
RDK

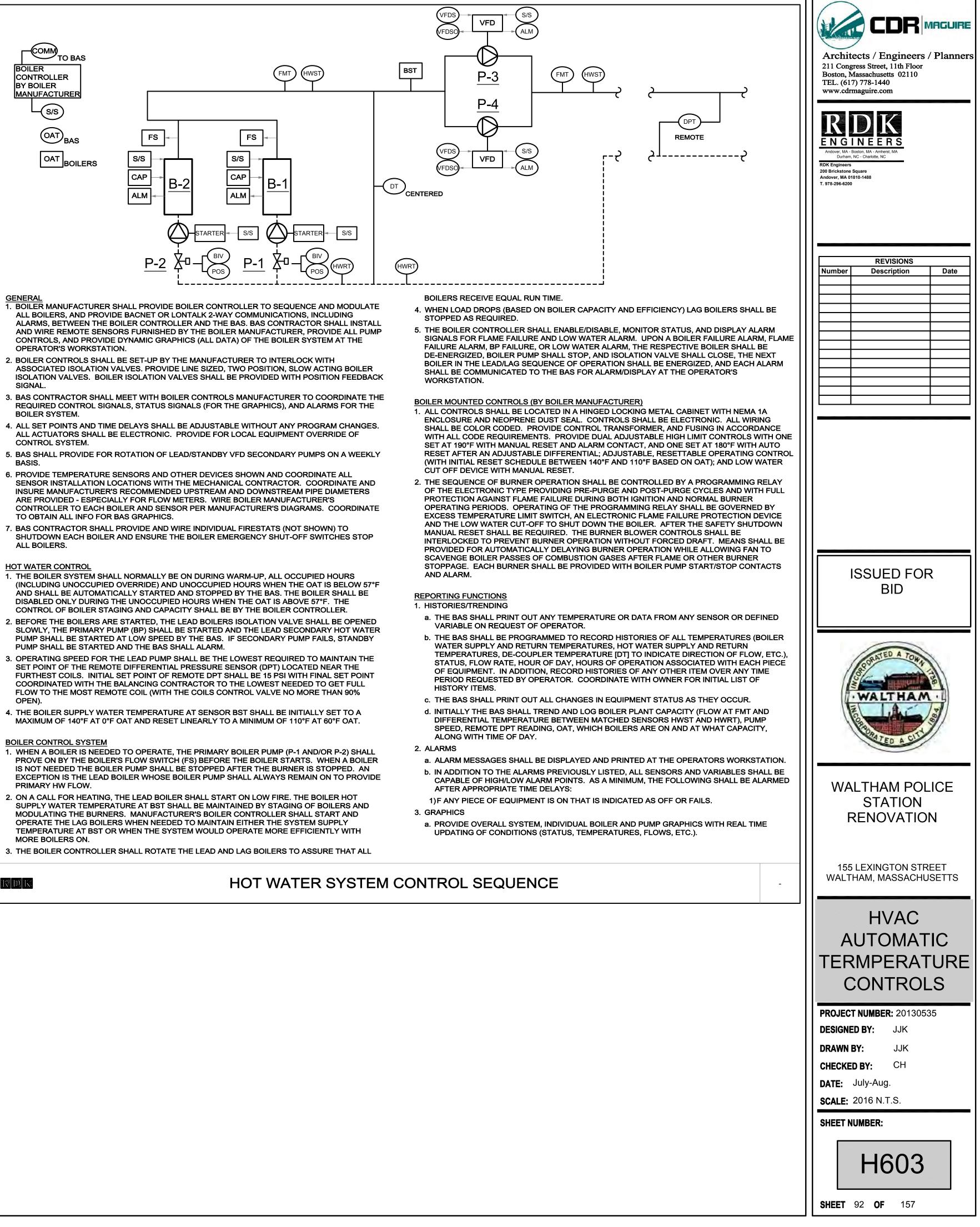




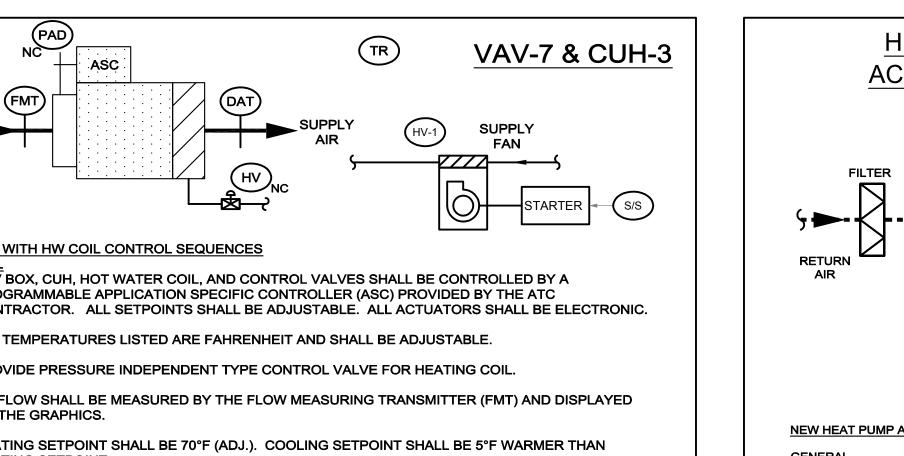








|   | SUPPLY<br>AIR<br>UPPLY<br>AIR<br>UPPLY<br>AIR<br>UPPLY<br>AIR<br>UPPLY<br>AIR<br>UPPLY<br>AIR<br>UPPLY<br>AIR<br>UPPLY<br>AIR  | $\begin{array}{c} HC-1 \\ HC-2 \\ HC-7 \\ HC-3 \\ HC-4 \\ HC-9 \end{array}$  | PRIMAF   |
|---|--|--|--|
| GENERAL<br>1. HOT V<br>APPLI<br>SETP<br>2. ALL T<br>3. PROV<br>4. HEAT<br>HEAT<br>5. ROOM<br><u>HEATING C</u><br>1. UPON<br>CONT<br>WITH<br>IN SP/<br><u>COOLING C</u><br>1. COOL<br>SEQU<br><u>ALARMS</u><br>1. IF THE | VATER COIL, AND CONTROL VALVES SHALL BE CONTROLLEE<br>CATION SPECIFIC CONTROLLER (ASC) PROVIDED BY THE AT<br>DINTS SHALL BE ADJUSTABLE. ALL ACTUATORS SHALL BE E<br>EMPERATURES LISTED ARE FAHRENHEIT AND SHALL BE AD.<br>IDE PRESSURE INDEPENDENT TYPE CONTROL VALVE FOR H<br>NG SETPOINT SHALL BE 70°F (ADJ.). COOLING SETPOINT SH<br>NG SETPOINT.<br>I TEMPERATURES SHALL BE SET BY THE BUILDING AUTOMAT<br>ONTROL<br>A CALL FOR HEATING FROM THE ROOM TEMPERATURE SEN<br>ROL VALVE (HV) SHALL MODULATE AS REQUIRED TO MAINT/<br>A MAXIMUM SUPPLY TEMPERATURE OF 90°F (ADJ.). THE REV<br>ACE TEMPERATURE. | TC CONTRACTOR. ALL<br>ELECTRONIC.<br>JUSTABLE.<br>HEATING COIL.<br>HALL BE 5°F WARMER THAN<br>TION SYSTEM (BAS).<br>NSOR (TR), THE HEATING<br>AIN THE HEATING SETPOINT<br>VERSE SHALL OCCUR ON A RISE<br>ERU-1 (REFER TO ERU CONTROL<br>RE MORE THAN 10°F ABOVE OR | VAV<br>GEN<br>1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>7.<br><u>HE4</u><br>1. |
| RDK   | DUCT MOUNTED HOT WAT<br>CONTROL SEQUENC  |  | <u>CO(</u><br>1.   |



NG SETPOINT. TEMPERATURES SHALL BE SET BY THE BUILDING AUTOMATION SYSTEM (BAS) AND THE OF LOCAL +/- 2°F ADJUSTMENT.

IM AND MAXIMUM PRIMARY AIRFLOWS ARE SHOWN ON DRAWINGS. HEATING AIRFLOWS IOWN ON SCHEDULES.

ITROL CALL FOR

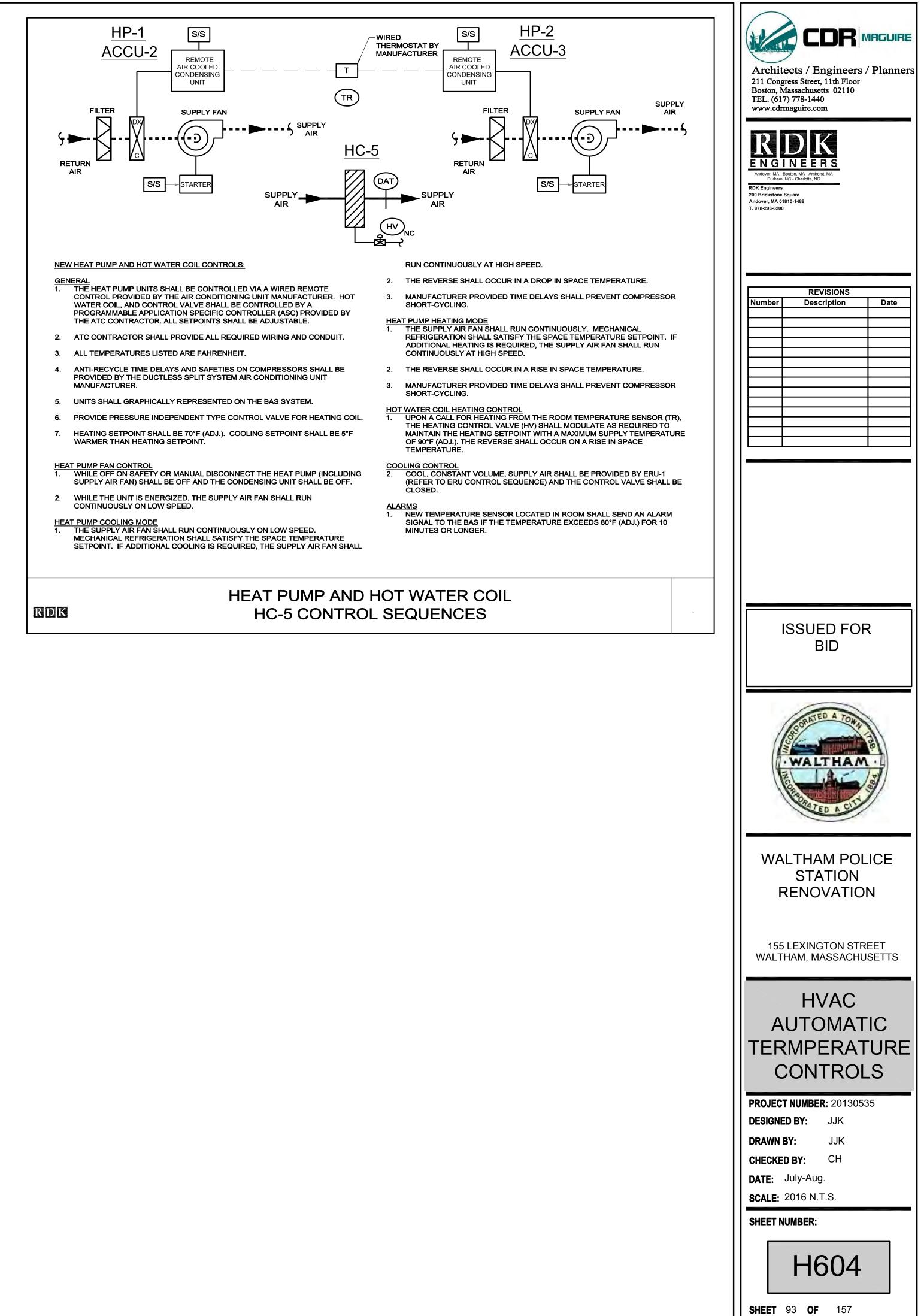
A CALL FOR HEATING FROM THE ROOM TEMPERATURE SENSOR (TR), THE PAD SHALL ATE TO ITS MINIMUM HEATING AIRFLOW AND THE HEATING CONTROL VALVE (HV) SHALL ATE AS REQUIRED TO MAINTAIN THE HEATING SETPOINT. IF THERE IS A CONTINUED DROP PERATURE, THE ASSOCIATED CABINET UNIT HEATER'S FAN SHALL BE ENERGIZED UNTIL EATING SETPOINT IS MAINTAINED. THE REVERSE SHALL OCCUR ON A RISE IN SPACE RATURE.

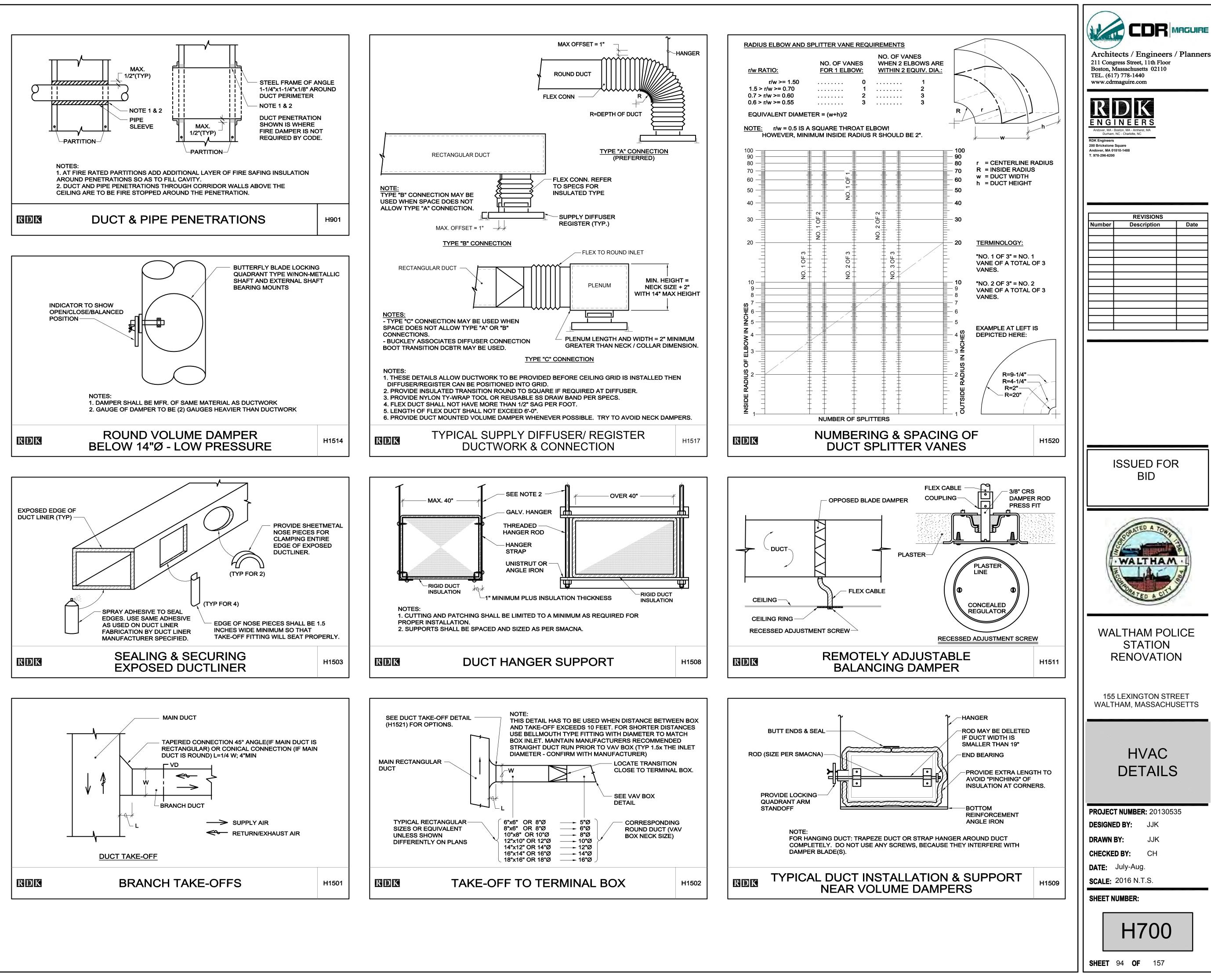
NTR

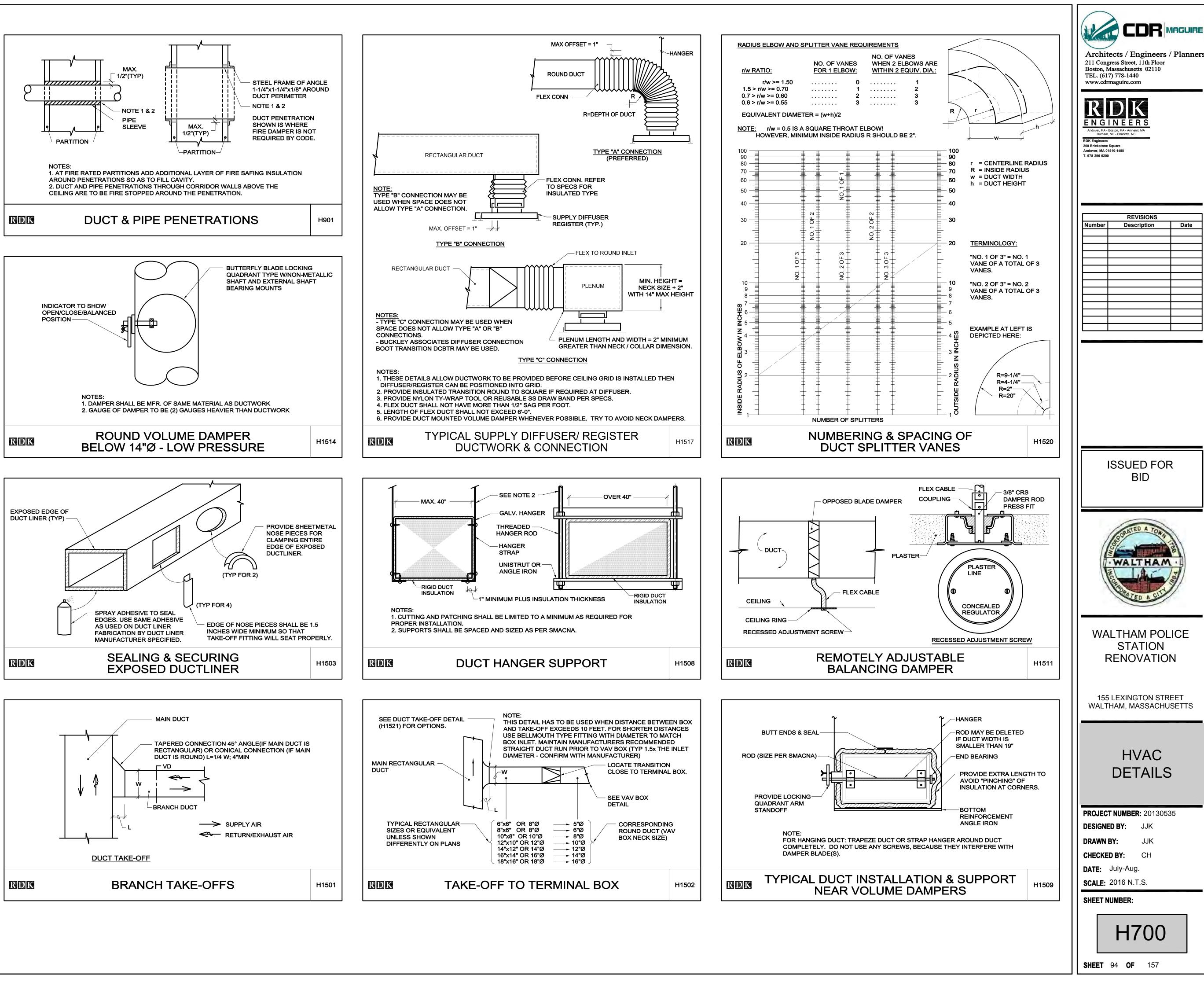
A CALL FOR COOLING FROM THE ROOM TEMPERATURE SENSOR (TR), THE PAD SHALL ATE BETWEEN MINIMUM AND MAXIMUM AIRFLOWS AS REQUIRED TO MAINTAIN COOLING INT WITH THE HEATING COIL CONTROL VALVE (HV) CLOSED, THE CUH CONTROL VALVE LOSED, AND THE CUH DE-ENERGIZED.

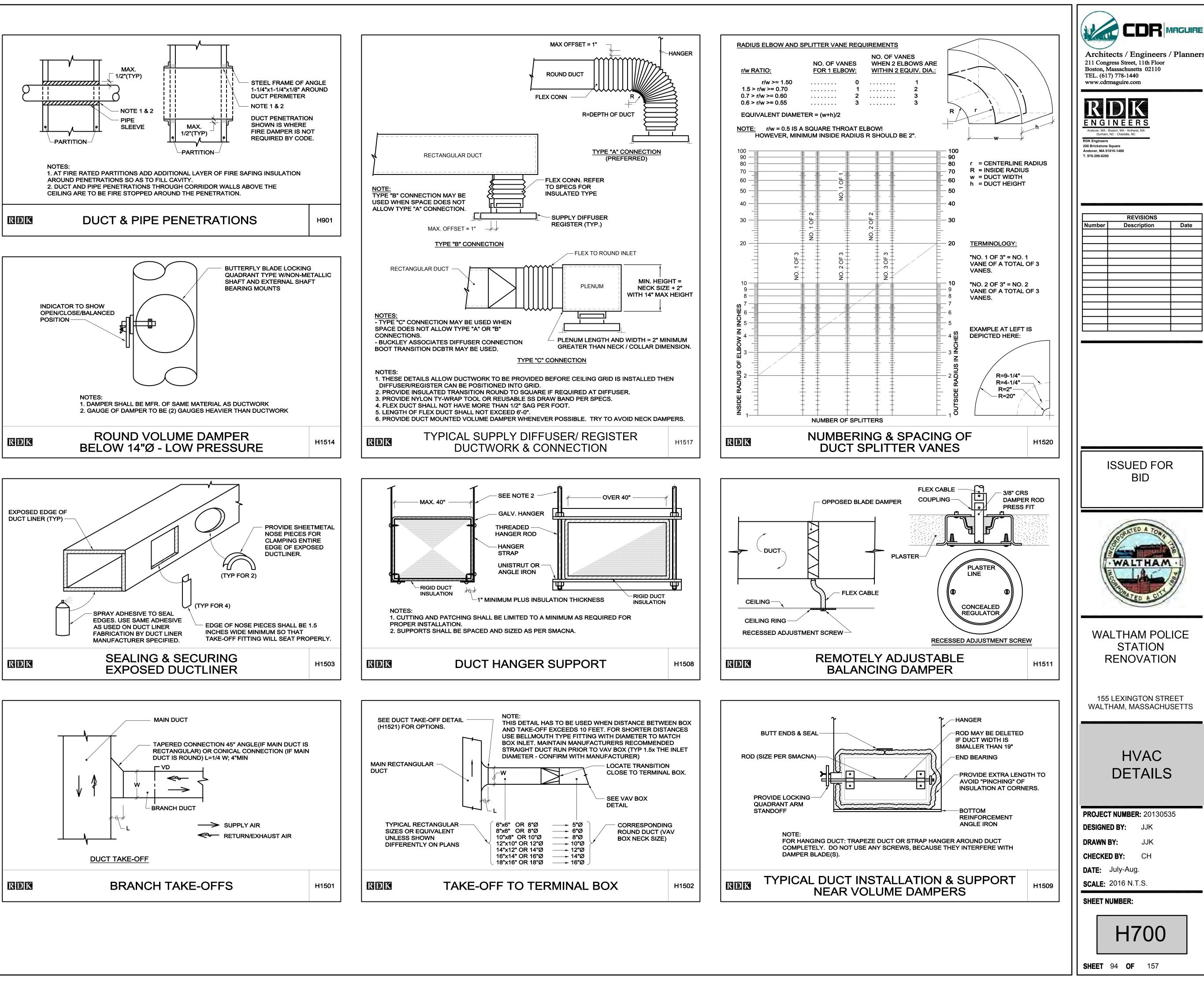
ROOM TEMPERATURE SENSOR TR SENSES A TEMPERATURE MORE THAN 10°F ABOVE OR 7 THE SETPOINT FOR 5 MINUTES THE DDC SYSTEM SHALL GIVE A DETAILED ALARM SIGNAL.

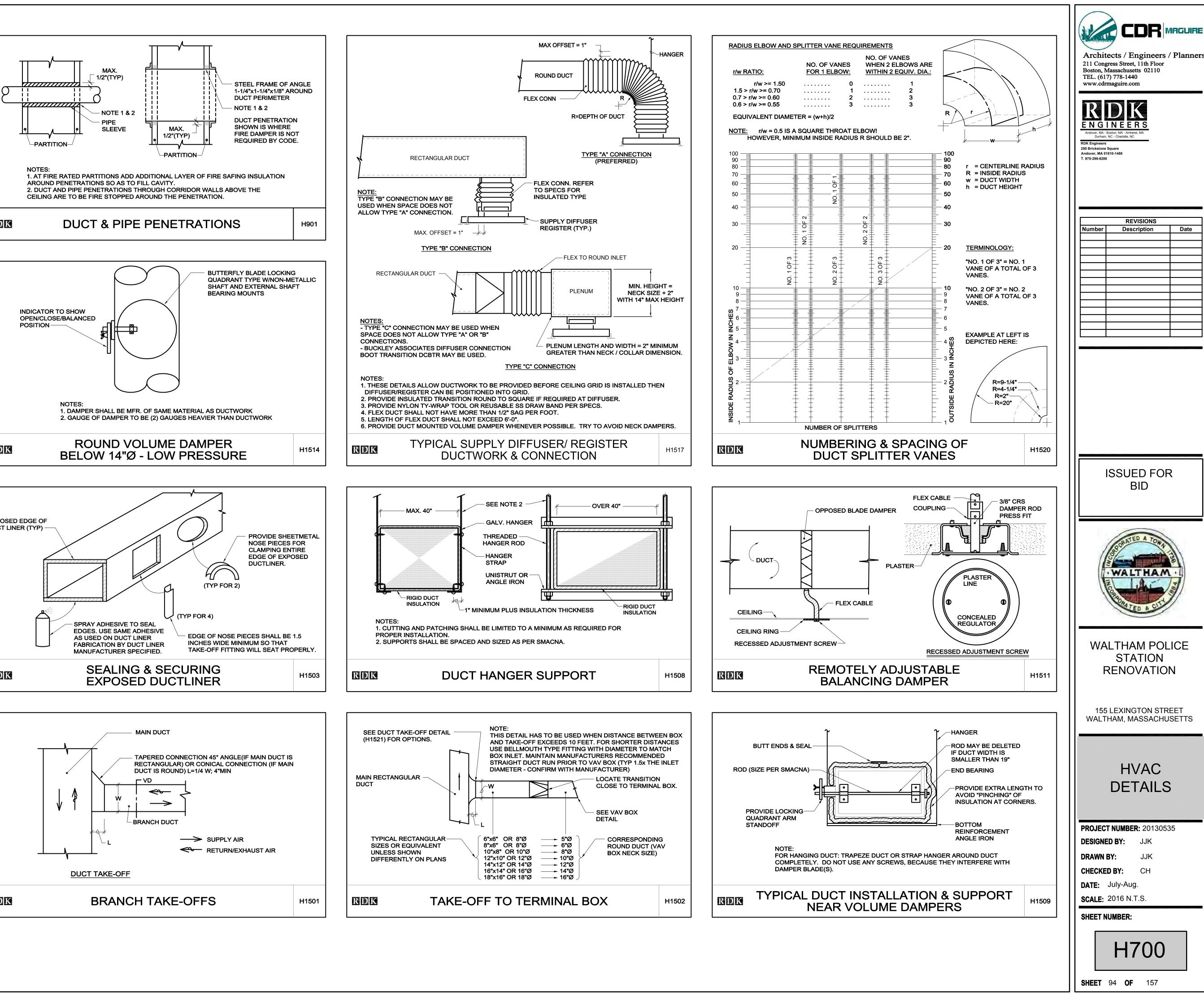
> RTU-1 VAV BOX WITH CUH CONTROL SEQUENCES

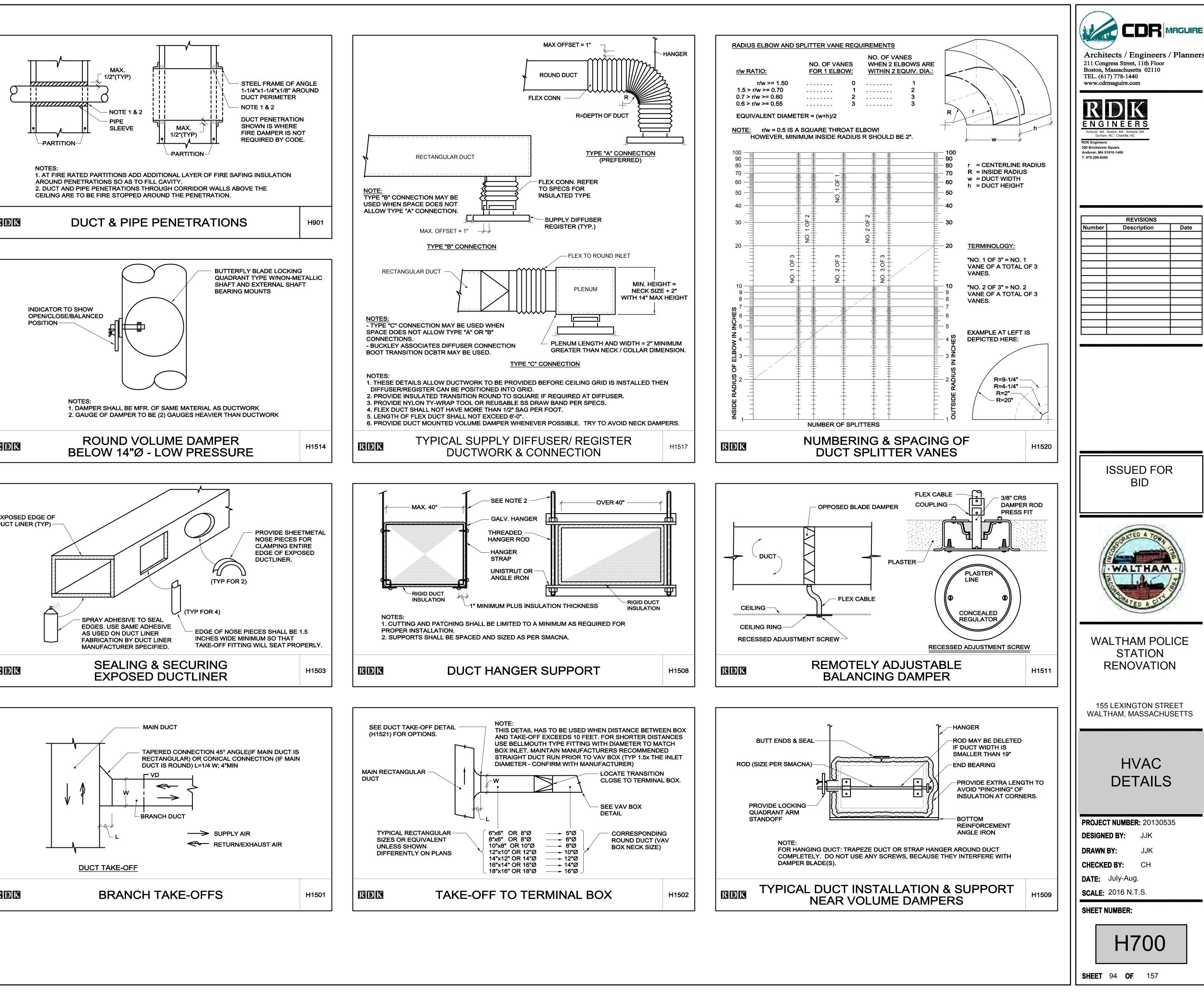




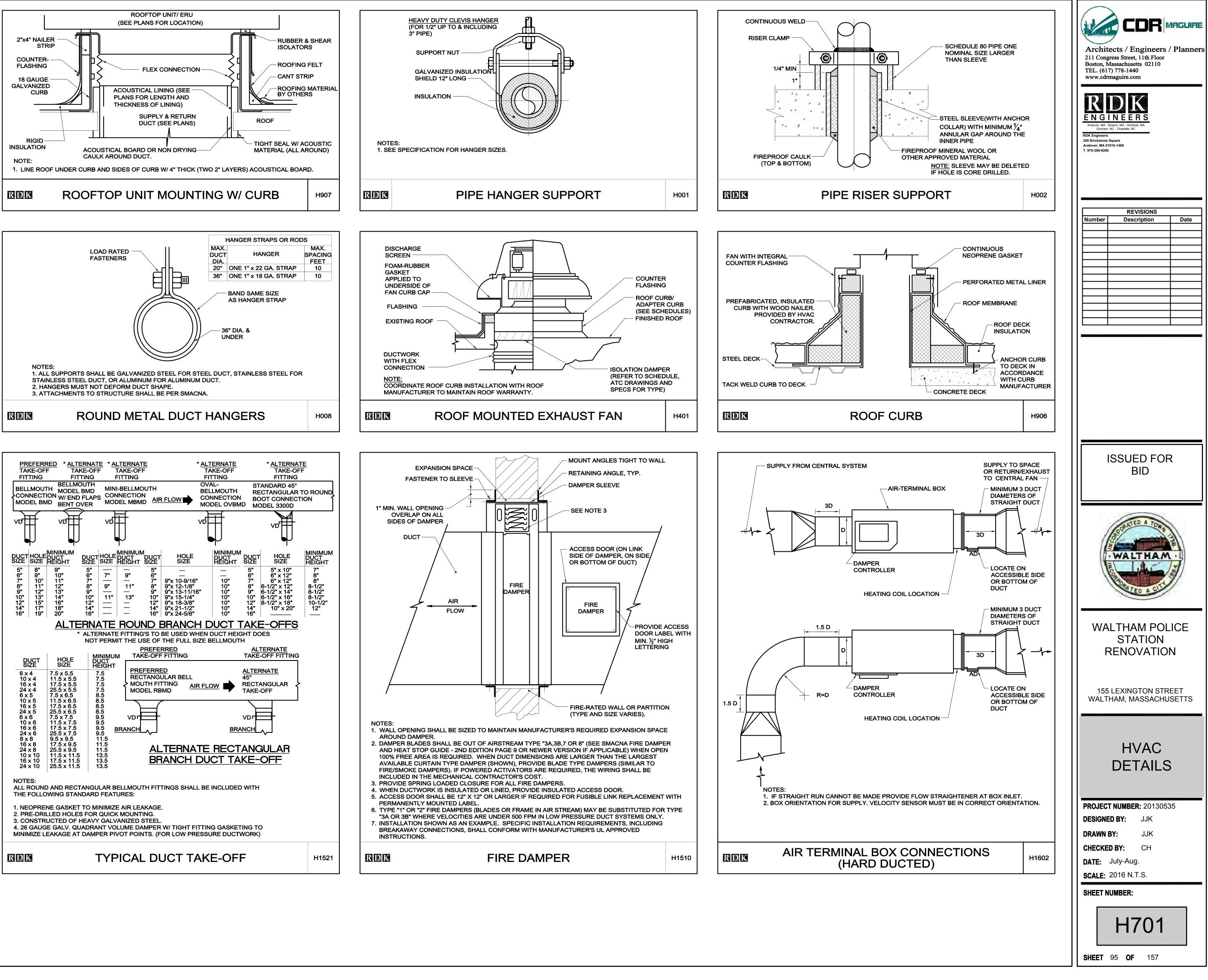


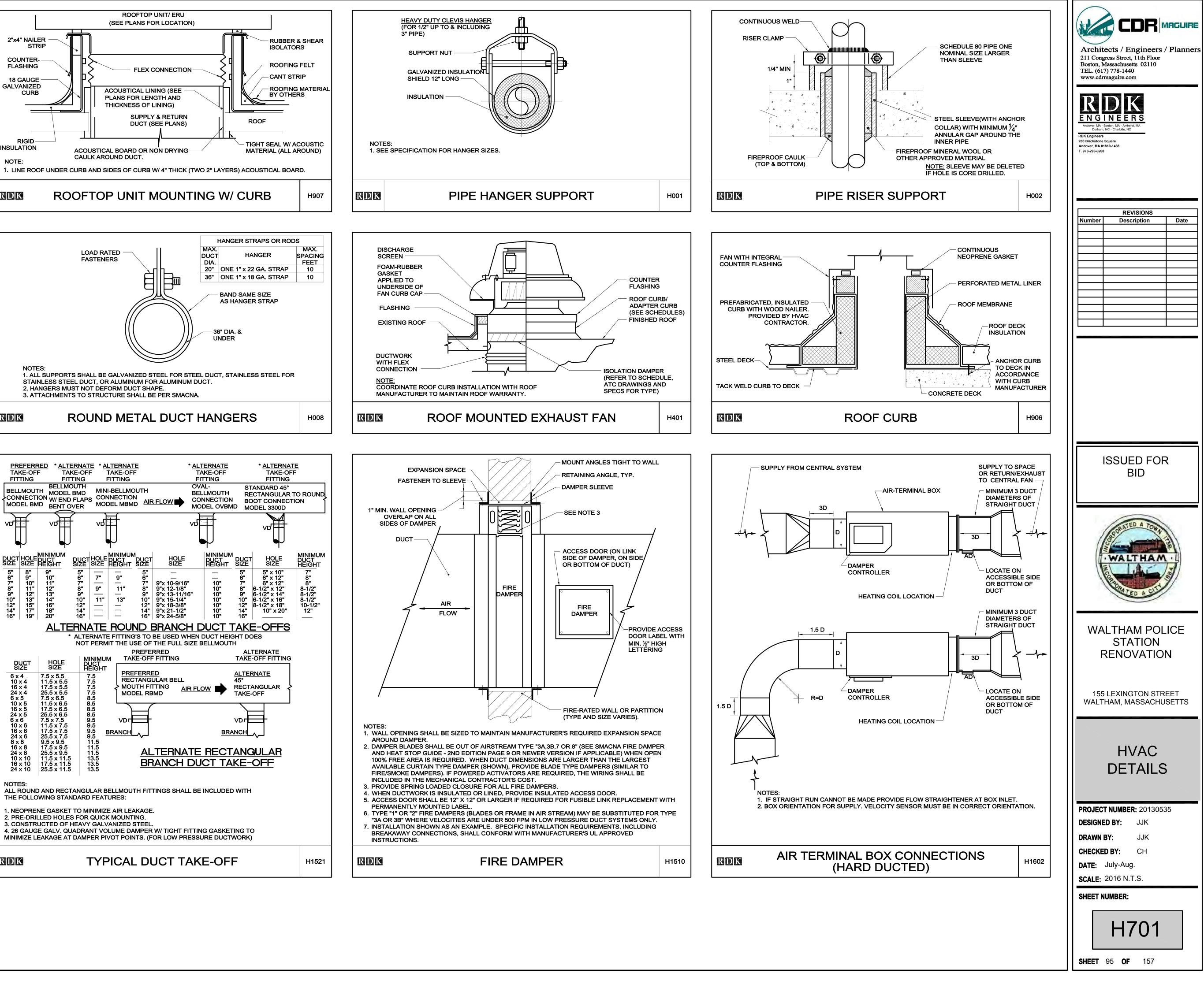


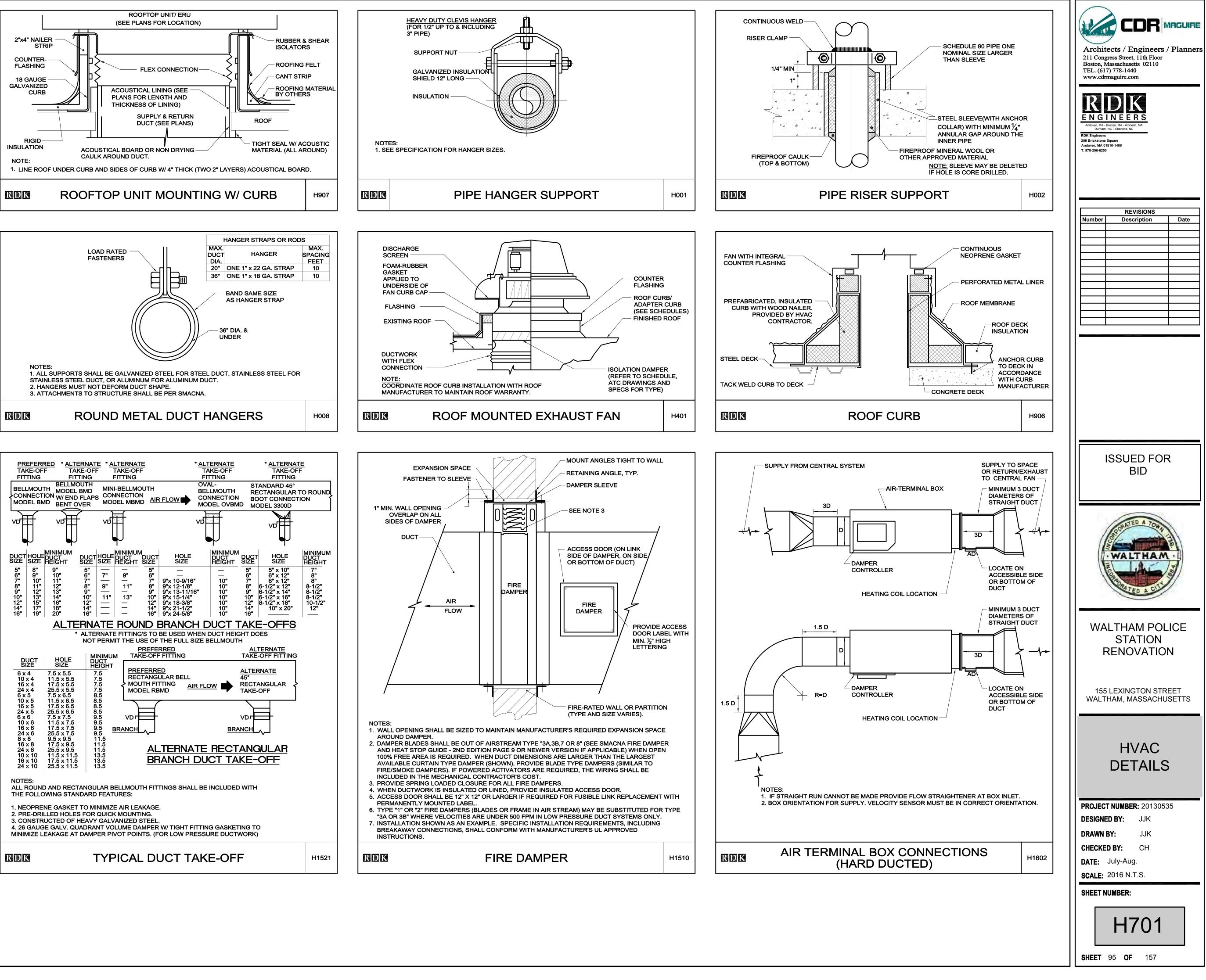


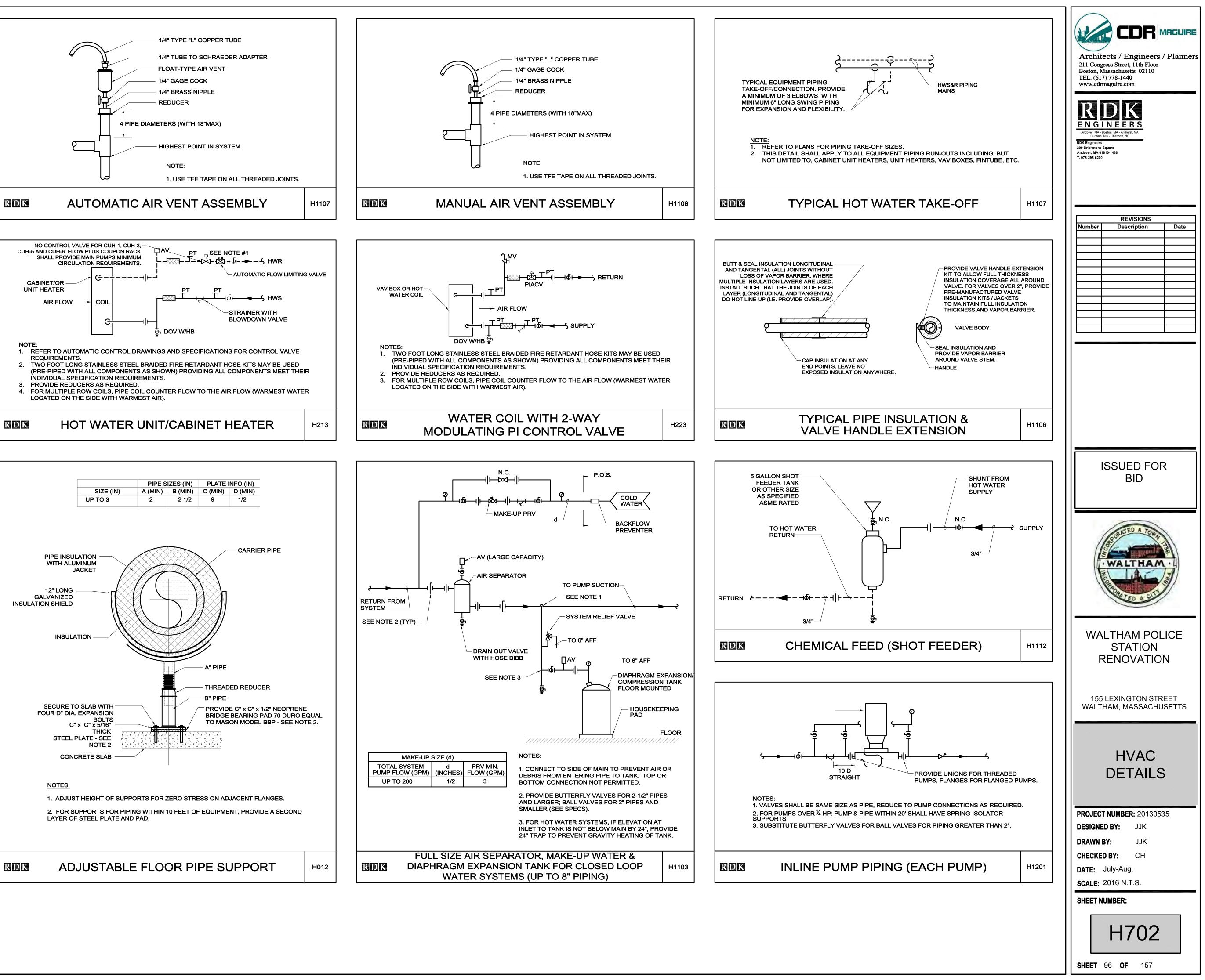


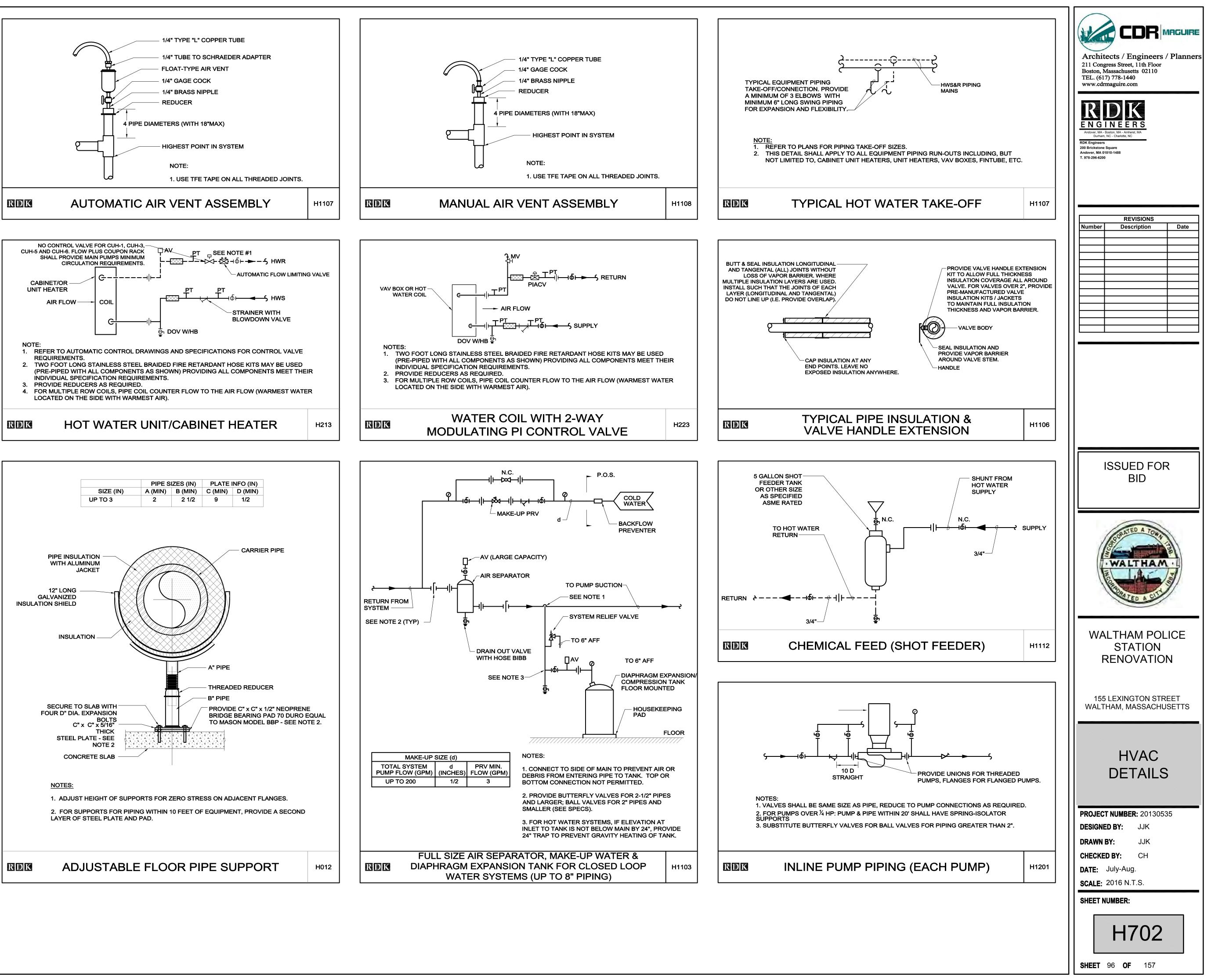
### \* <u>ALTERNATE</u> TAKE-OFF \* ALTERNATE \* ALTERNATE PREFERRED TAKE-OFF TAKE-OFF TAKE-OFF FITTING FITTING FITTING FITTING BELLMOUTH OVAL-BELLMOUTH MODEL BMD MINI-BELLMOUTH CONNECTION W/ END FLAPS CONNECTION MODEL MBMD AIR FLOW MODEL BMD BENT OVER volt MINIMUN лімімці DUCT HOLE DUCT SIZE SIZE HEIGHT HOLE SIZE DUCT HOLE DUCT DUCT SIZE SIZE HEIGHT SIZE \_\_\_\_ 9 10" 11" 12" 13" 14" 16" 18" 20" 9" 10" 11" 12" 13" 15" 17" 19" 9" 10" 10" 10" 10" 10" 10" 9"x 10-9/16" 9"x 12-1/8" 8" 9" 11" 9" 10" 12" 14" 16" 9"x 13-11/16" 11" 13" 10" 12" 9"x 15-1/4" 12" 9"x 18-3/8" — 14" \_\_\_\_ — 14" 9"x 21-1/2" 9"x 24-5/8" 16" \_ PREFERRED TAKE-OFF FITTING MINIMUM DUCT HEIGHT HOLE SIZE DUCT SIZE 7.5 x 5.5 11.5 x 5.5 17.5 x 5.5 25.5 x 5.5 7.5 x 6.5 17.5 x 6.5 25.5 x 6.5 7.5 x 6.5 25.5 x 6.5 7.5 x 7.5 11.5 x 7.5 17.5 x 7.5 25.5 x 7.5 9.5 x 9.5 17.5 x 9.5 17.5 x 9.5 11.5 x 11.5 17.5 x 11.5 25.5 x 11.5 PREFERRED $6 \times 4$ $10 \times 4$ $16 \times 4$ $24 \times 4$ $6 \times 5$ $10 \times 5$ $16 \times 5$ $24 \times 5$ $6 \times 6$ $16 \times 6$ $24 \times 6$ $8 \times 8$ $16 \times 8$ $24 \times 8$ $10 \times 10$ $16 \times 10$ $24 \times 10$ 75 RECTANGULAR BELL MOUTH FITTING MODEL RBMD BRANCH 9.5 11.5 11.5 11.5 13.5 13.5 13.5 25.5 x 11.5 NOTES: THE FOLLOWING STANDARD FEATURES: 1. NEOPRENE GASKET TO MINIMIZE AIR LEAKAGE. 2. PRE-DRILLED HOLES FOR QUICK MOUNTING. 3. CONSTRUCTED OF HEAVY GALVANIZED STEEL

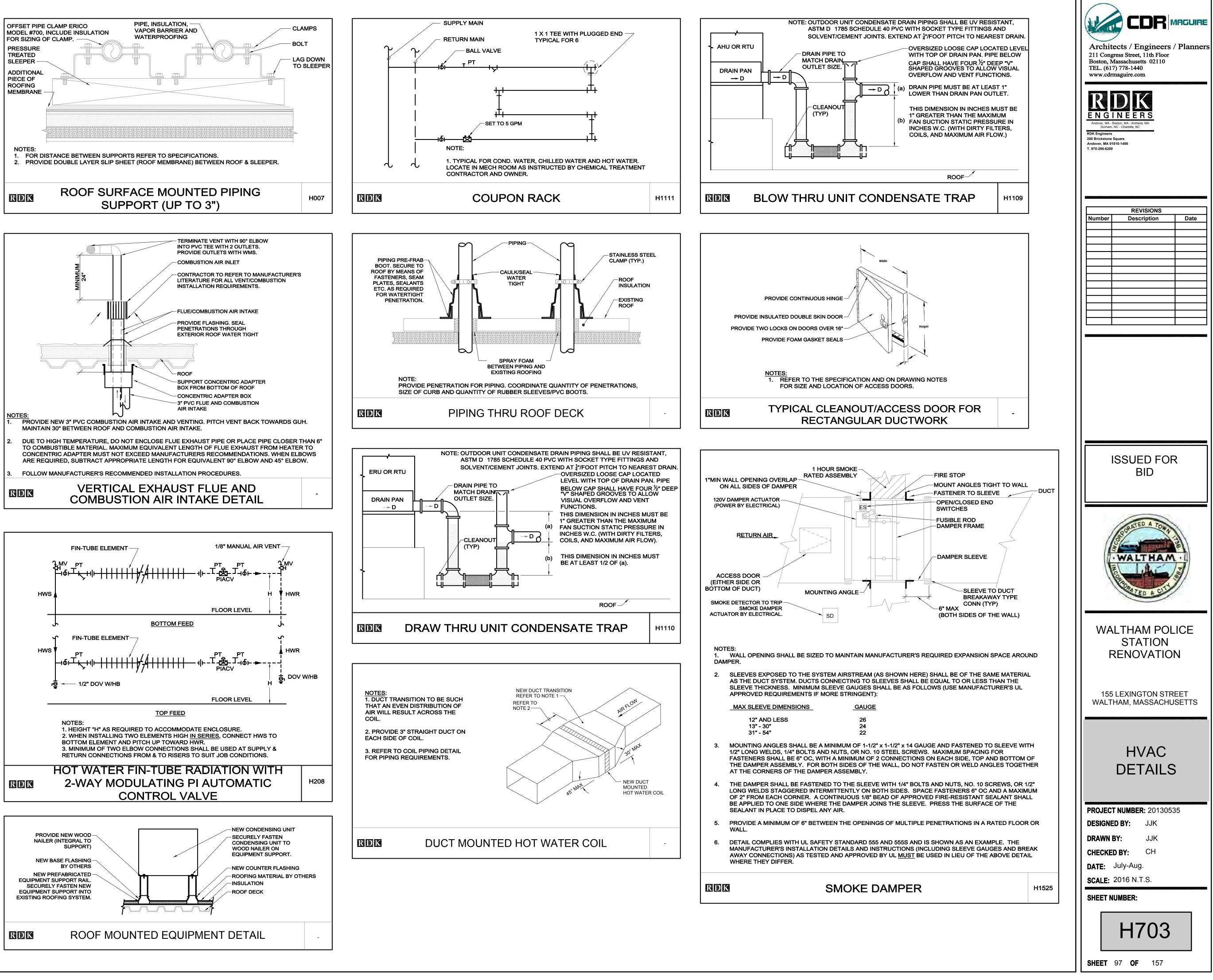


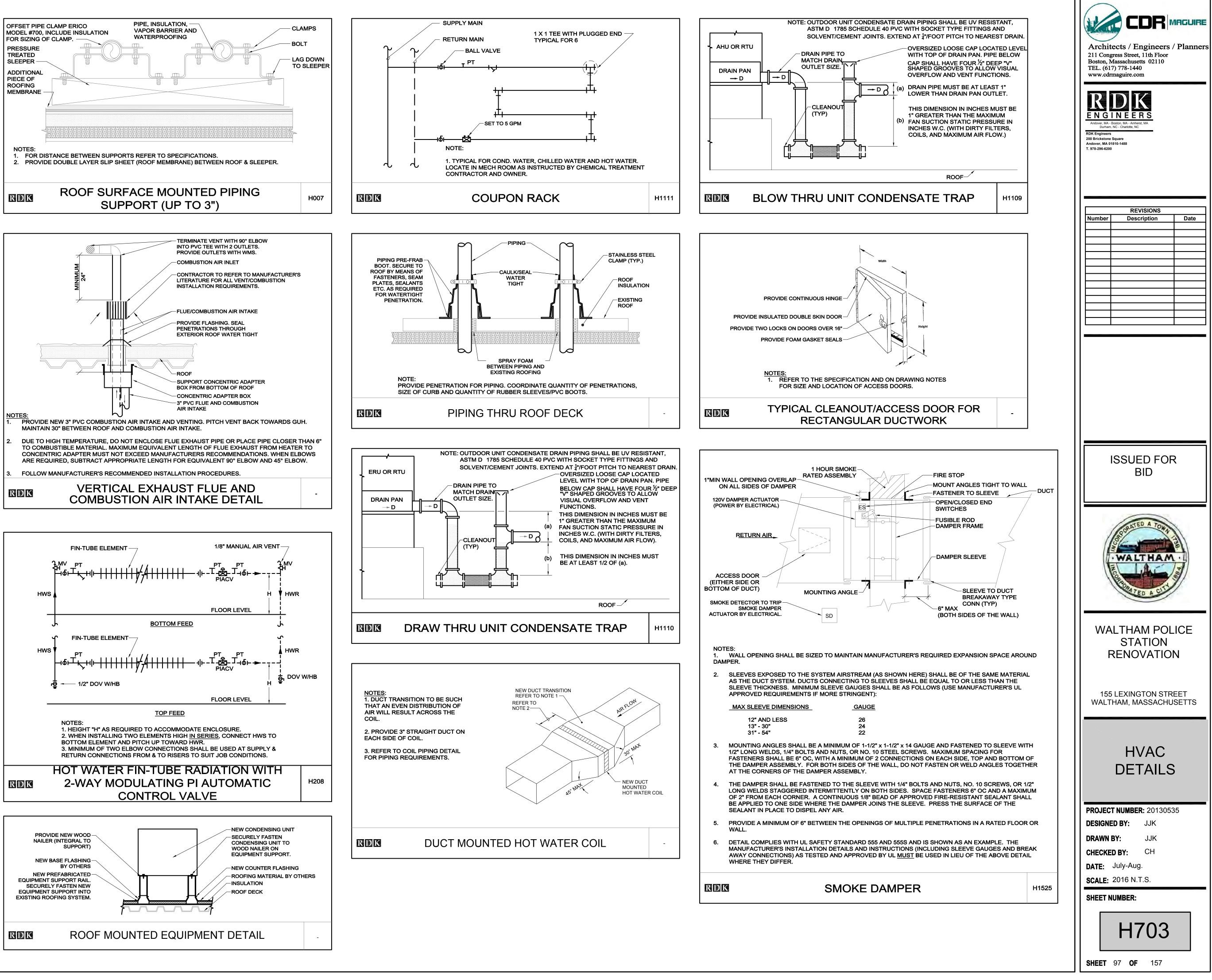


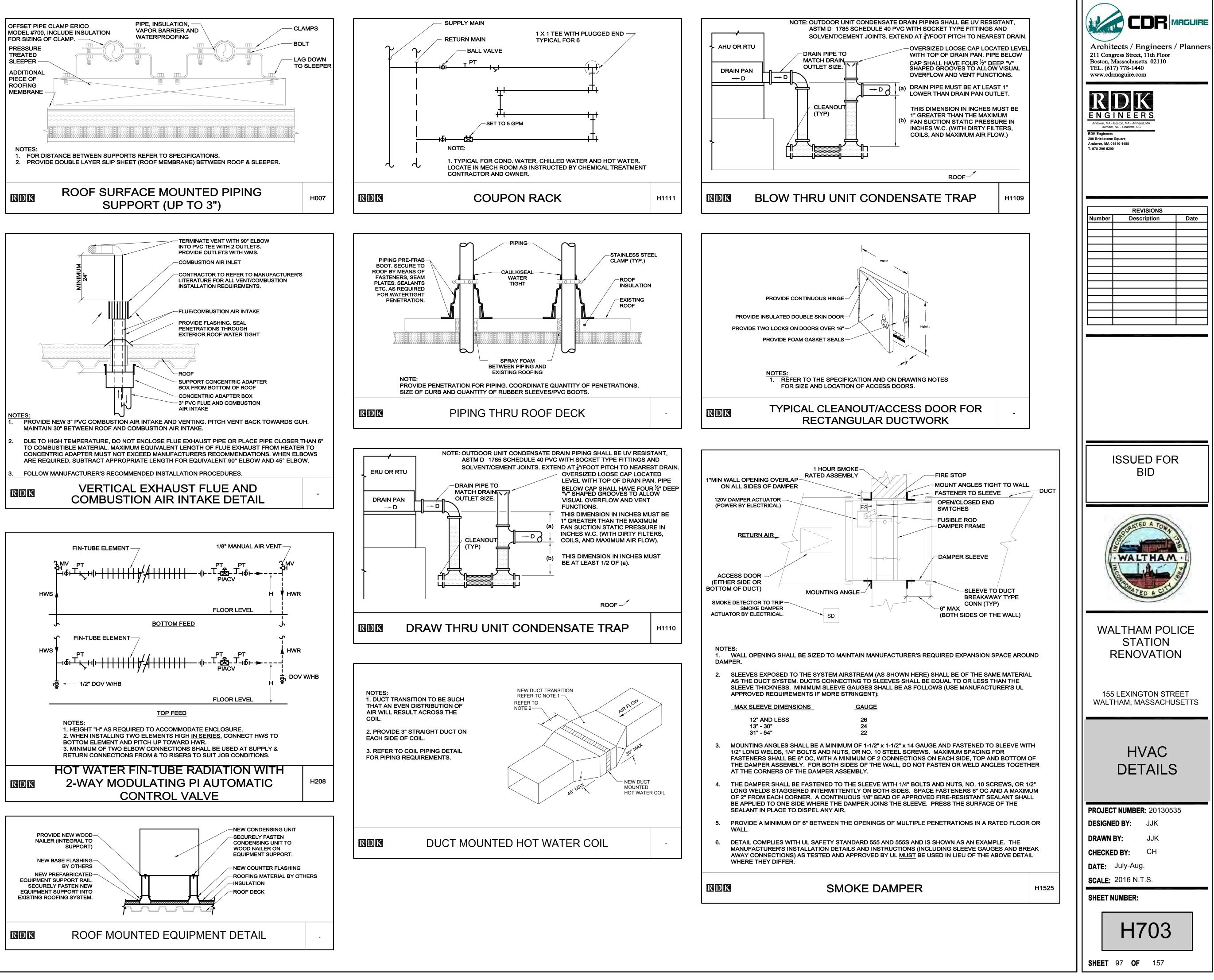












TAG

NOTES:

BASEMENT

ERU-1 & 1ST FLOOR

LOWER

ROOF

|   |   |  |  |   | -  |  |   |  |  |   |   |                       |            |         |        | ГА               |          | GED DX RO         |                     |                |                       |           |        |                   |                        |         |              |        | ň         |       |               |        | _      |
|---|---|--|--|---|--|--|---|--|--|---|---|-----------------------|------------|---------|--------|------------------|----------|-------------------|---------------------|----------------|-----------------------|-----------|--------|-------------------|------------------------|---------|--------------|--------|-----------|-------|---------------|--------|--------|
|   |   |  | REFRIC   | SERANT  | OUTDO  |  |   |  |  | SUPPL   | LY FAN  |                       |            |         |        |                  | <u>ι</u> | JNIT COOLII       |                     |                |                       |           |        | AIR-COOL          | ED COND                | ENSING  |              |        |           |       | INDIRECT G    | AS-FIF | ł۶<br> |
| TAG   |   | LOCATION                                 |  |   | CONDI  |  | CF  | м  | CAPACI   | TY CONTROL  | STATIC PRESS  | 5. (IN.WG)            | N          | IOTOR   |        | CAPACIT<br>(MBH) | Ŷ        | FACE              | UNIT EA<br>(°F)     | AT *           | UNIT LAT<br>(°F)      | со        | MPRES  | SOR(S)            | STEPS                  | DB      |              |        |           | CAF   | ACITY (MBH)   |        |        |
| TAG   | SERVICE   | LOCATION                                 | TYPE   | CHARGE<br>(LBS)   | DB (°F)  | WB<br>(°F)   | TOTAL                                       | O.A.   | RANGE  | TYPE  | EXTERNAL (W/<br>.25 DIRTY<br>FILTER)                                      | TOTAL                 | RPM        | BHP     | нр то  |                  | INS.     | VELOCITY<br>(FPM) | DB W                | /в [           | DB WE                 | TYPE      | NO.    | NOMINAL<br>HP EA. | OFUNLOAD               | TEMP.   | MIN.<br>EFF  |        |           | INPUT | OUTPUT EF     | =F   🗒 | ۹<br>F |
| RTU-1   | 1ST<br>FLOOR  | UPPER<br>ROOF                            | R-410A   | 24.6  | 91.0   | 74.0   | 8,050                                       | 1,700  | 4,830-<br>8,050                                    | VAV   | 1.6   | 2.162                 | 674        | 5.54    | 7.5 26 | 9.2 20           | )6.3     | 254               | 79.9 66             | 6.0 5          | 5.51 53.9             | 1 SCROL   | L 2    | -                 | 2                      | 95.0    | 10.3<br>EER  | 3      | 1.1       | -     |               |        | -      |
| RTU-2   | TRAINING<br>ROOM  | LOWER<br>ROOF                            | R-410A   | 11.8  | 91.0   | 74.0   | 1,800                                       | 300  | 900-1800   | SINGLE ZONE<br>VAV                                  | 1.25  | 1.153                 | 1039       | 0.77    | 1 6    | 5.0 4            | 7.6      | 182               | 79.3 66             | 6.3 58         | 8.61 56.3             | SCROL     | L 1    | 4.3               | 1                      | 95.0    | 17.2<br>SEER | 1      | 0.4       | 80    | 64 -          | - 57   | .€     |
| RTU-3   | 2ND<br>FLOOR  | UPPER<br>ROOF                            | R-410A   | 17.8  | 91.0   | 74.0   | 5,600                                       | 1,000  | 3,360-<br>5,600                                    | VAV   | 1.5   | 1.73                  | 778        | 3.88    | 5 16   | 7.0 13           | 31.3     | 178               | 79.0 65             | 5.0 59         | 9.54 55.4             | SCROL     | L 2    | 3.9               | 2                      | 95.0    | 14.2<br>EER  | 2      | 0.5       | -     |               | -      | -      |
| 2) PROV<br>ELECTF<br>3) PROV<br>ELECTF<br>4) PROV<br>DISCON | VIDE RTU-1<br>RICAL CONN<br>VIDE RTU-2<br>RICAL, DISC<br>VIDE RTU-3<br>VIDE RTU-3 | ECTION, FAC<br>WITH 2" MER<br>ONNECT SWI | / 14 FILTE<br>TORY PO<br>/ 13 FILTE<br>FCH, POV<br>/ 13 FILTE<br>COF CUE | ER SECTIO<br>WERED G<br>ER SECTIO<br>VERED GF<br>ER SECTIO<br>RB. | DN, HING<br>ROUND<br>DN, HING<br>CI CONV<br>DN, HING | ED ACCI<br>FAULT C<br>ED ACCI<br>ENIENC<br>ED ACCI | ESS DOOF<br>ONVENIE<br>ESS DOOF<br>E OUTLET | RS, STAII<br>NCE OU <sup>-</sup><br>RS, NATU<br><sup>-</sup> AND 24' | NLESS STE<br>TLET WITH<br>JRAL GAS F<br>" ROOF CUI | EL CONDENSAT<br>DISCONNECT S<br>FURNACE WITH<br>RB. | TE DRAIN PAN, CO<br>WITCH AND 24" R<br>STAINLESS STEE<br>TE DRAIN PAN, CO | OOF CURE<br>L HEAT EX | 8.<br>CHAN | GER, SI | AINLES | S STEEL          | COND     | DENSATE DF        | RAIN PAN<br>(HAUST, | I, COM<br>BACN | IPARATIV<br>IET INTER | E ENTHALF | Y ECON | IOMIZER W         | ITH POWE               | RED EXI | HAUST, E     | DEMANI | D CONT    |       | NTILATION, BA | CNET   | 1      |
|   |   |  | <u>.</u>   |   |  |  |   |  |  |   |   |                       |            |         |        |                  | IERG     | Y RECOVE          |                     |                |                       |           |        |                   |                        |         |              |        |           |       |               |        |        |
| _   | İ   |  |  | CEM   |  |  |   |  |  |   | <b>ΕΔΝΙ ΠΔΤΔ</b>  |                       |            |         |        |                  |          |                   | I                   |                |                       |           |        | FNED              | GY RECOV               |         | IEEI         |        |           |       |               |        | _      |
| LOG   |   | EFRIGERANT                               |  |   |  | ACITY C  | ONTROL                                      | SUPPLY   | Y STATIC PI<br>WG)                                 |   | FAN DATA<br>EXHAUST STATIC<br>PRESS. (IN. WG)                             |                       | SUPPI      |         | DR     |                  | EXHAU    | JST MOTOR         |                     | WHE            |                       |           | SS %   |                   | GY RECOV<br>LY AIR DAT |         |              | XHAUS  | ST AIR D/ | ATA   | TOTAL         | , SEI  | _      |

|         | TO SPECIFICATIONE ERU-1 WITH M  | •        | •        |          |          |              |         |          |                |        | אם "כ פו | א ואו ור |         | CONS   | TRI |
|---------|---------------------------------|----------|----------|----------|----------|--------------|---------|----------|----------------|--------|----------|----------|---------|--------|-----|
| CONDENS | SATE DRAIN PAN<br>AUST, AIRFLOW | , BACNET | DDC INTE | RFACE CA | ARD, ERV | COMPOSITE CO | ONSTRUC | TION WIT | H FROST        | PROTEC | TION, M  | ODULAT   | 'ING OA | VRA DA | ۹MP |
|         | ALL BE BY TRAN                  |          |          |          |          |              |         |          | , ic, ic, in t |        |          |          |         |        |     |
|         |                                 |          |          |          |          |              |         |          |                |        |          |          |         |        |     |
|         |                                 |          |          |          | CC       | ONDENSING    | BOILE   | R SCHE   | EDULE (        | (HOT V | VATER    | R)       |         |        |     |
|         |                                 | CAPACIT  | Y (MBH)  |          | NATU     | JRAL GAS     |         |          | V              | VATER  |          |          | EL      | ECTRIC | CAL |
| TAG     | LOCATION                        | мах      | МАХ      | MIN      | MAX      | EFFICIENCY   | TURN    | RELIEF   | WPD            | ENT    | LVG      | CPM      | V       | ы      |     |

AIR

RANGE

2,575 2,450 VFD CONSTANT

TYPE

AIR

|        |                    |               |              |                | CC             | ONDENSING                    | <b>BOILE</b> | R SCHE          | EDULE (I       | HOT V   | VATER       | R)         |     |       |        |                  |                               | (MBH OUT) |                 | DUCTWOR                                  | K PRESSURE CI        | ASS AND SE      | AL CLASS |                     |
|--------|--------------------|---------------|--------------|----------------|----------------|------------------------------|--------------|-----------------|----------------|---------|-------------|------------|-----|-------|--------|------------------|-------------------------------|-----------|-----------------|--|----------------------|-----------------|----------|---------------------|
|        | TAG LOCATION       |               | ( (MBH)      |                | NATU           | JRAL GAS                     |              |                 |                | WATER   |             | ELECTRICAL |     | CAL   | WEIGHT | MANUFACTURER AND |                               | PRESSU    | STATIC PRESSURE | SMACNA SEAL                              | SMACNA LEAKAGE CLASS |                 | DESIGN   |                     |
| TAG    | LOCATION           | MAX<br>OUTPUT | MAX<br>INPUT | MIN<br>(IN.WG) | MAX<br>(IN.WG) | EFFICIENCY<br>@ 100%<br>FIRE | TURN<br>DOWN | RELIEF<br>VALVE | WPD<br>(FT HD) |         | LVG<br>(°F) | GPM        | v   | РН    | FLA    | (LBS)            | MODEL NUMBER (AS<br>STANDARD) | REMARKS   | RE<br>CLASS     |  | CLASS                | RECTANGUL<br>AR | ROUND    | VELOCITY<br>LIMITS  |
| B-1    | MECHANICAL<br>ROOM | 555           | 600          | 4.0            | 14.0           | 92.5                         | 5:1          | 50              | 18             | 140     | 110         | 38         | 120 | 1     | 2.7    | 340              | LOCHINVAR KB-601              | SEE NOTES |                 | 2" POS. OR NEG.                          | А                    | 6               | 3        | 2000 FPM OR<br>LESS |
| B-2    | MECHANICAL<br>ROOM | 555           | 600          | 4.0            | 14.0           | 92.5                         | 5:1          | 50              | 18             | 140     | 110         | 38         | 120 | 1     | 2.7    | 340              | LOCHINVAR KB-601              | SEE NOTES |                 | OTHERWISE SPECIFIE<br>RE CLASSIFICATIONS |                      |                 |          |                     |
| NOTES: | /IDE WITH STAIN    |               | CONSTR       | RUCTION.       | PROVIDE        |                              |              |                 | ANTY ON T      | THE STA |             | STEELI     |     | XCHAN |        | ID 1 YEAR        | WARRANTY ON                   |           | 2"<br>CLASS:    | ALL OTHER DUCTWO                         | RK.                  |                 |          |                     |
|        | INDER OF THE       |               |              |                |                |                              |              |                 |                |         |             |            |     |       |        |                  |                               |           | NOTES:          |  |                      |                 |          |                     |

2. PROVIDE WITH PROBE TYPE LOW WATER CUT-OFF WITH MANUAL RESET. PROVIDE WITH PRESSURE RELIEF VALVE, SINGLE POINT ELECTRICAL 3. PROVIDE WITH MASSACHUSETTS APPROVED VENTLESS GAS TRAIN. IF SUBMITTED BOILER DOES NOT HAVE VENTLESS GAS TRAIN CONTRACTOR PROPERLY VENT GAS TRAIN AT NO ADDITIONAL COST TO THE OWNER.

SUPPLY

EXTERNAL W/

.25" DIRTY

FILTER

1.40

TOTAL

3.26

PROVIDE WITH CONDENSATE NEUTRALIZER (EQUAL TO JJM MODEL JM-10).

PROVIDE WITH OUTDOOR RESET CONTROL AND OUTDOOR SENSOR.

PROVIDE WITH MANUFACTURER'S CONTROLLER AND BACNET INTERFACE.
PROVIDE WITH HIGH TEMPERATURE LIMIT WITH MANUAL RESET AND FLOW SWITCH.

R410A

BOILER SHALL COMPLY WITH CSD-1 CODE REQUIREMENTS.

. PROVIDE STAINLESS STEEL FLUE DESIGNED FOR CONDENSING BOILERS (SEE SPECIFICATIONS FOR DETAILS). 10. PROVIDE WITH FACTORY HIGH TEMPERATURE LIMIT WITH MANUAL RESET, FLOW SWITCH, FLUE TEMPERATURE SENSOR, AND LOW AIR PRESSU

11. REFER TO SPECIFICATIONS, DETAILS, AND CONTROL DRAWINGS FOR ADDITIONAL INFORMATION. 12. PROVIDE POLYPROPYLENE FLUE DESIGNED FOR CONDENSING BOILERS (SEE SPECIFICATIONS FOR DETAILS

13. EFFICIENCY BASED ON 110°F ENTERING WATER TEMPERATURE AND 140°F LEAVING WATER TEMPERATURE AT 100% FIRING.

14. BOILERS SHALL BE BY LOCHINVAR, AERCO, CLEAVER BROOKS, BUDERUS OR EQUAL.

|       |                          |                    |        | CAB         | INET        | HEAT        | ER (H | OT W            | ATER        | R) SCH        | IEDUL | _E                                      |    |       |    |                               | (GPM      |
|-------|--------------------------|--------------------|--------|-------------|-------------|-------------|-------|-----------------|-------------|---------------|-------|---|----|-------|----|-------------------------------|-----------|
|       |                          |                    | OUTPUT |             | AIR         |             |       | WA <sup>.</sup> | TER         |               |       | MOTOR                                   |    | LECTR |    | MANUFACTURER AND              |           |
| TAG   | LOCATION                 | TYPE               | (MBH)  | CFM<br>(LO) | EAT<br>(°F) | LAT<br>(°F) | GPM   | EWT<br>(°F)     | LWT<br>(°F) | P.D.<br>(FT.) | RPM   | HP                                      | HZ | v     | РН | MODEL NUMBER (AS<br>STANDARD) | REMARKS   |
| CUH-1 | STAIR #2 120 - BASEMENT  | FLOOR<br>MOUNTED   | 7.1    | 185         | 60          | 99.0        | .60   | 140             | 110         | 0.2           | 875   | ¥15                                     | 60 | 115   | 1  | STERLING C-1160-02            | SEE NOTES |
| CUH-2 | LOBBY 115                | CEILING<br>MOUNTED | 13.3   | 345         | 60          | 95.6        | 1.2   | 140             | 110         | 0.1           | 875   | Ио                                      | 60 | 115   | 1  | STERLING RC-1210-04           | SEE NOTES |
| CUH-3 | LOBBY 115                | FLOOR<br>MOUNTED   | 25.8   | 845         | 60          | 98.3        | 1.8   | 140             | 110         | .3            | 875   | 1 @ ¼ <sub>0</sub> & 1 @ ¼ <sub>5</sub> | 60 | 115   | 1  | STERLING FSI-1055-10          | SEE NOTES |
| CUH-4 | STAFF ENTRANCE 133       | CEILING<br>MOUNTED | 25.8   | 845         | 60          | 98.3        | 1.8   | 140             | 110         | .3            | 875   | 1 @ ¼ <sub>0</sub> & 1 @ ¼ <sub>5</sub> | 60 | 115   | 1  | STERLING RC-1210-10           | SEE NOTES |
| CUH-5 | STAIR #2 120 - 2ND FLOOR | FLOOR<br>MOUNTED   | 7.1    | 185         | 60          | 99.0        | .60   | 140             | 110         | 0.2           | 875   | ¥15                                     | 60 | 115   | 1  | STERLING C-1160-02            | SEE NOTES |
| CUH-6 | STAIR #3 130 - 2ND FLOOR | FLOOR<br>MOUNTED   | 7.1    | 185         | 60          | 99.0        | .60   | 140             | 110         | 0.2           | 875   | 1/15                                    | 60 | 115   | 1  | STERLING C-1160-02            | SEE NOTES |

. REFER TO SPECIFICATIONS, DETAILS, AND CONTROL DRAWINGS FOR ADDITIONAL INFORMATION.

. UNITS SELECTED AT LOW FAN SPEED. PROVIDE CABINET UNIT HEATERS WITH UNIT MOUNTED SPEED CONTROLLER AND LEVELING LEGS. PROVIDE UNITS WITH MOTOR STARTER AND UNIT MOUNTED DISCONNECT.

 PROVIDE WITH BAKED ENAMEL FINISH - COORDINATE FINAL COLOR WITH OWNER AND ARCHITECT.
 CUH FLOW RATES, OUTPUT AND PRESSURE DROPS BASED ON 30°F WATER TEMPERATURE DROP. CONTRACTOR'S SUBMITTAL SHALL ADJUST A CHARACTERISTICS TO ACCOUNT FOR HIGHER TEMPERATURE DIFFERENCE. . PROVIDE CUH-2, CUH-3 AND CUH-4 WITH MANUFACTURERS FURNISHED AQUASTAT TO BE INSTALLED IN FIELD BY THIS CONTRACTOR.

CABINET UNIT HEATERS SHALL BE BY STERLING, MODINE, AIRTHERM OR EQUAL.

|     |               |                    |                |             |              |     |    | PUMP SC    | CHEDULE  |      |      |       |     |    |        |                               |           |
|-----|---------------|--------------------|----------------|-------------|--------------|-----|----|------------|----------|------|------|-------|-----|----|--------|-------------------------------|-----------|
|     |               |                    |                |             | UID          |     |    | SHUT-OFF   | IMPELLER |      | Ν    | ΛΟΤΟΓ | र   |    | WEIGHT | MANUFACTURER AND              |           |
| TAG | SERVICE       | LOCATION           | CASING<br>TYPE | TYPE        | TEMP<br>(°F) | GPM |    | HEAD (FT.) |          | RPM  | BHP  | HP    | v   | PH | (LBS)  | MODEL NUMBER (AS<br>STANDARD) | REMARKS   |
| P-1 | B-1           | MECHANICAL<br>ROOM | CI             | нพ          | 140          | 38  | 27 | 29         | 5.25     | 1750 | 0.45 | 3⁄4   | 208 | 3  | 63     | B&G SERIES 60<br>1-1/2x5-1/4  | SEE NOTES |
| P-2 | B-2           | MECHANICAL<br>ROOM | CI             | нพ          | 140          | 38  | 27 | 29         | 5.25     | 1750 | 0.45 | 3⁄4   | 208 | 3  | 63     | B&G SERIES 60<br>1-1/2x5-1/4  | SEE NOTES |
| P-3 | HEATING<br>HW | MECHANICAL<br>ROOM | CI             | HW          | 140          | 47  | 50 | 56         | 7        | 1750 | 1.1  | 1.5   | 208 | 3  | 170    | B&G 1-1/2x1-1/2x7B            | SEE NOTES |
| P-4 | HEATING<br>HW | MECHANICAL<br>ROOM | CI             | нพ          | 140          | 47  | 50 | 56         | 7        | 1750 | 1.1  | 1.5   | 208 | 3  | 170    | B&G 1-1/2x1-1/2x7B            | SEE NOTES |
|     | VIDE P-1 AND  | ) P-2 WITH PREMIUM |                | • • • • • • |              |     |    |            |          |      |      |       |     |    |        | AET                           |           |

PROVIDE P-3 AND P-4 WITH PREMIUM EFFICIENCY, VFD COMPATIBLE MOTOR (VFD BY DIVISION 26), CAST BRONZE IMPELLER AND STEEL SHAFT.
 PUMPS SHALL BE BY BELL AND GOSSETT, TACO, ARMSTRONG OR EQUAL.

| <u> </u>  |  |  |   |  | PAC           | KAGED DX F            |                      |   | HANDLIN   |  | SCHED   |  |   |  |  |  |   |   |   |  |   |  |   |   |   |  |  |   | 6                 |   |
|---|--|--|---|--|---------------|-----------------------|----------------------|---|---|--|---|--|---|--|--|--|---|---|---|--|---|--|---|---|---|--|--|---|-------------------|---|
|   | Y FAN<br>STATIC PRES   | S. (IN.WG)   | мото  |  |               |                       | UNIT E               |   |   | CC   | OMPRESS   |  |   |  |  |  |   | INDIRECT (  | AS-FIRED H  | EATER DAT  |   | <del> </del>   |   | -   |   | NUFACTUR   |  |   | (                 |   |
|   | EXTERNAL (W/   |  |   |  | (MBH)         | FACE<br>VELOCITY      |                      |   | (°F)  |  |   |  | - STEPS<br>OF   |  | MIN.<br>EFF  | ONDENSE<br>FAN   |   |   |   |  | GAS<br>PRESS<br>(IN.WO  |  | V PH  | H DA  | TA  | AND MODEL<br>NUMBER (AS<br>STANDARD  | s REI  | MARKS   |                   | Architects / Engineers / 1<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110  |
| PE  | .25 DIRTY<br>FILTER)   | TOTAL  | RPM BHF   | HP TOT   | AL SEN        | IS. (FPM)             | DB \                 |   | B WB  | TYPE   | E NO.   | HP EA.   | - UNLOAD  | ("F)   |  | ю. НР Е  |   | OUTPUT E  | =F (°F) (<br>%)   | LAT P.D.<br>(°F) (IN.WO  | 3) (IN.WG   | •)   |   |   |   |  | ,  |   | т                 | FEL. (617) 778-1440<br>www.cdrmaguire.com   |
|   | 1.6  | 2.162  | 674 5.54  | 7.5 269  | 2 206.        | .3 254                | 79.9 6               | 6.0 55  | .51 53.91   | 1 SCROL  | LL 2  | -  | 2   |  | 10.3<br>EER  | 3 1.1  | -   | -   |   |  | -   | 60   | 208 3   | 4" PLE<br>MER   | V 14  | RANE YCD 3   | 530  | E NOTE  |                   |   |
|   | 1.25   | 1.153  | 1039 0.77   |  |               |                       |                      |   | .61 56.30   |  |   | 4.3  | 1   | 95.0   | 17.2<br>SEER<br>14.2   | 1 0.4  |   | 64  | - 57.67 9   | 0.87 0.153   | 4.5/14.   |  | 208 3   | 2" PLE<br>MER<br>2" PLE   |   | RANE YHC 0   |  | E NOTE<br>2<br>E NOTE   |                   |   |
| NV  | 1.5  | 1.73   | 778 3.88  | 5 167  | 0 131.        | .3 178                | 79.0 6               | 5.0 59  | .54 55.40   |  | LL 2  | 3.9  | 2   | 95.0   | 14.2<br>EER  | 2 0.5  | -   | -   |   |  | -   | 60   | 208 3   |   |   | RANE YHD 1   | 80   | 3   | RD                | Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC<br>DK Engineers  |
|   | E DRAIN PAN, C   |  |   | W SWITCH   |               |                       |                      |   | P WITH P  |  |   | T WITH DR  |   |  | BACNET   |  |   | VARIARI E SP  | יוססו א   |  |   |  |   | HRII THE P  |   |  |  |   | An                | 00 Brickstone Square<br>ndover, MA 01810-1488<br>978-296-6200   |
| INECT SV  | VITCH AND 24" I<br>STAINLESS STEI  | ROOF CUF   | RB.   |  |               |                       |                      |   |   |  |   |  |   |  |  |  |   |   |   |  |   |  |   |   |   | -  |  |   |                   |   |
| DENSAT  | E DRAIN PAN, C   | OMPARAT  | IVE ENTHALF   | Y ECONOM   | IZER WIT      | TH POWERED I          | EXHAUST              | , BACNI   | ET INTERF   | FACE CAF   | RD, VARIA   | BLE SPEE   | D SUPPLY I  | FAN WITH   | VFD BY I   | MANUFAC  | TURER, T  | HRU THE BAS   | E ELECTRIC  | AL, SINGLE   | POINT PO  | WER CON  | INECTIO   | N, POWEF  | RED CONVE   |  | JTLET W  | /ІТН  |                   |   |
|   |  |  |   |  |               |                       |                      |   |   |  |   |  |   |  |  |  |   |   |   |  |   |  |   |   |   |  |  | ]   | ╡║ <mark>╸</mark> | REVISIONS   |
|   | FAN DAT  | A  |   |  | ENE           | RGY RECOV             |                      | IIT SCI   |   |  |   | ENER   | GY RECOV  | ERY WHE  | EL   |  |   |   |   |  |   |  |   |   |   |  |  |   | ╡║┡               | Number Description  |
|   | XHAUST STATIO  | c  | SUPPLY MC   | TOR  | E)            | XHAUST MOTOR          |                      |   |   |  |   |  |   |  |  | IAUST AIF  |   |   |   | HOT  | GAS   |  |   |   | Δ   | IR DATA  |  |   | 1   E             |   |
|   | PRESS. (IN. WG)  | ,  |   |  |               |                       |                      | WHEE  | ι   |  | :00 %   |  |   |  |  |  |   | TOTAL<br>CAPACIT  | , SENSIBL   |  | · · · · ·   | SAT.<br>SUCTION  | FACE<br>VELOC   |   |   |  |  |   | )   E             |   |
| EXTE  |  |  | и внр нр  | V РН   |               | BHP HP                | V PH                 |   |   |  |   |  |   |  |  |  |   | (MBH)   |   | MBH  | LAT   | ſEMP (°F)  | (FPM  | I) EA   | \T (°F)   | LAT (°F)   | P.D<br>(IN.W   |   | (   E             |   |
| F   | ILTER  |  |   |  |               |                       |                      |   |   |  |   |  | °F EAT °F   |  |  |  |   |   |   |  |   |  |   | DB  | WB  | DB WE  |  |   | -711F             |   |
|   | 1.25 2.3   | 36 233   | 1 2.06 3  | 208 3  | 2075          | 1.43 2.0 2            | 208 3                | VFD   |   | -  | -   | 0.0 45   | .9 91.0   | 81.6   | 68.0   | 18.1 7   | 7.0 87.   | 3 125.0   | 84.3  | 200  | 67.0  | -  | 292   | 81.6  | 67.4  | 50.7 50.8  | 5 0.3  | 5   | 4   E             |   |
|   |  |  |   |  |               |                       |                      |   |   |  |   |  |   |  |  |  |   |   |   |  |   |  |   | I   |   |  |  |   | ┤   ━             |   |
| , MODUL   | WALLED CONS<br>ATING OA/RA D/<br>NNECTION, POV   | AMPERS W   | ITH ECONON  | IZER CON   | ROL AND       | D WITH LOW LE         | EAKAGE [             | AMPEF   | R BLADES,   |  |   |  |   |  |  |  |   |   |   |  |   |  |   |   |   |  |  | _Y  |                   |   |
|   |  |  |   |  |               | 1                     |                      |   |   |  |   |  |   |  |  |  |   |   |   |  |   |  |   |   |   |  |  |   |                   |   |
| ER)   | ELECTRI  |  | <u> </u>  |  |               | (MBH OUT)             |                      |   | DUC   | TWORK  | PRESS   | URE CLA  | SS AND S  | EAL CLA  | ASS  |  |   |   |   |  | ENE   |  | COVER   |   | SCHEDUL   | E  |  |   | ןן ך              |   |
| GPM   |  | T v  |   | NUFACTUR<br>DEL NUMB<br>STANDAR  | ER (AS        | REMARKS               | PRESS<br>RE          | 1 31/   | TIC PRES  |  | SMACNA<br>CLA   |  | SMACNA LE   |  |  | DESIGN<br>VELOCIT<br>LIMITS  | Y   |   |   | ECT GAS-FIR  | ED HEATEF   | R COIL DAT   | A   |   |   |  |  |   | 1                 |   |
|   |  |  |   |  |               |                       | CLAS                 |   | POS. OR I   |  | A   |  | AR<br>6   | - ROU<br>3   |  | 2000 FPM   |   |   | CAPACITY<br>(MBH)   |  | A   | IR DATA  |   | FILTER<br>DATA  | WEIGHT  | MANUFAC  |  |   | $  _{}$           |   |
| 38  | 120 1<br>120 1   | 2.7  |   | OCHINVAR I   |               | SEE NOTES             | UNLES                |   | RWISE SF  | PECIFIED   | OR SHO  |  | E DRAWING   |  |  | LESS<br>DWING  |   |   |   | TURN<br>DOWN   |   | LAT F  |   | SUPPLY &<br>EXHAUST   | (LBS)   | NUMBE<br>STAND   | R (AS  | REMARKS   |                   | ISSUED FOR  |
|   |  |  |   |  | I             |                       | PRESS<br>2"<br>CLASS | AL 1  | OTHER DI  |  |   | 0 01 L   |   |  |  |  |   |   |   | UT   | (°F)  | (°F) (IN   | .WG)  |   |   |  |  |   |                   | BID   |
| SINGLE I  | POINT ELECTRIC   | CAL CONN   | ECTION, AND   | CONDENS  |               |                       |                      | TRACT   |   |  |   |  | RT) A MINIM<br>SS 3" AND 1  |  |  |  | E   | $\overline{}$   | 200 160   | ) 1:10   | 0.0   | 60.0 (   | ).14  | MERV 13   | 3522  | TRANE  | OA1D   | SEE<br>NOTES  | 1                 |   |
|   |  |  |   |  |               |                       | LOCAT                | ED OUT  | DOORS.  |  |   |  |   |  |  |  |   |   |   |  |   |  |   |   |   |  |  |   | ┤ ║╘              |   |
|   |  |  |   |  |               | 1                     | Z. REF               | ERIOS   |   | ATIONS A   |   |  | JUITIONAL   | NFORMA   | TION.  |  |   |   |   |  |   |  |   |   |   |  |  |   | 1 11              |   |
|   |  |  |   |  |               |                       | 2. REF               |   |   |  | ND DETA   |  | JUITIONAL   | INFORMA  | TION.  |  |   |   |   |  |   |  |   |   |   |  |  |   |                   | SCORATED A TOWN   |
| SOR, ANI  | D LOW AIR PRES   | SSURE SW   | ITCH FOR DE   | TAILS.   |               |                       | Z. REF               |   |   |  | ND DETA   |  | DITIONAL  | INFORMA  | TION.  |  |   |   |   |  |   |  |   |   |   |  |  |   |                   | Secreted A TOWN   |
| SOR, ANI<br>FIRING.   | D LOW AIR PRES   | SSURE SW   | /ITCH FOR DE  | TAILS.   |               |                       | Z. REF               |   |   |  |   |  | DITIONAL  | INFORMA  | TION.  |  |   |   |   |  |   |  |   |   |   |  |  |   |                   | WALTHAM   |
| •   | D LOW AIR PRES   | SSURE SW   | /ITCH FOR DE  | TAILS.   |               |                       | Z. REF               |   |   |  |   |  |   |  |  | <u>,                                     </u>  |   |   |   |  |   |  |   |   |   |  |  | (GPM)   |                   | WALTHAM   |
| •   | D LOW AIR PRES   | SSURE SW   | /ITCH FOR DE  | TAILS.   | (GP           | PM)                   | Z. REF               |   | AG  |  |   |  |   |  | TION.<br>SIZE (IN.<br>W H  | .) FA  | CE  | EATING CO<br>DWS FINS<br>PER<br>FOOT  | AIR DA  |  |   |  | NT F  |   | NUFACTUI<br>ODEL NUM<br>STANDA  | BER (AS  | REI  | (GPM)<br>MARKS  |                   | WALTHAM<br>WALTHAM  |
| FIRING.   |  | C<br>MA  | NUFACTURE   | RAND   | -             |                       | Z. REF               | Т   |   | LOCATI<br>MALE L   |   | ED<br>17   | CFM 0<br>(<br>395   |  | SIZE (IN<br>W H<br>18 S  | .) F/<br>VEL<br>H (F<br>9 3  | ACE<br>DCITY<br>PM)<br>50   | FINS<br>OWS PER   | AIR DA  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11   | GPM E   | EWT LV<br>(°F) (°<br>140 1   | VT F<br>F) (I<br>10   | P.D. M0<br>FT.)<br>1.4  | ODEL NUM  | BER (AS<br>RD)<br>10B09  | SEE  |   |                   | THE A CITY  |
| FIRING.   | ELECTRIC   | C<br>MA  |   | R AND<br>R (AS F   | (GP<br>EMARKS |                       | Z. REF               | Т   | AG<br>C-1<br>C-2<br>C-2 EV  | LOCATI<br>MALE L   | ON SERV   | ED<br>17<br>17<br>2 002 &  | CFM 0<br>(<br>395   | UTPUT<br>MBH)<br>18.7  | SIZE (IN<br>W H<br>18 S  | .) FA<br>VEL0<br>H (F<br>9 3<br>9 3  | ACE<br>DCITY<br>PM) RG<br>50<br>60  | 2 150   | AIR DA<br>EAT LAT<br>(°F) (°F)<br>60.0 103.7  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12   | GPM [1.25<br>1.3  | EWT LN<br>(°F) (°<br>140 1<br>140 1  | NT F<br>F) (I<br>10   | P.D. M0<br>FT.)<br>1.4  | ODEL NUM<br>STANDA<br>TRANE DI  | BER (AS<br>RD)<br>10B09<br>10B09   | SEE<br>SEE   | MARKS   |                   | WALTHAM POLI<br>STATION   |
| FIRING.<br>PR<br>HP<br>½5   | ELECTRIC<br>SERVICE<br>HZ V<br>60 115  | C<br>= MAI<br>PH<br>1 ST   | NUFACTURE<br>DDEL NUMBE<br>STANDARD   | R AND<br>R (AS<br>)<br>60-02 S   | EMARKS        | s                     | Z. REF               | T<br>H<br>H<br>H  | AG<br>C-1<br>C-2<br>C-3<br>EV<br>003  | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO  | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF   | ED<br>17<br>17<br>17<br>E 002 &<br>ICE 005   | CFM 0 (<br>395<br>405<br>120<br>300 (   | UTPUT<br>MBH)<br>18.7<br>19.1  | SIZE (IN.<br>W H<br>18 S<br>18 S<br>8 6  | .) FA<br>VEL0<br>(F<br>9 3<br>9 3<br>6 3<br>9 3  | ACE<br>DCITY<br>PM)<br>50<br>60<br>45   | FINS<br>PER<br>FOOT21502150   | AIR DA<br>EAT LAT<br>(°F) (°F)<br>60.0 103.7<br>60.0 103.4  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06   | GPM [1.25<br>1.3<br>0.55<br>0.75 [  | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT     F       F)     (I       10     -       10     -       10     -       10     -       10     -   | P.D.     M0       FT.)     1.4       1.4     0.1       0.2     0.2  | ODEL NUM<br>STANDA<br>TRANE D1<br>TRANE D1  | BER (AS<br>RD)<br>10809<br>10809<br>10806<br>10809   | SEE<br>SEE<br>SEE<br>SEE   | MARKS<br>NOTES<br>NOTES   |                   | WALTHAM POLI  |
| FIRING.<br>PR<br>HP<br>½5   | ELECTRIC           SERVICE           HZ         V           60         115           60         115  | С МА<br><u>РН</u> МС<br>1 ST<br>1 STE  | NUFACTURE<br>DDEL NUMBE<br>STANDARD<br>ERLING C-11  | R AND<br>R (AS<br>)<br>50-02 S<br>210-04 S   | EMARKS        | s<br>s                | Z. REF               |   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI   | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO<br>FITN<br>MALE C  | ON SERV<br>-OCKER (<br>-OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO  | ED<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>E-H  | CFM 0 (<br>395<br>405<br>120<br>300<br>450<br>260   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3   | SIZE (IN.<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9   | .) FA<br>VEL0<br>(F<br>9 3<br>9 3<br>9 3<br>6 3<br>9 3<br>9 4<br>9 4<br>9 2  | ACE<br>DCITY<br>PM) RC<br>50<br>60<br>45<br>00<br>50<br>60  | FINS<br>PER<br>FOOT2150215021102110215021102110   | AIR DA           EAT<br>(°F)         LAT<br>(°F)           60.0         103.7           60.0         103.4           60.0         90.8           60.0         96.7           60.0         96.1           60.0         10.3  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.17<br>0.06   | GPM [1.25<br>1.3 [<br>0.55 [<br>0.75 [<br>1.2 [<br>0.7 [  | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT         F           10            10            10            10            10            10            10            10            10            10            10            10       | D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>10809<br>10809<br>10806<br>10809<br>10809<br>10809   | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                             | MARKS<br>NOTES<br>NOTES<br>NOTES  |                   | WALTHAM POLI<br>STATION   |
| FIRING.<br>PR<br>HP<br>½5<br>½0<br>& 1 @ ½  | ELECTRIC<br>SERVICE<br>HZ V<br>60 115<br>60 115<br>5 60 115  | С<br><u>=</u> MAI<br>МС<br>РН<br>1 STE<br>1 STE<br>1 STE   | NUFACTURE<br>DDEL NUMBE<br>STANDARD   | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>055-10 Si  | EMARKS        | s<br>s<br>s           | Z. REF               |   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8   | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO<br>FITN<br>MALE C<br>MALE C<br>JUVE  | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>JESS 015<br>CELL 1444<br>CELL 1444<br>ENILE 143   | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D   | CFM 0 (<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>100   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>3.5  | SIZE (IN.<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9   | .)         F/           H         VEL0           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           6         3   | ACE<br>DCITY<br>PM) RC<br>50<br>60<br>45<br>60<br>60<br>60<br>60<br>60<br>60<br>60<br>60<br>60<br>60<br>60  | FINS<br>PER<br>FOOT2150215021102110215021102110280  | AIR DA           EAT<br>(°F)         LAT<br>(°F)           60.0         103.7           60.0         103.4           60.0         90.8           60.0         96.1           60.0         96.1           60.0         10.3           60.0         10.3           60.0         10.3           60.0         92.3  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.17<br>0.06<br>0.06<br>0.06<br>0.05   | GPM     F       1.25     1       1.3     1       0.55     1       0.75     1       0.75     1       0.75     1       0.76     1       0.77     1       0.76     1   | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10 | D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>T0B09<br>T0B09<br>T0B06<br>T0B09<br>T0B09<br>T0B09<br>T0B09<br>T0B06   | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                      | MARKS NOTES   |                   | WALTHAM POLI<br>STATION   |
| FIRING.<br>PR<br>HP<br>½5<br>½0<br>6 & 1 @ ½<br>6 & 1 @ ½   | ELECTRIC<br>SERVICE<br>HZ V<br>60 115<br>60 115<br>5 60 115  | С МАІ<br>РН МС<br>1 STE<br>1 STE<br>1 STE<br>1 STE   | NUFACTURE<br>DDEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING FSI-10   | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si   | EMARKS        | s<br>s<br>s<br>s      | Z. REF               |   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9  | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO<br>FITN<br>MALE C<br>MALE C<br>JUVE  | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>NESS 015<br>CELL 144E<br>CELL 1444  | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D   | CFM 0 (<br>395<br>405 1<br>120 2<br>300 4<br>50 2<br>260 2  | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3   | SIZE (IN.<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9   | .)         F/           H         VEL0           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           6         3   | ACE<br>DCITY<br>PM) RC<br>50<br>60<br>45<br>00<br>50<br>60<br>60<br>60  | FINS<br>PER<br>FOOT2150215021102110215021102110211021102110   | AIR DA           EAT<br>(°F)         LAT<br>(°F)           60.0         103.7           60.0         103.4           60.0         90.8           60.0         96.7           60.0         96.1           60.0         10.3           60.0         10.3           60.0         10.3           60.0         10.3  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.17<br>0.06<br>0.06<br>0.06<br>0.05   | GPM     F       1.25     1       1.3     1       0.55     1       0.75     1       0.75     1       0.75     1       0.76     1       0.77     1       0.76     1   | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10 | D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>T0B09<br>T0B09<br>T0B06<br>T0B09<br>T0B09<br>T0B09<br>T0B09<br>T0B06   | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                      | MARKS NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES   |                   | WALTHAM POLI<br>STATION<br>RENOVATION   |
| FIRING.<br>FIRING.<br>PR<br>HP<br>½5<br>¼0<br>& 1 @ ¼<br>& 1 @ ¼<br>½5  | ELECTRIC         HZ       V         60       115         60       115         5       60       115         5       60       115  | C<br>PH<br>MAI<br>MC<br>PH<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE  | NUFACTURE<br>DDEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING FSI-10<br>ERLING RC-12   | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si<br>50-02 Si   | EMARKS        | s<br>s<br>s<br>s<br>s | Z. REF               | T<br>H<br>H<br>H<br>H<br>H<br>H<br>NO<br>1.   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TO  | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN   | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>NESS 015<br>CELL 144E<br>CELL 144E<br>CELL 144E<br>CELL 144E  | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM 0<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>260<br>260<br>260<br>100<br>290   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>10.3<br>3.5<br>9.9<br>17.6   | SIZE (IN<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16  | .)     FA       H     VEL0       9     3 <td< td=""><td>ACE<br/>DCITY<br/>PM) R0<br/>50<br/>60<br/>45<br/>00<br/>50<br/>60<br/>60<br/>60<br/>60<br/>60<br/>90<br/>90</td><td>FINS<br/>PER<br/>FOOT2150215021102110215021102110280</td><td>AIR DA           EAT<br/>(°F)         LAT<br/>(°F)           60.0         103.7           60.0         103.4           60.0         90.8           60.0         96.1           60.0         96.1           60.0         10.3           60.0         10.3           60.0         10.3           60.0         92.3</td><td>ATA<br/>P.D.<br/>(IN.WG)<br/>7 0.11<br/>4 0.12<br/>0.08<br/>0.06<br/>0.17<br/>0.06<br/>0.06<br/>0.06<br/>0.05</td><td>GPM     F       1.25     1       1.3     1       0.55     1       0.75     1       0.75     1       0.75     1       0.76     1       0.77     1       0.76     1</td><td>EWT LV<br/>(°F) ('<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1</td><td>NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10</td><td>D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI</td><td>BER (AS<br/>RD)<br/>T0B09<br/>T0B09<br/>T0B06<br/>T0B09<br/>T0B09<br/>T0B09<br/>T0B09<br/>T0B06</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES</td><td></td><td>WALTHAM POLI<br/>STATION<br/>RENOVATION</td></td<>  | ACE<br>DCITY<br>PM) R0<br>50<br>60<br>45<br>00<br>50<br>60<br>60<br>60<br>60<br>60<br>90<br>90  | FINS<br>PER<br>FOOT2150215021102110215021102110280  | AIR DA           EAT<br>(°F)         LAT<br>(°F)           60.0         103.7           60.0         103.4           60.0         90.8           60.0         96.1           60.0         96.1           60.0         10.3           60.0         10.3           60.0         10.3           60.0         92.3  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.17<br>0.06<br>0.06<br>0.06<br>0.05   | GPM     F       1.25     1       1.3     1       0.55     1       0.75     1       0.75     1       0.75     1       0.76     1       0.77     1       0.76     1   | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10 | D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>T0B09<br>T0B09<br>T0B06<br>T0B09<br>T0B09<br>T0B09<br>T0B09<br>T0B06   | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                      | MARKS NOTES   |                   | WALTHAM POLI<br>STATION<br>RENOVATION   |
| FIRING.<br>PR<br>HP<br>½5<br>½0<br>& 1 @ ½<br>½5<br>½5  | ELECTRIO<br>SERVICE<br>HZ V<br>60 115<br>60 115<br>5 60 115<br>5 60 115<br>60 115  | C<br>PH<br>MAI<br>MC<br>PH<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE  | NUFACTURE<br>DDEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING FSI-10<br>ERLING RC-12   | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si<br>50-02 Si   | EMARKS        | s<br>s<br>s<br>s<br>s | Z. REF               | T<br>H<br>H<br>H<br>H<br>H<br>H<br>NO<br>1.   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TO  | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN   | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>NESS 015<br>CELL 144E<br>CELL 144E<br>CELL 144E<br>CELL 144E  | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM 0<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>260<br>260<br>260<br>260<br>260<br>260<br>260   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>10.3<br>3.5<br>9.9<br>17.6   | SIZE (IN<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16 9<br>16  | .)     FA       H     VEL0       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     3       9     2       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     2       6     3       9     3       9     3 <td< td=""><td>ACE<br/>DCITY<br/>PM) R<br/>50<br/>60<br/>45<br/>60<br/>50<br/>60<br/>60<br/>60<br/>60<br/>90<br/>90<br/>7<br/>10NAL INI</td><td>FINS<br/>PER<br/>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         3       10         4       10         5       10</td><td>AIR DA         EAT<br/>(°F)       LAT<br/>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       10.3         60.0       92.3         60.0       91.2</td><td>ATA<br/>P.D.<br/>(IN.WG)<br/>7 0.11<br/>4 0.12<br/>0.08<br/>0.06<br/>0.17<br/>0.06<br/>0.06<br/>0.06<br/>0.05<br/>1 0.07<br/>1 0.07</td><td>GPM     F       1.25     1       1.3     1       0.55     1       0.75     1       0.75     1       0.75     1       0.76     1       0.77     1       0.76     1</td><td>EWT LV<br/>(°F) ('<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1</td><td>NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10</td><td>D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI</td><td>BER (AS<br/>RD)<br/>T0B09<br/>T0B09<br/>T0B06<br/>T0B09<br/>T0B09<br/>T0B09<br/>T0B09<br/>T0B06</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES</td><td></td><td>WALTHAM POLI<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>WALTHAM, MASSACHUS<br/>HVAC</td></td<>  | ACE<br>DCITY<br>PM) R<br>50<br>60<br>45<br>60<br>50<br>60<br>60<br>60<br>60<br>90<br>90<br>7<br>10NAL INI   | FINS<br>PER<br>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         3       10         4       10         5       10   | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       10.3         60.0       92.3         60.0       91.2  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.17<br>0.06<br>0.06<br>0.06<br>0.05<br>1 0.07<br>1 0.07   | GPM     F       1.25     1       1.3     1       0.55     1       0.75     1       0.75     1       0.75     1       0.76     1       0.77     1       0.76     1   | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10 | D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>T0B09<br>T0B09<br>T0B06<br>T0B09<br>T0B09<br>T0B09<br>T0B09<br>T0B06   | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                      | MARKS NOTES   |                   | WALTHAM POLI<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>WALTHAM, MASSACHUS<br>HVAC   |
| FIRING.<br>FIRING.<br>DR<br>HP<br>$\frac{1}{5}$<br>$\frac{1}{0}$ & 1 @ $\frac{1}{4}$<br>$\frac{1}{5}$<br>$\frac{1}{5}$<br>$\frac{1}{5}$<br>AND LEVI   | ELECTRIC         HZ       V         60       115         60       115         5       60       115         5       60       115         60       115       60         5       60       115         60       115       60         5       60       115         60       115       60         5       60       115         60       115       60         60       115       60         60       115       60   | С МА<br>РН МС<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 ST   | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING FSI-10<br>ERLING RC-11<br>ERLING C-11  | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si<br>50-02 Si   | EMARKS        | s<br>s<br>s<br>s<br>s |                      | T<br>H<br>H<br>H<br>H<br>H<br>H<br>NO<br>1.   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TO  | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN   | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>NESS 015<br>CELL 144E<br>CELL 144E<br>CELL 144E<br>CELL 144E  | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM 0<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>100<br>290<br>5, AND CON<br>E, JOHNSO   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>3.5<br>9.9<br>17.6<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3   | SIZE (IN.<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9   | .)         FA           H         VEL0           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         3           9         2           9         2           9         2           6         3           9         2           6         3           9         2           6         3           9         2           6         3           9         2           6         3           9         2           6         3           9         2           6         3           9         2           6         3           9         2           6         3           7         7           6         3           7         7 <td>ACE       RC         DCITY       RC         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         FIONAL INI       -         S-FIREI       -</td> <td>Simple set in the set in</td> <td>AIR DA<br/>EAT LAT<br/>(°F) (°F)<br/>60.0 103.7<br/>60.0 103.4<br/>60.0 90.8<br/>60.0 90.8<br/>60.0 96.7<br/>60.0 96.7<br/>60.0 91.3<br/>60.0 91.2<br/>60.0 91.2<br/>TER SCH</td> <td>ATA<br/>P.D.<br/>(IN.WG)<br/>7 0.11<br/>4 0.12<br/>0.08<br/>0.06<br/>0.06<br/>0.06<br/>0.06<br/>0.05<br/>10.07<br/>10.05<br/>10.07<br/>10.05<br/>10.07<br/>10.05<br/>10.07<br/>10.05<br/>10.07<br/>10.05<br/>10.07<br/>10.05<br/>10.07<br/>10.05<br/>10.07<br/>10.05<br/>10.07<br/>10.07<br/>10.05<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07<br/>10.07</td> <td>GPM</td> <td>EWT LV<br/>(°F) ('<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1</td> <td>NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10</td> <td>D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4</td> <td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI</td> <td>BER (AS<br/>RD)<br/>T0B09<br/>T0B09<br/>T0B06<br/>T0B09<br/>T0B09<br/>T0B09<br/>T0B09<br/>T0B06</td> <td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td> <td>MARKS NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES</td> <td></td> <td>WALTHAM POLI<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>WALTHAM, MASSACHUS</td>  | ACE       RC         DCITY       RC         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         FIONAL INI       -         S-FIREI       -  | Simple set in the set in | AIR DA<br>EAT LAT<br>(°F) (°F)<br>60.0 103.7<br>60.0 103.4<br>60.0 90.8<br>60.0 90.8<br>60.0 96.7<br>60.0 96.7<br>60.0 91.3<br>60.0 91.2<br>60.0 91.2<br>TER SCH  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.06<br>0.06<br>0.06<br>0.05<br>10.07<br>10.05<br>10.07<br>10.05<br>10.07<br>10.05<br>10.07<br>10.05<br>10.07<br>10.05<br>10.07<br>10.05<br>10.07<br>10.05<br>10.07<br>10.05<br>10.07<br>10.07<br>10.05<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07<br>10.07 | GPM   | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT     F       (F)     (I       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10 | D.     M0       FT.)     1.4       1.4     0.1       0.2     0.5       0.2     0.2       0.2     0.2       0.4     0.4  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>T0B09<br>T0B09<br>T0B06<br>T0B09<br>T0B09<br>T0B09<br>T0B09<br>T0B06   | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                      | MARKS NOTES   |                   | WALTHAM POLI<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>WALTHAM, MASSACHUS   |
| FIRING.<br>FIRING.<br>DR<br>HP<br>$\frac{1}{5}$<br>$\frac{1}{0}$ & 1 @ $\frac{1}{4}$<br>$\frac{1}{5}$<br>$\frac{1}{5}$<br>$\frac{1}{5}$<br>AND LEVI   | ELECTRIC         HZ       V         60       115         60       115         5       60       115         5       60       115         5       60       115         60       115       60         5       60       115         60       115       60         5       60       115         60       115       60         115       60       115         60       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       115       115         115       115       115         115       115 </td <td>С МА<br/>РН МС<br/>1 STE<br/>1 STE<br/>1 STE<br/>1 STE<br/>1 STE<br/>1 ST</td> <td>NUFACTURED<br/>DEL NUMBE<br/>STANDARD<br/>ERLING C-11<br/>ERLING RC-12<br/>ERLING FSI-10<br/>ERLING RC-11<br/>ERLING C-11</td> <td>R AND<br/>R (AS<br/>)<br/>50-02 Si<br/>210-04 Si<br/>255-10 Si<br/>210-10 Si<br/>50-02 Si</td> <td>EMARKS</td> <td>s<br/>s<br/>s<br/>s<br/>s</td> <td>Z. REF</td> <td>T<br/>H<br/>H<br/>H<br/>H<br/>H<br/>H<br/>NO<br/>1.</td> <td>AG<br/>C-1<br/>C-2<br/>C-3<br/>C-3<br/>C-4<br/>FEI<br/>C-5<br/>C-6<br/>C-7<br/>C-8<br/>C-9<br/>TES:<br/>REFER TC<br/>HOT WAT</td> <td>LOCATI<br/>MALE L<br/>MALE L<br/>/IDENCE 3<br/>3 AND RA<br/>MALE LOO<br/>FITN<br/>MALE C<br/>JUVE<br/>WOMEN</td> <td>ON SERV<br/>OCKER (<br/>OCKER (<br/>STORAGI<br/>NGE OFF<br/>CKER RO<br/>NESS 015<br/>CELL 144E<br/>CELL 144E<br/>CELL 144E<br/>CELL 144E</td> <td>ED<br/>17<br/>17<br/>17<br/>002 &amp;<br/>ICE 005<br/>OM 010<br/>H<br/>D<br/></td> <td>CFM 0<br/>395<br/>405<br/>120<br/>300<br/>450<br/>260<br/>260<br/>260<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>100<br/>290<br/>0<br/>100<br/>100<br/>100<br/>100<br/>100<br/>100<br/>100</td> <td>UTPUT<br/>MBH)<br/>18.7<br/>19.1<br/>4.1<br/>10.9<br/>17.6<br/>10.3<br/>10.3<br/>3.5<br/>9.9<br/>IROL DRA<br/>N CONTR</td> <td>SIZE (IN.<br/>W H<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9</td> <td>.)       FA         VEL0       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         GA         MIN.         ICIENCY</td> <td>ACE<br/>DCITY<br/>PM)<br/>50<br/>60<br/>45<br/>00<br/>50<br/>60<br/>60<br/>60<br/>60<br/>60<br/>60<br/>90<br/>50<br/>60<br/>60<br/>60<br/>60<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7<br/>7</td> <td>SOWS       FINS<br/>PER<br/>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       100         2       100         2       100         2       80         1       150         FORMATION.       South State Sta</td> <td>AIR DA<br/>EAT (°F) (°F)<br/>60.0 103.7<br/>60.0 103.4<br/>60.0 90.8<br/>60.0 96.1<br/>60.0 96.1<br/>60.0 10.3<br/>60.0 10.3<br/>60.0 91.2<br/>60.0 91.2<br/>ATER SCH</td> <td>ATA<br/>P.D.<br/>(IN.WG)<br/>7 0.11<br/>4 0.12<br/>0.08<br/>0.06<br/>0.06<br/>0.06<br/>0.06<br/>0.05<br/>0.07<br/>1<br/>ELECTRIC<br/>SERVIC</td> <td>GPM</td> <td>EWT LV<br/>(°F) ('<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1<br/>140 1</td> <td>NT F<br/>F) (I<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·</td> <td>P.D.<br/>FT.)<br/>M<br/>1.4<br/>1.4<br/>0.1<br/>0.2<br/>0.2<br/>0.2<br/>0.2<br/>0.2<br/>0.4<br/>0.7<br/>0.7</td> <td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI</td> <td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td> <td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td> <td>MARKS NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES</td> <td></td> <td>WALTHAM POLI<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>WALTHAM, MASSACHUS<br/>HVAC</td>   | С МА<br>РН МС<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 ST   | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING FSI-10<br>ERLING RC-11<br>ERLING C-11  | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si<br>50-02 Si   | EMARKS        | s<br>s<br>s<br>s<br>s | Z. REF               | T<br>H<br>H<br>H<br>H<br>H<br>H<br>NO<br>1.   | AG<br>C-1<br>C-2<br>C-3<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TC<br>HOT WAT  | LOCATI<br>MALE L<br>MALE L<br>/IDENCE 3<br>3 AND RA<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN   | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>NESS 015<br>CELL 144E<br>CELL 144E<br>CELL 144E<br>CELL 144E  | ED<br>17<br>17<br>17<br>002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM 0<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>260<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>100<br>290<br>0<br>100<br>100<br>100<br>100<br>100<br>100<br>100   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>3.5<br>9.9<br>IROL DRA<br>N CONTR  | SIZE (IN.<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9   | .)       FA         VEL0       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         GA         MIN.         ICIENCY  | ACE<br>DCITY<br>PM)<br>50<br>60<br>45<br>00<br>50<br>60<br>60<br>60<br>60<br>60<br>60<br>90<br>50<br>60<br>60<br>60<br>60<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7  | SOWS       FINS<br>PER<br>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       100         2       100         2       100         2       80         1       150         FORMATION.       South State Sta  | AIR DA<br>EAT (°F) (°F)<br>60.0 103.7<br>60.0 103.4<br>60.0 90.8<br>60.0 96.1<br>60.0 96.1<br>60.0 10.3<br>60.0 10.3<br>60.0 91.2<br>60.0 91.2<br>ATER SCH  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.06<br>0.06<br>0.06<br>0.05<br>0.07<br>1<br>ELECTRIC<br>SERVIC  | GPM   | EWT LV<br>(°F) ('<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1<br>140 1   | NT F<br>F) (I<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·   | P.D.<br>FT.)<br>M<br>1.4<br>1.4<br>0.1<br>0.2<br>0.2<br>0.2<br>0.2<br>0.2<br>0.4<br>0.7<br>0.7  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                      | MARKS NOTES   |                   | WALTHAM POLI<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>WALTHAM, MASSACHUS<br>HVAC   |
| FIRING.<br>FIRING.<br>DR<br>HP<br>½5<br>½0<br>0 & 1 @ ¼<br>0 & 1 @ ¼<br>1 @ ¼<br>1 @ ¼<br>5<br>1 @ ↓<br>1 | ELECTRIC         HZ       V         60       115         60       115         5       60       115         5       60       115         5       60       115         60       115       60         5       60       115         60       115       60         5       60       115         60       115       60         115       60       115         60       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       60       115         61       115       60         115       115       115         115       115       115         115       115 </td <td>С МА<br/>РН МС<br/>1 STE<br/>1 STE<br/>1 STE<br/>1 STE<br/>1 STE<br/>1 ST</td> <td>NUFACTURED<br/>DEL NUMBE<br/>STANDARD<br/>ERLING C-11<br/>ERLING RC-12<br/>ERLING FSI-10<br/>ERLING RC-11<br/>ERLING C-11</td> <td>R AND<br/>R (AS<br/>)<br/>50-02 Si<br/>210-04 Si<br/>255-10 Si<br/>210-10 Si<br/>50-02 Si</td> <td>EMARKS</td> <td>s<br/>s<br/>s<br/>s<br/>s</td> <td></td> <td>T<br/>H<br/>H<br/>H<br/>H<br/>H<br/>H<br/>H<br/>TAG</td> <td>AG<br/>C-1<br/>C-2<br/>C-3<br/>C-3<br/>C-4<br/>FEI<br/>C-5<br/>C-6<br/>C-7<br/>C-8<br/>C-9<br/>TES:<br/>REFER TC<br/>HOT WAT<br/>LOC</td> <td>LOCATI<br/>MALE L<br/>MALE L<br/>MALE LOO<br/>FITN<br/>MALE C<br/>MALE C<br/>JUVE<br/>WOMEN</td> <td>ON SERV<br/>OCKER (<br/>OCKER (<br/>STORAGI<br/>NGE OFF<br/>CKER RO<br/>JESS 015<br/>CELL 1444<br/>ENILE 143<br/>CELL 1444<br/>ENILE 143<br/>CELL 136<br/>SHALL BI<br/>SHALL BI</td> <td>ED<br/>17<br/>17<br/>17<br/>2 002 &amp;<br/>ICE 005<br/>OM 010<br/>H<br/>D<br/></td> <td>CFM 0<br/>395<br/>405<br/>120<br/>300<br/>450<br/>260<br/>260<br/>260<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>290<br/>0<br/>100<br/>100<br/>290<br/>0<br/>100<br/>100<br/>100<br/>100<br/>100<br/>100<br/>100</td> <td>UTPUT<br/>MBH)<br/>18.7<br/>19.1<br/>4.1<br/>10.9<br/>17.6<br/>10.3<br/>10.3<br/>3.5<br/>9.9<br/>IROL DRA<br/>N CONTR</td> <td>SIZE (IN.<br/>W H<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9<br/>18 9</td> <td>.)       FA         VEL0       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         GA         MIN.         ICIENCY</td> <td>ACE       RC         DCITY       RC         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         90       -         FIONAL INI       -         S-FIREI       -</td> <td>SOWS       FINS PER FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       80         1       150         5       FORMATION.</td> <td>AIR DA         EAT (°F)       LAT (°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.3         60.0       91.2         60.0       91.2         ATER SCH         MOTOR       PM         HP       H</td> <td>ATA<br/>P.D.<br/>(IN.WG)<br/>7 0.11<br/>4 0.12<br/>0.08<br/>0.06<br/>0.06<br/>0.06<br/>0.06<br/>0.05<br/>0.07<br/>1<br/>ELECTRIC<br/>SERVIC</td> <td>GPM</td> <td>EWT (°F) ('<br/>140 1<br/>140 1<br/>VEIGHT</td> <td>NT F<br/>F) (I<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·<br/>10 ·</td> <td>P.D.<br/>FT.)<br/>1.4<br/>1.4<br/>0.1<br/>0.2<br/>0.2<br/>0.2<br/>0.2<br/>0.2<br/>0.2<br/>0.4<br/>0.7<br/>0.7</td> <td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI</td> <td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F0B08<br/>F08<br/>F08<br/>F08<br/>F08<br/>F08<br/>F08<br/>F08<br/>F</td> <td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td> <td>MARKS NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES</td> <td></td> <td>WALTHAM POLI<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>WALTHAM, MASSACHUS<br/>HVAC</td>   | С МА<br>РН МС<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 ST   | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING FSI-10<br>ERLING RC-11<br>ERLING C-11  | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si<br>50-02 Si   | EMARKS        | s<br>s<br>s<br>s<br>s |                      | T<br>H<br>H<br>H<br>H<br>H<br>H<br>H<br>TAG   | AG<br>C-1<br>C-2<br>C-3<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TC<br>HOT WAT<br>LOC   | LOCATI<br>MALE L<br>MALE L<br>MALE LOO<br>FITN<br>MALE C<br>MALE C<br>JUVE<br>WOMEN  | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>JESS 015<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>ENILE 143<br>CELL 136<br>SHALL BI<br>SHALL BI  | ED<br>17<br>17<br>17<br>2 002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM 0<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>260<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>100<br>290<br>0<br>100<br>100<br>100<br>100<br>100<br>100<br>100   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>3.5<br>9.9<br>IROL DRA<br>N CONTR  | SIZE (IN.<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9   | .)       FA         VEL0       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         GA         MIN.         ICIENCY  | ACE       RC         DCITY       RC         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         90       -         FIONAL INI       -         S-FIREI       -   | SOWS       FINS PER FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       80         1       150         5       FORMATION.  | AIR DA         EAT (°F)       LAT (°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.3         60.0       91.2         60.0       91.2         ATER SCH         MOTOR       PM         HP       H   | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.06<br>0.06<br>0.06<br>0.05<br>0.07<br>1<br>ELECTRIC<br>SERVIC  | GPM   | EWT (°F) ('<br>140 1<br>140 1<br>VEIGHT   | NT F<br>F) (I<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·   | P.D.<br>FT.)<br>1.4<br>1.4<br>0.1<br>0.2<br>0.2<br>0.2<br>0.2<br>0.2<br>0.2<br>0.4<br>0.7<br>0.7  | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI  | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B09<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F0B08<br>F08<br>F08<br>F08<br>F08<br>F08<br>F08<br>F08<br>F                | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE                      | MARKS NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES NOTES   |                   | WALTHAM POLI<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>WALTHAM, MASSACHUS<br>HVAC   |
| FIRING.<br>FIRING.<br>PR<br>HP<br>½5<br>½0<br>0 & 1 @ ½<br>0 & 1 @ ½<br>1   | ELECTRIC         HZ       V         60       115         60       115         60       115         5       60       115         5       60       115         6       115       60         5       60       115         6       115       60         5       60       115         60       115       60         115       60       115         60       115       60         60       115       60         60       115       60         60       115       60         60       115       60         8       CTOR.       8  | C MAI<br>PH MC<br>1 STE<br>1 STE   | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING FSI-10<br>ERLING RC-11<br>ERLING C-11<br>FORMANCE  | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si<br>50-02 Si   | EMARKS        | s<br>s<br>s<br>s<br>s |                      | TAG<br>GUH-1<br>GUH-2   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TO<br>HOT WAT<br>LOC<br>VEHICLE<br>SALLYI   | LOCATION<br>MALE L<br>MALE L<br>MALE LOO<br>FITN<br>MALE CO<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL   | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>VESS 015<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>SHALL 136<br>SHALL BI<br>SHALL BI<br>GAS<br>TYPE<br>01 NAT<br>9 NAT  | ED<br>17<br>17<br>17<br>002 &<br>ICE 005<br>OM 010<br>E-H<br>A-D<br>A-C<br>BA-C<br>BY TRAN<br>PRESSI<br>MIN<br>6"<br>6"  | CFM 0<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>100<br>290<br>0<br>300<br>450<br>260<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>0<br>100<br>290<br>100<br>290<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>280<br>100<br>100<br>280<br>100<br>100<br>280<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>1   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>10.3<br>3.5<br>9.9<br>ITROL DRA<br>N CONTR<br>ITROL DRA<br>ITROL DRA<br>N CONTR<br>ITROL DRA<br>ITROL DRA<br>ITRO   | SIZE (IN<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9  | .)       FA         VEL0       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         6       3         9       2         GA       3         93       93   | ACE<br>DCITY<br>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         100NAL       -         S-FIREI       -         CFM       T         1650       -         1100       -   | Simple served | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       90.8         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         ATER SCH       MOTOR         PM       HP       H         550       1/8         140       1/8  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.06<br>0.06<br>0.06<br>0.05<br>0.07<br>1000<br>ELECTRIC<br>SERVIC<br>FLA V<br>2.2 115<br>1.3 115  | GPM   | EWT (°F) (°<br>140 1<br>140 1<br>VEIGHT (LBS)<br>105 95                                  | NT F<br>F) (I<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·   | P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.4          0.7          0.4          0.7          ACTURER (AS S         MODI         MODI                           | CODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE | MARKS NOTES   |                   | WALTHAM POLIS<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>WALTHAM, MASSACHUS<br>HVALTHAM, MASSACHUS   |
| FIRING.<br>FIRING.<br>PR<br>HP<br>¼5<br>¼6<br>0 & 1 @ ¼<br>1 @ ¼   | ELECTRIC         HZ       V         60       115         60       115         60       115         5       60       115         5       60       115         6       115       60         5       60       115         6       115       60         5       60       115         60       115       60         115       60       115         60       115       60         60       115       60         60       115       60         60       115       60         60       115       60         8       CTOR.       8  | C MANUFAC MODEL N  | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-11<br>ERLING FSI-10<br>ERLING C-11<br>ERLING C-11<br>FORMANCE   | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>255-10 Si<br>210-10 Si<br>50-02 Si   |               | s<br>s<br>s<br>s<br>s |                      | TAG<br>GUH-1<br>GUH-3   | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TO<br>HOT WAT<br>LOC<br>VEHICLE<br>SALLYI<br>SALLYI   | LOCATION<br>MALE L<br>MALE L<br>MALE LOO<br>FITN<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>CATION<br>E BAYS 10<br>PORT 149   | ON SERV<br>OCKER (<br>OCKER (<br>STORAGE<br>NGE OFF<br>CKER RO<br>VESS 015<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>SHALL 136<br>SHALL 136<br>SHALL BI<br>GAS<br>TYPE<br>01 NAT<br>9 NAT   | ED<br>17<br>17<br>17<br>002 &<br>ICE 005<br>OM 010<br>E-H<br>-D<br>A-C<br>A-C<br>BY TRAN<br>PRESSI<br>MIN<br>6"<br>6"<br>6"<br>6"  | CFM 0 (<br>395<br>405<br>120<br>300<br>450<br>260<br>260<br>260<br>100<br>290<br>5, AND CON<br>E, JOHNSO  | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>3.5<br>9.9<br>ITROL DRA<br>N CONTR<br>ITROL DRA<br>N CONTR<br>I CONTR<br>I CONTR<br>I CONTR<br>I CONTR<br>I CONTR<br>I CONT  | SIZE (IN<br>W H<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9<br>18 9  | .)       FA         H       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         9       2         9       2         9       2         9       2         9       2         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         7       6         8       7         6       3         7       6         6       3        <  | ACE<br>DCITY<br>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         7       -         CFM       T         1650       -   | FINS<br>PER<br>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       80         1       150         FORMATION.       Image: State  | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         ATER SCH       91.2         MOTOR       91.2         550       1/8         140       1/8  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.06<br>0.06<br>0.06<br>0.05<br>0.05<br>0.07<br>4<br>D.05<br>0.07<br>1<br>ELECTRIC<br>SERVIC<br>FLA V<br>2.2 115   | GPM   | EWT (°F) (°<br>140 1<br>140 1                                 | NT F<br>F) (I<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·   | P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.4          0.7          0.4          0.7          ACTURER (AS S         MODI         MODI         MODI         MODI | CODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI                         | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE | MARKS NOTES   |                   | WALTHAM POLIS<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>MALTHAM, MASSACHUS<br>HVALTHAM, MASSACHUS<br>HUMBER: 20130535<br>ESIGNED BY: JJK  |
| FIRING.<br>PR<br>HP<br>½5<br>½0<br>& 1 @ ½<br>& 1 @ ½<br>%5<br>%5<br>%5<br>%5<br>%5<br>%5<br>%5<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%6<br>%7<br>%7<br>%7<br>%7<br>%7<br>%7<br>%7<br>%7<br>%7<br>%7   | ELECTRIC         HZ       V         60       115         60       115         60       115         5       60       115         5       60       115         60       115       60         5       60       115         60       115       60         5       60       115         60       115       60         115       60       115         60       115       60         60       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115       60         800       115   | C MAN<br>PH MA<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE<br>1 STE  | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-11<br>ERLING RC-11<br>ERLING C-11<br>ERLING C-11<br>FORMANCE  | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>210-10 Si<br>30-02 Si<br>30-02 Si<br>30-02 Si  |               | s<br>s<br>s<br>s<br>s |                      | TAG<br>GUH-1<br>GUH-2<br>GUH-3<br>GUH-4<br>NO<br>1.<br>2.<br>TAG  | AG<br>C-1<br>C-2<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TC<br>HOT WAT<br>LOC<br>VEHICLE<br>SALLYI<br>SALLYI<br>MOTO<br>BIKE STC<br>DVIDE WIT  | LOCATION<br>MALE L<br>MALE L<br>MALE L<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>WOMEN<br>CATION<br>E BAYS 10<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149  | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>NESS 015<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>ENILE 143<br>CELL 136<br>SHALL BI<br>GAS<br>TYPE<br>01 NAT<br>9 NAT<br>9 NAT<br>9 NAT  | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br><br><br><br><br><br>   | CFM       O         395       1         405       1         120       1         300       1         450       1         260       1         260       1         260       1         100       2         280       1         100       1         290       1         100       1         290       1         INPL       (MBH)         7"       85         7"       55         7"       55         7"       55         7"       55         7"       55         7"       55         7"       55  | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>3.5<br>9.9<br>ITROL DRA<br>N CONTR<br>ITROL DRA<br>N CONTR<br>0.1<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10  | SIZE (IN.         W       H         18       9         18       9         18       9         16       9         16       9         16       9         16       9         16       9         16       9         OLS, OR I         PUT         H)       EFF         1       2         2       2         BAKED ON   | .)       FA         H       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       3         93       93         93       93         93       93        93         93  | ACE<br>DCITY<br>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         7       -         FIONAL INI       -         S-FIREI       -         CFM       T         1650       -         1100       -         1100       -         1100       -         R COAT.       -  | FINS<br>PER<br>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       80         1       150         FORMATION.       Image: State  | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         ATER SCH       91.2         MOTOR       91.2         550       1/8         140       1/8  | ATA<br>P.D.<br>(IN.WG)<br>7 0.11<br>4 0.12<br>0.08<br>0.06<br>0.06<br>0.06<br>0.06<br>0.05<br>0.07<br>4<br>0.05<br>0.07<br>1<br>ELECTRIC<br>SERVIC<br>FLA V<br>2.2 115<br>1.3 115<br>1.3 115   | GPM   | EWT (°F) (°<br>140 1<br>140 1<br>105 1<br>95 95 1             | NT F<br>F) (I<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·   | P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.4          0.7          0.4          0.7          ACTURER (AS S         MODI         MODI         MODI         MODI | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>AND MOD<br>TANDARD                | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE | MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES |                   | WALTHAM POLIS<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>MALTHAM, MASSACHUS<br>HVALTHAM, MASSACHUS<br>HUMBER: 20130535<br>ESIGNED BY: JJK  |
| FIRING.<br>FIRING.<br>PR<br>HP<br>½5<br>½6<br>A 1 @ ½<br>A 1 @ ½<br>⅓5<br>Å5<br>Å5<br>Å5<br>Å5<br>Å5<br>Å5<br>Å5<br>Å5<br>Å5<br>Å   | ELECTRIC         HZ       V         60       115         60       15         60       15         60       15         60       15         60       15         60       15         60       15  | C MAN<br>PH MAN<br>1 STE<br>1 STE | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING RC-12<br>ERLING C-11<br>ERLING C-11<br>ERLING C-11<br>FORMANCE   | R AND<br>R (AS<br>)<br>50-02 Si<br>210-04 Si<br>210-10 Si<br>50-02 Si<br>50-02 Si<br>60-02 Si<br>80-02 Si  | EMARKS        | s<br>s<br>s<br>s<br>s |                      | TAG<br>GUH-1<br>GUH-2<br>GUH-3<br>GUH-4<br>NOTES:<br>PRO<br>3. PRO  | AG<br>C-1<br>C-2<br>C-3<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TC<br>HOT WAT<br>C-5<br>C-9<br>LOC<br>VEHICLE<br>SALLYI<br>SALLYI<br>SALLYI<br>MOTO<br>BIKE STO<br>VIDE WIT<br>DVIDE WIT<br>DVIDE ALU  | LOCATION<br>MALE LOCATION<br>MALE LOC<br>MALE LOC<br>MALE LOC<br>FITN<br>MALE CO<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>WOMEN<br>CATION<br>E BAYS 10<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149<br>PORT 149  | ON SERV<br>OCKER (<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>JESS 015<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>ENILE 143<br>CELL 134<br>CELL 134<br>CELL 134<br>CELL 134<br>CELL 134<br>CELL 144<br>ENILE 143<br>CELL 144<br>SHALL BI<br>CELL 144<br>ENILE 143<br>CELL 134<br>CELL 134<br>CELL 134<br>CELL 134<br>CELL 134<br>CELL 134<br>CELL 144<br>ENILE 143<br>CELL 144<br>SHALL BI<br>CELL 144<br>ENILE 143<br>CELL 134<br>CELL 144<br>SHALL BI<br>CELL 144<br>SHALL BI<br>SHALL SHALL SHA   | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br> | CFM       O         395       0         405       0         120       0         300       0         450       0         260       0         260       0         260       0         260       0         260       0         260       0         260       0         260       0         290       0         0       0         290       0         0       0         290       0         0       0         290       0         0       0         290       0         0       0         290       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       <                 | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>3.5<br>9.9<br>17.6<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.5<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10 | SIZE (IN.         W       H         18       9         18       9         18       9         18       9         18       9         16       9         16       9         16       9         16       9         0LS, OR I         PUT       EFF         1       2         2       2         2       2         BAKED ON POW       REXHAUS  | .)       FA         H       VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       3         93       93         93       93         93       93        93       93  | ACE<br>DCITY<br>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         100       -         S-FIREI       -         CFM       T         1650       -         1100       -         1100       -         1100       -         SINGLE S       -   | STAGE DIREC       FINS PER FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       10         2       80         1       150         5       FORMATION.         FORMATION       FORMATION.         AIR       1         44       1         43       1         43       1         43       1   | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.3         60.0       92.3         60.0       91.2         60.0       91.2         ATER SCH         MOTOR       10         PM       HP       1         550       1%       1         140       1%       1         140       1%       1  | ATA         P.D.<br>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115   | GPM   | EWT (°F) (°<br>140 1<br>140 1<br>105 1<br>95 95 1             | NT F<br>F) (I<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·<br>10 ·   | P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.4          0.7          0.4          0.7          ACTURER (AS S         MODI         MODI         MODI         MODI | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>AND MOD<br>TANDARD                | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE | MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES |                   | WALTHAM POLIS<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>MALTHAM, MASSACHUS<br>ISS LEXINGTON STRE<br>MALTHAM, MASSACHUS  |
| FIRING.<br>FIRING.<br>PR<br>HP<br>½5<br>½0<br>0 & 1 @ ½<br>208  | ELECTRIC<br>SERVICE         HZ       V         60       115         8       8         8       8         8       8         9       9         9       8         9       8         9       8         9       8         9       8         9       8         9       8 <td>C MAN<br/>PH MA<br/>1 STE<br>1 STE<br/>1 STE</br></td> <td>NUFACTURE<br/>DDEL NUMBE<br/>STANDARD<br/>ERLING C-11<br/>ERLING RC-12<br/>ERLING RC-12<br/>ERLING RC-11<br/>ERLING C-11<br/>ERLING C-11<br/>FORMANCE</td> <td>R AND<br/>R (AS<br/>)<br/>50-02<br/>210-04<br/>510-10<br/>50-02<br/>50-02<br/>50-02<br/>SEE NOT</td> <td>EMARKS</td> <td>s<br/>s<br/>s<br/>s<br/>s</td> <td></td> <td>TAG<br/>TAG<br/>GUH-1<br/>GUH-2<br/>GUH-3<br/>GUH-4<br/>NO<br/>1.<br/>2.<br/>TAG<br/>GUH-4<br/>NO<br/>1.<br/>2.<br/>TAG<br/>GUH-3<br/>GUH-4<br/>NO<br/>5.<br/>PRO<br/>5.<br/>PRO</td> <td>AG<br/>C-1<br/>C-2<br/>C-3<br/>C-3<br/>C-3<br/>C-4<br/>FEI<br/>C-5<br/>C-6<br/>C-7<br/>C-8<br/>C-9<br/>TES:<br/>REFER TC<br/>HOT WAT<br/>TES:<br/>REFER TC<br/>HOT WAT<br/>C-9<br/>VEHICLE<br/>SALLYI<br/>SALLYI<br/>MOTO<br/>BIKE STC<br/>VIDE WIT<br/>OVIDE VIT<br/>OVIDE FAC<br/>OVIDE FAC<br/>OVIDE CON</td> <td>LOCATION<br/>MALE L<br/>MALE L<br/>MALE LOO<br/>FITN<br/>MALE LOO<br/>FITN<br/>MALE C<br/>JUVE<br/>WOMEN<br/>O SPECIF<br/>FER COIL<br/>WOMEN<br/>O SPECIF<br/>FER COIL<br/>ORALE C<br/>JUVE<br/>WOMEN<br/>O SPECIF<br/>FER COIL<br/>FITN<br/>MALE C<br/>JUVE<br/>WOMEN<br/>O SPECIF<br/>FER COIL<br/>FITN<br/>MALE C<br/>JUVE<br/>WOMEN<br/>O SPECIF<br/>FER COIL<br/>FITN<br/>FORT 149<br/>FORT 149<br/>FO</td> <td>ON SERV<br/>OCKER (<br/>STORAGI<br/>NGE OFF<br/>CKER RO<br/>VESS 015<br/>CELL 1444<br/>CELL 14</td> <td>ED<br/>17<br/>17<br/>17<br/>5 002 &amp;<br/>ICE 005<br/>OM 010<br/>H<br/>D<br/></td> <td>CFM       O         395       0         405       0         120       0         300       0         450       0         260       0         260       0         260       0         260       0         260       0         260       0         270       0         0       0         27       55         7"       55</td> <td>UTPUT<br/>MBH)<br/>18.7<br/>19.1<br/>4.1<br/>10.9<br/>17.6<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>3.5<br/>9.9<br/>ITROL DRA<br/>N CONTR<br/>9.9<br/>ITROL DRA<br/>N CONTR<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3<br/>10.3</td> <td>SIZE (IN.         W       H         18       9         18       9         18       9         18       9         18       9         18       9         18       9         16       9         16       9         16       9         16       9         16       9         NUNGS F       9         OLS, OR I       9         PUT H)       EFF         1       2         2       2         2       2         2       2         SAKED ON       9         SAKED ON       9     <td>.)       FA         VELC         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       3         93       93         93       93         93       93         93       93         93<td>ACE<br/>DCITY<br/>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       -</td><td>FINS<br/>PER<br/>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       100         2       100         2       80         1       150         5       FORMATION.         FORMATION       I         AIR       I         44       1         43       1         43       1         43       1    </td><td>AIR DA         EAT<br/>(°F)       LAT<br/>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       &lt;</td><td>ATA         P.D.<br/>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115</td><td>GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1</td><td>EWT (°F) (°<br/>140 1<br/>140 1<br/>105 1<br/>95 9<br/>95 9<br/>95 9<br/>95 1</td><td>MT F<br/>F) (I<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (</td><td>P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>AND MOD<br/>TANDARD</td><td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES</td><td></td><td>WALTHAM POLIS<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>ALTHAM, MASSACHUS<br/>HURAN, MASSACHUS<br/>COJECT NUMBER: 20130535<br/>ESIGNED BY: JJK<br/>PRAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: CH<br/>DATE: JUly-Aug.</td></td></td> | C MAN<br>PH MA<br>1 STE<br>  | NUFACTURE<br>DDEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING RC-12<br>ERLING RC-11<br>ERLING C-11<br>ERLING C-11<br>FORMANCE  | R AND<br>R (AS<br>)<br>50-02<br>210-04<br>510-10<br>50-02<br>50-02<br>50-02<br>SEE NOT   | EMARKS        | s<br>s<br>s<br>s<br>s |                      | TAG<br>TAG<br>GUH-1<br>GUH-2<br>GUH-3<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-3<br>GUH-4<br>NO<br>5.<br>PRO<br>5.<br>PRO   | AG<br>C-1<br>C-2<br>C-3<br>C-3<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TC<br>HOT WAT<br>TES:<br>REFER TC<br>HOT WAT<br>C-9<br>VEHICLE<br>SALLYI<br>SALLYI<br>MOTO<br>BIKE STC<br>VIDE WIT<br>OVIDE VIT<br>OVIDE FAC<br>OVIDE FAC<br>OVIDE CON    | LOCATION<br>MALE L<br>MALE L<br>MALE LOO<br>FITN<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>WOMEN<br>O SPECIF<br>FER COIL<br>ORALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>FITN<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>FITN<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>FITN<br>FORT 149<br>FORT 149<br>FO | ON SERV<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>VESS 015<br>CELL 1444<br>CELL 14 | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM       O         395       0         405       0         120       0         300       0         450       0         260       0         260       0         260       0         260       0         260       0         260       0         270       0         0       0         27       55         7"       55   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>10.3<br>10.3<br>3.5<br>9.9<br>ITROL DRA<br>N CONTR<br>9.9<br>ITROL DRA<br>N CONTR<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3        | SIZE (IN.         W       H         18       9         18       9         18       9         18       9         18       9         18       9         18       9         16       9         16       9         16       9         16       9         16       9         NUNGS F       9         OLS, OR I       9         PUT H)       EFF         1       2         2       2         2       2         2       2         SAKED ON       9         SAKED ON       9 <td>.)       FA         VELC         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       3         93       93         93       93         93       93         93       93         93<td>ACE<br/>DCITY<br/>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       -</td><td>FINS<br/>PER<br/>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       100         2       100         2       80         1       150         5       FORMATION.         FORMATION       I         AIR       I         44       1         43       1         43       1         43       1    </td><td>AIR DA         EAT<br/>(°F)       LAT<br/>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       &lt;</td><td>ATA         P.D.<br/>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115</td><td>GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1</td><td>EWT (°F) (°<br/>140 1<br/>140 1<br/>105 1<br/>95 9<br/>95 9<br/>95 9<br/>95 1</td><td>MT F<br/>F) (I<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (</td><td>P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>AND MOD<br/>TANDARD</td><td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES</td><td></td><td>WALTHAM POLIS<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>ALTHAM, MASSACHUS<br/>HURAN, MASSACHUS<br/>COJECT NUMBER: 20130535<br/>ESIGNED BY: JJK<br/>PRAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: CH<br/>DATE: JUly-Aug.</td></td> | .)       FA         VELC         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       3         93       93         93       93         93       93         93       93         93 <td>ACE<br/>DCITY<br/>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       -</td> <td>FINS<br/>PER<br/>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       100         2       100         2       80         1       150         5       FORMATION.         FORMATION       I         AIR       I         44       1         43       1         43       1         43       1    </td> <td>AIR DA         EAT<br/>(°F)       LAT<br/>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       &lt;</td> <td>ATA         P.D.<br/>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115</td> <td>GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1</td> <td>EWT (°F) (°<br/>140 1<br/>140 1<br/>105 1<br/>95 9<br/>95 9<br/>95 9<br/>95 1</td> <td>MT F<br/>F) (I<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (</td> <td>P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI</td> <td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>AND MOD<br/>TANDARD</td> <td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td> <td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td> <td>MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES</td> <td></td> <td>WALTHAM POLIS<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>ALTHAM, MASSACHUS<br/>HURAN, MASSACHUS<br/>COJECT NUMBER: 20130535<br/>ESIGNED BY: JJK<br/>PRAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: CH<br/>DATE: JUly-Aug.</td>  | ACE<br>DCITY<br>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       - | FINS<br>PER<br>FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       100         2       110         2       100         2       100         2       80         1       150         5       FORMATION.         FORMATION       I         AIR       I         44       1         43       1         43       1         43       1   | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.7         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       <   | ATA         P.D.<br>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115   | GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1 | EWT (°F) (°<br>140 1<br>140 1<br>105 1<br>95 9<br>95 9<br>95 9<br>95 1 | MT F<br>F) (I<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (   | P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI          | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>AND MOD<br>TANDARD                | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE | MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES |                   | WALTHAM POLIS<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>ALTHAM, MASSACHUS<br>HURAN, MASSACHUS<br>COJECT NUMBER: 20130535<br>ESIGNED BY: JJK<br>PRAWN BY: JJK<br>RAWN BY: JJK<br>RAWN BY: JJK<br>RAWN BY: CH<br>DATE: JUly-Aug.  |
| FIRING.<br>FIRING.<br>PR<br>HP<br>⅓5<br>⅓0<br>0 & 1 @ ¾<br>3 & 1 @ ½<br>3 & 1 @ 1 @ 1 @ 1 @ 1 @ 1 @ 1 @ 1 @ 1 @ 1   | ELECTRIC<br>SERVICE         HZ       V         60       115         8       8         9       8         9       8         105       8         9       8         9       8         9       8         9       8         9       8   | C MANUFAC<br>PH 1 STE<br>1 STE    | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING RC-12<br>ERLING RC-11<br>ERLING C-11<br>ERLING C-11<br>ERLING C-11<br>FORMANCE   | R AND       F         R (AS       F         50-02       S         210-04       S         2055-10       S         30-02       S         30-02       S         30-02       S         30-02       S         30-02       S         30-02       S         SEE NOT       SEE NOT | EMARKS        | s<br>s<br>s<br>s<br>s |                      | TAG<br>TAG<br>GUH-1<br>GUH-2<br>GUH-3<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-3<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-3<br>GUH-4<br>NO<br>2.<br>PRO<br>3.<br>PRO<br>5.<br>PRO<br>5.<br>PRO<br>5.<br>PRO | AG<br>C-1<br>C-2<br>C-3<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TC<br>HOT WAT<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>D<br>LOC<br>VEHICLE<br>SALLYI<br>MOTO<br>BIKE STO<br>VIDE VIT<br>VIDE VIT<br>OVIDE ALO<br>VIDE FAC<br>DVIDE FAC<br>DVIDE FAC | LOCATIO<br>MALE L<br>MALE L<br>MALE LOO<br>FITN<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>WOMEN<br>O SPECIF<br>FER COIL<br>MALE C<br>JUVE<br>WOMEN<br>CATION<br>E BAYS 10<br>PORT 149<br>PORT 149<br>PO          | ON SERV<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>VESS 015<br>CELL 1444<br>CELL 14 | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM       0         395       0         405       1         120       0         300       1         450       1         260       1         260       1         260       1         260       1         270       1         300       1         455       1         260       1         290       1         0       1         290       1         100       2         290       1         300       1         300       1         300       1         300       1         200       1         300       1         300       1         300       1         300       1         300       1         300       1         300       1         300       1         300       1         300       1         300       1         300       1         300       1   | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>10.3<br>10.3<br>3.5<br>9.9<br>ITROL DRA<br>N CONTR<br>9.9<br>ITROL DRA<br>N CONTR<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3        | SIZE (IN.         W       H         18       9         18       9         18       9         18       9         18       9         18       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         17       10         12       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         3       3         3       4         4       4         5       5  | .)       FA         VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         93       93         93       93         93       93         93       93         93 <td>ACE<br/>DCITY<br/>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       -</td> <td>STAGE DIREC       FINS PER FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       10         2       10         2       10         2       10         2       80         1       150         480       1         50       UNIT HE         AIR       1         44       1         43       1         43       1         43       1</td> <td>AIR DA         EAT<br/>(°F)       LAT<br/>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.1         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       18         61.40       <t< td=""><td>ATA         P.D.<br/>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115</td><td>GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1</td><td>EWT (°F) (°<br/>140 1<br/>140 1<br/>105 1<br/>95 9<br/>95 9<br/>95 9<br/>95 1</td><td>MT F<br/>F) (I<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (</td><td>P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>AND MOD<br/>TANDARD</td><td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES</td><td></td><td>WALTHAM POLI<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>VALTHAM, MASSACHUS<br/>HURAN, MASSACHUS<br/>COJECT NUMBER: 20130535<br/>ESIGNED BY: JJK<br/>RAWN BY: LJK<br/>RAWN BY:</td></t<></td> | ACE<br>DCITY<br>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       - | STAGE DIREC       FINS PER FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       10         2       10         2       10         2       10         2       80         1       150         480       1         50       UNIT HE         AIR       1         44       1         43       1         43       1         43       1   | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.1         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       18         61.40 <t< td=""><td>ATA         P.D.<br/>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115</td><td>GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1</td><td>EWT (°F) (°<br/>140 1<br/>140 1<br/>105 1<br/>95 9<br/>95 9<br/>95 9<br/>95 1</td><td>MT F<br/>F) (I<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (</td><td>P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>AND MOD<br/>TANDARD</td><td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES</td><td></td><td>WALTHAM POLI<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>VALTHAM, MASSACHUS<br/>HURAN, MASSACHUS<br/>COJECT NUMBER: 20130535<br/>ESIGNED BY: JJK<br/>RAWN BY: LJK<br/>RAWN BY:</td></t<> | ATA         P.D.<br>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115   | GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1 | EWT (°F) (°<br>140 1<br>140 1<br>105 1<br>95 9<br>95 9<br>95 9<br>95 1 | MT F<br>F) (I<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (   | P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI          | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>AND MOD<br>TANDARD                | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE | MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES |                   | WALTHAM POLI<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>VALTHAM, MASSACHUS<br>HURAN, MASSACHUS<br>COJECT NUMBER: 20130535<br>ESIGNED BY: JJK<br>RAWN BY: LJK<br>RAWN BY: |
| FIRING.<br>FIRING.<br>PR<br>HP<br>½5<br>½0<br>& 1 @ ½<br>½5<br>ND LEVI<br>JBMITTA<br>S CONTF<br>R<br>V<br>208<br>208<br>208<br>208  | ELECTRIC<br>SERVICE         HZ       V         60       115         8       8         8       8         9       8         9       8         9       8         9       8         9       8         9       8         9       8         9       8         9       8         9       8  | C MAN<br>PH MA<br>1 STE<br>1 STE  | NUFACTURED<br>DEL NUMBE<br>STANDARD<br>ERLING C-11<br>ERLING RC-12<br>ERLING RC-12<br>ERLING C-11<br>ERLING C-11<br>ERLING C-11<br>ERLING C-11<br>FORMANCE<br>FORMANCE<br>TURER AND<br>UMBER (AS<br>IDARD)<br>ERIES 60<br>Ex5-1/4<br>ERIES 60<br>Ex5-1/4<br>ERIES 60<br>Ex5-1/4<br>2x1-1/2x7B | R AND       F         50-02       Si         210-04       Si         210-10       Si         30-02       Si         30-02       Si         30-02       Si         SEE NOTI       SEE NOTI         SEE NOTI       SEE NOTI         SEE NOTI       SEE NOTI                  | EMARKS        | s<br>s<br>s<br>s<br>s |                      | TAG<br>TAG<br>GUH-1<br>GUH-2<br>GUH-3<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-3<br>GUH-4<br>NO<br>1.<br>2.<br>TAG<br>GUH-3<br>GUH-4<br>NO<br>2.<br>PRO<br>3.<br>PRO<br>5.<br>PRO<br>5.<br>PRO<br>5.<br>PRO | AG<br>C-1<br>C-2<br>C-3<br>C-3<br>C-4<br>FEI<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>TES:<br>REFER TC<br>HOT WAT<br>C-5<br>C-6<br>C-7<br>C-8<br>C-9<br>D<br>LOC<br>VEHICLE<br>SALLYI<br>MOTO<br>BIKE STO<br>VIDE VIT<br>VIDE VIT<br>OVIDE ALO<br>VIDE FAC<br>DVIDE FAC<br>DVIDE FAC | LOCATIO<br>MALE L<br>MALE L<br>MALE LOO<br>FITN<br>MALE LOO<br>FITN<br>MALE C<br>JUVE<br>WOMEN<br>O SPECIF<br>FER COIL<br>WOMEN<br>O SPECIF<br>FER COIL<br>MALE C<br>JUVE<br>WOMEN<br>CATION<br>E BAYS 10<br>PORT 149<br>PORT 149<br>PO          | ON SERV<br>OCKER (<br>STORAGI<br>NGE OFF<br>CKER RO<br>VESS 015<br>CELL 1444<br>CELL 1444<br>ENILE 143<br>CELL 1444<br>SHALL BI<br>CELL 1444<br>ENILE 143<br>CELL 130<br>SHALL BI<br>CELL 130<br>SHALL BI<br>OT NAT<br>9 NAT  | ED<br>17<br>17<br>17<br>5 002 &<br>ICE 005<br>OM 010<br>H<br>D<br>   | CFM       0         395       405         405       1         120       300         450       2         260       2         260       2         100       2         290       1         0       1         260       1         27       55         7"       55         7       55         7       55 | UTPUT<br>MBH)<br>18.7<br>19.1<br>4.1<br>10.9<br>17.6<br>10.3<br>10.3<br>10.3<br>10.3<br>3.5<br>9.9<br>ITROL DRA<br>N CONTR<br>9.9<br>ITROL DRA<br>N CONTR<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3<br>10.3        | SIZE (IN.         W       H         18       9         18       9         18       9         18       9         18       9         18       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         16       9         17       10         12       10         2       10         2       10         2       10         2       10         2       10         2       10         2       10         3       3         3       4         4       4         5       5  | .)       FA         VEL0         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         9       2         6       3         93       93         93       93         93       93         93       93         93 <td>ACE<br/>DCITY<br/>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       -</td> <td>STAGE DIREC       FINS PER FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       10         2       10         2       10         2       10         2       80         1       150         480       1         50       UNIT HE         AIR       1         44       1         43       1         43       1         43       1</td> <td>AIR DA         EAT<br/>(°F)       LAT<br/>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.1         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       18         61.40       <t< td=""><td>ATA         P.D.<br/>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115</td><td>GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1</td><td>EWT (°F) (°<br/>140 1<br/>140 1<br/>105 1<br/>95 9<br/>95 9<br/>95 9<br/>95 1</td><td>MT F<br/>F) (I<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (</td><td>P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>AND MOD<br/>TANDARD</td><td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES</td><td></td><td>WALTHAM POLIS<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>MALTHAM, MASSACHUS<br/>HURAN<br/>BESIGNED BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: CH<br/>RAWN BY: CH<br/>RAWN BY: CH</td></t<></td>   | ACE<br>DCITY<br>PM)       RG         50       -         60       -         45       -         00       -         50       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         60       -         90       -         50       -         S-FIREI       -         A       -         1650       -         1100       -         1100       -         0       -         0       -         0       -         1100       -         0       -         0       -         0       -         0       - | STAGE DIREC       FINS PER FOOT         2       150         2       150         2       110         2       110         2       110         2       110         2       110         2       110         2       110         2       10         2       10         2       10         2       10         2       10         2       10         2       80         1       150         480       1         50       UNIT HE         AIR       1         44       1         43       1         43       1         43       1   | AIR DA         EAT<br>(°F)       LAT<br>(°F)         60.0       103.7         60.0       103.4         60.0       90.8         60.0       96.1         60.0       96.1         60.0       96.1         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       92.3         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       92.3         60.0       91.2         60.0       92.3         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       91.2         60.0       18         61.40 <t< td=""><td>ATA         P.D.<br/>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115</td><td>GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1</td><td>EWT (°F) (°<br/>140 1<br/>140 1<br/>105 1<br/>95 9<br/>95 9<br/>95 9<br/>95 1</td><td>MT F<br/>F) (I<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (<br/>10 (</td><td>P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI</td><td>ODEL NUM<br/>STANDA<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>TRANE DI<br/>AND MOD<br/>TANDARD</td><td>BER (AS<br/>RD)<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B06<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B08<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0B09<br/>F0</td><td>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE<br/>SEE</td><td>MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES</td><td></td><td>WALTHAM POLIS<br/>STATION<br/>RENOVATION<br/>155 LEXINGTON STRE<br/>MALTHAM, MASSACHUS<br/>HURAN<br/>BESIGNED BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: JJK<br/>RAWN BY: CH<br/>RAWN BY: CH<br/>RAWN BY: CH</td></t<>   | ATA         P.D.<br>(IN.WG)         0.11         0.12         0.08         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.07         ELECTRIC         SERVIC         FLA       V         2.2       115         1.3       115         1.3       115         1.3       115         1.3       115   | GPM       F         1.25       1         1.3       1         0.55       1         0.75       1         0.75       1         0.75       1         0.75       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         0.7       1         1       1         1       1         1       1 | EWT (°F) (°<br>140 1<br>140 1<br>105 1<br>95 9<br>95 9<br>95 9<br>95 1 | MT F<br>F) (I<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (<br>10 (   | P.D.       M0         FT.)       1.4         1.4          0.1          0.2          0.5          0.2          0.2          0.4          0.7              ACTURER (AS S         MODI         MODI         MODI         MODI          | ODEL NUM<br>STANDA<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>TRANE DI<br>AND MOD<br>TANDARD                | BER (AS<br>RD)<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B06<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B08<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0B09<br>F0 | SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE<br>SEE | MARKS NOTES ENOTES ENOTES EE NOTES EE NOTES |                   | WALTHAM POLIS<br>STATION<br>RENOVATION<br>155 LEXINGTON STRE<br>MALTHAM, MASSACHUS<br>HURAN<br>BESIGNED BY: JJK<br>RAWN BY: JJK<br>RAWN BY: JJK<br>RAWN BY: JJK<br>RAWN BY: CH<br>RAWN BY: CH<br>RAWN BY: CH  |

|                 |                  | G UNIT S                         |                  | AIR-COOL   | _ED COND                               | ENSING               | UNIT                |                         | [              |            | INDIREC                   | T GAS-FI             | RED H             | EATER DA           | TA                    | 1                    |                       |                         |                                     | 1  | 1                        |              |  |
|-----------------|------------------|----------------------------------|------------------|------------|--|----------------------|---------------------|-------------------------|----------------|------------|---------------------------|----------------------|-------------------|--------------------|-----------------------|----------------------|-----------------------|-------------------------|-------------------------------------|--|--------------------------|--------------|--|
|                 | T LAT<br>'F)     | СОМ                              | PRESS            |            |  |                      |                     | CONDE                   | NSER           | САРА       | CITY (MB                  |                      |                   | R DATA             |                       |                      |                       |                         | FII <b>7</b> 22                     |  |                          |              |  |
| B DB            | ч<br>wb          | TYPE                             | NO.              | NOMINAL    | - STEPS<br>OF<br>UNLOAD                | TEMP.                | MIN.<br>EFF         | FA                      | ▶              |            | ЭЦТРІ ІТ                  | MIN.<br>EFF          |                   | AT P.[             | G/<br>PRE<br>). (IN.) | SS. HZ               | v                     | РН                      | FILTER<br>DATA                      | AND MOD<br>NUMBER (<br>STANDAR                 | AS   <sup>REM⊄</sup>     | ARKS         | Architects / Engineers / Plan<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110                |
|                 |                  |                                  |                  | HP EA.     |  |                      |                     | NO. H                   | IP EA.         |            |                           | (%)                  | (°F) (            | °F) (IN.V          | /G)                   |                      |                       |                         |                                     |  |                          |              | TEL. (617) 778-1440<br>www.cdrmaguire.com  |
| 0 55.51         | 53.91            | SCROLL                           | 2                | -          | 2                                      | 95.0                 | 10.3<br>EER<br>17.2 | 3                       | 1.1            | -          | -                         | -                    | -                 |                    |                       | - 60                 | 208                   | 3                       | 4" PLEATED<br>MERV 14<br>2" PLEATED | TRANE YCD                                      |                          |              |  |
|                 |                  | SCROLL                           | 1                | 4.3        | 1                                      | 95.0                 | SEER<br>14.2        |                         | 0.4            | 80         | 64                        | - 5                  | 7.67 90           | 0.87 0.1           | 53 4.5/               |                      |                       | 3                       | MERV 13<br>2" PLEATED               |  | 2                        | 2            |  |
| 0 59.54         | 55.40            | SCROLL                           | 2                | 3.9        | 2                                      | 95.0                 | EER                 | 2                       | 0.5            | -          | -                         | -                    | -                 |                    |                       | - 60                 | 208                   | 3                       | MERV 13                             | TRANE YHD                                      | 3                        | <u>,</u>     | Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC<br>RDK Engineers<br>200 Brickstone Square |
| СОМРА           | RATIVE<br>NTERF/ | ENTHALPY                         | ECON             | OMIZER W   | ITH POWE                               | ERED EX              | HAUST,              | DEMAND                  | CONT           | ROL VEN    | <b>FILATION</b>           | , BACNE <sup>-</sup> | T INTEF           | RFACE CA           | RD, 0-10              | 0% MOTO              | RIZED                 | OUTDO                   | OR AIR DAM                          | ELECTRICAL, S<br>PERS, THRU TI<br>ONVENIENCE ( | HE BASE                  |              | REVISIONS<br>Number Description Date   |
|                 |                  |                                  |                  | ENER       | GY RECO                                | VERY WH              | HEEL                |                         |                |            |                           |                      |                   |                    |                       | DX COC               | ING (                 | COIL                    |                                     |  |                          |              |  |
|                 | EFFE             | NET<br>CTIVENESS                 | %                | SUPP       | LY AIR DA                              | TA                   |                     | EXHAUS                  |                | <b>ATA</b> |                           |                      |                   |                    | T GAS<br>HEAT         |                      |                       |                         |                                     | AIR DATA                                       |                          |              |  |
| VHEEL<br>ONTROL |                  |                                  |                  | WINTER     | SU                                     | MMER                 | w                   | INTER                   | su             | MMER       | TOTA<br>CAPAC<br>(MBH     |                      | ENSIBLI<br>APACIT |                    |                       | SAT.<br>SUCTIC       | N VE                  | FACE<br>LOCITY<br>(FPM) | EAT (°F)                            | LAT (°F  | )                        |              | /  |
|                 | SUMN             |                                  |                  | AT °F LAT  | °F EAT °F                              |                      | EAT °I              | F LAT °F                | EAT °          | F LAT °F   | -                         | ,                    |                   | МВН                | LAT                   | Ì                    |                       | ( )                     | DB W                                | B DB V   | / P.D.<br>(IN.WG)        |              |  |
| VFD             | _                |                                  |                  | 0.0 45.    | .9 91.0                                | 81.6                 | 68.0                | 18.1                    | 77.0           | 87.3       | 125.0                     |                      | 84.3              | 200                | 67.0                  |                      |                       | 292                     | 81.6 67                             | .4 50.7 50                                     | 0.5 0.35                 |              | 7  |
|                 |                  |                                  |                  | +J.        |  |                      |                     |                         |                |            | 120.1                     | -                    |                   | 200                |                       |                      |                       | _~~                     |                                     |  |                          |              |  |
|                 | ADES,            |                                  | CESS             | DOORS W    | ÌTH SLIDE                              | OUT TO               | TAL ENE             |                         |                |            |                           |                      |                   |                    | MIZER, D              | E-HUMIDI             | FICATI                | ION SEQ                 |                                     | STAINLESS ST<br>V 13 FILTERS                   |                          |              |  |
|                 |                  | SURE SI                          |                  |            | SMACNA L                               |                      | CLASS               |                         | BIGN<br>DCITY  |            |                           | НО                   |                   | ECT GAS-FI         |                       |                      |                       |                         |                                     |  |                          |              |  |
|                 |                  |                                  |                  |            |  | <sup>/L</sup> R(     |                     |                         |                | -          |                           |                      | ACITY<br>(BH)     |                    |                       | AIR DAT              | A                     |                         | TER                                 |  |                          |              |  |
|                 |                  |                                  |                  |            |  |                      |                     |                         | SS             | -          | $\left  \right $          |                      | -                 |                    | N                     |                      |                       |                         |                                     | BS) NUMB                                       | MODEL<br>ER (AS<br>DARD) | REMARKS      |  |
|                 |                  | TIONS FOR                        | THE T            | YPES OF D  | UCTWORI                                | K LISTED             | ) BELOW             | V                       |                |            | >                         |                      | OUTP              | UT                 | EAT<br>(°F)           |                      | P.D.<br>(IN.WC        |                         |                                     |  |                          |              | ISSUED FOR   |
| ACTOR           | SHALL            | LEAK TEST                        |                  |            |  |                      |                     |                         |                |            | $\overline{)}$            | 200                  | 160               | 1:10               | 0.0                   | 60.0                 | 0.14                  |                         | RV 13 35                            | 22 TRAN  | E OA1D                   | SEE          |  |
|                 | UCTWO<br>ORS.    | RK ABOVE                         | PRES             | SURE CLAS  | SŚ 3" AND                              | 100% OF              | F ALL DU            | JCTWORI                 |                |            |                           |                      | 100               |                    |                       |                      | J. 14                 |                         |                                     |  |                          | NOTES        |  |
| TAG             |                  | LOCATION                         | SERV             | ED         | СҒМ                                    | OUTPUT<br>(MBH)      | SIZE                | (IN.)                   | FACE           | TY ROV     | ATING C<br>VS FINS<br>FOO | EAT                  | AIR DA            | ATA<br>P.D.        | GPM                   | WATER<br>EWT<br>(°F) | 2 DATA<br>LWT<br>(°F) | P.D.<br>(FT.)           | MODEL                               | CTURER AND<br>NUMBER (AS<br>NDARD)             | REMA                     | (GPM)<br>RKS | WALTHAM .  |
| HC-2            |                  | MALE LOC                         |                  |            | 395<br>405                             | 18.7<br>19.1         | 18<br>18            | 9<br>9                  | 350<br>360     | 2          | 150<br>150                |                      | 103.7<br>103.4    |                    | 1.25<br>1.3           | 140<br>140           | 110<br>110            | 1.4                     |                                     | IE DT0B09<br>IE DT0B09                         | SEE N                    |              |  |
| HC-3            | EV               | DENCE STO<br>AND RANG            | ORAGE            | E 002 &    | 120                                    | 4.1                  | 8                   | 6                       | 345            | 2          |                           |                      | 90.8              |                    | 0.55                  | 140                  | 110                   | 0.1                     |                                     | IE DT0B06                                      | SEE N                    |              | STATION  |
| HC-4            |                  | IALE LOCK<br>FITNES              |                  |            | 300<br>450                             | 10.9<br>17.6         | 16<br>16            | 9<br>9                  | 300<br>450     | 2          |                           |                      | 96.7<br>96.1      |                    | 0.75<br>1.2           | 140<br>140           | 110<br>110            | 0.2                     |                                     | IE DT0B09<br>IE DT0B09                         | SEE NO                   |              | RENOVATION   |
| HC-6            |                  | MALE CEL                         |                  |            | 260<br>260                             | 10.3<br>10.3         | 16<br>16            | 9<br>9                  | 260<br>260     | 2          | 110<br>110                | 60.0<br>60.0         | 10.3<br>10.3      |                    | 0.7                   | 140<br>140           | 110<br>110            | 0.2                     |                                     | IE DT0B09<br>IE DT0B09                         | SEE NO                   |              |  |
| HC-8            |                  |                                  | LE 143           |            | 100<br>290                             | 3.5<br>9.9           | 8<br>16             | 6 9                     | 300<br>290     | 2          | 80<br>150                 | 60.0                 | 92.3<br>91.2      | 0.05               | 0.5                   | 140<br>140           | 110<br>110            | 0.4                     | TRAN                                | IE DT0B06                                      | SEE NO                   | OTES         | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
|                 |                  |                                  | 130              |            | 200                                    | 3.3                  | 10                  | 3                       | 290            |            | 150                       | 00.0                 | 31.2              | 0.07               | 0.7                   | עדי                  | ιυ                    | 0.7                     |                                     |  | JEE N                    |              |  |
|                 | FER TC           | SPECIFIC                         |                  |            |  |                      |                     |                         |                | NAL INFC   | RMATIO                    | N.                   |                   |                    |                       |                      |                       |                         |                                     |  |                          |              |  |
|                 |                  |                                  |                  |            | _,                                     |                      |                     |                         |                |            |                           |                      |                   |                    |                       |                      |                       |                         |                                     |  |                          |              |  |
|                 |                  |                                  |                  | PRESSL     | JRE                                    |                      |                     |                         | GAS-           |            |                           |                      |                   |                    |                       |                      |                       |                         |                                     |  |                          |              | SCHEDULES  |
| G               | LOC              | ATION                            | GAS<br>TYPE      |            | INP<br>(ME                             |                      |                     | MIN.<br>EFFICIEN<br>(%) |                |            | /P. RISE                  |                      |                   | SERV               | PH                    | WEIGHT<br>(LBS)      | - ма                  |                         | TURER AND<br>(AS STAND              | MODEL NUMBI<br>ARD)                            |                          | MARKS        |  |
| H-1 \           | EHICLE           | BAYS 101                         | NAT              |            | 7" 8                                   | 5 7                  | 79.1                | 93                      |                | 50         | (°F)<br>44                |                      |                   | 2.2 115            |                       | 105                  |                       |                         | MODINE PT                           | °C-85  | SEE                      | NOTES        | PROJECT NUMBER: 20130535   |
| H-2             | SALLYF           | ORT 149                          | NAT              |            | 7" 5                                   | 5 5                  | 51.2<br>51.2        | 93                      |                | 00         | 43                        | 1440                 | 1⁄8               | 1.3 115            | 5 1                   | 95<br>95             |                       |                         |                                     |  |                          | NOTES        | DESIGNED BY: JJK   |
| · 1-3           | МОТОР            | PORT 149<br>RCYCLE/<br>DRAGE 150 | NAT<br>NAT       |            | 7"     5       7"     5       7"     5 |                      | 51.2<br>51.2        | 93<br>93                |                | 00         | 43<br>43                  | 1440<br>1440         |                   | 1.3 115<br>1.3 115 |                       | 95                   |                       |                         | MODINE PT                           |  |                          | NOTES        | DRAWN BY: JJK<br>CHECKED BY: CH  |
| н-4 🔓           | DE WITH          | I 20 GAUGE<br>AUGE ALUI          | E ALUM<br>MINIZE | IINIZED ST | EEL CABIN<br>CABINET W                 | NET WITI<br>/ITH BAK | H BAKED<br>ED ON F  | D ON POV<br>POWDER      | VDER C<br>COAT | OAT.       |                           | ECT SPA              |                   |                    |                       |                      |                       |                         |                                     |  |                          |              | DATE: July-Aug.  |

|              |              | I                   |                      |                    | AIR-COOL                              | ED COND               | ENSING              | JNIT         |                         | I                |         | INDIREC              |              | FIRED          |             | ER ח∆⊤       | Α                  |                 |             |                 |                                 |  |               |  |
|--------------|--------------|---------------------|----------------------|--------------------|---------------------------------------|-----------------------|---------------------|--------------|-------------------------|------------------|---------|----------------------|--------------|----------------|-------------|--------------|--------------------|-----------------|-------------|-----------------|---------------------------------|--|---------------|--|
| AT *         |              | LAT                 | COMF                 | RESS               |                                       |                       |                     |              | COND                    |                  |         |                      |              |                |             |              |                    |                 |             |                 |                                 | MANUFACTURER                           |               | With the state base to   |
| VB С         | (°F          |                     | TYPE                 |                    | NOMINAL<br>HP EA.                     | STEPS<br>OF<br>UNLOAD | DB<br>TEMP.<br>(°F) | MIN.<br>EFF  | F/                      | AN               |         | DUTPUT               |              | EAT            | LAT<br>(°F) | P.D.         | GA<br>PRE<br>(IN.V | ss.   нz        | v           | PH              | FILTER<br>DATA                  | AND MODEL<br>NUMBER (AS<br>STANDARD)   | REMARKS       | Architects / Engineers / Plan<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
| 6.0 55       | .51          | 53.91 S             | CROLL                | 2                  | -                                     | 2                     | 95.0                | 10.3<br>EER  | 3                       | 1.1              | -       | -                    | -            | -              | -           | -            | -                  | 60              | 208         | 3               | 4" PLEATED<br>MERV 14           | TRANE YCD 330                          | SEE NOTE<br>1 |  |
| .3 58        | .61          | 56.30 S             | CROLL                | 1                  | 4.3                                   | 1                     | 95.0                | 17.2<br>SEER | 1                       | 0.4              | 80      | 64                   | -            | 57.67          | 90.87       | 0.153        | 4.5/1              | 4.0 60          | 208         | 3               | 2" PLEATED<br>MERV 13           | TRANE YHC 060                          | SEE NOTE<br>2 |  |
| .0 59        | .54          | 55.40 S             | CROLL                | 2                  | 3.9                                   | 2                     | 95.0                | 14.2<br>EER  | 2                       | 0.5              | -       | -                    | -            | -              | -           | -            | -                  | 60              | 208         | 3               | 2" PLEATED<br>MERV 13           | TRANE YHD 180                          | SEE NOTE<br>3 | Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC   |
| I, COM       | PARA         | ATIVE EN            | THALPY               | ECON               | OMIZER WI                             | TH POWE               | RED EXH             | IAUST,       | DEMANI                  |                  |         | FILATION             | I, BACN      | ET INT         | TERFAC      | E CAR        | D, 0-100           | % МОТО          | RIZED       | OUTDO           | OR AIR DAMP                     | ELECTRICAL, SINGL<br>PERS, THRU THE BA | SE            | T. 978-296-6200  |
| IT SC        | HED          | ULE                 |                      |                    |                                       |                       |                     |              |                         |                  |         | 1                    |              |                |             |              |                    |                 |             |                 |                                 |  |               | REVISIONS Number Description Dat   |
|              |              |                     | ET                   |                    | ENERG                                 | GY RECOV              | ERY WH              |              |                         |                  |         |                      |              |                |             | нот          |                    |                 |             |                 |                                 |  |               |  |
|              |              | EFFECTI             |                      | %                  | SUPPL                                 | Y AIR DAT             | ΓA                  | E            | EXHAUS                  | ST AIR DA        | A       | тот/                 |              |                |             | REH          |                    | SAT.            |             | FACE            |                                 | AIR DATA                               |               |  |
| WHEE<br>ONTR | OL           |                     |                      |                    | WINTER                                | SUN                   | MMER                | w            | NTER                    | SUM              | MER     | CAPAC<br>(MBł        | ~   ' ' '    | SENSI<br>CAPAC |             |              | 1 47               | SUCTIC          |             | LOCITY<br>(FPM) | EAT (°F)                        | LAT (°F)                               | P.D.          |  |
|              |              | SUMMER              |                      |                    |                                       | °F EAT °F             | LAT °F              | EAT °F       |                         | F EAT °F         | LAT °F  | 1                    |              |                |             | МВН          | LAT                |                 |             |                 | DB WE                           |  | (IN.WG)       |  |
| VFD          |              | -                   | -                    | (                  | 0.0 45.9                              | 9 91.0                | 81.6                | 68.0         | 18.1                    | 77.0             | 87.3    | 125.                 | 0            | 84.3           | 3           | 200          | 67.0               | -               |             | 292             | 81.6 67.4                       | 4 50.7 50.5                            | 0.35          | 7  |
|              |              |                     |                      |                    |                                       |                       |                     |              |                         |                  |         |                      |              |                |             |              |                    |                 |             |                 |                                 |  |               |  |
|              | R BLA<br>RB. | DES, HIN            | GED AC               | CESS               |                                       | TH SLIDE              |                     | AL ENE       |                         |                  |         |                      |              |                |             |              | ZER, DE            | E-HUMIDI        | FICATI      | ON SEC          | QUENCE, MER                     | STAINLESS STEEL<br>V 13 FILTERS ON SI  | JPPLY         |  |
| ST           |              | PRESSUF             |                      |                    | SEAL S                                | MACNA LI              | EAKAGE              | CLASS        |                         | SIGN             |         |                      | - н          |                |             | GAS-FIRI     |                    |                 |             |                 |                                 |  |               | II   |
| 51/          |              | _ASS                |                      | CLAS               |                                       | ECTANGU<br>AR         |                     | UND          |                         | .OCITY<br>MITS   |         |                      | -            |                |             |              |                    |                 |             |                 |                                 |  |               |  |
| 2"           | POS          | . OR NEG            | ·                    | Α                  |                                       | 6                     |                     | 3            |                         | FPM OR<br>ESS    |         |                      |              | (MBH)          |             | TURN         |                    |                 | A           |                 | LTER<br>DATA WEIC<br>PPLY & (LB |  |               |  |
|              |              |                     |                      |                    | VN ON THE                             |                       |                     |              |                         | IG               |         |                      |              |                |             | DOWN         | EAT                |                 | P.D.        | ÈEX             |                                 |  |               | ISSUED FOR   |
| ALL          | отн          | ER DUCT             | WORK.                |                    |                                       |                       |                     |              |                         |                  | <       |                      |              |                |             |              | (°F)               | (°F)            | (IN.WO      | 3)              |                                 |  |               | BID  |
|              | _ DU         | CTWORK              |                      |                    | IIT REPOR                             |                       |                     |              |                         |                  |         |                      | 200          | 1              | 160         | 1:10         | 0.0                | 60.0            | 0.14        | ME              | RV 13 352                       | 22 TRANE OA1                           | D SE<br>NOT   |  |
| F            |              |                     |                      |                    |                                       | 0T14                  | ουτρυτ              | SIZE         |                         |                  |         | FINS                 | 3            | AIR            | DATA        |              |                    | WATEF           |             | _               |                                 |  |               | (GPM)  |
|              | AG           |                     |                      |                    |                                       | СЕМ                   | (MBH)               | W            | н                       | VELOCIT<br>(FPM) |         | FOO                  | T (°F)       | (°             | °F) (IN     |              | GPM                | EWT<br>(°F)     | LWT<br>(°F) | P.D<br>(FT      | ) STA                           | NUMBER (AS<br>NDARD)                   | REMARKS       |  |
|              | C-1<br>C-2   | M                   | ALE LOC              | KER 0 <sup>°</sup> | 17                                    | 395<br>405            | 18.7<br>19.1        | 18<br>18     | 9<br>9                  | 350<br>360       | 2       |                      |              |                |             | 0.11<br>0.12 | 1.25<br>1.3        | 140<br>140      | 110<br>110  | 1.4             |                                 |  | SEE NOTES     | s    WALTHAM POLICE  |
|              | C-3          | 003 AN              | NCE STO<br>D RANGI   | E OFFI             | CE 005                                | 120<br>300            | 4.1                 | 8            | 6                       | 345              | 2       |                      |              |                |             |              | 0.55               | 140             | 110         | 0.1             |                                 |  | SEE NOTES     |  |
| н            | C-4<br>C-5   |                     | E LOCKE              | S 015              |                                       | 450                   | 10.9<br>17.6        | 16<br>16     | 9<br>9                  | 300<br>450       | 2       | 150                  | 60.0         | ) 90           | 6.1 (       | 0.17         | 1.2                | 140<br>140      | 110<br>110  | 0.2             | TRAN                            | E DT0B09                               | SEE NOTES     | S I  |
|              | C-6<br>C-7   |                     | ALE CELI<br>ALE CELI |                    |                                       | 260<br>260            | 10.3<br>10.3        | 16<br>16     | 9<br>9                  | 260<br>260       | 2<br>2  |                      |              |                |             | 0.06<br>0.06 | 0.7<br>0.7         | 140<br>140      | 110<br>110  | 0.2             |                                 |  | SEE NOTES     | S  |
|              | C-8<br>C-9   |                     | JUVENIL<br>MEN CE    |                    | A-C                                   | 100<br>290            | 3.5<br>9.9          | 8<br>16      | 6<br>9                  | 300<br>290       | 2       | 80<br>150            | 60.0<br>60.0 |                |             | 0.05<br>0.07 | 0.5<br>0.7         | 140<br>140      | 110<br>110  | 0.4             |                                 |  | SEE NOTES     |  |
| NC           | TES:         |                     |                      |                    |                                       |                       |                     |              |                         |                  |         |                      |              |                |             |              |                    |                 |             |                 |                                 |  |               |  |
|              |              |                     |                      |                    | , DETAILS,<br>BY TRANE                |                       |                     |              |                         |                  | AL INFC | RMATIO               | N.           |                |             |              |                    |                 |             |                 |                                 |  |               |  |
|              |              |                     |                      |                    |                                       |                       |                     | -            |                         | GAS-F            |         |                      |              | P er           |             |              |                    |                 |             |                 |                                 |  |               |  |
|              |              |                     |                      |                    | PRESSU                                | RE                    |                     |              | -                       |                  |         |                      |              |                | EL          | ECTRIC       |                    |                 |             |                 |                                 |  |               | SCHEDULES  |
| ſAG          |              | LOCATI              | NC                   | GAS<br>TYPE        |                                       |                       | JT OUT<br>H) (M     |              | MIN.<br>EFFICIEI<br>(%) |                  |         | IP. RISE             |              |                |             |              | E<br>PH            | WEIGHT<br>(LBS) |             | NUFAC           | TURER AND N<br>(AS STANDA       | MODEL NUMBER<br>ARD)                   | REMARK        | ks   |
| UH-1         |              | HICLE BA            | YS 101               | NAT                |                                       | 7" 85                 | ; 7 <sup>,</sup>    | 9.1          | 93                      | 165              |         | (°F)<br>44           | 1550         | пе<br>         | 2.2         | 115          | 1                  | 105             |             |                 |                                 | C-85                                   | SEE NOT       | PROJECT NUMBER: 20130535   |
| UH-2         | S            | ALLYPOR             | T 149                | NAT                | 6"                                    | 7" 55                 | i 5                 | 1.2          | 93                      | 110              | 0       | 43                   | 1440         | 1⁄8            | 1.3         | 115          | 1                  | 95              |             |                 | MODINE PT                       | C-55                                   | SEE NOT       | TES DESIGNED BY: JJK   |
| UH-3<br>UH-4 | N            | ALLYPOR<br>IOTORCY  | CLE/                 | NAT<br>NAT         |                                       | 7" 55<br>7" 55        |                     | 1.2<br>1.2   | 93<br>93                | 110              |         | 43<br>43             | 1440<br>1440 | 1⁄8<br>1⁄8     | 1.3<br>1.3  | 115<br>115   | 1                  | 95<br>95        |             |                 |                                 |  | SEE NOT       |  |
| DTES:        |              |                     |                      |                    |                                       |                       |                     |              |                         |                  |         | שד                   | ,+U          | /8             | 6.1         | 110          |                    | 90              |             |                 |                                 |  |               | <b>DATE:</b> July-Aug.   |
| PRO          | <b>VID</b>   | E 20 GAU            | GE ALUN              | INIZEI             | INIZED STE<br>D STEEL CA<br>EAT EXCHA | ABINET W              | ITH BAKE            | ED ON F      | POWDEF                  | R COAT           |         | AGE DIR              | ECT SP       |                | GNITIO      | N            |                    |                 |             |                 |                                 |  |               | <b>SCALE:</b> 2016 N.T.S.  |
| PRO          |              | E FACTOR            | RY FINGE<br>RY VERT  | ER PRO             | OOF FAN G<br>ONCENTR                  | UARD, MO              | DUNTING             | BRACK        | KETS, AN<br>OVIDE F     | ND ADJUS         |         | AIR DEFL<br>ED DIFFE | ECTOR        | BLAD           | DES         |              | СН ТО Р            | PROVE P         | OSITIVI     | E VENT          | ING.                            |  |               | SHEET NUMBER:  |
|              | יסיו/ (ו     | • • • • • • • • • • |                      | maiN (             |                                       | • GVVIICH.            |                     |              | UTTU                    | UNDENSA          | THE NEL |                      | N NH.        |                |             |              |                    |                 |             |                 |                                 |  |               |  |

|        | ļ         | AIR SEPARATOR                 | SCHED                  | ULE           |  | (GPM)     |
|--------|-----------|-------------------------------|------------------------|---------------|--|-----------|
| TAG    | SERVICE   | TYPE                          | WATER<br>FLOW<br>(GPM) | P.D.<br>(FT.) | MANUFACTURER<br>AND MODEL<br>NUMBER (AS<br>STANDARD) | REMARKS   |
| AS-1   | HOT WATER | AIR SEPARATOR<br>W/O STRAINER | 47                     | 0.3           | AMTROL 3-AS-L  | SEE NOTES |
| NOTES: |           |                               |                        |               |  |           |

1. REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION. 2. PROVIDE BALL-TYPE BLOWDOWN VALVE, HOSE CONNECTION W/ CAP AND CHAIN. 3. PROVIDE VENT WITH  $\frac{1}{2}$ " COPPER TUBING FROM THE AIR VENT TO FLOOR. REFER TO DETAIL. 4. AIR SEPARATOR SHALL BE BY AMTROL, TACO, BELL AND GOSSETT OR EQUAL.

|      |             |             |             |       |       | IND      | OOR UNIT | -    |                    |                     | -    |       |      |   |        |               | _     |              | OUTDOOR | UNIT    | -      |        |     |                         |           |
|------|-------------|-------------|-------------|-------|-------|----------|----------|------|--------------------|---------------------|------|-------|------|---|--------|---------------|-------|--------------|---------|---------|--------|--------|-----|-------------------------|-----------|
|      |             |             |             |       | COOL  | ING DATA |          |      | HEATING DA         | ATA                 | ELEC | CTRIC | DATA |   |        |               |       |              | COMPR   | ESSOR   | ELECTR | C SERV | ICE | MANUFACTURER            |           |
| TAG  | SERVICE     | LOCATION    | CFM         | TOTAL | SENS. | E/       | ٩T       | мвн  | INDOOR<br>TEMP. DB | OUTDOOR<br>TEMP. DB | v    | мса   | БЦ   | MANUFACTURER AND<br>MODEL NUMBER (AS<br>STANDARD) | TAG    | LOCATION      |       | AIR<br>TEMP. | MAX     | МВН     | МСА    | v      | PH  | AND MODEL<br>NUMBER (AS | REMARKS   |
|      |             |             |             | MBH   | MBH   | DB (°F)  | WB (°F)  |      | (°F)               | (°F)                | v    |       |      | ,   |        |               |       | (°⊢)         | HEATING | COOLING | MOA    | v      |     | STANDARD)               |           |
| HP-1 | FITNESS 015 | FITNESS 015 | 635-705-775 | 24.0  | 18.5  | 80.0     | 67.0     | 18.0 | 70.0               | 17.0                | 208  | 1.0   | 1    | РКА-А24КА4  | ACCU-2 | LOWER<br>ROOF | R410A | 95           | 18.0    | 24.0    | 18     | 208    | 1   | PUZ-A24NHA4             | SEE NOTES |
| HP-2 | FITNESS 015 | FITNESS 015 | 635-705-775 | 24.0  | 18.5  | 80.0     | 67.0     | 18.0 | 70.0               | 17.0                | 208  | 1.0   | 1    | PKA-A24KA4  | ACCU-3 | LOWER<br>ROOF | R410A | 95           | 18.0    | 24.0    | 18     | 208    | 1   | PUZ-A24NHA4             | SEE NOTES |

| PIPE INSULATIO   | N (IECC - 20                    | 012 ASH  | RAE 90.1   | -2010 C      | OMPLIANCE)  |
|--|---------------------------------|----------|------------|--------------|---|
| MINIMUM INSULATION THIC  | KNESS IN INC                    | CHES FOR | r Indoor f | PIPE SIZE    | S (SEE NOTES BELOW)                                   |
| PIPING SYSTEM TYPES  | FLUID<br>TEMP.<br>RANGE<br>(°F) | < 1"     | 1" TO 1¼"  | 1½" TO<br>3" | K-FACTOR<br>(BTU-INCH/°F-HR-SF) AT<br>AVE. TEMP. (°F) |
| LOW TEMPERATURE HEATING  | 100 TO 200                      | 1.5      | 1.5        | 2            | 0.25-0.28 @ 125°F                                     |
| REFRIGERANT (SUCTION/GAS<br>AND LIQUID LINES FOR HEAT<br>PUMPS) AND ALL OUTDOOR<br>REFRIGERANT | -                               | 0.5      | 1          | 1            | 0.21-0.27 @ 75°F                                      |

NOTES: 1. FOR MINIMUM THICKNESS OF ALTERNATIVE INSULATION TYPES OUTSIDE THE STATED CONDUCTIVITY RANGE, SEE TEST METHOD FOR STEADY STATE HEAT TRANSFER PROPERTIES OF HORIZONTAL PIPE INSULATIONS, ASTM C 335-95, AND THE STATE ENERGY CODE. 2. PROVIDE OUTDOOR REFRIGERANT WITH UV RESISTANT ALUMINUM OR PVC JACKET. 3. REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION.

| TAG | SELECTION<br>RANGE (CFM) | NECK SIZE<br>(IN.) | OVERALL SIZE<br>(IN.) | MOUNTING | ACCESSORIES | MANUFACTURER AND MODEL NUMBER<br>(AS STANDARD) | NC OR AIR PRESSURE<br>DROP NOT TO EXCEED | REMARKS   |
|-----|--------------------------|--------------------|-----------------------|----------|-------------|--|--|-----------|
| SA  | 0-50                     | 4"Ø                | 12x12                 | LAY-IN   | -           | TITUS TMS                                      | 25                                       | SEE NOTES |
| SB  | 50-75                    | 5"Ø                | 12x12                 | LAY-IN   | -           | TITUS TMS                                      | 25                                       | SEE NOTES |
| SC  | 50-125                   | 8"Ø                | 24x24                 | LAY-IN   | -           | TITUS TMS                                      | 25                                       | SEE NOTES |
| SD  | 125-200                  | 10"Ø               | 24x24                 | LAY-IN   | -           | TITUS TMS                                      | 25                                       | SEE NOTES |
| SE  | 200-300                  | 12"Ø               | 24x24                 | LAY-IN   | -           | TITUS TMS                                      | 25                                       | SEE NOTES |
| SF  | 300-450                  | 14"Ø               | 24x24                 | LAY-IN   | -           | TITUS TMS                                      | 25                                       | SEE NOTES |
| SG  | 90                       | 14x6               | 14x6                  | SURFACE  | -           | TITUS 300RS                                    | 25                                       | SEE NOTES |
| SH  | 15-50                    | 6x6                | 6x6                   | SURFACE  | -           | TITUS SG-PR                                    | 25                                       | SEE NOTES |
| SI  | 50-75                    | 8x8                | 8x8                   | SURFACE  | -           | TITUS SG-PR                                    | 25                                       | SEE NOTES |
| SJ  | 845                      | 20x20              | 24x24                 | LAY-IN   | -           | TITUS 300RS                                    | 25                                       | SEE NOTES |
| RA  | 0-75                     | 6x6                | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| RB  | 75-150                   | 8x8                | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| RC  | 150-250                  | 10x10              | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| RD  | 250-400                  | 12x12              | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| RE  | 400-600                  | 14x14              | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| RF  | 650-850                  | 18x18              | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| EA  | 0-75                     | 6x6                | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| EB  | 75-150                   | 8x8                | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| EC  | 150-300                  | 12x12              | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| ED  | 300-450                  | 14x14              | 24x24                 | LAY-IN   | -           | TITUS 350RL                                    | 25                                       | SEE NOTES |
| EE  | 15-50                    | 6x6                | 6x6                   | SURFACE  | -           | TITUS SG-PR                                    | 25                                       | SEE NOTES |
| EF  | 50-75                    | 8x8                | 8x8                   | SURFACE  | -           | TITUS SG-PR                                    | 25                                       | SEE NOTES |

NOTES: REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION. CONFIRM QUANTITIES AND FLOW PATTERNS WITH FLOOR PLANS. RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE INLET.

3 PROVIDE 24"x24" LAY-IN BORDER FOR DIFFUSERS, REGISTERS AND GRILLES THAT ARE TO BE INSTALLED WITHIN A CEILING GRID. REFER TO ARCHITECTURAL RCP. 4 PROVIDE RETURN GRILLES IN INTERVIEW ROOMS AND ROOMS WITH FULL HEIGHT WALLS/ DEDICATED TRANSFER AIR DUCTS WITH ACOUSTICAP ACOUSTIC BAFFLE (OR APPROVED EQUAL) AND LINER AND CAP-SUB ASSEMBLY FOR NOISE REDUCTION. ASSEMBLE/ ATTACH AS REQUIRED. CONFIGURE SO OPENING POINTS AWAY FROM TRANSFER DUCT.

|      |              |                |       |     | н             | EATING | SYSTEM                  | I EXPA | NSION TANK   | SCHEDU   | LE       |                           |
|------|--------------|----------------|-------|-----|---------------|--------|-------------------------|--------|--------------|----------|----------|---------------------------|
| TAG  |              | LOCATION       | FLUID |     | TEM<br>P (°F) | PRESSU | TEM<br>RE (PSIG)<br>ANK | VOLU   | ME (GALLONS) | DIMENSIC | ONS (IN) | INITIA<br>TANK A<br>CHARG |
|      |              |                |       | MIN | MAX           | MIN    | MAX                     | TANK   | ACCEPTANCE   | DIAMETER | HEIGHT   | (PSIG                     |
| ET-1 | HOT<br>WATER | BOILER<br>ROOM | WATER | 40  | 140           | 20     | 48                      | 53     | 48           | 24       | 38       | 12                        |

NOTES: REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION.

2 EXPANSION TANKS TO BE RATED FOR MAXIMUM WORKING PRESSURE OF 125 PSIG. EXPANSION TANK SHALL BE ASME RATED. 3 EXPANSION TANKS SHALL BE FULL ACCEPTANCE TYPE.

|       |             |             |      |                  |      |               | FINNED TUBE   | RADIATO |         | DULE  |          |
|-------|-------------|-------------|------|------------------|------|---------------|---------------|---------|---------|-------|----------|
|       | WATEF       | R TEMP.     | P    | IPE              |      | FINS          |               | ROWS    |         | COVE  | R        |
| TAG   | ENT<br>(°F) | LVG<br>(°F) | TYPE | SIZE<br>(IN)     | TYPE | FINS PER INCH | SIZE (IN)     | HIGH    | BTUH/FT | TYPE  | SI<br>(I |
| FTR-1 | 140         | 120         | CU   | <sup>3</sup> ⁄4" | AL   | 50            | 4-¼" x 3-5⁄8" | 1       | 540     | SLOPE | 1        |
| NOTES |             |             |      |                  |      |               |               |         |         |       |          |

. PROVIDE 14 GAGE ENCLOSURE WITH FULL BACKPLATE, END CAPS, ONE TIER SLOPE TOP TYPE ENCLOSURE. 2. PROVIDE WITH BAKED ENAMEL PRIME COAT. FINAL COLOR TO BE COORDINATED WTIH THE ARCHITECT. 5. FINTUBE RADIATION SHALL BE BY STERLING, SLANT-FIN, VULCAN OR EQUAL.

|        |                         |                 | UNIT            | HEAT  | ER (H       | IOT V       | ATE    | R) SCI          | HEDU        | LE            |             |      |
|--------|-------------------------|-----------------|-----------------|-------|-------------|-------------|--------|-----------------|-------------|---------------|-------------|------|
|        |                         |                 | MIN             |       | AIR         |             |        | WA <sup>.</sup> | TER         |               | MOTOD       | ELEC |
| TAG    | LOCATION                | TYPE            | OUTPUT<br>(MBH) | CFM   | EAT<br>(°F) | LAT<br>(°F) | GPM    | EWT<br>(°F)     | LWT<br>(°F) | P.D.<br>(FT.) | MOTOR<br>HP | AMF  |
| UH-1   | MECHANICAL ROOM         | HORIZONTAL      | 4.1             | 245   | 60          | 91          | .50    | 140             | 110         | .3            | 16 W        | 0.8  |
| NOTES: | /IDE HOT WATER UNIT HEA | TER WITH OSHA A | PPROVED         | FAN G |             | S. HOF      | RIZONT |                 | UVER.       |               |             | NTED |

AL LOUVER, AND UNIT MOUNTED PROVIDE WITH BAKED ENAMEL FINISH - COORDINATE FINAL COLOR WITH OWNER AND ARCHITECT. 3. HOT WATER UNIT HEATER SHALL BE BY STERLING, MODINE, AIRTHERM OR EQUAL.

| MINIM   | UM DUCT IN  | SULATION R  | -VALUES                                   |
|---|---|---|---|
| LOCATION  | SUPPLY  | RETURN  | RAW OUTDOOR<br>AIR                        |
| UNCONDITIONED SPACE (SHAFT OR CEILING WITH DUCTED RETURN AIR)   | R-5   | R-5   | R-4                                       |
| DUCT LINING SCOPE: ACOUSTIC DUCT LINING OF THE TYPE A<br>DUCTWORK WITHIN 20 FEET OF ALL TYPES OF AIR HANDLING<br>BRANCHES), ALL LOW PRESSURE DUCTWORK DOWNSTREAM<br>DRAWINGS. LINING SHALL NOT BE USED ON DUCTWORK SER<br>NOTES: (SEE SPECIFICATIONS FOR R-VALUES OF VARIOUS DU | UNITS (INCLUDI<br>OF ALL TYPES (<br>VING AND SHOV<br>JCT INSULATION | NG RTU, ERU, AC<br>DF SUPPLY VOLU<br>VER SYSTEMS.<br>I AND LINERS). | CU, ETC., AND ALL B<br>IME BOXES (VAV), A |
| 1. R-VALUES SHOWN MAY BE OBTAINED BY ADDING THE R-VA<br>2. R-VALUES SHOWN ARE AS INSTALLED. USE R-VALUES FOR<br>3. REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL   | 25% COMPRES   |   |   |

|        |                 |               |      |       |        |                        |           |        |       |        |          | SPLIT A/C UN                  | T SCHE | DULE          |                     |                      |         |        |     |        |        |      |                                      |              |
|--------|-----------------|---------------|------|-------|--------|------------------------|-----------|--------|-------|--------|----------|-------------------------------|--------|---------------|---------------------|----------------------|---------|--------|-----|--------|--------|------|--------------------------------------|--------------|
|        | -               |               |      |       |        | INDOOR UNI             | Γ         |        |       |        |          |                               |        | -             |                     | -                    | OUTDOO  | R UNIT |     |        |        |      |                                      |              |
|        |                 |               |      | COOL  | ING DA | ТА                     |           | E      | LECTI | RIC DA | TA       | MANUFACTURER AND              |        |               |                     | AMBIENT              |         |        | ELE | ECTRIC | C SERV | /ICE | MANUFACTURER                         |              |
| TAG    | SERVICE         | LOCATION      |      | SENS. |        | EAT                    | CFM       | V      | FLA   | мса    | РН       | MODEL NUMBER (AS<br>STANDARD) | TAG    | LOCATION      | REFRIGERANT<br>TYPE | AIR<br>TEMP.<br>(°F) | COOLING | SEER   | мса | FLA    | v      | PH   | AND MODEL<br>NUMBER (AS<br>STANDARD) | REMARKS      |
|        |                 |               | MBH  | MBH   | DB (°F | <sup>-</sup> ) WB (°F) |           |        |       |        |          |                               |        |               |                     |                      |         |        |     |        |        |      |                                      |              |
| ACU-1  | TEL/DATA<br>013 | TEL/DATA 013  | 24.0 | 16.8  | 80.0   | 67.0                   | 705       | 208    | .36   | 1.0    | 1        | PKA-A24                       | ACCU-1 | LOWER<br>ROOF | R410A               | 95                   | 24.0    | 17.0   | 18  | .75    | 208    | 1    | PUY-A24                              | SEE<br>NOTES |
| NOTES: |                 | TH WIRED REMO |      |       |        | URE SENSO              | R. CONDEN | SATE F | PUMP  | (MODE  | EL SI310 | 00) AND WIND BAFFLE F         |        | MBIENT COC    | DLING.              |                      |         |        |     |        |        |      |                                      |              |
|        |                 |               |      |       |        |                        | .,        |        |       | (      |          |                               |        |               |                     |                      |         |        |     |        |        |      |                                      |              |

|                            |   |  | (ACCEPTANCE<br>VOLUME) |  |  |  |  |
|----------------------------|---|--|------------------------|--|--|--|--|
| IAL<br>( AIR<br>RGE<br>IG) | WEIGHT<br>(LBS)                                   | MANUFACTURER<br>AND MODEL<br>NUMBER (AS<br>STANDARD) | REMARKS                |  |  |  |  |
| 2                          | 190   | EXTROL 200-L   | SEE NOTES              |  |  |  |  |
|                            |   |  |                        |  |  |  |  |
|                            |   |  |                        |  |  |  |  |
| SIZE<br>(IN)               | MANUFACTURER AND<br>MODEL NUMBER (AS<br>STANDARD) |  |                        |  |  |  |  |
| 14                         | STER  | LING JVB-S14B  | SEE NOTES              |  |  |  |  |
|                            |   |  |                        |  |  |  |  |

|      |      |       |     |                       |         | (GPM               |
|------|------|-------|-----|-----------------------|---------|--------------------|
| CTR  | IC S | ERVIC | Э   | MANUFACTU             | RER AND |                    |
| PS   | v    | PI    | Н   | MODEL NU<br>(AS STANI |         | REMARKS            |
| .8   | 115  | 5 1   |     | STERLING H            | IS-108A | SEE NOTES          |
| ) MA | NUA  | L MO  | гоі | R STARTER/ DI         | SCONNEC | T SWITCH.          |
|      |      |       |     |                       |         |                    |
|      |      |       |     |                       |         |                    |
| DOO  | R    |       |     | EXH                   | AUST    |                    |
| 200  | '' X |       |     | I ENERGY<br>COVERY    |         | JT ENERGY<br>OVERY |

R-5 -0-LLED ON ALL SUPPLY, RETURN, AND EXHAUST ND ALL BRANCHES WITHIN 20') ALL FANS (INCLUDING S (VAV), AND WHERE DETAILED OR SHOWN ON

OR USED) AND EXTERNAL DUCT INSULATION.

|        |             |         |                |     |               |    | TE             | ERMINAL V                  |              | BOX W                                   | /ITH H     | AW TC       | TER S       | CHED             | ULE         |      |                            |      |                               |           |
|--------|-------------|---------|----------------|-----|---------------|----|----------------|----------------------------|--------------|---|------------|-------------|-------------|------------------|-------------|------|----------------------------|------|-------------------------------|-----------|
|        |             |         | SELEC<br>RANGE |     | INLET         |    | IARGE<br>(IN.) | MAX. S.P.                  |              | HOT WATER COIL DATA (SEE NOTES 2 AND 3) |            |             |             | MANUFACTURER AND |             |      |                            |      |                               |           |
| TAG    | TYPE        | SERVICE | MAX            |     | SIZE<br>(IN.) | W  | н              | DROP W/<br>COIL<br>(IN.WG) | NC<br>RATING | мвн                                     | MIN<br>CFM | EWT<br>(°F) | LWT<br>(°F) | EAT<br>(°F)      | LAT<br>(°F) | GPM  | MAX<br>WATER<br>P.D. (FT.) | ROWS | MODEL NUMBER (AS<br>STANDARD) | REMARKS   |
| VAV-1  | SINGLE DUCT | RTU-1   | 300            | 180 | 8             | 10 | 8              | .13                        | 20           | 9.5                                     | 180        | 140         | 110         | 44               | 92.5        | 0.65 | 0.05                       | 3    | TRANE VCWF08                  | SEE NOTES |
| VAV-2  | SINGLE DUCT | RTU-1   | 200            | 120 | 5             | 10 | 8              | .08                        | 30           | 6.4                                     | 120        | 140         | 110         | 44               | 93.1        | 0.45 | 0.14                       | 2    | TRANE VCWF05                  | SEE NOTES |
| VAV-3  | SINGLE DUCT | RTU-1   | 600            | 360 | 10            | 14 | 12             | .17                        | 17           | 17.5                                    | 360        | 140         | 110         | 44               | 88.9        | 1.2  | 0.24                       | 2    | TRANE VCWF10                  | SEE NOTES |
| VAV-4  | SINGLE DUCT | RTU-1   | 500            | 300 | 10            | 14 | 12             | .13                        | 16           | 15.4                                    | 300        | 140         | 110         | 44               | 91.0        | 1.0  | 0.16                       | 2    | TRANE VCWF10                  | SEE NOTES |
| VAV-5  | SINGLE DUCT | RTU-1   | 200            | 120 | 5             | 10 | 8              | .08                        | 30           | 6.4                                     | 120        | 140         | 110         | 44               | 93.1        | 0.45 | 0.17                       | 2    | TRANE VCWF05                  | SEE NOTES |
| VAV-6  | SINGLE DUCT | RTU-1   | 850            | 510 | 14            | 19 | 18             | .10                        | 16           | 18.5                                    | 510        | 140         | 110         | 44               | 77.4        | 1.25 | 0.50                       | 1    | TRANE VCWF14                  | SEE NOTES |
| VAV-7  | SINGLE DUCT | RTU-1   | 1150           | 690 | 14            | 19 | 18             | .15                        | 16           | 32.6                                    | 690        | 140         | 110         | 44               | 97.5        | 2.2  | 0.22                       | 2    | TRANE VCWF14                  | SEE NOTES |
| VAV-8  | SINGLE DUCT | RTU-1   | 250            | 150 | 5             | 11 | 10             | .12                        | 32           | 6.4                                     | 150        | 140         | 110         | 44               | 90.2        | 0.45 | 0.20                       | 2    | TRANE VCWF04                  | SEE NOTES |
| VAV-9  | SINGLE DUCT | RTU-1   | 200            | 120 | 4             | 10 | 8              | .05                        | 36           | 6.4                                     | 120        | 140         | 110         | 44               | 93.1        | 0.43 | 0.14                       | 2    | TRANE VCWF04                  | SEE NOTES |
| VAV-10 | SINGLE DUCT | RTU-1   | 1300           | 780 | 16            | _  | _              | .14                        | 16           | 44.8                                    | 900        | 140         | 110         | 44               | 99.07       | 90.0 | 3.0                        | 2    | TRANE VCWF16                  | SEE NOTES |
| VAV-11 | SINGLE DUCT | RTU-1   | 225            | 135 | 5             | 10 | 8              | .15                        | 31           | 12.6                                    | 225        | 140         | 110         | 44               | 95.7        | 0.85 | 0.65                       | 3    | TRANE VCWF05                  | SEE NOTES |
| VAV-12 | SINGLE DUCT | RTU-1   | 225            | 135 | 5             | 10 | 8              | .10                        | 31           | 7.0                                     | 135        | 140         | 110         | 44               | 91.6        | 0.50 | 0.16                       | 2    | TRANE VCWF05                  | SEE NOTES |
| VAV-13 | SINGLE DUCT | RTU-1   | 175            | 105 | 5             | 10 | 8              | .07                        | 29           | 5.8                                     | 105        | 140         | 110         | 44               | 94.7        | 0.39 | 0.11                       | 2    | TRANE VCWF05                  | SEE NOTES |
| VAV-14 | SINGLE DUCT | RTU-1   | 1100           | 660 | 14            | 19 | 18             | .14                        | 16           | 31.5                                    | 660        | 140         | 110         | 44               | 88.0        | 2.1  | 0.20                       | 2    | TRANE VCWF14                  | SEE NOTES |
| VAV-15 | SINGLE DUCT | RTU-1   | 200            | 120 | 5             | 10 | 8              | .12                        | 30           | 6.4                                     | 180        | 140         | 110         | 44               | 99.5        | 0.70 | 0.50                       | 2    | TRANE VCWF05                  | SEE NOTES |
| VAV-16 | SINGLE DUCT | RTU-1   | 150            | 90  | 4             | 10 | 8              | .03                        | 36           | 3.4                                     | 90         | 140         | 110         | 44               | 78.5        | 0.25 | 0.13                       | 1    | TRANE VCWF04                  | SEE NOTES |
| VAV-17 | SINGLE DUCT | RTU-1   | 625            | 375 | 10            | 14 | 12             | .18                        | 17           | 18.0                                    | 375        | 140         | 110         | 44               | 88.4        | 1.2  | 0.26                       | 2    | TRANE VCWF10                  | SEE NOTES |
| VAV-18 | SINGLE DUCT | RTU-1   | 400            | 240 | 10            | 14 | 12             | .09                        | 16           | 13.0                                    | 325        | 140         | 110         | 44               | 90.3        | 1.1  | 0.21                       | 2    | TRANE VCWF10                  | SEE NOTES |
| VAV-19 | SINGLE DUCT | RTU-3   | 400            | 240 | 8             | 11 | 10             | .23                        | 21           | 11.3                                    | 240        | 140         | 110         | 47               | 94.0        | 0.75 | 0.06                       | 3    | TRANE VCWF08                  | SEE NOTES |
| VAV-20 | SINGLE DUCT | RTU-3   | 200            | 120 | 5             | 10 | 8              | .08                        | 30           | 6.1                                     | 120        | 140         | 110         | 47               | 90.3        | 0.40 | 0.12                       | 2    | TRANE VCWF05                  | SEE NOTES |
| VAV-21 | SINGLE DUCT | RTU-3   | 200            | 120 | 5             | 10 | 9              | .08                        | 30           | 6.1                                     | 120        | 140         | 110         | 47               | 93.7        | 0.40 | 0.12                       | 2    | TRANE VCWF05                  | SEE NOTES |
| VAV-22 | SINGLE DUCT | RTU-3   | 250            | 150 | 6             | 10 | 8              | .08                        | 20           | 6.3                                     | 150        | 140         | 110         | 47               | 85.6        | 0.40 | 0.02                       | 2    | TRANE VCWF08                  | SEE NOTES |
| VAV-23 | SINGLE DUCT | RTU-3   | 650            | 390 | 10            | 14 | 12             | .19                        | 17           | 17.6                                    | 390        | 140         | 110         | 47               | 88.7        | 1.2  | 0.25                       | 2    | TRANE VCWF10                  | SEE NOTES |
| VAV-24 | SINGLE DUCT | RTU-3   | 700            | 420 | 12            | 14 | 12             | .16                        | 15           | 18.0                                    | 420        | 140         | 110         | 47               | 86.6        | 1.20 | 0.10                       | 2    | TRANE VCWF12                  | SEE NOTES |
| VAV-25 | SINGLE DUCT | RTU-3   | 650            | 390 | 10            | 14 | 12             | .19                        | 17           | 17.6                                    | 390        | 140         | 110         | 47               | 88.7        | 1.2  | 0.25                       | 2    | TRANE VCWF10                  | SEE NOTES |
| VAV-26 | SINGLE DUCT | RTU-3   | 325            | 195 | 8             | 11 | 10             | .16                        | 20           | 9.5                                     | 195        | 140         | 110         | 47               | 92.0        | 0.65 | 0.10                       | 3    | TRANE VCWF06                  | SEE NOTES |
| VAV-27 | SINGLE DUCT | RTU-3   | 675            | 450 | 12            | 14 | 12             | .15                        | 15           | 17.5                                    | 450        | 140         | 110         | 47               | 86.8        | 1.2  | 0.10                       | 2    | TRANE VCWF12                  | SEE NOTES |
| VAV-28 | SINGLE DUCT | RTU-3   | 750            | 450 | 12            | 14 | 12             | .17                        | 15           | 19.1                                    | 450        | 140         | 110         | 47               | 86.1        | 1.3  | 0.10                       | 2    | TRANE VCWF12                  | SEE NOTES |
| VAV-29 | SINGLE DUCT | RTU-3   | 375            | 225 | 10            | 14 | 12             | .05                        | 16           | 8.7                                     | 225        | 140         | 110         | 47               | 82.6        | 0.6  | 1.2                        | - 1  | TRANE VCWF10                  | SEE NOTES |
| VAV-30 | SINGLE DUCT | RTU-3   | 300            | 180 | 8             | 11 | 10             | .14                        | 20           | 9.1                                     | 180        | 140         | 110         | 47               | 93.6        | 0.60 | 0.05                       | 3    | TRANE VCWF06                  | SEE NOTES |
| VAV-31 | SINGLE DUCT | RTU-3   | 250            | 150 | 6             | 10 | 8              | .17                        | 27           | 7.2                                     | 150        | 140         | 110         | 47               | 90.9        | 0.50 | 0.16                       | 2    | TRANE VCWF06                  | SEE NOTES |
| VAV-32 | SINGLE DUCT | RTU-3   | 450            | 270 | 10            | 14 | 12             | .13                        | 16           | 17.2                                    | 270        | 140         | 110         | 47               | 105.6       | 1.1  | 0.33                       | 3    | TRANE VCWF10                  | SEE NOTES |
| NOTES: |             |         |                |     |               |    |                |                            |              |   |            |             |             |                  |             |      |                            |      |                               |           |

1. COIL HEATING CAPACITY SHALL BE BASED ON MINIMUM CFM AND WATER FLOW LISTED ON DRAWINGS FOR EACH BOX. FOR BOXES WITH CO2 CONTROLS, IN WHICH CASE 75% OF MAXIMUM AIRFLOW SHALL BE USED).

2. RUNOUT TO VAV BOX SHALL BE THE SAME SIZE AS THE INLET CONNECTION. 3. 1" ACOUSTICAL SOUND LINING SHALL BE INSTALLED ON THE SUPPLY AIR DUCTWORK FROM THE VAV UNIT TO 20 FEET DOWNSTREAM OF THE BOX.

. PROVIDE VAV UNIT WITH FACTORY CONTROLS ENCLOSURE.

. PROVIDE VAV UNITS WITH HANGER BRACKETS AND 1" MATTE LINER.

5. CONFIRM LOCATION OF HOT WATER COIL CONNECTIONS IN THE FIELD AND WITH THE DRAWINGS. 7. INLET DUCTWORK TO VAV BOXES SHALL HAVE A MINIMUM DISTANCE OF 1.5 TIMES THE DIAMETER FOR PROPER AIRFLOW MEASUREMENT. . VAV TERMINAL UNITS SHALL BE BY TITUS, TRANE, PRICE OR EQUAL.

|        |                      |            |     |                             |         | F    | AN SCHEI      | DULE |      |     |     |    |                |        |                               |           |
|--------|----------------------|------------|-----|-----------------------------|---------|------|---------------|------|------|-----|-----|----|----------------|--------|-------------------------------|-----------|
|        |                      |            |     |                             | E.S.P.  | ROOF |               |      |      |     |     |    | SOUND          | WEIGHT | MANUFACTURER AND              |           |
| TAG    | SERVICE              | LOCATION   | CFM | FAN TYPE                    | (IN.WG) | CURB | MOTOR<br>TYPE | RPM  | BHP  | HP  | v   | PH | POWER<br>(dBA) | (LBS)  | MODEL NUMBER (AS<br>STANDARD) | REMARKS   |
| EF-1   | 1ST FLOOR<br>TOILETS | LOWER ROOF | 650 | DIRECT DRIVE<br>CENTRIFUGAL | 1.0     | 16"  | ECM           | 1415 | 0.21 | 1⁄4 | 115 | 1  | 61             | 100    | GREENHECK G-143HP-VG          | SEE NOTES |
| EF-2   | VEHICLE BAY<br>101   | LOWER ROOF | 150 | DIRECT DRIVE<br>CENTRIFUGAL | 0.5     | 16"  | ECM           | 1236 | 0.05 | 1⁄4 | 115 | 1  | 50             | 82     | GREENHECK G-097-VG            | SEE NOTES |
| EF-3   | 2ND FLOOR<br>TOILETS | UPPER ROOF | 250 | DIRECT DRIVE<br>CENTRIFUGAL | 0.5     | 16"  | ECM           | 1571 | 0.06 | 1⁄6 | 115 | 1  | 55             | 65     | GREENHECK G-080-VG            | SEE NOTES |
| -      |                      |            |     |                             |         |      |               | -    |      |     |     |    |                |        |                               |           |
| EF-5   | SALLYPORT            | LOWER ROOF | 225 | DIRECT DRIVE<br>CENTRIFUGAL | 0.5     | 16"  | ECM           | 1395 | 0.07 | 1⁄4 | 115 | 1  | 54             | 82     | GREENHECK G-097-VG            | SEE NOTES |
| NOTES: |                      |            |     |                             |         |      |               |      |      |     |     |    |                |        |                               |           |

3. PROVIDE MOTORIZED DAMPER WITH 24V ACTUATOR AND DAMPER TRAY.

4. PROVIDE EF-2 AND EF-3 WITH 16" HIGH INSULATED ROOF CURBS. PROVIDE EF-1, EF-4, AND EF-5 WITH 12" HIGH ADAPTER CURBS. CONFIRM SIZE OF EXISTING ROOF CURBS IN THE FIELD. 5. FANS SHALL BE BY GREENHECK, PRICE, COOK OR APPROVED EQUAL.

PROVIDE FANS WITH EC MOTOR. PROVIDE EF-1, EF-3, AND EF-4 WITH UNIT MOUNTED SPEED CONTROLLERS FOR BALANCING. PROVIDE EF-2 WITH REMOTE SPEED CONTROLLER.
 PROVIDE WITH FACTORY MOUNTED AND WIRED DISCONNECT SWITCH.

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| WALTHAM POLICE<br>STATION<br>RENOVATION   |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| HVAC<br>SCHEDULES   |
| PROJECT NUMBER: 20130535DESIGNED BY:JJKDRAWN BY:JJKCHDATE:July-Aug.   |
| <b>SCALE:</b> 2016 N.T.S.   |
| SHEET NUMBER:   |
| SHEET 99 OF 157   |
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|  | GENE   | RAL   |
|--|--------|---|
| 0  | FD     | FLOOR DRAIN                                 |
|  | TD     | TRENCH DRAIN                                |
| ——   | со     | CLEANOUT                                    |
| $\square \emptyset$                                | FCO    | FLOOR CLEANOUT                              |
|  | GCO    | GRADE CLEANOUT                              |
|  |        | P-TRAP                                      |
| o  |        | ELBOW UP OR RISE                            |
| ə  |        | ELBOW DOWN OR DROP                          |
|  |        | CAP OR END OF PIPE                          |
| <b>———</b> + НВ                                    | НВ     | HOSE BIBB                                   |
|  | WH     | WALL HYDRANT                                |
| o  |        | TEE LOOKING UP                              |
| <del></del>  |        | TEE LOOKING DOWN                            |
|  |        | UNION                                       |
|  | VIV    | VALVE IN VERTICAL                           |
|  | RPBP   | REDUCED PRESSURE ZONE<br>BACKFLOW PREVENTER |
|  |        | STRAINER                                    |
| <b>P</b>   | WHA/SA | WATER HAMMER ARRESTOR/SHOCK<br>ABSORBER     |
| •  | CTE    | CONNECT TO EXISTING                         |
|  | ETR    | EXISTING TO REMAIN                          |
| · <del>/ / / / / / / / / / / / / / / / / / /</del> | ETBR   | EXISTING TO BE REMOVED                      |
| <b>—</b>   |        | FLOW IN DIRECTION OF ARROW                  |
| <b>&gt;</b>  |        | DIRECTION OF SLOPE                          |
| <b>───</b>   | CNR    | CONCENTRIC REDUCER                          |
| <del></del>  |        | PIPE SLEEVE                                 |
| -<br>  | ECC    | ECCENTRIC REDUCER                           |
|  |        | DOUBLE WALL PIPING                          |
| ——————————————————————————————————————             |        | PIPE ANCHOR                                 |
|  |        | PIPE GUIDE                                  |
|  |        | EXPANSION JOINT                             |
|  |        | FLEXIBLE CONNECTOR                          |
| <del></del>  |        | IN-LINE FILTER                              |
| FM   |        | FLOW METER                                  |
|  |        | LIMIT OF WORK                               |
| L<br>L   | НС     | HANDICAPPED ACCESSIBLE                      |
|  |        | I ANDIGAFFED AGGEGOIDLE                     |
| NUM  |        | KEY NOTE DESIGNATION                        |
| ⊗ <sup>TP</sup>                                    | ТР     | TRAP PRIMER                                 |
|  |        |   |

### DESIGNATION INDICATOR - DETAIL DESIGNATION NUMBER

(P-1)

DETAIL DESIGNATION DRAWING

## VALVE LEGEND

| Image: Ball Valve   Image: Ball Valve <th></th>  |    |
|--|----|
| GATE VALVE<br>GATE VALVE (NORMALLY CLOSED)<br>GATE VALVE (NORMALLY CLOSED)<br>OS&Y<br>OUTSIDE SCREW AND YOKE VALVE<br>BUTTERFLY VALVE<br>CHECK VALVE<br>BALL VALVE (GAS)<br>GAS COCK<br>PLUG VALVE   |    |
| →N GATE VALVE (NORMALLY CLOSED)   → OS&Y   OS&Y OUTSIDE SCREW AND YOKE VALVE   BUTTERFLY VALVE   → CHECK VALVE   → BALL VALVE (GAS)   → GAS COCK   → PLUG VALVE  |    |
| OS&Y OUTSIDE SCREW AND YOKE VALVE   OS&Y OUTSIDE SCREW AND YOKE VALVE   UNITERFLY VALVE BUTTERFLY VALVE   UNITERFLY VALVE CHECK VALVE   UNITERFLY VALVE GAS COCK   UNITERFLY PLUG VALVE  |    |
| Image: Second state   Image: Second state <tr< th=""><th></th></tr<> |    |
| Image: Check valve       Image:  |    |
| →     →     BALL VALVE (GAS)       →     ✓     GAS COCK       →     ✓     PLUG VALVE   |    |
| GAS COCK<br>I∳I GAS COCK<br>PLUG VALVE   |    |
| PLUG VALVE   |    |
|  |    |
| ±  |    |
| MV MIXING VALVE  |    |
| BALANCING VALVE  |    |
| ANGLE VALVE  |    |
| T&P TEMPERATURE AND PRESSURE RELIEF  |    |
| A VACUUM RELIEF VALVE  |    |
| T AQUASTAT   |    |
| THERMOMETER  |    |
|  | /E |
| PG PRESSURE GAUGE  |    |
| BACK WATER VALVE   |    |
| GLOBE VALVE  |    |
| FLOW SWITCH  |    |
| SOLENOID VALVE   |    |
|  |    |
| MOTOR OPERATED GATE VALVE  |    |
| MOTOR OPERATED BALL VALVE  |    |

### PIPING LEGEND

|   | CW     | COLD WATER                           |
|---|--------|--------------------------------------|
| ======================================= |        | COLD WATER BELOW SLAB                |
|   | нw     | HOT WATER                            |
|   | HWR    | HOT WATER RETURN                     |
|   | S or W | SOIL OR WASTE ABOVE GROUND           |
|   | S or W | SOIL OR WASTE BELOW SLAB             |
|   | v      | VENT ABOVE GROUND                    |
|   | V      | VENT BELOW SLAB                      |
| RL                                      | RL     | RAIN LEADER ABOVE GROUND             |
| RL                                      | RL     | RAIN LEADER BELOW SLAB               |
| IW                                      | IW     | INDIRECT WASTE                       |
| G                                       | G      | NATURAL GAS PIPING                   |
| GV                                      | GV     | GAS VENT PIPING                      |
|   | тw     | TEMPERED WATER                       |
|   | TWR    | TEMPERED WATER RETURN                |
| —— 140°F — — ——                         |        | 140°F HOT WATER                      |
| —— 140°F — — — ——                       |        | 140°F HOT WATER RETURN               |
| —— NP — ——                              | NPCW   | NON POTABLE COLD WATER               |
| DWS                                     | DWS    | CHILLED DRINKING WATER SUPPLY        |
| DWR                                     | DWR    | CHILLED DRINKING WATER RECIRCULATING |
| TP                                      | TP     | TRAP PRIMER                          |
|   |        |                                      |

| A             | BBREVIATIONS                                    |                  |                 |
|---------------|---|------------------|-----------------|
| ACT           | ACOUSTICAL TILE                                 |                  |                 |
| AFF           | ABOVE FINISH FLOOR<br>ACCESS PANEL              | 1.               |                 |
|               | ACCESS PANEL                                    | 1                | PLUI            |
| BLDG          | BUILDING  | 2.               | OBT/<br>COM     |
| CFH           | CUBIC FEET PER HOUR                             | 3.               |                 |
| CFM           |   | 0.               | EXA             |
| CI<br>CLG     | CAST IRON<br>CEILING                            | 4.               |                 |
| CLDI          | CEMENT LINED DUCTILE IRON                       | l                | ARC<br>THE      |
| со            | CLEANOUT  | 5.               | FURI            |
| CONC          | CONCRETE  | 1                | NOT             |
| CONT          |   |                  |                 |
| CONTR         | CONTRACTOR<br>CHROME PLATED                     | 6.               | PRO<br>INDI     |
| CTE           | CONNECT TO EXISTING                             | 7.               | PRO             |
| cw            | COLD WATER                                      | 8.               | FUR             |
| DF            | DRINKING FOUNTAIN-FIXTURE                       | 0.               | REL             |
| DIA           | DIAMETER  | 9.               | PITC            |
| DN            | DOWN  | 10               | ). INST         |
| DWG           |   | l                | AT A            |
| EC<br>EL/ELEV | ELECTRICAL CONTRACTOR<br>ELEVATION              | 11               | . HOT           |
|               |   | 12               | . PRO           |
| EWC           | ELECTRIC WATER<br>COOLER-FIXTURE IDENTIFICATION | 13               | . PIPIN         |
| EX            | EXISTING  | l                | ARE             |
| FCO           | FLOOR CLEANOUT                                  | 14               | . INST          |
| FFE           | FINISH FLOOR ELEVATION                          | 15               | 5. PRO          |
| <u>P-#</u>    |   | 16               | . PRO           |
| FLR<br>FP     | FLOOR<br>FIRE PROTECTION                        | 17               | . AN A          |
| FS            | FLOW SWITCH                                     | l                | PRO             |
| FT            | FOOT  | 18               | . REQ<br>WHE    |
| FV            | FLUSH VALVE                                     | 40               |                 |
| GALV          | GALVANIZED                                      | 19               | ). REFI<br>PLAN |
| GC<br>GI      | GENERAL CONTRACTOR<br>GREASE INTERCEPTOR        | 20               | ). ALL          |
| GPF           | GALLON PER FLUSH                                | 1                | AS II           |
| GPM           | GALLONS PER MINUTE                              | 21               | I. SEE          |
| нс            | HANDICAPPED                                     |                  |                 |
| HW<br>HWR     | HOT WATER<br>HOT WATER RETURN                   |                  |                 |
|               |   |                  |                 |
| INV           | INVERT  |                  |                 |
| IW            | INDIRECT WASTE                                  | <u>DEN</u><br>1. |                 |
| LPC           | LIMIT OF PLUMBING CONTRACTOR                    | 1.               | REFE            |
| МЕСН          | MECHANICAL                                      | l                | SHOV            |
| MSB           | MOP SERVICE BASIN-FIXTURE                       | 2.               | VISIT           |
| NC            | NORMALLY CLOSED                                 | 1                | CONE            |
| NO            | NORMALLY OPEN                                   | 3.               | TRAC            |
| NTS           | NOT TO SCALE                                    | l                | DISCO<br>AFFE   |
| NIC<br>OD     | NOT IN CONTRACT<br>OUTSIDE DIAMETER             | l                | REMO            |
| OED           | OPEN END DRAIN                                  | l                | OWN             |
| PC            | PLUMBING CONTRACTOR                             | 4.               | NOTIF           |
| PLBG          | PLUMBING  | 1                | ENCC            |
| PSI           | POUNDS PER SQUARE INCH                          | 5.               |                 |
| RPBP          | REDUCED PRESSURE BACKFLOW<br>PREVENTER          | 1                | TAKE<br>HAZA    |
| SA            | SHOCK ABSORBER                                  | l                | MANI            |
| SH            | SHOWER-FIXTURE IDENTIFICATION                   | 6.               | NOTIF           |
| SK            | SINK-FIXTURE IDENTIFICATION                     | 1                |                 |
| SPEC          | SPECIFICATION                                   | · _              |                 |
| SS<br>ST.ST.  | SOIL STACK<br>STAINLESS STEEL                   | 7.               | ENSU<br>PREV    |
| 51.51.<br>TW  | TEMPERED WATER                                  | 1                | BRAC<br>BEFO    |
| ТҮР           | TYPICAL   | -                |                 |
| υ             | URINAL-FIXTURE IDENTIFICATION                   | 8.               | DO NO<br>CONO   |
| v             | VENT  | l                | HIDDI<br>PORT   |
| VB            | VACUUM BREAKER                                  | l                | ADEC            |
| VS            |   | 9.               | DRAII           |
| VTR<br>W      | VENT THRU ROOF<br>WASTE                         | l                | EXPL            |
|               | WASTE<br>WATER CLOSET-FIXTURE                   | l                |                 |
| wc            | IDENTIFICATION                                  | 10.              | PRIO            |
|               |   | 1                |                 |
|               |   | 11.              | PROF            |

### **GENERAL NOTES**

MBING WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE IMBING AND GAS CODE INCLUDING ALL LOCAL AMENDMENTS.

TAIN ALL PERMITS AND PAY ALL FEES ASSOCIATED WITH THIS WORK PRIOR TO MMENCEMENT.

ING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY. THE ACTUAL ROUTING OF PIPING AND ACT LOCATION OF EQUIPMENT SHALL BE DETERMINED IN THE FIELD.

ADDITION TO REVIEWING AND COORDINATING WITH THE OTHER TRADES (CIVIL, STRUCTURAL, CHITECTURAL, FIRE PROTECTION, HVAC, AND ELECTRICAL) THE CONTRACTOR SHALL VISIT E SITE AND FAMILIARIZE HIMSELF WITH DETAILS OF CONSTRUCTION.

RNISH AND INSTALL ALL NECESSARY PIPING, EQUIPMENT SUPPORTS AND ANY EQUIPMENT T SHOWN ON DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS BUT NECESSARY TO OVIDE A COMPLETE AND WORKABLE SYSTEM.

OVIDE ACCESSIBLE SHUTOFF VALVES ON ALL BRANCH PIPING AND ON ALL SUPPLY PIPING TO IVIDUAL FIXTURES AND EQUIPMENT.

DVIDE ACCESS TO ALL EQUIPMENT REQUIRING PERIODIC SERVICE AND MAINTENANCE.

RNISH ACCESS PANELS TO THE GENERAL CONTRACTOR FOR INSTALLATION UNDER THE ATED TRADES.

CH ALL WATER LINES TO DRAIN.

TALL HORIZONTAL RUNS OF WATER PIPING AS HIGH AS POSSIBLE AND PROVIDE DRAIN-OFFS ALL LOW POINTS.

T WATER TAKEOFFS SHALL HAVE NOT LESS THAN THREE ELBOW SWINGS.

OVIDE DRAIN VALVE ON HOUSE SIDE OF WATER METER.

ING SHALL RUN CONCEALED IN ALL AREAS WITH THE EXCEPTION OF MECHANICAL ROOMS, EAS WHERE NO CEILING EXISTS OR WHERE NOTED ON THE PLANS.

TALL DIELECTRIC COUPLINGS BETWEEN DISSIMILAR MATERIALS. DVIDE DANDY CLEANOUTS AT THE BASE OF ALL SANITARY AND RAINWATER STACKS.

OVIDE DRIP LEGS FOR ALL GAS RISERS.

AIR GAP OF AT LEAST TWICE THE EFFECTIVE DIAMETER OF THE DRAIN SERVED SHALL BE OVIDED ON ALL EQUIPMENT DRAINS PIPED TO FLOOR DRAINS.

QUIRED FIRE RESISTANCE RATING OF FLOORS, WALLS AND CEILINGS SHALL BE MAINTAINED EN PIPE PENETRATIONS ARE MADE.

ER TO RISER DIAGRAMS AND DETAILS FOR PIPE AND EQUIPMENT SIZES NOT SHOWN ON THE

WORK SHOWN ON RISER DIAGRAMS BUT NOT ON PLANS OR VICE VERSA SHALL BE INCLUDED F SHOWN ON BOTH.

E SPECIFICATIONS FOR OTHER REQUIREMENTS.

### **DEMO NOTES**

ON NOTES:

ER TO THE ARCHITECTURAL DRAWINGS FOR THE EXTENT OF THE DEMOLITION SCOPE OF WORK AREA. THE DEMOLITION PLANS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO W ALL ITEMS TO BE REMOVED OR RETAINED.

T THE SITE PRIOR TO SUBMISSION OF THE BIDS TO BECOME FAMILIAR WITH THE ACTUAL DITIONS AND EXTENT OF THE WORK.

CE AND LABEL ALL EXISTING SYSTEMS WITHIN THE DEMOLITION AREA AND BEYOND PRIOR TO CONNECTION AND REMOVAL TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION AREA IS ECTED. REVIEW IN DETAIL WITH THE GENERAL CONTRACTOR AND OWNER WHAT IS TO BE OVED AND REMAIN PRIOR TO WORK COMMENCING THE DEMOLITION. THERE SHALL BE NO RUPTION OF SERVICES OUTSIDE THE DEMOLITION AREA WITHOUT APPROVAL FROM THE IER'S REPRESENTATIVE.

IFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY UNANTICIPATED HIDDEN CONDITIONS OUNTERED DURING THE DEMOLITION.

ITEMS REMOVED SHALL BE OFFERED TO THE OWNER FOR SALVAGE. IF THE OWNER DOES NOT E POSSESSION, DISPOSE OF THE ITEMS IN A SAFE AND LEGAL MANNER. ALL ITEMS CLASSIFIED AS ARDOUS SHALL BE DISPOSED AS HAZARDOUS WASTES AND A UNIFORM HAZARDOUS WASTE IFEST SHALL BE PROVIDED TO THE OWNER.

IFY UTILITY COMPANIES IN ACCORDANCE WITH THEIR REQUIREMENTS PRIOR TO DEMOLITION. IFY THAT THE UTILITIES HAVE BEEN DISCONNECTED, VALVED, CAPPED AND MADE SAFE PRIOR TO OLITION.

URE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. VENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND CING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION ORE BEING DAMAGED. TAKE EFFECTIVE MEASURES TO PREVENT WINDBLOWN DUST.

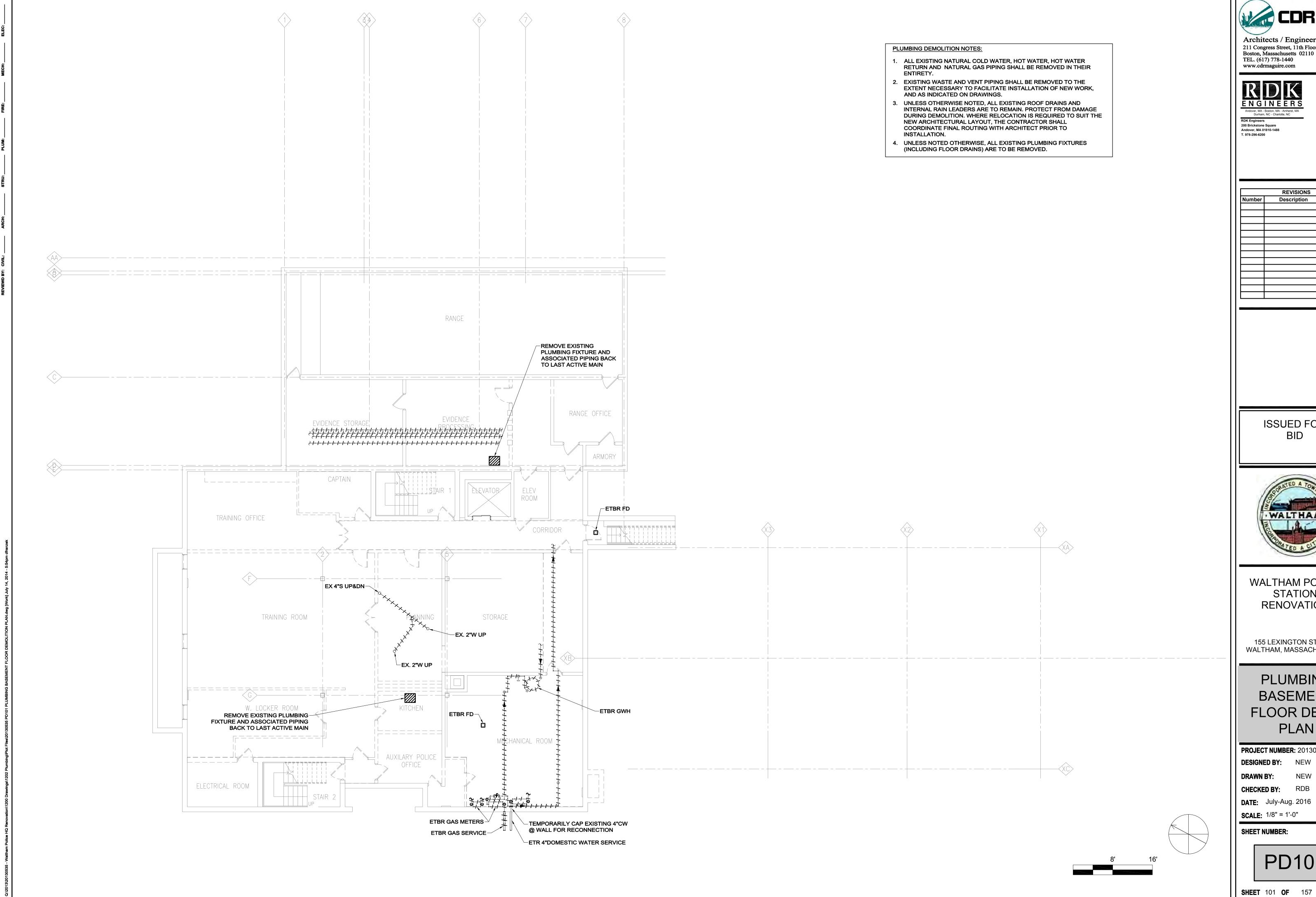
NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. AT CEALED SPACES, SUCH AS DUCT AND PIPE INTERIORS, VERIFY CONDITION AND CONTENTS OF DEN SPACE BEFORE STARTING FLAME-CUTTING OPERATIONS. MAINTAIN FIRE WATCH AND TABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS. MAINTAIN QUATE VENTILATION WHEN USING CUTTING TORCHES.

IN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND DISPOSE OF CHEMICALS, LIQUIDS, GASES, LOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH OLITION OPERATIONS.

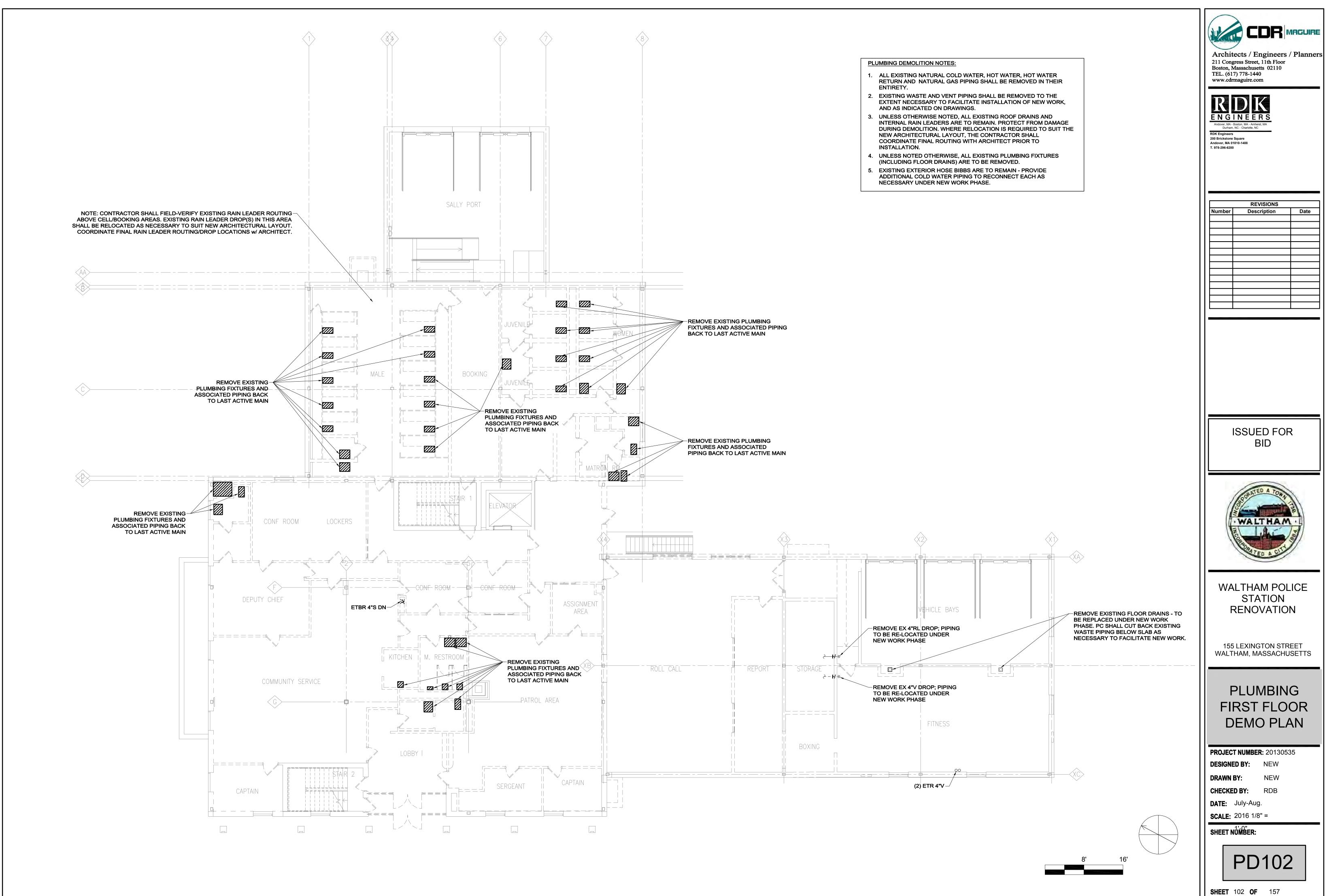
OR TO DEMOLITION, MAKE SAFE ALL SERVICE PIPE TERMINATIONS TO THE AREA. PROVIDE VALVE CAPS ON PRESSURE SERVICES TO THE AREA THAT ARE TO REMAIN IN SERVICE.

PERLY LABEL ALL UNLABELED SERVICE PIPELINES AND VALVES TO REMAIN WITH COLOR PIPE KERS AND VALVE TAGS. MOUNT A VALVE AND SERVICE CHART IN THE AREA OF DEMOLITION THAT IDENTIFIES ALL LABELED SERVICES. TURN ONE COPY OF SAME OVER TO THE CM

| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110 |
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| WALTHAM POLICE<br>STATION   |
| RENOVATION  |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| PLUMBING  |
| LEGEND, NOTES<br>& ABBRVS.  |
| PROJECT NUMBER: 20130535  |
| DESIGNED BY: NEW DRAWN BY: NEW  |
| CHECKED BY: RDB<br>DATE: July-Aug.<br>SCALE: 2016 N.T.S.  |
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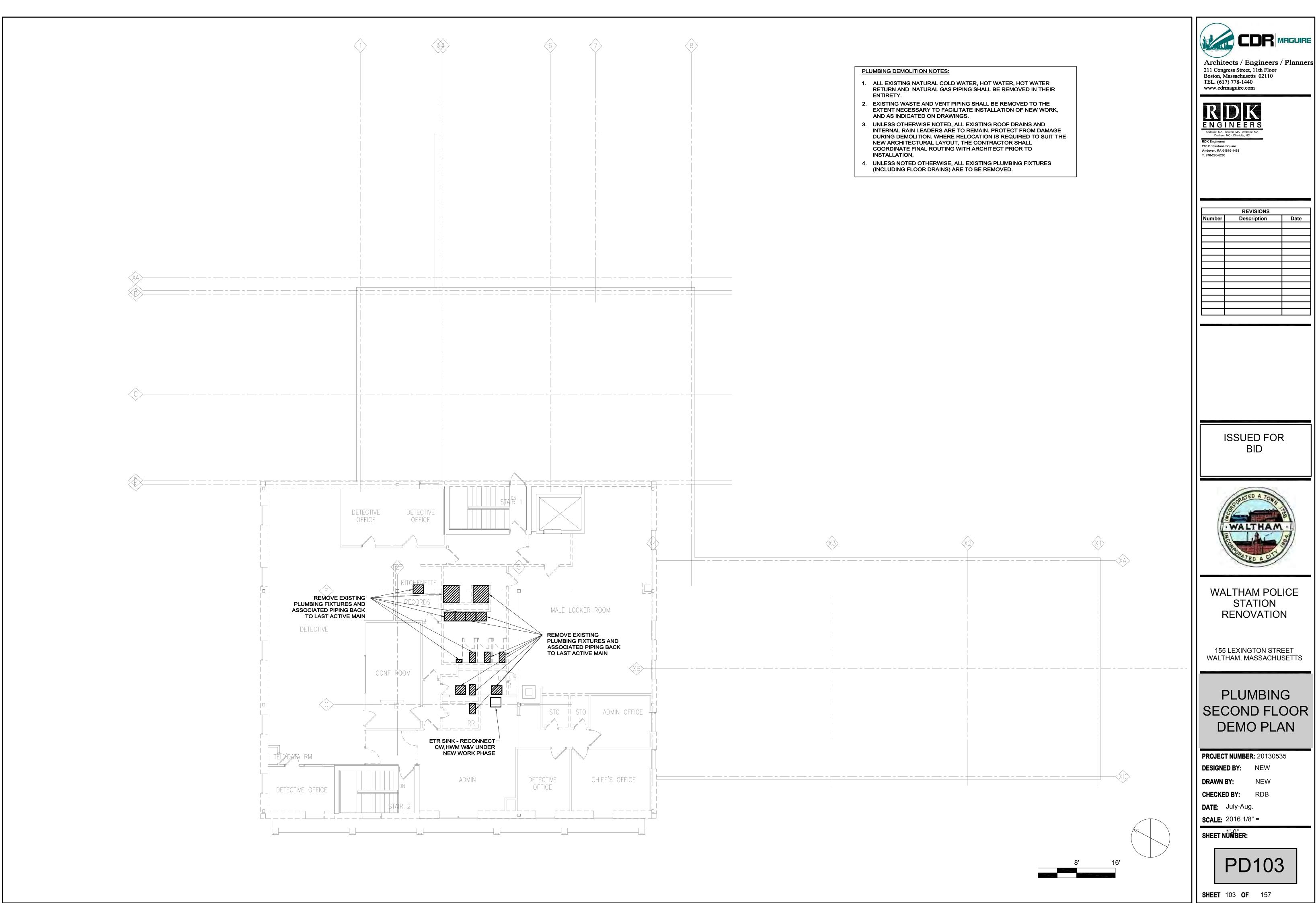
| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com   |
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| WALTHAM POLICE<br>STATION<br>RENOVATION  |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| PLUMBING<br>BASEMENT<br>FLOOR DEMO<br>PLAN   |
| PROJECT NUMBER: 20130535DESIGNED BY:NEWDRAWN BY:NEWCHECKED BY:RDBDATE:July-Aug. 2016SCALE:1/8" = 1'-0"   |
| SHEET NUMBER:  |

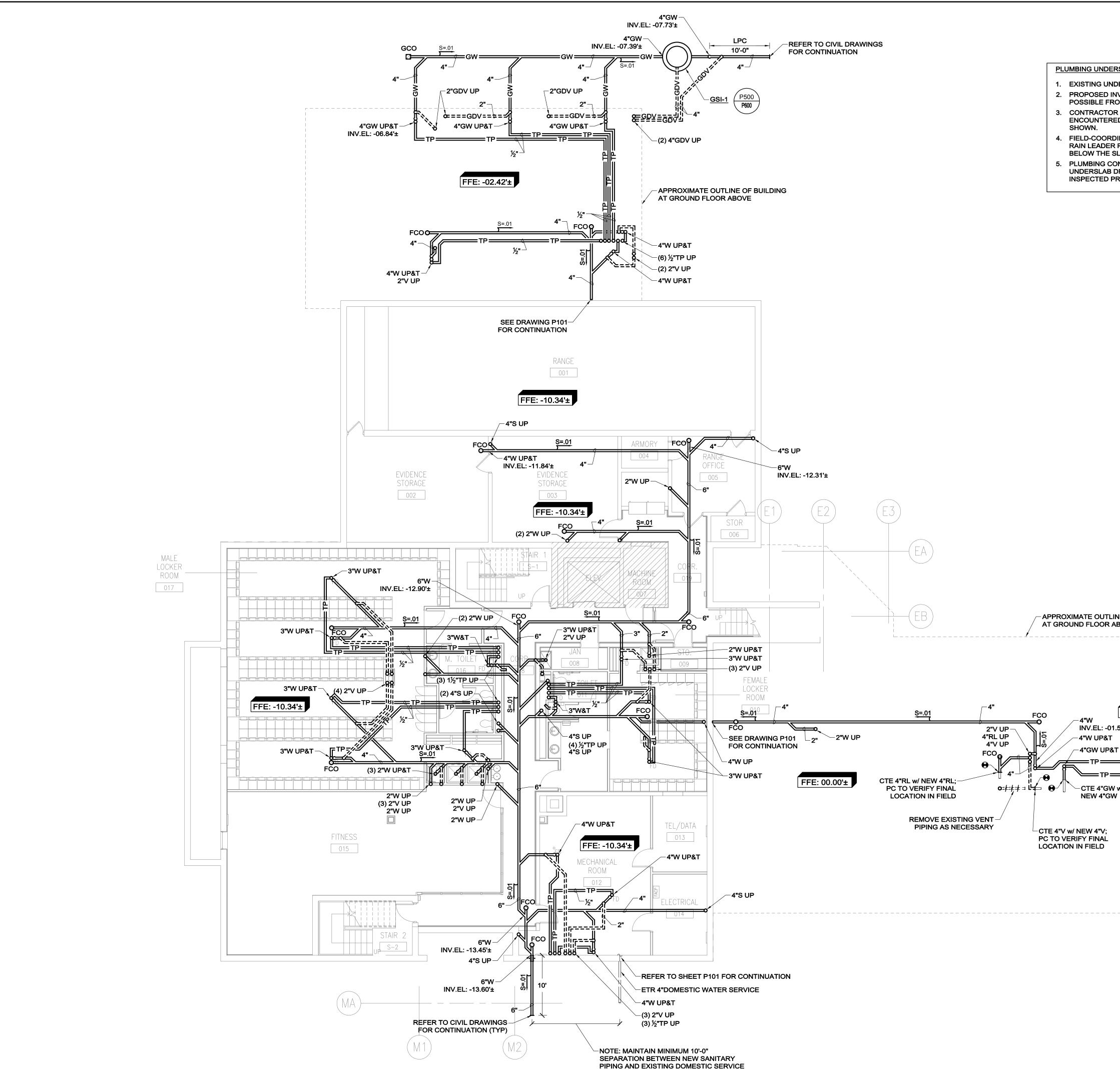


REVIEWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_\_ PLUM: \_\_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ ELEC: \_\_

3/20130535 - Waltham Police HQ Renovation/1200 Drawings/1202 Plumbing/Plot Files/20130535 PD102 PLUMBING FIRST FLOOR DEMOLITION PLAN.dwg [Work] July 14, 2014 - 5:54pm dfranzek



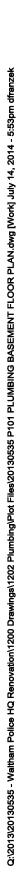


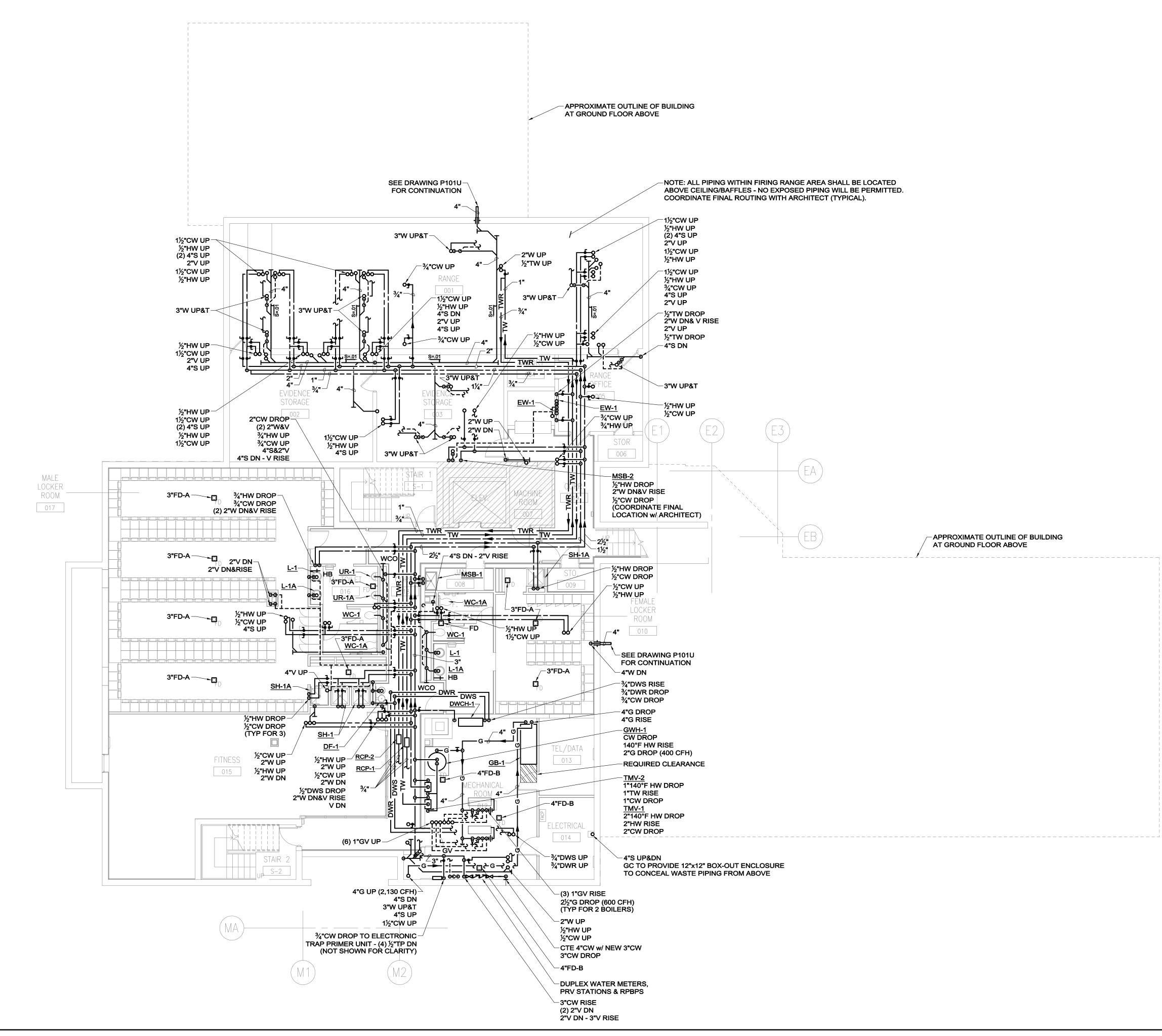


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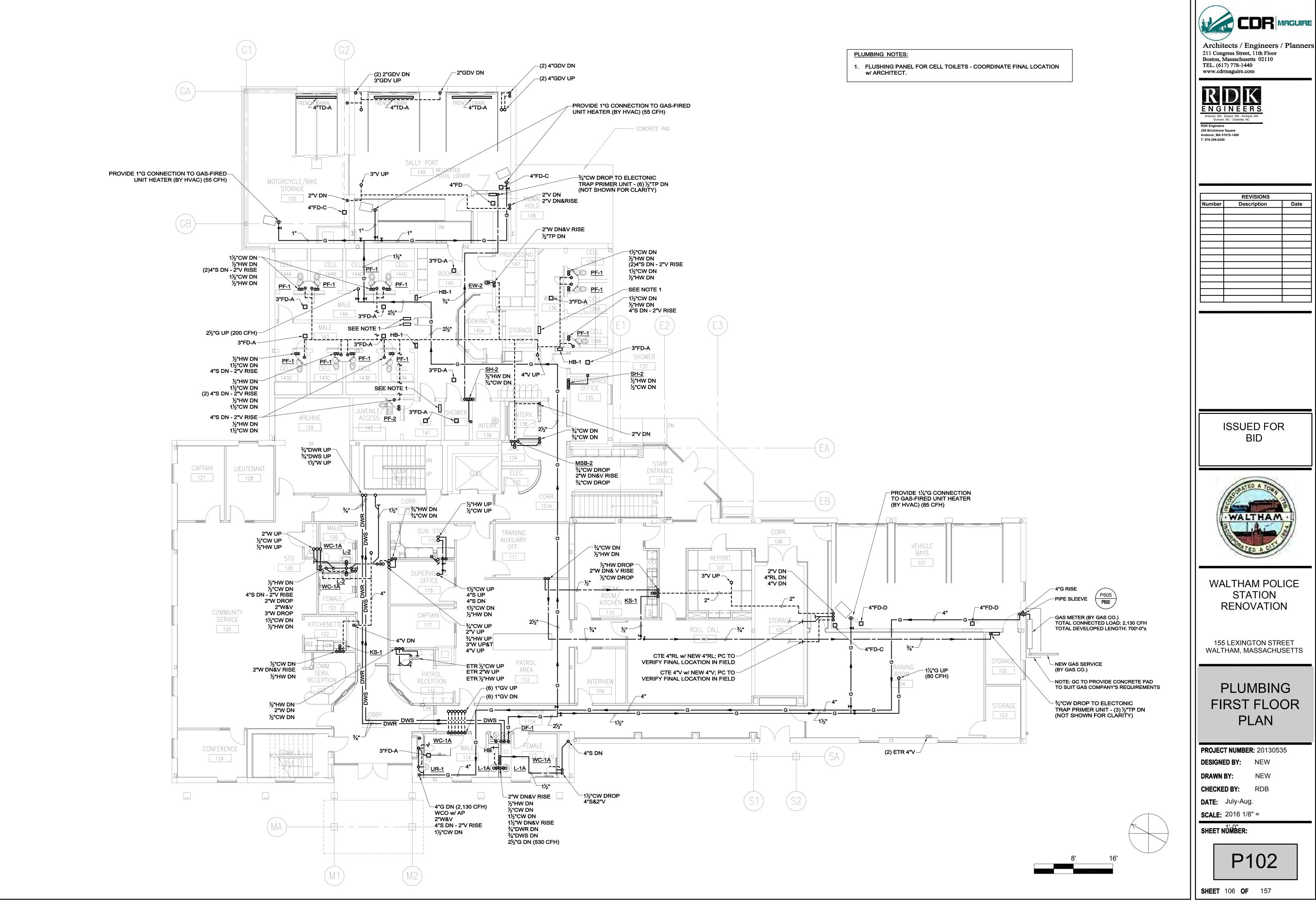
2013/20130535 - Wattham Police HQ Renovation/1200 Drawings/1202 Plumbing/Plot Files/20130535 P101U PLUMBING UNDERSLAB PLAN.dwg [Work] July 14, 2014 - 5:53pm dfran

| RSLAB NOTES:  |     | Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston Messachusetta 02110 |
|---|-----|--|
| DERSLAB CONDITIONS ARE CURRENTLY UNKNOWN.<br>VERTS/ROUTING ASSUME GRAVITY DRAINAGE IS<br>DM THE BASEMENT AREA.<br>R SHALL REMOVE ANY ABANDONED PIPING |     | Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com                           |
| ED BELOW SLAB AS REQUIRED TO INSTALL NEW WORK AS<br>INATE NEW SANITARY AND VENT PIPING WITH ANY ETR<br>PIPING OR OTHER EXISTING UTILITIES ENCOUNTERED |     | Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC                               |
| LAB.<br>INTRACTOR SHALL PROVIDE PRICING TO HAVE ENTIRE<br>DRAINAGE SYSTEM (BOTH SANITARY AND STORM) VIDEO<br>RIOR TO START OF DEMOLITION.             |     | RDK Engineers<br>200 Brickstone Square<br>Andover, MA 01810-1488<br>T. 978-296-6200                |
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|   |     | PROMITED A CITY  |
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| 50'±<br>  |     | STATION<br>RENOVATION  |
|   |     | 155 LEXINGTON STREET   |
| (3) ½"TP UP<br>−CTE 4"GW w/   |     | WALTHAM, MASSACHUSETTS   |
| NEW 4"GW  |     | PLUMBING   |
|   |     | UNDERSLAB<br>PLAN  |
|   |     | PROJECT NUMBER: 20130535   |
|   |     | DESIGNED BY: NEW<br>DRAWN BY: NEW  |
|   |     | CHECKED BY: RDB<br>DATE: July-Aug.   |
|   |     | SCALE: 2016 1/8" =<br>SHEET NUMBER:  |
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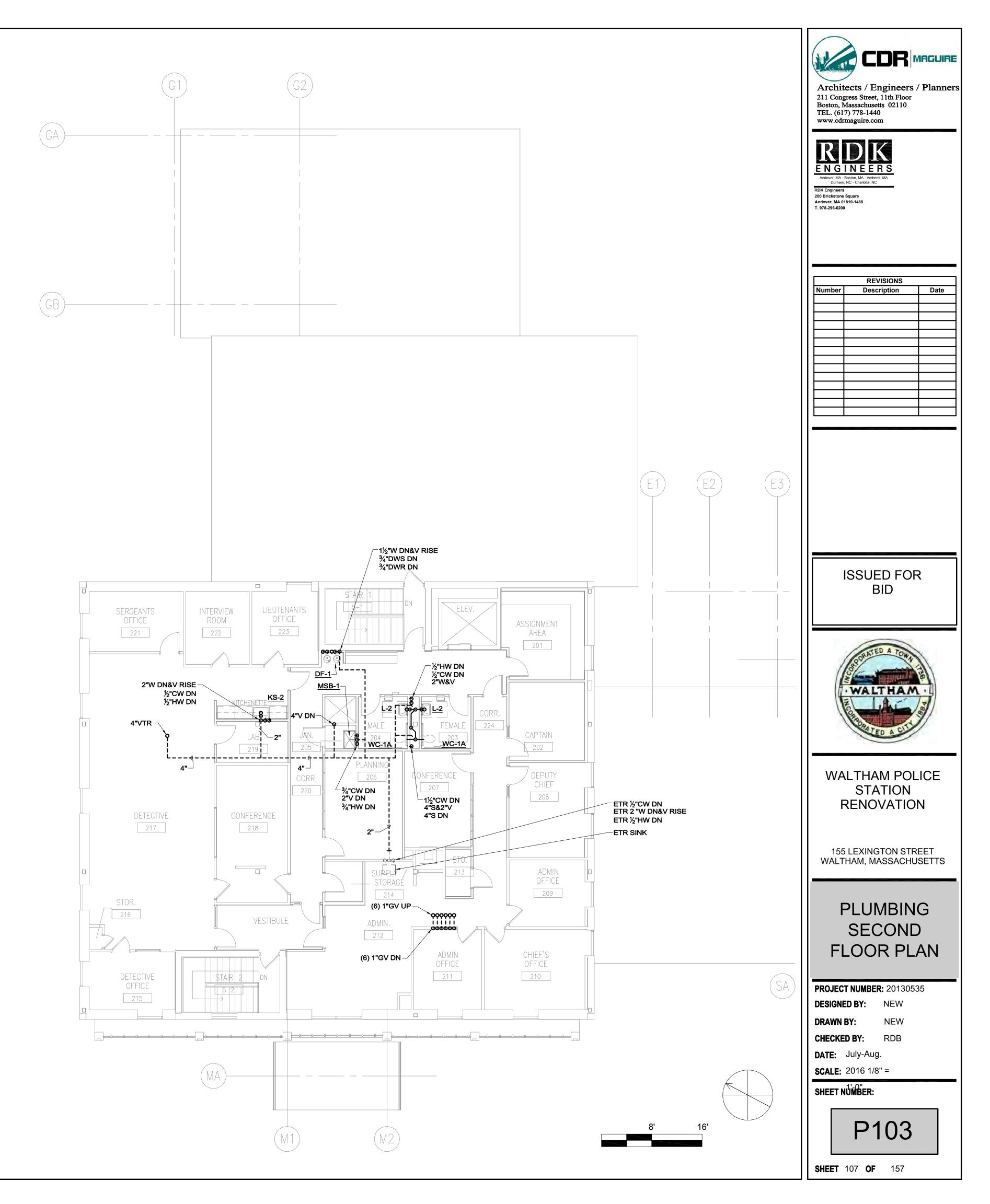




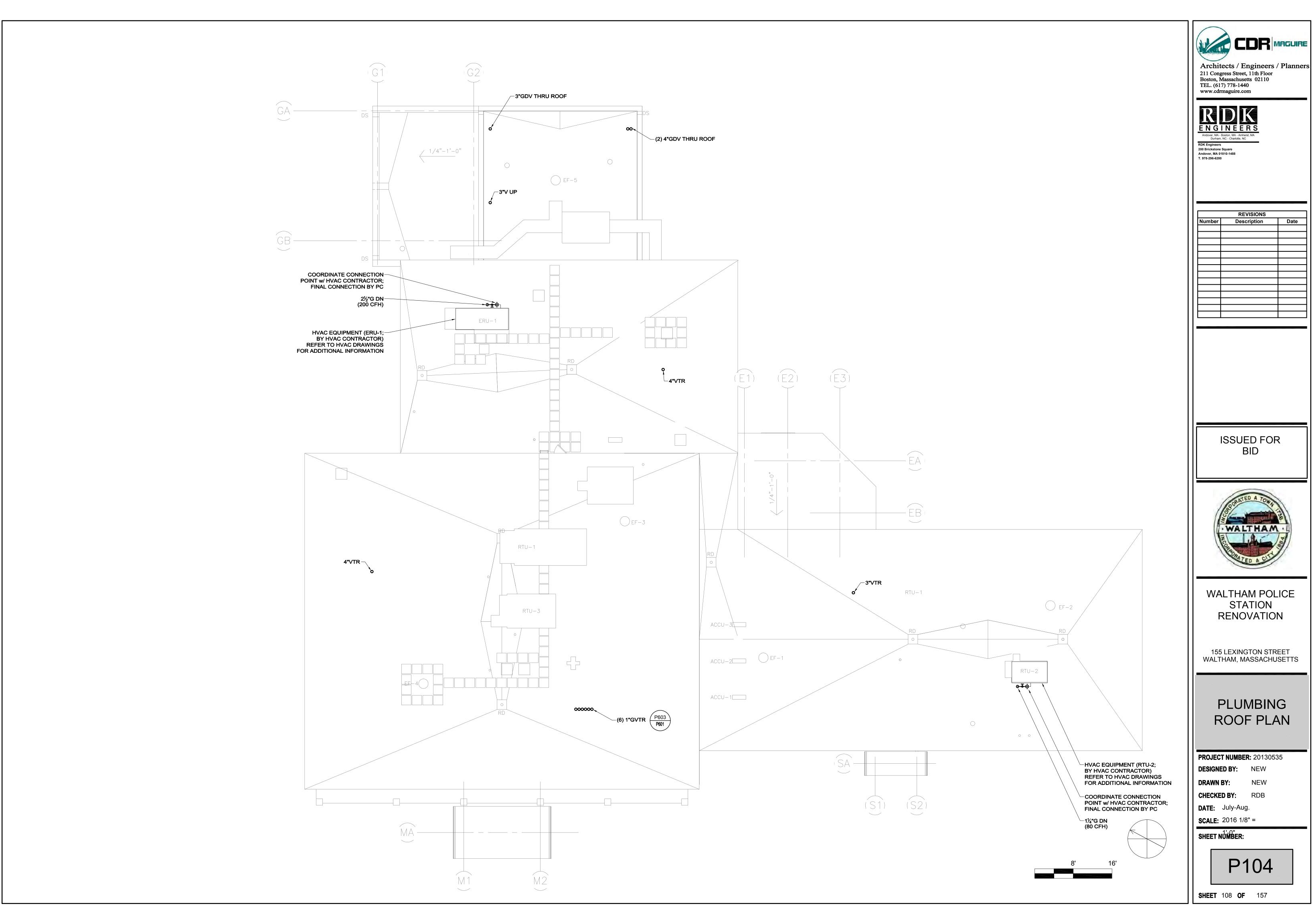
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|        | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
|        | PLUMBING<br>BASEMENT<br>FLOOR PLAN  |
|        | PROJECT NUMBER: 20130535<br>DESIGNED BY: NEW<br>DRAWN BY: NEW<br>CHECKED BY: RDB<br>DATE: July-Aug.<br>SCALE: 2016 1/8" = |
| 8' 16' | SHEET NUMBER:<br>P101<br>SHEET 105 OF 157   |

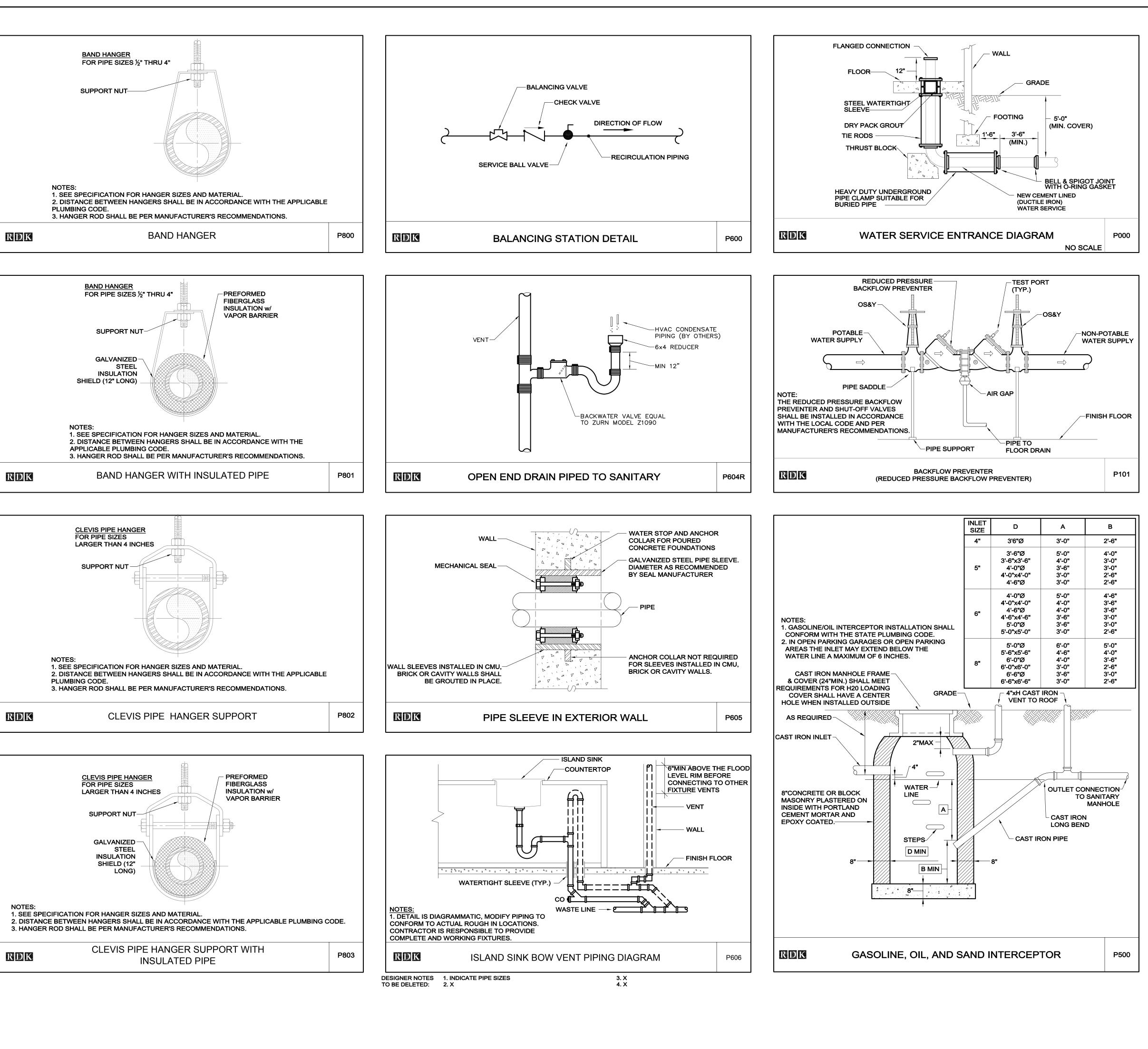


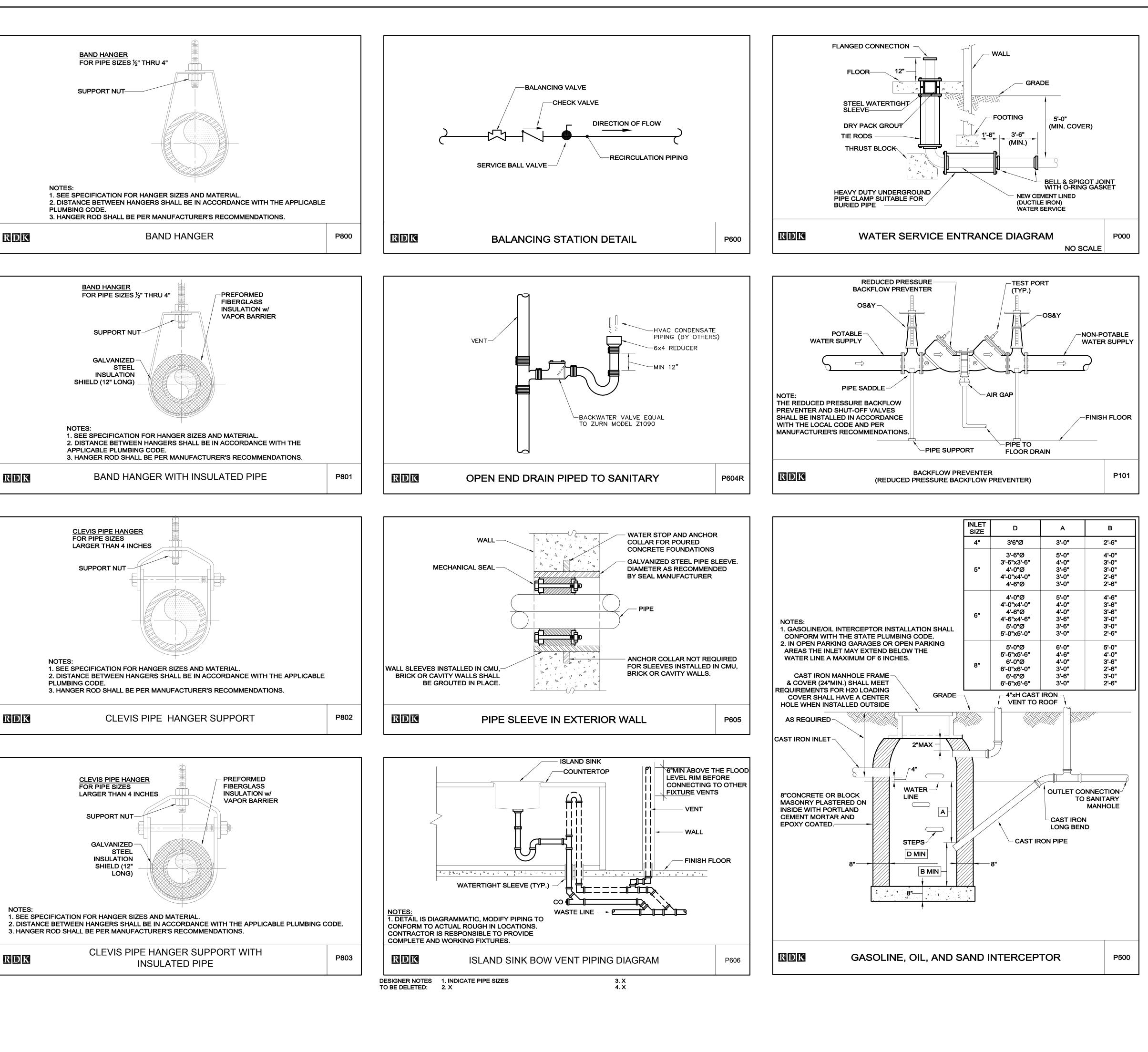
3/20130535 - Waitham Police HQ Renovation/1200 Drawings/1202 Plumbing/Plot Files/20130535 P103 PLUMBING SECOND FLOOR PLAN.dwg [Work] July 14, 2014 - 5:53pm dfranzek

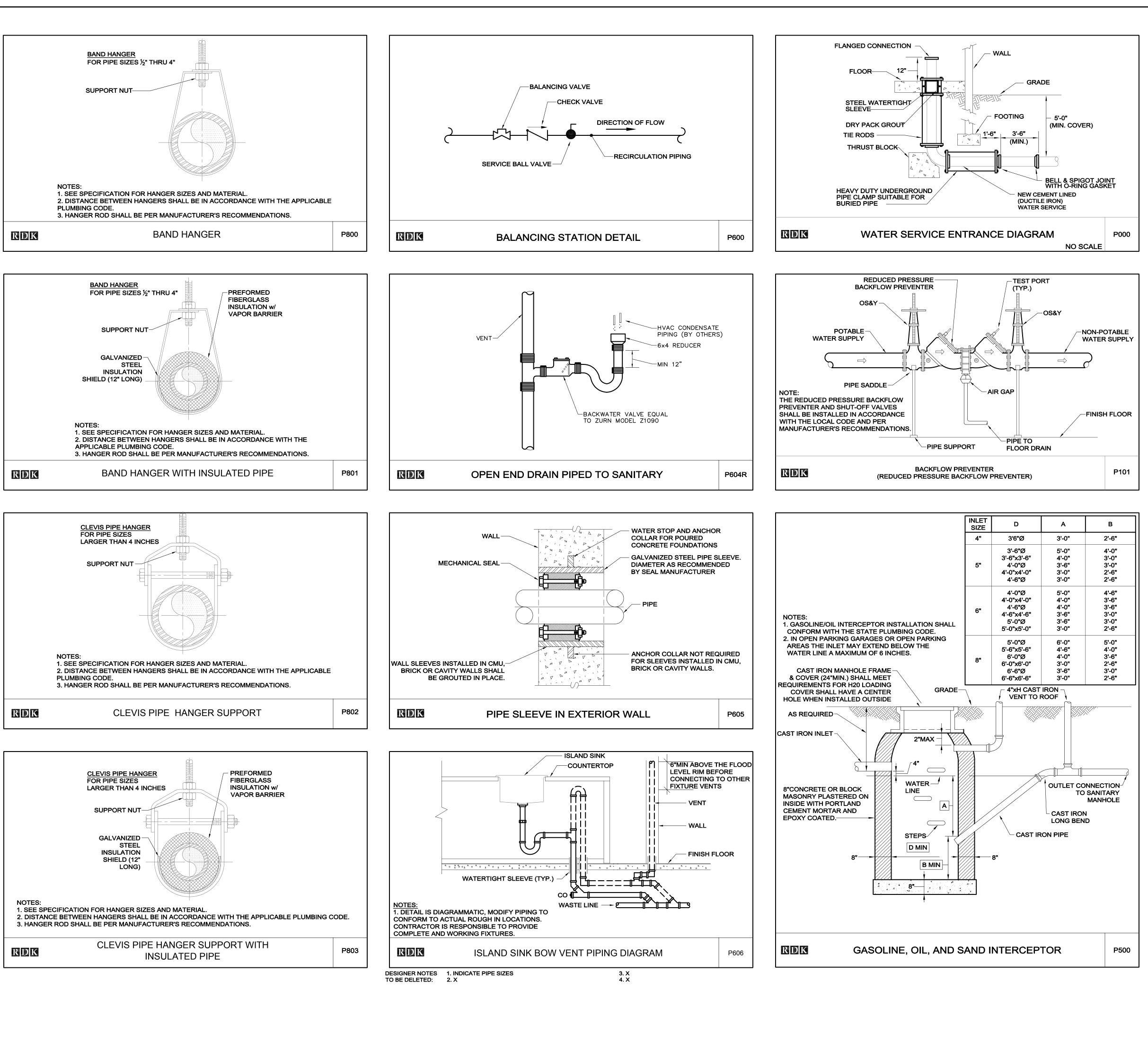






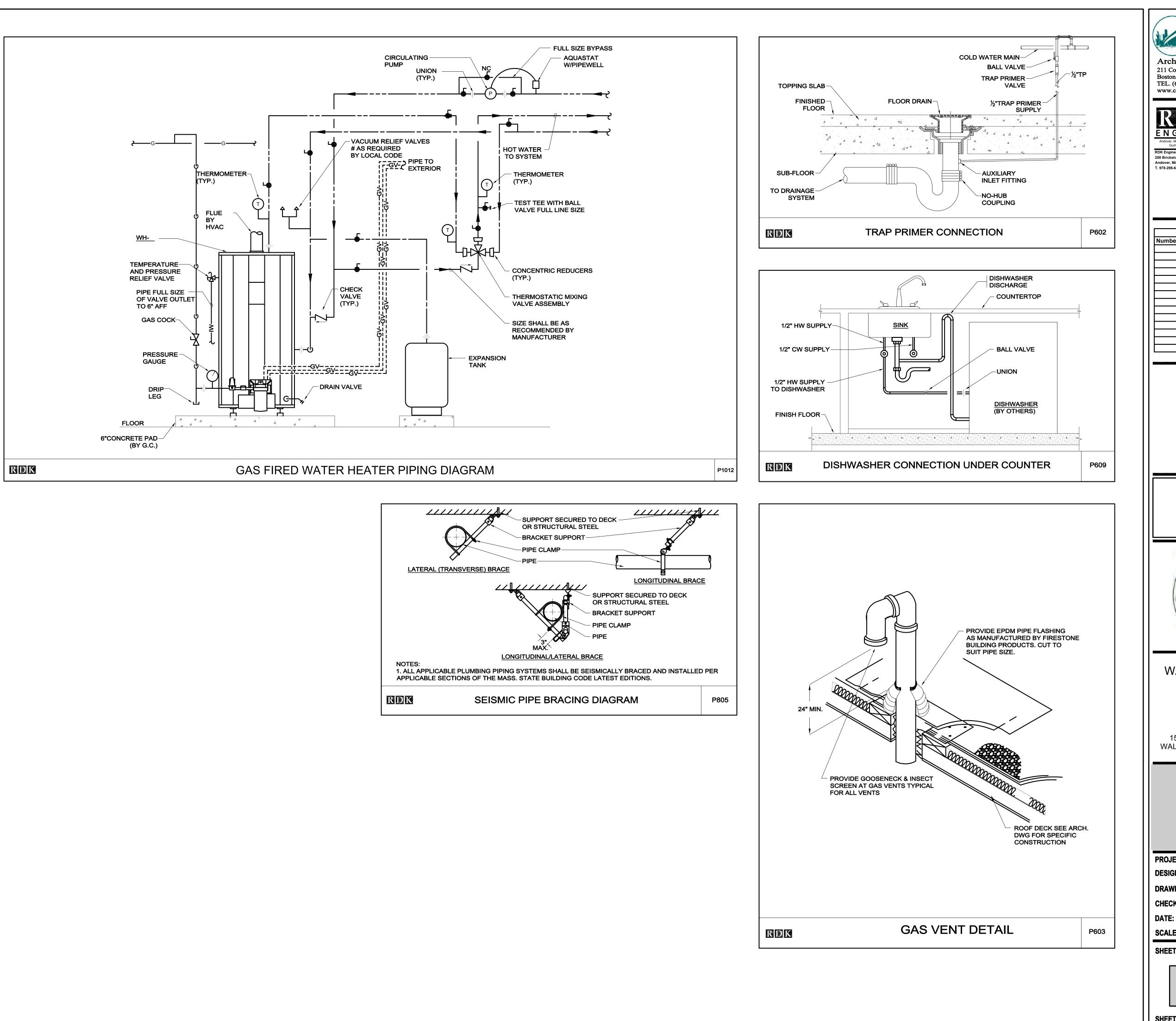


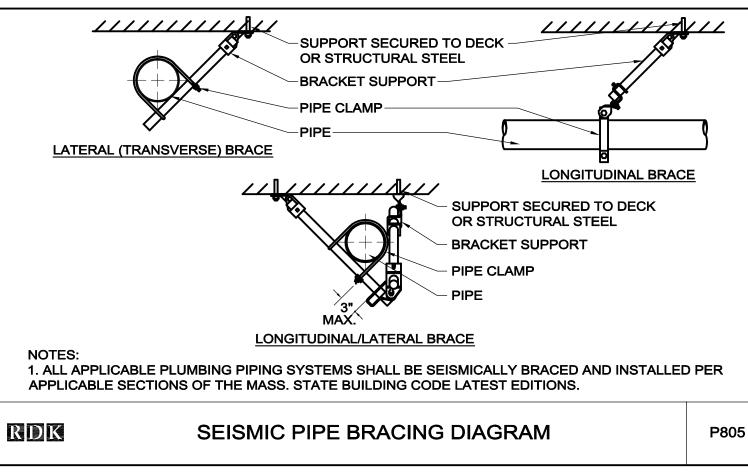




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| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |  |  |
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| PLUMBING   |  |  |
| DETAILS  |  |  |
| <b>PROJECT NUMBER:</b> 20130535  |  |  |
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| DATE: July-Aug.<br>SCALE: 2016 N.T.S.  |  |  |
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| P600   |  |  |
| <b>SHEET</b> 109 <b>OF</b> 157   |  |  |
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| REVISIONS         Number       Description       Date   |
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| WALTHAM POLICE<br>STATION<br>RENOVATION   |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| PLUMBING<br>DETAILS   |
| PROJECT NUMBER: 20130535<br>DESIGNED BY: NEW<br>DRAWN BY: NEW<br>CHECKED BY: RDB<br>DATE: July-Aug.<br>SCALE: 2016 N.T.S.<br>SHEET NUMBER:  |
| P601<br>Sheet 110 of 157  |

|         |  |               |   |                            |  |              | PLUME                    | BING FIXTURE SC  | CHEDULE |                 |   |
|---------|--|---------------|---|----------------------------|--|--------------|--------------------------|--|---------|-----------------|---|
|         |  |               | FIXTURE   |                            |  | FITTING      |                          |  |         |                 |   |
| TAG NO. | ТҮРЕ   | MANUFACTURER  | MODEL   | SIZE                       | TYPE   | MANUFACTURER | MODEL                    | TRAP   | FLOW    | CARRIER         |   |
| WC-1    | WATER CLOSET   | тото          | CT 708  |                            | SENSOR FLUSH<br>VALVE  | тото         | ECOPOWER<br>TET1GNC-32   | INTEGRAL   | 1.6 GPF | PROVIDE TO SUIT | PROVIDE CARRIER SYSTEM EQUAL TO ZURN SERIES 1200. SPECIFIC FRONT SEAT   |
| WC-1A   | WATER CLOSET (ADA)   | тото          | CT 708  |                            | SENSOR FLUSH<br>VALVE  | тото         | ECOPOWER<br>TET1GNC-32   | INTEGRAL   | 1.6 GPF | PROVIDE TO SUIT | PROVIDE CARRIER SYSTEM EQUAL TO ZURN SERIES 1200. SPECIFIC FRONT SEAT. MOUNT AT ADA HEIGHT.   |
| UR-1    | URINAL   | тото          | UT370   |                            | SENSOR FLUSH<br>VALVE  | тото         | ECOPOWER<br>TEU1GNC-12   | INTEGRAL   | 1.0 GPF | PROVIDE TO SUIT |   |
| UR-1A   | URINAL (ADA)   | тото          | UT370   |                            | SENSOR FLUSH<br>VALVE  | тото         | ECOPOWER<br>TEU1GNC-12   | INTEGRAL   | 1.0 GPF | PROVIDE TO SUIT |   |
| L-1     | LAVATORY<br>(COUNTER-MOUNT)  | тото          | LT 501  | 20" X 17"                  | SELF GENERATING<br>SENSOR OPERATED<br>FAUCET, WITH<br>THERMAL MIXING, 4<br>INCH CENTERS, TRIM<br>PLATE | тото         | TEL5GSC-10               | 1 1/4" X 1 1/2" 17<br>GA CAST BRASS<br>CHROME PLATED P<br>TRAP W/CO PLUG<br>EQUAL TO MCGUIRE<br>MCT150090B |         | SELF RIMMING    | FAUCET SHALL BE SET FOR 10 SECOND RUN TIME  |
| L-1A    | LAVATORY<br>(COUNTER-MOUNT) (ADA)  | тото          | LT 501  | 20" X 17"                  | SELF GENERATING<br>SENSOR OPERATED<br>FAUCET, WITH<br>THERMAL MIXING, 4<br>INCH CENTERS, TRIM<br>PLATE | тото         | TEL5GSC-10               | 1 1/4" X 1 1/2" 17<br>GA CAST BRASS<br>CHROME PLATED P<br>TRAP W/CO PLUG<br>EQUAL TO MCGUIRE<br>MCT150090B |         | SELF RIMMING    | FAUCET SHALL BE SET FOR 10 SECOND RUN TIME  |
| L-2     | LAVATORY<br>(WALL HUNG) (ADA)  | ZURN          | Z5341   | 20" X 18"                  | SELF GENERATING<br>SENSOR OPERATED<br>FAUCET, WITH<br>THERMAL MIXING, 4<br>INCH CENTERS, TRIM<br>PLATE | тото         | TEL5GSC-10               | 1 1/4" X 1 1/2" 17<br>GA CAST BRASS<br>CHROME PLATED P<br>TRAP W/CO PLUG<br>EQUAL TO MCGUIRE<br>MCT150090B |         | PROVIDE TO SUIT | FAUCET SHALL BE SET FOR 10 SECOND RUN TIME  |
| MSB-1   | MOP BASIN<br>(MOLDED STONE )   | FIAT          | MSB 2424  | 24" X 24" X 10"            | 1/2" H&CW  | CHICAGO      | 445-897SRCXKCP           | STAINLESS STEEL<br>DRAIN BODY W/3"<br>P-TRAP   | -       | FLOOR MOUNTED   | PROVIDE HOSE & HOSE BRACKET FIAT MODEL 832-AA, AND MOP HANGER   |
| MSB-2   | UTILITY SINK/LAUNDRY TUB<br>MOLDED STONE<br>FLOOR MOUNTED  | FIAT          | FL-1  | 20 1/4" X 17<br>1/4" X 13" | 1/2" H&CW  | CHICAGO      | 526-CP                   | PROVIDE DRAIN<br>AND STOPPER W/3"<br>P-TRAP  | -       | FLOOR MOUNTED   |   |
| EW-1    | EYE/FACE WASH RECESSED<br>MOUNTED BARRIER FREE   | GUARDIAN      | GBF1735DP   |                            | ½" TEPID WATER   | -            | -                        | -  |         | WALL MOUNTED    |   |
| EW-2    | EYE/FACE WASH WALL<br>MOUNTED BARRIER FREE<br>VANDAL RESISTANT   | GUARDIAN      | GBFVR1721-T   |                            | ½" TEPID WATER   | -            | -                        | PROVIDE WITH<br>OPTIONAL<br>CHROME PLATED<br>1½" BRASS<br>TAILPIECE AND<br>TRAP                            |         | WALL MOUNTED    |   |
| KS-1    | KITCHENETTE SINK w/<br>DISHWASHER<br>CONNECTION<br>(ADA)   | JUST          | SL-ADA-2225-A-GR  | 22"X25"X8"D                | ½" SWEAT X½"<br>COMP. SIMILAR TO<br>MCGUIRE H171   | CHICAGO      | 201-AGN8AE3V-<br>317AB   | 1 1/2" X 1 1/2" 17<br>GA CAST BRASS<br>CHROME PLATED P<br>TRAP W/CO PLUG<br>EQUAL TO MCGUIRE<br>MCT150090B | 2.2 GPM | SELF RIMMING    | PROVIDE BASKET STRAINER AND 1/1/2" OD 17 GA BRASS TAILPIECE EQUA  |
| KS-2    | KITCHENETTE SINK (ADA)   | JUST          | SL-ADA-2225-A-GR  | 22"X25"X6"D                | ½" SWEAT X½"<br>COMP. SIMILAR TO<br>MCGUIRE H171   | CHICAGO      | 201-AGN8AE3V-<br>317AB   | 1 1/2" X 1 1/2" 17<br>GA CAST BRASS<br>CHROME PLATED P<br>TRAP W/CO PLUG<br>EQUAL TO MCGUIRE<br>MCT150090B | 2.2 GPM | SELF RIMMING    | PROVIDE BASKET STRAINER AND 1/1/2" OD 17 GA CHROME PLATED BRAS  |
| PF-1    | LAV-W.C COMBINATION  | BRADLEY       | COMBI5500   | -                          | -  | -            | -                        | INTEGRAL   | 1.6GPF  | FLOOR MOUNTED   | LAV-TOILET COMBY SHALL BE MANUFACTURED BY BRADLEY OR EQU<br>OUTLET, PENAL BUBBLER, AIR CONTROL VALVE SINGLE TEMPERATU<br>TEMPLATE. PROVIDE A THERMOSTATIC MIXING VALVE LEONARD MO<br>AND TEMPLATE TO CELL MANUFACTURER FOR MOCK-UP PRIOR TO                                 |
| PF-2    | LAV-W.C COMBINATION<br>(ADA)   | ACORN         | 1432-AL (OR AR) -2-BP-03-M-UFL-1.6-PH-FTA-MT-GBC  | -                          | -  | -            | -                        | INTEGRAL   | 1.6GPF  | FLOOR MOUNTED   | LAV-TOILET COMBY SHALL BE MANUFACTURED BY ACORN OR EQUA<br>OUTLET, PENAL BUBBLER, AIR CONTROL VALVE SINGLE TEMPERATU<br>TEMPLATE, GRAB BAR CLOSURE PLATE. PROVIDE A THERMOSTATIC<br>TO FURNISH ONE FIXTURE AND TEMPLATE TO CELL MANUFACTURE<br>ARCHITECT PRIOR TO ORDERING. |
| SH-1    | SHOWER (STAFF)   |               | PC TO PROVIDE TERRAZZO SHOWER PAN (COLOR TBD BY<br>ARCHITECT) AND SHOWER VALVE/TRIM ONLY; SHOWER STALL<br>BUILT BY G.C. | 48" X 36"                  |  | SYMMONS      | SAFETYMIX<br>1-100-X-2.0 | 2" P-TRAP  |         |                 | PROVIDE SHOWER MODULE DRAIN EQUAL TO SIOUX CHIEF NO. 827-28 P   |
| SH-2    | SHOWER (DETENTION)   | BUILT BY G.C. | -   |                            |  | SYMMONS      | TEMPTROL                 | -  |         |                 | PROVIDE w/ 3"FD-A   |
| DF-1    | DRINKING FOUNTAIN WALL<br>MOUNTED HI-LO 18 GAUGE,<br>TYPE 304 STAINLESS STEEL<br>BOWL ASSEMBLY W/BACK<br>PANEL AND ACCESS PANEL<br>PUSH BUTTON CONTROL | HAWS          | 1011 MS   |                            | ½" DWS   |              |                          |  |         |                 | PROVIDE (1) UNIT PER FLOOR. FINAL LOCATIONS TBD BY ARCHITEC   |
| НВ      | HOSE BIBB  | CHICAGO       | 952-CP  | -                          | -  | -            | _                        | -  | -       | -               | LOCATED IN TOILET ROOMS   |
| HB-1    | ENCLOSED HOSE BIBB   | ZURN          | Z1330   | -                          | -  | -            | -                        | -  | -       | -               | LOCATED IN CORRIDOR BETWEEN DETENTION CELLS   |
| WH      | WALL HYDRANT   | JAY R SMITH   | 5509QT  |                            |  |              |                          |  |         |                 |   |

| REMARKS  |    |
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| MODEL AS REQUIRED FOR INSTALLATION ORIENTATION. PROVIDE TOTO MODEL SC534 OPEN  |    |
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| S OFFSET TAILPIECE EQUAL TO ELKAY LK AD35  | ය  |
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| JAL BY ACORN OR WILLOUGHBY . UNIT SHALL INCLUDE: ON FLOOR MOUTING WITH WALL<br>JRE NON METERING, 1.6 GPF FLUSH VALVE, PAPER HOLDER, FLOOD-TROL AUTOMATIC, METAL<br>IDEL # TA-SB OR EQUAL BY SYMMONS OR LAWLER. CONTRACTOR TO FURNISH ONE FIXTURE |    |
| INSTALLATION. IMPORTANT: CONFIRM ALL OPTIONS WITH ARCHITECT PRIOR TO ORDERING.<br>L BY BRADLEY OR WILLOUGHBY . UNIT SHALL INCLUDE: ON FLOOR MOUTING WITH WALL<br>JRE METERING, 1.6 GPF FLUSH VALVE, PAPER HOLDER, FLOOD-TROL AUTOMATIC, METAL    |    |
| MIXING VALVE LEONARD MODEL # TA-SB OR EQUAL BY SYMMONS OR LAWLER. CONTRACTOR<br>R FOR MOCK-UP PRIOR TO INSTALLATION. IMPORTANT: CONFIRM ALL OPTIONS WITH   | Ł  |
| ROVIDE 2.0 GPM FLOW RESTRICTOR FOR SHOWER HEAD   |    |
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| WALTHAM POLICE<br>STATION<br>RENOVATION  |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| PLUMBING<br>SCHEDULES  |
| PROJECT NUMBER: 20130535<br>DESIGNED BY: NEW   |
| DRAWN BY:NEWCHECKED BY:RDBDATE:July-Aug.   |
| SCALE: 2016 N.T.S.<br>SHEET NUMBER:  |
| P700   |
| SHEET 111 OF 157   |

|        | WATER HAMMER ARRES  | TER SCHEDULE      |
|--------|---------------------|-------------------|
| TYPE   | FIXTURE UNIT RATING | MODEL             |
| SA "A" | 1-11                | JAY R. SMITH 5005 |
| SA "B" | 12-32               | JAY R. SMITH 5010 |
| SA "C" | 33-60               | JAY R. SMITH 5020 |
| SA "D" | 61-113              | JAY R. SMITH 5030 |
| SA "E" | 114-154             | JAY R. SMITH 5040 |
| SA "F" | 155-330             | JAY R. SMITH 5050 |

|         |                    |       |            |                   | GAS                 |      | WATER           | HEATEF |          | ULE |                  |                 |         |
|---------|--------------------|-------|------------|-------------------|---------------------|------|-----------------|--------|----------|-----|------------------|-----------------|---------|
|         | STORAGE            | INPUT | RECO       | VERY              | GAS                 | FLUE | TEMP.           | ELEC   | TRICAL D | ATA |                  |                 |         |
| TAG NO. | CAPACITY<br>(gal.) | (MBH) | RATE (GPH) | DEG. RISE<br>(°F) | PRESSURE<br>("W.C.) | SIZE | SETTING<br>(°F) | VOLTS  | PHASE    | HZ  | MANUFACTURER     | MODEL NO.       | REMARKS |
| GWH-1   | 130                | 400   | 465        | 100               | 5.2-10"             |      | 140             | 120    | 1        | 60  | STATE INDUSTRIES | SUF 130 400 NEA |         |

|         |             |     |                    | DRINKING WATE    | ER REMOTE CHILLI | ER/PURIFI       | ER EQUIP | MENT SCHED | DULE                 |                 |
|---------|-------------|-----|--------------------|------------------|------------------|-----------------|----------|------------|----------------------|-----------------|
| TAG NO. | LOCATION    | QTY | FIXTURES<br>SERVED | DIMENSIONS       | FILTER/PURIFIER  | RECIRC.<br>PUMP | COMP     | POWER      | MFG./MODEL #         | REMARKS         |
| DWCH-1  | MECH RM 012 | 1   |                    | 32"Wx30"Hx11.5"D | TMP2-07          | 1/25 HP         | 1/3 HP   | 115/60/1   | FILTRINE ES-6-RFC-FS | SEE NOTES BELOW |
| NOTES:  |             |     |                    |                  |                  |                 |          |            |                      |                 |

CHILLER/PURIFIER SYSTEM TO INCLUDE: 1. WALL INSERT ASSEMBLY WITH HINGED STAINLESS STEEL GRILLE. 2. FILTER/PURIFIER TO BE NSF CERTIFIED TO REMOVE DIRT, RUST, SEDIMENT, CHLORINE, BAD TASTE AND ODORS, CYSTS AND PARTICLES 0.5 MICRON AND LARGER. 3. DRINKING WATER FICTURES AS SHOWN ON DRAWINGS AND FIXTURE SCHEDULE. 4. ½" RECIRCULATION PIPING LOOP FROM REMOTE CHILLER/PURIFIER TO FIXTURE AS SHOWN ON PLUMBING DRAWINGS.

|         |         |                   |              | DOME | ESTIC HO |          | R RECIR | CULATI | ON PUMP SCHE | DULE      |         |         |                     |        | EXPANSIO     | N TANK SCH | EDULE           |                   |                    |
|---------|---------|-------------------|--------------|------|----------|----------|---------|--------|--------------|-----------|---------|---------|---------------------|--------|--------------|------------|-----------------|-------------------|--------------------|
| TAG NO. | TYPE    | CAPACITY<br>(GPM) | HEAD<br>(FT) |      | ELEC     | TRICAL D | ATA     |        | MANUFACTURER | MODEL NO. | REMARKS | TAG NO. | TANK VOL.<br>(GAL.) |        | MANUFACTURER | MODEL NO.  | HEIGHT<br>(IN.) | DIAMETER<br>(IN.) | CONNECTION<br>SIZE |
|         |         |                   | ( ,          | HP   | VOLTS    | HZ       | PHASE   | RPM    |              |           |         |         |                     | (GAL.) |              |            |                 |                   | (IN.)              |
| RCP-1   | IN-LINE | 5                 | 10           | 1⁄8  | 115      | 60       | 1       | 3250   | TACO         | 0010-BF3  |         | ET-1    | 9.2                 | 2      | AMTROL       | ST-30-V-C  | 12"             | 16.25             | 3⁄4"               |
| RCP-2   | IN-LINE | 5                 | 10           | ⅓    | 115      | 60       | 1       | 3250   | TACO         | 0010-BF3  |         | [       |                     |        | GAS FIRED EC |            |                 |                   |                    |

|            |             |             |                    |               |                        | MIXII  | NG VALVE SCHE | DULE      |  |
|------------|-------------|-------------|--------------------|---------------|------------------------|--------|---------------|-----------|--|
| TAG<br>NO. | CW<br>INLET | HW<br>INLET | TEMPERED<br>OUTLET | FLOW<br>(GPM) | MIXED<br>TEMP.<br>(°F) | SYSTEM | MANUFACTURER  | MODEL NO. | REMARKS  |
| TMV-1      | 1           | 1           | 11⁄4               | 23            | 120                    | HW     | LAWLER        | 802       |  |
| TMV-2      | 1⁄2         | 1/2         | 1⁄2"               | 3             | 80                     | тw     | LAWLER        | 911E/F    | PROVIDE WITHIN 18 GA SURFACE MOUNTED<br>CABINET LOCATED ABOVE FIXTURE SERVED |

|         |                   |                    |       | NATURA           | L GAS | S BOOST  | FER S | CHEDUI | LE           |                              |                           |
|---------|-------------------|--------------------|-------|------------------|-------|----------|-------|--------|--------------|------------------------------|---------------------------|
| TAG NO. | INLET<br>PRESSURE | OUTLET<br>PRESSURE | INPUT | ARRANGEMENT      |       | ELECTRIC |       | ТА     | MANUFACTURER | MODEL NO.                    | REMARKS                   |
|         | ("W.C.)           | ("W.C.)            | (CFH) | (SIMPLEX/DUPLEX) | ΗP    | VOLTS    | ΗZ    | PHASE  |              | MODEL NO.                    | REMARKS                   |
| GB-1    | 4                 | 7                  | 2,130 | SIMPLEX          | 1/2   | 208      | 60    | 3      | ETTER        | GASPOD-130-S-<br>PCFM-REG-BP | LOCATED IN MECH<br>RM 012 |

|                    |                        |      |                    | GAS FIRED          | EQUIPMENT                          | SCHEDULE                       |                |
|--------------------|------------------------|------|--------------------|--------------------|------------------------------------|--------------------------------|----------------|
|                    | TAG NO. /<br>EQUIPMENT | QTY. | INPUT (EA.)<br>CFH | TOTAL INPUT<br>CFH | REQ'D<br>PRESS. "W.C.<br>(MIN-MAX) | LOCATION                       | REMARKS        |
|                    | GWH-1                  | 1    | 400                | 400                | 5.2-10                             | MECH ROOM 012                  |                |
|                    | RTU-2                  | 1    | 80                 | 80                 | 4.5-14                             | LOWER ROOF                     | RTU BY HVAC    |
| FACE MOUNTED       | ERU-1                  | 1    | 200                | 200                | 7-14                               | LOWER ROOF                     | ERU BY HVAC    |
| IXTURE SERVED      | GUH-1                  | 1    | 85                 | 85                 | 6-7                                | VEHICLE BAYS 101               | GUH BY HVAC    |
|                    | GUH-2                  | 1    | 55                 | 55                 | 6-7                                | SALLY PORT 149                 | GUH BY HVAC    |
|                    | GUH-3                  | 1    | 55                 | 55                 | 6-7                                | SALLY PORT 149                 | GUH BY HVAC    |
| REMARKS            | GUH-4                  | 1    | 55                 | 55                 | 6-7                                | MOTORCYCLE/BIKE<br>STORAGE 150 | GUH BY HVAC    |
| ATED IN MECH<br>12 | B-1                    | 1    | 600                | 600                | 4-14                               | MECH ROOM 012                  | BOILER BY HVAC |
|                    | B-2                    | 1    | 600                | 600                | 4-14                               | MECH ROOM 012                  | BOILER BY HVAC |
|                    |                        |      |                    |                    |                                    |                                |                |
|                    |                        |      | TOTAL<br>LOAD      | 2,130              |                                    |                                |                |

|            | r                               |       | IBING F | IXTURE       |                  | TION SCHEDU       | LE                |
|------------|---------------------------------|-------|---------|--------------|------------------|-------------------|-------------------|
| TAG<br>NO. | FIXTURE                         | WASTE | VENT    | HOT<br>WATER | COLD<br>WATER    | TEMPERED<br>WATER | REMARKS           |
| WC-1       | WATER<br>CLOSET                 | 4"    | 2"      | -            | 1"               | -                 |                   |
| WC-1A      | WATER<br>CLOSET<br>(ADA)        | 4"    | 2"      | -            | 1"               | -                 |                   |
| UR-1       | URINAL                          | 2"    | 2"      | -            | 3⁄4"             | -                 |                   |
| UR-1A      | URINAL<br>(ADA)                 | 2"    | 2"      | -            | 3⁄4"             | -                 |                   |
| L-1        | LAVATORY                        | 1½"   | 1½"     | 1⁄2"         | 1⁄2"             | -                 |                   |
| L-1A       | LAVATORY<br>(ADA)               | 1½"   | 1½"     | 1⁄2"         | 1⁄2"             | -                 |                   |
| L-2        | LAVATORY<br>(ADA)               | 1½"   | 1½"     | 1⁄2"         | 1⁄2"             | -                 |                   |
| MSB-1      | MOP SINK                        | 3"    | 2"      | 3⁄4"         | 3⁄4"             | -                 |                   |
| MSB-2      | MOP SINK                        | 3"    | 2"      | 3⁄4"         | 3⁄4"             | -                 |                   |
| EW-1       | EMERGENCY<br>EYEWASH            | 2"    | 2"      | -            | -                | 1⁄2"              |                   |
| EW-2       | EMERGENCY<br>EYEWASH            | 2"    | 2"      | -            | -                | 1⁄2"              |                   |
| KS-1       | KITCHENETTE<br>SINK (ADA)       | 2"    | 2"      | 1⁄2"         | 1⁄2"             | -                 |                   |
| KS-2       | KITCHENETTE<br>SINK (ADA)       | 2"    | 2"      | 1⁄2"         | 1⁄2"             | -                 |                   |
| PF-1       | LAV-W.C<br>COMBINATION          | 4"    | 2"      | 1⁄2"         | (1) 1"<br>(1) ½" | -                 |                   |
| PF-2       | LAV-W.C<br>COMBINATION<br>(ADA) | 4"    | 2"      | 1⁄2"         | (1) 1"<br>(1) ½" | -                 |                   |
| SH-1       | SHOWER<br>(STAFF)               | 2"    | 2"      | 1⁄2"         | 1⁄2"             | -                 |                   |
| SH-1A      | SHOWER<br>(STAFF) (ADA)         | 2"    | 2"      | 1⁄2"         | 1⁄2"             | -                 |                   |
| SH-2       | SHOWER<br>(DETENTION)           | -     | -       | 1⁄2"         | 1⁄2"             | -                 | PROVIDE w/ 3"FD-A |
| DF-1       | DRINKING<br>FOUNTAIN            | 1½"   | 1½"     | -            | 1⁄2"             | -                 |                   |
| HB         | HOSE BIBB                       | -     | -       | -            | 1⁄2"             | -                 |                   |
| HB-1       | ENCLOSED<br>HOSE BIBB           | -     | -       | -            | 1⁄2"             | -                 |                   |
| WH         | WALL<br>HYDRANT                 | -     | -       | -            | 3⁄4"             | -                 |                   |

|            | DRAIN SCHEDULE  |              |                            |          |   |  |
|------------|-----------------|--------------|----------------------------|----------|---|--|
| TAG<br>NO. | TYPE            | MANUFACTURER | MODEL NO.                  | STRAINER | REMARKS   |  |
| FD-A       | FLOOR<br>DRAIN  | JAY R. SMITH | 2005-Y-B-P050-B-U          | 6"       | LOCATED IN TOILET ROOMS &<br>HOLDING CELL VESTIBULES. PROVIDE<br>W/ VANDAL PROOF HARDWARE,<br>SQUARE STRAINER AND TRAP PRIMER<br>CONNECTION. DRAINS TO BE<br>PROVIDED WITH "PRECISION<br>PLUMBING PRODUCTS" TRAP PRIMER<br>TO SUIT. |  |
| FD-B       | FLOOR<br>DRAIN  | JAY R. SMITH | 2230-C                     | 12"      | LOCATED IN MECHANICAL AREAS -<br>DRAINS TO BE PROVIDED WITH<br>"PRECISION PLUMBING PRODUCTS"<br>TRAP PRIMER TO SUIT.  |  |
| FD-C       | FLOOR<br>DRAIN  | JAY R. SMITH | 2230-C-F37                 | 12"      | LOCATED IN FLEET GARAGE - SERVES<br>INDIRECT WASTE FROM EQUIPMENT.<br>PROVIDE WITH ANTI-FLOOD RIM.  |  |
| FD-D       | FLOOR<br>DRAIN  | JAY R. SMITH | 2253-C-M                   | 14"      | GARAGE DRAIN - INSTALLED IN CIP<br>SLAB ON GRADE. DRAINS TO BE<br>PROVIDED WITH "PRECISION<br>PLUMBING PRODUCTS" TRAP PRIMER<br>TO SUIT.  |  |
| TD-A       | TRENCH<br>DRAIN | ABT, INC     | TRENCHFORMER<br>TFX 6"-24" | 12" WIDE | LOCATED IN SALLYPORT &<br>MOTORCYCLE STORAGE GARAGE.<br>PROVIDE TRAP PRIMER CONNECTION.<br>PROVIDE HEELPROOF ADA-<br>COMPLAINT GRATE w/ VANDAL-<br>RESISTANT HARDWARE. PROVIDE<br>LENGTHS TO SUIT; APPROXIMATELY<br>8'L EACH.       |  |

| 211 Congres<br>Boston, Mas<br>TEL. (617) 7  | CCR MAGUIRE<br>Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |      |  |
|---|---|------|--|
| Rickstone Squa<br>Andover, MA - Bostor<br>Durham, NC -<br>RDK Engineers<br>200 Brickstone Squa<br>Andover, MA 01810-<br>T. 978-296-6200 | Charlotte, NC   |      |  |
| Number  | REVISIONS<br>Description  |      |  |
|   |   |      |  |
| IS  | ISSUED FOR<br>BID   |      |  |
| - Incon   | WALTHAM .   |      |  |
|   | WALTHAM POLICE<br>STATION<br>RENOVATION   |      |  |
|   | EXINGTON S<br>AM, MASSACI   |      |  |
|   | PLUMBING<br>SCHEDULES   |      |  |
| DESIGNED<br>DRAWN BY  | <b>BY:</b> RDB<br>Ily-Aug.<br>016 N.T.S.  | 0535 |  |
|   | <b>Р701</b><br>2 <b>ог</b> 157  |      |  |

|        | SPRINKLER SCHEDULE |          |                                      |          |          |                    |             |
|--------|--------------------|----------|--------------------------------------|----------|----------|--------------------|-------------|
| SYMBOL | CONDITION          | RESPONSE | ORIENTATION                          | COVERAGE | K-FACTOR | FINISH             | TEMP RATING |
|        | NEW                | QUICK    | CONCEALED PENDENT/ PENDENT           | STANDARD | 5.6      | WHITE/CHROME       | ORDINARY    |
| 0      | NEW                | QUICK    | CONCEALED PENDENT/PENDENT (OPTION 1) | STANDARD | 5.6      | WHITE/CHROME       | ORDINARY    |
| 0      | NEW                | QUICK    | CONCEALED PENDENT/PENDENT (OPTION 2) | STANDARD | 5.6      | WHITE/CHROME       | ORDINARY    |
| 0      | NEW                | QUICK    | UPRIGHT (OPTION 1)                   | STANDARD | 5.6      | BRASS              | ORDINARY    |
| 0      | NEW                | QUICK    | UPRIGHT (OPTION 2)                   | STANDARD | 5.6      | BRASS              | ORDINARY    |
| Ø      | NEW                | QUICK    | DRY PENDENT/UPRIGHT                  | STANDARD | 5.6      | BRASS              | ORDINARY    |
| ▼      | NEW                | QUICK    | HORIZONTAL WET SIDEWALL              | STANDARD | 5.6      | WHITE/CHROME/BRASS | ORDINARY    |
|        | NEW                | QUICK    | HORIZONTAL DRY SIDEWALL              | STANDARD | 5.6      | WHITE/CHROME/BRASS | ORDINARY    |
| V      | NEW                | QUICK    | HORIZONTAL SIDEWALL (OPTION 1)       | STANDARD | 5.6      | WHITE/CHROME/BRASS | ORDINARY    |
| V      | NEW                | QUICK    | HORIZONTAL SIDEWALL (OPTION 2)       | STANDARD | 5.6      | WHITE/CHROME/BRASS | ORDINARY    |

| 1. FIRE |      | ГЕСТІ |
|---------|------|-------|
| AME     | NDME | NTS A |
|         |      |       |
| 2. ALL  | FIRE | PRO   |

OTECTION SYSTEMS, EQUIPMENT, PIPING AND VALVES SHALL BE INSTALLED AND TESTED BY A SPRINKLER CONTRACTOR LICENSED BY THE STATE AND EXPERIENCED IN THE INSTALLATION OF SPRINKLER SYSTEMS. 3. OBTAIN ALL PERMITS AND PAY ALL FEES ASSOCIATED WITH THIS WORK PRIOR TO COMMENCEMENT.

FOR APPROVAL.

6.IN ADDITION TO REVIEWING AND COORDINATING WITH THE OTHER TRADES (CIVIL, STRUCTURAL, ARCHITECTURAL, HVAC AND ELECTRICAL) THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE DETAILS OF CONSTRUCTION.

RECOMMENDATIONS.

## GENERAL NOTES

TION WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE BUILDING CODE, LOCAL AND THE REFERENCED NATIONAL FIRE PROTECTION ASSOCIATION CODES INCLUDING 13, 14, 20, AND 24.

4. PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY THE ACTUAL ROUTING OF PIPING AND EXACT LOCATION OF EQUIPMENT SHALL BE DETERMINED IN THE FIELD.

5. THE DRAWINGS SUGGEST ROUTING OF PIPING, PIPE SIZES AND APPROXIMATE LOCATION OF HEADS. THE CONTRACTOR SHALL PRODUCE A COMPLETE SET OF WORKING PLANS IN ACCORDANCE WITH NFPA 13. THE SYSTEM SHALL BE HYDRAULICALLY CALCULATED PER THE DESIGN CRITERIA SPECIFIED. ALL PLANS AND CALCULATIONS SHALL BE STAMPED BY THE CONTRACTOR'S REGISTERED FIRE PROTECTION ENGINEER AND SHALL BE SUBMITTED TO THE LOCAL AUTHORITY AND OWNER'S UNDERWRITER

7. FURNISH AND INSTALL ALL NECESSARY PIPING EQUIPMENT SUPPORTS AND ANY EQUIPMENT NOT SHOWN ON DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS BUT NECESSARY TO PROVIDE A COMPLETE AND WORKABLE SYSTEM. 8. PROVIDE ACCESS TO ALL EQUIPMENT REQUIRING PERIODIC SERVICE AND MAINTENANCE.

9. FURNISH ACCESS PANELS TO THE GENERAL CONTRACTOR FOR INSTALLATION UNDER THE RELATED TRADES.

10. PITCH ALL PIPING TO DRAIN, PROVIDE AN AUXILIARY DRAIN AT ALL LOW POINTS.

11. PROVIDE WATER TIGHT SLEEVES ON ALL PIPES PASSING THROUGH EXTERIOR WALLS AND BASEMENT FLOORS.

12. ALL VALVES CONTROLLING FIRE PROTECTION MAINS SHALL BE PROVIDED WITH TAMPER/SUPERVISORY SWITCHES WIRED TO THE FIRE ALARM CONTROL PANEL.

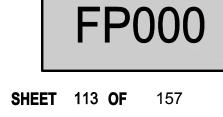
13. CONTRACTOR SHALL PROVIDE FIRE STOPPING FOR ALL PENETRATIONS THRU FIRE WALLS AND FIRE RATED SEPERATIONS, CONTRACTOR SHALL COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND RATINGS OF ALL FIRE RATED SEPARATIONS AND BARRIERS, INSTALLATION OF FIRE STOPPING SHALL BE IN ACCORDANCE WITH MANUFACTURERS

14. ALL FIRE PROTECTION SYSTEMS SHALL BE SEISMICALLY BRACED ACCORDING TO THE APPLICABLE SECTIONS OF THE STATE BUILDING CODE AND THE REFERENCED EDITION OF NFPA-13.

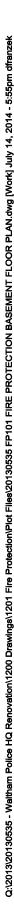
|         | ABBREVIATIONS                                |
|---------|--|
| АСТ     | ACOUSTICAL TILE                              |
| AFF     | ABOVE FINISH FLOOR                           |
| AP      | ACCESS PANEL                                 |
| BLDG    | BUILDING                                     |
| BFP     | BACKFLOW PREVENTER                           |
| CLG     | CEILING                                      |
| CLDI    | CEMENT LINED DUCTILE IRON                    |
| CONT    | CONTINUATION                                 |
| D       | DRY SPRINKLER SYSTEM                         |
| DCVA    | DOUBLE CHECK VALVE ASSEMBLY                  |
| DIA     | DIAMETER                                     |
| DN      | DOWN   |
| DSR     | DRY SYSTEM MAIN RISER                        |
| DWG     | DRAWING                                      |
| EAB     | ELECTRIC ALARM BELL                          |
| EL/ELEV | ELEVATION                                    |
| F       | FIRE SERVICE MAIN/BUILDING WET SUPPLY PIPING |
| FDC     | FIRE DEPARTMENT CONNECTION                   |
| FFE     | FINISH FLOOR ELEVATION                       |
| FLR     | FLOOR  |
| FP      | FIRE PROTECTION                              |
| FS      | FLOW SWITCH                                  |
| GALV    | GALVANIZED                                   |
| GC      | GENERAL CONTRACTOR                           |
| GPM     | GALLONS PER MINUTE                           |
|         |  |
| LPS     | LOW PRESSURE SWITCH                          |
| MECH    | MECHANICAL                                   |
| NC      | NORMALLY CLOSED                              |
| NO      | NORMALLY OPEN                                |
| NTS     | NOT TO SCALE                                 |
| NIC     |  |
| OED     | OPEN END DRAIN                               |
| OS&Y    |  |
| PG      | PRESSURE GAUGE                               |
| PIV     | POST INDICATOR VALVE                         |
| PRV     | PRESSURE REDUCING/REGULATING VALVE           |
| PS      | PRESSURE SWITCH                              |
| PSI     | POUNDS PER SQUARE INCH                       |
|         | SPECIFICATION                                |
| SPD     | SPRINKLER DRAIN                              |
| SPR     | WET PIPE SPRINKLER SYSTEM                    |
| тѕ      | TAMPER SWITCH                                |
| ТҮР     | TYPICAL                                      |
|         |  |
| WSR     | WET SYSTEM MAIN RISER                        |
| ZCA     | SPRINKLER ZONE CONTROL ASSEMBLY              |
|         |  |

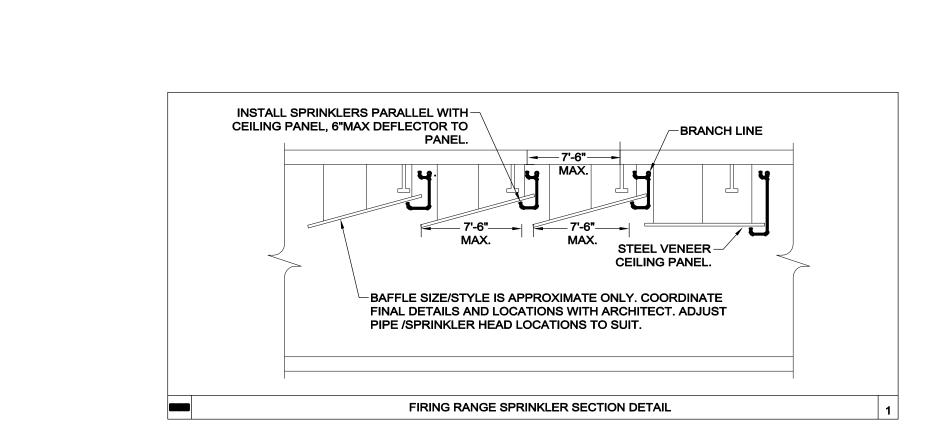
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|-------------------|--|---|--|--|
|                   |  |   | 6  |  |
|                   | PIPING LINETYPES                                       |   | - Britania and a state   | 7  |
| ———— F-——         | FIRE SERVICE/MAIN/BUIDING WET PIPING                   |   |  | ects / Engineers / Planners<br>gress Street, 11th Floor    |
| SPR               | WET PIPE SPRINKLER SYSTEM                              |   |  | Massachusetts 02110<br>7) 778-1440                         |
| ——— FDC —         | FIRE DEPARTMENT CONNECTION PIPING                      |   |  | maguire.com  |
| SPD               | SPRINKLER DRAIN  |   |  |  |
| D                 | DRY PIPE SPRINKLER SYSTEM                              |   |  |  |
|                   |  |   |  | INEERS<br>Boston, MA - Amherst, MA<br>, NC - Charlotte, NC |
|                   | PIPING SYMBOLS   |   | RDK Engineers<br>200 Brickstone<br>Andover, MA 0 <sup>-</sup><br>T. 978-296-6200 | Square<br>1810-1488  |
| 0                 | OED OPEN END DRAIN                                     |   |  |  |
|                   | DIRECTION OF SLOPE                                     |   |  |  |
| -0                | ELBOW UP OR RISE                                       |   |  |  |
| <b>—</b> >        | ELBOW DOWN OR DROP                                     |   |  |  |
|                   | TEE LOOKING DOWN                                       |   |  | REVISIONS  |
| o                 | TEE LOOKING UP   |   | Number   | Description Date   |
|                   | ->>  |   |  |  |
|                   | FLOW IN DIRECTION OF ARROW                             |   |  |  |
|                   | → CAP OR END OF PIPE                                   |   |  |  |
| 7                 | REDUCER/INCREASER                                      |   |  |  |
|                   | PIPE SLEEVE  |   |  |  |
| —<br>—            | UNION  |   |  |  |
|                   | CNICH  |   |  |  |
|                   |  |   |  |  |
| EC                | QUIPMENT & VALVES                                      |   |  |  |
| $\bigcirc$        | WET SYSTEM MAIN RISER                                  |   |  |  |
| $\bigcirc$        | DRY SYSTEM MAIN RISER                                  |   |  |  |
| ₹<br>₹            | ANGLE VALVE  |   |  |  |
|                   | BALL VALVE   |   |  |  |
| b<br>D            |  |   |  |  |
|                   | SUPERVISED BUTTERFLY VALVE                             |   |  |  |
| $\mathbb{N}$      | CHECK VALVE  |   |  |  |
| <b>A</b>          | BACKFLOW PREVENTER                                     |   |  |  |
| ZCA               | SPRINKLER ZONE CONTROL ASSEMBLY                        |   |  | ISSUED FOR   |
|                   | FLOW SWITCH  |   |  | BID  |
|                   | GLOBE VALVE  |   |  |  |
| <u>т</u>          | SUPERVISED OS&Y VALVE                                  |   |  |  |
| Ø<br>₽            |  |   |  |  |
|                   | PRESSURE REDUCING/REGULATING VALVE                     |   |  | ORATED A TOWA  |
| PS<br>T           | PRESSURE SWITCH  |   | 1  | S S  |
| ዋ<br><del>ፍ</del> |  |   | 1  |  |
| 名。                | ELECTRIC ALARM BELL WALL MOUNTED FIRE DEPARTMENT INLET |   | 14   | z A Z  |
| <u> </u>          | CONNECTION   |   | 1  |  |
|                   |  |   |  | PATED A CIT  |
|                   | ANNOTATIONS  |   |  |  |
|                   | DETAIL DESIGNATION NUMBER                              |   | ۱۸/۸   |  |
| FP-1              | DETAIL DESIGNATION DRAWING                             |   | v v /~   | STATION  |
| <b>—</b> /        |  |   | F  | RENOVATION   |
| #/{#>-            | HYDRAULIC CALCULATION NODE<br>POINT                    |   | •  | LINGVATION   |
|                   |  |   | A  |  |
|                   |  |   |  | ELEXINGTON STREET  |
|                   |  |   |  |  |
|                   |  |   |  |  |
|                   |  |   | FIDE   | PROTECTION   |
|                   |  |   |  |  |
|                   |  |   | LEG  | END, NOTES &   |

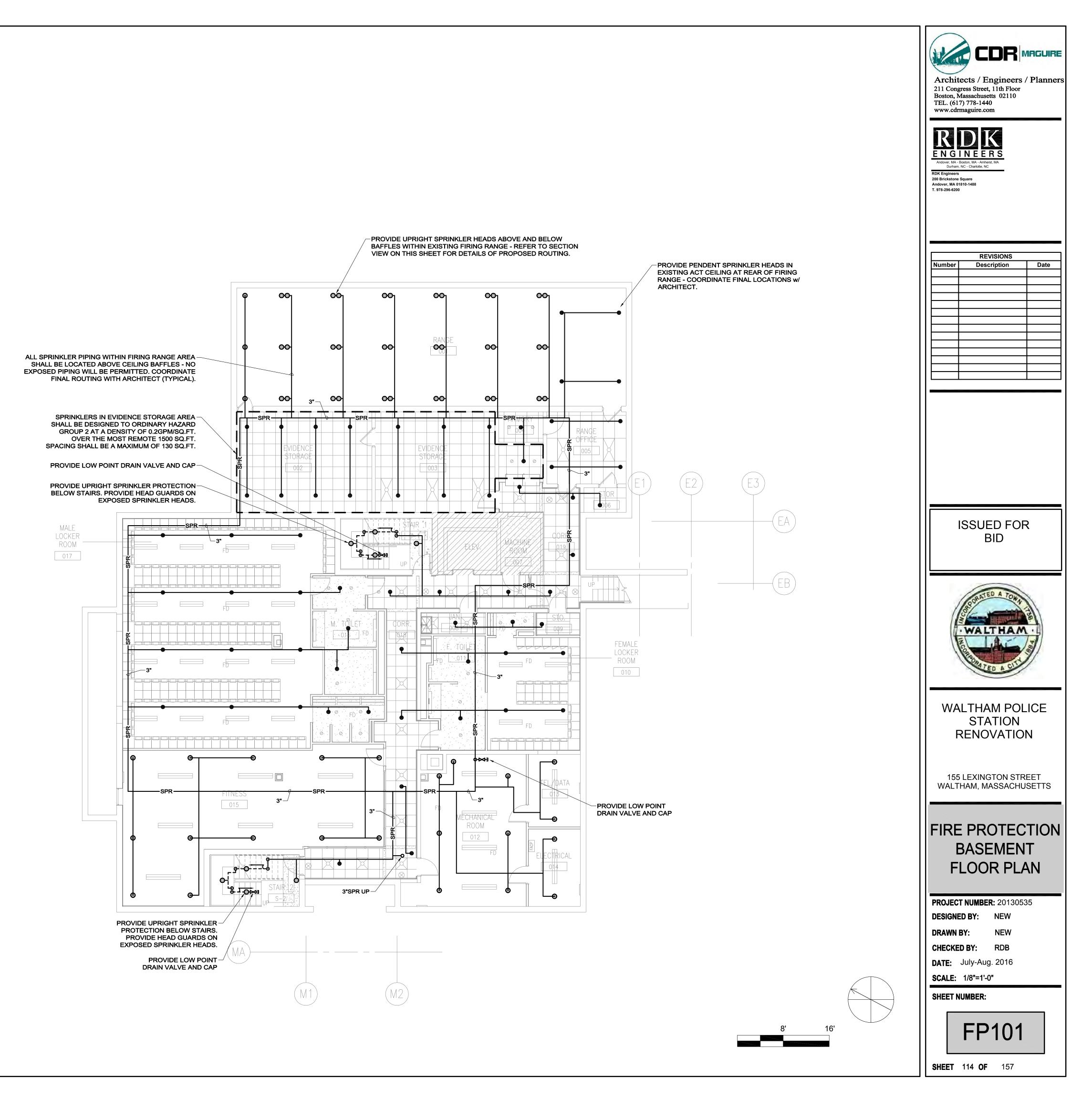
| ABBRE\         | /IATIONS          |
|----------------|-------------------|
| PROJECT NUMBER | <b>:</b> 20130535 |
| DESIGNED BY:   | NEW               |
| DRAWN BY:      | NEW               |
| CHECKED BY:    | RDB               |
| DATE: July-Aug | . 2016            |
| SCALE: N.T.S.  |                   |
| SHEET NUMBER:  |                   |





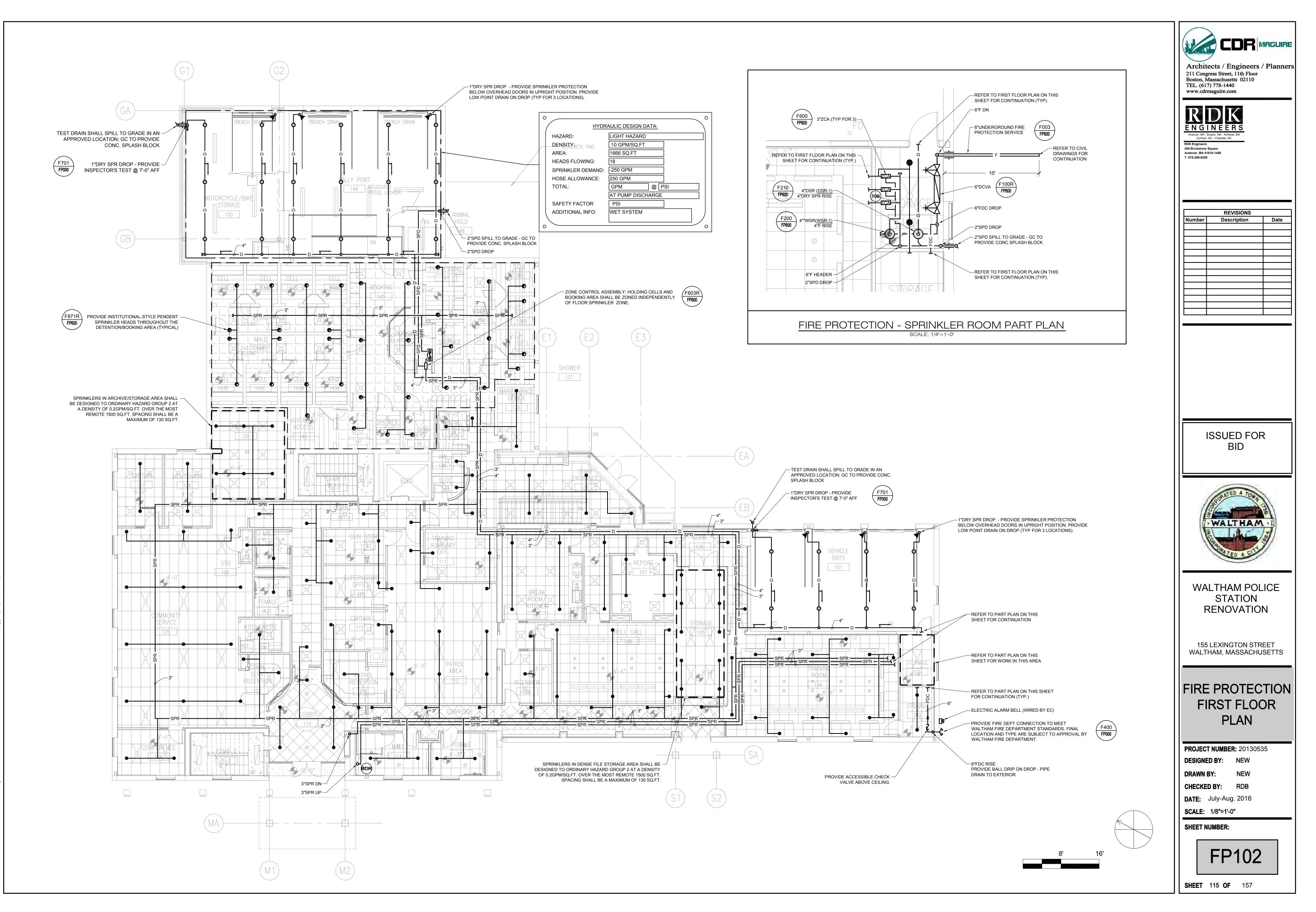






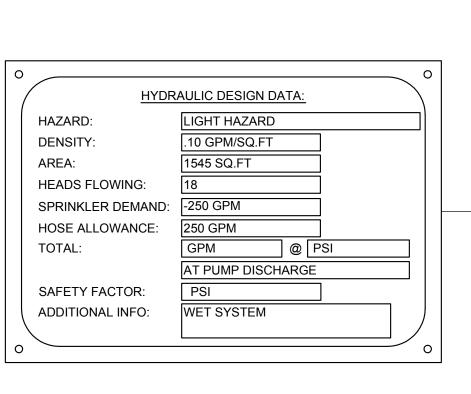
EWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_\_ PLUM: \_\_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ ELE

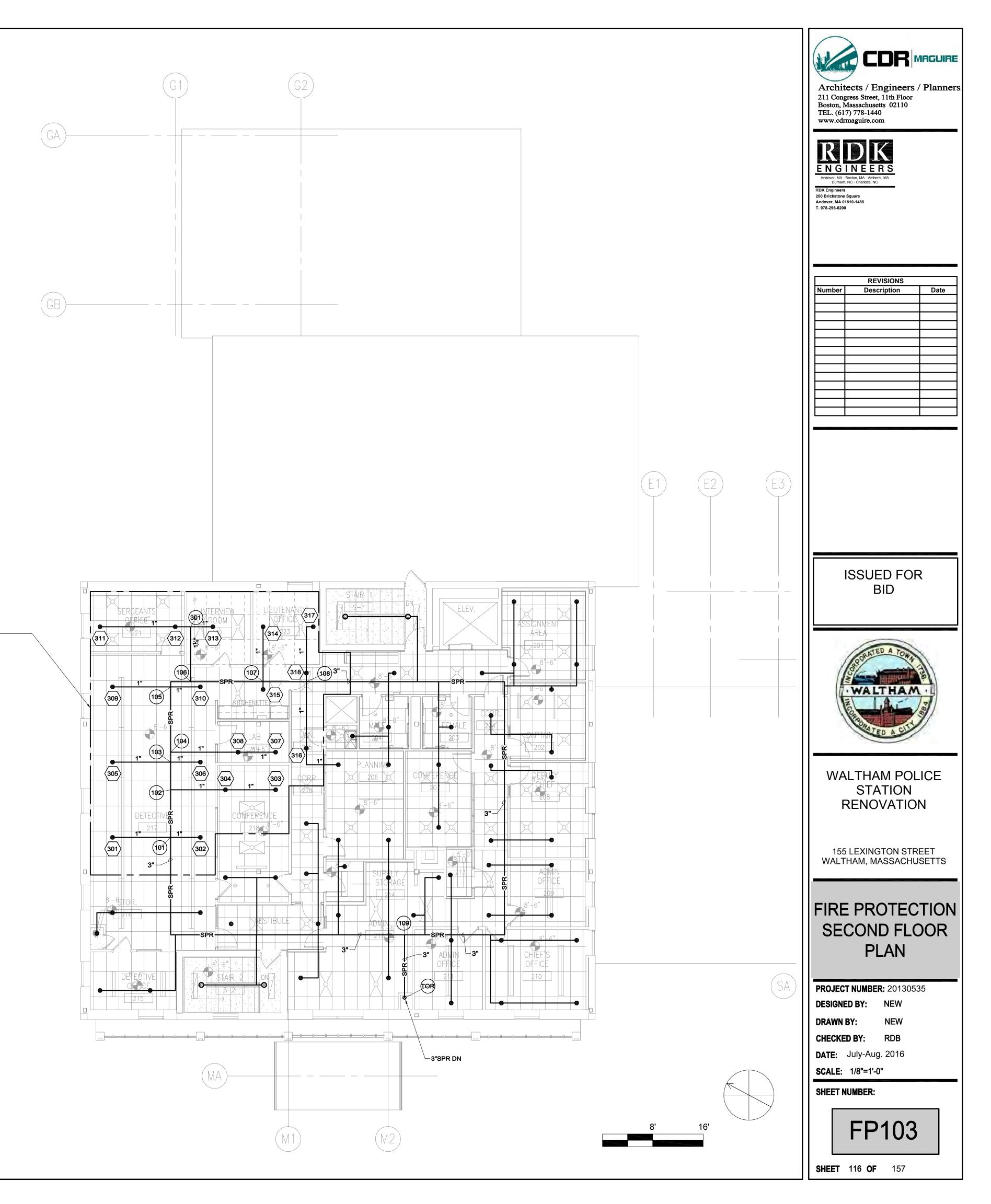
013/20130535 - Waitham Police HQ Renovation/1200 Drawings/1201 Fire Protection/Plot Files/20130535 FP102 FIRE PROTECTION FIRST FLOOR PLAN.dwg [Work] July 14, 2014 - 5:55pm dfranzek

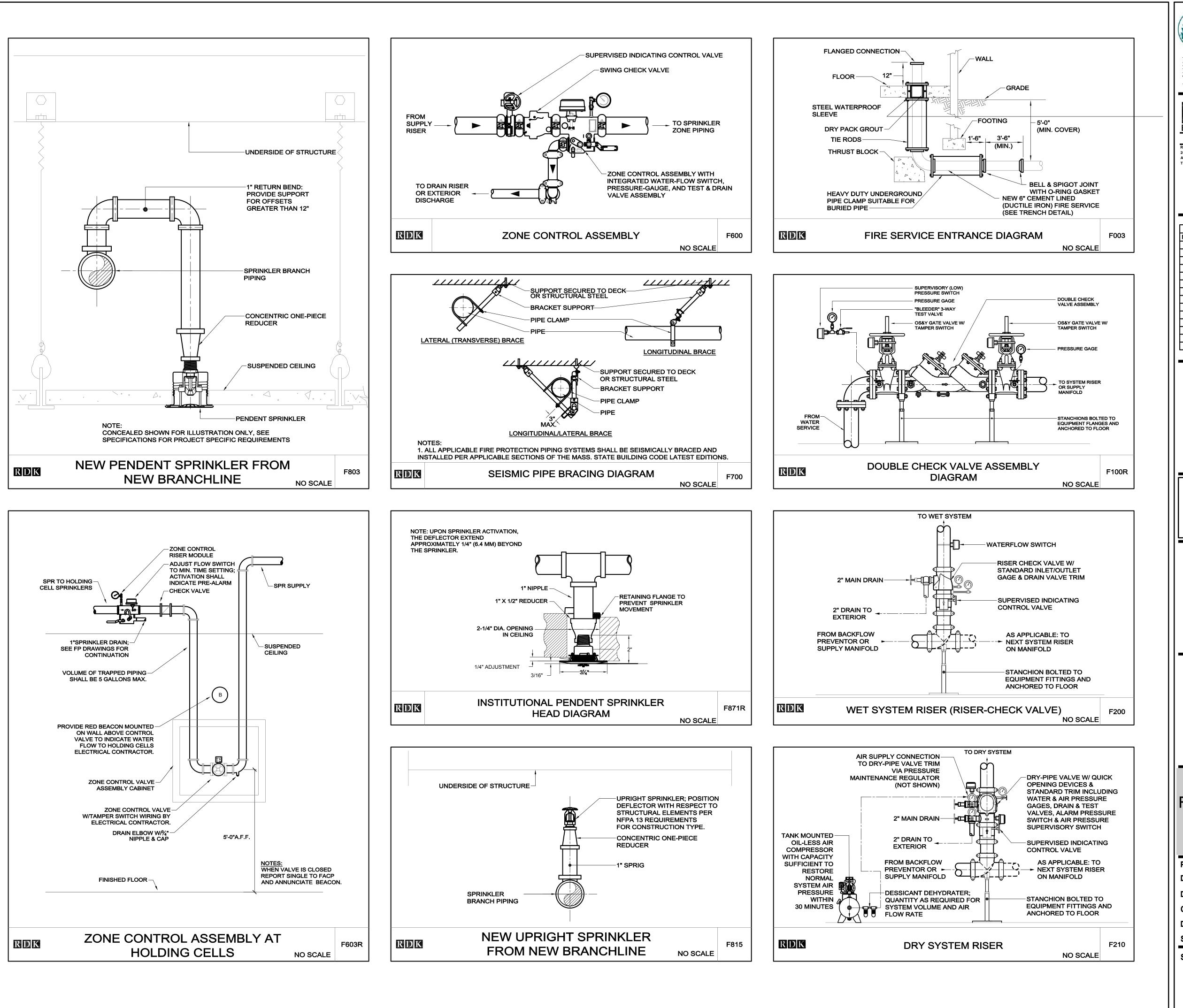


3/20130535 - Waltham Police HQ Renovation/1200 Drawings/1201 Fire Protection/Plot Files/20130535 FP103 FIRE PROTECTION SECOND FLOOR PLAN.dwg [Work] July 14, 2014 - 5:56pm dfranzek

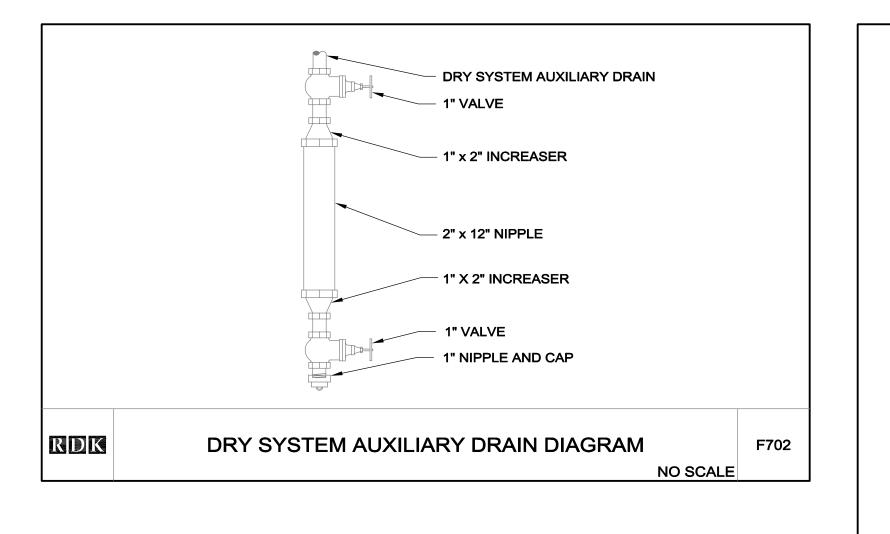
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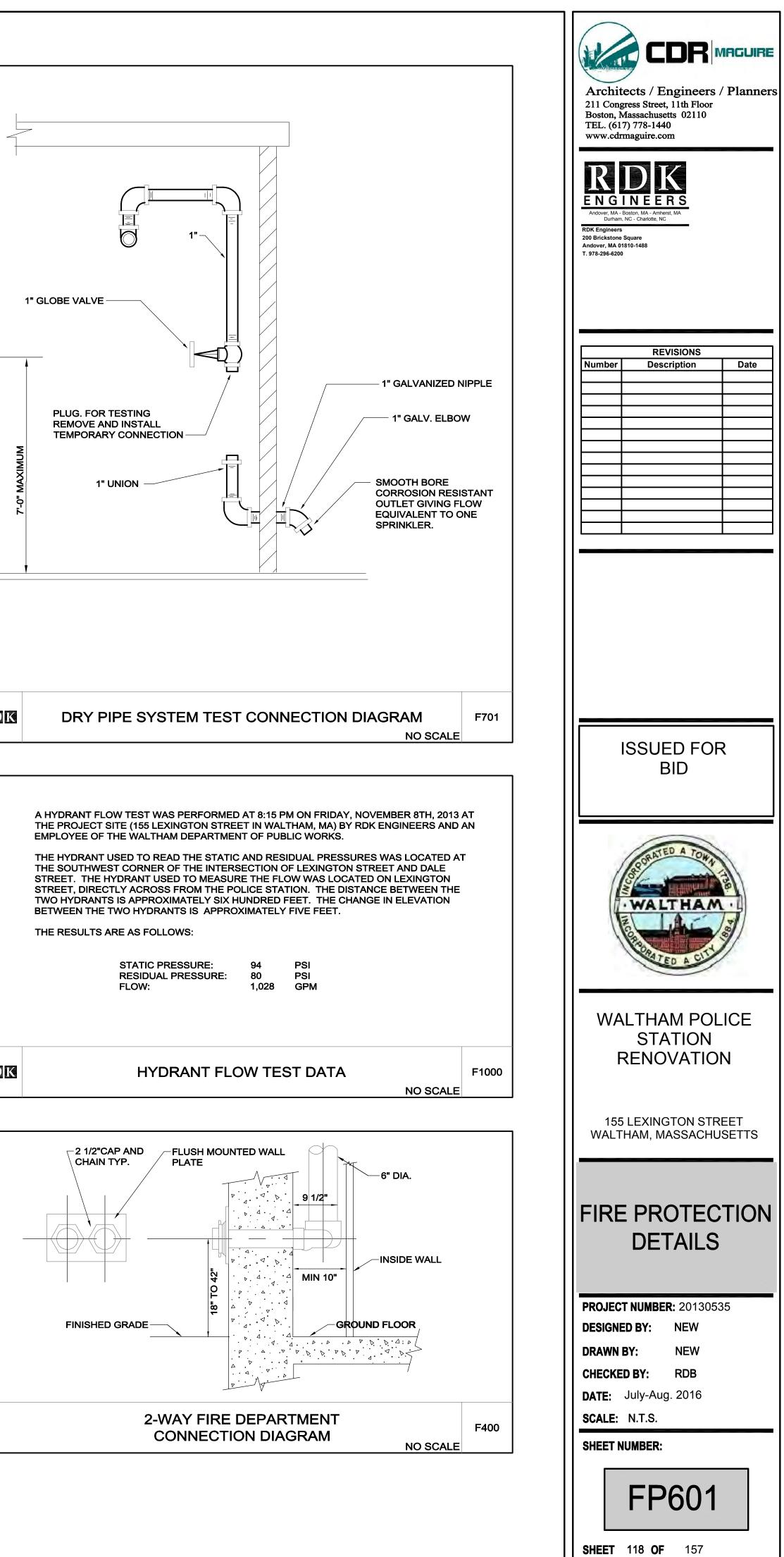




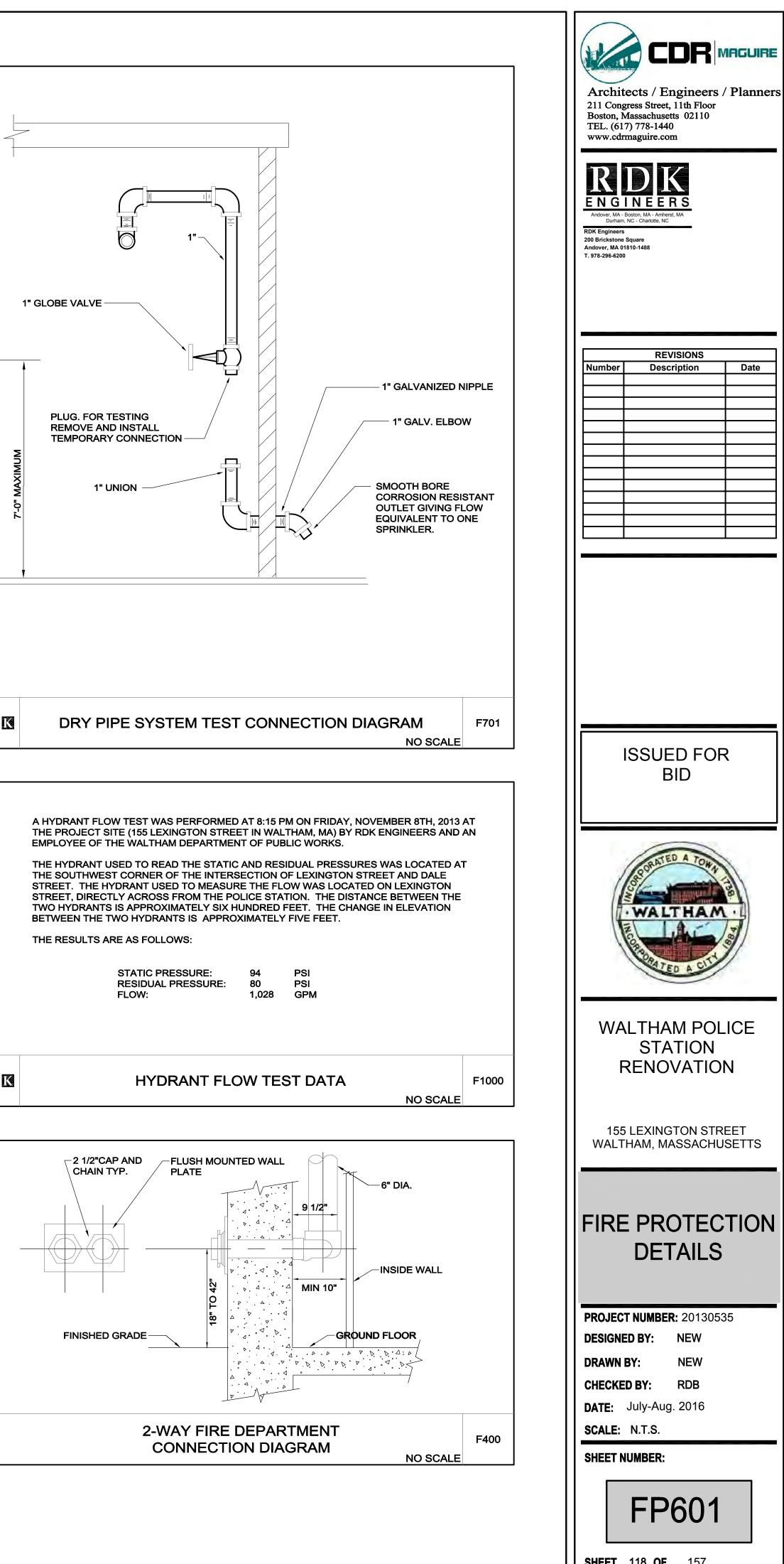


Architects / Engineers / Planners 211 Congress Street, 11th Floor Boston, Massachusetts 02110 TEL. (617) 778-1440 www.cdrmaguire.com ENGINEERS Andover, MA - Boston, MA - Amhers Durham, NC - Charlotte, NC RDK Engineers 200 Brickstone Square Andover, MA 01810-1488 T. 978-296-6200 REVISIONS Number Description Date **ISSUED FOR** BID WALTHAM WALTHAM POLICE STATION RENOVATION **155 LEXINGTON STREET** WALTHAM, MASSACHUSETTS **FIRE PROTECTION** DETAILS PROJECT NUMBER: 20130535 **DESIGNED BY:** NEW NEW DRAWN BY: CHECKED BY: RDB DATE: July-Aug. 2016 SCALE: N.T.S. SHEET NUMBER: FP600 **SHEET 117 OF** 157

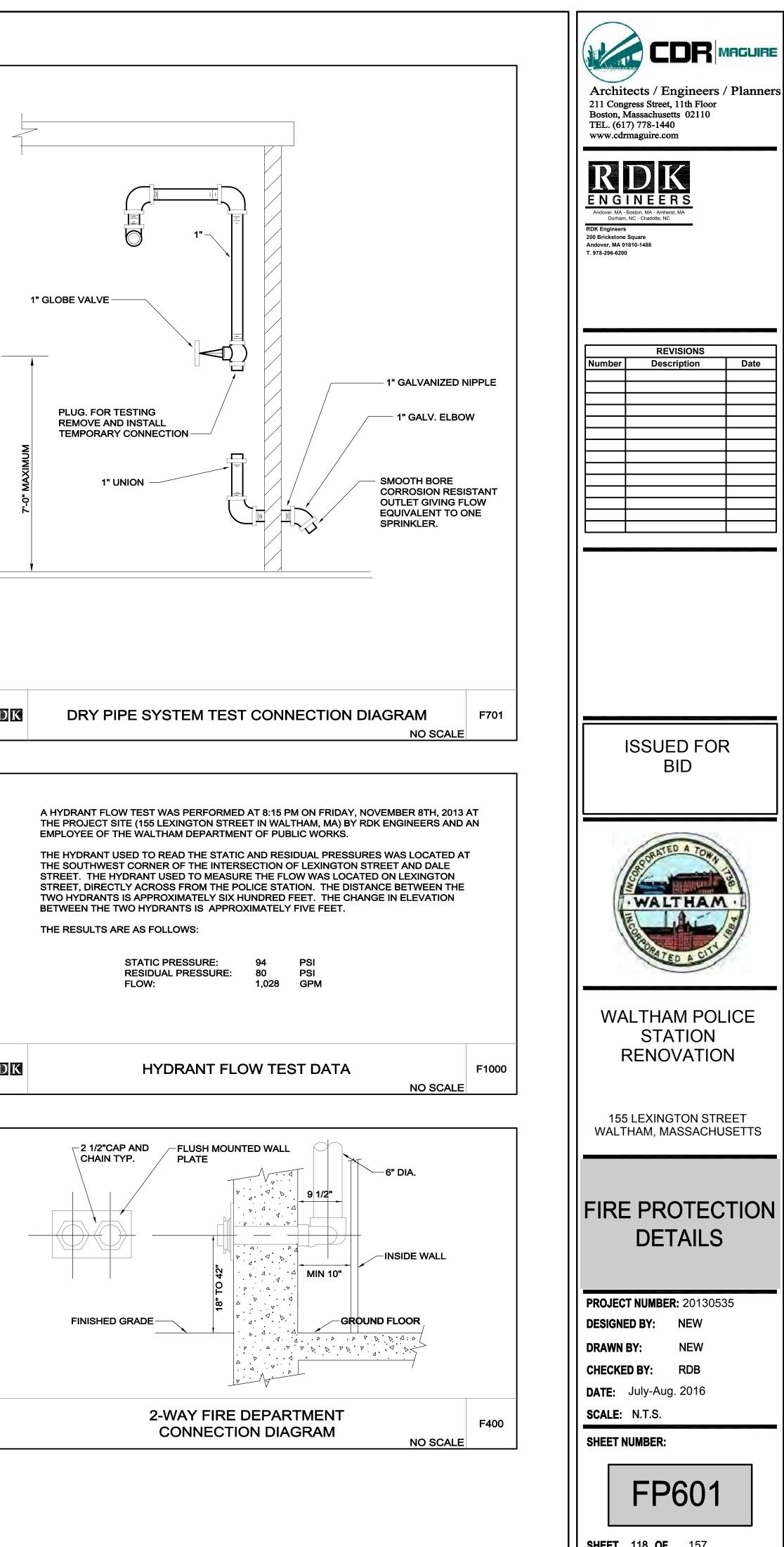




RDK



RDK



|  |   | ONE LINE SYMBOLS LE   |
|--|---|---|
| •  | <u> </u>  | DISCONNECT SWITCH, UNFUSED  |
|  |   | DISCONNECT SWITCH, FUSED  |
|  | $\widehat{}^{\times}$   | AF CIRCUIT BREAKER, FIXED<br>"XXAF" INDICATES FRAME SIZE "XXAT" IN  |
|  | HOA   | HAND/OFF/AUTO SELECTOR SWITCH   |
|  | SS  | SELECTOR SWITCH   |
|  |   | FUSE  |
|  | ┝╼╍   |   |
|  | °€—   | CURRENT TRANSFORMER<br>— "3" - INDICATES QUANTITY<br>"500:5A" - INDICATES PRIMARY TO SECO   |
| Ţ  | ĘŶ  |   |
| -  | Δ   | 3 PHASE, 3 WIRE DELTA CONNECTION  |
|  | ĘY  | 3 PHASE, 4 WIRE WYE SOLIDLY GROUND  |
|  |   | AUTOMATIC TRANSFER SWITCH   |
|  | R21A  | PANELBOARD  |
|  |   |   |
|  |   |   |
|  | -   | TELECOMMUNICATIONS  |
| ,  | 10/   | TELEPHONE OUTLET  |
|  | ♥"  | "W" INDICATES WALL PHONE<br>"P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE  |
|  | <b>▼</b> "  | "P" INDICATES PAY PHONE   |
|  | —   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE  |
|  | ▼"<br>□<br>1<br>▽   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLI  |
| ٦  |   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLI<br>CEILING MOUNTED BOX WITH TELEPHONE OUTI   |
| I  |   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLI<br>CEILING MOUNTED BOX WITH TELEPHONE OUTI<br>DATA OUTLET  |
| I  |   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLI<br>CEILING MOUNTED BOX WITH TELEPHONE OUTI<br>DATA OUTLET<br>FLOOR MOUNTED BOX WITH DATA OUTLET  |
| ר  | $\sim$  | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLING<br>CEILING MOUNTED BOX WITH TELEPHONE OUT<br>DATA OUTLET<br>FLOOR MOUNTED BOX WITH DATA OUTLET<br>CEILING MOUNTED BOX WITH DATA OUTLET   |
| ר  |   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLING<br>CEILING MOUNTED BOX WITH TELEPHONE OUTLING<br>DATA OUTLET<br>FLOOR MOUNTED BOX WITH DATA OUTLET<br>CEILING MOUNTED BOX WITH DATA OUTLET<br>COMBINATION TELEPHONE/DATA OUTLET  |
| ר<br>נ<br>ר  |   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLING<br>CEILING MOUNTED BOX WITH TELEPHONE OUTLING<br>FLOOR MOUNTED BOX WITH DATA OUTLET<br>CEILING MOUNTED BOX WITH DATA OUTLET<br>COMBINATION TELEPHONE/DATA OUTLET<br>FLOOR MOUNTED BOX WITH COMBINATION TEL   |
| ו<br>נ<br>   |   | "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES COUNTER HEIGHT<br>"FAX" INDICATES FAX MACHINE<br>FLOOR MOUNTED BOX WITH TELEPHONE OUTLING<br>CEILING MOUNTED BOX WITH TELEPHONE OUTLING<br>FLOOR MOUNTED BOX WITH DATA OUTLET<br>CEILING MOUNTED BOX WITH DATA OUTLET<br>FLOOR MOUNTED BOX WITH COMBINATION TELE<br>CEILING MOUNTED BOX WITH COMBINATION TELE  |
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| ONE LINE SYMBOLS LEGEND  | FIRE ALARM LEGEND   | WIRING DEVICE LEGEND   |
|--|---|--|
| DISCONNECT SWITCH, UNFUSED   | FCP FAN CONTROL PANEL   | DUPLEX RECEPTACLE, GROUNDING TYPE, RATED 20A, 125V<br>"5"- INDICATES CIRCUIT NUMBER  |
| XXAS<br>XXAF<br>"XXAF" INDICATES FUSE RATING "XXAS" INDICATES SWITCH SIZE                                    | FACP FIRE ALARM CONTROL PANEL   | <sup>5</sup><br>GFI - INDICATES INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER<br>"IG"- INDICATES ISOLATED GROUND TYPE<br>"WP" - INDICATES WEATHERPROOF   |
|  | FAA FIRE ALARM ANNUNCIATOR PANEL  | "SP" - INDICATES SURGE PROTECTION<br>"T" - INDICATES TAMPER RESISTANT SAFETY   |
| -6 6- "XXAF" INDICATES FRAME SIZE "XXAT" INDICATES TRIP  | FATC FIRE ALARM TERMINAL CABINET  | "C" - INDICATES COUNTER HEIGHT<br>DUPLEX RECEPTACLE, SHADING INDICATES EACH RECEPTACLE WIRED   |
| HOA HAND/OFF/AUTO SELECTOR SWITCH  | ESR ELEVATOR STATUS/RECALL CABINET  | a SEPARATELY, ONE ON CONSTANT SOURCE & ONE ON SWITCHED SOURCE<br>FROM SWITCH "a"   |
| SS SELECTOR SWITCH   | BATT FIRE ALARM SYSTEM BATTERY PACK & BATTERY CHARGER   | G- SINGLE RECEPTACLE, GROUNDING TYPE, RATED 20A, 125V  |
|  | FIRE ALARM MASTER BOX   | DOUBLE DUPLEX RECEPTACLE, GROUNDING TYPE, RATED 20A, 125V  |
| POTENTIAL TRANSFORMER "2" INDICATES QUANTITY   | FIRE ALARM COMMUNICATIONS ANTENNA/TRANSMITTER   | OCE DUPLEX RECEPTACLE MOUNTED FLUSH TO FINISHED CEILING  |
| 3 CURRENT TRANSFORMER<br>"3" - INDICATES QUANTITY  | FIRE ALARM RED ROTATING BEACON, EXTERIOR MOUNTED,<br>WEATHERPROOF   | SPECIAL PURPOSE RECEPTACLE,<br>15 H "15" - INDICATES TAG NUMBER  |
| <ul> <li>"500:5A" - INDICATES PRIMARY TO SECONDARY TURNS RATIO</li> <li> <u> <u> </u> <u> </u></u></li></ul> |   | REFER TO SPECIAL PURPOSE RECEPTACLE SCHEDULE<br>FLOOR MOUNTED BOX WITH SPECIAL PURPOSE RECEPTACLE.   |
|  |   | 15 "15" - INDICATES TAG NUMBER<br>REFER TO SPECIAL PURPOSE RECEPTACLE SCHEDULE   |
|  | CEILING MOUNTED FIRE ALARM VISUAL DEVICE  | FLOOR MOUNTED BOX WITH DUPLEX RECEPTACLE   |
| △ 3 PHASE, 3 WIRE DELTA CONNECTION   | BO FIRE ALARM BELL  | FLOOR MOUNTED BOX WITH DOUBLE DUPLEX RECEPTACLE  |
| 3 PHASE, 4 WIRE WYE SOLIDLY GROUNDED   |   | FLOOR MOUNTED BOX WITH DOUBLE DUPLEX RECEPTACLE AND TEL/DATA   |
|  | FIRE ALARM HORN   | FB1 FLOOR MOUNTED BOX WITH MULTIPLE DEVICES.<br>"FB1"-INDICATES TYPE AS DEFINED IN NOTES/SCHEDULES.  |
|  | S DUCT MOUNTED SMOKE DETECTOR   | Ere FLOOR MOUNTED BOX FOR POWER CONNECTION TO PRE-WIRED  |
| R21A   | " DH MAGNETIC DOOR HOLDER   | Here Wall MOUNTED BOX FOR POWER CONNECTION TO PRE-WIRED FURNITURE<br>PARTITIONS  |
| PANELBOARD   |   |  |
|  |   |  |
|  |   | PP POWER POLE  |
|  | ESC INDICATES STOPPER COVER   | SURFACE, HORIZONTALLY MOUNTED MULTI-OUTLET RACEWAY SYSTEM.   |
| TELECOMMUNICATIONS LEGEND  | TS SPRINKLER TAMPER FLOW SWITCH   | ASSOCIATED NOTES, AND/OR SCHEDULES   |
| TELEPHONE OUTLET<br>W" INDICATES WALL PHONE  | FS SPRINKLER WATER FLOW SWITCH  | P1 SURFACE MULTI-OUTLET RACEWAY SYSTEM VERTICALLY MOUNTED.<br>"P1" - INDICATES TYPE, SIZE AND QUANTITY OF DEVICES AS PER   |
| ▼ "P" INDICATES PAY PHONE<br>"C" INDICATES COUNTER HEIGHT  | PS SPRINKLER LOW PRESSURE SWITCH  | ASSOCIATED NOTES, AND/OR SCHEDULES   |
|  | RAI REMOTE ALARM INDICATOR  | P1 15 SHOWN ON FLOOR PLANS.<br>"P1" - INDICATES TYPE   |
| T1   | RTS REMOTE TEST STATION   |  |
| CEILING MOUNTED BOX WITH TELEPHONE OUTLET  | ACM INDIVIDUAL ADDRESSABLE CONTROL MODULE   | BRANCH CIRCUIT & FEEDER LEGEND   |
| ✓ DATA OUTLET  | ZMM ZONE MONITORING MODULE  | BRANCH CIRCUIT & FEEDER LEGEND   |
| FLOOR MOUNTED BOX WITH DATA OUTLET   | FIRE ALARM AUDIBLE AND VISUAL DEVICE, NUMERAL INDICATES CANDELA   | BRANCH CIRCUIT OR FEEDER CONCEALED IN FINISHED AREAS   |
| CEILING MOUNTED BOX WITH DATA OUTLET   | EWG VALUE "WG" INDICATES WIRE GUARD<br>"WP" INDICATES WEATHERPROOF  | BRANCH CIRCUIT OR FEEDER, CONCEALED IN OR UNDER FLOOR SLAB   |
| COMBINATION TELEPHONE/DATA OUTLET  | CEILING MOUNTED FIRE ALARM AUDIBLE AND VISUAL DEVICE, NUMERAL INDICATES CANDELA VALUE   | BRANCH CIRCUIT OR FEEDER TURNING UP TOWARDS OBSERVER   |
| FLOOR MOUNTED BOX WITH COMBINATION TELEHONE/DATA OUTLET  | VEV INDICATES CANDELA VALUE ▼H FIREFIGHTERS PHONE, JACK ONLY UNLESS INDICATED OTHERWISE   | BRANCH CIRCUIT OR FEEDER TURNING DOWN AWAY FROM OBSERVER   |
| —  | THE INDICATES HAND SET  |  |
| CEILING MOUNTED COMBINATION TELEHONE/DATA OUTLET   | BEAM TYPE SMOKE DETECTOR  | BRANCH CIRCUIT HOME RUN TICKS INDICATE QUANTITY OF CONDUCTORS,<br>R22A-1,3,5 GROUND CONDUCTORS ARE NOT INDICATED. NO TICKS INDICATES 2#12 &<br>1#12G IN 3/4"C MINIMUM. R22A-1,3,5 INDICATES PANEL AND CIRCUIT  |
| - <u>CT</u> CABLE TRAY, CONCEALED  | FIRE ALARM SMOKE DETECTOR, PHOTO ELECTRIC UNLESS NOTED  | 1#12G IN 3/4"C MINIMUM. R22A-1,3,5 INDICATES PANEL AND CIRCUIT<br>DESIGNATION FROM WHICH HOMERUN SHALL ORIGINATE. EACH CIRCUIT<br>SHALL BE 20A-1P (20AMP SINGLE POLE) UNLESS NOTED OTHERWISE.  |
| CABLE TRAY EXPOSED   | OTHERWISE "ER" INDICATES ELEVATOR RECALL<br>"SC" INDICATES SELF-CONTAINED, SINGLE STATION TYPE  | H42B-1<br>100A-3P FEEDER HOMERUN. REFER TO LEGEND OF FEEDER SIZES FOR  |
|  | SER "I" INDICATES IONIZATION TYPE DETECTOR<br>"M" INDICATES MULTI-SENSOR<br>"MULTI-SENSOR   | CONDUCTOR AND RACEWAY REQUIREMENTS DESIGNATED INSIDE TAG.<br>H42B-1 INDICATES PANEL AND CIRCUIT NUMBER DESIGNATION FROM  |
|  | "WG" INDICATES WIRE GUARD<br>"V" INDICATES VESDA TAMPER PROOF SAMPLING TUBE BY VESDA  | WHICH HOME RUN SHALL ORIGINATE, 100A-3P INDICATES 100 AMPERE, 3<br>6 POLE CIRCUIT BREAKER.   |
|  | FIRE ALARM HEAT DETECTOR, 135° FIXED TEMPERATURE UNLESS NOTED<br>OTHERWISE "RR" INDICATES RATE OF RISE<br>(H) RR "R/F" INDICATES RATE OF RISE AND FIXED TEMPERATURE                 | FLEXIBLE CONNECTION TO EQUIPMENT. RACEWAY AND CONDUCTOR  |
| FLOOR MOUNTED BOX FOR TELEPHONE/DATA CONNECTION TO PRE-WIRED           FURNITURE PARTITIONS                  | "200" INDICATES 200° TEMPERATURE<br>"WG" INDICATES WIRE GUARD   | RATING TO MATCH ASSOCIATED BRANCH CIRCUIT OR FEEDER BRANCH CIRCUIT FOR EMERGENCY BATTERY DC CIRCUIT, MINIMUM 2#10 IN   |
| SPEAKER, CEILING MOUNTED<br>"LS" INDICATES LOCAL SOUND SYSTEM<br>"VC" INDICATES INTEGRAL VOLUME CONTROL KNOB | CARBON MONOXIDE SENSOR  | 3/4"C. UNLESS OTHERWISE NOTED  |
|  |   | POWER DISTRIBUTION   |
|  | MOTOR & CONTROLS LEGEND   | 208Y/120 VOLT PANELBOARD, SURFACE MOUNTED  |
|  |   | REFER TO SCHEDULE OF PANELBOARDS 208Y/120 VOLT PANELBOARD, RECESSED MOUNTED  |
|  | SM MANUAL MOTOR STARTING SWITCH WITH THERMAL OVERLOAD   | REFER TO SCHEDULE OF PANELBOARDS 480Y/277 VOLT PANELBOARD, SURFACE MOUNTED   |
| HDM INTERCOM STATION<br>"M" INDICATES MASTER INTERCOM STATION  | MAGNETIC MOTOR STARTER, REFER TO MAGNETIC MOTOR STARTER & VFD   | REFER TO SCHEDULE OF PANELBOARDS   |
| HOM SYSTEM CLOCK<br>"M" INDICATES MASTER CLOCK WITH ASSOCIATED CONTROLS                                      | $\frac{60AS}{EAAF}$ COMBINATION FUSED DISCONNECT MAGNETIC MOTOR STARTER.  | REFER TO SCHEDULE OF PANELBOARDS   |
| 3/4" PLYWOOD BACKBOARD WITH 2" X 4" STUDS PLACED 16" OFF CENTER  | REFER TO MAGNETIC MOTOR STARTER AND VFD SCHEDULE FOR TYPE,<br>SIZE AND ENCLOSURE  | GROUND BAR   |
| VS EXTERNAL DOOR/VOICE SIGNALING STATION   | C CONTACTOR IN NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED  | T3 "T3" - INDICATES KVA RATING OF TRANSFORMER<br>REFER TO DRY TYPE TRANSFORMER SCHEDULE  |
|  |   | CT CURRENT TRANSFORMER CABINET   |
| AMP AMPLIFIER, LOCAL SOUND SYSTEM  | VFD VARIABLE SPEED DRIVE  | M METER  |
|  | ATS AUTOMATIC TRANSFER SWITCH   | UTILITY METER AND SOCKET   |
| LSR LOCAL SOUND RACK   | G GENERATOR   |  |
| TV OUTLET, WALL MOUNTED<br>"TP" INDICATES TEACHER PRESENTATION   |   | SECURITY LEGEND  |
| "V1" INDICATES QUANTITIES OF DATA, VOICE, S-VIDEO, RCA AND CATV  | "2" - INDICATES HORSEPOWER RATING   |  |
| CEILING MTD. DATAVIDEO PROJECTOR OUTLET W/CONDUIT TO TV OUTLET   | DISCONNECT SWITCH RATED 30AMP, 3-POLE, IN NEMA TYPE 1 ENCLOSURE,<br>UNLESS OTHERWISE NOTED<br>"38" - INDICATES NEMA TYPE 38 ENCLOSURE   |  |
| -  | "3R" - INDICATES NEMA TYPE 3R ENCLOSURE<br>"2P" - INDICATES 2 POLE SINGLE PHASE DISCONNECT<br>"60AS" - INDICATES 60A SWITCH   | ES ELECTRIC DOOR STRIKE  |
|  | FUSED DISCONNECT SWITCH, 3-POLE, IN NEMA TYPE 1 ENCLOSURE,  | DC DOOR CONTACT  |
|  | 60AS UNLESS OTHERWISE NOTED.<br>60AF "3R" - INDICATES NEMA TYPE 3R ENCLOSURE<br>60AS" - INDICATES 60AMP SWITCH  |  |
|  | "50AF" - INDICATES 50AMP FUSES  | EXISTING EQUIPMENT LEGEND  |
|  | 100AF       ENCLOSED CIRCUIT BREAKER IN NEMA TYPE 1 ENCLOSURE, UNLESS         90AT       OTHERWISE NOTED         ICE       "100AF" - INDICATES 100AMP, 3-POLE FRAME CIRCUIT BREAKER |  |
|  | "90AT" - INDICATES 90AMP TRIP   |  |
|  | FB4 EQUIPMENT TAG, TOP ALPHANUMERIC CORRESPONDS TO EQUIPMENT ID<br>LOWER INDICATES LOAD (KW, HP, ETC.)  |  |
|  | ·   |  |
|  |   | XN         NEW LOCATION OF EXISTING RELOCATED EQUIPMENT           Image: Second strain stra |
|  | SITE LEGEND   | INSTALLED ON EXISTING BRANCH/FEEDER  |
|  | EH ELECTRIC HAND HOLE   | EXISTING EQUIPMENT FOR INFORMATION ONLY-<br>INDICATED BY SYMBOL WITH LIGHT AND OUT OF FUNCTION LINE<br>TYPE  |
|  |   | EXISTING EQUIPMENT TO BE REWORKED-   |
|  |   | L INDICATED BY SYMBOL WITH DASHED AND IN FUNCTION LINE TYPE  |
|  |   |  |
|  |   | 1  |

-UT- UNDERGROUND TELEPHONE

-UF- UNDERGROUND FIRE ALARM

-OE-OVERHEAD ELECTRIC

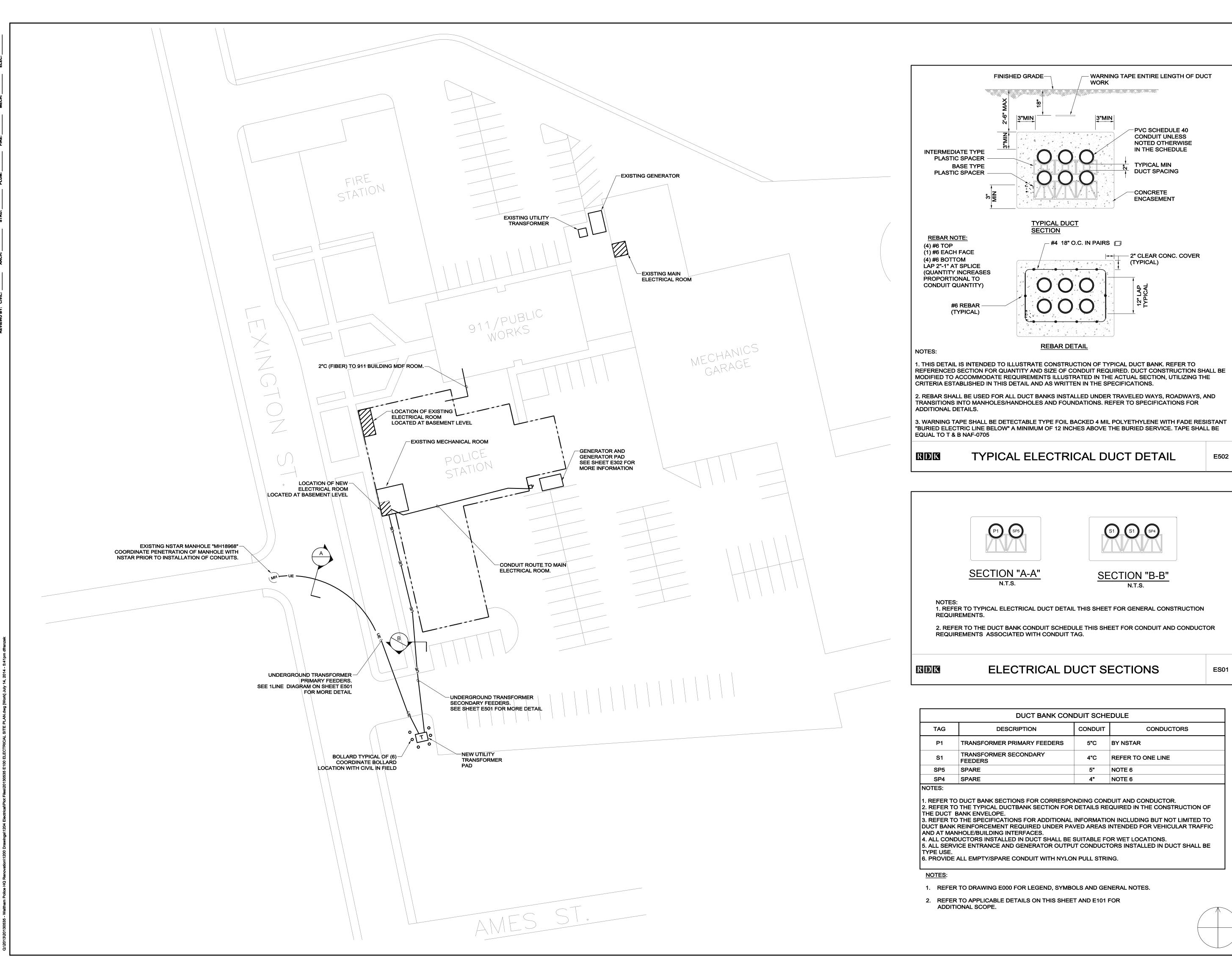
-OF-OVERHEAD FIRE ALARM

UNDERGROUND SECTION, REFER TO SECTION DETAIL "A" INDICATES DETAIL LETTER "#" INDICATES DRAWING NUMBER

| LIGHTING FIX   | TURE        | E LEGEND   |   |   |
|--|-------------|--|---|---|
|  |             | NG FIXTURE SCHEDULE)                                   |   | Commission of the second se |
| 2,a "FR2" - INDICATES LIG<br>"2" - INDICATES CIRCL<br>"a" - INDICATES SWITC          | IT NUMBE    | R<br>OL  |   | Architects / Engineers / Planne<br>211 Congress Street, 11th Floor  |
| 12,NL "NL"- INDICATES NIGH   | t light (u  | INSWITCHED) CIRCUIT                                    |   | Boston, Massachusetts 02110<br>TEL. (617) 778-1440  |
| A 2,NL FIXTURE.  | IALLY ORI   | IENTED WALLWASH TYPE LIGHTING                          |   | www.cdrmaguire.com  |
| <sup>/2</sup> Q <sup>2,a</sup> LIGHTING FIXTURE W/                                   |             | TED  |   |   |
|  |             | EILING, PENDANT MOUNTED,                               |   | RDK   |
| <b>O</b>   | -           | VALL MOUNTED, ARROWS AND EXIT                          |   | Andover, MA - Boston, MA - Amherst, MA  |
| FACE AS (SHADED) AS  | INDICATE    | ED.  |   | Durham, NC - Charlotte, NC RDK Engineers  |
|  | H TYPE AS   | S5 HEADS   |   | 200 Brickstone Square<br>Andover, MA 01810-1488<br>T. 978-296-6200  |
|  | G REMOTE    | E LAMP HEADS, SINGLE OR DOUBLE                         |   |   |
|  | 3 BATTER    | Y UNIT WITH DOUBLE LAMP HEADS                          |   |   |
| <sup>IG5</sup> BOLLARD LIGHTING FI   | XTURE       |  |   |   |
| •  |             |  |   |   |
| LIGHTING FIXTURE SH  |             | DICATES FIXTURE EMERGENCY (LIFE                        |   | REVISIONS Number Description Date   |
| <sup>R1</sup> I  |             |  |   |   |
|  |             |  |   |   |
|  | TING FIXTU  | URE  |   |   |
| l  |             |  |   |   |
| SWITCH   | I LEG       | END  |   |   |
| SINGLE POLE SWITCH, RATED<br>"a" LOWER CASE LETTER IND                               |             |  |   |   |
| TWO POLE SINGLE THROW S  |             |  |   |   |
| THREE WAY SWITCH, RATED  | 20A, 120/27 | 777  |   |   |
|  |             |  |   |   |
| FLUORESCENT DIMMER   |             |  |   |   |
| "O1" INDICATES SINGLE CIRCU<br>OCCUPANCY SENSOR, RECES<br>"O2" INDICATES DUAL CIRCUI | S WALL M    | IOUNTED  |   |   |
| OCCUPANCY SENSOR, CEILIN<br>"O1"-INDICATES TYPE AS DEF                               | G MOUNT     | ED   |   |   |
| DRAWING E701 FOR ADDITION<br>OCCUPANCY SENSOR, SURFA                                 | CE WALL     | MOUNTED  |   |   |
| "O1"-INDICATES TYPE AS DEF<br>PHOTOCELL  | NED IN NO   | DTES/SCHEDULES.  |   |   |
| TIMECLOCK  |             |  |   |   |
| O PUSHBUTTON STATION<br>"EPO" INDICATES EMERGENC                                     | Y POWER     | OFF  |   |   |
| ABBRE  |             | ONS  |   |   |
| AMPERE   | күн         | KILOWATT HOURS   |   | ISSUED FOR  |
| ALTERNATION CURRENT<br>AMERICAN WITH DISABILITIES                                    | LTG         |  |   | BID   |
| ACT<br>AMPERE FRAME  | MCB<br>MEC  | MAIN CIRCUIT BREAKER<br>MASSACHUSETTS ELECTRICAL       |   |   |
| ABOVE FINISHED FLOOR   | M/G         | CODE<br>MOTOR/GENERATOR SET                            |   |   |
| ABOVE FINISHED GRADE<br>AMPERE INTERRUPTING<br>CAPACITY                              | MH<br>MLO   | MANHOLE<br>MAIN LUGS ONLY                              |   |   |
| ALUMINUM<br>AMPERE TRIP  | MTD<br>MTG  | MOUNTED<br>MOUNTING                                    |   | PRATED A TOWN   |
| AUTOMATIC TRANSFER SWITCH  | NC          | NORMALLY CLOSED CONTACT                                |   |   |
| AMERICAN WIRE GAUGE<br>BURIED  | NEC<br>NO   | NATIONAL ELECTRICAL CODE<br>NORMALLY OPEN CONTACT      |   |   |
| CONDUIT<br>CABLE   | NTS<br>#    | NOT TO SCALE<br>NUMBER                                 |   | Z A Z   |
| CABLE TELEVISION   | OPD         | OVER CURRENT PROTECTION<br>DEVICE                      |   |   |
| CLOSED CIRCUIT TELEVISION<br>SYSTEM<br>CIRCUIT BREAKER                               | POS         | PROVIDED UNDER OTHER<br>SECTIONS<br>POLYVINYL CHLORIDE |   | PRATED A CUT  |
| CIRCUITS   | PVC<br>PWR  | POLYVINYL CHLORIDE<br>POWER                            |   |   |
| CENTRAL PROCESSING UNIT<br>CENTERLINE  | RGS<br>RMS  | RIGID GALVANIZED STEEL<br>ROOT MEAN SQUARE VALUE       |   |   |
| DECIBEL<br>DIRECT CURRENT  | RPM<br>SN   | REVOLUTIONS PER MINUTE<br>SOLID NEUTRAL                |   | WALTHAM POLICE  |
| DRAWING<br>ELECTRICAL CONTRACTOR   | SWBD<br>TB  | SWITCHBOARD<br>TERMINAL BLOCK                          |   | STATION   |
| ELECTRIC METALLIC TUBING   | TEL         | TELEPHONE  |   | RENOVATION  |
| FEEDER<br>FLEXIBLE LIQUID TIGHT METALLIC   | TERMN       | TERMINAL<br>TWISTED SHIELDED-PAIR                      |   |   |
| TUBING<br>FREQUENCY  | TVSS        | TRANSIENT VOLTAGE SURGE<br>SUPPRESSER                  |   |   |
| GROUNDING ELECTRODE<br>CONDUCTOR   | ТҮР         | TYPICAL  |   | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| GROUND FAULT INTERRUPTING<br>GROUND  | UG<br>UNO   | UNDERGROUND<br>UNLESS NOTED OTHERWISE                  |   |   |
| HANDHOLE   | UPS         | UNINTERRUPTIBLE POWER<br>SUPPLY                        |   |   |
| HORSEPOWER<br>HEATING, VENTILATING AND AIR   | UTP<br>V    | UNSHIELDED TWISTED-PAIR<br>VOLTS                       |   | ELECTRICAL  |
| CONDITIONING<br>HERTZ  | VA          | VOLT-AMPERE  |   |   |
| ISOLATED GROUND<br>JUNCTION BOX  | VSD<br>W    | VARIABLE SPEED DRIVE<br>WATTS                          |   | LEGEND, NOTES   |
| KILOVOLT-AMPERE<br>KILOWATT  | WP          | WEATHERPROOF   |   | & ABBRVS.   |
|  |             |  | 1 |   |
|  |             |  |   | PROJECT NUMBER: 20130535  |
|  |             |  |   | DESIGNED BY: AM   |
|  |             |  |   |   |
|  |             |  |   |   |
|  |             |  |   | CHECKED BY: GM  |
|  |             |  |   | DATE: July-Aug.   |
|  |             |  |   | SCALE: 2016 N.T.S.  |
|  |             |  |   | SHEET NUMBER:   |

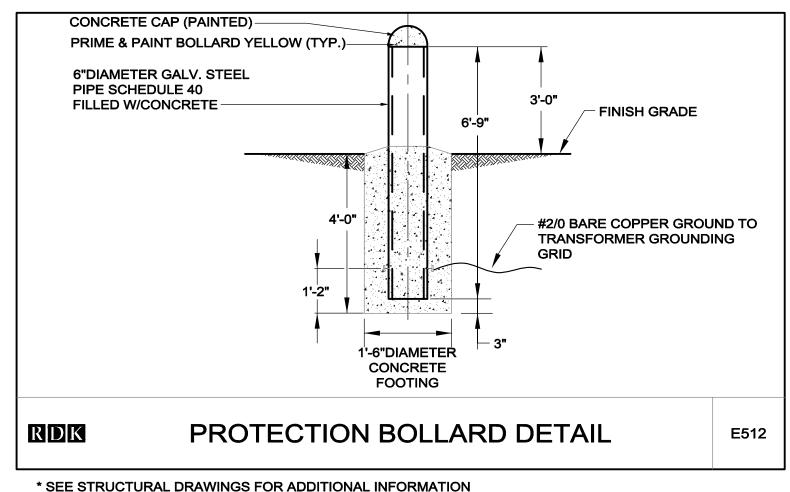
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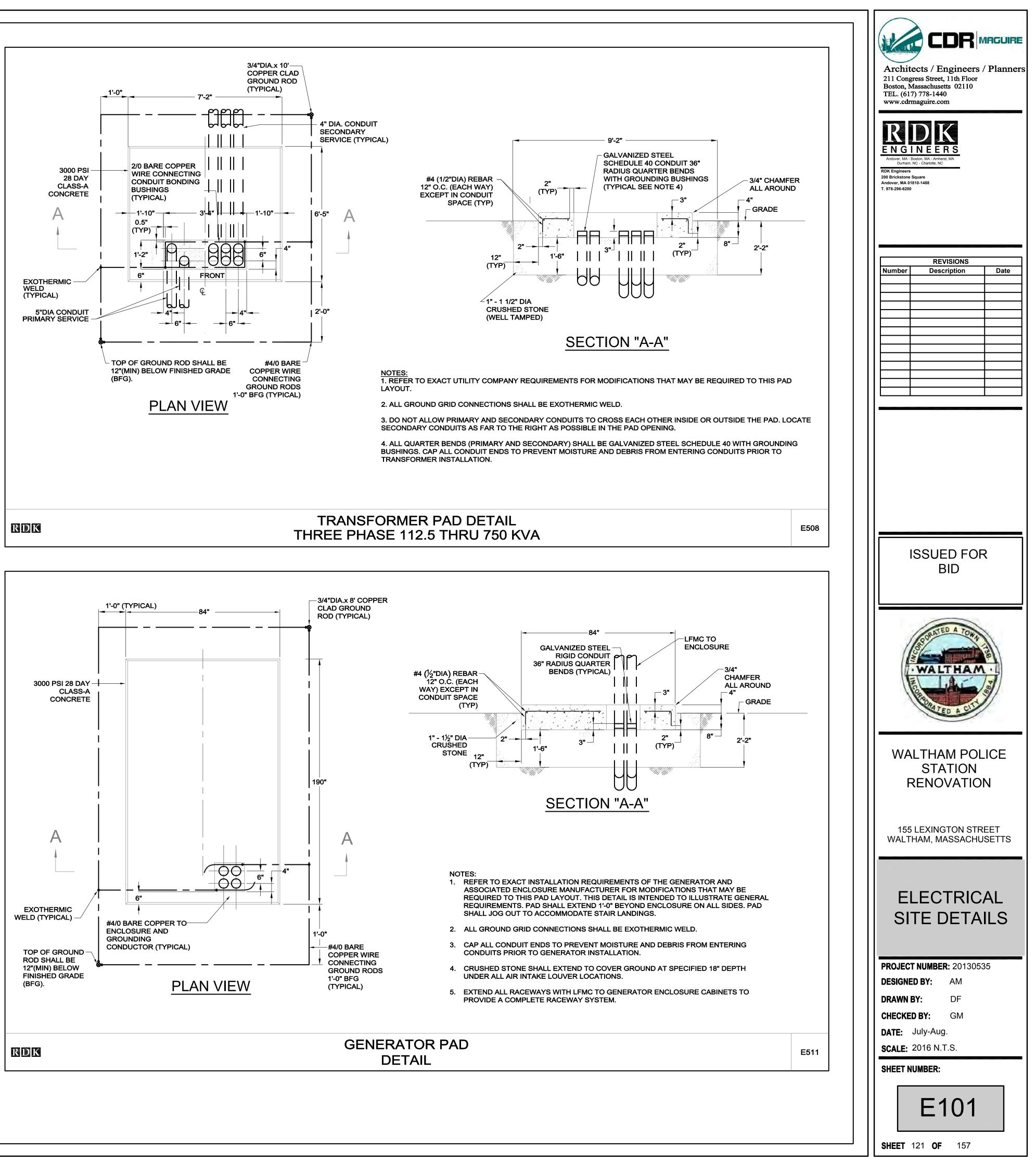


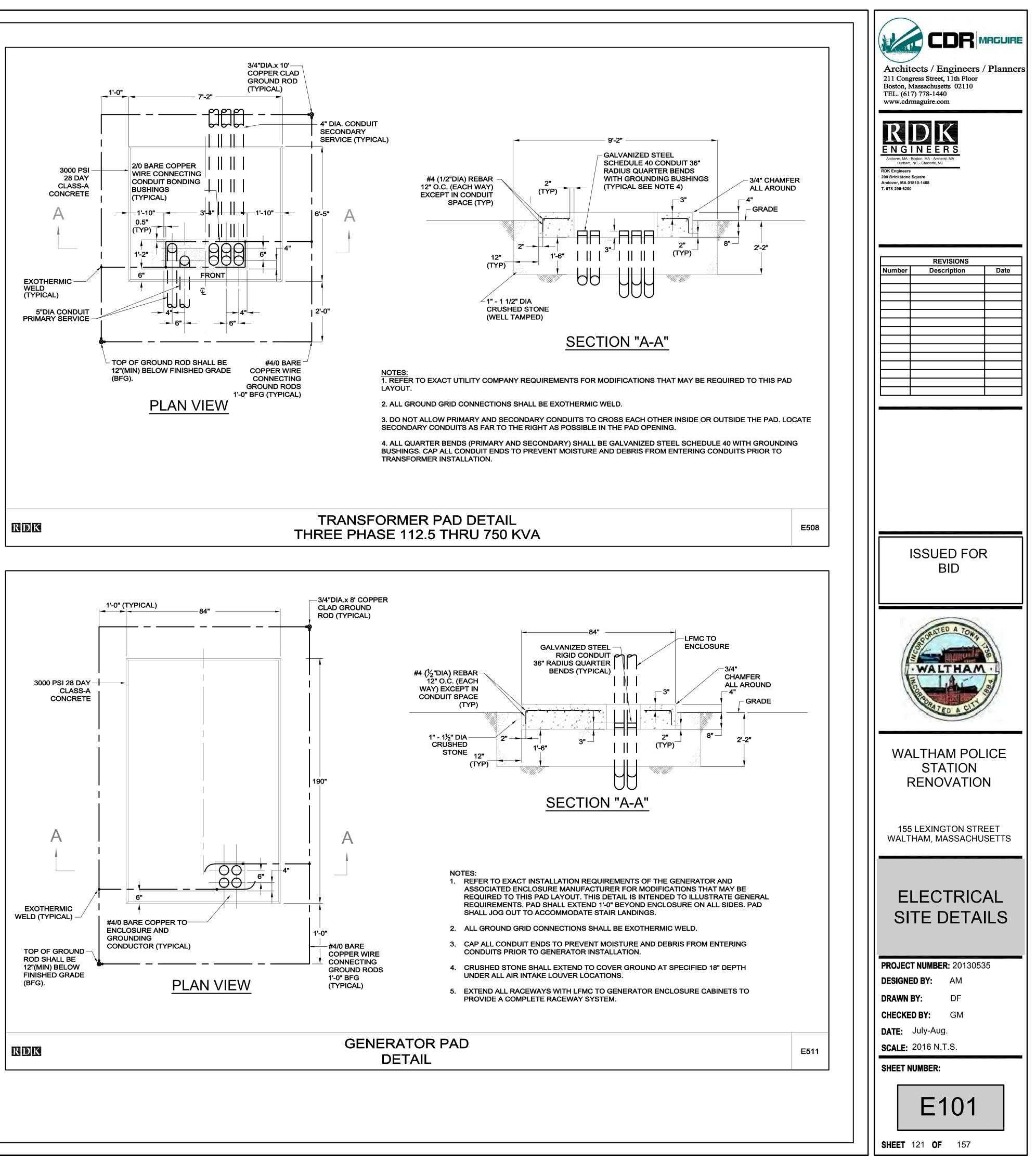
| DUCT BANK CONDUIT SCHEDULE     |         |                   |  |  |
|--------------------------------|---------|-------------------|--|--|
| DESCRIPTION                    | CONDUIT | CONDUCTORS        |  |  |
| RANSFORMER PRIMARY FEEDERS     | 5"C     | BY NSTAR          |  |  |
| RANSFORMER SECONDARY<br>EEDERS | 4"C     | REFER TO ONE LINE |  |  |
| PARE                           | 5"      | NOTE 6            |  |  |
| PARE                           | 4"      | NOTE 6            |  |  |
|                                |         |                   |  |  |

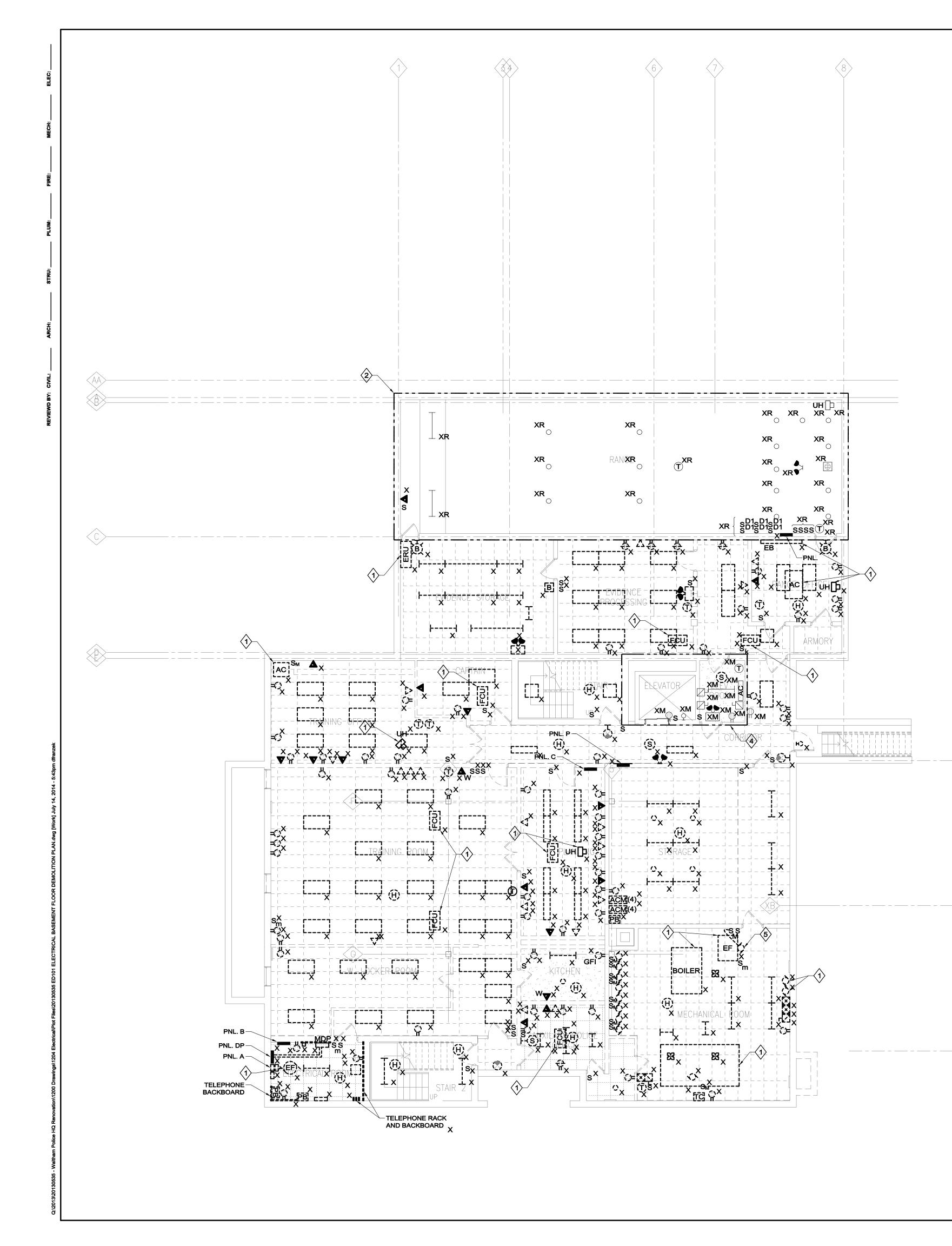
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| REVISIONS Number Description Date  |
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| ISSUED FOR<br>BID  |
| WALTHAM .<br>NOR ATED A TOWN   |
| WALTHAM POLICE<br>STATION<br>RENOVATION  |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| ELECTRICAL<br>SITE PLAN  |
| PROJECT NUMBER: 20130535DESIGNED BY:AMDRAWN BY:DFCHECKED BY:GMDATE:July-Aug.SCALE:2016 N.T.S.  |
| SHEET NUMBER:<br>E100<br>SHEET 120 OF 157  |
| E100<br>SHEET 120 OF 157   |



\* SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION

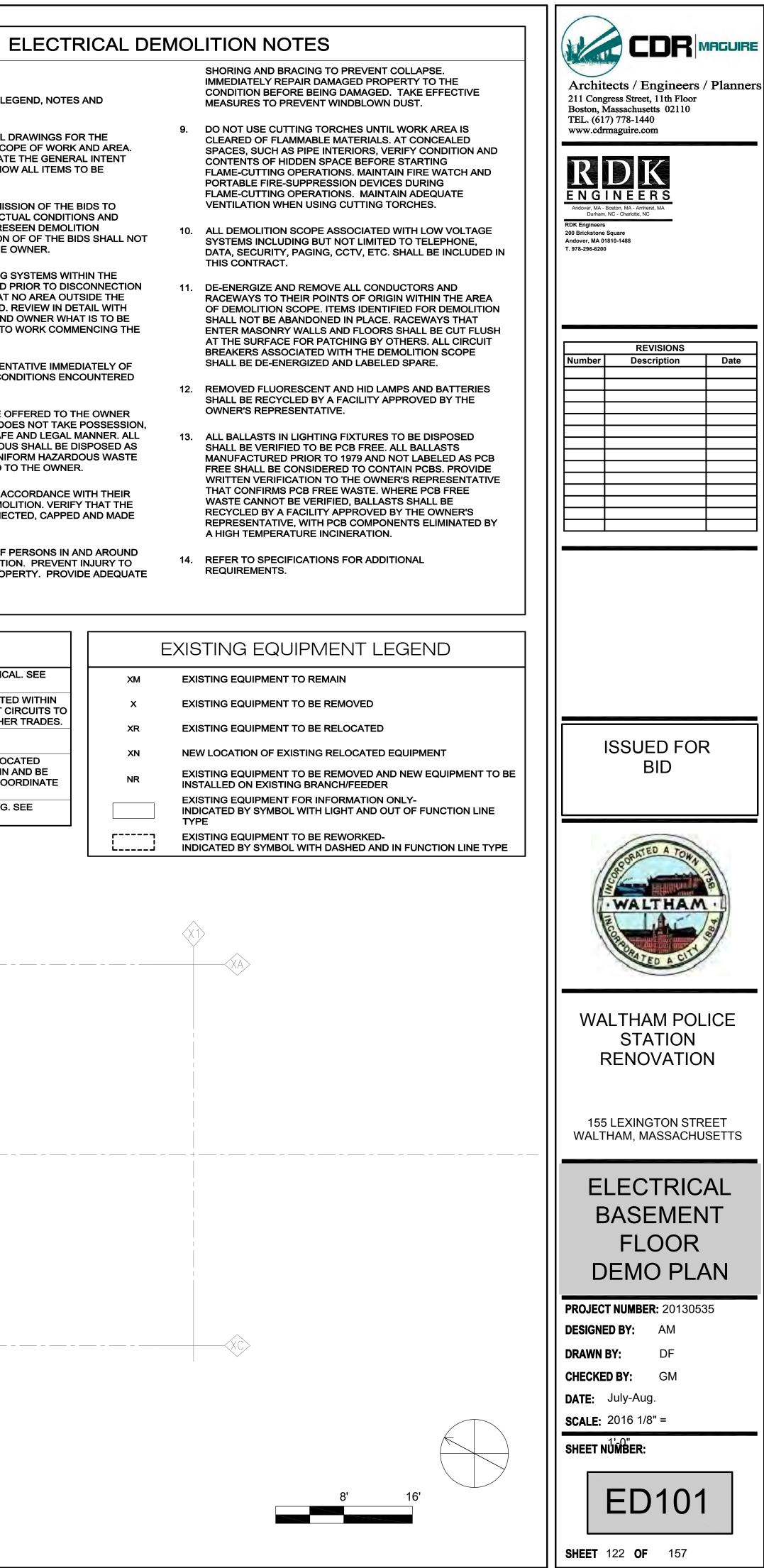


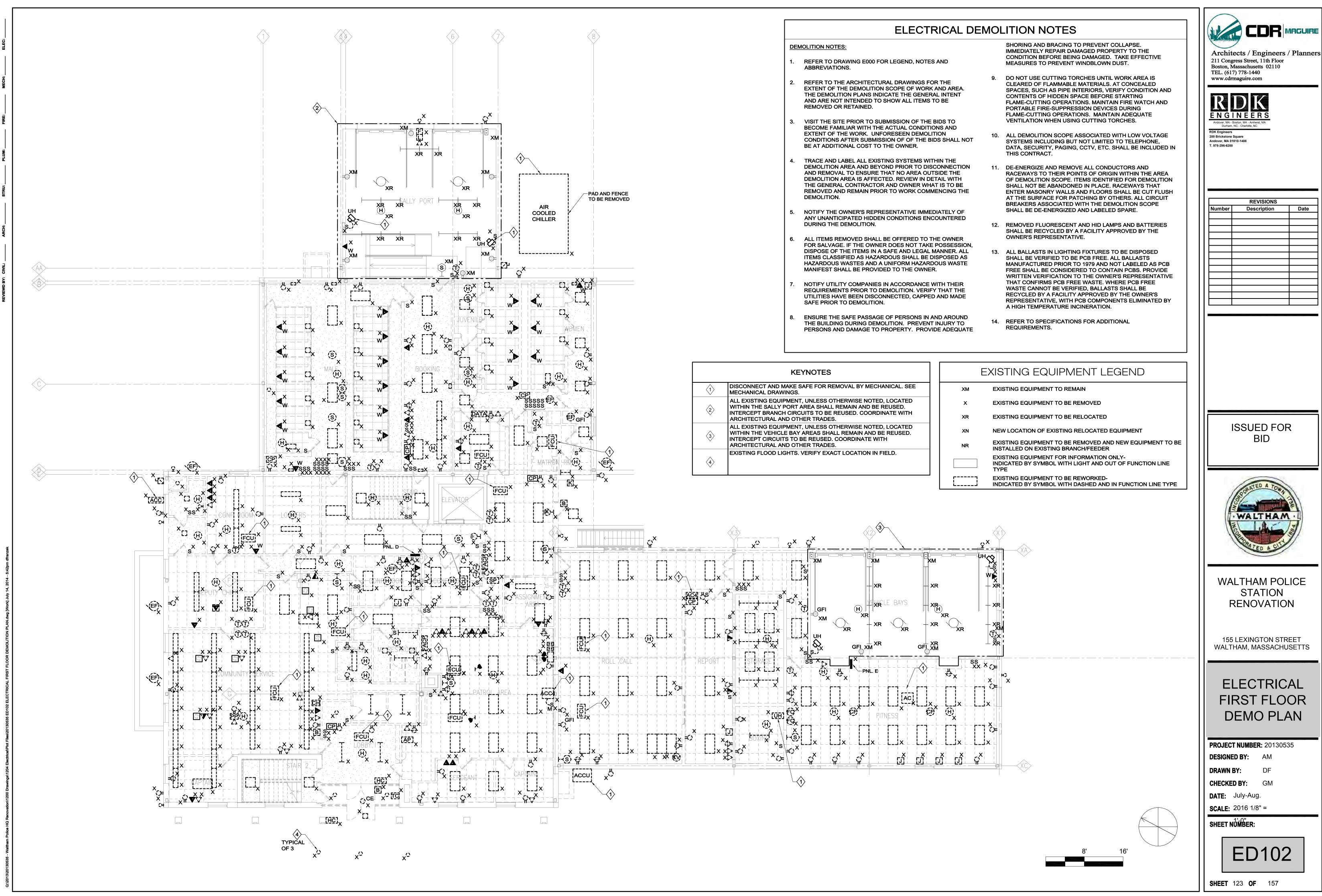


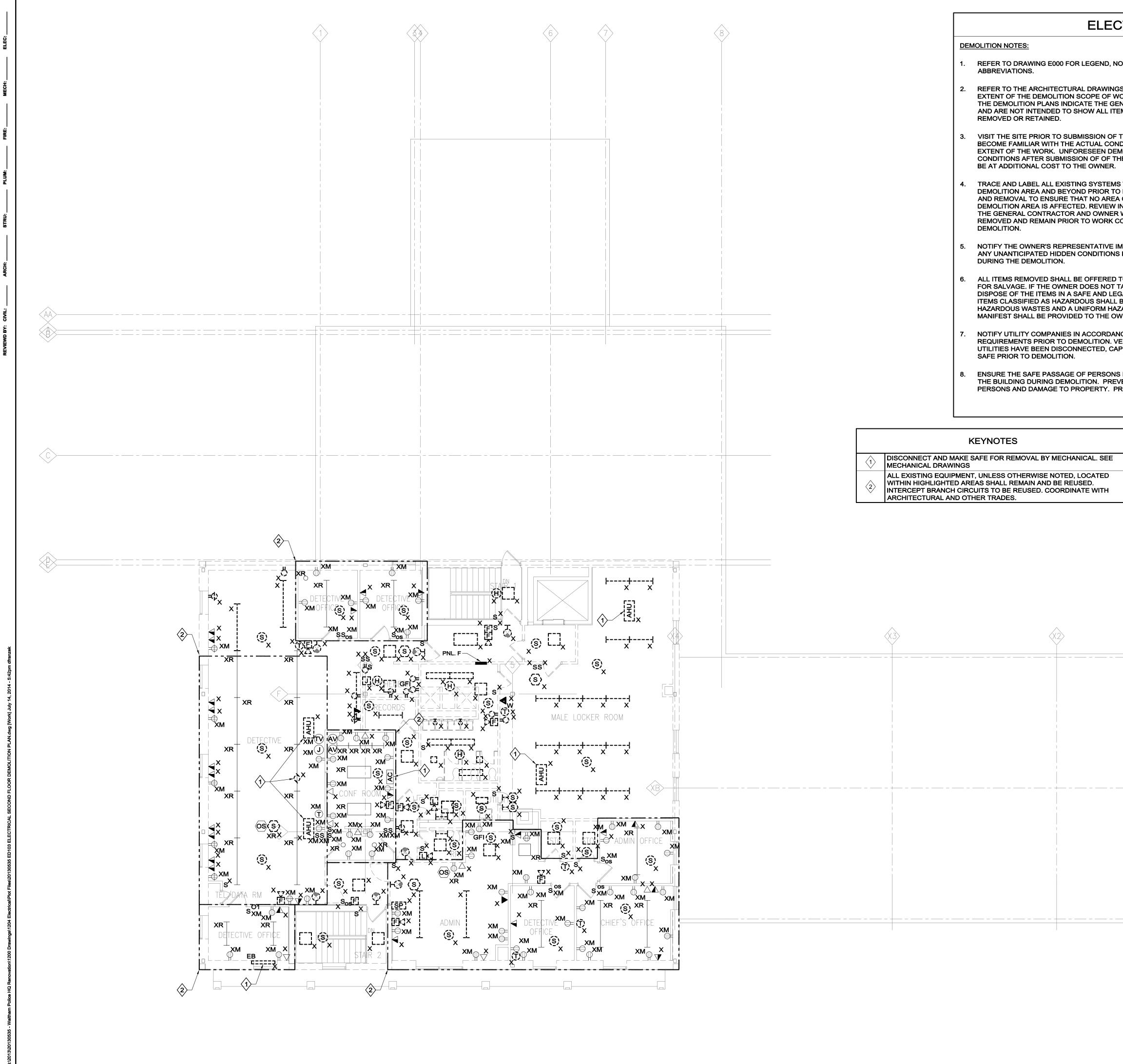


- DEMOLITION NOTES:
- 1. REFER TO DRAWING E000 FOR LEGEND, NOTES AND ABBREVIATIONS.
- 2. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXTENT OF THE DEMOLITION SCOPE OF WORK AND AREA. THE DEMOLITION PLANS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED.
- 3. VISIT THE SITE PRIOR TO SUBMISSION OF THE BIDS TO BECOME FAMILIAR WITH THE ACTUAL CONDITIONS AND EXTENT OF THE WORK. UNFORESEEN DEMOLITION CONDITIONS AFTER SUBMISSION OF OF THE BIDS SHALL NOT BE AT ADDITIONAL COST TO THE OWNER.
- 4. TRACE AND LABEL ALL EXISTING SYSTEMS WITHIN THE DEMOLITION AREA AND BEYOND PRIOR TO DISCONNECTION AND REMOVAL TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION AREA IS AFFECTED. REVIEW IN DETAIL WITH THE GENERAL CONTRACTOR AND OWNER WHAT IS TO BE REMOVED AND REMAIN PRIOR TO WORK COMMENCING THE DEMOLITION.
- 5. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY UNANTICIPATED HIDDEN CONDITIONS ENCOUNTERED DURING THE DEMOLITION.
- 6. ALL ITEMS REMOVED SHALL BE OFFERED TO THE OWNER FOR SALVAGE. IF THE OWNER DOES NOT TAKE POSSESSION, DISPOSE OF THE ITEMS IN A SAFE AND LEGAL MANNER. ALL ITEMS CLASSIFIED AS HAZARDOUS SHALL BE DISPOSED AS HAZARDOUS WASTES AND A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PROVIDED TO THE OWNER.
- 7. NOTIFY UTILITY COMPANIES IN ACCORDANCE WITH THEIR REQUIREMENTS PRIOR TO DEMOLITION. VERIFY THAT THE UTILITIES HAVE BEEN DISCONNECTED, CAPPED AND MADE SAFE PRIOR TO DEMOLITION.
- 8. ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE

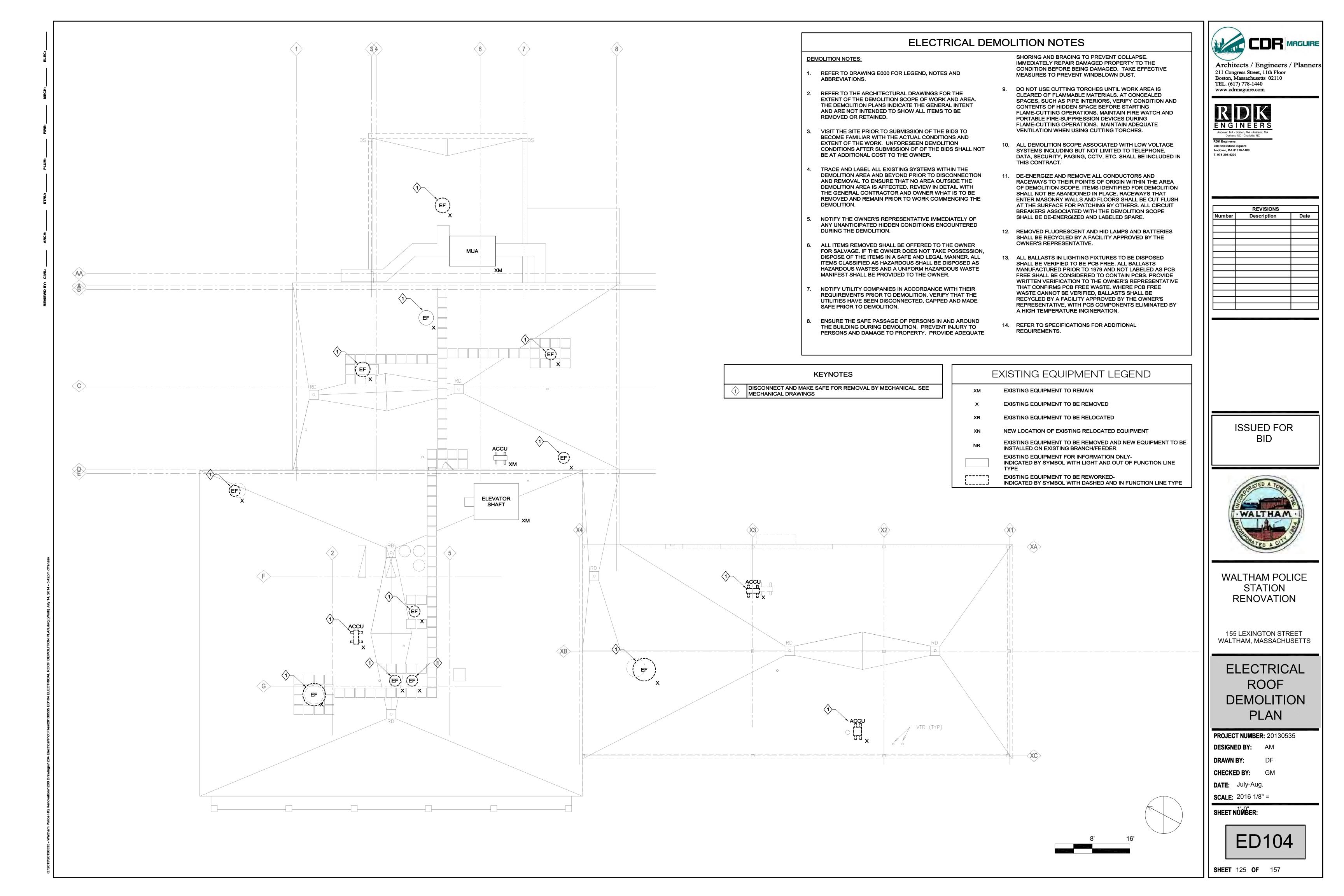
|   | KEYNOTES  |
|---|---|
|   | DISCONNECT AND MAKE SAFE FOR REMOVAL BY MECHANICAL. SEE<br>MECHANICAL DRAWINGS.   |
| 2 | EXISTING EQUIPMENT, UNLESS OTHERWISE NOTED, LOCATED WITHIN<br>THE EXISTING GUN RANGE SHALL BE REUSED. INTERCEPT CIRCUITS<br>BE REUSED. COORDINATE WITH ARCHITECTURAL AND OTHER TRADE                                      |
| 3 | NOTE NOT USED.  |
| 4 | ALL EXISTING EQUIPMENT, UNLESS OTHERWISE NOTED, LOCATED<br>WITHIN THE ELEVATOR AND MACHINE ROOM SHALL REMAIN AND BE<br>REUSED. INTERCEPT BRANCH CIRCUITS TO BE REUSED. COORDINATE<br>WITH ARCHITECTURAL AND OTHER TRADES. |
| 5 | DISCONNECT AND MAKE SAFE FOR REMOVAL BY PLUMBING. SEE<br>PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.  |

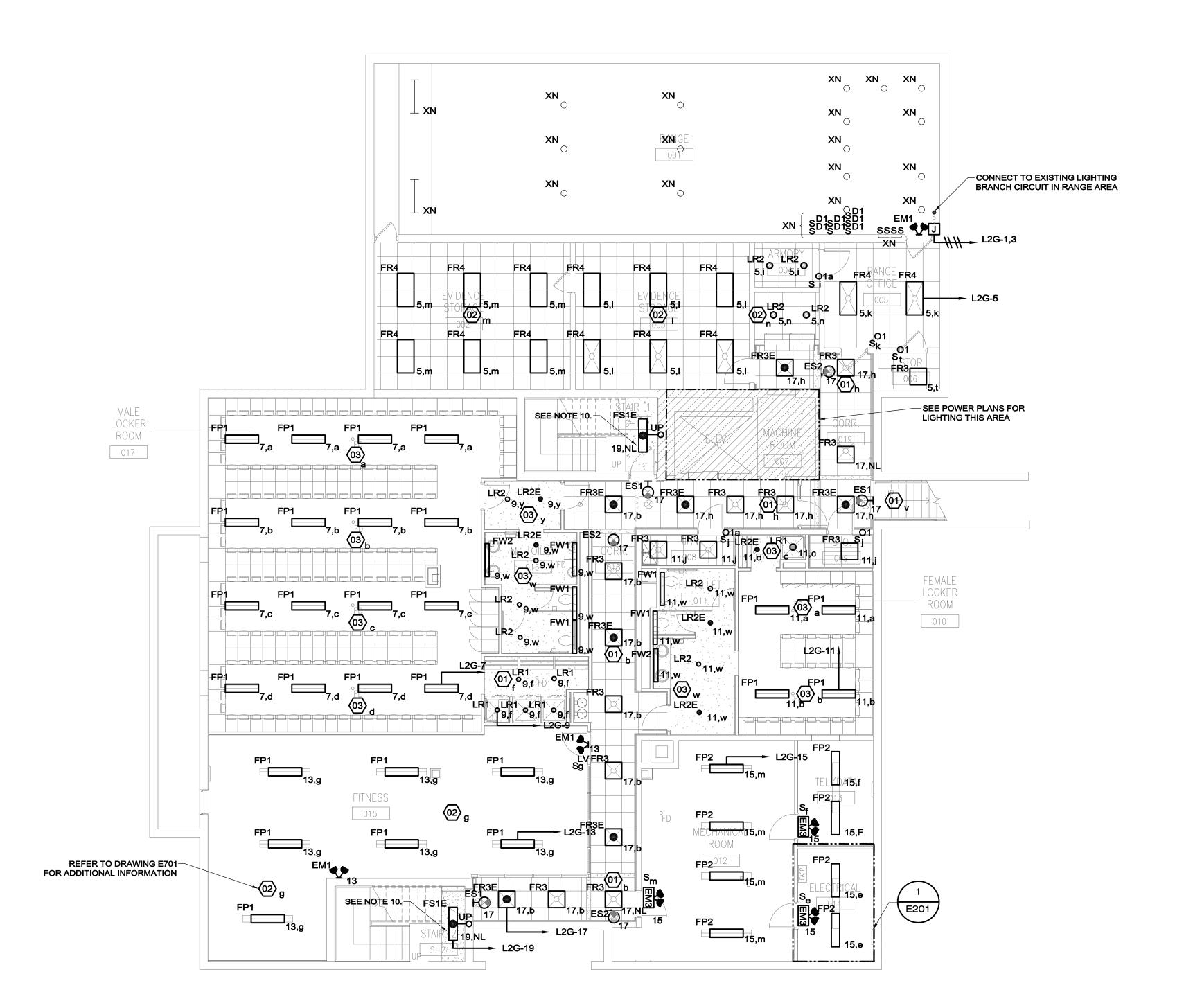


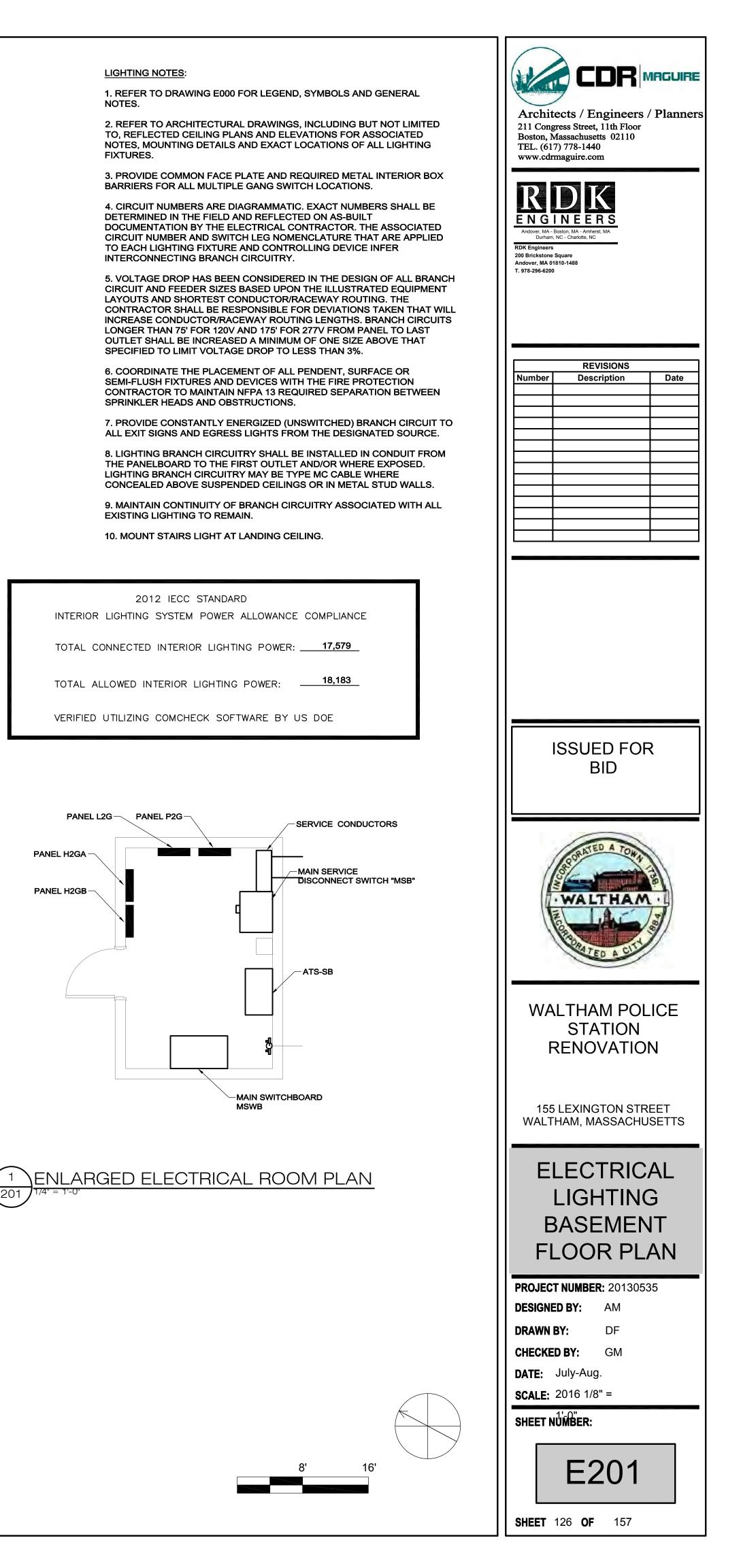




|   | MOLITION NOTES   |   |
|---|--|---|
|   | SHORING AND BRACING TO PREVENT COLLAPSE.   |   |
| NOTES AND   | IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE<br>CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE<br>MEASURES TO PREVENT WINDBLOWN DUST.  | Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110               |
| NGS FOR THE<br>WORK AND AREA.<br>GENERAL INTENT   | 9. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS<br>CLEARED OF FLAMMABLE MATERIALS. AT CONCEALED<br>SPACES, SUCH AS PIPE INTERIORS, VERIFY CONDITION AND<br>CONTENTS OF HIDDEN SPACE BEFORE STARTING   | TEL. (617) 778-1440<br>www.cdrmaguire.com   |
| TEMS TO BE<br>IF THE BIDS TO  | FLAME-CUTTING OPERATIONS. MAINTAIN FIRE WATCH AND<br>PORTABLE FIRE-SUPPRESSION DEVICES DURING<br>FLAME-CUTTING OPERATIONS. MAINTAIN ADEQUATE<br>VENTILATION WHEN USING CUTTING TORCHES.  | R D K<br>ENGINEERS<br>Andover, MA - Boston, MA - Amherist, MA   |
| ONDITIONS AND<br>EMOLITION<br>THE BIDS SHALL NOT<br>R.  | 10. ALL DEMOLITION SCOPE ASSOCIATED WITH LOW VOLTAGE<br>SYSTEMS INCLUDING BUT NOT LIMITED TO TELEPHONE,<br>DATA, SECURITY, PAGING, CCTV, ETC. SHALL BE INCLUDED IN<br>THIS CONTRACT.   | Durham, NC - Charlotte, NC<br>RDK Engineers<br>200 Brickstone Square<br>Andover, MA 01810-1488<br>T. 978-296-6200 |
| MS WITHIN THE<br>TO DISCONNECTION<br>EA OUTSIDE THE<br>V IN DETAIL WITH<br>ER WHAT IS TO BE<br>COMMENCING THE                                   | 11. DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND<br>RACEWAYS TO THEIR POINTS OF ORIGIN WITHIN THE AREA<br>OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION<br>SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT<br>ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH<br>AT THE SURFACE FOR PATCHING BY OTHERS. ALL CIRCUIT<br>BREAKERS ASSOCIATED WITH THE DEMOLITION SCOPE  | REVISIONS   |
| E IMMEDIATELY OF<br>NS ENCOUNTERED<br>D TO THE OWNER  | SHALL BE DE-ENERGIZED AND LABELED SPARE.<br>12. REMOVED FLUORESCENT AND HID LAMPS AND BATTERIES<br>SHALL BE RECYCLED BY A FACILITY APPROVED BY THE<br>OWNER'S REPRESENTATIVE.  | Number     Description     Date   |
| T TAKE POSSESSION,<br>EGAL MANNER. ALL<br>L BE DISPOSED AS<br>AZARDOUS WASTE<br>OWNER.<br>ANCE WITH THEIR<br>VERIFY THAT THE<br>CAPPED AND MADE | 13. ALL BALLASTS IN LIGHTING FIXTURES TO BE DISPOSED<br>SHALL BE VERIFIED TO BE PCB FREE. ALL BALLASTS<br>MANUFACTURED PRIOR TO 1979 AND NOT LABELED AS PCB<br>FREE SHALL BE CONSIDERED TO CONTAIN PCBS. PROVIDE<br>WRITTEN VERIFICATION TO THE OWNER'S REPRESENTATIVE<br>THAT CONFIRMS PCB FREE WASTE. WHERE PCB FREE<br>WASTE CANNOT BE VERIFIED, BALLASTS SHALL BE<br>RECYCLED BY A FACILITY APPROVED BY THE OWNER'S<br>REPRESENTATIVE, WITH PCB COMPONENTS ELIMINATED BY |   |
| NS IN AND AROUND<br>EVENT INJURY TO<br>PROVIDE ADEQUATE   | A HIGH TEMPERATURE INCINERATION.         14. REFER TO SPECIFICATIONS FOR ADDITIONAL<br>REQUIREMENTS.   |   |
|   |  |   |
|   | EXISTING EQUIPMENT LEGEND  |   |
| ХМ  | EXISTING EQUIPMENT TO REMAIN   |   |
| x   | EXISTING EQUIPMENT TO BE REMOVED   |   |
| XR  | EXISTING EQUIPMENT TO BE RELOCATED   |   |
| ]XN   | NEW LOCATION OF EXISTING RELOCATED EQUIPMENT   | ISSUED FOR  |
| NR  | EXISTING EQUIPMENT TO BE REMOVED AND NEW EQUIPMENT TO BE<br>INSTALLED ON EXISTING BRANCH/FEEDER<br>EXISTING EQUIPMENT FOR INFORMATION ONLY-<br>INDICATED BY SYMBOL WITH LIGHT AND OUT OF FUNCTION LINE   | BID   |
|   | TYPE   |   |
|   | EXISTING EQUIPMENT TO BE REWORKED-<br>INDICATED BY SYMBOL WITH DASHED AND IN FUNCTION LINE TYPE  | WALTHAM .   |
|   |  | WALTHAM POLICE<br>STATION<br>RENOVATION   |
|   | ·  | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
|   |  | ELECTRICAL<br>SECOND FLOOR<br>DEMO PLAN   |
|   |  | PROJECT NUMBER: 20130535DESIGNED BY:AMDRAWN BY:DFCHECKED BY:GMDATE:July-Aug.                                      |
|   | 8' 16'   | scale: 2016 1/8" =<br>sheet NUMBER:<br>ED103  |
|   |  | <b>SHEET</b> 124 <b>OF</b> 157  |

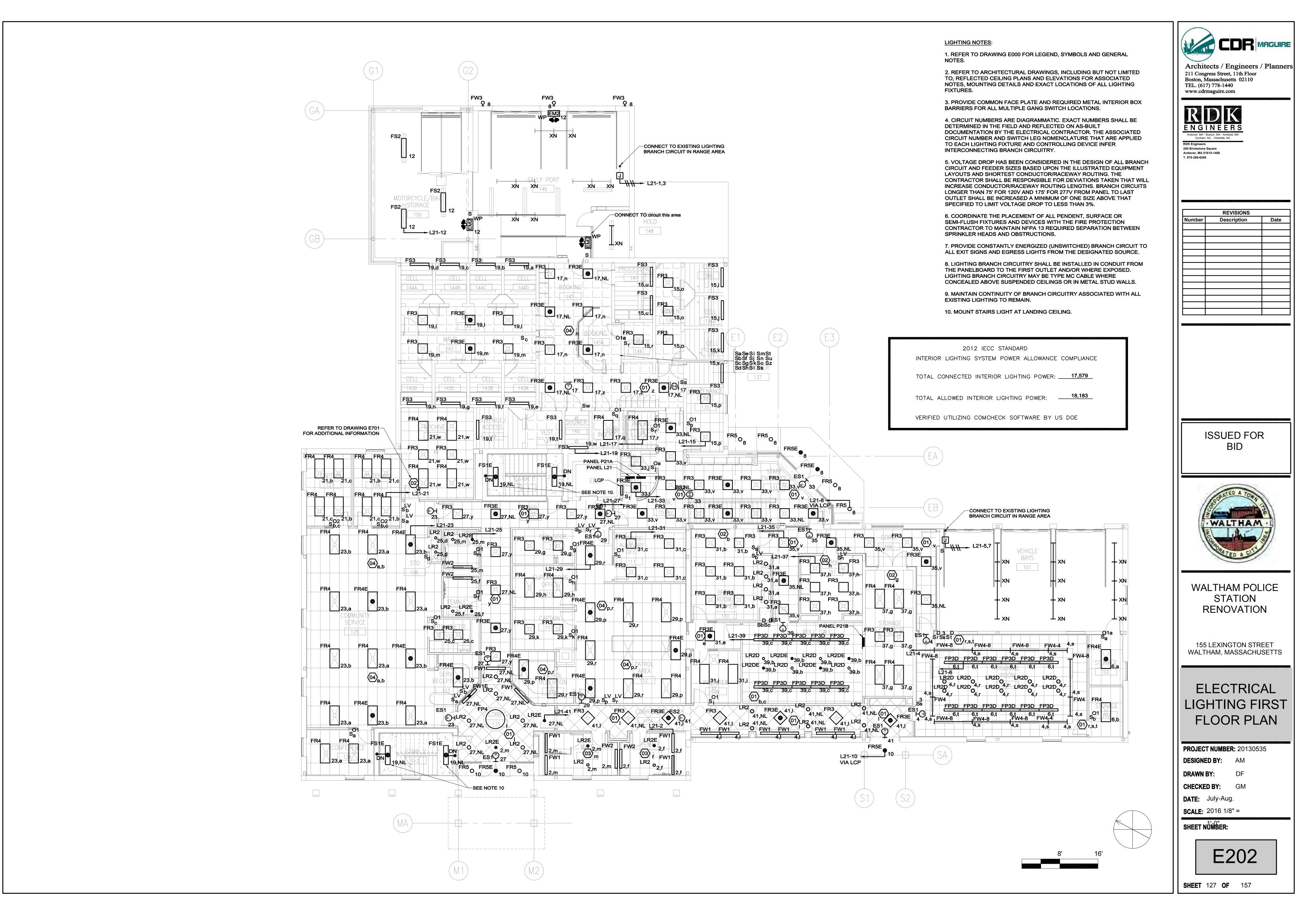




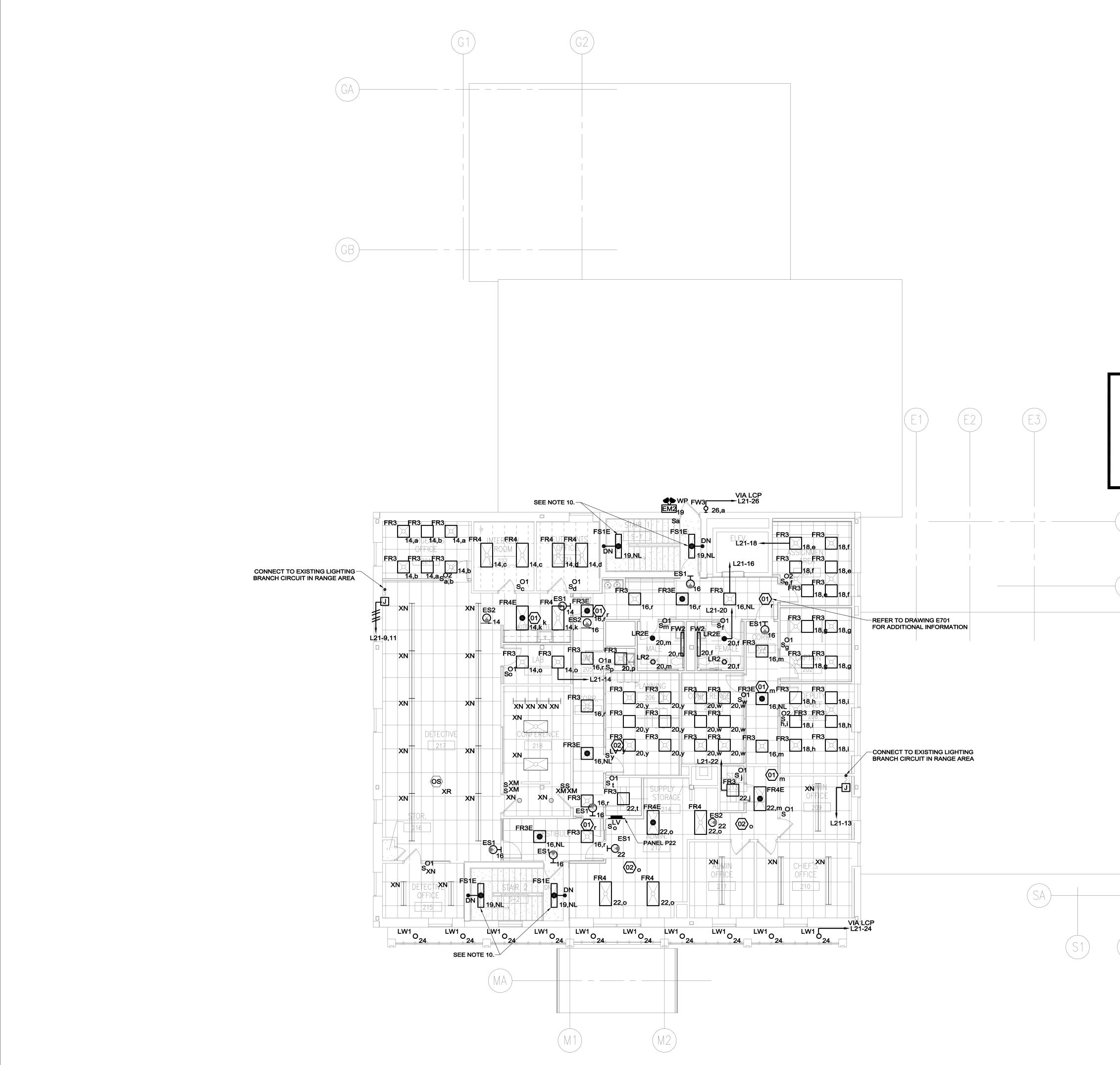


3/20130535 - Waitham Police HQ Renovation/1200 Drawings/1204 Electrical/Plot Files/20130535 E202 ELECTRICAL LIGHTING FIRST FLOOR PLAN.dwg [Work] July 14, 2014 - 5:41pm dfranzek

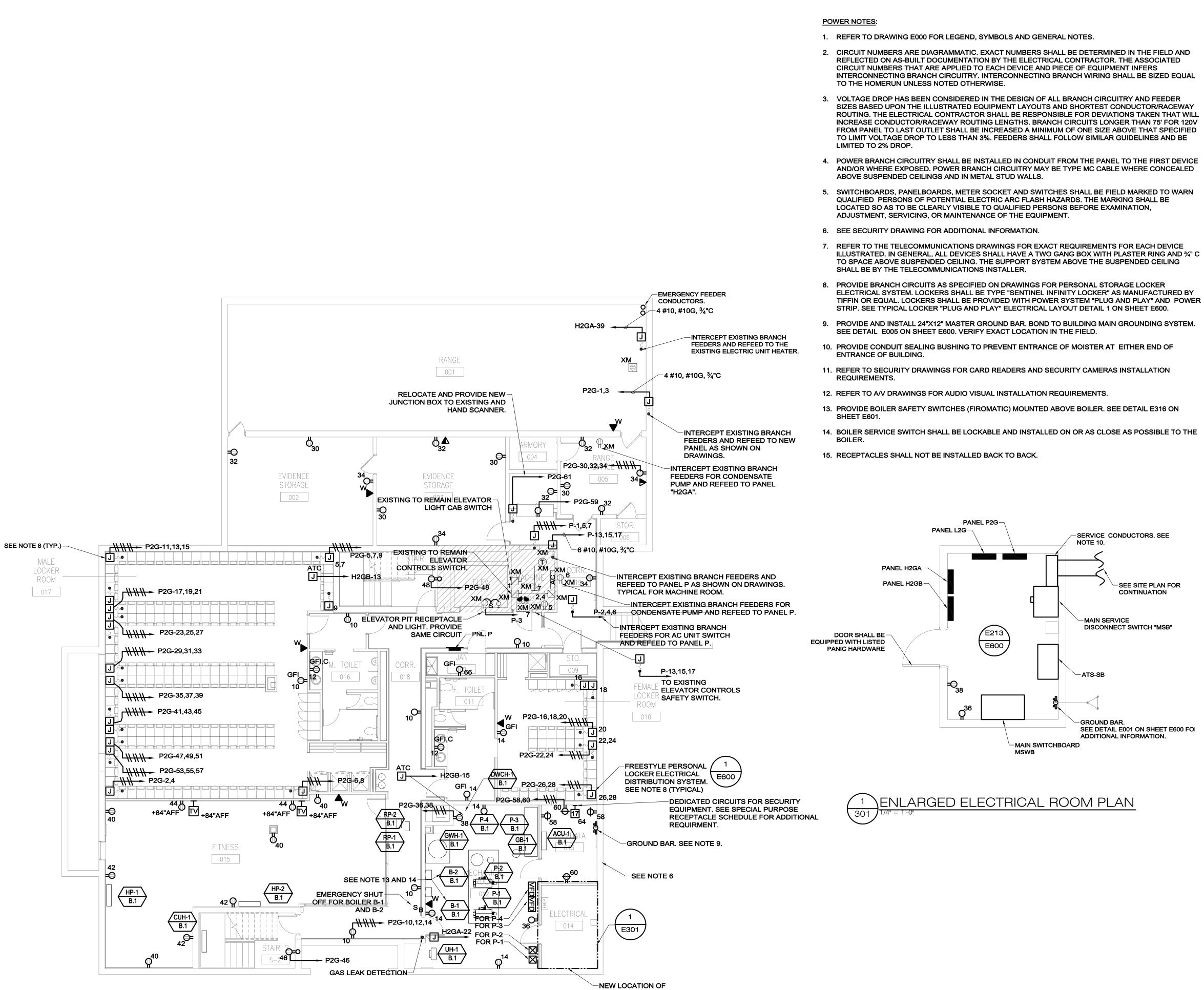
REVIEWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_\_ PLUM: \_\_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ ELEC: \_\_\_\_\_



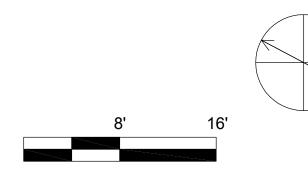


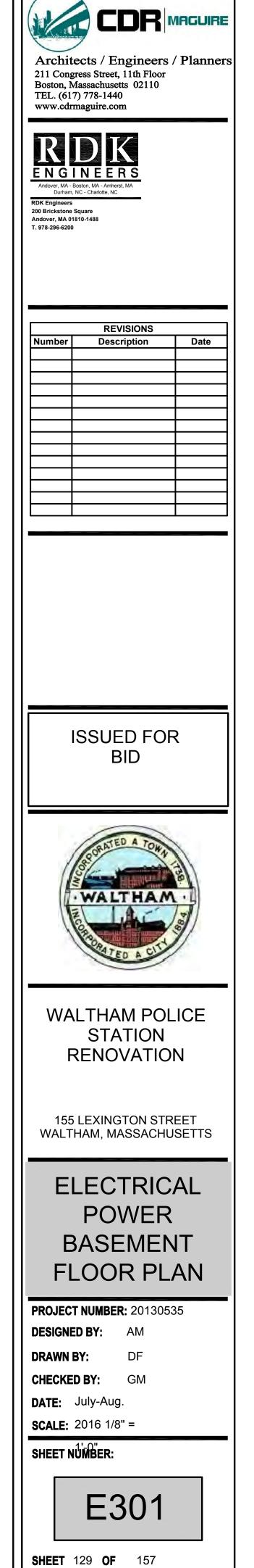


|   | $\bigcirc$   |
|---|--|
| LIGHTING NOTES:<br>1. REFER TO DRAWING E000 FOR LEGEND, SYMBOLS AND GENERAL   |  |
| NOTES.<br>2. REFER TO ARCHITECTURAL DRAWINGS, INCLUDING BUT NOT LIMITED<br>TO, REFLECTED CEILING PLANS AND ELEVATIONS FOR ASSOCIATED<br>NOTES, MOUNTING DETAILS AND EXACT LOCATIONS OF ALL LIGHTING   | Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440               |
| FIXTURES.<br>3. PROVIDE COMMON FACE PLATE AND REQUIRED METAL INTERIOR BOX   | www.cdrmaguire.com   |
| BARRIERS FOR ALL MULTIPLE GANG SWITCH LOCATIONS.<br>4. CIRCUIT NUMBERS ARE DIAGRAMMATIC. EXACT NUMBERS SHALL BE<br>DETERMINED IN THE FIELD AND REFLECTED ON AS-BUILT<br>DOCUMENTATION BY THE ELECTRICAL CONTRACTOR. THE ASSOCIATED<br>CIRCUIT NUMBER AND SWITCH LEG NOMENCLATURE THAT ARE APPLIED<br>TO EACH LIGHTING FIXTURE AND CONTROLLING DEVICE INFER<br>INTERCONNECTING BRANCH CIRCUITRY.   | READEDERS<br>ENGINEERS<br>Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC<br>RDK Engineers<br>200 Brickstone Square |
| 5. VOLTAGE DROP HAS BEEN CONSIDERED IN THE DESIGN OF ALL BRANCH<br>CIRCUIT AND FEEDER SIZES BASED UPON THE ILLUSTRATED EQUIPMENT<br>LAYOUTS AND SHORTEST CONDUCTOR/RACEWAY ROUTING. THE<br>CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS TAKEN THAT WILL<br>INCREASE CONDUCTOR/RACEWAY ROUTING LENGTHS. BRANCH CIRCUITS<br>LONGER THAN 75' FOR 120V AND 175' FOR 277V FROM PANEL TO LAST<br>OUTLET SHALL BE INCREASED A MINIMUM OF ONE SIZE ABOVE THAT<br>SPECIFIED TO LIMIT VOLTAGE DROP TO LESS THAN 3%. | Andover, MA 01810-1488<br>T. 978-296-6200  |
| 6. COORDINATE THE PLACEMENT OF ALL PENDENT, SURFACE OR<br>SEMI-FLUSH FIXTURES AND DEVICES WITH THE FIRE PROTECTION<br>CONTRACTOR TO MAINTAIN NFPA 13 REQUIRED SEPARATION BETWEEN<br>SPRINKLER HEADS AND OBSTRUCTIONS.   | REVISIONS       Number     Description     Date  |
| 7. PROVIDE CONSTANTLY ENERGIZED (UNSWITCHED) BRANCH CIRCUIT TO ALL EXIT SIGNS AND EGRESS LIGHTS FROM THE DESIGNATED SOURCE.   |  |
| 8. LIGHTING BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM<br>THE PANELBOARD TO THE FIRST OUTLET AND/OR WHERE EXPOSED.<br>LIGHTING BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE<br>CONCEALED ABOVE SUSPENDED CEILINGS OR IN METAL STUD WALLS.   |  |
| 9. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING LIGHTING TO REMAIN.   |  |
| 10. MOUNT STAIRS LIGHT AT LANDING CEILING.  |  |
|   |  |
| 2012 IECC STANDARD<br>INTERIOR LIGHTING SYSTEM POWER ALLOWANCE COMPLIANCE   |  |
| TOTAL CONNECTED INTERIOR LIGHTING POWER:  |  |
| TOTAL ALLOWED INTERIOR LIGHTING POWER:  |  |
|   |  |
| VERIFIED UTILIZING COMCHECK SOFTWARE BY US DOE  | ISSUED FOR   |
|   | BID  |
|   |  |
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| B   | SECORATED A TOWN   |
|   | WALTHAM  |
|   | A CONTRACT OF A  |
|   | PATED A CIT  |
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|   | WALTHAM POLICE<br>STATION  |
|   | RENOVATION   |
|   | 155 LEXINGTON STREET   |
|   | WALTHAM, MASSACHUSETTS   |
|   | ELECTRICAL   |
|   | LIGHTING   |
|   | SECOND FLOOR   |
|   | PLAN   |
|   | PROJECT NUMBER: 20130535<br>DESIGNED BY: AM  |
|   | DRAWN BY: DF   |
| 52)   | CHECKED BY: GM<br>DATE: July-Aug.  |
|   | SCALE: 2016 1/8" =   |
|   | SHEET NUMBER:  |
| 8' 16'  | E203   |
|   |  |
|   | <b>SHEET</b> 128 <b>OF</b> 157   |

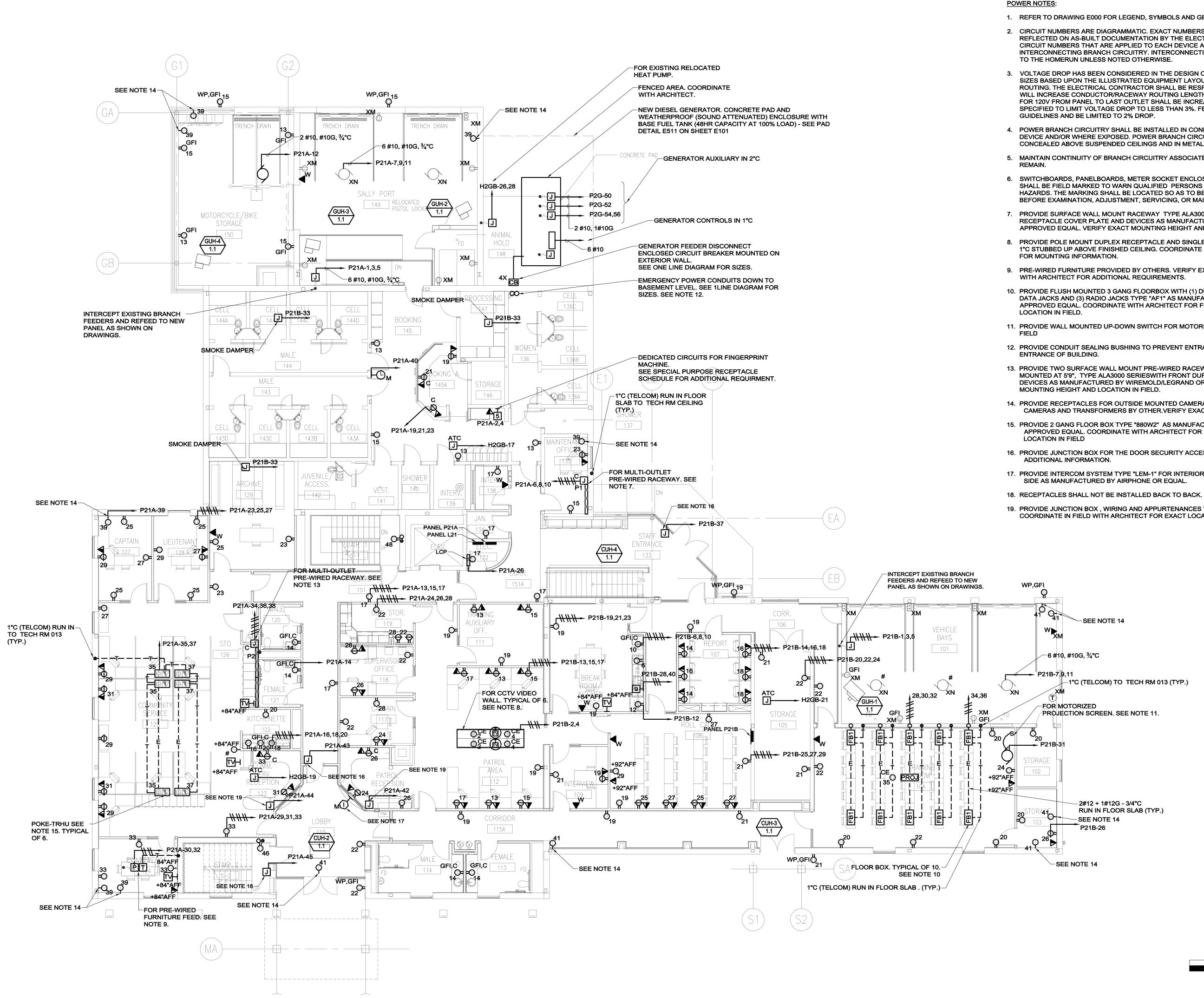


ELECTRICAL ROOM









1. REFER TO DRAWING E000 FOR LEGEND, SYMBOLS AND GENERAL NOTES.

2. CIRCUIT NUMBERS ARE DIAGRAMMATIC. EXACT NUMBERS SHALL BE DETERMINED IN THE FIELD AND REFLECTED ON AS-BUILT DOCUMENTATION BY THE ELECTRICAL CONTRACTOR. 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

3. VOLTAGE DROP HAS BEEN CONSIDERED IN THE DESIGN OF ALL BRANCH CIRCUITRY AND FEEDER SIZES BASED UPON THE ILLUSTRATED EQUIPMENT LAYOUTS AND SHORTEST CONDUCTOR/RACEWAY ROUTING. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS TAKEN THAT WILL INCREASE CONDUCTOR/RACEWAY ROUTING LENGTHS. BRANCH CIRCUITS LONGER THAN 75' FOR 120V FROM PANEL TO LAST OUTLET SHALL BE INCREASED A MINIMUM OF ONE SIZE ABOVE THAT SPECIFIED TO LIMIT VOLTAGE DROP TO LESS THAN 3%. FEEDERS SHALL FOLLOW SIMILAR

4. POWER BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM THE PANEL TO THE FIRST DEVICE AND/OR WHERE EXPOSED. POWER BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE CONCEALED ABOVE SUSPENDED CEILINGS AND IN METAL STUD WALLS.

5. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING POWER DEVICES TO

6. SWITCHBOARDS, PANELBOARDS, METER SOCKET ENCLOSURES AND MOTOR CONTROL CENTERS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.

PROVIDE SURFACE WALL MOUNT RACEWAY TYPE ALA3000 SERIES WITH FRONT DUPLEX RECEPTACLE COVER PLATE AND DEVICES AS MANUFACTURED BY WIREMOLD/LEGRAND OR APPROVED EQUAL. VERIFY EXACT MOUNTING HEIGHT AND LOCATION IN FIELD.

8. PROVIDE POLE MOUNT DUPLEX RECEPTACLE AND SINGLE GANG BOX FOR TV MONITORS. PROVIDE 1"C STUBBED UP ABOVE FINISHED CEILING. COORDINATE IN FIELD WITH SECURITY AND ARCHITECT

9. PRE-WIRED FURNITURE PROVIDED BY OTHERS. VERIFY EXACT LOCATION IN FIELD. COORDINATED

10. PROVIDE FLUSH MOUNTED 3 GANG FLOORBOX WITH (1) DUPLEX RECEPTACLE, (1) VOICE JACK, (2) DATA JACKS AND (3) RADIO JACKS TYPE "AF1" AS MANUFACTURED BY WIREMOLD/LEGRAND OR APPROVED EQUAL. COORDINATE WITH ARCHITECT FOR FINISHES REQUIREMENTS. VERIFY EXACT

11. PROVIDE WALL MOUNTED UP-DOWN SWITCH FOR MOTORIZED SCREEN. VERIFY EXACT LOCATION IN

12. PROVIDE CONDUIT SEALING BUSHING TO PREVENT ENTRANCE OF MOISTER AT EITHER END OF

13. PROVIDE TWO SURFACE WALL MOUNT PRE-WIRED RACEWAY , ONE MOUNTED AT 4'-2" AND ONE MOUNTED AT 5'9", TYPE ALA3000 SERIESWITH FRONT DUPLEX RECEPTACLE COVER PLATE AND DEVICES AS MANUFACTURED BY WIREMOLD/LEGRAND OR APPROVED EQUAL. VERIFY EXACT

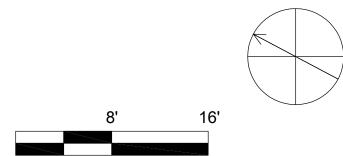
14. PROVIDE RECEPTACLES FOR OUTSIDE MOUNTED CAMERA LOW VOLTAGE TRANSFORMER. CAMERAS AND TRANSFORMERS BY OTHER. VERIFY EXACT LOCATION WITH SECURITY IN FIELD.

15. PROVIDE 2 GANG FLOOR BOX TYPE "880W2" AS MANUFACTURED BY WIREMOLD/LEGRAND OR APPROVED EQUAL. COORDINATE WITH ARCHITECT FOR FINISHES REQUIREMENTS. VERIFY EXACT

16. PROVIDE JUNCTION BOX FOR THE DOOR SECURITY ACCESS. REFER TO SECURITY DRAWINGS FOR

17. PROVIDE INTERCOM SYSTEM TYPE "LEM-1" FOR INTERIOR COMPONENT AND "LE-SS/A" FOR PUBLIC

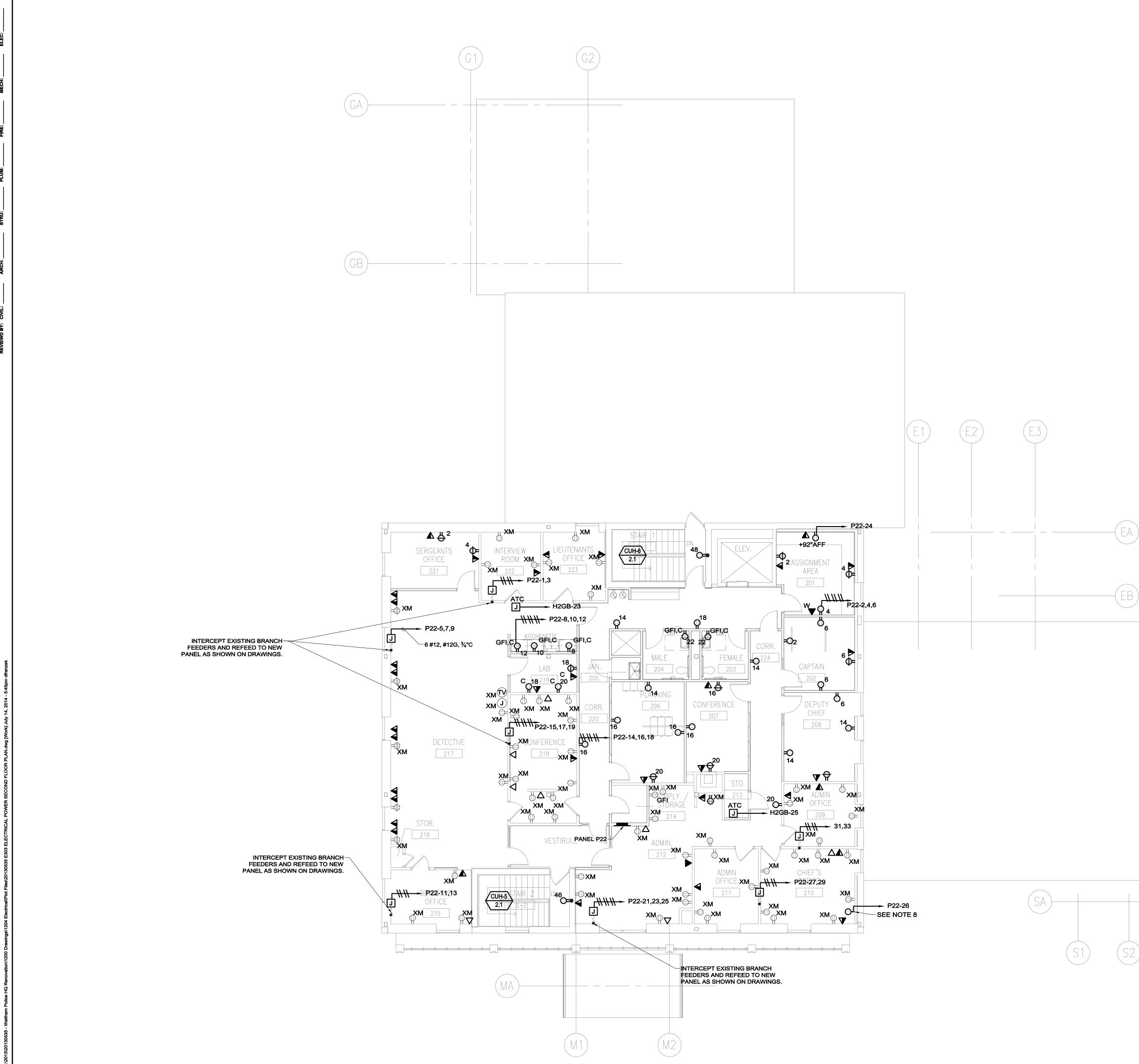
19. PROVIDE JUNCTION BOX, WIRING AND APPURTENANCES TO THE FIRE COUNTER SHUTTER DOOR. COORDINATE IN FIELD WITH ARCHITECT FOR EXACT LOCATION.



| Architects / Engineers / Planners  |
|--|
| 211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com                              |
| Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC<br>RDK Engineers<br>200 Brickstone Square<br>Andover, MA 01810-1488 |
| T. 978-296-6200  |
| REVISIONS Number Description Date  |
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| ISSUED FOR   |
| BID  |
| WALTHAM .<br>REALTHAM .<br>REALTHAM .  |
| WALTHAM POLICE<br>STATION<br>RENOVATION  |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| ELECTRICAL<br>POWER FIRST<br>FLOOR PLAN  |
| PROJECT NUMBER: 20130535DESIGNED BY:AMDRAWN BY:DFCHECKED BY:GMDATE:July-Aug.SCALE:2016 1/8" =  |
|  |

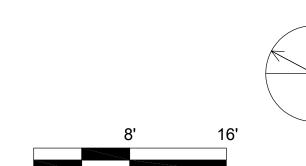
**SHEET** 130 **OF** 157

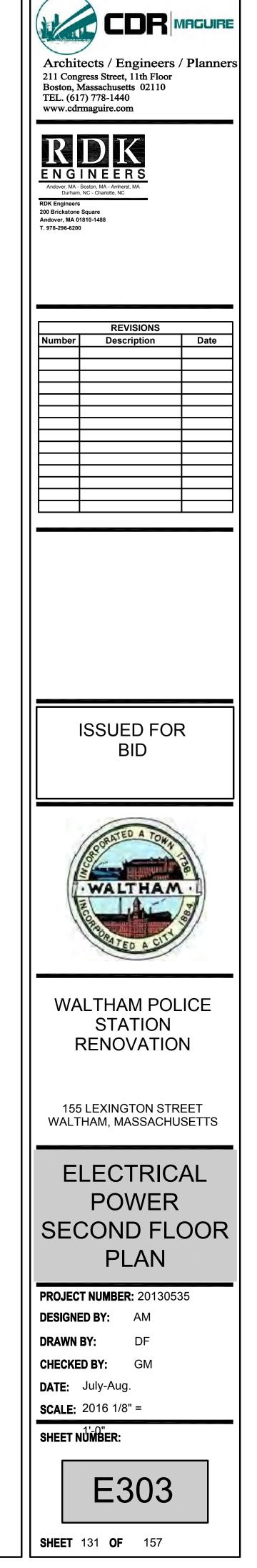
E302



POWER NOTES:

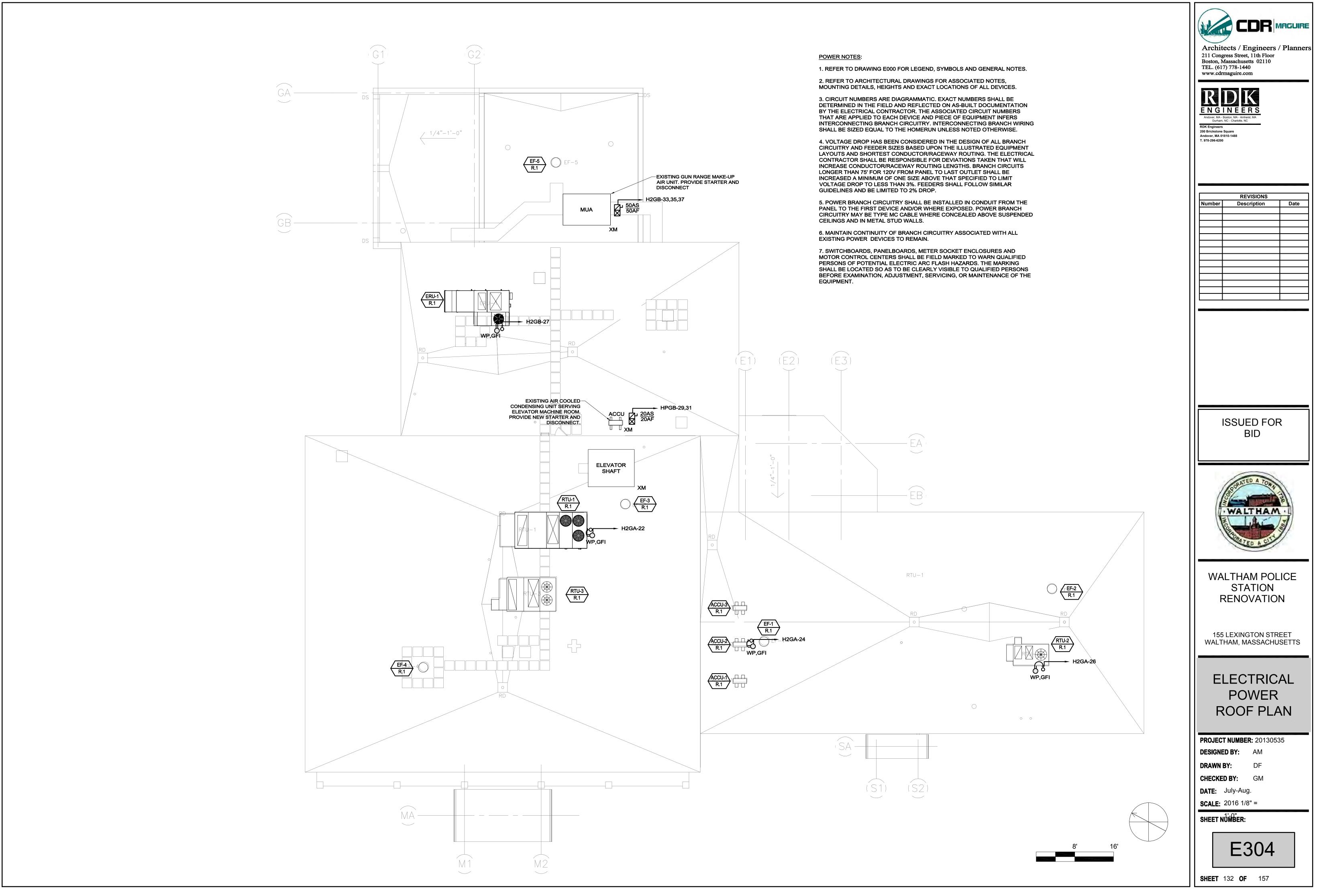
- 1. REFER TO DRAWING E000 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
- 2. REFER TO ARCHITECTURAL DRAWINGS FOR ASSOCIATED NOTES, MOUNTING DETAILS, HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.
- 3. CIRCUIT NUMBERS ARE DIAGRAMMATIC. EXACT NUMBERS SHALL BE DETERMINED IN THE FIELD AND REFLECTED ON AS-BUILT DOCUMENTATION BY THE ELECTRICAL CONTRACTOR. 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.
- 4. VOLTAGE DROP HAS BEEN CONSIDERED IN THE DESIGN OF ALL BRANCH CIRCUITRY AND FEEDER SIZES BASED UPON THE ILLUSTRATED EQUIPMENT LAYOUTS AND SHORTEST CONDUCTOR/RACEWAY ROUTING. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS TAKEN THAT WILL INCREASE CONDUCTOR/RACEWAY ROUTING LENGTHS. BRANCH CIRCUITS LONGER THAN 75' FOR 120V FROM PANEL TO LAST OUTLET SHALL BE INCREASED A MINIMUM OF ONE SIZE ABOVE THAT SPECIFIED TO LIMIT VOLTAGE DROP TO LESS THAN 3%. FEEDERS SHALL FOLLOW SIMILAR GUIDELINES AND BE LIMITED TO 2% DROP.
- 5. POWER BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM THE PANEL TO THE FIRST DEVICE AND/OR WHERE EXPOSED. POWER BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE CONCEALED ABOVE SUSPENDED CEILINGS AND IN METAL STUD WALLS.
- 6. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING POWER DEVICES TO REMAIN.
- 7. SWITCHBOARDS, PANELBOARDS, METER SOCKET ENCLOSURES AND MOTOR CONTROL CENTERS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMEN
- 8. PROVIDE RECEPTACLES FOR OUTSIDE MOUNTED CAMERA LOW VOLTAGE TRANSFORMER. CAMERAS AND TRANSFORMERS BY OTHER. VERIFY EXACT LOCATION WITH SECURITY IN FIELD.
- 9. RECEPTACLES SHALL NOT BE INSTALLED BACK TO BACK.



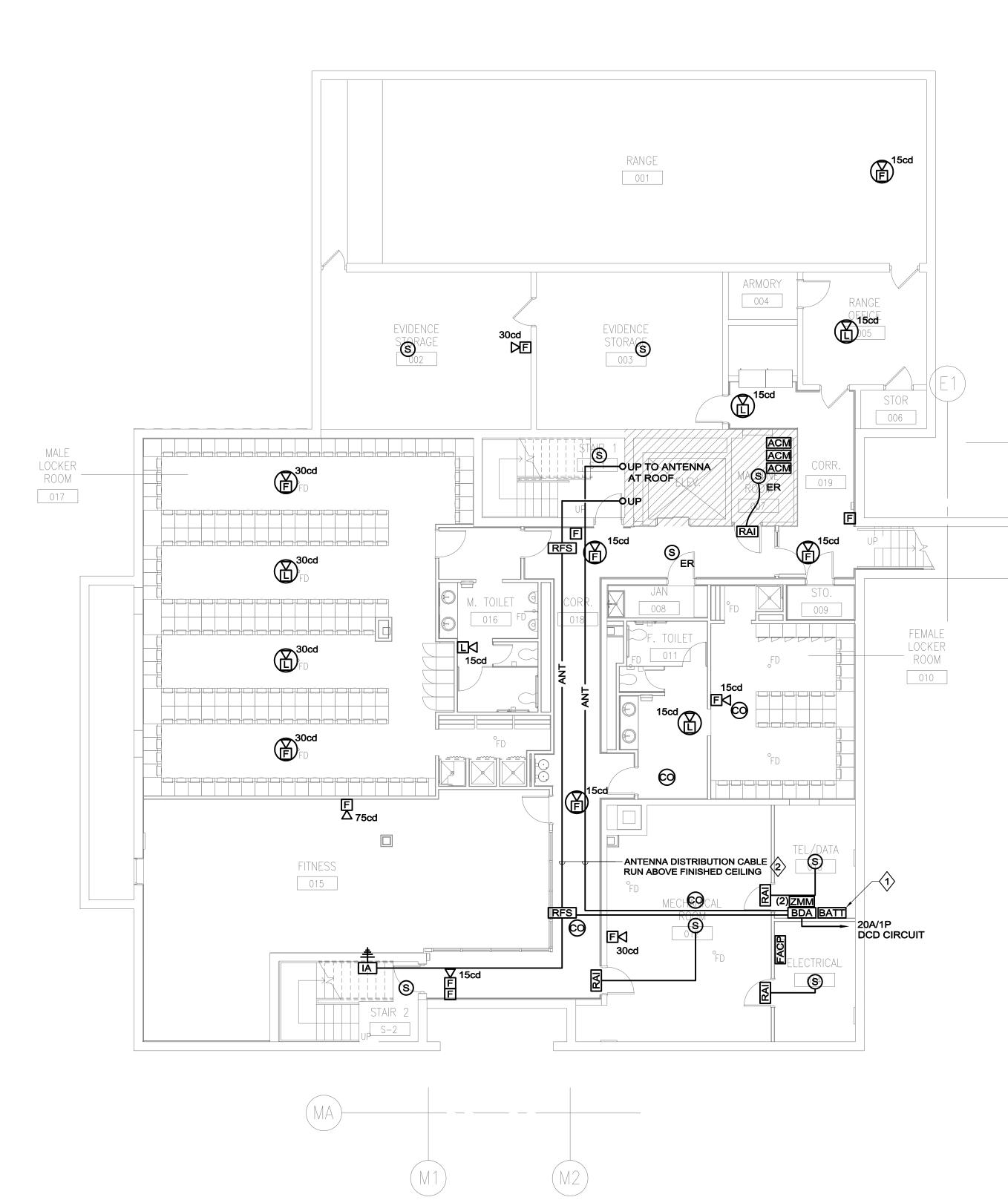


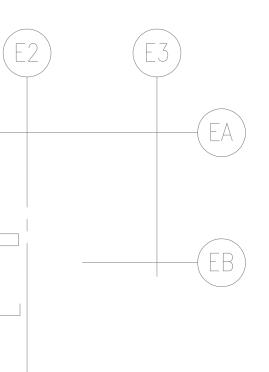
0130535 - Waltham Police HQ Renovation/1200 Drawings/1204 Electrical/Plot Files/20130535 E304 ELECTRICAL POWER ROOF PLAN.dwg [Work] July 14, 2014 - 5:45pm dfranzek

REVIEWD BY: CIVIL: \_\_\_\_\_ ARCH: \_\_\_\_\_ STRU: \_\_\_\_\_ PLUM: \_\_\_\_\_ FIRE: \_\_\_\_\_ MECH: \_\_\_\_\_ ELEC: \_\_\_\_\_



(320130535 - Waltham Police HQ Renovation/1200 Drawings/1204 Electrical/Plot Files/20130535 E401 ELECTRICAL FIRE ALARM BASEMENT FLOOR PLAN.dwg [Work] July 14, 2014 - 5:45pm dfranzek





FIRE ALARM NOTES:

1. REFER TO DRAWING E000 FOR LEGEND, SYMBOLS AND GENERAL NOTES.

2. REFER TO ARCHITECTURAL DRAWINGS FOR ASSOCIATED NOTES, MOUNTING DETAILS, HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.

3. FIRE ALARM BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM THE PANEL TO THE FIRST DEVICE AND/OR WHERE EXPOSED. FIRE ALARM BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE CONCEALED ABOVE SUSPENDED CEILINGS AND IN METAL STUD WALLS.

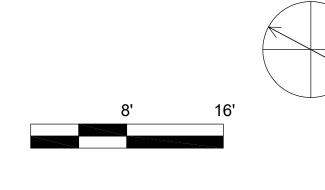
4. MC CABLE FOR FIRE ALARM SERVICE SHALL HAVE A RED IDENTIFIER ALONG ITS ENTIRE LENGTH. JUNCTION BOX COVERS AND CONDUIT COUPLINGS FOR ALL FIRE ALARM WIRING RACEWAYS SHALL BE PAINTED RED PRIOR TO INSTALLATION.

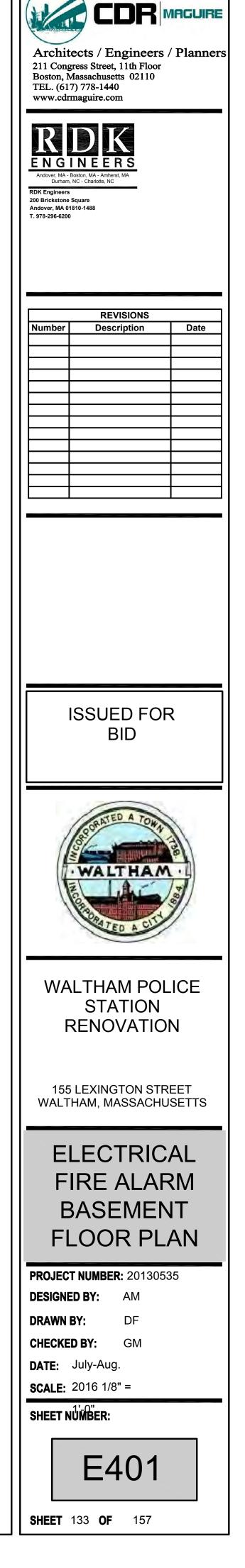
5. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING FIRE ALARM DEVICES TO REMAIN.

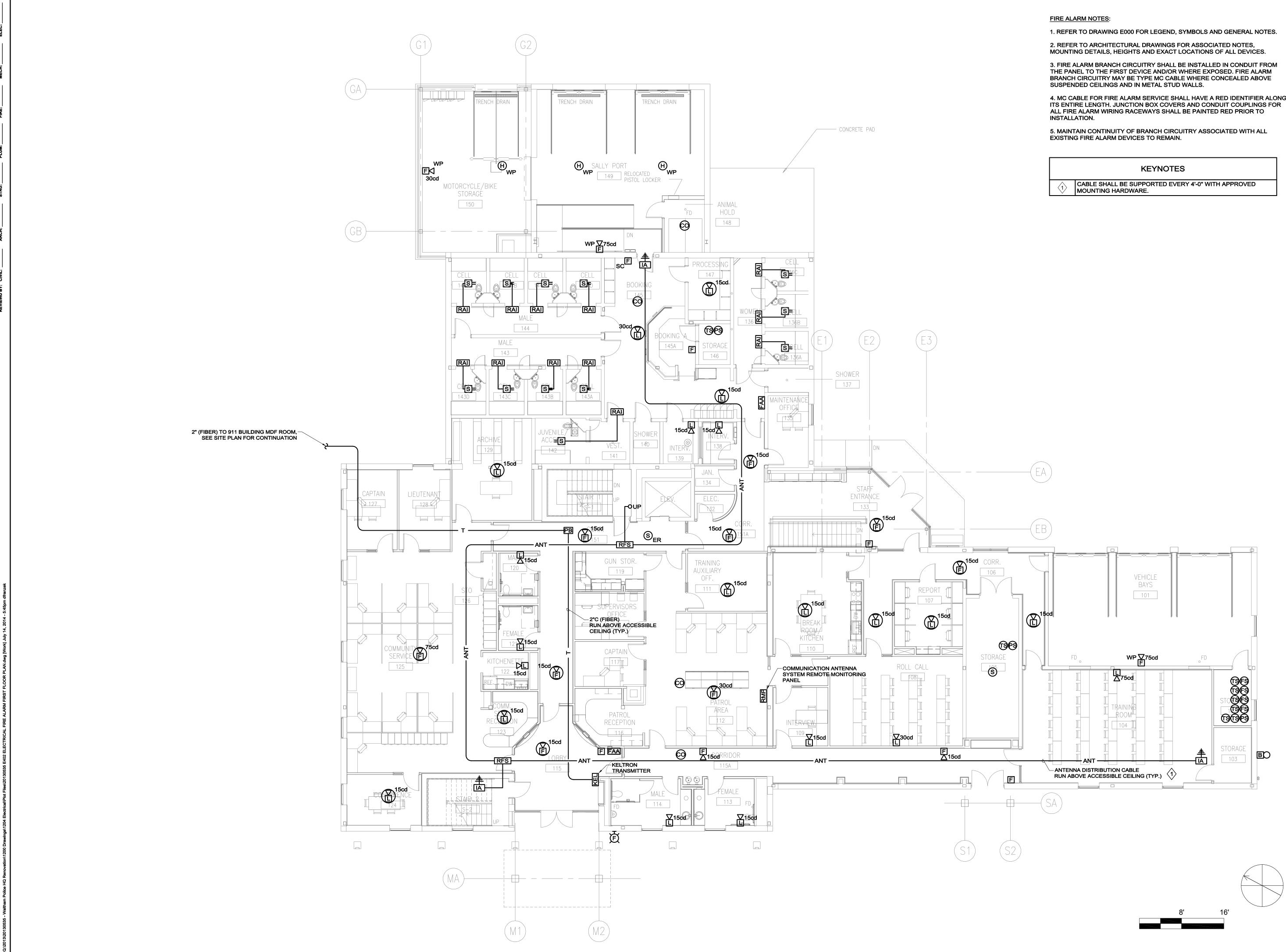
### KEYNOTES

 $\langle 1 \rangle$  $\langle 2 \rangle$ 

- PROVIDE (2) ZONE MONITORING MODULES (ZMM) FOR TROUBLE NOTIFICATION AT THE SUPERVISORY STATION.
- CABLE SHALL BE SUPPORTED EVERY 4'-0" WITH APPROVED MOUNTING HARDWARE.

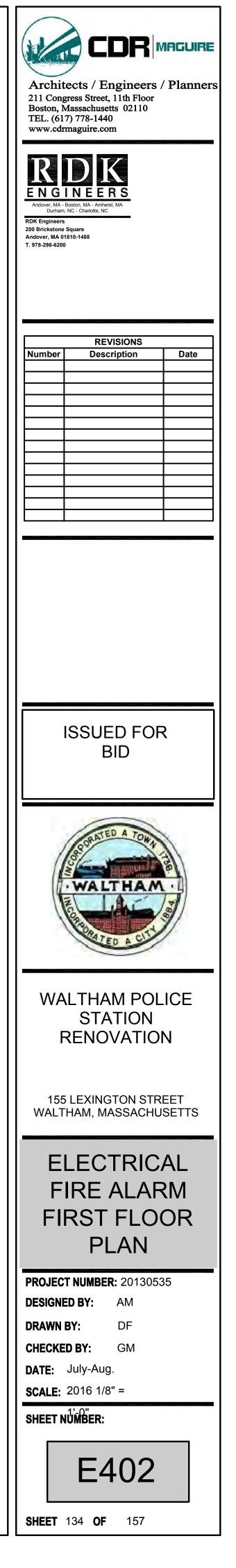




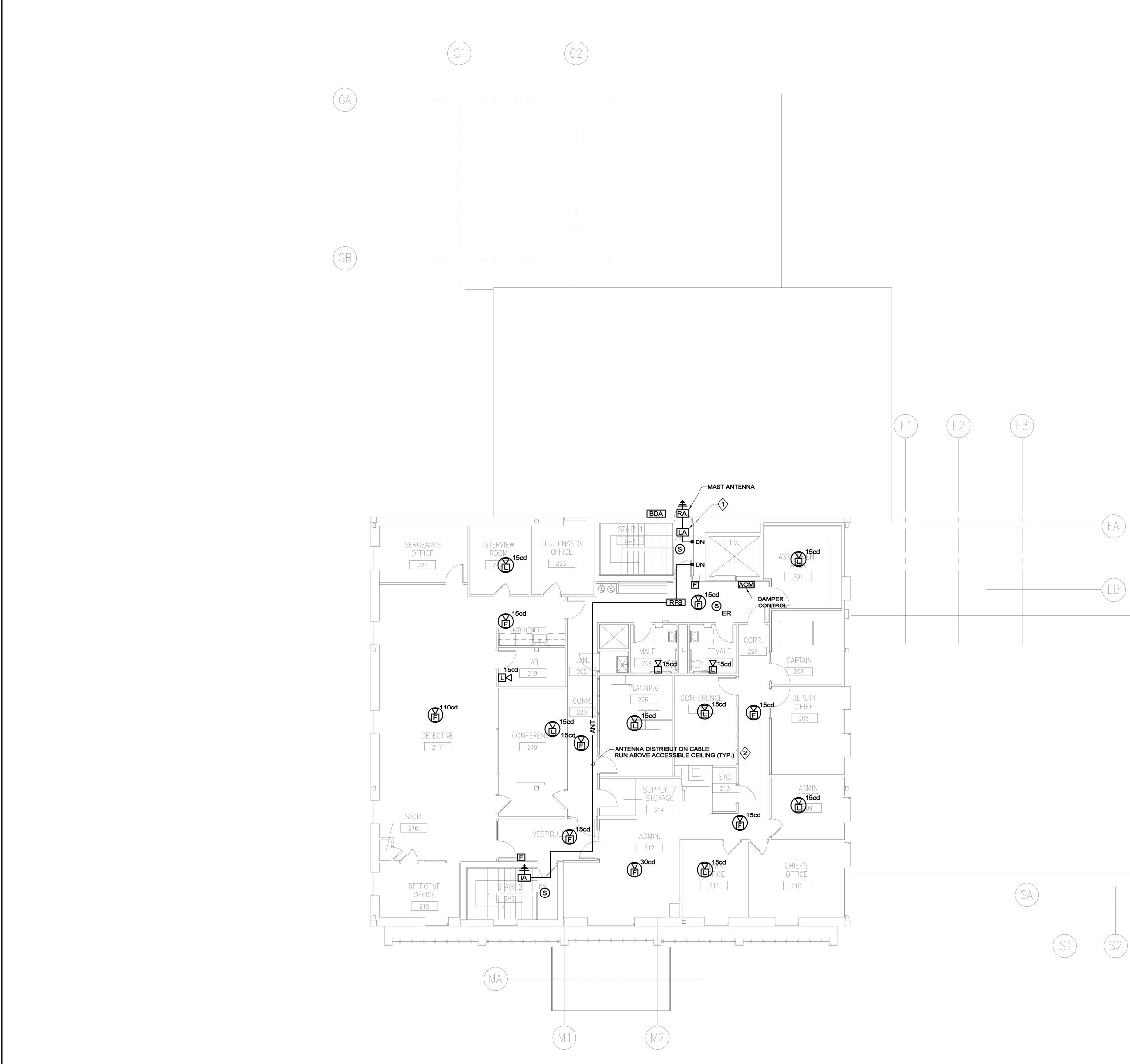


4. MC CABLE FOR FIRE ALARM SERVICE SHALL HAVE A RED IDENTIFIER ALONG









FIRE ALARM NOTES:

1. REFER TO DRAWING E000 FOR LEGEND, SYMBOLS AND GENERAL NOTES.

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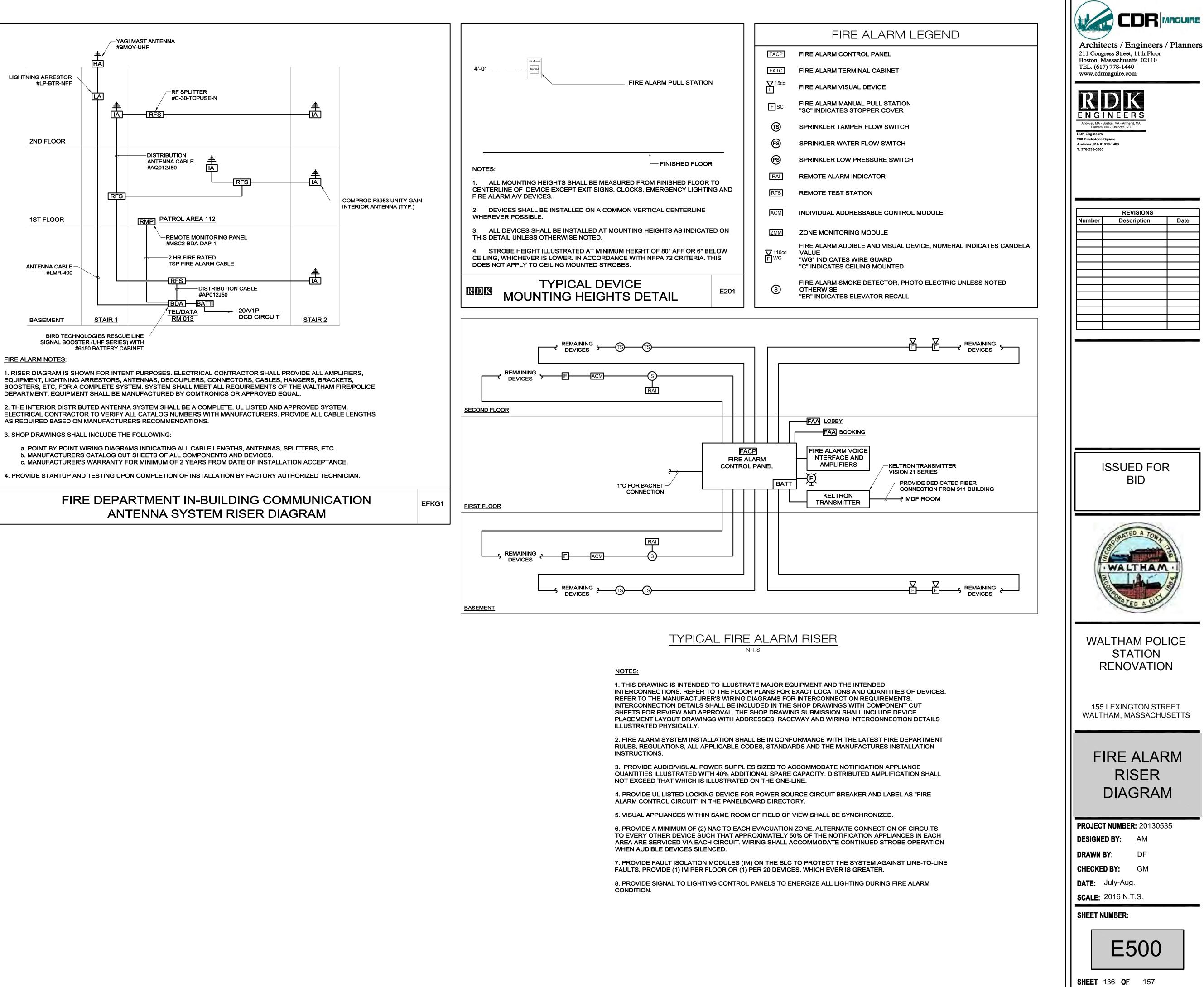
### KEYNOTES

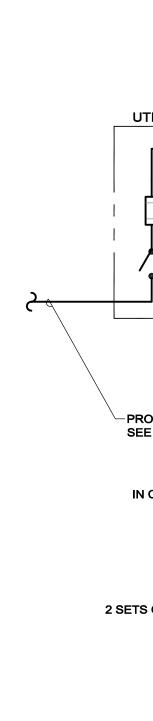
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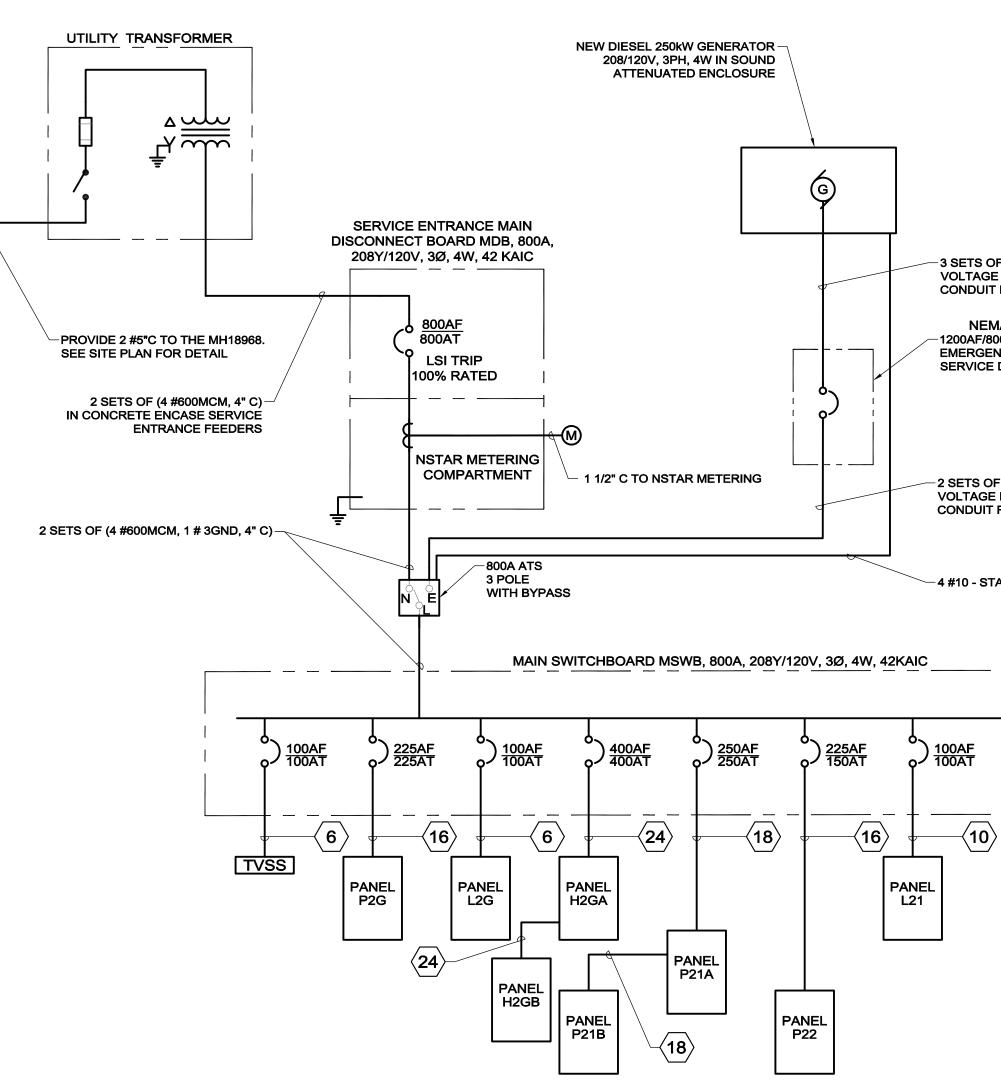
- LOCATE LIGHTNING PROTECTION UNIT AT CABLE ROOF PENETRATION. BOND TO BUILDING GROUND SYSTEM.
- CABLE SHALL BE SUPPORTED EVERY 4'-0" WITH APPROVED MOUNTING HARDWARE.



| 211 Congre            |                                 | / Planners |
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| DESIGNED              |                                 |            |
| DRAWN BY              | <b>f:</b> DF<br><b>BY:</b> MM   |            |
| DATE: Ju              | uly-Aug.                        |            |
| SCALE: 20<br>SHEET NU |                                 |            |
| SHEET NÜ              | MBEK:                           |            |
|                       | E403                            |            |
|                       |                                 |            |
| SHEET 13              | 35 <b>OF</b> 157                |            |





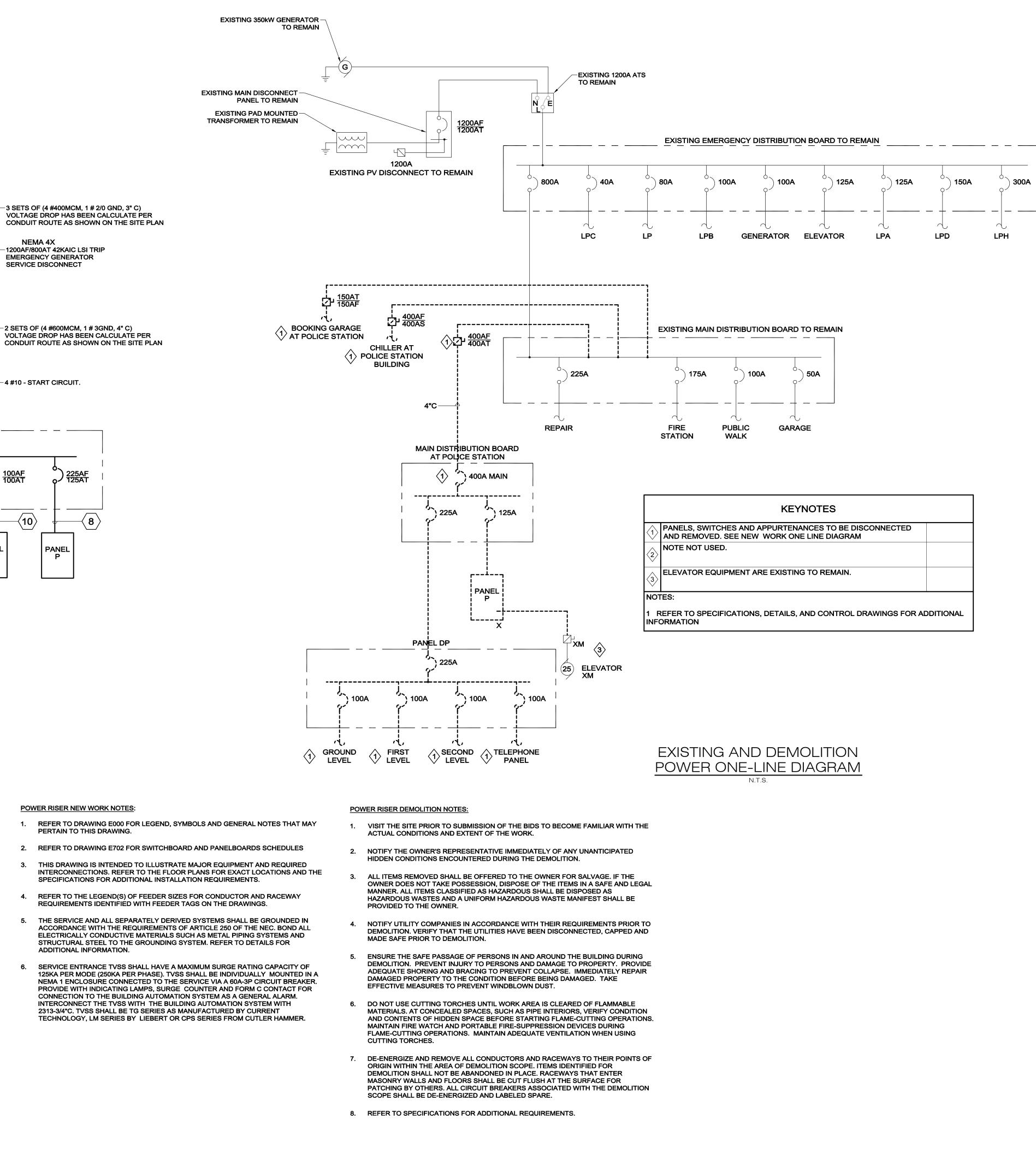


### NEW WORK POWER ONE-LINE DIAGRAM N.T.S.

| FEEDER<br>SYMBOL | CONDUCTORS (3 PHASE, 3<br>WIRE) WITH GROUND | RACEWAY<br>SIZE | CONDUCTORS (3 PHASE 4<br>WIRE) WITH GROUND | RACEWAY<br>SIZE | NOMINAL |  |  |  |
|------------------|---|-----------------|--|-----------------|---------|--|--|--|
| 1                | 3#6 & 1#10G.                                | 3/4"            |  |                 |         |  |  |  |
| 2                |   |                 | 4#6 & 1#10G.                               | 1"              | - 60    |  |  |  |
| 3                | 3#4 & 1#8G.                                 | 1"              |  |                 | 70      |  |  |  |
| 4                |   |                 | 4#4 & 1#8G.                                | 1 1/4"          | - 70    |  |  |  |
| 5                | 3#2 & #8G.                                  | 1 1/4"          |  |                 | 100     |  |  |  |
| 6                |   |                 | 4#2 & 1#8G.                                | 1 1/2"          | 100     |  |  |  |
| 7                | 3#1 & 1#6G.                                 | 1 1/2"          |  |                 | 405     |  |  |  |
| 8                |   |                 | 4#1 & 1#6G.                                | 1 1/2"          | 125     |  |  |  |
| 9                | 3#1/0 & 1#6G.                               | 1 1/2"          |  |                 | 450     |  |  |  |
| 10               |   |                 | 4#1/0 & 1#6G.                              | 2"              | 150     |  |  |  |
| 11               | 3#2/0 & 1#6G.                               | 2"              |  |                 | 475     |  |  |  |
| 12               |   |                 | 4#2/0 & 1#6G.                              | 2"              | 175     |  |  |  |
| 13               | 3#3/0 & 1#6G.                               | 2"              |  |                 | 000     |  |  |  |
| 14               |   |                 | 4#3/0 & 1#6G.                              | 2"              | 200     |  |  |  |
| 15               | 3#4/0 & 1#4G.                               | 2"              |  |                 | 005     |  |  |  |
| 16               |   |                 | 4#4/0 & 1#4G.                              | 2 1/2"          | 225     |  |  |  |
| 17               | 3#250kcmil & 1#4G.                          | 2 1/2"          |  |                 | 0.50    |  |  |  |
| 18               |   |                 | 4#250kcmil & 1#4G.                         | 3"              | 250     |  |  |  |
| 19               | 3#350kcmil & 1#4G.                          | 3"              |  |                 |         |  |  |  |
| 20               |   |                 | 4#350kcmil & 1#4G.                         | 3"              | - 300   |  |  |  |
| 21               | 3#500kcmil & 1#3G.                          | 3"              |  |                 | 050     |  |  |  |
| 22               |   |                 | 4#500kcmil & 1#3G.                         | 4"              | - 350   |  |  |  |
| 23               | 3#500kcmil & 1#3G.                          | 3"              |  |                 | (00)    |  |  |  |
| 24               |   |                 | 4#500kcmil & 1#3G.                         | 4"              | 400     |  |  |  |

NEC TABLE 310.15(B)(16) WITH NO GREATER THAN THREE CURRENT CARRYING CONDUCTORS PER RACEWAY IN AN AMBIENT NOT TO EXCEED 30 DEGREES C. FEEDER TAGS MAY BE OVERSIZED FOR THE ASSOCIATED OVERCURRENT PROTECTION TO ACCOUNT FOR DERATING FACTORS OR LIMIT VOLTAGE DROP. 2) RACEWAY SIZES ARE THE MINIMUM ALLOWED BASED UPON NEC TABLE C1 FOR THHN/THWN CONDUCTORS IN EMT. RACEWAY SIZES SHALL BE INCREASED TO ACCOMMODATE DIFFERING INSULATION SYSTEMS AND RACEWAY TYPES TO LIMIT RACEWAY FILL TO LESS THAN 40%.

3) FEEDERS DESIGNATED IN MULTIPLE SETS SHALL HAVE THE REQUIRED SETS INSTALLED IN PARALLEL.



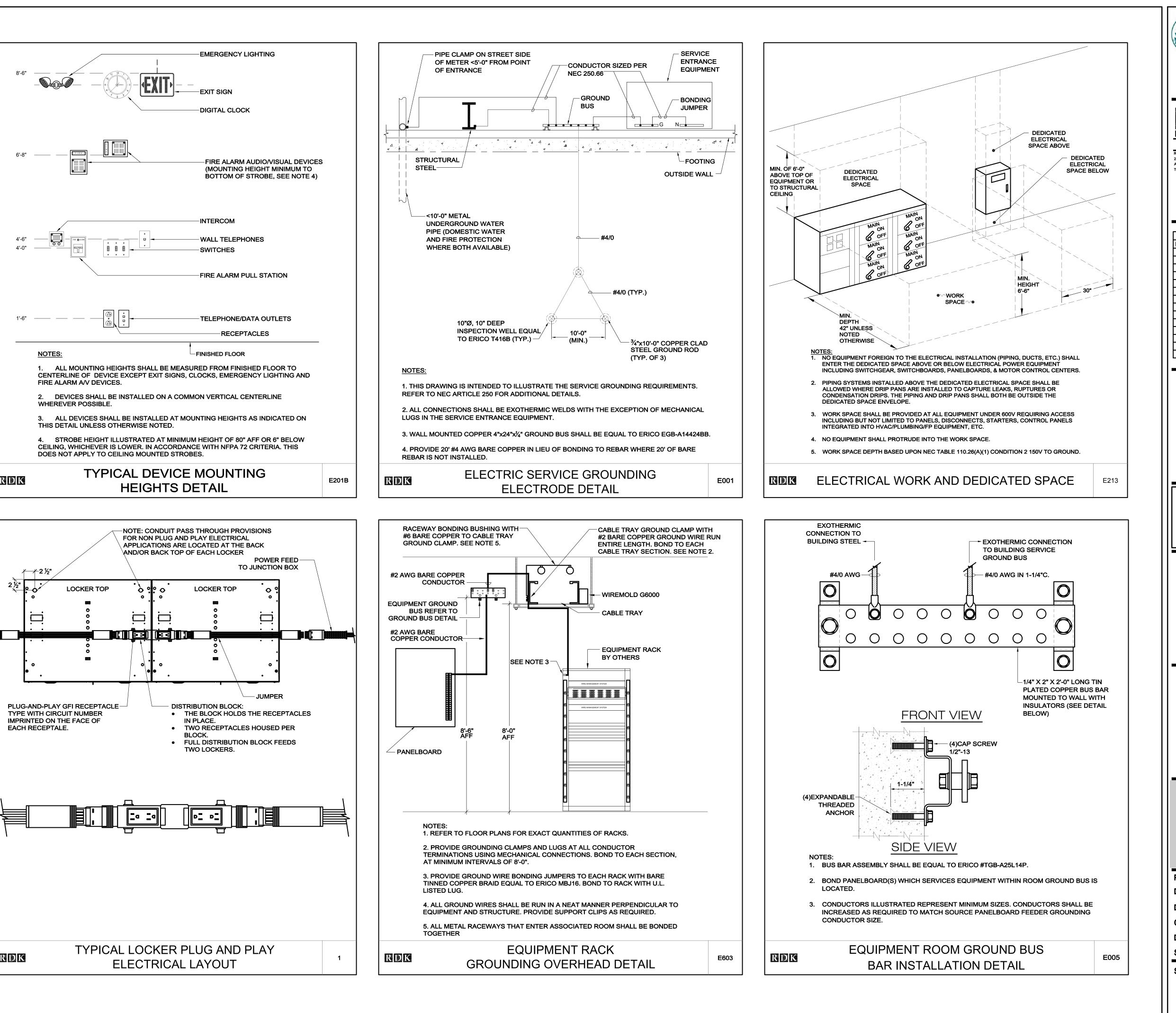
### POWER RISER NEW WORK NOTES:

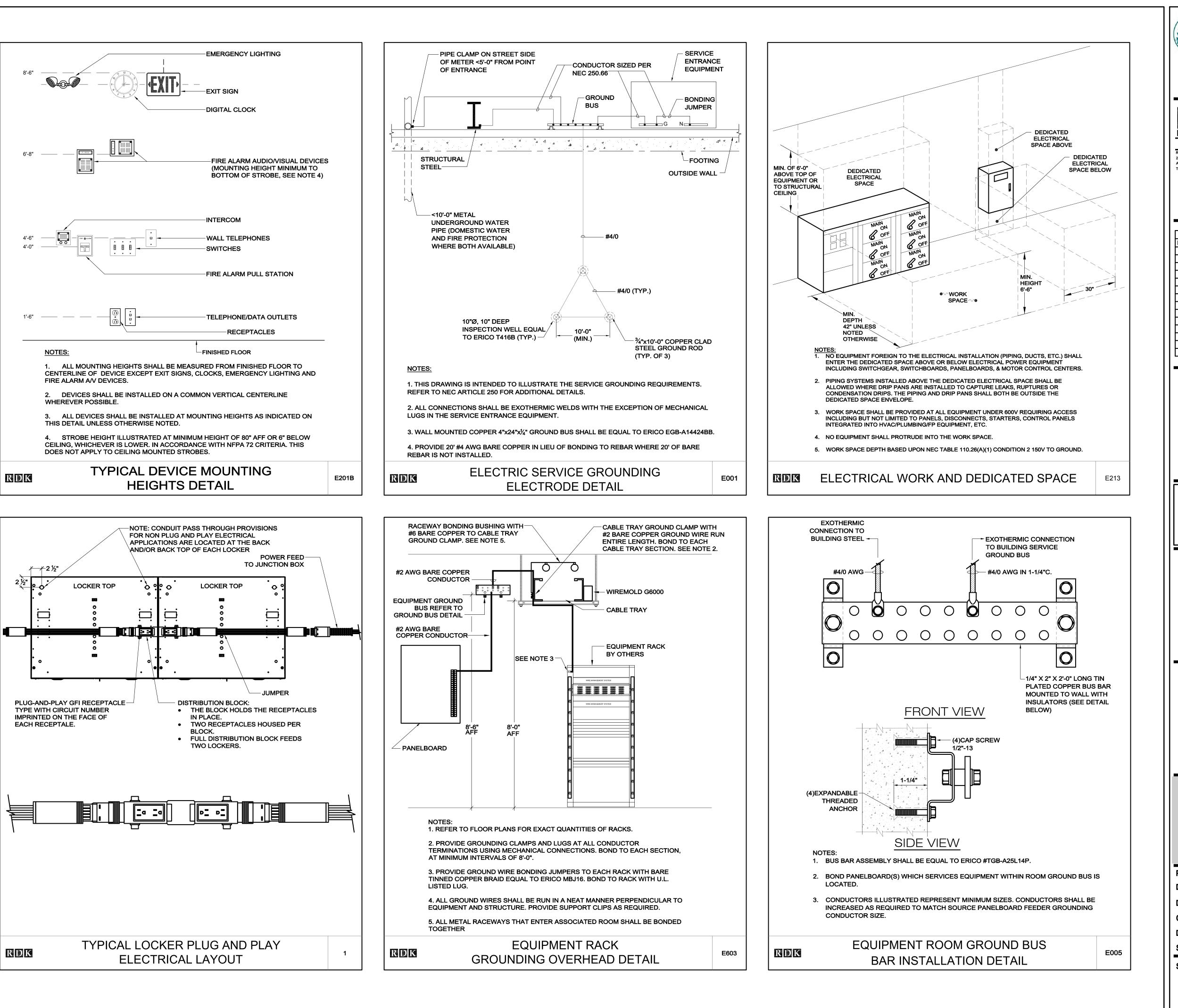
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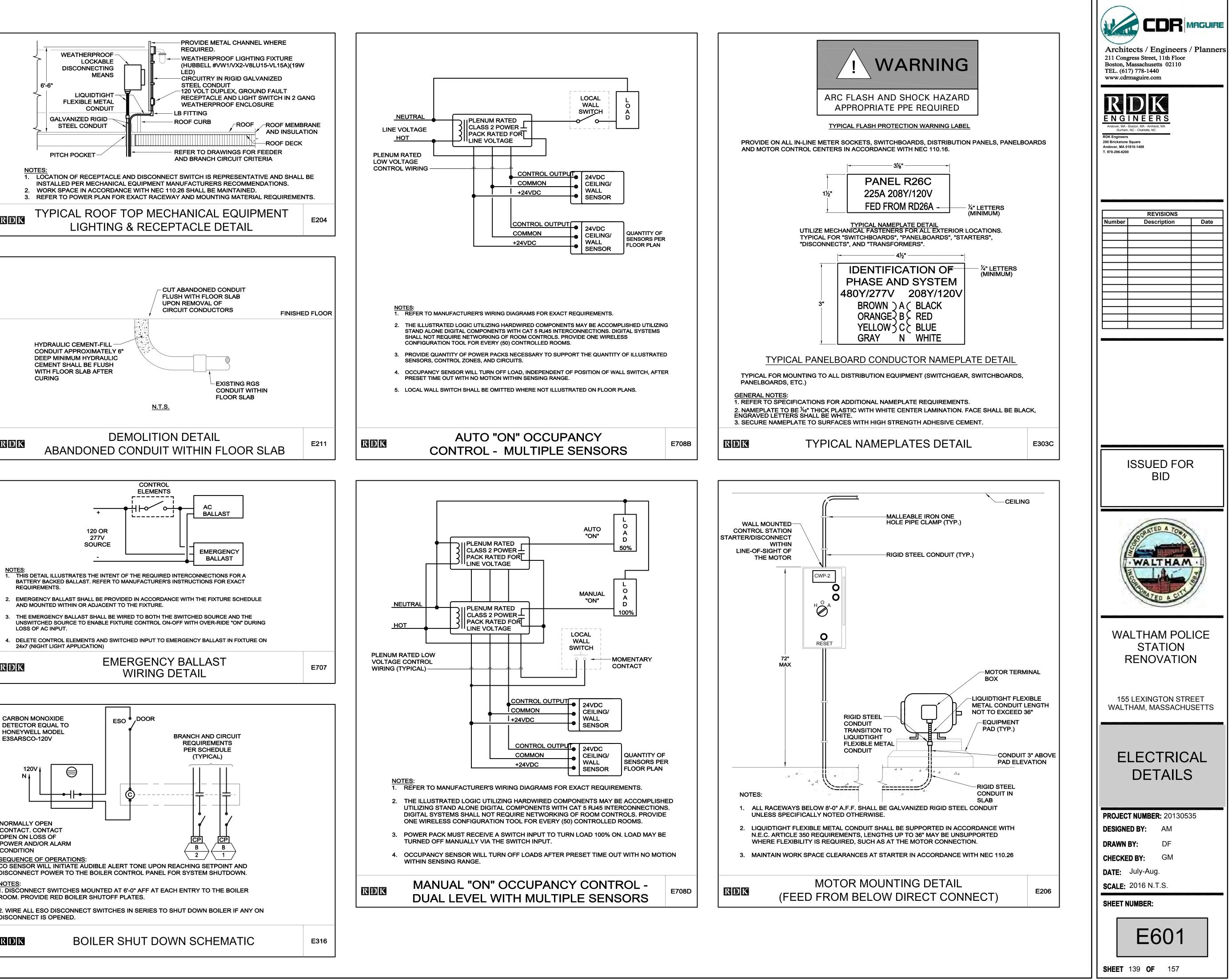
- REFER TO DRAWING E000 FOR LEGEND, SYMBOLS AND GENERAL NOTES THAT MAY PERTAIN TO THIS DRAWING.
- INTERCONNECTIONS. REFER TO THE FLOOR PLANS FOR EXACT LOCATIONS AND THE
- 5. THE SERVICE AND ALL SEPARATELY DERIVED SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NEC. BOND ALL ELECTRICALLY CONDUCTIVE MATERIALS SUCH AS METAL PIPING SYSTEMS AND STRUCTURAL STEEL TO THE GROUNDING SYSTEM. REFER TO DETAILS FOR
- 125KA PER MODE (250KA PER PHASE). TVSS SHALL BE INDIVIDUALLY MOUNTED IN A NEMA 1 ENCLOSURE CONNECTED TO THE SERVICE VIA A 60A-3P CIRCUIT BREAKER. PROVIDE WITH INDICATING LAMPS, SURGE COUNTER AND FORM C CONTACT FOR CONNECTION TO THE BUILDING AUTOMATION SYSTEM AS A GENERAL ALARM. INTERCONNECT THE TVSS WITH THE BUILDING AUTOMATION SYSTEM WITH 2313-3/4"C. TVSS SHALL BE TG SERIES AS MANUFACTURED BY CURRENT

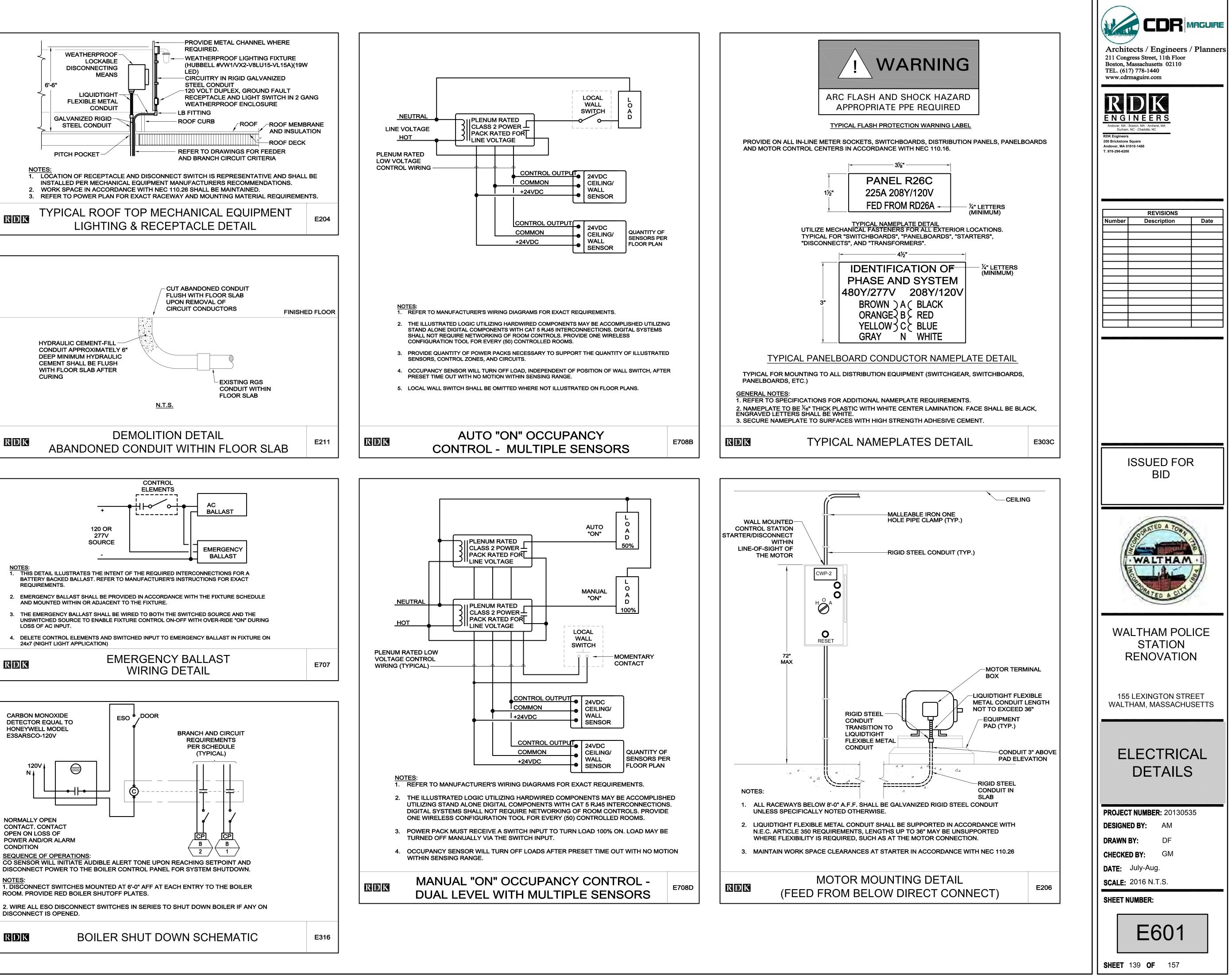
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|  | WALTHAM                                     |   |  |  |  |  |  |  |  |
|  | LTHAM POLICE<br>STATION<br>RENOVATION       |   |  |  |  |  |  |  |  |
|  | ELEXINGTON STREET<br>HAM, MASSACHUSETTS     | _ |  |  |  |  |  |  |  |
|  | ELECTRICAL<br>ONE-LINE<br>DIAGRAM           |   |  |  |  |  |  |  |  |
| DESIGNE<br>DRAWN<br>CHECKE<br>DATE:  | <b>D BY:</b> GM<br>July-Aug.<br>2016 N.T.S. |   |  |  |  |  |  |  |  |
|  | E501  |   |  |  |  |  |  |  |  |

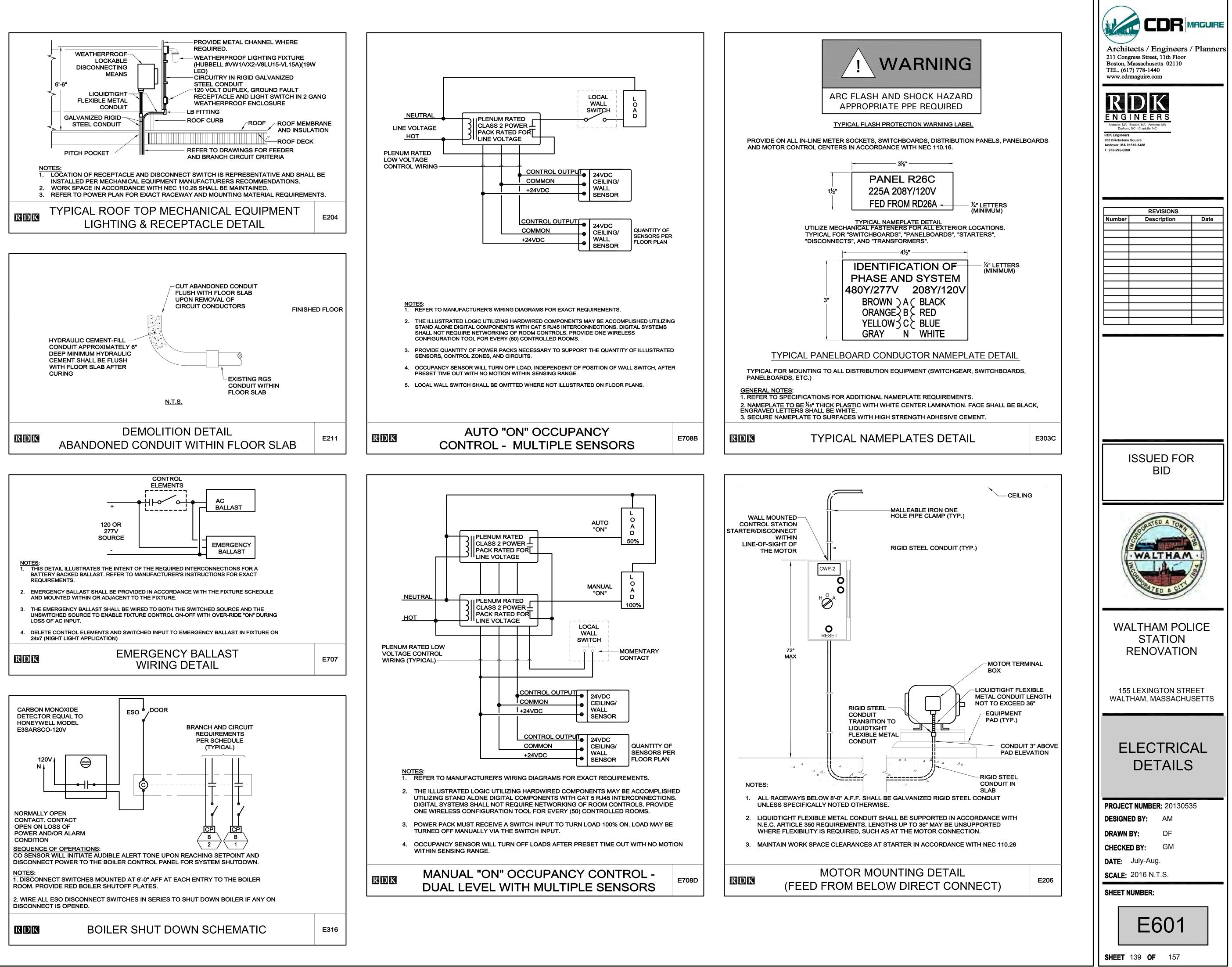




| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
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| REDEERS<br>Andover, MA - Boston, MA - Amherst, MA  |
| Durham, NC - Charlotte, NC<br>RDK Engineers<br>200 Brickstone Square<br>Andover, MA 01810-1488<br>T. 978-296-6200                                |
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| ISSUED FOR<br>BID  |
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| WALTHAM POLICE<br>STATION<br>RENOVATION  |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
| ELECTRICAL<br>DETAILS  |
| PROJECT NUMBER: 20130535<br>DESIGNED BY: AM<br>DRAWN BY: DF  |
| CHECKED BY: GM<br>DATE: July-Aug.  |
| SCALE: 2016 N.T.S.<br>SHEET NUMBER:  |
| E600   |
| SHEET 138 OF 157   |







|     | SPECIAL   | PURPOSE REC           | EPTACLE | SCHEDULE       |
|-----|-----------|-----------------------|---------|----------------|
| TAG | NEMACONF. | RATING                | CIRCUIT | BRANCH CIRCU   |
|     |           |                       | BREAKER |                |
| 1   | 5-30R     | 30A, 125V, 2P, 3W     | 30A-1P  | 2#10 & 1#10G 3 |
| 2   | 5-50R     | 50A, 125V, 2P, 3W     | 50A-1P  | 2#6 & 1#10G 3/ |
| 3   | 6-15R     | 15A, 250V, 2P, 3W     | 15A-2P  | 2#12 & 1#12G 3 |
| 4   | 6-20R     | 20A, 250V, 2P, 3W     | 20A-2P  | 2#12 & 1#12G 3 |
| 5   | 6-30R     | 30A, 250V, 2P, 3W     | 30A-2P  | 2#10 & 1#10G 3 |
| 6   | 6-50R     | 50A, 250V, 2P, 3W     | 50A-2P  | 2#6 & 1#10G 3  |
| 7   | 14-20R    | 20A, 125/250V, 3P, 4W | 20A-2P  | 3#12 & 1#12G 3 |
| 8   | 14-30R    | 30A, 125/250V, 3P, 4W | 30A-2P  | 3#10 & 1#10G 3 |
| 9   | 14-50R    | 50A, 125/250V, 3P, 4W | 50A-2P  | 3#6 & 1#10G 3/ |
| 10  | 14-60R    | 60A, 125/250V, 3P, 4W | 60A-2P  | 3#6 & 1#10G 3/ |
| 11  | 15-20R    | 20A, 250V, 3P, 4W     | 20A-3P  | 3#12 & 1#12G 3 |
| 12  | 15-30R    | 30A, 250V, 3P, 4W     | 30A-3P  | 3#10 & 1#10G 3 |
| 13  | 15-50R    | 50A, 250V, 3P, 4W     | 50A-3P  | 3#6 & 1#10G 3/ |
| 14  | 15-60R    | 60A, 250V, 3P, 4W     | 60A-3P  | 3#6 & 1#10G 3  |
| 15  | L5-15R    | 15A, 125V, 2P, 3W     | 15A-1P  | 2#12 & 1#12G 3 |
| 16  | L5-20R    | 20A, 125V, 2P, 3W     | 20A-1P  | 2#12 & 1#12G 3 |
| 17  | L5-30R    | 30A, 125V, 2P, 3W     | 30A-1P  | 2#10 & 1#10G 3 |
| 18  | L6-15R    | 15A, 250V, 2P, 3W     | 15A-2P  | 2#12 & 1#12G 3 |
| 19  | L6-20R    | 20A, 250V, 2P, 3W     | 20A-2P  | 2#12 & 1#12G 3 |
| 20  | L6-30R    | 30A, 250V, 2P, 3W     | 30A-2P  | 2#10 & 1#10G 3 |
| 21  | L14-20R   | 20A, 125/250V, 3P, 4W | 20A-2P  | 3#12 & 1#12G 3 |
| 22  | L14-30R   | 30A, 125/250V, 3P, 4W | 30A-2P  | 3#10 & 1#10G 3 |
| 23  | L15-20R   | 20A, 250V, 3P, 4W     | 20A-3P  | 3#12 & 1#12G 3 |
| 24  | L15-30R   | 30A, 250V, 3P, 4W     | 30A-3P  | 3#10 & 1#10G 3 |
| 25  | L16-20R   | 20A, 480V, 3P, 4W     | 20A-3P  | 3#12 & 1#12G 3 |
| 26  | L16-30R   | 30A, 480V, 3P, 4W     | 30A-3P  | 3#10 & 1#10G 3 |
| 27  | L21-20R   | 20A, 208V, 4P, 5W     | 20A-3P  | 4#12 & 1#12G 3 |
| 28  | L21-30R   | 30A, 208V, 4P, 5W     | 30A-3P  | 4#10 & 1#10G 3 |
| 29  | L22-20R   | 20A, 480V, 4P, 5W     | 20A-3P  | 4#12 & 1#12G 3 |
| 30  | L22-30R   | 30A, 480V, 4P, 5W     | 30A-3P  | 4#10 & 1#10G 3 |

NOTES: 1. DEVICE NEMA CONFIGURATION SHALL BE CONFIRMED PRIOR TO INSTALLATION. MATCH CONFIGURATION OF EQUIPMENT CORD CAP. NOTIFY OWNER'S REPRESENTATIVE OF RATING DISCREPANCY. 2. CONDUCTOR SIZES ARE THE MINIMUM ALLOWED BASED UPON NEC TABLE 310.15(B)(16) WITH NO GREATER THAN THREE CURRENT CARRYING CONDUCTORS PER RACEWAY IN AN AMBIENT NOT TO EXCEED 30 DEGREI 3. VOLTAGE DROP IS NOT CONSIDERED IN BRANCH CIRCUIT SIZES. ALL BRANCH CIRCUITS WHICH EXCEED 75 FEET SHALL BE INCREASED A MINIMUM OF ONE SIZE TO LIMIT VOLTAGE DROP TO LESS THAN 3%. 4. RACEWAY SIZES ARE THE MINIMUM ALLOWED BASED UPON NEC TABLE C1 FOR THHN/THWN CONDUCTORS EMT. RACEWAY SIZES SHALL BE INCREASED TO ACCOMMODATE DIFFERING INSULATION SYSTEMS AND RACEWAY TYPES TO LIMIT RACEWAY FILL TO LESS THAN 40%.

|         |         | DIS       | TRIE     | BUTIO      | N P      | ANEL     | SCH      | IEDU     | JLE   |          |         |
|---------|---------|-----------|----------|------------|----------|----------|----------|----------|-------|----------|---------|
|         | PANEL:  | D2G       | -        | VOLT:      | 208/120  | /        | 3        | PHASE    | 4     | WIRE     |         |
|         | BUS:    | 800       | AMPS     | MAIN:      | MLO      | AMPS     | AIC      |          | AMP   | SSYM     |         |
| CIRCUIT | LOAD    | DESIGN    | ATION    | OVERC      | URRENT   | DEVICE   | LC       | DAD      |       | REM      | ARKS    |
| NO.     |         | 1         |          | FRAME      | TRIP     | POLE     | KVA      | HP       |       |          |         |
| 1       | TVSS    |           |          | 100        | 100      | 3        | -        | 1 65 C   |       | 1.1      |         |
| 2       | PANEL   | P2G       |          | 225        | 225      | 3        | 55.25    | 1.7.4    |       |          |         |
| 3       | PANEL   | L2G       | -        | 100        | 100      | 3        | 7.33     | 1.4.0    |       |          |         |
| 4       | PANEL   | H2GA      | H2GB     | 400        | 400      | 3        | 115.86   |          |       |          |         |
| 5       | PANEL   | P21A      | P21B     | 250        | 250      | 3        | 68.57    | -        |       |          |         |
| 6       | PANEL   | L21       | 10.7.0   | 100        | 100      | 3        | 28.12    | 1.0.4.1  |       |          |         |
| 7       | PANEL   | P22       |          | 225        | 150      | 3        | 25.83    |          |       |          |         |
| 8       | PANEL   | P         |          | 225        | 125      | 3        | 30.79    |          |       |          |         |
|         |         |           |          |            |          |          |          |          |       |          | -       |
|         |         |           |          |            |          | -        |          | -        |       |          |         |
| NOTES:  |         |           | 1        |            |          |          |          |          | 1     | 1        |         |
| 1.      |         |           |          | MODATE FI  |          |          |          |          |       | R DIAGR  | AMFOR   |
|         |         |           |          | THIS NOTE  |          |          |          |          |       |          |         |
| 2       | "SPACE" | SHALL C   | ONSTITU  | TE ALL REC | QUIRED   | BUS, SUP | PORTS A  | ND HARD  | WARE  |          |         |
|         | NECESS  | ARYTOI    | NSTALL T | HE PROTE   | CTIVE DE | EVICEUP  | TO THE F | RAME LIN | ITATI | ON INDIC | ATED.   |
| 3       | NOTES 4 | -8 ARE C  | PTIONS V | VHICH SHA  | LL BE SP | PECIFCAL | LYNOTED  | IN REM   | ARKS  | FOR INC  | LUSION. |
| 4       | PROVIDE | E WITH FE | EED THRU | JLUGS.     |          |          |          |          |       |          |         |
| 5.      | PROVIDE | E WITH 20 | 00% NEUT | TRAL       |          |          |          |          |       |          |         |
| 6       | PROVIDE | E WITH IS | OLATED ( | GROUND B   | US.      |          |          |          |       |          |         |
| 7.      | PROVIDE | E SHUNT   | TRIP AUX | LIARYATT   | ACHMEN   | T TO THE | CIRCUIT  | BREAKE   | R.    |          |         |
| 8       | PROVIDE | TRANSI    | ENT VOLT | AGE SURG   | E SUPP   | RESSION. | REFER T  | O SPECI  | FICAT | IONS FOR | CLASS   |

| LE        |
|-----------|
| CIRCUIT   |
| 0.0/110   |
| )G3/4"C.  |
| G3/4"C.   |
| 2G 3/4"C. |
| 2G 3/4"C. |
| )G3/4"C.  |
| G 3/4"C.  |
| G 3/4"C   |

| ULE                        |                |   |              |                          |                       |            |                     |           |             | ľ       | MEC            | HAN              | ICA     | LEQ         | UIP        | MEN     | IT S             | CHE | DUL       | E  |
|----------------------------|----------------|---|--------------|--------------------------|-----------------------|------------|---------------------|-----------|-------------|---------|----------------|------------------|---------|-------------|------------|---------|------------------|-----|-----------|----|
| CHCIRCUIT                  | LOAD           |   |              |                          |                       |            |                     | . 200 - L | STARTER     |         |                |                  |         |             |            |         |                  |     |           |    |
|                            | LOAD           | STARTER                                     |              |                          |                       |            |                     | Sec.      |             | OVE     | ERCURR         | ENT              |         | 1. Ca       | INDIC      | ATING L | IGHTS            | 1   | AUXILIARY | Y  |
| #10G 3/4"C.                | TAG            | LOCATION                                    | HP           | FLA                      | KVA                   | VOLT       | PH                  | NEMA      | TYPE        | CB      | RK1            | MCP              | PB      | HOA         | R          | G       | A                | CPT | CONT      | AC |
| #10G3/4"C.                 |                |   |              |                          |                       |            |                     | SIZE      |             |         | FUSE           | 1                |         | · · · · · · |            |         | :                | _   | NO        |    |
| #12G 3/4"C.                | ACU-1          | TEL/DATA013                                 | 1.20         | 0.36                     | 0.07                  | 208        | 1                   | 102       | NOTE 8      | 4       | 12             | -                |         |             | 18.00      | 1.73    |                  | -   |           | _  |
| #12G 3/4"C.                |                | condensate Pump                             |              | 0.50                     | 0.07                  | 120        | 1                   | -         | NOTED       |         |                |                  | -       | -           |            | -       | -                | -   | -         | _  |
| #10G 3/4"C.                | ACU-1 mini     | LOWER ROOF                                  |              | 0.75                     | 0.08                  | 208        | 1                   | -         | NOTE 8      |         | -              |                  | -       |             |            |         |                  | -   |           | _  |
| #10G 3/4"C.                | ACCU-1         | LOWERROOF                                   |              | 0.75                     | 0.16                  | 200        | 1                   | -         | NOTEO       | -       | -              | -                | •       | -           |            | -       |                  | -   | -         | _  |
| #12G 3/4"C.                | HP-1           | FITNESS 015                                 | -            | 0.36                     | 0.07                  | 208        | 1                   |           | NOTE 8      | -       |                | 10.4             | -       |             |            |         |                  | -   | -         | _  |
| #10G 3/4"C.                | HP-1 mini co   | ondensate Pump                              | -            | 1.040.0                  | 0.08                  | 120        | 1                   | -         | 0.004-001   | 1.4     | -              | ÷                | -       | -           | 1 Drept 1  |         |                  | 141 | - et 1    |    |
| #10G 3/4"C.                | ACCU-2         | LOWER ROOF                                  | -            | 0.75                     | 0.16                  | 208        | 1                   | -         | NOTE 8      | -       |                |                  | -       | -           | 4          | -       | ÷                | -   | 1.0       |    |
| #10G 3/4"C.                |                |   |              |                          |                       |            |                     |           |             |         |                |                  |         |             | -          |         |                  |     |           | _  |
| #12G3/4"C.                 | HP-2           | FITNESS 015                                 |              | 0.36                     | 0.07                  | 208        | 1                   | · •       | NOTE 8      |         |                | -                | •       |             | - (* P     | •       | -                |     |           |    |
| #10G 3/4"C.                |                | ondensate Pump                              | -            | -                        | 0.08                  | 120        | 1                   | -         | -           | -       | -              | -                | -       | •           |            | -       | -                | -   |           |    |
| #10G3/4"C.                 | ACCU-3         | LOWER ROOF                                  | -            | 0.75                     | 0.16                  | 208        | 1                   | -         | NOTE 8      | -       |                | -                |         |             |            | -       |                  | -   |           |    |
| #10G3/4"C.                 | RTU-1          | UPPER ROOF                                  | 7.50         | 56.10                    | 20.21                 | 208        | 3                   | 1         | NOTE 8      | -       |                | -                |         | 1.1.4       | 1.1        | 1004    | -                | -   |           |    |
| #12G3/4"C.                 | RTU-2          | LOWER ROOF                                  | 1.00         | 32.20                    | 11.60                 | 208        | 3                   |           | NOTE 8      | -       | -              | -                |         |             |            | -       | -                | -   | -         | _  |
| #12G3/4"C.                 | RTU-3          | UPPER ROOF                                  | 5.00         | 72.00                    | 25.94                 | 208        | 3                   | -         | NOTE 8      |         | -              | -                | -       |             | -          | -       | -                | -   | -         |    |
| #10G 3/4"C.                |                |   |              | -                        |                       |            |                     |           |             |         |                |                  |         |             | 1          |         |                  |     |           | _  |
| #12G 3/4"C.                | UH-1           | MECHANICAL RM                               | -            | 0.80                     | 0.09                  | 115        | 1                   | 0         | NOTE 8      |         |                |                  |         | -           |            | •       | . 13 <b>-</b> 51 | -   | -         |    |
| #12G 3/4"C.                | EF-1           | LOWER ROOF                                  | 1/4          | 3.70                     | 0.43                  | 115        | 1                   | 0         | FVNR        | 15      | -              | 7                |         | X           | X          | X       | X                | -   | 2         |    |
| #10G 3/4"C.                | EF-2           | LOWER ROOF                                  | 1/4          | 3.70                     | 0.43                  | 115        | 1                   | 0         | FVNR        | 15      |                | 7                |         | X           | X          | X       | X                |     | 2         | -  |
| #12G 3/4"C.                | EF-3           | UPPER ROOF                                  | 1/6          | 3.40                     | 0.39                  | 115        | 1                   | 0         | FVNR        | 15      | -              | 7                |         | X           | X          | X       | X                | -   | 2         | -  |
| #10G 3/4"C.                | EF-4           | NOTUSED                                     | 1/0          | 0.40                     | 0.00                  | 110        |                     |           | T VIVIX     | 10      |                | ,                |         |             | ~          | ~       | A                |     | -         |    |
| #12G 3/4"C.                | EF-5           | UPPER ROOF                                  | 1/4          | 3.70                     | 0.43                  | 115        | 1                   | 0         | FVNR        | 15      | -              | 7                | -       | X           | Х          | X       | X                | -   | 2         | -  |
| #10G 3/4"C.                | 2. 0           |   | 1/4          | 0.10                     | 0.40                  | 110        |                     |           |             | 10      |                |                  |         | ~           | ~          | ~       | ~                |     | -         | _  |
| #12G 3/4"C.                | ERU-1          | LOWER ROOF                                  | -            | 67.7                     | 24.37                 | 208        | 3                   | 2-14      | NOTE 8      |         | -              | 0 <b>-</b> 0     | -       | -           | 10.00      |         | -                | -   |           |    |
| #10G 3/4"C.                | CUH-1          | STAIR #2 BASEMENT                           | 1/15         | 0.0                      | 0.1                   | 115        | 1                   |           | NOTE 8      |         |                |                  |         |             |            |         |                  |     |           | _  |
| #12G 3/4"C.<br>#10G 3/4"C. |                | LOBBY 115                                   |              | 0.8                      | 0.1                   |            | 1                   | -         |             |         |                | -                |         | -           |            |         | -                | -   |           | _  |
| #10G 3/4 C.<br>#12G 3/4"C. | CUH-2<br>CUH-3 | LOBBY 115<br>LOBBY 115                      | 1/10<br>1/10 | 1.4<br>2.2               | 0.2                   | 115<br>115 | 1                   | -         | NOTE 8      | -       | -              | -                | -       | -           | •          | -       | -                | -   | -         | _  |
| #10G 3/4"C.                | CUH-3<br>CUH-4 | STAFF ENTRANCE                              | 1/10         | 2.2                      | 0.3                   | 115        | 1                   |           | NOTE 8      | -       |                |                  | -       |             |            |         |                  | -   |           | _  |
| #1003/4 0.                 | CUH-5          | STAFF ENTRANCE                              | 1/10         | 0.8                      | 0.3                   | 115        | 1                   | -         | NOTE 8      | -       | -              | -                | -       | -           |            |         | -                | -   | -         | Ē  |
| FIGURATION                 | CUH-6          | STAIR #2 2ND FLOOR                          | 1/15         | 0.8                      | 0.1                   | 115        | 1                   | -         | NOTE 8      | -       | -              | -                | -       |             |            |         |                  | -   |           | _  |
| IGUILATION                 | 000-0          | STAR #5 2ND FLOOR                           | 1/10         | 0.0                      | 0.1                   | 115        |                     | -         | NOTED       |         |                |                  |         |             |            |         |                  |     |           |    |
| H NO GREATER               | GUH-1          | VEHICLE BAYS                                | 1/8          | 2.2                      | 0.3                   | 115        | 1                   | -         | NOTE 8      | -       | 10 P           | -                | •       | -           | 1.00       |         |                  |     |           |    |
| ED 30 DEGREES C.           | GUH-2          | SALLYPORT                                   | 1/8          | 1.3                      | 0.1                   | 115        | 1                   | -         | NOTE 8      | -       |                | (10 <b>-</b> 11) | -       | -           | 1.14       | -       | 1.7.40           | -   | -         |    |
| ICH EXCEED                 | GUH-3          | SALLYPORT                                   | 1/8          | 1.3                      | 0.1                   | 115        | 1                   | ÷         | NOTE 8      | -       | 6 e 70         | -                | 4       | 1.06        | 11.54 13   |         | -                |     | - 19 E    |    |
| 3%.                        | GUH-4          | MOTO/BIKE STORAGE                           | 1/8          | 1.3                      | 0.1                   | 115        | 1                   |           | NOTE 8      | -       |                |                  |         | · ·         | - 19 A. 19 |         |                  |     |           |    |
| CONDUCTORS IN              | <b>D</b> 4     |   |              | 0.7                      | 0.0                   | 100        | 4                   | 00        | NOTE 8      | 45      |                | 7                |         | V           | V          | V       | V                |     |           | _  |
| MS AN D                    | B-1            | MECHANICAL RM                               |              | 2.7                      | 0.3                   | 120        | 1                   | 00        |             | 15      | -              |                  |         | X           | X          | X       | X                | -   | 2         | _  |
| 011000                     | B-2            | MECHANICAL RM                               |              | 2.7                      | 0.3                   | 120        | 1                   | 00        | NOTE 8      | 15      | -              | 7                |         | Х           | Х          | X       | X                | -   | 2         | _  |
|                            | P-1            | MECHANICAL RM                               | 3/4          | 3.0                      | 1.08                  | 208        | 3                   | 0         | FVNR        | 30      |                | 15               | -       | X           | Х          | X       | X                |     | 2         |    |
|                            | P-2            | MECHANICAL RM                               | 3/4          | 3.0                      | 1.08                  | 208        | 3                   | 0         | FVNR        | 30      | -              | 15               | -       | X           | Х          | Х       | X                | ÷   | 2         |    |
|                            | P-3            | MECHANICAL RM                               | 1 1/2        | 6.6                      | 2.38                  | 208        | 3                   | -         | VFD         |         | -              | -                |         | X           | Х          | Х       | X                | -   | 2         |    |
| 1                          | P-4            | MECHANICAL RM                               | 1 1/2        | 6.6                      | 2.38                  | 208        | 3                   | -         | VFD         | 1.0.0   |                | -                | -       | Х           | Х          | Х       | X                | -   | 2         |    |
| WIRE                       |                |   | 410          | 10                       | 0.40                  | 445        |                     |           |             | 45      |                | -                |         | ×           | V          | X       |                  |     |           |    |
| SYM                        | RP-1           | MECHANICAL RM                               | 1/8          | 1.2                      | 0.13                  | 115        | 1                   | 00        | FVNR        | 15      |                | 7                | -       | X           | X          | X       |                  | -   | 2         | _  |
| REMARKS                    | RP-2           | MECHANICAL RM                               | 1/8          | 1.2                      | 0.13                  | 115        | 1                   | 00        | FVNR        | 15      |                | 7                | - ÷     | Х           | Х          | X       | -                | -   | 2         |    |
| ILLIVEI (ILO               | GWH-1          | MECHANICAL RM                               |              | 1 CO. 1                  | 0.12                  | 120        | 1                   |           |             |         |                |                  | •       | 1.00        |            | -       | 1.1.4            |     | -         |    |
|                            | DWCH-1         | MECHANICAL RM                               | -            | 9.0                      | 1.0                   | 115        | 1                   | -         |             | -       |                | -                |         | -           |            | -       | -                |     |           |    |
|                            | GB-1           | MECHANICAL RM                               | 1/2          | 3.0                      | 1.08                  | 208        | 3                   | 0         | FVNR        | 30      | 1 <del>.</del> | 15               | 19.01   | X           | Х          | Х       | X                | -   | 2         |    |
|                            |                |   |              | 1.0                      |                       |            |                     |           |             | 1       |                |                  |         |             |            |         |                  |     |           | _  |
|                            |                |   |              |                          |                       |            |                     |           |             |         |                |                  |         |             |            | -       |                  |     |           | -  |
|                            | NOTES          |   | -            |                          |                       |            |                     |           |             |         |                |                  | 1       |             |            | 1       |                  |     | KEY:      |    |
|                            |                | NOTES 2-6 APPLY TO A                        |              | ICABLE                   | LOADS.                |            |                     |           |             |         |                |                  |         |             |            |         |                  |     | FVNR      |    |
|                            | 2              | PROVIDE THERMAL OV                          | ERLOAD       | UNITS                    | FOR ALL               | STARTE     | RS SIZ              | ED TO MA  | TCH LOAD N  | AMEPLAT | E AND N        | EC REQ           | UIREME  | NTS .       |            |         |                  |     | FVR       |    |
|                            | 3              | BRANCH CIRCUIT WIR                          | ING MET      | THODS S                  | HALL BE               | AS NOT     | ED ON               | THE DRA   | WINGS AND/C | OR SPEC | IFICATIO       | NS FOR           | THE APP | PLICABLE    |            |         |                  |     | 2S1W      |    |
|                            |                | LOCATION. THE FINAL                         |              |                          |                       |            |                     |           |             |         |                |                  |         |             |            |         |                  |     | 2S2W      |    |
|                            | 4              | COPPER BRANCH CIR                           |              |                          |                       |            | and the local dates |           |             |         | KE ADJUS       | STMENT           | s то со | NDUCTO      | ORS FOR    | 2       |                  |     | RVAT      | 1  |
|                            |                | TEMPERATURE OR VO                           |              | the second second second |                       |            |                     |           |             | IA.     |                |                  | _       |             |            |         |                  |     | RVPW      |    |
|                            |                | RACEWAY SIZES ARE E                         |              |                          |                       |            |                     |           |             |         | TO 0 51        |                  | _       |             |            |         |                  |     | RVYDOT    |    |
|                            |                | VFD SHALL BE CONTR                          |              |                          |                       |            |                     |           |             |         | ALC CON        | RACTO            | к.      |             |            |         |                  |     | RVYDCT    | _  |
|                            |                | . REQUIRED DISCONNE<br>. REQUIRED STARTER I |              |                          |                       |            |                     |           |             |         |                |                  |         |             |            |         |                  | -   | MMS<br>CB |    |
| RDIAGRAMFOR                |                | DISCONNECT FOR 25                           |              |                          | and the second second |            |                     |           |             | IN L.   | -              |                  |         |             |            |         |                  |     | MCP       | -  |
|                            |                | PROVIDE NEUTRAL FR                          |              |                          |                       |            |                     |           |             | OF 208  | 3PH LINI       | TS               |         |             |            |         |                  |     | PB        |    |
|                            | 10 CO 10 C     | FUSES FOR DISCONNI                          |              |                          |                       |            |                     |           |             |         |                |                  |         |             |            | -       | -                |     | HOA       |    |
| N INDICATED.               |                |   |              |                          |                       |            |                     |           |             |         |                |                  |         |             |            |         | -                |     | CPT       |    |
| OR INCLUSION               |                | 1   | 1            | -                        | 1                     | 1          | ĺ .                 | 1         |             |         | 1              |                  |         | 1           |            | Ì.      | 1                |     | VED       |    |

S FOR CLASS.

## SCHEDULE OF

| PANEL  | SERVICE              | MAINS   | MTG | AIC    | TOTAL      |       |     |       |       |      |      | _     |       |     |     | BR | ANCI |    | CUI | T BR | EAK    | ERS       |      |      |      |       |     |       |          |     |       | Т  |
|--------|----------------------|---------|-----|--------|------------|-------|-----|-------|-------|------|------|-------|-------|-----|-----|----|------|----|-----|------|--------|-----------|------|------|------|-------|-----|-------|----------|-----|-------|----|
| TAG    |                      | MCB MLO |     |        | POLES      |       |     | 1-P   | OLE   |      |      |       |       | 2-P | OLE |    |      |    |     |      |        |           |      | 3    | -POL | E     |     |       |          | 1.1 | 1.2.3 |    |
|        |                      |         |     |        |            | 15    | 20  | 25    | 30    | 40   | 50   | 15    | 20    | 25  | 30  | 40 | 50   | 15 | 20  | 25   | 30     | 40        | 50   | 60   | 70   | 80    | 90  | 100   | 125      | 150 | 175 2 | 00 |
| P2G    | 208/120V, 3PH, 4W    | 225A    | S   | 10,000 | 80         |       | 77  |       |       |      |      |       | 1     |     |     |    |      |    |     |      |        | 1         |      |      |      |       |     |       |          |     |       | +  |
| L2G    | 208/120V, 3PH, 4W    | 100A    | S   | 10,000 | 30         |       | 25  | 1     |       |      |      |       |       |     |     |    |      |    |     |      | 1      |           |      |      |      | 10.71 |     |       |          |     |       |    |
| H2GA   | 208/120V, 3PH, 4W    | 400A    | S   | 10,000 | 42         | 5     | 17  | 1     |       | 1    |      | 2     |       | 3   |     |    |      |    |     | ·    |        |           | 2    | -    |      | 1     |     |       |          |     |       | 1  |
| H2GB   | 208/120V, 3PH, 4W    | 400A    | S   | 10,000 | 42         | -     | 19  |       |       |      |      |       | 1     |     |     |    |      | 4  | 1   |      |        |           |      |      |      | 1     | 1   |       |          |     |       |    |
| P21A   | 208/120V, 3PH, 4W    | 250A    | S   | 10,000 | 72         | 1     | 78  | 1-1   |       | [    |      |       |       |     | 1   |    |      |    | 1   |      | 1-1- m | 1.000     |      |      |      | 1     |     |       |          |     |       | 1  |
| P21B   | 208/120V, 3PH, 4W    | 250A    | S   | 10,000 | 72         |       | 72  |       |       |      |      |       |       |     |     |    |      |    | 1   |      |        |           |      |      |      | 1     |     |       |          |     |       |    |
| L21    | 208/120V, 3PH, 4W    | 100A    | R   | 10,000 | 42         | 0.000 | 42  | 1     | 1003  | 1    |      |       |       | -   |     |    |      |    |     |      | 121    |           |      | 10   |      |       |     |       |          |     |       |    |
| P22    | 208/120V, 3PH, 4W    | 150A    | R   | 10,000 | 42         | 1     | 41  |       |       |      | 1    |       |       | 11  |     |    | -    |    |     |      | 1      |           |      |      |      | 1     |     |       |          |     |       |    |
| Р      | 208/120V, 3PH, 4W    | 250A    | R   | 10,000 | 18         |       | 12  | 1     |       |      | ·    |       |       | 1.1 | 1   |    |      |    | 1   |      |        | 1         |      |      |      |       |     |       | 1        |     |       |    |
|        |                      |         |     | 12     |            |       |     |       |       |      |      |       |       | 1   |     |    |      |    |     |      |        |           |      |      |      |       |     |       |          |     |       |    |
|        |                      |         |     |        |            |       |     |       |       |      |      |       |       |     |     |    | 1.   | 1  |     |      | 1      | 1         | 1    |      |      |       |     |       |          |     |       |    |
|        |                      |         |     |        |            |       |     |       |       |      |      |       |       |     |     |    | 1.1  |    |     | 1    |        | , level ( |      |      |      | 1.000 |     |       |          |     |       | _  |
|        |                      |         |     |        |            |       |     |       | _     |      |      |       |       | 1   |     |    |      |    |     |      |        |           | 1    |      |      | 1.1.1 |     |       |          |     |       |    |
| NOTES: |                      |         |     |        |            | 1     |     |       |       | 1    |      |       |       |     |     |    |      |    | EY: |      |        |           |      |      |      |       |     |       |          |     |       |    |
|        | NOTES 2 & 3 APPLY T  |         |     |        |            |       |     |       |       |      |      |       |       |     |     |    |      |    | MCE |      | 1000   |           |      |      |      | ER    |     |       |          |     |       | _  |
| 2      | . PROVIDE LUGS TO A  |         |     |        |            |       |     |       |       | ISER | DIA  | GRA   | I FO  | R   |     |    |      |    |     |      |        | N LU      |      |      |      |       |     |       |          |     |       | _  |
|        | SUPPLY AND ALL LO    |         |     |        |            |       |     |       |       |      | 0.05 | 0.710 |       |     | _   |    |      |    | S   |      |        | RFAC      |      |      |      | _     |     |       |          |     |       | _  |
|        | PANEL SHALL BE FUI   |         |     |        |            |       |     |       |       |      |      |       |       | -   |     |    |      |    | F   | =    | FLU    | SH M      | 1001 | NIEL | )    |       |     |       |          |     |       | _  |
|        | NOTES 5-13 ARE OPT   |         |     |        |            |       |     |       |       |      |      |       | _     | UN. | -   | -  |      | -  | 410 |      | MAINT  |           |      | FDD  |      |       |     | 10.01 |          |     | -     | -  |
| 5.     | ACCORDANCE WITH      |         |     |        |            |       |     |       |       |      |      |       | 5 111 |     | -   |    | -    |    | AIC | -    |        |           |      |      |      |       |     |       |          |     |       | _  |
| 6      | . PROVIDE WITH FEED  |         |     | SIDENT | IF TING SI |       | SRA | (TINC | 5 APF | LICA |      | N.    |       |     |     | -  | -    |    |     | -    | DRE    | ARE       | RSI  | 1317 | ALLE |       | REF |       | ICEL     | PAN | IEL.  | -  |
|        | . PROVIDE WITH FEED  |         | 1   |        |            | -     | -   |       |       | -    | -    |       |       |     |     |    |      |    |     | -    |        | -         |      |      | -    |       |     |       |          |     |       | -  |
|        | . PROVIDE WITH 200%  |         |     |        |            |       |     |       |       | -    |      |       |       |     |     |    |      |    |     |      |        |           |      |      |      |       |     |       |          |     |       | -  |
|        | . 120V SHUNT TRIP MA |         |     | R      |            |       |     |       |       |      |      |       |       |     |     |    |      |    |     |      |        |           |      |      |      | -     |     |       |          |     |       | _  |
|        | . GROUND FAULT CIR   |         |     |        | OR 4-6 n   | na Fi |     | FRS   | ONN   | FIP  | ROT  | ECTI  | ON    |     |     |    |      |    |     |      |        | -         |      | -    | -    |       |     |       |          |     |       | -  |
|        | GROUND FAULT EAR     |         |     |        |            |       |     |       |       |      |      |       |       |     | -   |    |      |    | -   |      |        | -         |      |      | -    | -     |     | -     |          |     |       | -  |
|        | ARC FAULT CIRCUIT    |         |     |        |            | 1     |     |       |       |      |      |       |       |     |     | -  |      | 1  |     |      |        | -         |      |      |      |       |     |       |          |     |       | -  |
|        | TRANSIENT VOLTAGE    |         |     |        |            | L     | 1   | -     |       |      | 1    | 1     |       |     | -   | -  |      | -  |     |      | ·      | -         | -    | -    |      | -     | -   |       | <u> </u> | 1   |       |    |

| E  | DU    | ILI        | E   |      |      |                |               |      |                |      |          |      |         |        |          |    | _         |     |                  |                                    |                        |
|----|-------|------------|---|------|------|----------------|---------------|------|----------------|------|----------|------|---------|--------|----------|----|-----------|-----|------------------|------------------------------------|------------------------|
|    |       |            | ,   |      |      | POW            | ER S          |      | RCE            |      |          | -    |         | INE    | CTI      |    | <u> </u>  |     | D                | DANICH                             | DEMARKS                |
| T  | -     |            | ACTS                                      |      | PA   | NEL            |               |      | C/B            |      | FLE      | X JI | B R     | EC     | AS       | _  | SC<br>NEM | 1A  |                  | RANCH                              | REMARKS                |
|    | NC    |            | NC  |      | 1120 | 24.4           | 2             | _    |                |      |          |      | -       |        | 20       |    | 1         | -   | 0#10.0           | #100 2/4 10                        |                        |
|    | -     | -          | •   |      |      | GA-1,<br>GA-1  |               |      | 15A-2<br>20A-1 |      | X        | -    |         | -<br>X | 30       |    | 1         |     |                  | #12G - 3/4"C<br>#12G - 3/4"C       |                        |
|    |       |            | •   |      | H2G  | 6 <b>A-9</b> , | 11            | 2    | 25A-2          | P    | X        | -    |         | -      | 30       | -  | 3R        | 1   | 2#12 &           | #12G - 3/4"C                       |                        |
|    | -     |            |   |      |      | GA-5,          | _             | 1    | 15A-2          | P    | X        | -    |         | -      | 30       | -  | 1         |     | 2#12 &           | #12G - 3/4"C                       |                        |
|    | •     |            |   | -    |      | GA-1<br>A-31,  | -             | -    | 20A-1<br>25A-2 |      | X        | -    | -       | X<br>- | - 30     | -  | -<br>3R   | _   |                  | #12G - 3/4"C<br>#12G - 3/4"C       |                        |
|    |       |            |   | -    |      | GA-5,          |               |      | 15A-2          |      | X        |      | +       | -      | 30       |    | 1         |     |                  | #12G - 3/4"C                       |                        |
|    | -     |            | -   |      |      | GA-5,          |               |      | 20A-1          |      | -        | -    |         | -<br>X | -        | -  | -         |     |                  | #12G - 3/4 C<br>#12G - 3/4"C       |                        |
|    | -     |            |   | ł    | H2G  | A-35,          | 37            | 2    | 25A-3          | P    | X        | -    |         | -      | 30       | -  | 3R        |     | 2#12 &           | #12G - 3/4"C                       |                        |
|    |       |            | 1   |      |      | -8,10          |               |      | 30A-3          |      | X        |      | · · · · | -      | -        | -  | -         |     |                  | & #8G - 1 1/4"C                    |                        |
|    | -     |            |   |      | _    | -14,1<br>B-1,3 | 6,18          |      | 15A-3          |      | X        |      | (<br>(  | -      | -        | -  | -         | -   |                  | #10G - 3/4"C<br>& #8G - 1 1/4"C    | NOTE 7,10<br>NOTE 7,10 |
|    |       | -          | 1   | -    |      | GA-1           |               |      | 20A/1          |      | X        |      |         | -      |          |    | -         | -   |                  | (1)#12G - 3/4"C                    | NOTE 7                 |
|    | -     |            | -   | -    |      |                |               |      |                |      |          | - 0  |         |        | -        |    |           |     |                  |                                    |                        |
|    | 2     |            | 2   | -    |      | GA-1<br>GA-1   | -             | -    | 20A-1<br>20A-1 | -    | X        | -    | 1.1     | -      | ÷        | -  | -         | -   |                  | (1)#12G - 3/4"C<br>(1)#12G - 3/4"C | NOTE 7<br>NOTE 7       |
|    | 2     |            | 2   |      |      | GA-1           | -             | -    | 20A-1          |      | X        |      | 21      | -      | -        | •  | -         |     |                  | (1)#12G - 3/4"C                    | NOTE 7                 |
|    | 2     |            | 2   | -    | L12  | GA-1           | 5             |      | 20A-1          | D    | X        | )    | _       | -      | -        | -  | -         | _   | (2)#12.8         | (1)#12G - 3/4"C                    | NOTE 7                 |
|    |       |            |   | -    |      |                |               |      |                |      |          |      |         |        | _        |    |           | _   |                  |                                    |                        |
|    |       |            |   | -    |      | 3-7,9          |               |      | 80A/3          |      | X        |      |         | -      | •        | •< | -         |     | 3#4, 1#8N        | & #8G - 1 1/4"C                    | NOTE 7,10              |
|    |       | -          |   |      |      | GA-2           | _             |      | 5A/1           | _    | X        | _    |         | -      | •        | -  | -         |     |                  | #12G - 3/4"C                       | NOTE 7                 |
|    | -     |            |   | -    |      | GA-2<br>GA-2   |               | -    | 15A/1          |      | X        | 1.00 | -       | -      | -        | -  | -         | -   |                  | #12G - 3/4"C<br>#12G - 3/4"C       | NOTE 7<br>NOTE 7       |
|    | ÷     |            | +   | -    |      | GA-2           | -             |      | 15A/1          | _    | X        | )    | _       | -      | •        | -  | -         |     |                  | #12G - 3/4"C                       | NOTE 7                 |
|    | -     |            |   | -    |      | GA-2<br>GA-2   |               |      | 5A/1           | -    | X        |      | -       | -      | -        | •  | -         | _   |                  | #12G - 3/4"C<br>#12G - 3/4"C       | NOTE 7<br>NOTE 7       |
|    |       |            |   | -    |      |                |               |      |                | -    |          |      |         | -      | -        |    | -         | _   |                  |                                    | NOTE /                 |
|    | -     |            |   | -    |      | GA-2           |               | _    | 15/1           |      | X        |      |         | -      | 30<br>30 | _  | 1         | -   |                  | #12G - 3/4"C<br>#12G - 3/4"C       |                        |
|    |       |            | 4   |      |      | GA-4           | ~~            |      | 15/11          |      | X        |      |         | -      | 30       | _  | 1         |     | P 144 14 12 12 8 | #12G - 3/4"C                       |                        |
|    | -     |            | *   |      | H2   | GA-4           | 1             |      | 15/1           | P    | X        | -    |         | -      | 30       | ~  | 1         |     | 2#12 &           | #12G - 3/4"C                       |                        |
|    | 2     | -          | 2   |      |      | GA-6           |               |      | 5A/1           |      | X        |      |         | -      | 30       |    | 1         |     |                  | #12G - 3/4"C                       |                        |
|    | 2     |            | 2   | -    | H2   | GA-6           | 6             | 1    | 5A/1           | P    | X        |      |         | •      | 30       | -  | 1         | _   | 2#12 &           | #12G - 3/4"C                       |                        |
|    | 2     | -          | 2   | -    |      | B-2,4          |               |      | 5A/3           | 2    | X        |      |         | -      | 30       | -  | 1         |     |                  | #12G - 3/4"C                       |                        |
|    | 2     | _          | 2   | -    |      | -8,10          | 5,12<br>6,18  | /    | 5A/3           | ·    | X        |      |         | -      | 30<br>30 | -  | 1         | -   |                  | #12G - 3/4"C<br>#12G - 3/4"C       | NOTE 6                 |
|    | 2     | -          | 2   | _    | _    |                | 2,24          | -    | 5A/3           | -    | X        | _    |         | -      | 30       | -  | 1         |     | 1.000 2.000 0.0  | #12G - 3/4"C                       | NOTE 6                 |
| 10 | 2     |            | 2   |      | H2   | GA-2           | 5             | 1    | 5A/1           | P    | X        | -    |         | -      | 30       | -  | 1         |     | 2#12 &           | #12G - 3/4"C                       |                        |
|    | 2     |            | 2   |      | H2   | GA-2           | 7             | 1    | 5A/1           | Ρ    | X        | -    |         | -      | 30       | -  | 1         |     | 2#12 &           | #12G - 3/4"C                       |                        |
|    |       |            | ÷.  |      | H2   | GA-2           | 9             | 2    | 20A/1          | P    | X        | >    | (       | ÷      |          |    |           |     | 2#12 &           | #12G - 3/4"C                       |                        |
|    | . (   |            | -   |      |      | GA-2           |               | -    | 20/11          |      | X        |      | (       | -      | -        | •  | -         |     |                  | #12G - 3/4"C                       |                        |
|    | 2     |            | 2   |      | ZGB- | 30,3           | 2,34          | 2    | 20A/3          | P    | X        | -    |         | -      | 30       | -  | 1         |     | 4#12 &           | #12G - 3/4"C                       |                        |
|    | KEY   |            |   |      |      |                |               |      | _              | _    |          |      |         |        |          |    |           |     |                  |                                    |                        |
|    | FV    | NR         |   |      |      |                | ION-I         |      |                | ١G   |          |      |         |        |          |    |           |     |                  |                                    |                        |
|    |       | VR<br>1W   |   |      |      |                |               |      | -              |      |          | _    | -       |        |          |    |           | _   |                  |                                    |                        |
|    |       | 2W         |   |      |      |                |               |      |                |      |          |      |         |        |          |    |           |     |                  |                                    |                        |
| -  |       | /AT<br>PW  | 10 A. |      |      |                |               |      |                |      |          | ER   | -       | _      |          |    |           | _   |                  |                                    |                        |
| F  | RVYD  |            |   |      |      |                |               |      |                | TAOF |          | TRAN | ISIT    | ION    |          | -  | -         | -   |                  |                                    |                        |
| F  | RVYD  |            |   |      |      |                |               |      |                | TACL | OSE      | DTF  | RAN     | SITI   | ON       |    |           |     |                  |                                    |                        |
|    |       | MS<br>CB   |   |      |      | EAKE           | STAF<br>R     | CIER | •              |      | -        | -    |         |        |          | -  |           |     |                  |                                    |                        |
|    |       | ICP        | MOT                                       | OR   | CIRC | CUIT           | PRO           |      |                |      |          |      |         |        |          |    |           |     |                  |                                    |                        |
|    |       | PB         |   |      | 1.2  |                | P PUS<br>MATI |      |                |      | SWIT     | сн   | -       |        | _        | -  |           | -   | -                |                                    |                        |
|    | C     | PT         | CON                                       | ITRO |      | OWE            | RTR           | ANS  | FOR            | MER  | Ī        |      |         |        |          |    |           |     |                  |                                    |                        |
| _  |       | /FD<br>D/B | VAR                                       |      | _    |                |               |      |                |      |          |      |         |        |          | -  |           | _   |                  |                                    |                        |
|    | CNT   |            |   |      |      |                |               |      |                | VERL |          | 122  |         |        |          |    |           |     |                  |                                    |                        |
|    |       |            |   |      |      |                |               |      |                |      |          |      | -       |        |          |    |           |     |                  |                                    |                        |
| E  | 0     | F          | PA  | NE   | EL   | BC             | DA            | R    | )S             |      |          |      |         |        |          |    |           |     |                  |                                    |                        |
|    |       |            | BRA                                       | NCH  | CIR  | CUI            | T BR          | EAKE | ERS            |      |          |      |         |        |          |    |           |     |                  | REMAR                              |                        |
| 20 | 2-P   | OLE<br>30  | 40  | 50   | 15   | 20             | 25            | 30   | 40             | 50   | 3.<br>60 | -POL |         | 9      |          | 00 | 125       | 150 | 0 175 200        | (REFEF<br>ASSOCIATED               |                        |
|    | 20    |            | 40  |      | 10   | 20             | 20            |      |                |      |          | 10   |         |        |          |    | 120       | 10. |                  |                                    |                        |
| 1  | d and |            |   |      | _    |                | -             |      | ll             |      |          | æ    | · · · · |        |          |    | 111       |     |                  |                                    |                        |
| -  | 3     |            |   | _    | -    |                |               |      |                | 2    |          |      | 1       | -      | +        |    |           |     |                  | NOTE 6                             |                        |
| 1  |       |            |   |      | 4    | 1              |               |      |                |      |          |      | 1       | 1      |          |    |           |     |                  |                                    |                        |
|    |       | 1          |   |      |      |                |               |      |                |      |          |      |         |        |          |    |           |     |                  | NOTE 6                             |                        |
|    |       |            | $\left  \right $                          |      |      |                | -             | _    |                | -    |          |      |         | +      | +        |    |           |     | + $+$            |                                    |                        |
|    |       |            |   |      |      |                |               |      |                |      |          |      |         |        |          |    |           |     |                  |                                    |                        |
|    |       | 1          |   |      |      |                |               |      |                |      |          |      | 1       |        | 1        |    | 1         |     |                  |                                    |                        |
|    |       |            |   |      |      |                | -             |      |                | -    |          |      |         | +      | +        |    |           |     | + $+$            |                                    |                        |
|    |       |            |   |      |      |                |               |      |                |      |          |      |         |        |          |    |           |     |                  |                                    |                        |
|    |       |            |   |      |      |                |               |      |                |      |          |      |         |        |          |    |           |     |                  |                                    |                        |
|    | -     |            |   |      |      | EY:<br>MCE     |               |      |                |      |          |      |         |        | _        |    |           | _   |                  |                                    |                        |

| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440  |
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| www.cdrmaguire.com         Image: Comparison of the second secon |
| REVISIONS         Number       Description       Date   |
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| ISSUED FOR<br>BID   |
| WALTHAM .<br>WALTHAM  |
| WALTHAM POLICE<br>STATION<br>RENOVATION   |
| 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| ELECTRICAL<br>SCHEDULES   |
| PROJECT NUMBER: 20130535<br>DESIGNED BY: AM<br>DRAWN BY: DF<br>CHECKED BY: GM<br>DATE: July-Aug.<br>SCALE: 2016 N.T.S.<br>SHEET NUMBER:   |
| SHEET NOMBER:<br>E700<br>SHEET 140 OF 157   |

| LIGHTING FIXTURE SCHEDULE                        |   |  |     |                        |       |     |       | ┨ ┝──- <sub>┲</sub> ───── |              | LIG    |                   |   | CHEDULE  |   |                                       |                                  |   |   |               |                   |        |        |
|--|---|--|-----|------------------------|-------|-----|-------|---------------------------|--------------|--------|-------------------|---|--|---|---------------------------------------|----------------------------------|---|---|---------------|-------------------|--------|--------|
| PE MANUFACTURERS                                 | CATALOG NUMBER  | DESCRIPTION  | QTY | LAMPS<br>TYPE COLOR CF | ι ατγ | -   | LLAST | TYPE                      | INP<br>WATTS |        | REMARKS           | TYPE MANUFACTURERS  | CATALOG NUMBER   | DESCRIPTION   | QTY                                   | -                                | MPS<br>COLOR (                              | B/<br>CRI QTY BF  | LUMENS TY     | INP<br>YPE WATTS  |        | REMARK |
| GOTHAM<br>INDY<br>H.E. WILLIAMS                  | EVO 35/10 6DFR 120<br>SD6-11351-SAQF3 SD6-SAQF-PF/WET HB-TL<br>LEDSL60-OS11/835-EDD*OS-120                | 6" RECESSED APERATURE LED<br>DOWNLIGHT. UL LISTED WET<br>LOCATION                                  | 1   | LED 3500K 83           | 3 1   |     | 661   | LED                       | 22           | 120    |                   | ES1   | LQC-W1R-ELN  | SINGLE FACED SELF CONTAINED   | 1                                     | LED                              |   |   |               | .71               | UNIV N | IOTE 9 |
| GOTHAM<br>INDY                                   | AF 1/32TRT 6WR 120<br>C6H-126-42T C650-CL-WH HB-TL  | 6" RECESSED COMPACT<br>FLUORESCENT DOWNLIGHT   | 1   | 32W<br>TRT             | 1     |     | 2400  | ELB                       | 32           | 120    |                   | ES2   | LQC-W2R-ELN  | DOUBLE FACED SELF CONTAINEE   | 1                                     | LED                              |   |   |               | .71               |        | IOTE 9 |
| H.E. WILLIAMS<br>PHILIPS<br>OR EQUAL             | PBD60-1-32T-CS-EB1-120 COLORGRAZE MX4 POWERCORE   | EXTERIOR LED DECORATIVE  |     | LED                    |       |     |       | LED                       | 37           | 120    |                   | <u>NOTES:</u><br>1. NOTES 2-9 APPLY TO AL                                 | _ APPLICABLE LIGHTING FIXTURES.  | THE REMARKS COLUMN SHALL NOTE   |                                       |                                  |   |   |               |                   |        |        |
| GOTHAM<br>INDY                                   | AF 1/32TRT 6WR 120 EL<br>C6H-126-42T-BR C650-CL-WH HB-TL  | 6" RECESSED COMPACT<br>FLUORESCENT DOWNLIGHT WITH  | 1   | 32W                    | 1     |     | 2400  | ELB                       | 32           | 120 51 | E NOTE 12         | 2. FIXTURES SPECIFIED W<br>WITHOUT CATALOG NUM<br>3. VERIFY EXACT MOUNTIN | TH CATALOG NUMBERS ESTABLISH<br>IBERS. WHERE ONLY ONE MANUFA<br>IG CONDITIONS AND PROVIDE APPF       | QUALITY LEVEL FOR EQUAL FIXTURE<br>CTURER LISTED, THERE SHALL BE NO<br>ROPRIATE ACCESSORIES AND HARDW.<br>HALL BE TYPICAL OF ALL FIXTURES IN                                      | S FROM MA<br>SUBSTITUT<br>ARE TO ACC  | NUFACTU<br>FION. FIXT<br>COMMODA | RERS LISTED<br>URES SHALL I<br>.TE REQUIREN | BE DLC COMPLAINT UNI<br>/IENTS.   | ESS OTHERWISE | E INDICATED.      |        |        |
| H.E. WILLIAMS<br>GOTHAM                          | PBD60-1-32T-CS-EM-EB1-120           AF 1/32TRT 6WR 120 ECOS   | EMERGENCY BALLAST  |     | 32W                    | '     |     |       |                           |              |        |                   | 5. CONTINUOUS ROWS OF<br>LENGTHS AS INDICATED<br>6. PROVIDE ALL FLUORES   | FIXTURES SHALL BE PROVIDED WIT<br>ON THE PLANS. FIXTURES IN SOFF<br>CENT FIXTURES WITH ELECTRONIC    | THALL BE THREAD OF ALL PATCHALS IN<br>TH ALL NECESSARY HARDWARE AND F<br>ITS SHALL BE CONTINUOUS END TO E<br>BALLASTS WITH MAXIMUM THD OF 109<br>APID START WITH END-OF-LAMP-LIFE | ILLERS TO<br>ND.<br>6, PF GREA        | PROVIDE                          | THE EXACT<br>97% AND BF                     | MGL.  |               |                   |        |        |
| D INDY<br>H.E. WILLAIAMS<br>LITECONTROL          | C6H-126-42T-D10 C650-CL-WH HB-TL<br>PBD60-1-32T-CS-EBD1-120<br>P-ID-5924T8-PBCWM-TCWM-ELB-1CWQ-120        | FLUORESCENT DIMMABLE<br>DOWNLIGHT  | 1   | TRT                    | 1     |     | 2400  | ELB                       | 32           | 120 SE | EE NOTE 10        | OTHERWISE. BALLASTS<br>7. BALLAST EFFICIENCY SI<br>8. FLUORESCENT LAMPS S | SHALL BE UL LISTED AND MANUFAC<br>IALL BE GREATER THAN THAT REQU<br>HALL HAVE A MINIMUM CRI OF 82. L | TURED BY ADVANCE ELECTRIC, GE, O<br>JIRED TO ENSURE THAT THE VALUE LI<br>AMP SHALL BE MANUFACTURED BY O   | SRAM SYLV<br>STED FOR I<br>SRAM SYLV  | VANIA OR<br>INPUT WA             | JNIVERSAL.<br>FTS IS NOT EX                 | CEEDED.   |               |                   |        |        |
| 1 PINNACLE<br>PEERLESS<br>LITHONIA               | G9CA-2T8-4'-AC48G1-UNV-1C-W<br>PRM4-2-32-WHR-OPD-WPB-4-R4-120-GEB10-SCT-LP835-F3<br>L 2 32 120            | ARCOS ID 4' PENDANT-MOUNTED<br>INDIRECT/DIRECT   | 2   | Т8                     | 1     |     |       | ELB                       | 59           | 120    |                   | 10. FLUORESCENT DIMMIN<br>11. FLUORESCENT DIMMIN<br>HILUME SERIES. COORD  | B BALLAST SHALL HAVE FULL RANG<br>B BALLAST SHALL HAVE FULL RANG<br>INATE SPECIFIED DIMMER CONTRO    | SSORIES AS INDICATED ON THE PLANS<br>E ENERGY MANAGEMENT CAPABILITIE<br>E ARCHITECTURAL CAPABILITIES FRO<br>DL TO MATCH REQUIREMENTS FOR OP                                       | S FROM 10<br>M 1% TO 10<br>FIMAL CONT | 0% EQUA                          | . TO LUTRON<br>HE SUPPLIED                  | SYSTEM.   |               |                   |        |        |
| 2 H.E. WILLIAMS                                  | 80-4-2 32-VBY-2-EB2-UNV<br>KW 48 S 2 32 120 SO AH5 CSP  | 4' SUSPENDED INDUSTRIAL STRIP<br>LIGHT   | 2   | тв                     | 1     | .88 | 2900  | ELB                       | 55           | 120    |                   | FOR 90 MINUTES. BALLA<br>13. ALL FIXTURES SHALL BI                        | ST SHALL UL LISTED, COMPATIBLE   | DE 600-1325 LUMENS OF ILLUMINATION<br>TO THE SPECIFIED LAMPS AND BE EQI   |                                       |                                  |   | 5   |               |                   |        |        |
| LITHONIA<br>E H.E. WILLIAMS<br>LIGHTOLIER        | L 2 32 120 EL<br>80-4-2 32-VBY-2-EB2-UNV-EM1400(T8)/1<br>KW 48 S 2 32 120 SO AH5 CSP EM                   | 4' SUSPENDED INDUSTRIAL STRIP<br>LIGHT WITH EMERGENCY BATTERY<br>PACK                              | 2   | Т8                     | 1     | .88 | 2900  | ELB                       | 55           | 120 SI | EE NOTE 12        |   |  |   |                                       |                                  |   |   |               |                   |        |        |
| LITECONTROL<br>3 FINELITE<br>LIGHTOLIER          | P-ID-5234T8-PBSS-CWM-ELB-1CWQ-120<br>S12-ID-DCO-6-3T8-SC-91W-OPEN-120-FA-FE-C1-0.88<br>EG-1-3-B-H-P-4-1-W | CIROS 4' PENDANT-MOUNTED<br>INDIRECT/DIRECT  | 3   | тв                     | 1     |     |       | ELB                       | 86           | 120    |                   |   |  |   |                                       |                                  |   |   |               |                   |        |        |
| LITECONTROL<br>BD FINELITE                       | P-ID-5234T8-PBSS-CWM-DIM-1CWQ-120<br>S12-ID-DCO-6-3T8-CRD-91W-OPEN-120-FA-FE-C1-0.88                      | CIROS 4' PENDANT-MOUNTED<br>INDIRECT/DIRECT DIMMABLE   | 3   | Т8                     | 1     |     |       | ELB                       | 86           | 120 SE | EE NOTE 10        |   | TURERS MODEL # DESCRIPT  | LIGHTING CO   |                                       |                                  | ECHNOLOGY                                   | COVERAGE  | VOLTAGE       | NOTES             |        |        |
| LIGHTOLIER<br>PRUDENTIAL LIGHTING<br>FOCAL POINT | EG-1-3-B-H-P-4-1-W<br>P3940 7T5 PRA YGW D9 SC 120 CA48 X1<br>FSD 44 D 7T5 E 120 C48 CX WH                 | 4' DIAMETER SUSPENDED  | 7   | Т5                     | 7     |     | 2850  | ELB                       | 145          | 120    |                   |   |  |   |                                       |                                  |   | 360° TWO-SIDED,   |               |                   |        |        |
| H.E. WILLIAMS<br>LITECONTROL<br>PINNACLE         | RNDP-4-5-32U-FXA-EB4/1-UNV<br>G-D-LRC222T8-PFO-CWM-ELB-120<br>LU22A-2T5-G1-UNV-1C-W                       | 2' x 2' RECESSED INDIRECT  | 2   | Т8/Т5                  |       |     |       | ELB                       | 33           | 120    |                   |   |  | SENSORS CORRIDOR  | CEILIN                                |                                  | SONIC                                       | 90 LINEAR FT  | 24VDC         |                   |        |        |
| LIGHTOLIER<br>LITECONTROL                        | H9-S-2-G-L-R-2-17-120-HI<br>G-D-LRC222T8-PFO-CWM-ELB-EF-120   | 2' X 2' RECESSED INDIRECT  |     |                        |       |     |       |                           |              |        |                   |   | PPER DT-355 DUAL TECHNOLOGY CE   | EILING SENSORS BREAKROOM  | CEILIN                                | ANDU                             | /EINFRARED (PIR<br>LTRASONIC<br>IOLOGIES    | 1,000FT2  | 120V          |                   |        |        |
| E PINNACLE<br>LIGHTOLIER<br>LITECONTROL          | LU22A-2T5-G1-UNV-1E-W<br>H9-S-2-G-L-R-2-17-120-HI-EM<br>G-D-LRC242T8-PFO-CWM-ELB-120                      | EMERGENCY BALLAST  | 2   | T8/T5                  | 1     |     |       | ELB                       | 33           | 120 SE | EE NOTE 12        |   |  | RESTROOMS/  | CEILIN                                | NG                               | JLTRASONIC                                  | 500 FT2   |               | ROVIDE WITH ADDIT |        |        |
| 4 PINNACLE<br>LIGHTOLIER<br>LITECONTROL          | LU24A-2T5-G1-UNV-1C-W<br>H9-S-2-G-L-R-2-32-120-HI<br>G-D-LRC242T8-PFO-CWM-ELB-EF-120                      | 2' x 4' RECESSED INDIRECT  | 2   | T8/T5                  | 1     |     |       | ELB                       | 55           | 120    |                   |   | ULTRASONIC CEILING S   | OPEN LARGE OFFICE   | CEILIN                                | NG                               | JLTRASONIC                                  | 2,000FT2  | 24VDC PR      | ROVIDE LOW VOLTA  | GE     |        |
| E PINNACLE<br>LIGHTOLIER                         | LU24A-2T5-G1-UNV-1E-W<br>H9-S-2-G-L-R-2-32-120-HI-EM  | 2' x 4' RECESSED INDIRECT WITH<br>EMERGENCY BALLAST  | 2   | T8/T5                  | 1     |     |       | ELB                       | 55           | 120 SI | EE NOTE 12        | S <sup>O1a</sup> WATTSTO  | PPER UW-100-W ULTRASONIC WALL SW<br>AUTO ON/OFF SWITCH.  |   | WALL                                  |                                  | JLTRASONIC                                  | MAJOR MOTION: 20' X 20'<br>MINOR MOTION: 15' X 15   | 120V          |                   |        |        |
| DESIGNPLAN<br>5 LITHONIA<br>JUNO LIGHTING        | RDL-8-E8-4-01-C-C-0<br>LF6N 2/26DTT F602A 120<br>CH6-226Q-650C-WH   | FLUORESCENT DOWNLIGHT  | 1   | 2-26W 3500K            | 1     |     |       | ELB                       | 52           | 120    |                   | s <sup>O1</sup> WATTSTO   | PPER DW-100-W WALL SWITCH SENSOR   | SINGLE CIRCUIT SMALL OFFICE/SMALL BREAK   | ROOM WALL                             | ANDU                             | /E INFRARED (PIR<br>LTRASONIC<br>IOLOGIES   | MAJOR MOTION, PIR 35' X 30<br>ULTRASONIC 20' X 20'<br>MINOR MOTION, PIR 20' X 15<br>ULTRASONIC 15' X 15 |               |                   |        |        |
| DESIGNPLAN<br>E LITHONIA<br>JUNO LIGHTING        | RDL-8-E8-4-01-C-C-1<br>LF6N 2/26DTT F602A 120 EL<br>CH6-226Q-650C-WH-PLK-E                                | FLUORESCENT DOWNLIGHT WITH<br>EMERGENCY BALLAST  | 1   | 2-26W 3500K            | 1     |     |       | ELB                       | 52           | 120 SE | EE NOTE 12        | OR EQUAL  | MANUAL ON/ AUTO OFF<br>ULTRASONIC DUAL REL<br>SWITCH SEN SOR. WITH                                   | LAY WALL  | iL                                    |                                  | /EINFRARED (PIR<br>LTRASONIC                | MAJOR MOTION, PIR 35' X 30<br>(1) ULTRASONIC 20' X 20'<br>MINOR MOTION, PIR 20' X 15                    |               |                   |        |        |
| COOPER LIGHTING<br>H.E. WILLIAMS<br>LITHONIA     | MC-228T5A-120-EBT1<br>11-4-2 28T5S-F A12125-EB2-UNV<br>M 2 28T5 A12 MVOLT GEB10PS                         | 1' x 4' SURFACE MOUNTED<br>ACRYLIC LENS FLUORESCENT  | 2   | T5                     | 1     | 1.0 |       | ELB                       | 60           | 120    |                   | S <sup>O2</sup> WATTSTO   |  | CIRCUITS. SMALL OFFICE/   | WALL                                  |                                  | IOLOGIES                                    | ULTRASONIC 15' X 15   | 120V PR       | ROVIDE WITH ADDIT |        |        |
| 2 COOPER LIGHTING<br>H.E. WILLIAMS<br>LITHONIA   | ICF-232-120V-EL4-EB81<br>80-4-2 32-EB2-UNV<br>L 2 32 MVOLT GEB10PS  | 4' INDUSTRIAL STRIP<br>FLUORESCENT   | 2   | тв                     | 1     |     | 2850  | ELB                       | 53           | 120    |                   |   |  |   |                                       |                                  |   |   |               |                   |        |        |
| COOPER LIGHTING<br>CD LIGHTING<br>KENALL         | FCC-X-232-120-EB51-SPK         DCA-4-T-2-32-120-EB-18CP         CD 4 1/1 2 32 RS 120 1/G 1 SK             | 8" x 48" CORNER MOUNTED<br>FLUORESCENT WITH MICROPHONE<br>VANDAL RESISTANT -<br>CORRECTIONAL GRADE | 2   | Т8                     | 1     |     |       | ELB                       | 71           | 120    |                   |   |  |   |                                       |                                  |   |   |               |                   |        |        |
| LITECONTROL<br>V1 LINEAR LIGHTING<br>LIGHTOLIER  | 2114T5-CWM-ELB/PS-DP<br>WW5-D-1SG-ET5-120-NNS-R-BW-4'<br>PTS5-1-S-O-120-4                                 | 48" RECESSED PERIMETER   | 1   | Т5                     | 1     |     |       | ELB                       | 32           | 120    |                   |   |  |   |                                       |                                  |   |   |               |                   |        |        |
| LITECONTROL<br>1E LINEAR LIGHTING<br>LIGHTOLIER  | 2114T5-CWM-ELB/PS-DP-EF-120<br>WW5-D-1SG-ET5-120-NNS-R-BW-EC-4'<br>PTS5-1-S-O-E1-4                        | 48" RECESSED PERIMETER WITH<br>EMERGENCY BALLAST   | 1   | T5                     | 1     |     |       | ELB                       | 32           | 120 SE | EE NOTE 12        |   |  |   |                                       |                                  |   |   |               |                   |        |        |
| LITHONIA<br>/2 H.E. WILLIAMS<br>COOPER           | CA 2 32 MVOLT<br>20-4-232-A-EB2-UNV<br>23DW-2T8-4-1EB   | 48" WALL MOUNT CORRIDOR  | 2   | тв                     | 1     | .88 | 2850  | ELB                       | 61           | 120    |                   |   |  | LIGHTING<br>PANEL: LC1A   |                                       |                                  |   |   |               |                   |        |        |
| LITHONIA<br>COOPER                               | TWA 42TRT 120 PE DBL LPI<br>CF-WP-PL-42-120-PE  | MINI WALL-PACK   | 1   | 42W<br>TRT             | 1     |     |       | ELB                       | 48           | 120    |                   | -   |  | RELAY ZONE<br>1 1 FRONT BU  | SERVICE                               |                                  |   | CONTROL   |               |                   |        |        |
| H.E. WILLIAMS<br>PHILIPS LGHTOLIER<br>CORELITE   | WL5-1 42T-GX24Q-4-120         CL08-T01-E-N-#-1-D-E-W         AW-SN-1T8-1C-120-SU-WA-8'-ET                 | COVE UPLIGHT   | 1   | тв                     | 1     |     | 2950  | ELB                       | 32           |        | INDICATES FIXTURE | -   |  | 2 2 BACK BUIL   | ding<br>Aylightin                     | 1G                               | L21-10<br>L21-24<br>L21-26                  | NOTE 5.<br>NOTE 5.  |               |                   |        |        |
| OR EQUAL<br>LITHONIA<br>1 COOPER                 | ELM<br>LEMR2  | GENERAL PURPOSE EMERGENCY  | 2   |                        |       |     |       |                           | 1.2          | 120    |                   |   |  | NOTES:<br>1 "ZONE" INDICATES SV<br>2 LIGHTING ENERGIZE  | MTCH CON                              |                                  |   |   |               |                   |        |        |
| H.E. WILLIAMS<br>LITHONIA                        | EMER/MR16/CP-WHT<br>ELA T QWP L0304   | UIGHT  |     |                        |       |     |       |                           |              |        |                   | -   |  | 3 LIGHTING ON/OFF MA<br>TIMED SWEEP.<br>4 LIGHTING ON/OFF MA  | SWITCH IN                             | NPUT, OFF                        | MA  |   |               |                   |        |        |
| 2 JUNO LIGHTING<br>HOLOPHANE<br>LITHONIA         | NRL-WP-2-GY-SD         ELA-CZ11-WP-L0304         ELM2 LED SD WRS  | EMERGENCY HEAD   | 2   | LED                    |       |     |       | LED                       | 1.44         | 120    |                   | -   |  | 5 LIGHTING ON VAPHO   |                                       |                                  | E CLOCK.                                    |   |               |                   |        |        |
| 3 H.E. WILLIAMS                                  | EMER/CP/ADJ/LED WHT<br>NRL-SQ-2-WH-SD   | 6V EMERGENCY BATTERY UNIT  | 2   | LED                    |       |     |       | LED                       | 1.5          | 120    |                   |   |  |   |                                       |                                  |   |   |               |                   |        |        |

NOTES 2-9 APPLY TO ALL APPLICABLE LIGHTING FIXTURES. THE REMARKS COLUMN SHALL NOTE ADDITIONAL REQUIREMENTS.
 FIXTURES SPECIFIED WITH CATALOG NUMBERS ESTABLISH QUALITY LEVEL FOR EQUAL FIXTURES FROM MANUFACTURERS LISTED WITHOUT CATALOG NUMBERS. WHERE ONLY ONE MANUFACTURER LISTED, THERE SHALL BE NO SUBSTITUTION.

VERIFY EXACT MOUNTING CONDITIONS AND PROVIDE APPROPRIATE ACCESSORIES AND HARDWARE TO ACCOMMODATE REQUIREMENTS.
 FIXTURE TYPE INDICATED ONCE ON A CONTINUOUS ROW SHALL BE TYPICAL OF ALL FIXTURES IN THE ROW UNLESS NOTED OTHERWISE.

5. CONTINUOUS ROWS OF FIXTURES SHALL BE PROVIDED WITH ALL NECESSARY HARDWARE AND FILLERS TO PROVIDE THE EXACT

CONTINUOUS ROWS OF FIXTURES SHALL BE PROVIDED WITH ALL NECESSARY HARDWARE AND FILLERS TO PROVIDE THE EXACT LENGTHS AS INDICATED ON THE PLANS. FIXTURES IN SOFFITS SHALL BE CONTINUOUS END TO END.
 PROVIDE ALL FLUORESCENT FIXTURES WITH ELECTRONIC BALLASTS WITH MAXIMUM THD OF 10%, PF GREATER THAN 97% AND BF GREATER THAN 0.88. BALLASTS SHALL BE PROGRAMMED RAPID START WITH END-OF-LAMP-LIFE PROTECTION UNLESS NOTED OTHERWISE. BALLASTS SHALL BE UL LISTED AND MANUFACTURED BY ADVANCE ELECTRIC, GE, OSRAM SYLVANIA OR UNIVERSAL.
 BALLAST EFFICIENCY SHALL BE GREATER THAN THAT REQUIRED TO ENSURE THAT THE VALUE LISTED FOR INPUT WATTS IS NOT EXCEEDED.
 FLUORESCENT LAMPS SHALL HAVE A MINIMUM CRI OF 82. LAMP SHALL BE MANUFACTURED BY OSRAM SYLVANIA, GE OR PHILLIPS.
 PROVIDE EXIT SIGNS WITH ARROWS AND MOUNTING ACCESSORIES AS INDICATED ON THE PLANS.

10. FLUORESCENT DIMMING BALLAST SHALL HAVE FULL RANGE ENERGY MANAGEMENT CAPABILITIES FROM 10% TO 100% EQUAL TO LUTRON.

11. FLUORESCENT DIMMING BALLAST SHALL HAVE FULL RANGE ARCHITECTURAL CAPABILITIES FROM 1% TO 100% EQUAL TO LUTRON HILUME SERIES. COORDINATE SPECIFIED DIMMER CONTROL TO MATCH REQUIREMENTS FOR OPTIMAL CONTROL OF THE SUPPLIED SYSTEM.

12. BATTERY BACKED FLUORESCENT BALLASTS SHALL PROVIDE 600-1325 LUMENS OF ILLUMINATION FROM (1) STDN OR HO T5/T8 LAMP FOR 90 MINUTES. BALLAST SHALL UL LISTED, COMPATIBLE TO THE SPECIFIED LAMPS AND BE EQUAL TO TYPE LP600 BY BODINE.

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|   | WALTHAM POLICE<br>STATION<br>RENOVATION  |
|   |  |
|   | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS   |
|   | ELECTRICAL   |
|   | SCHEDULES  |
|   | PROJECT NUMBER: 20130535<br>DESIGNED BY: AM  |
|   | DRAWN BY: DF<br>CHECKED BY: GM   |
|   | DATE: July-Aug.<br>SCALE: 2016 N.T.S.  |
|   |  |
|   | E701   |
|   | <b>SHEET</b> 141 <b>OF</b> 157   |

# AUDIOVISUAL COORDINATION LEGEND

|  |              | 7              | 7      |        | ~ |                |
|--|--------------|----------------|--------|--------|---|----------------|
| VIDEO: PROJECTION SCREENS  |              |                |        |        |   |                |
| PROJECTION SCREENS FURNISHED BY PROJECTION SCREENS INSTALLED BY  |              |                | X<br>X |        |   | _              |
| ELECTRIC PROJECTION SCREEN LVC AND SWITCH FURNISHED BY   |              |                | X      |        |   | -              |
| ELECTRIC PROJECTION SCREEN LVC AND SWITCH INSTALLED BY   |              |                | Х      |        |   |                |
| VIDEO: PROJECTIONS   |              | _              |        |        |   |                |
| VIDEO PROJECTOR FURNISHED BY   |              |                | х      |        |   | -              |
| VIDEO PROJECTOR INSTALLED BY   |              |                | Х      |        |   | _              |
| CEILING MOUNTED/LIFT FURNISHED BY  |              |                | Х      |        |   |                |
| CEILING MOUNTED/LIFT INSTALLED BY<br>UNISTRUT FURNISHED BY   |              |                | X<br>X |        |   | _              |
| UNISTRUT INSTALLED BY  |              |                | X      |        |   | -              |
|  |              |                |        |        |   |                |
| VIDEO: LCD/PLASMA DISPLAY DISPLAY FURNISHED BY   |              | 1              | v      |        |   | _              |
| DISPLAY INSTALLED BY   |              |                | X<br>X |        |   | -              |
| DISPLAY MOUNT FURNISHED BY   |              |                | X      |        |   | -              |
| DISPLAY MOUNT INSTALLED BY   |              |                | Х      |        |   |                |
| DISPLAY WALL BLOCKING PROVIDED BY  | X            |                |        |        |   | _              |
| AUDIO: LOUDSPEAKERS AND MICROPHONES  |              | _              |        |        |   | _              |
| CEILING LOUDSPEAKER FURNISHED BY   |              |                | Х      |        |   |                |
| CEILING LOUDSPEAKER INSTALLED BY   |              |                | Х      |        |   |                |
| CEILING LOUDSPEAKER BACK BOXES FURNISHED BY<br>CEILING LOUDSPEAKER BACK BOXES (IF ANY) INSTALLED BY                              | -            |                |        |        |   |                |
| IN-WALL LOUDSPEAKER FURNISHED BY   | -            |                | >      | <      |   |                |
| IN-WALL LOUDSPEAKER BACK BOX (IF ANY) INSTALLED BY   |              |                | -      |        |   |                |
| DISPLAY MOUNTED SPEAKERS FURNISHED BY  |              |                |        |        |   |                |
| DISPLAY MOUNTED SPEAKERS INSTALLED BY TABLETOP WIRED MICROPHONES FURNISHED BY  | _            |                |        |        |   |                |
| TABLETOP WIRED MICROPHONES FORNISHED BY  |              |                |        |        |   | _              |
|  |              |                |        |        |   |                |
| NETWORK / IT   | _            | 1              |        |        |   |                |
| LAN OUTLETS REQUIRED FOR AV EQUIPMENT FURNISHED BY LAN OUTLETS REQUIRED FOR AV EQUIPMENT INSTALLED BY                            |              |                |        | X      |   | _              |
| NETWORK BACKBONE FURNISHED BY  |              |                |        | X<br>X |   | _              |
| NETWORK BACKBONE INSTALLED BY  |              |                |        | х      |   |                |
|  |              |                |        |        |   |                |
| ELECTRICAL: AV CABLE AV HIGH-VOLTAGE CABLE FURNISHED BY  |              | V              |        |        |   | _              |
| AV HIGH-VOLTAGE CABLE I VINISHED BY  |              | X<br>X         |        |        |   | -              |
| AV LOW-VOLTAGE CABLE FURNISHED BY  |              |                | Х      |        |   |                |
| AV LOW-VOLTAGE CABLE INSTALLED BY  |              |                | Х      |        |   |                |
| AV CONDUIT & CONDUIT SLEEVE REQUIREMENTS FURNISHED BY<br>AV CONDUIT & CONDUIT SLEEVE INSTALLED WITH PULL STRINGS BY              |              | X<br>X         |        |        |   | _              |
| AV HIGH-VOLTAGE PROJECTION SCREEN WIRING PROVIDED BY   |              | X              |        |        |   | -              |
| AV LOW-VOLTAGE PROJECTION SCREEN WIRING PROVIDED BY  |              | Х              |        |        |   |                |
| WALL MOUNTED JUNCTION BOXES FOR AV REQUIREMENTS FURNISHED BY   |              | X              |        |        |   |                |
| WALL MOUNTED JUNCTION BOXES FOR AV REQUIREMENTS INSTALLED BY<br>FLOOR BOXES FOR AV REQUIREMENTS FURNISHED BY                     |              | X<br>X         |        |        |   | -              |
| FLOOR BOXES FOR AV REQUIREMENTS INSTALLED BY   |              | X              |        |        |   | -              |
| POKE-THROUGH FOR AV REQUIREMENTS FURNISHED BY  |              | Х              |        |        |   |                |
| POKE-THROUGH FOR AV REQUIREMENTS INSTALLED BY  |              | Х              |        |        |   | _              |
| AV FURNITURE:  |              |                |        |        |   |                |
| VENTILATED AV FURNITURE/CREDENZAS FURNISHED BY   |              |                |        |        |   | +              |
| VENTILATED AV FURNITURE/CREDENZAS INSTALLED BY   |              |                |        |        |   |                |
| AV FURNITURE/CREDENZAS ADDITIONAL COOLING AV FANS FURNISHED BY   |              |                |        |        |   | $\neg$         |
| AV FURNITURE/CREDENZAS ADDITIONAL COOLING AV FANS INSTALLED BY<br>AV FURNITURE/CREDENZAS CUTTING CORING FOR AV CABLE PATHWAYS BY |              |                |        |        |   | -              |
| AV FURNITURE/TABLETOP CUTTING CORING FOR AV DEVICES BY   |              |                |        |        |   | +              |
|  |              |                |        |        |   |                |
|  |              |                |        |        |   | $\downarrow$   |
| AV LIGHTING SYSTEM FURNISHED AND INSTALLED BY<br>AV LIGHTING SYSTEM PROGRAMMED BY  | +            |                |        |        |   |                |
| LIGHTING SCENES SETTINGS BY  |              |                | >      | <      |   |                |
| AV SHADE SYSTEM FURNISHED AND INSTALLED BY   |              |                |        |        |   |                |
| AV SHADE SYSTEM PROGRAMMED BY AV CONTROL SYSTEMS FURNISHED BY  | $\checkmark$ |                |        |        |   | $ \downarrow $ |
| AV CONTROL STSTEMS FORMSFILD BT  | _            |                |        |        |   | $\neg$         |
|  |              |                |        |        |   |                |
|  | _            | _              | _      |        |   |                |
| CATV / CABLE CATV HOME RUN CABLE SUPPLIED BY   |              |                |        | x      |   | -              |
| CATV HOME RUN CABLE INSTALLED BY   |              |                |        | X      |   |                |
| CATV BACKBONE SUPPLIED BY  |              |                |        | Х      |   |                |
| CATV BACKBONE INSTALLED BY   | $\vdash$     | $ \sqsubseteq$ |        | Х      |   |                |
| CABLE/SAT TUNER BOXES FURNISHED BY<br>CABLE/SAT TUNER BOXES INSTALLED BY   |              | $\geq$         | >      | <      | _ |                |
|  |              |                |        |        |   |                |
| WALL PLATES BY:  | -            | 1              |        |        |   | $\square$      |
| AV WALL PLATES FOR AV REQUIREMENTS FURNISHED BY AV WALL PLATES FOR AV REQUIREMENTS INSTALLED BY                                  | +            |                | X<br>X |        |   | $\neg$         |
| AV WALL PLATES FOR AV REQUIREMENTS INSTALLED BY LAN WALL PLATES REQUIRED FOR AV EQUIPMENT FURNISHED BY                           | +            |                |        | х      |   | $\neg$         |
| LAN WALL PLATES REQUIRED FOR AV EQUIPMENT INSTALLED BY   | +            | 1              |        | X      |   |                |
|  |              | _              |        |        |   |                |
| ELECTRICAL WALL PLATES FOR AV REQUIREMENTS FURNISHED BY<br>ELECTRICAL WALL PLATES FOR AV REQUIREMENTS INSTALLED BY               |              | X<br>X         |        |        |   |                |

|        | GENERAL AUDIOVIS  | SUAL / | ABBREVIATIONS                                   |
|--------|---|--------|---|
| AC     | ALTERNATING CURRENT                                       | NEC    | NATIONAL ELECTRICAL CODE                        |
| ADA    | AMERICANS WITH DISABILITIES ACT                           | NEXT   | NEAR END CROSS TALK                             |
| AFF    | ABOVE FINISH FLOOR  | NIC    | NOT IN CONTRACT                                 |
| AIA    | AMERICAN INSTITUTE OF ARCHITECTS                          | OFE    | OWNER FURNISHED EQUIPMENT                       |
| ANSI   | AMERICAN NATIONAL STANDARDS INSTITUTE                     | OSHA   | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION   |
| AWG    | AMERICAN WIRE GAUGE                                       | PABX   | PRIVATE AUTOMATIC BRANCH EXCHANGE               |
| BICSI  | BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL        | PBX    | PRIVATE BRANCH EXCHANGE                         |
| BTU    | BRITISH THERMAL UNIT                                      | POTS   | PLAIN OLD TELEPHONE SERVICE                     |
| CATV   | CABLE TELEVISION  | PR     | PAIR  |
| CO     | CENTRAL OFFICE  | PVC    | POLYVINYL CHLORIDE                              |
| CODEC  | CODER DECODER   | RCDD   | REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER |
| CTS    | CERTIFIED TECHNOLOGY SPECIALIST                           | REF    | REFERENCE                                       |
| CPU    | CENTRAL PROCESSING UNIT                                   | RFI    | RADIO FREQUENCY INTERFERENCE                    |
| dB     | DECIBEL   | RFP    | REQUEST FOR PROPOSAL                            |
| DC     | DIRECT CURRENT  | RFQ    | REQUEST FOR QUOTE                               |
| DEMARC | DEMARCATION POINT   | RMS    | RACK MOUNT SPACE                                |
| EIA    | ELECTRONICS INDUSTRIES ASSOCIATION                        | SP     | SERVICE PROVIDER                                |
| EMC    | ELECTROMAGNETIC COMPATIBILITY                             | STP    | SHIELDED TWISTED-PAIR                           |
| EMI    | ELECTROMAGNETIC INTERFERENCE                              | SWB    | SWITCHBOARD                                     |
| EMR    | ELECTROMAGNETIC RADIATION                                 | SYS    | SYSTEM  |
| EMT    | ELECTRIC METALLIC TUBING                                  | ТВ     | TERMINAL BLOCK                                  |
| FCC    | FEDERAL COMMUNICATIONS COMMISSION                         | TEL    | TELEPHONE                                       |
| FEXT   | FAR END CROSS TALK  | TELCO  | TELEPHONE COMPANY                               |
| GEC    | GROUNDING ELECTRODE CONDUCTOR                             | TYP    | TYPICAL   |
| GND    | GROUND  | UG     | UNDERGROUND                                     |
| нс     | HORIZONTAL CROSS-CONNECT                                  | UL     | UNDERWRITERS LABORATORIES, INC.                 |
| HF     | HIGH FREQUENCY  | UPS    | UNINTERRUPTIBLE POWER SUPPLY                    |
| нн     | HANDHOLE  | UTP    | UNSHIELDED TWISTED-PAIR                         |
| HVAC   | HEATING, VENTILATION, AND AIR-CONDITIONING                | WA     | WORK AREA                                       |
| Hz     | HERTZ   | WP     | WATERPROOF OUTLET                               |
| ICIA   | INTERNATIONAL COMMUNICATIONS INDUSTRIES ASSOCIATION, INC. | x      | CROSS-CONNECT                                   |
| IEEE   | INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS. INC.   |        | ON DISPLAY:                                     |
| ISDN   | INTEGRATED SERVICES DIGITAL NETWORK                       | VGA    | 640 x 480 VIDEO RESOLUTION 4:3 ASPECT RATIO     |
| ISO    | INTERNATIONAL STANDARDS ORGANIZATION                      | SVGA   | 800 x 600 VIDEO RESOLUTION 4:3 ASPECT RATIO     |
| kHz    | KILOHERTZ   | XGA    | 1024 x 768 VIDEO RESOLUTION 4:3 ASPECT RATIO    |
| kwh    | KILOWATT-HOURS  | QVGA   | 1280 x 800 VIDEO RESOLUTION 4:3 ASPECT RATIO    |
| LAN    | LOCAL AREA NETWORK  | WXGA   | 1280 x 960 VIDEO RESOLUTION 16:9 ASPECT RATIO   |
| LCD    | LIQUID CRYSTAL DISPLAY                                    | WXGA+  | 1440 x 900 VIDEO RESOLUTION 16:9 ASPECT RATIO   |
| LED    | LIGHT-EMMITTING DIODE                                     | SXGA   | 1280 x 1024 VIDEO RESOLUTION 16:9 ASPECT RATIO  |
| MH     | MANHOLE   | SXGA+  | 1400 x 1050 VIDEO RESOLUTION 4:3 ASPECT RATIO   |
| MODEM  | MODULATOR DEMODULATOR                                     | UXGA   | 1600 x 1200 VIDEO RESOLUTION 4:3 ASPECT RATIO   |
| MTT    | MAIN TELEPHONE TERMINAL                                   | WSXGA+ | 1680 x 1050 VIDEO RESOLUTION 16:9 ASPECT RATIO  |
| ···· · |   | MONO/  |   |

## GENERAL AUDIOVISUAL NOTES

1. REFER TO ELECTRICAL DRAWINGS FOR PROPOSED PATHWAYS.

2. THIS CONTRACTOR SHALL COORDINATE EXACT MOUNTING HEIGHTS AND LOCATION OF EQUIPMENT WITH ARCHITECT.

3. REFER TO AUDIOVISUAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

4. THIS CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS FOR ALL AUDIOVISUAL DEVICES PRIOR TO INSTALLATION.

5. ALL VOICE/DATA/VIDEO CABLES SHALL BE PLENUM RATED.

6. VERIFY LABELING STANDARD WITH OWNER, SUBMIT LABELING SCHEME FOR APPROVAL. LABELING SHALL BE IN ACCORDANCE WITH ANSI/EIA/TIA-606A STANDARDS.

7. THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, PLATES AND INSERTS TO ACCEPT THE CONNECTIVITY PRODUCTS WITHIN THE ELECTRICAL CONTRACTOR PROVIDED FLOOR BOXES, POKE THRU BOXES AND SURFACE RACEWAY.

8. THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, PLATES AND INSERTS TO ACCEPT THE CONNECTIVITY PRODUCTS WITHIN THE CONFERENCE ROOM CABLE CUBBY DEVICES.

| AUDIOVISUAL STANDARD CABLE TYPES |                                |              |                        |                          |                       |             |  |  |
|----------------------------------|--------------------------------|--------------|------------------------|--------------------------|-----------------------|-------------|--|--|
| DESIGNATION                      | APPLICATION                    | MANUFACTURER | MODEL NUMBER           | NOMINAL O.D.<br>(INCHES) | UNIT AREA<br>(INCHES) | CABLE CODED |  |  |
| А                                | AUDIO/MICROPHONE               | WEST PENN    | 25292                  | 0.143                    | 0.016                 | MXXX        |  |  |
| С                                | RS-232 CONTROL/CONTACT CLOSURE | WEST PENN    | 253270B                | 0.183                    | 0.026                 | CXXX        |  |  |
| СТ                               | CRESTRON CRESNET               | CRESTRON     | CRESNET-P              | 0.216                    | 0.037                 | CTXXX       |  |  |
| IR                               | INFRA RED EMITTER PROBE        | CRESTRON     | IRP2                   | -                        | -                     | IRXXX       |  |  |
| NT6                              | CATEGORY 6                     | MOHAWK       | M58281                 | 0.208                    | 0.037                 | NTXXX       |  |  |
| Р                                | DC REMOTE POWER                | WEST PENN    | 25224                  | 0.141                    | 0.016                 | PXXX        |  |  |
| QM                               | QUICK MEDIA CABLE              | CRESTRON     | CRESCAT-QM-P           | 0.431                    | 0.146                 | QMXXX       |  |  |
| RGBHV                            | RGBHV/VGA                      | EXTRON       | 22-103-02 (MHR-5P)     | 0.304                    | 0.072                 | RGBHXXX     |  |  |
| RF                               | WIRELESS MICROPHONE ANTENNA    | BELDEN       | 88240                  | 0.159                    | 0.019                 | RFXXX       |  |  |
| S                                | SPEAKER, 70V                   | WEST PENN    | 25224                  | 0.141                    | 0.016                 | SXXX        |  |  |
| SS                               | SPEAKER, 8 OHM                 | WEST PENN    | 25227                  | 0.221                    | 0.038                 | SSXXX       |  |  |
| UTP                              | SKEW FREE A/V TWISTED PAIR     | EXTRON       | 22-142-03 (UTP23SF-4P) | 0.240                    | 0.045                 | UTPXXX      |  |  |
| V                                | COMPOSITE VIDEO                | EXTRON       | 22-146-02 (RG59P)      | 0.204                    | 0.033                 | VXXX        |  |  |
| YC                               | S-VIDEO                        | EXTRON       | 22-129-02 (MHR-2P)     | 0.245                    | 0.047                 | YCXXX       |  |  |
| RGB                              | COMPONENT VIDEO                | EXTRON       | 22-103-02 (MHR-5P)     | 0.304                    | 0.072                 | RGBXXX      |  |  |

|                  | Al   |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|
| ୲୷୷              | Wall Moui<br>"Xg" - Indic                            |  |  |  |  |  |  |
| H₩ <sub>XG</sub> | INTERACTI\<br>"XG" - INDIC                           |  |  |  |  |  |  |
| HWB4 AV          | FOUR COMP<br>EVOLUTION<br>INSTALLATIC<br>AV-INDICAT  |  |  |  |  |  |  |
| HWB2 VD          | TWO COMP/<br>EVOLUTION<br>INSTALLATION<br>VD-INDICAT |  |  |  |  |  |  |
| €₽               | AUDIO SPEA   |  |  |  |  |  |  |
| HAV              | WALL MOUN  |  |  |  |  |  |  |
| AVR              | AUDIO VIDE   |  |  |  |  |  |  |
| VCC              | VIDEO PRES   |  |  |  |  |  |  |
|                  |  |  |  |  |  |  |  |
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| ROOM             |  |  |  |  |  |  |  |

| REQUIRED LAN   | N/NETWORK COM   |
|--|---|
|  | WORK CONNEC<br>/UNICATIONS TH<br>INCE ROOM.   |
| LAN/NETWORH<br>LAN/NETWORH<br>THE STANDAR<br>DRAWINGS/SP | TES REQUIRED<br>COUTLET CABLIE<br>CABLE TYPE AI<br>D TELECOMMUN<br>ECIFICATIONS F<br>CLOCATION(S) W |
|  |   |
|  |   |
| DESIGNATION  |   |
| PM3  | HDMI MALE   |
| PM4  | RGBHV / 5-\   |
| PM12   | 3.5 MM STE  |
| PM14   | MALE TO M   |
| PM17   | HDMI. MALE  |

|    |             | DESIGNATIC |
|----|-------------|------------|
|    |             | PM3        |
|    |             | PM4        |
| ΞA | CABLE CODED | PM12       |
| S) | IDENTIFIERS | PM14       |
|    | MXXX        | PM17       |
|    | CXXX        | PM19       |
|    | CTXXX       | PM24       |
|    | IRXXX       | PM25       |
|    | NTXXX       | PM62       |
|    | PXXX        | PM64       |
|    |             |            |

## AUDIOVISUAL LEGEND

## DUNTED A/V CONTROL PANEL DICATES THE SIZE OF BOX

TIVE WHITEBOARD DICATES THE SIZE OF BOX

MPARTMENT MULTI-SERVICE RECESSED WALL BOX, WIREMOLD LEGRAND ON SERIES #EFSB4. PROVIDE ALL REQUIRED ACCESSORIES FOR A COMPLETE NTION, BY ELECTRICAL CONTRACTOR INCLUDING TWO (2) EFB-MAAP. ATES FOR AV RACK

MPARTMENT MULTI-SERVICE RECESSED WALL BOX, WIREMOLD LEGRAND ION SERIES #EFSB2. PROVIDE ALL REQUIRED ACCESSORIES FOR A COMPLETE ATION, BY ELECTRICAL CONTRACTOR. CATES FOR VIDEO DISPLAY

EAKER, CEILING MOUNTED

JNTED A/V CONNECTION PLATE

DEO RACK LOCATION, SEE DETAILS

ESENTATION CAMERA (CEILING MOUNTED)

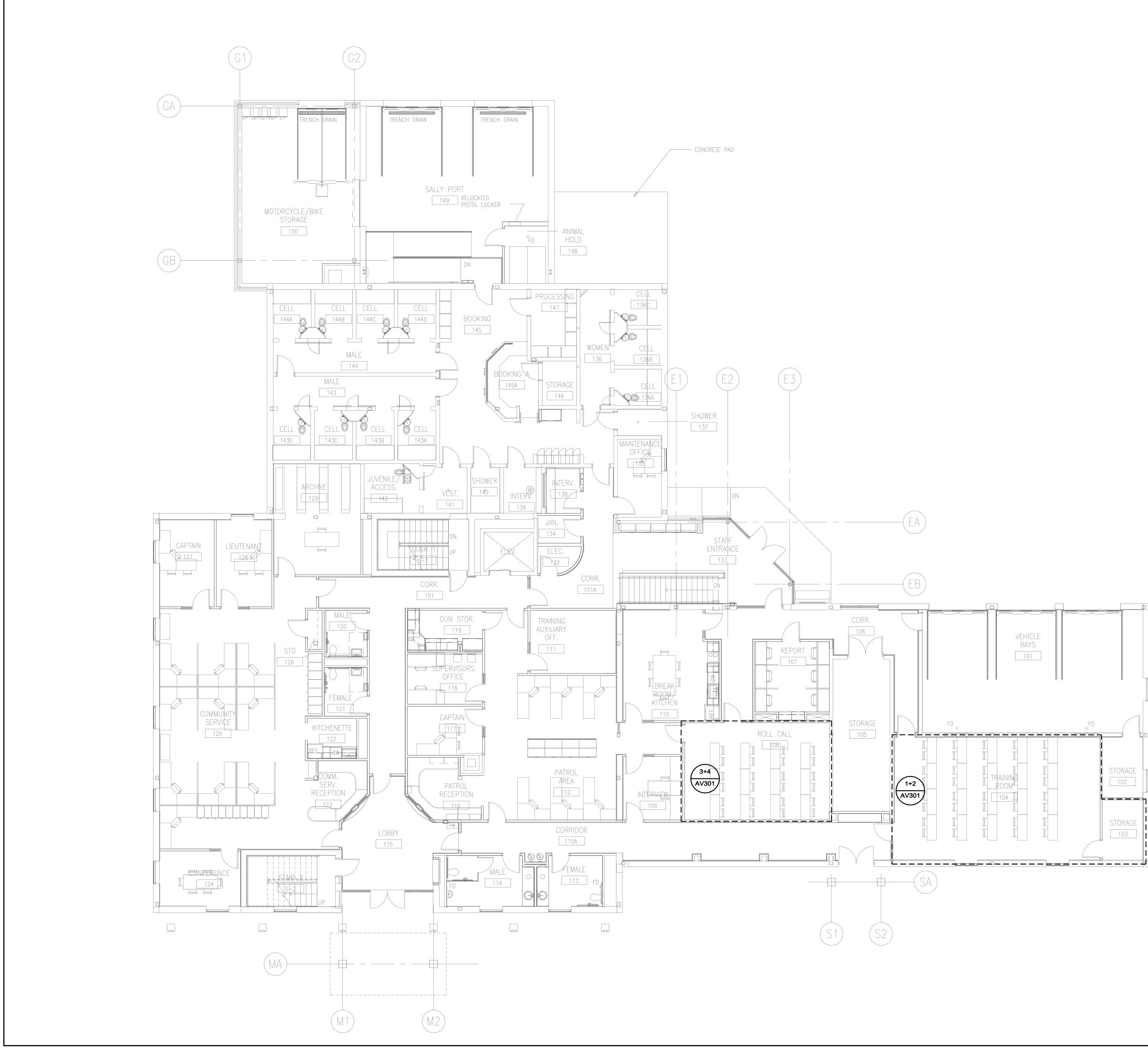
| Ν   | NETWORK CONNECTIONS          |             |  |  |  |  |  |  |  |  |
|-----|------------------------------|-------------|--|--|--|--|--|--|--|--|
|     | LOCATION                     | CONNECTIONS |  |  |  |  |  |  |  |  |
|     | SINGLE DISPLAY -WALL MOUNTED | NONE        |  |  |  |  |  |  |  |  |
|     |                              |             |  |  |  |  |  |  |  |  |
|     |                              |             |  |  |  |  |  |  |  |  |
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|     |                              |             |  |  |  |  |  |  |  |  |
|     |                              |             |  |  |  |  |  |  |  |  |
| :01 | ONNECTIONS                   |             |  |  |  |  |  |  |  |  |

INECTION PROVISIONS FOR CONFERENCE ROOMS SHOULD BE SUFFICIENT TO NS THAT ARE NEEDED BY THE AUDIOVISUAL SYSTEM COMPONENTS WITHIN

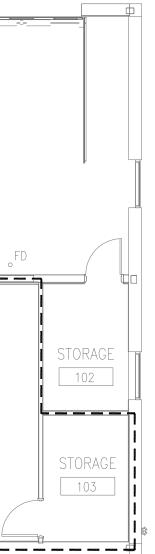
UIRED LAN/NETWORK CONNECTIONS FOR AUDIOVISUAL EQUIPMENT. CABLING, FACEPLATE AND JACK SHALL BE BY LOW VOLTAGE CONTRACTOR. YPE AND PERFORMANCE LEVEL (CAT5e, cat6) SHALL BE THE SAME TYPE AS DMMUNICATIONS OUTLET. SEE TELECOMMUNICATIONS IONS FOR DETAILS. AV INSTALLER TO COORDINATE EXACT LOCATIONS OF DN(S) WITH ARCHITECT AND LOW VOLTAGE CONTRACTOR.

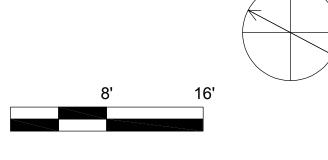
| AUDIOVISUAL STANDARD PRE-MADE CABLE TYPES |   |              |              |  |  |  |
|---|---|--------------|--------------|--|--|--|
|   | APPLICATION                                   | MANUFACTURER | MODEL NUMBER |  |  |  |
| HC  | DMI MALE TO MALE, 3', MICRO                   | EXTRON       | 26-667-03    |  |  |  |
| R   | GBHV / 5-WAY BNC /6'                          | EXTRON       | 26-260-01    |  |  |  |
| 3.  | 5 MM STEREO AUDIO MALE TO MALE, 50'           | CABLES TO GO | 2233         |  |  |  |
| M   | ALE TO MALE VGA MICRO HR CABLE, W/ AUDIO, 6'  | EXTRON       | 26-566-02    |  |  |  |
| HC  | DMI, MALE TO MALE, 6'                         | EXTRON       | 26-663-06    |  |  |  |
| HC  | DMI, MALE TO MALE, 15'                        | EXTRON       | 26-663-15    |  |  |  |
| M/  | ALE TO MALE VGA WITH AUDIO CABLE, PLENUM, 35' | CABLES TO GO | 40683        |  |  |  |
| HD  | DMI, MALE TO MALE, PLENUM, 35'                | CABLE TO GO  | 41192        |  |  |  |
| U   | TP PATCH CABLE, CATEGORY 5E, 3'               | OTRONICS     | OR-MC5E03-00 |  |  |  |
| H   | DMI MALE TO MALE, PLENUM, 50'                 | CABLES TO GO | 41193        |  |  |  |

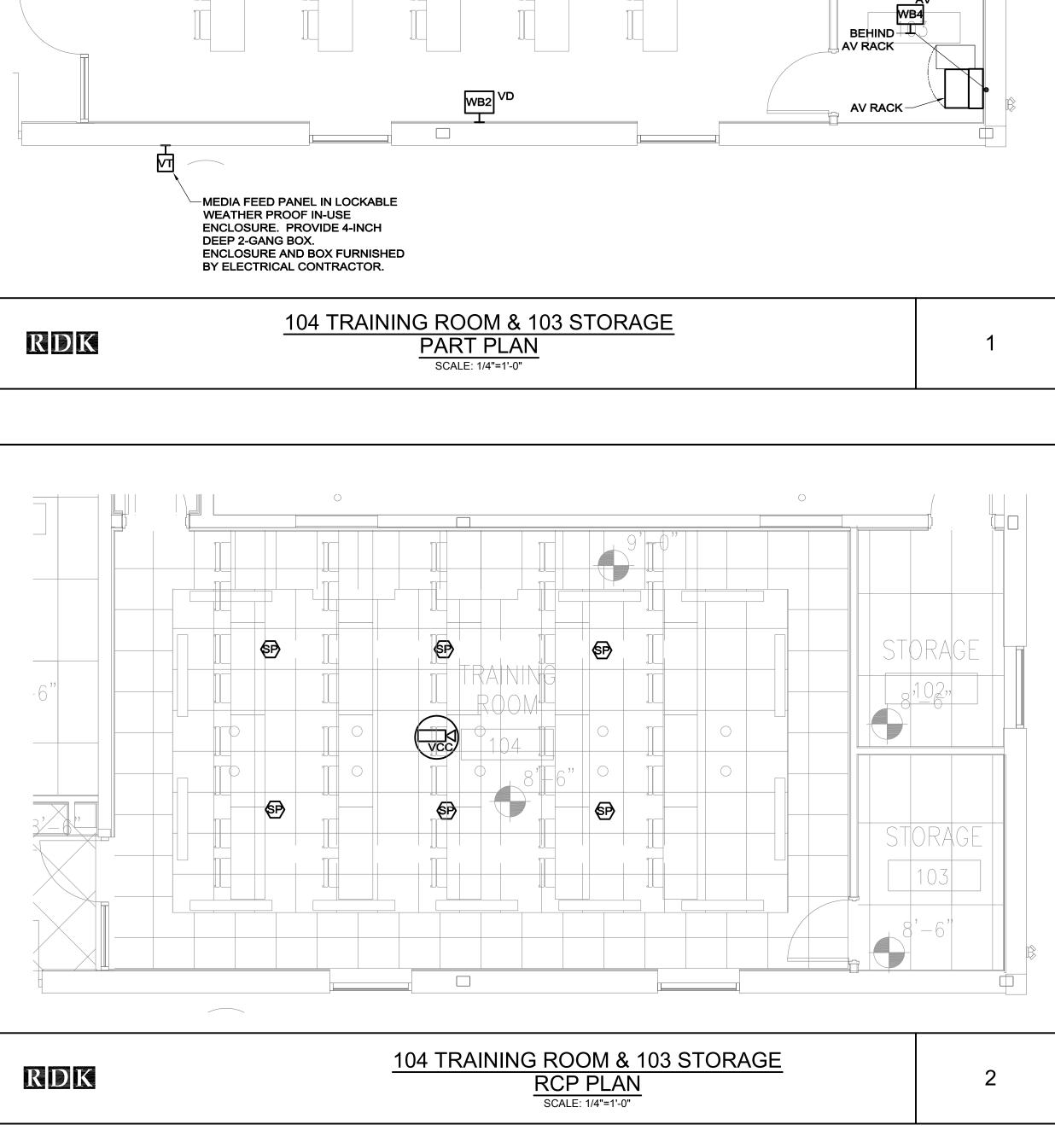
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|---|---|
|   |   |
|   | Architects / Engineers / Planners   |
|   | 211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com |
|   | RDK   |
|   | Andover, MA - Boston, MA - Amherst, MA<br>Durham, NC - Charlotte, NC  |
|   | RDK Engineers<br>200 Brickstone Square<br>Andover, MA 01810-1488<br>T. 978-296-6200                         |
|   |   |
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|   | WALTHAM POLICE<br>STATION   |
|   | RENOVATION  |
|   | 155 LEXINGTON STREET  |
|   | WALTHAM, MASSACHUSETTS  |
|   | AUDIOVISUAL   |
|   | LEGEND, NOTES   |
|   | & ABBRVS.   |
|   | PROJECT NUMBER: 20130535<br>DESIGNED BY: MH   |
|   | DRAWN BY: MH<br>CHECKED BY: PC  |
|   | DATE: July-Aug.   |
|   | SCALE: 2016 N.T.S.<br>SHEET NUMBER:   |
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|   | SHEET 152 OF 157  |

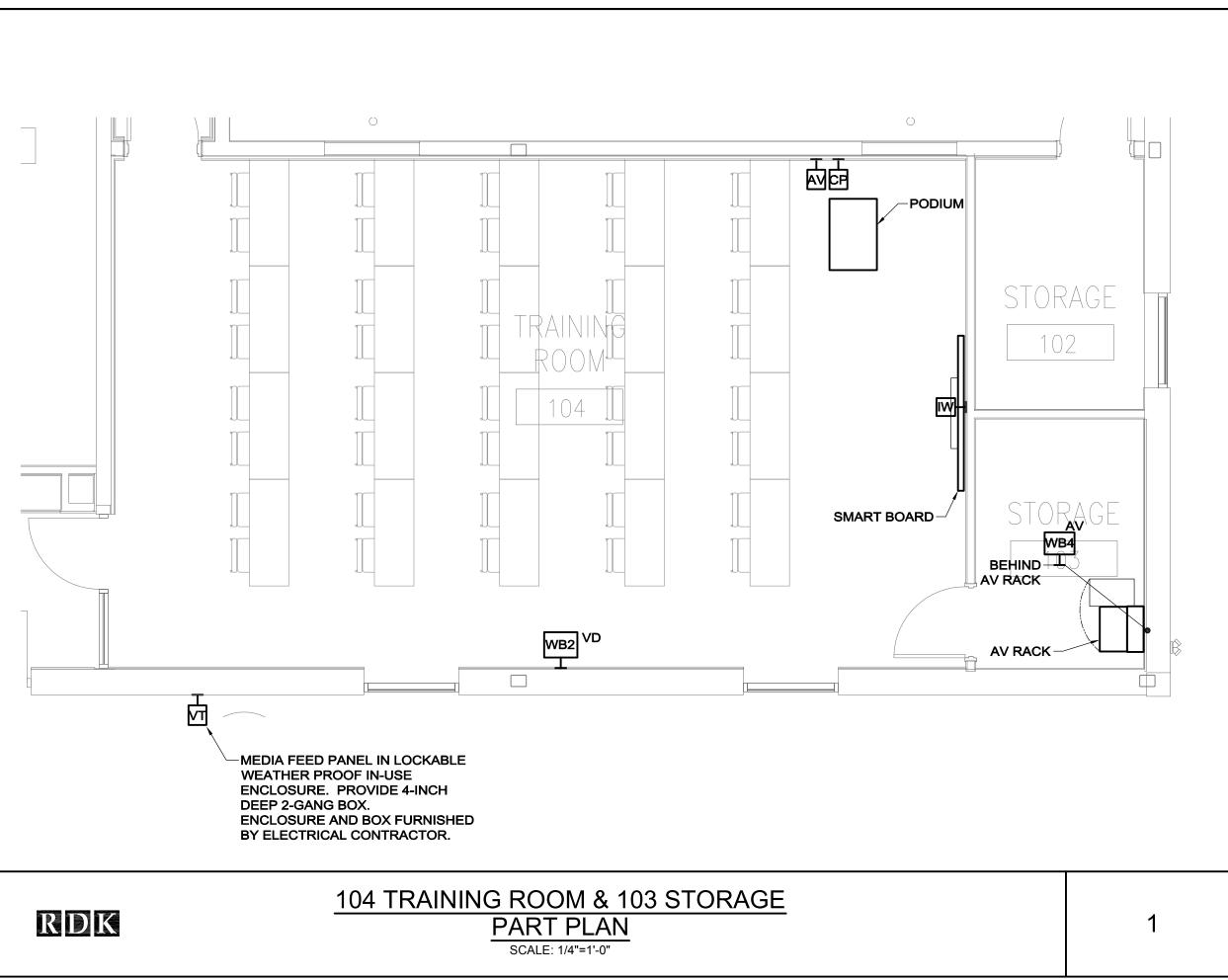


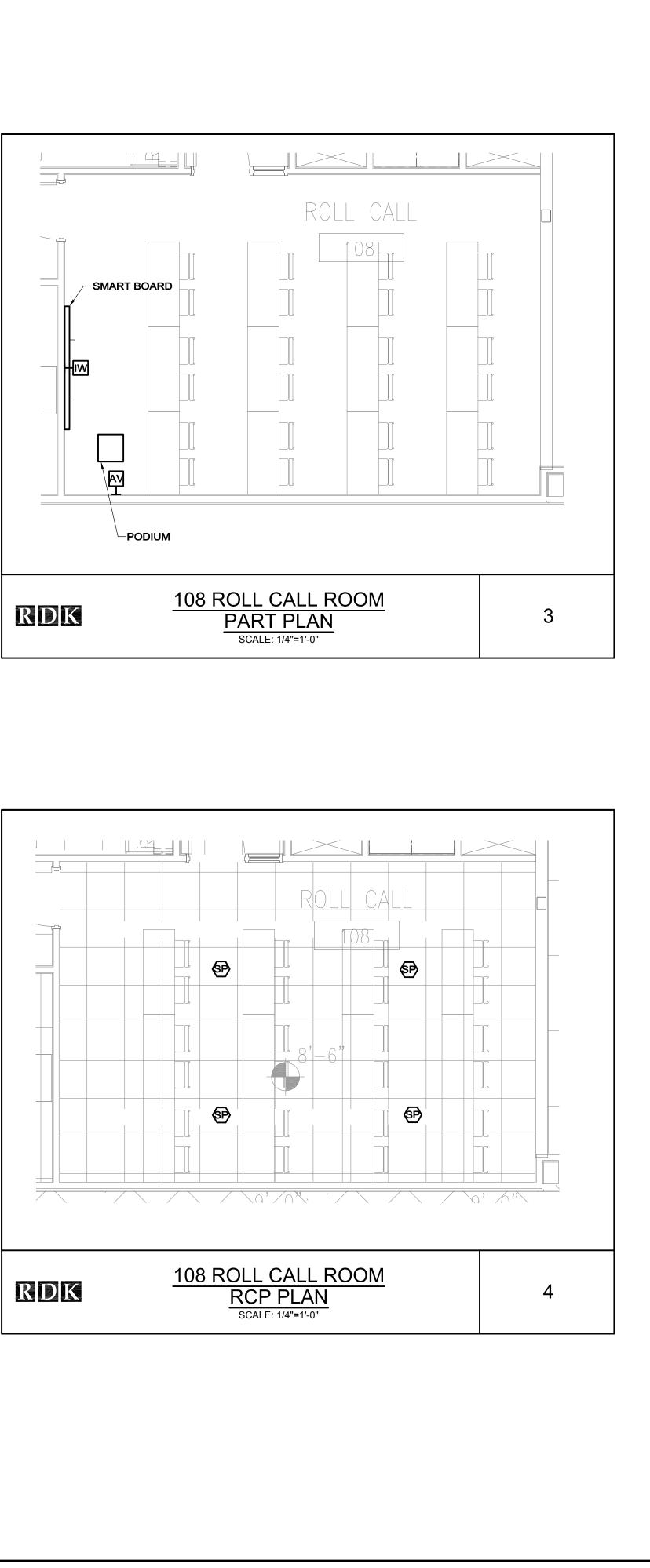
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| REVISIONS         Number       Description       Date  |  |  |  |
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| WALTHAM .<br>Based a city of the second |  |  |  |
| WALTHAM POLICE<br>STATION<br>RENOVATION<br>155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |  |  |  |
| AUDIOVISUAL<br>FIRST FLOOR<br>PLAN<br>PROJECT NUMBER: 20130535   |  |  |  |
| DESIGNED BY: MH<br>DRAWN BY: MH<br>CHECKED BY: PC<br>DATE: July-Aug.<br>SCALE: 2016 1/8" =<br>SHEET NÜMBER:  |  |  |  |
| <b>AV202</b><br>SHEET 153 OF 157   |  |  |  |

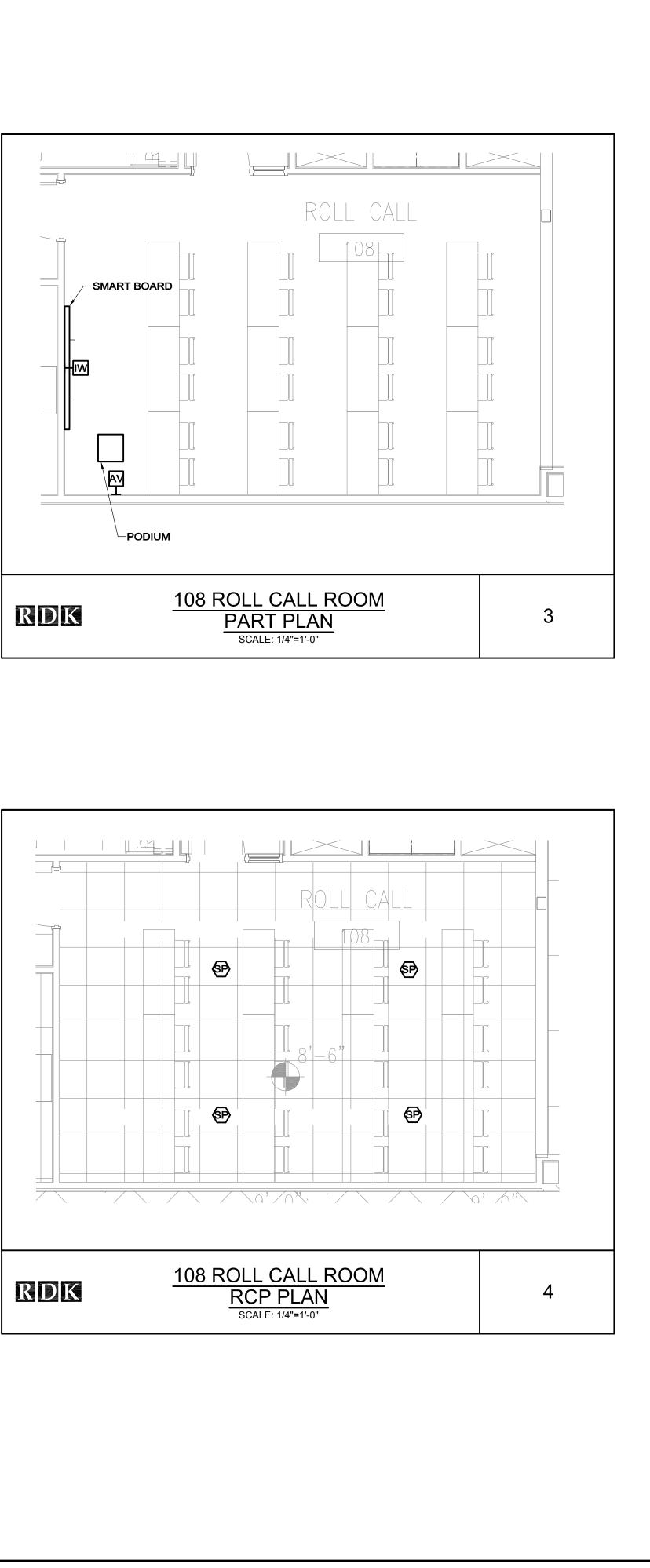


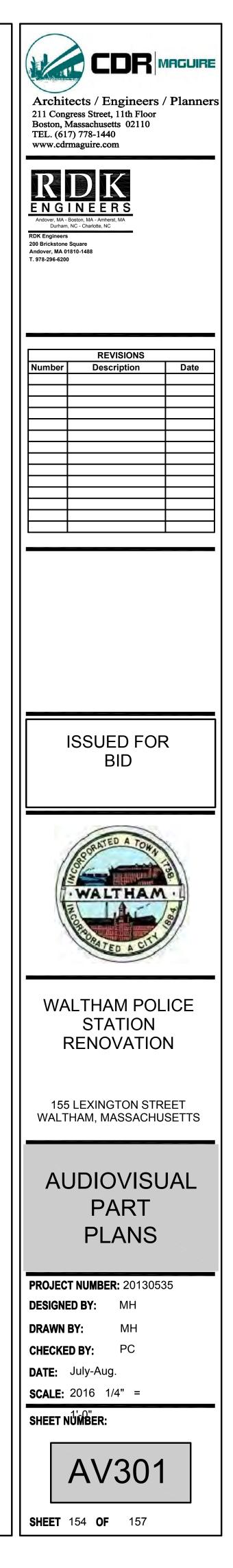


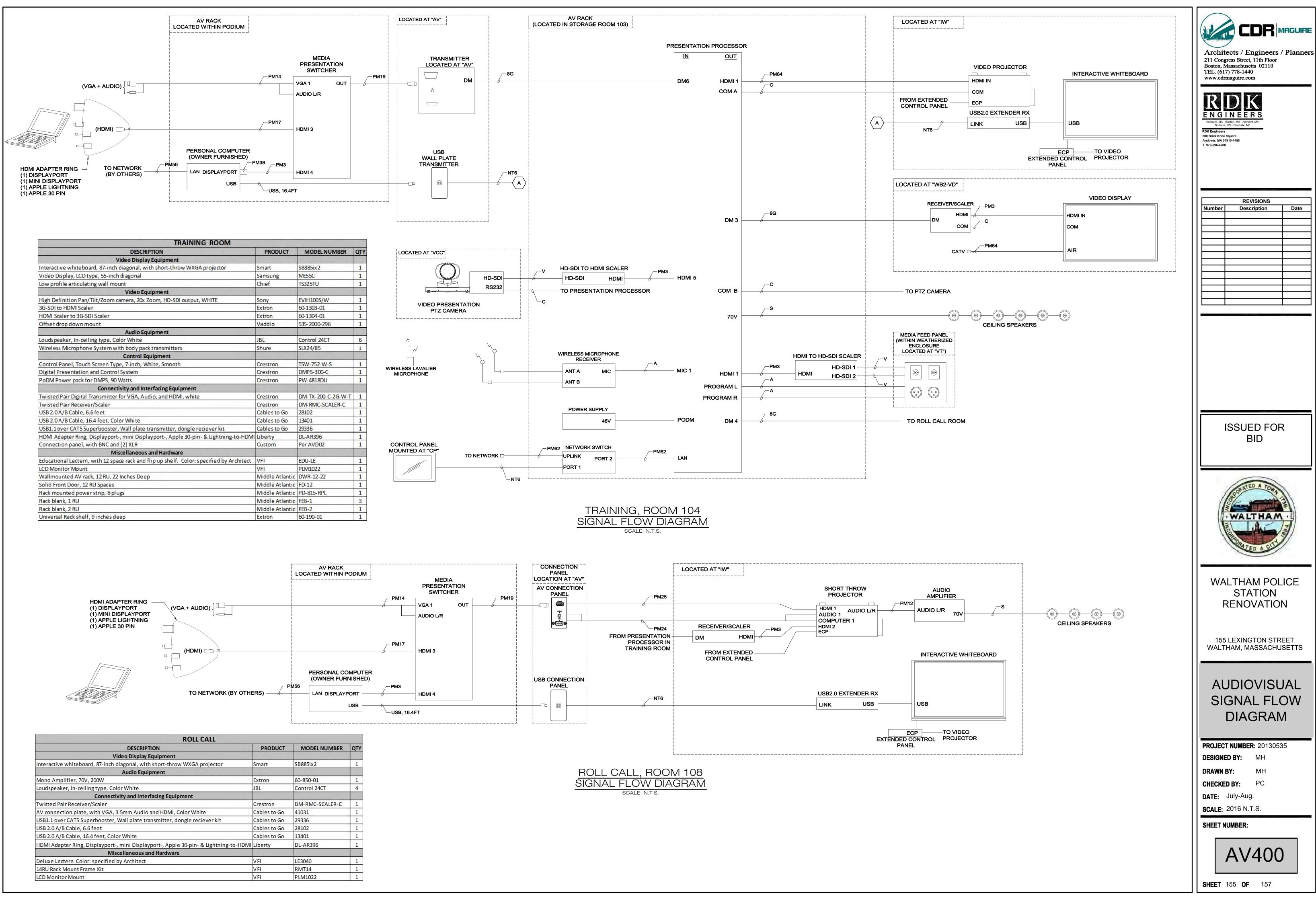




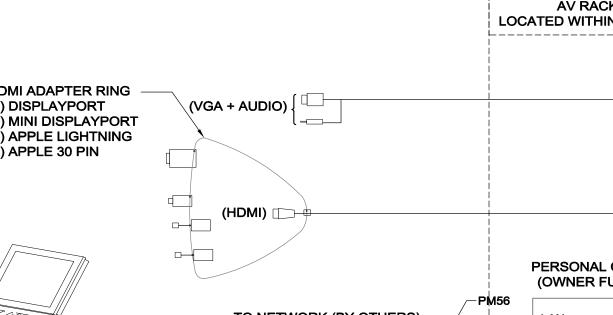


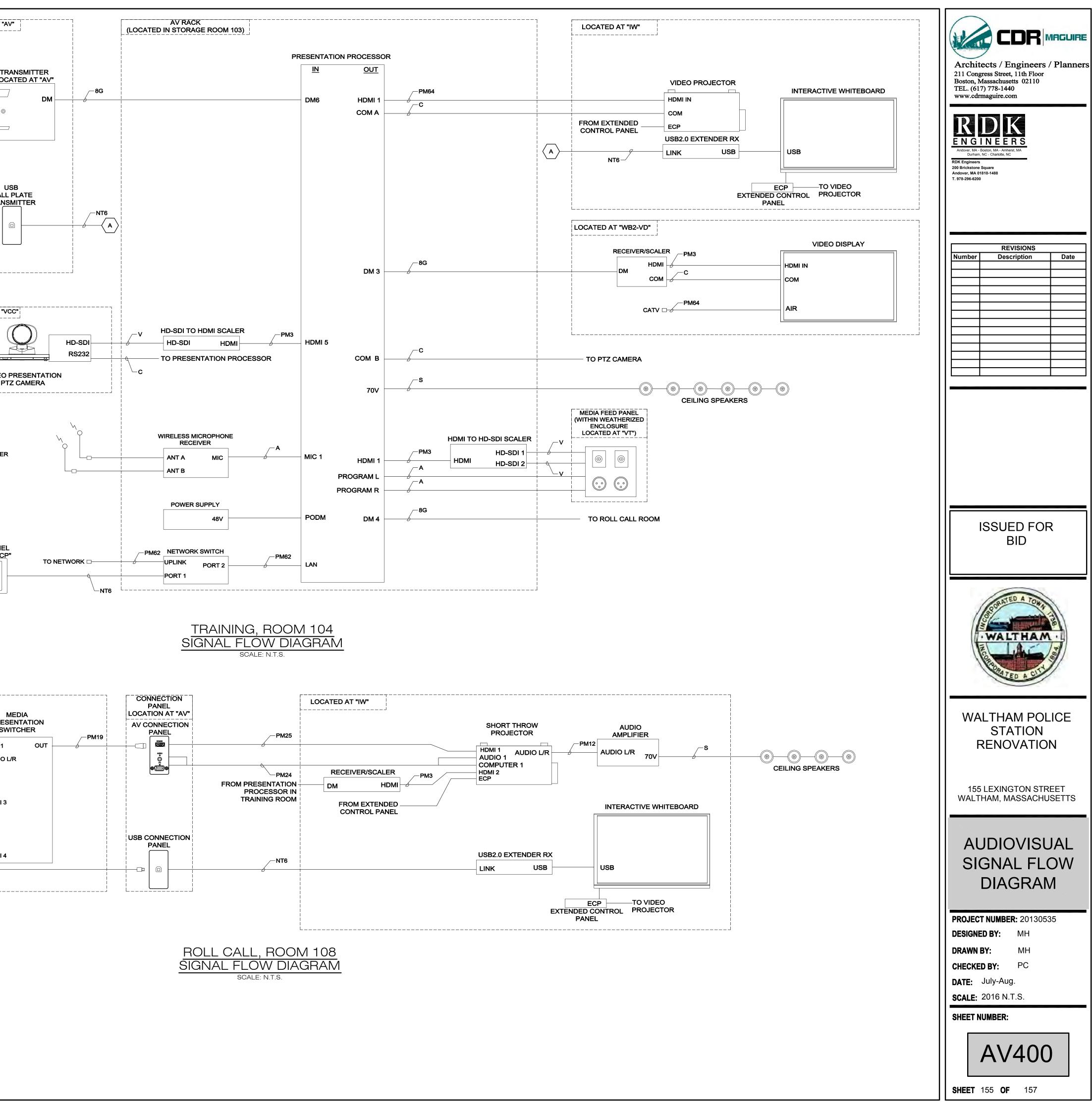




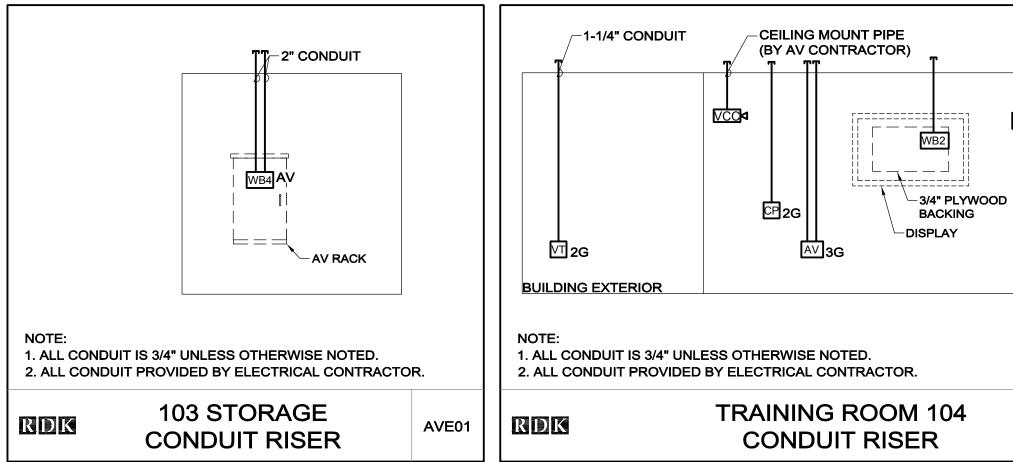


| TRAINING ROOM  |  |                    |     |
|--|--|--------------------|-----|
| DESCRIPTION  | PRODUCT  | MODELNUMBER        | QTY |
| Video Display Equipment  | 1  |                    |     |
| Interactive whiteboard, 87-inch diagonal, with short-throw WXGA projector                | Smart  | SB885ix2           | 1   |
| Video Display, LCD type, 55-inch diagonal  | Samsung  | ME55C              | 1   |
| Low profile articulating wall mount  | Chief  | TS325TU            | 1   |
| Video Equipment  |  |                    |     |
| High Definition Pan/Tilt/Zoom camera, 20x Zoom, HD-SDI output, WHITE                     | Sony   | EVIH100S/W         | 1   |
| 3G-SDI to HDMI Scaler  | Extron   | 60-1303-01         | 1   |
| HDMI Scaler to 3G-SDI Scaler   | Extron   | 60-1304-01         | 1   |
| Offset drop down mount   | Vaddio   | 535-2000-296       | 1   |
| Audio Equipment  |  |                    |     |
| Loudspeaker, In-ceiling type, Color White  | JBL  | Control 24CT       | 6   |
| Wireless Microphone System with body pack transmitters                                   | Shure  | SLX24/85           | 1   |
| Control Equipment  |  |                    |     |
| Control Panel, Touch Screen Type, 7-inch, White, Smooth                                  | Crestron   | TSW-752-W-S        | 1   |
| Digital Presentation and Control System  | Crestron   | DMPS-300-C         | 1   |
| PoDM Power pack for DMPS, 90 Watts   | Crestron   | PW-4818DU          | 1   |
| Connectivity and Interfacing Equipment   |  |                    |     |
| Twisted Pair Digital Transmitter for VGA, Audio, and HDMI, white                         | Crestron   | DM-TX-200-C-2G-W-T | 1   |
| Twisted Pair Receiver/Scaler   | Crestron   | DM-RMC-SCALER-C    | 1   |
| USB 2.0 A/B Cable, 6.6 feet  | Cables to Go   | 28102              | 1   |
| USB 2.0 A/B Cable, 16.4 feet, Color White  | Cables to Go   | 13401              | 1   |
| USB1.1 over CAT5 Superbooster, Wall plate transmitter, dongle reciever kit               | Cables to Go   | 29336              | 1   |
| HDMI Adapter Ring, Displayport-, mini Displayport-, Apple 30-pin- & Lightning-to-HDMI    | Liberty  | DL-AR396           | 1   |
| Connection panel, with BNC and (2) XLR   | Custom   | Per AVD02          | 1   |
| Miscellaneous and Hardware   |  |                    |     |
| Educational Lectern, with 12 space rack and flip up shelf. Color: specified by Architect | VFI  | EDU-LE             | 1   |
| LCD Monitor Mount  | VFI  | PLM1022            | 1   |
| Wallmounted AV rack, 12 RU, 22 Inches Deep   | Middle Atlantic  | DWR-12-22          | 1   |
| Solid Front Door, 12 RU Spaces   | Middle Atlantic  | FD-12              | 1   |
| Rack mounted power strip, 8 plugs  | Middle Atlantic  | PD-815-RPL         | 1   |
| Rack blank, 1 RU   | Middle Atlantic  | FEB-1              | 3   |
| Rack blank, 2 RU   | Middle Atlantic  | FEB-2              | 1   |
|  | in the second se | 60 4 00 04         | 1 . |

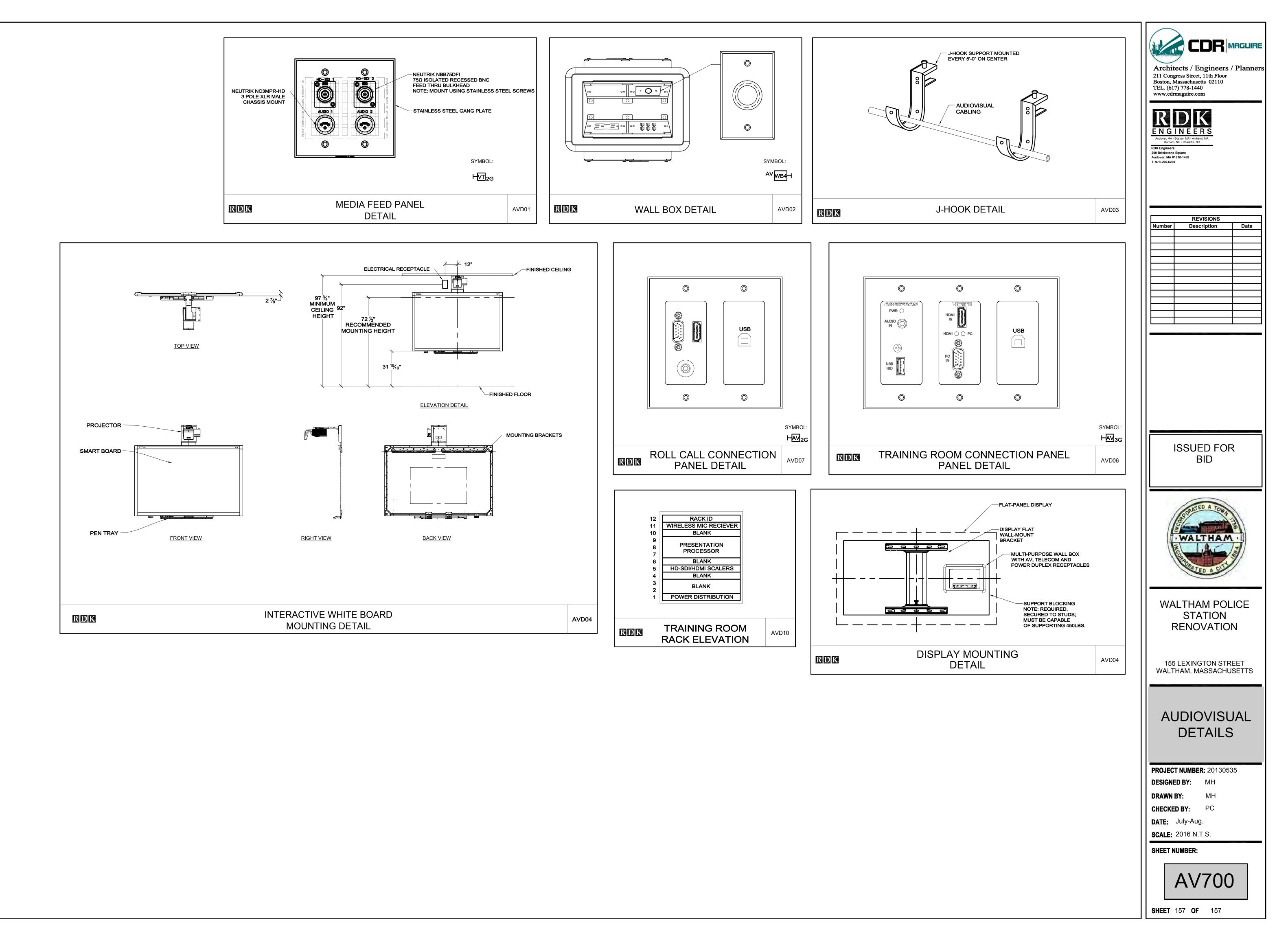




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|   |  | SHEET 156 OF 157   |



|   | SEC                 | 100          | Q      |   |      | SEC                            |
|---|---------------------|--------------|--------|---|------|--------------------------------|
| ELECTRONIC SECURITY<br>COORDINATION<br>LEGEND                       | SECURITY CONTRACTOR | DOOR HT      | OWNER  |   | SE07 | DOOR DETAIL, N<br>NUMBER       |
| COORDINATION  |                     |              |        |   | DR   | DOOR RELEASE                   |
| LEGEND  | ACT C               | I CONTRACTOR | VENDOR | \ | DO   | DOOR CONTACT                   |
|   | N Q                 | \ <b>%</b>   | N DA   |   | CR   | CARD READER                    |
| PATHWAYS:   |                     |              |        |   | -RD- | REQUEST TO E                   |
| IN HARD WALL DEVICE BOXES, DEVICE RINGS, PROVIDED BY                | >                   |              |        |   |      |                                |
| JUNCTION BOXES, CONDUIT, CONDUIT SLEEVES PROVIDED BY                | >                   | -            |        | _ | ES   | ELECTRIC DOO                   |
| LADDER RACK INSIDE SECURITY ROOM PROVIDED BY                        |                     | X            |        | _ | ML   | MAGNETIC LOC                   |
|   |                     |              |        |   | EM   | MORTISE HINGE                  |
| DOOR HARDWARE:<br>ELECTRONIC LOCKS & ELECTRIFIED HINGES PROVIDED BY |                     |              |        | _ |      |                                |
| ELECTRONIC LOCKS & ELECTRIFIED HINGES PROVIDED BY                   |                     | x            | X      | _ | EL   | ELECTRIC LOCK                  |
| ELECTRONIC LOCKING DEVICE POWER SUPPLIES PROVIDED BY                |                     | ×            |        | _ | PB   | PUSH BUTTON                    |
| ELECTRONIC LOCKING DEVICE POWER SUPPLY LOW VOLTAGE WIRING BY        |                     |              |        | _ |      | PUSH BUTTON                    |
| ELECTRONIC LOCKING DEVICE POWER SUPPLY 120 VOLTAGE WIRING BY        | >                   | <            |        |   | ACP  | ACCESS CONTR                   |
|   |                     |              |        |   | PTZ  |                                |
| SECURITY SYSTEMS ROOM:  |                     |              |        |   |      | CCTV CAMERA<br>"A" - INDICATES |
| PLYWOOD BACKBOARD PROVIDED BY                                       | X                   |              |        | _ | Ă    | "PTZ" - INDICAT                |
| GROUND BAR PROVIDED BY  |                     | < –          |        | _ |      |                                |
| RACK AND TRAY GROUNDING PROVIDED BY                                 |                     | <            |        | _ | NVR  | NETWORK VIDE                   |
| 120V POWER PROVIDED BY  |                     | <            |        |   |      |                                |
| LAN CONNECTIONS TO CONTROL PNL EQUIP PROVIDED BY                    |                     |              | X      |   | MON  | MONITOR                        |
|   |                     |              |        |   |      |                                |
| DEVICES:  |                     |              |        |   | UPS  | UPS                            |
| REX, CARD READERS, MAG CONTACTS, CCTV CAMERAS, ETC. PROVIDED BY     |                     | X            |        | _ |      | MOTION DETEC                   |
| HEAD END POWER SUPPLIES, RECORDING EQUIP, CNTRL PNLS, BY            |                     | X            |        |   |      | "CCTV" - INDICA                |
|   |                     |              |        |   | PS   | POWER SUPPL                    |
|   |                     |              |        |   |      |                                |
|   |                     |              |        |   | OH   | OVERHEAD DOO                   |
|   |                     |              |        |   | RB   | PNEUMATIC DO                   |
|   |                     |              |        |   | BHR  | BIOMETRIC HAN                  |
|   |                     |              |        |   | M    | CCTV MICROPH                   |
|   |                     |              |        |   | DB   | DURESS BUTTO                   |
|   |                     |              |        |   | Q    | DURESS STROE                   |

|        | CCTV CAMERA MATRIX |                |       |            |           |     |     |           |                      |           |          |          |             |           |
|--------|--------------------|----------------|-------|------------|-----------|-----|-----|-----------|----------------------|-----------|----------|----------|-------------|-----------|
| CAMERA |                    |                |       |            |           |     |     |           | STORAGE              |           |          |          |             |           |
| ID#    | I/O RATING         | LOCATION       | TYPE  | RESOLUTION | LENS TYPE | IR  | IPS | ALARM IPS | MOUNTING             | RECORDING | MOTION   | AUDIO    | COMPRESSION | TIMEFRAME |
| 1      | EXTERIOR           |                | FIXED | 3MP        | 3-9MM     | YES | 7   |           | GOOSENECK WALL MOUNT | 100%      |          |          | H.264       | 30 DAYS   |
| 2      | EXTERIOR           |                | PTZ   | 2MP/1080P  | 4.7-94MM  | NO  | 7   |           | GOOSENECK WALL MOUNT | 100%      |          |          | H.264       | 30 DAYS   |
| 3      | INTERIOR           | CELL ROOM      | FIXED | 720P       | 1.8MM     | YES | 15  |           | CORNER               | 10%       |          | INTERNAL | H.264       | 90 DAYS   |
| 4      | INTERIOR           | INTERVIEW ROOM | FIXED | 720P       | 1.8       | NO  | 7   | 15        | CEILING              | 10%       | EXTERNAL | EXTERNAL | H.264       | 30 DAYS   |
| 5      | INTERIOR           | GARAGE BAY     | FIXED | 720P       | 3-9MM     | NO  | 7   |           | WALL                 | 30%       | INTERNAL |          | H.264       | 30 DAYS   |
| 6      | INTERIOR           | HALLWAY        | FIXED | 720P       | 3-9MM     | NO  | 7   |           | CEILING              | 50%       | INTERNAL |          | H.264       | 30 DAYS   |
| 7      | INTERIOR           | OPEN AREA      | FIXED | 720P       | 2.8       | NO  | 7   |           | CEILING              | 50%       | INTERNAL |          | H.264       | 30 DAYS   |
| 8      | INTERIOR           | STAIRWELL      | FIXED | 720P       | 3-9MM     | NO  | 7   |           | WALL                 | 20%       | INTERNAL |          | H.264       | 30 DAYS   |
| 9      | INTERIOR           | BOOKING        | FIXED | 720P       | 3-9MM     | NO  | 7   | 15        | CEILING              | 10%       | INTERNAL | EXTERNAL | H.264       | 1 YEAR    |

120130535 - Waltham Police HQ Renovation/1200 Drawings/1207 Security/Plot Files/20130535 ES000 SECURITY LEGEND, NOTES AND ABBREVIATIONS.dwg [24x36] July 14, 2014 - 5:39pm dfran:

| SECURITY LEG | END |
|--------------|-----|
|--------------|-----|

|                     | SECONTILECEND  |
|---------------------|--|
| SE07                | DOOR DETAIL, NUMBER CORRESPONDS TO DETAIL DRAWING<br>NUMBER                            |
| DR                  | DOOR RELEASE BUTTON  |
| DC                  | DOOR CONTACT   |
| CR                  | CARD READER  |
| Ð                   | REQUEST TO EXIT MOTION DET   |
| ES                  | ELECTRIC DOOR STRIKE   |
| ML                  | MAGNETIC LOCK  |
| EM                  | MORTISE HINGE/DOOR HARDWARE  |
| EL                  | ELECTRIC LOCK  |
| PB                  | PUSH BUTTON  |
| ACP                 | ACCESS CONTROL PANEL   |
| PTZ                 | CCTV CAMERA<br>"A" - INDICATES AUDIO<br>"PTZ" - INDICATES PAN / TILT / ZOOM            |
| NVR                 | NETWORK VIDEO RECORDER-NVR   |
| MON                 | MONITOR  |
| UPS                 | UPS  |
|                     | MOTION DETECTOR<br>"CCTV" - INDICATES CCTV SYSTEM DETECTOR                             |
| PS                  | POWER SUPPLY   |
| DH                  | OVERHEAD DOOR CONTACT  |
| RB                  | PNEUMATIC DOOR RELEASE BUTTON  |
| BHR                 | BIOMETRIC HAND READER  |
| $\langle M \rangle$ | CCTV MICROPHONE  |
| DB                  | DURESS BUTTON  |
| S                   | DURESS STROBE  |
|                     | FER TO DETAIL DRAWINGS FOR EXACT QUANTITY OF CABLES AND REQUIRED AT EACH TYPICAL DOOR. |
|                     |  |
|                     |  |

|        |   | GENE  | RAL SECURITY ABBREVIATIONS                                 | 5     |  |
|--------|---|-------|--|-------|--|
| AC     | ALTERNATING CURRENT                                   | Hz    | HERTZ  | RMS   | RACK MOUNT SPACE                                 |
| ADA    | AMERICANS WITH DISABILITIES ACT                       | IEEE  | INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.    | ScTP  | SCREENED TWISTED-PAIR                            |
| AFF    | ABOVE FINISH FLOOR                                    | ISDN  | INTEGRATED SERVICES DIGITAL NETWORK                        | SP    | SERVICE PROVIDER                                 |
| ACU    | ACCESS CONTROL UNIT                                   | ISO   | INTERNATIONAL STANDARDS ORGANIZATION                       | STP   | SHIELDED TWISTED-PAIR                            |
| ANSI   | AMERICAN NATIONAL STANDARDS INSTITUTE                 | kHz   | KILOHERTZ  | SWB   | SWITCHBOARD                                      |
| AWG    | AMERICAN WIRE GAUGE                                   | kwh   | KILOWATT-HOURS   | SYS   | SYSTEM   |
| BICSI  | BUILDING INDUSTRY CONSULTING SERVICE<br>INTERNATIONAL | LAN   | LOCAL AREA NETWORK   | SCP   | SECURITY CONTROL PANEL                           |
| BTU    | BRITISH THERMAL UNIT                                  | LASER | LIGHT AMPLIFICATION BY STIMULATED EMISSION OF<br>RADIATION | тв    | TERMINAL BLOCK                                   |
| CATV   | CABLE TELEVISION                                      | LED   | LIGHT-EMMITTING DIODE                                      | твв   | TELECOMMUNICATIONS BONDING BACKBONE              |
| CCTV   | CLOSED CIRCUIT TELEVISION                             | МС    | MAIN CROSS-CONNECT   | TBBC  | TELECOMMUNICATIONS BACKBONE BONDING<br>CONDUCTOR |
| dB     | DECIBEL   | MDF   | MAIN DISTRIBUTION FRAME                                    | TR    | TELECOMMUNICATIONS ROOM                          |
| DC     | DIRECT CURRENT  | МН    | MANHOLE  | TEL   | TELEPHONE  |
| DEMARC | DEMARCATION POINT                                     | MODEM | MODULATOR DEMODULATOR                                      | TELCO | TELEPHONE COMPANY                                |
| DVMS   | DIGITAL VIDEO MANAGEMENT SYSTEM                       | MTT   | MAIN TELEPHONE TERMINAL                                    | TGB   | TELECOMMUNICATIONS GROUNDING BUSBAR              |
| EIA    | ELECTRONICS INDUSTRIES ASSOCIATION                    | NEC   | NATIONAL ELECTRICAL CODE                                   | TIA   | TELECOMMUNICATIONS INDUSTRIES ASSOCIATION        |
| ESS    | ELECTRONIC SECURITY SYSTEM                            | NESC  | NATIONAL ELECTRICAL SAFETY CODE                            | TMGB  | TELECOMMUNICATIONS MAIN GROUNDING BUSBAR         |
| EMI    | ELECTROMAGNETIC INTERFERENCE                          | NEXT  | NEAR END CROSSTALK   | то    | TELECOMMUNICATIONS OUTLET                        |
| EMR    | ELECTROMAGNETIC RADIATION                             | OSHA  | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION              | TSB   | TELECOMMUNICATIONS SYSTEM BULLETIN               |
| ЕМТ    | ELECTRIC METALLIC TUBING                              | OSP   | OUTSIDE PLANT  | TYP   | TYPICAL  |
| EL     | ELECTRIC LOCK   | PABX  | PRIVATE AUTOMATIC BRANCH EXCHANGE                          | UG    | UNDERGROUND                                      |
| FCC    | FEDERAL COMMUNICATIONS COMMISSION                     | PBX   | PRIVATE BRANCH EXCHANGE                                    | UL    | UNDERWRITERS LABORATORIES, INC.                  |
| FEXT   | FAR END CROSSTALK                                     | POTS  | PLAIN OLD TELEPHONE SERVICE                                | UPS   | UNINTERRUPTIBLE POWER SUPPLY                     |
| GEC    | GROUNDING ELECTRODE CONDUCTOR                         | PR    | PAIR   | UTP   | UNSHIELDED TWISTED-PAIR                          |
| GND    | GROUND  | PVC   | POLYVINYL CHLORIDE   | WA    | WORK AREA  |
| HC     | HORIZONTAL CROSS-CONNECT                              | RCDD  | REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER            | WP    | WATERPROOF OUTLET                                |
| HF     | HIGH FREQUENCY  | REF   | REFERENCE  | X     | CROSS-CONNECT                                    |
| нн     | HANDHOLE  | REX   | REQUEST TO EXIT  |       |  |
| ICP    | INTRUSION CONTROL PANEL                               | RFI   | RADIO FREQUENCY INTERFERENCE                               |       |  |
| HVAC   | HEATING, VENTILATION, AND AIR-CONDITIONING            | RFQ   | REQUEST FOR QUOTE  |       |  |

## GENERAL SECURITY NOTES

- I. REFER TO DRAWINGS FOR PROPOSED PATHWAYS.
- 2. COORDINATE WITH CONTRACTORS, UTILITIES, TRADES, AND ARCHITECT AS REQUIRED.
- 3. REFER TO ELECTRONIC SECURITY DRAWINGS AND SPECIFICATIONS FOR DETAILS.
- 4. FIELD VERIFY EXACT LOCATIONS OF ALL ELECTRONIC SECURITY DEVICES.
- 5. PROVIDE SUPERVISED INPUTS AND END OF LINE SUPERVISION COMPONENTS CONNECTED TO EACH DEVICE TO MONITOR DEVICE. CONNECT MONITOR DEVICE AT FAR END AND PROVIDE 4-STATE SUPERVISION.
- 6. ALL ELECTRONIC SECURITY CABLING SHALL BE PLENUM RATED.
- 7. VERIFY LABELING STANDARD WITH OWNER, SUBMIT LABELING SCHEME FOR APPROVAL. LABELING SHALL BE IN ACCORDANCE WITH ANSI/EIA/TIA-606A STANDARDS.
- 8. SECURITY CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, PLATES AND INSERTS TO ACCEPT THE CONNECTIVITY AND DEVICE PRODUCTS WITHIN THE ELECTRICAL CONTRACTOR PROVIDED BOXES, CONDUIT, AND SURFACE RACEWAY.
- 9. REFER TO DOOR DETAIL DRAWINGS FOR EXACT QUANTITY OF CABLES AND DEVICES REQUIRED AT EACH DOOR.
- 10. SECURITY CONTRACTOR SHALL COORDINATE ALL ELECTRONIC LOCKING HARDWARE WITH ARCHITECTURAL DOOR HARDWARE SCHEDULE.

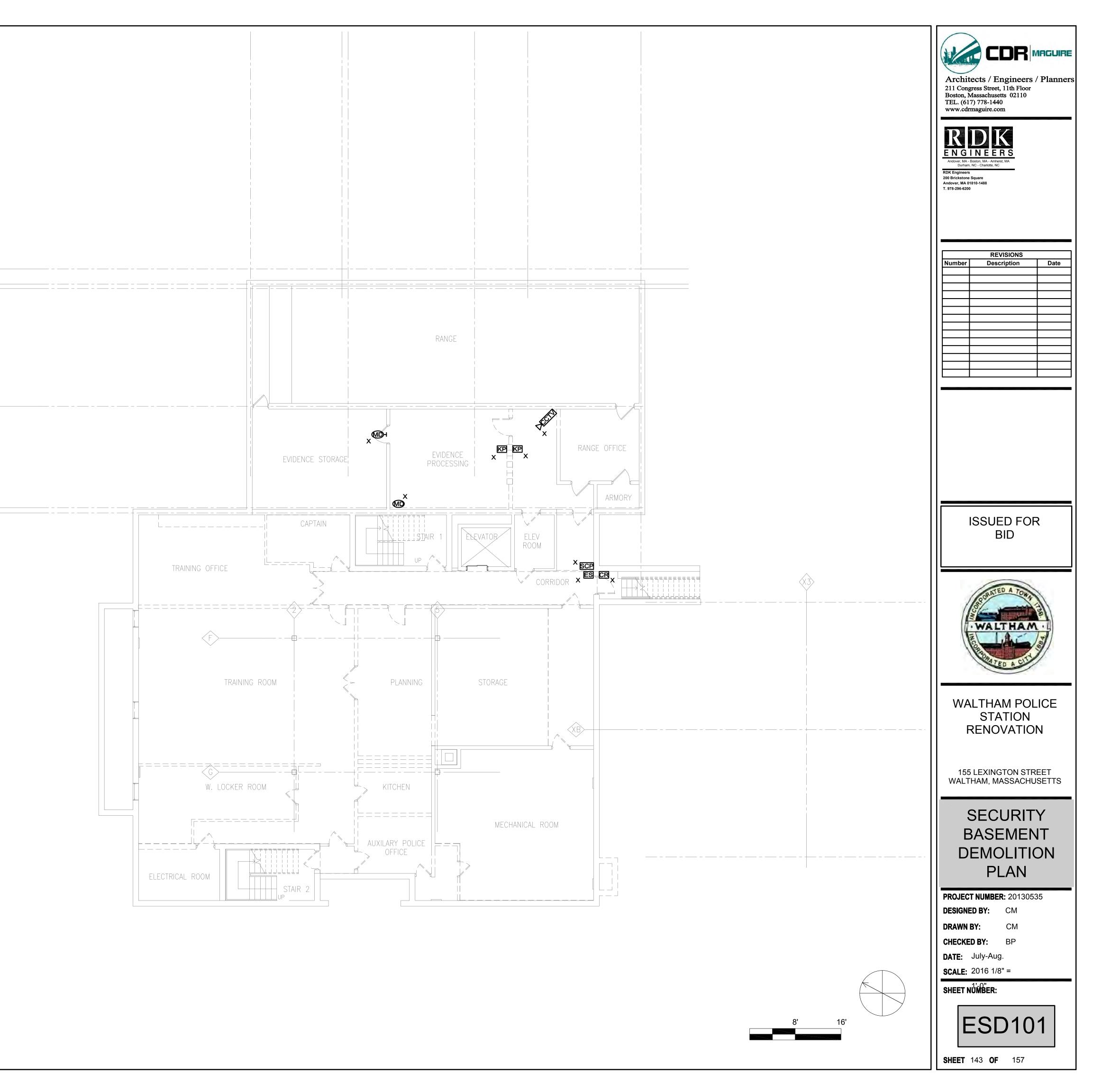
| E   | EXISTING EQUIPMENT LEGEND   |
|-----|---|
| ХМ  | EXISTING EQUIPMENT AND CABLING TO REMAIN  |
| x   | EXISTING EQUIPMENT AND CABLING TO BE REMOVED  |
| XR  | EXISTING EQUIPMENT AND CABLING TO BE RELOCATED  |
| XN  | EXISTING EQUIPMENT AND CABLING TO BE REMOVED AND NEW CABLING TO BE INSTALLED IN EXISTING OUTLET |
| XNL | EXISTING EQUIPMENT AND CABLING TO BE RELOCATED TO THIS LOCATION                                 |

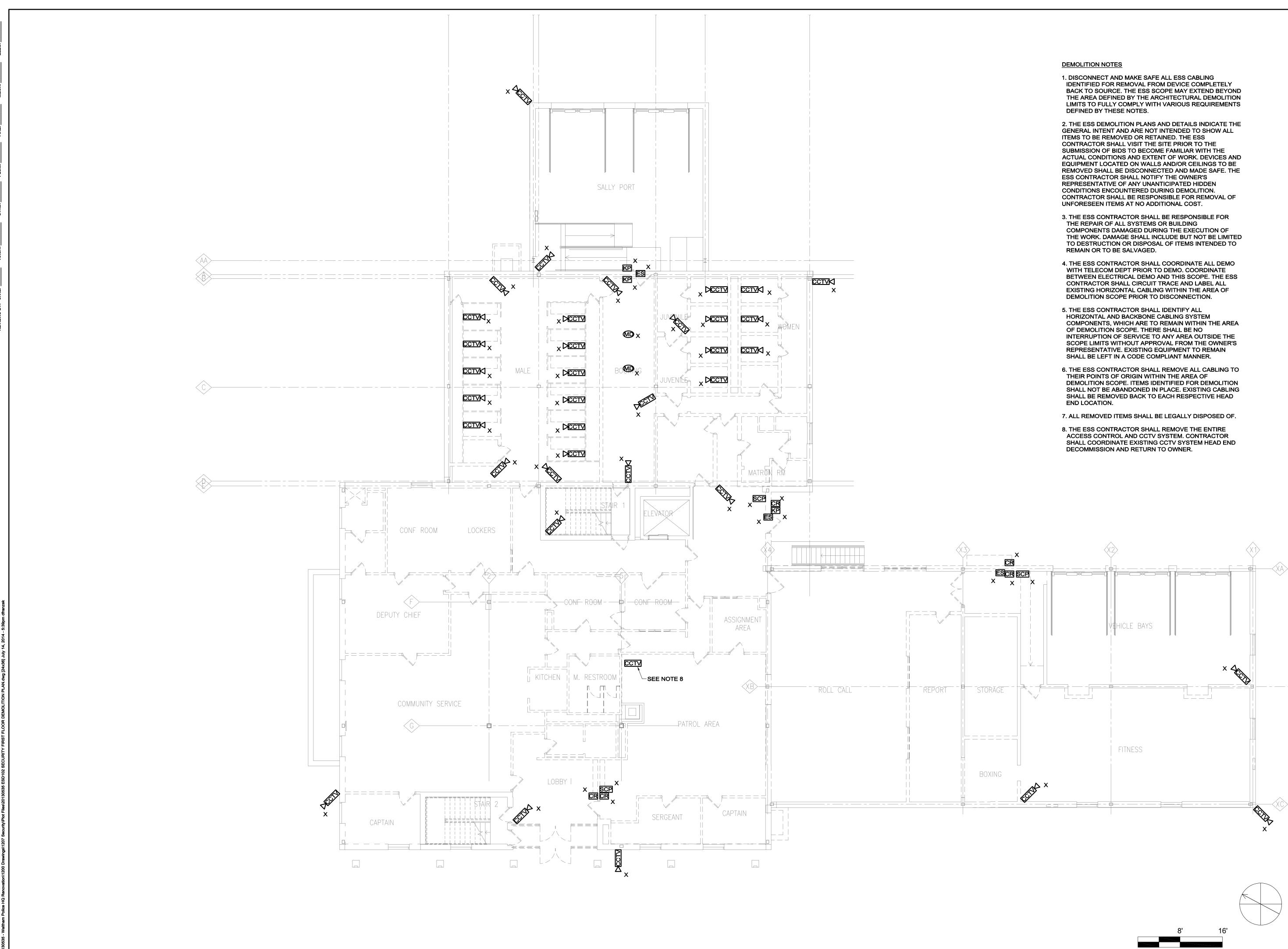


**SHEET** 142 **OF** 157

**DEMOLITION NOTES** 

- 1. DISCONNECT AND MAKE SAFE ALL ESS CABLING IDENTIFIED FOR REMOVAL FROM DEVICE COMPLETELY BACK TO SOURCE. THE ESS SCOPE MAY EXTEND BEYOND THE AREA DEFINED BY THE ARCHITECTURAL DEMOLITION LIMITS TO FULLY COMPLY WITH VARIOUS REQUIREMENTS DEFINED BY THESE NOTES.
- 2. THE ESS DEMOLITION PLANS AND DETAILS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED. THE ESS 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 AND MADE SAFE. THE ESS CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UNANTICIPATED HIDDEN CONDITIONS ENCOUNTERED DURING DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF UNFORESEEN ITEMS AT NO ADDITIONAL COST.
- 3. THE ESS CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ALL SYSTEMS OR BUILDING COMPONENTS DAMAGED DURING THE EXECUTION OF THE WORK. DAMAGE SHALL INCLUDE BUT NOT BE LIMITED TO DESTRUCTION OR DISPOSAL OF ITEMS INTENDED TO REMAIN OR TO BE SALVAGED.
- 4. THE ESS CONTRACTOR SHALL COORDINATE ALL DEMO WITH TELECOM DEPT PRIOR TO DEMO. COORDINATE BETWEEN ELECTRICAL DEMO AND THIS SCOPE. THE ESS CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING HORIZONTAL CABLING WITHIN THE AREA OF DEMOLITION SCOPE PRIOR TO DISCONNECTION.
- 5. THE ESS CONTRACTOR SHALL IDENTIFY ALL HORIZONTAL AND BACKBONE CABLING SYSTEM COMPONENTS, WHICH ARE TO REMAIN WITHIN THE AREA OF DEMOLITION SCOPE. THERE SHALL BE NO INTERRUPTION OF SERVICE TO ANY AREA OUTSIDE THE SCOPE LIMITS WITHOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE. EXISTING EQUIPMENT TO REMAIN SHALL BE LEFT IN A CODE COMPLIANT MANNER.
- 6. THE ESS CONTRACTOR SHALL REMOVE ALL CABLING TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. EXISTING CABLING SHALL BE REMOVED BACK TO EACH RESPECTIVE HEAD END LOCATION.
- 7. ALL REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF.
- 8. THE ESS CONTRACTOR SHALL REMOVE THE ENTIRE ACCESS CONTROL AND CCTV SYSTEM. CONTRACTOR SHALL COORDINATE EXISTING CCTV SYSTEM HEAD END DECOMMISSION AND RETURN TO OWNER.





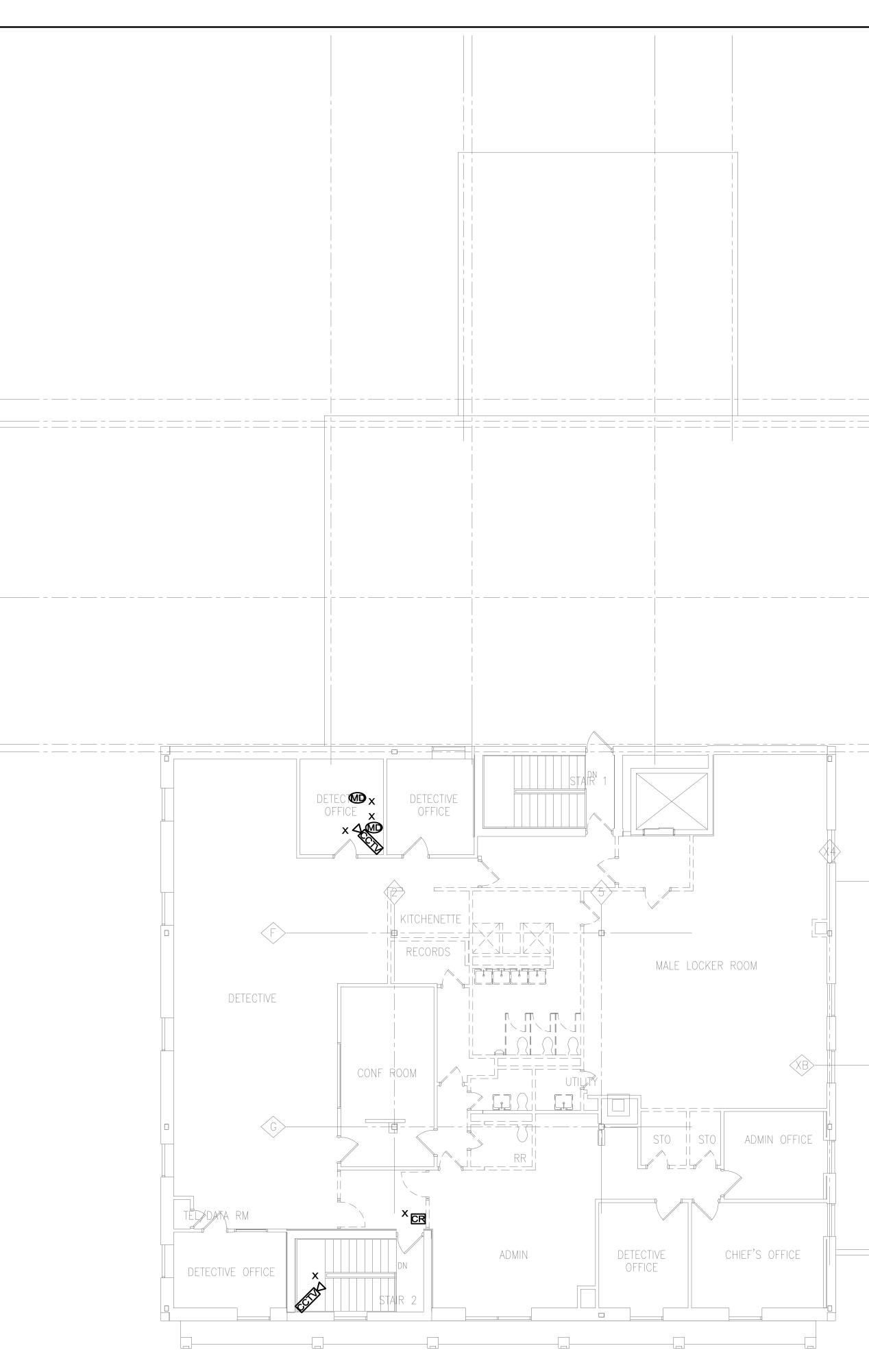
| Architects / Engineers / Planners<br>211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com   |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Image: Non-Ward Stress       Image: Non-Ward Stress         Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC         Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC         RDK Engineers         200 Brickstone Square         Andover, MA 01810-1488         T. 978-296-6200 |  |  |  |  |  |  |  |
| REVISIONS         Number       Description       Date  |  |  |  |  |  |  |  |
| ISSUED FOR<br>BID  |  |  |  |  |  |  |  |
| WALTHAM .<br>REALTHAM .<br>REALTHAM .  |  |  |  |  |  |  |  |
| <br>WALTHAM POLICE<br>STATION<br>RENOVATION<br>155 LEXINGTON STREET  |  |  |  |  |  |  |  |
| SECURITY<br>FIRST FLOOR<br>DEMOLITION<br>PLAN  |  |  |  |  |  |  |  |
| PROJECT NUMBER: 20130535<br>DESIGNED BY: CM<br>DRAWN BY: CM<br>CHECKED BY: BP<br>DATE: July-Aug.<br>SCALE: 2016 1/8" =<br>SHEET NÜMBER:  |  |  |  |  |  |  |  |
| <b>ESD102</b><br>SHEET 144 OF 157  |  |  |  |  |  |  |  |

**DEMOLITION NOTES** 

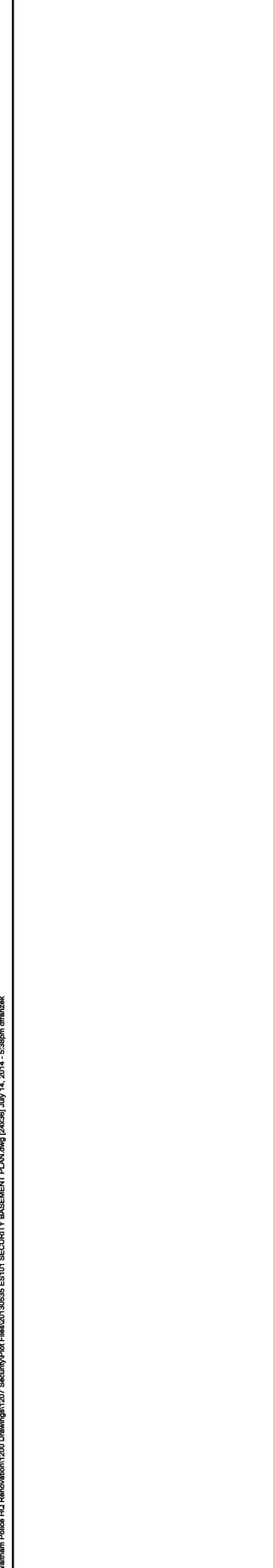
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- 2. THE ESS DEMOLITION PLANS AND DETAILS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED. THE ESS CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE SUBMISSION OF BIDS TO BECOME FAMILIAR WITH THE ACTUAL CONDITIONS AND EXTENT OF WORK. DEVICES AND EQUIPMENT LOCATED ON WALLS AND/OR CEILINGS TO BE REMOVED SHALL BE DISCONNECTED AND MADE SAFE. THE ESS CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UNANTICIPATED HIDDEN CONDITIONS ENCOUNTERED DURING DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF UNFORESEEN ITEMS AT NO ADDITIONAL COST.
- 3. THE ESS CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ALL SYSTEMS OR BUILDING COMPONENTS DAMAGED DURING THE EXECUTION OF THE WORK. DAMAGE SHALL INCLUDE BUT NOT BE LIMITED TO DESTRUCTION OR DISPOSAL OF ITEMS INTENDED TO REMAIN OR TO BE SALVAGED.

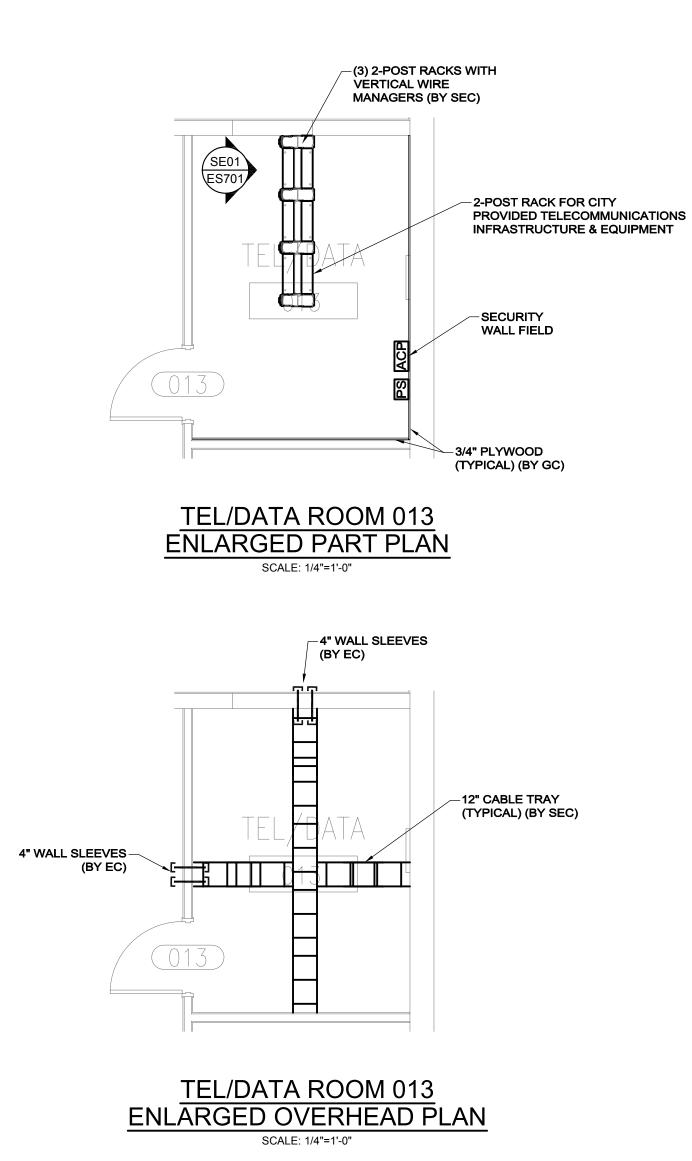
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- 4. THE ESS CONTRACTOR SHALL COORDINATE ALL DEMO WITH TELECOM DEPT PRIOR TO DEMO. COORDINATE BETWEEN ELECTRICAL DEMO AND THIS SCOPE. THE ESS CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING HORIZONTAL CABLING WITHIN THE AREA OF DEMOLITION SCOPE PRIOR TO DISCONNECTION.
- 5. THE ESS CONTRACTOR SHALL IDENTIFY ALL HORIZONTAL AND BACKBONE CABLING SYSTEM COMPONENTS, WHICH ARE TO REMAIN WITHIN THE AREA OF DEMOLITION SCOPE. THERE SHALL BE NO INTERRUPTION OF SERVICE TO ANY AREA OUTSIDE THE SCOPE LIMITS WITHOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE. EXISTING EQUIPMENT TO REMAIN SHALL BE LEFT IN A CODE COMPLIANT MANNER.
- 6. THE ESS CONTRACTOR SHALL REMOVE ALL CABLING TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. EXISTING CABLING SHALL BE REMOVED BACK TO EACH RESPECTIVE HEAD END LOCATION.
- 7. ALL REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF.
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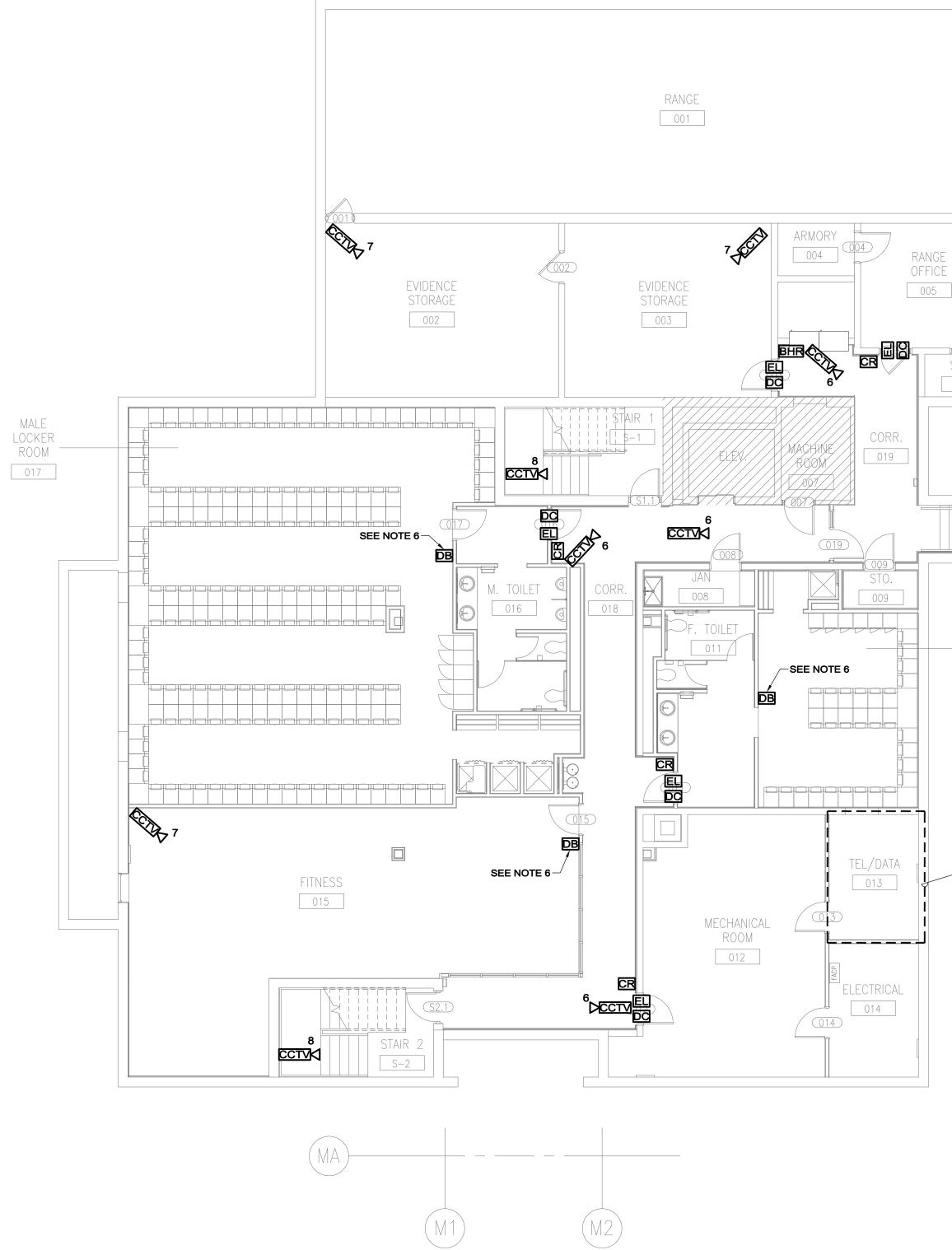


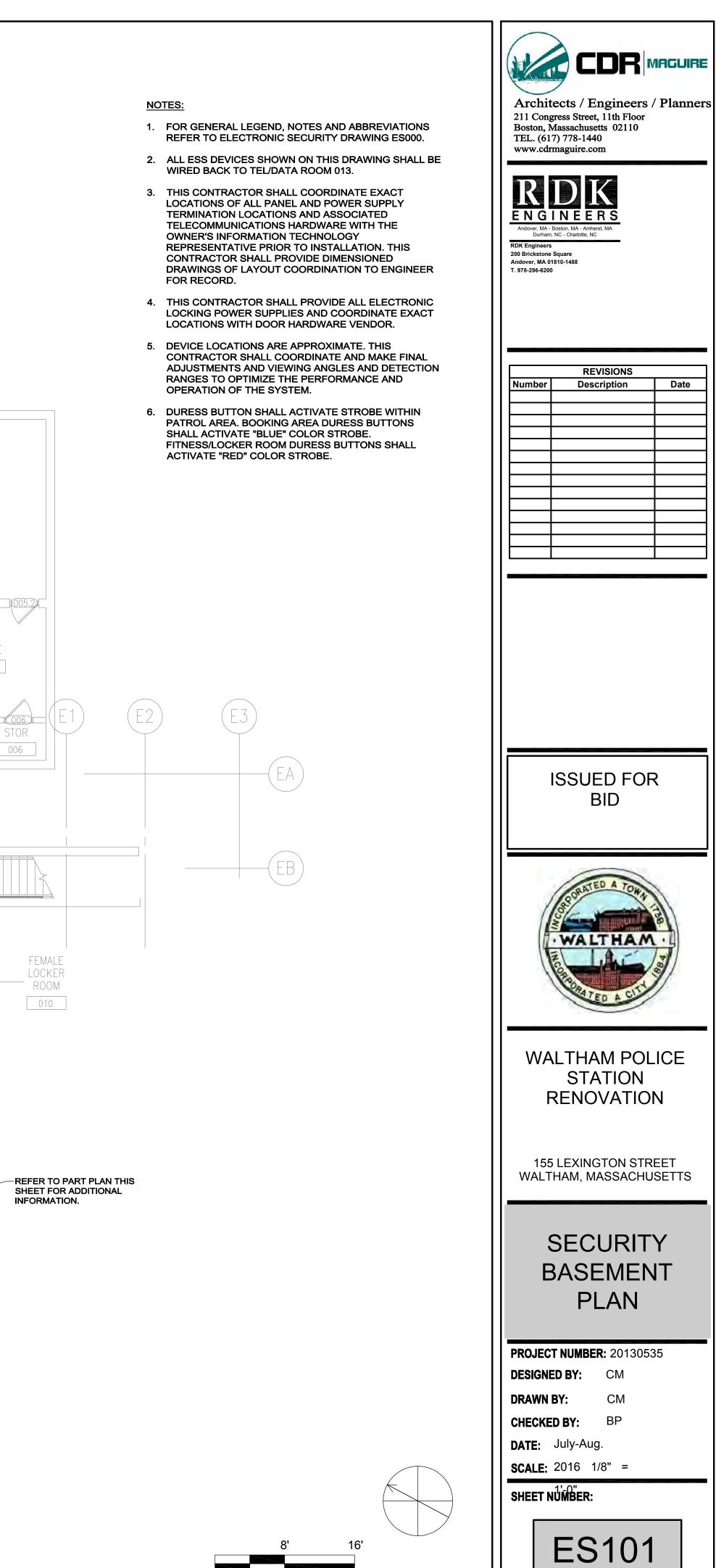
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|          | REVISIONS         Number       Description       Date  |  |  |
| <u> </u> | ISSUED FOR<br>BID  |  |  |
|          | WALTHAM POLICE         STATION         RENOVATION  |  |  |
|          | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTSSECURITY<br>SECOND FLOOR<br>DEMOLITION<br>   |  |  |
| 8' 16'   | CHECKED BY: BP<br>DATE: July-Aug.<br>SCALE: 2016 1/8" =<br>SHEET NUMBER:<br>ESD103<br>SHEET 145 OF 157   |  |  |





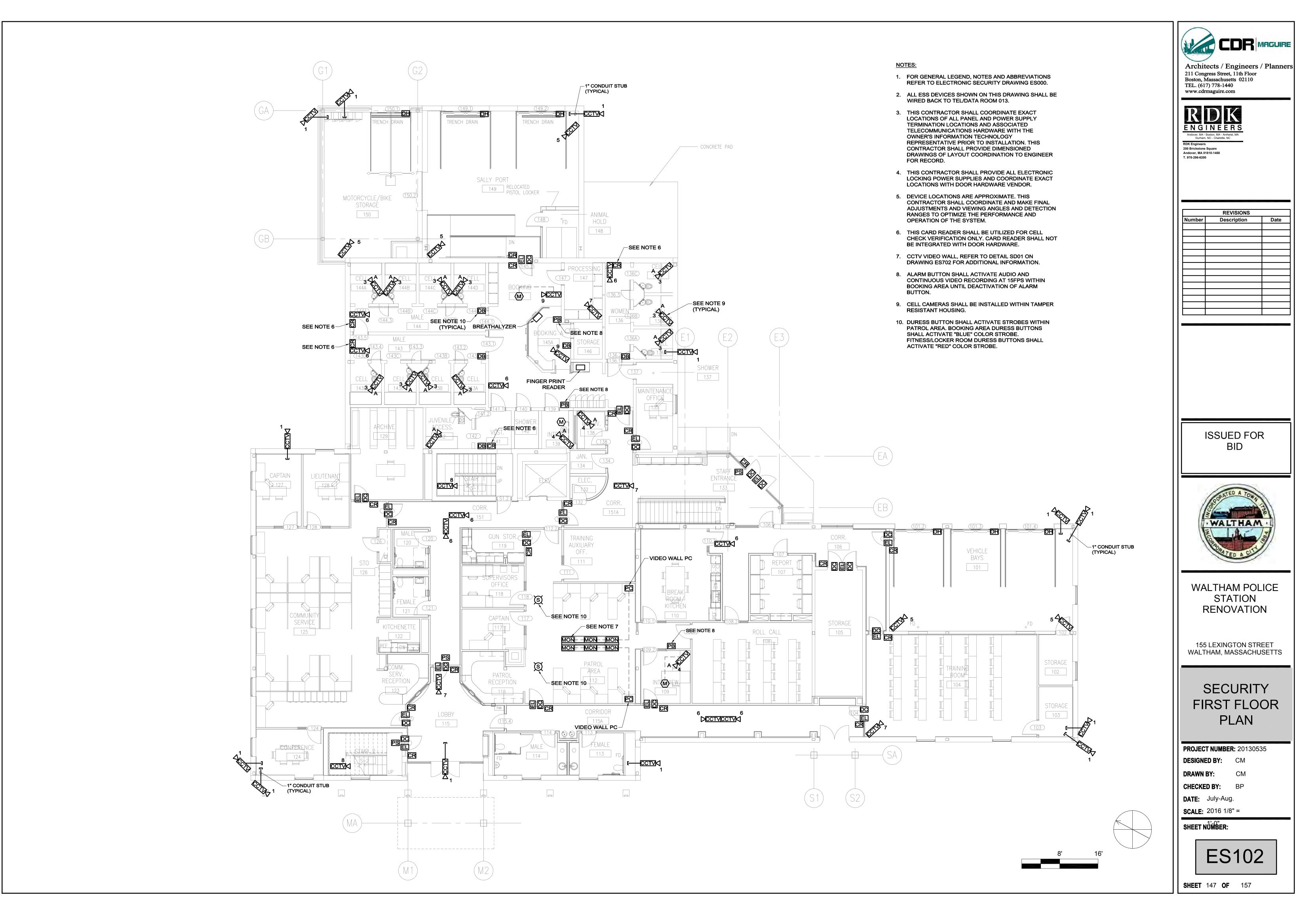




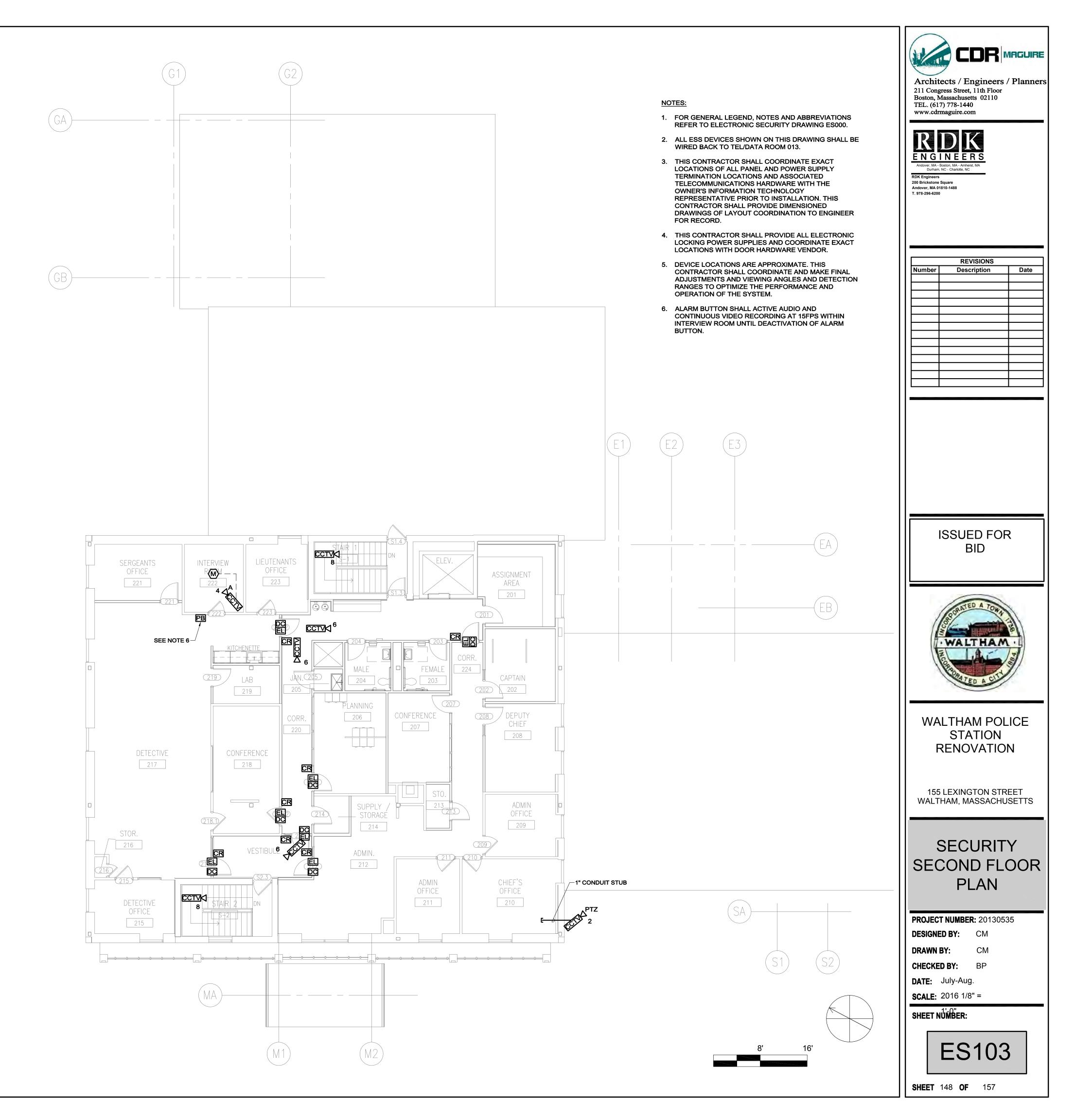


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3/20130535 - Waltham Police HQ Renovation/1200 Drawings/1207 Security/Plot Files/20130535 ES103 SECURITY SECOND FLOOR PLAN.dwg [24x36] July 14, 2014 - 5:38pm dfranzek



|   | 4                              |  |
|---|--------------------------------|--|
| STRUCTURAL -  |                                |  |
|   | <br>                           |  |
| STUB DOWN IN WALL FOR<br>WIRING TO MOTION<br>DETECTOR           |                                |  |
| MOTION DETECTOR MOUN  |                                |  |
| STUB INTO DOOR FRAME F<br>WIRING OF ELECTRIC LOC<br>SEE NOTE 5) |                                |  |
| MAGNETIC LOCK MOUNTE<br>DOOR JAMB (SECURED SIL                  |                                |  |
| DOOR CONTACTS CONCEA<br>N DOOR FRAME AND IN DO                  |                                |  |
| DOOR FRAME  | <br>ELECTRIC<br>DOOR<br>STRIKE |  |

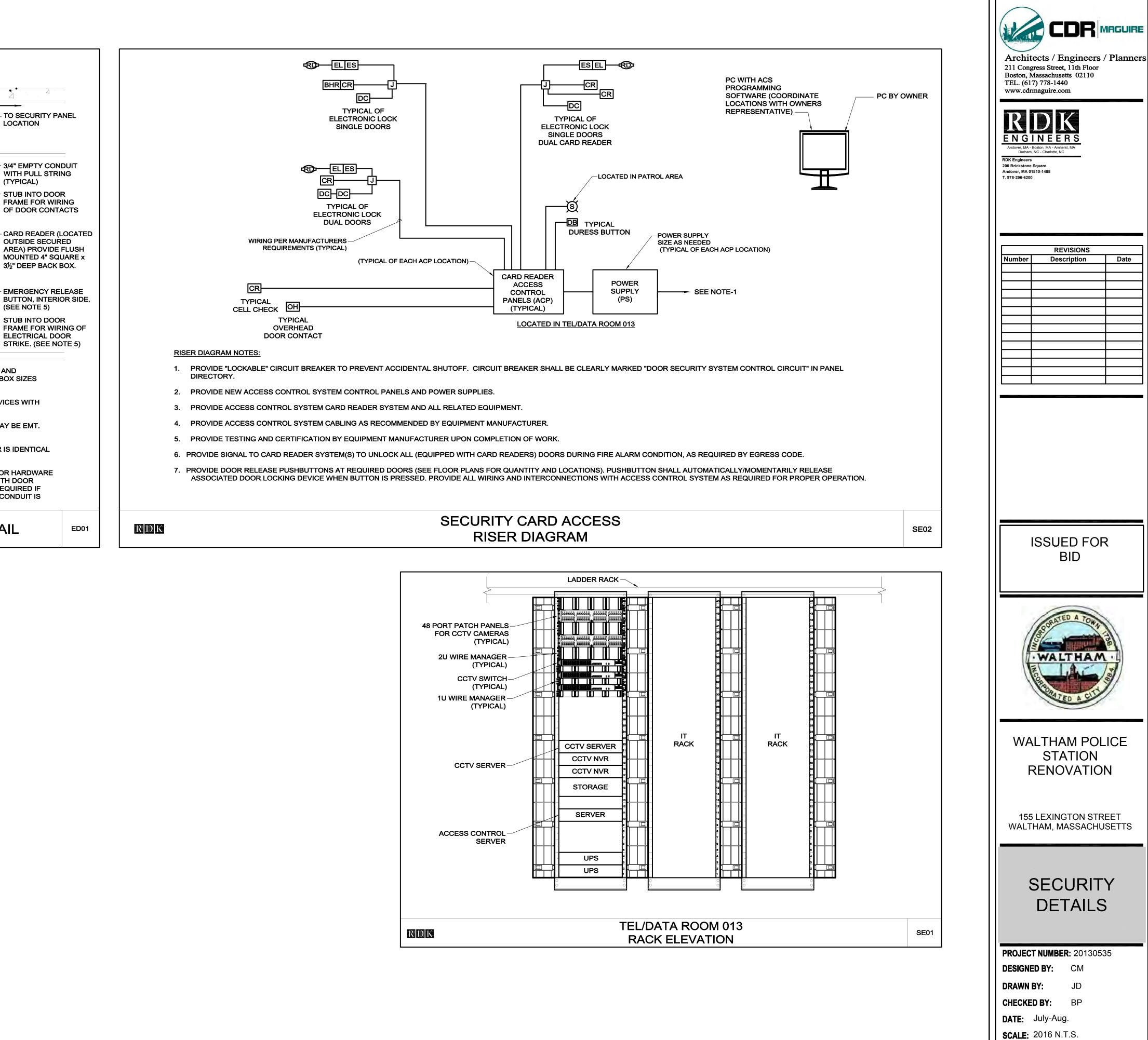
3. PROVIDE INSULATED BUSHINGS ON ALL CONDUITS. CONCEALED RACEWAY MAY BE EMT. ALL EXPOSED RACEWAY SHALL BE GALVANIZED RIGID METAL CONDUIT.

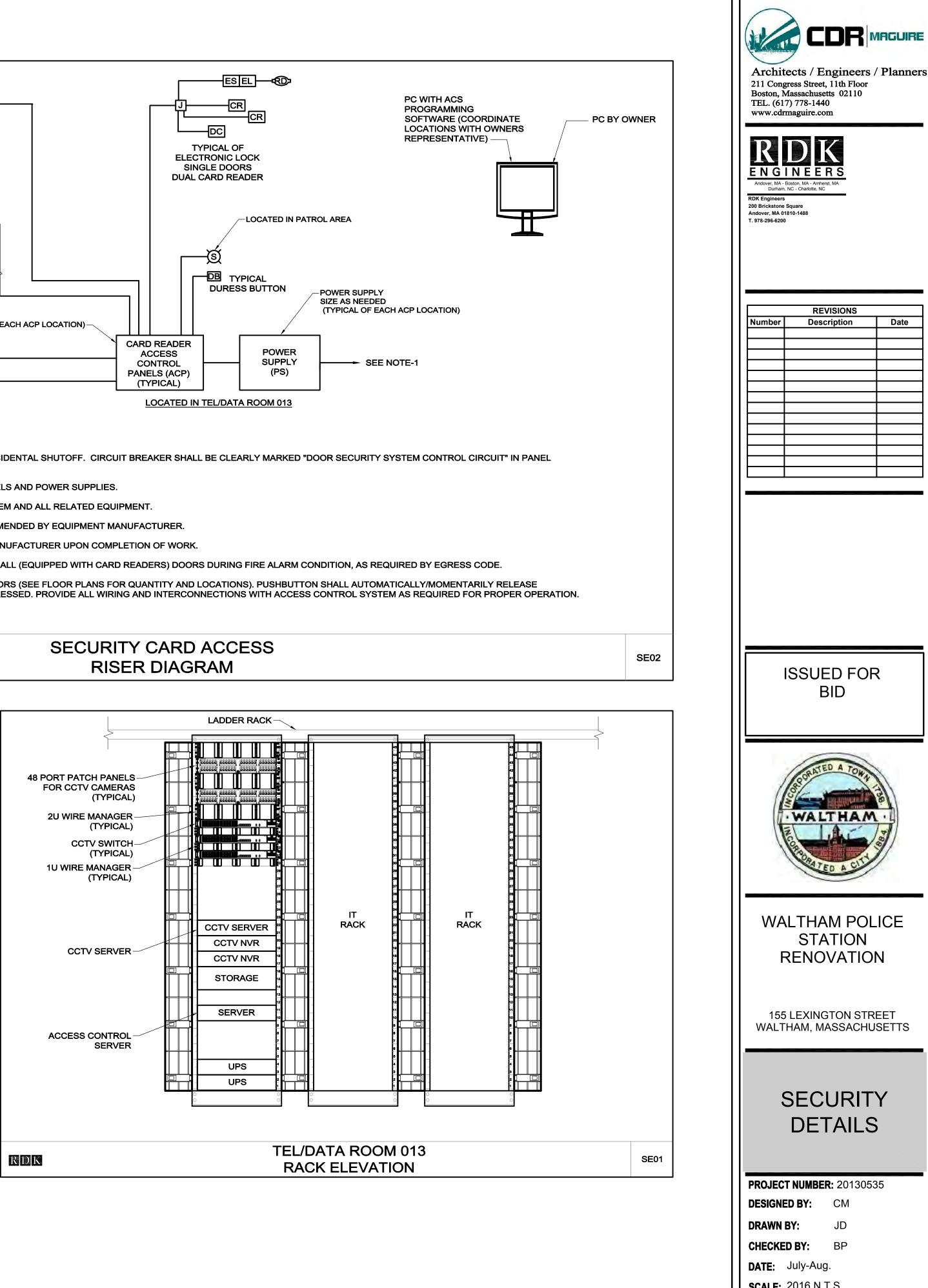
4. THE SCOPE ILLUSTRATED (RACEWAY AND BACKBOXES) FOR A DOUBLE DOOR IS IDENTICAL WITH ONE DOOR CONTACT AND MAG LOCK PER DOOR.

5. DETAIL INDICATED ABOVE INCLUDES CONDUIT PATHWAYS FOR MULTIPLE DOOR HARDWARE SCENARIOS. THIS CONTRACTOR CAN ELIMINATE CONDUIT IN COORDINATION WITH DOOR SECURITY HARDWARE SELECTION. (I.E. CONDUIT FOR ELECTRIC LOCK IS NOT REQUIRED IF DOOR IS SELECTED TO USE ELECTRIC STRIKE. EMERGENCY RELEASE BUTTON CONDUIT IS NOT REQUIRED IF MAGNETIC LOCKS ARE NOT SELECTED.

RDK

## TYPICAL DOOR SECURITY DETAIL

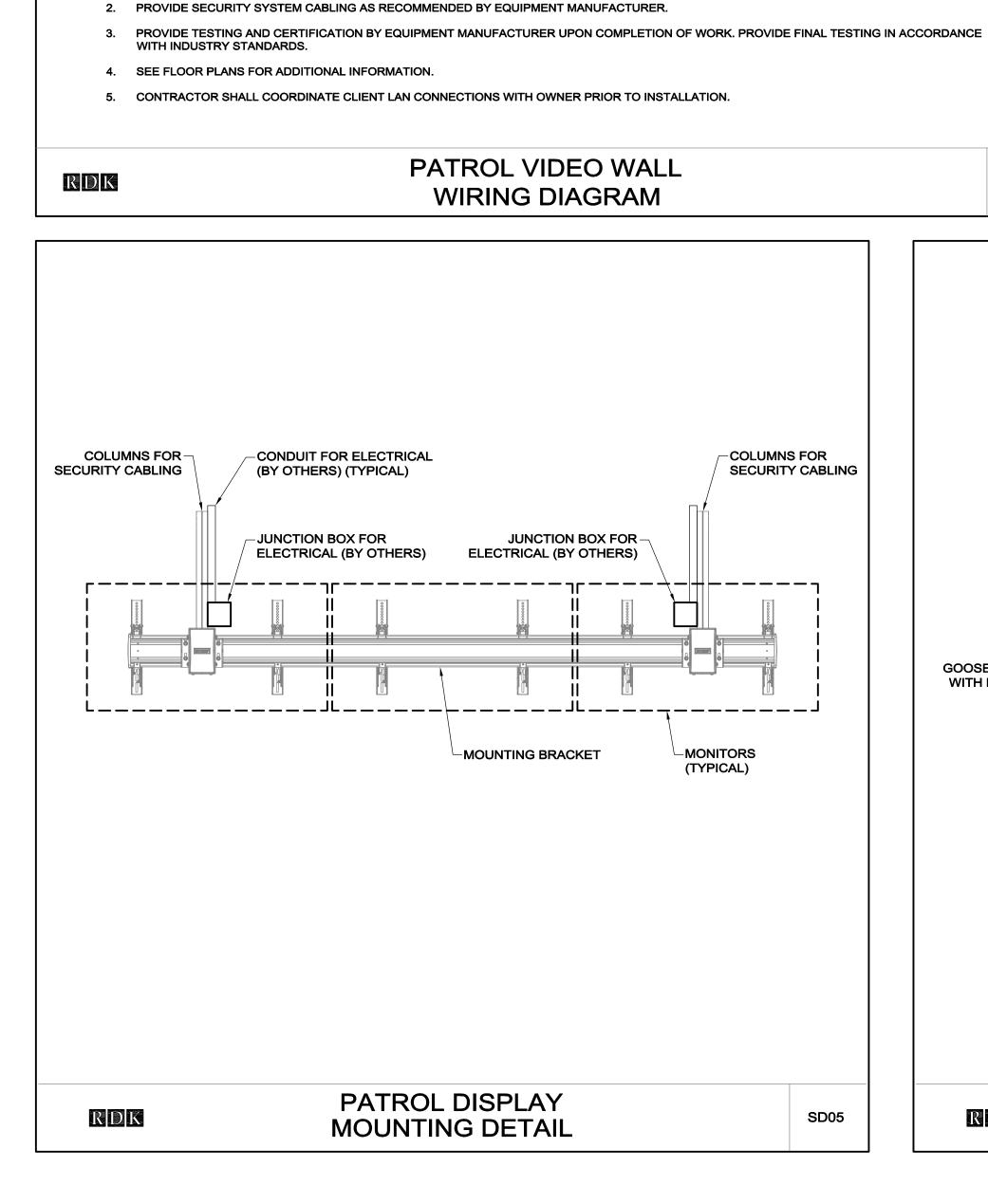




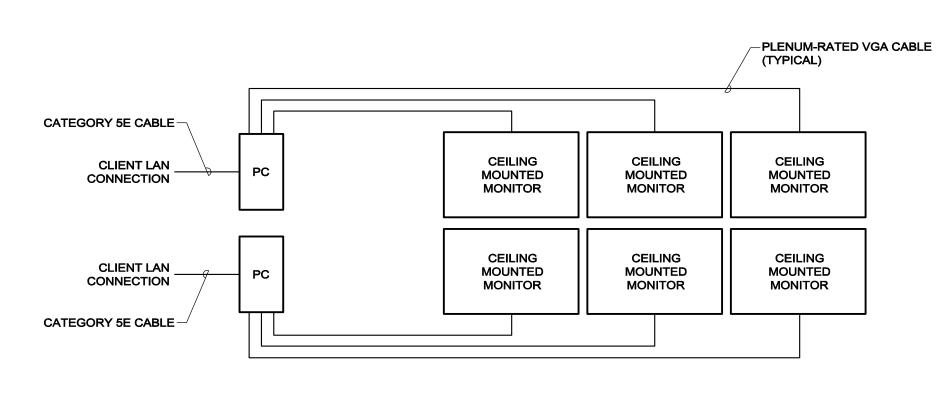
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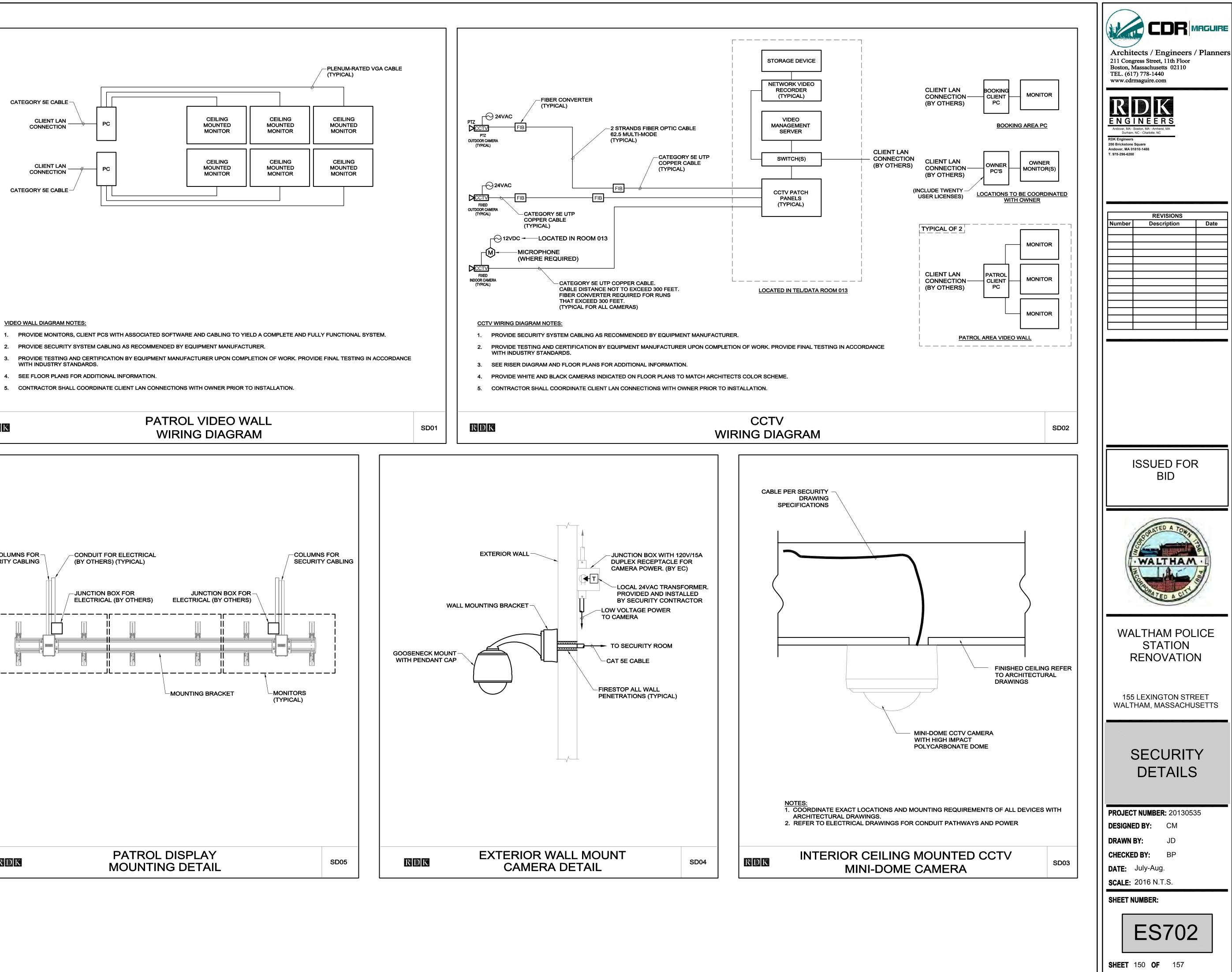
ES701

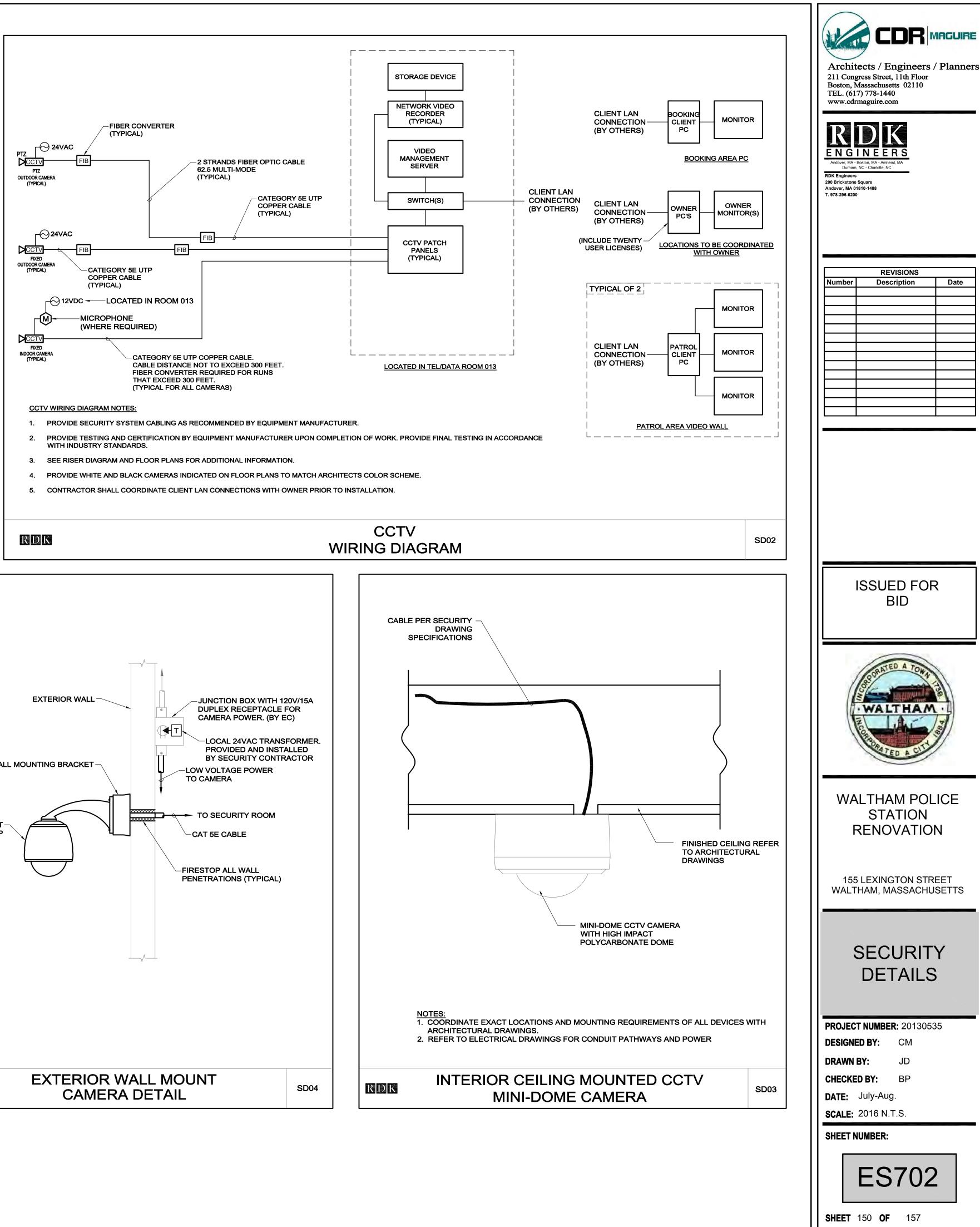
**SHEET** 149 **OF** 157

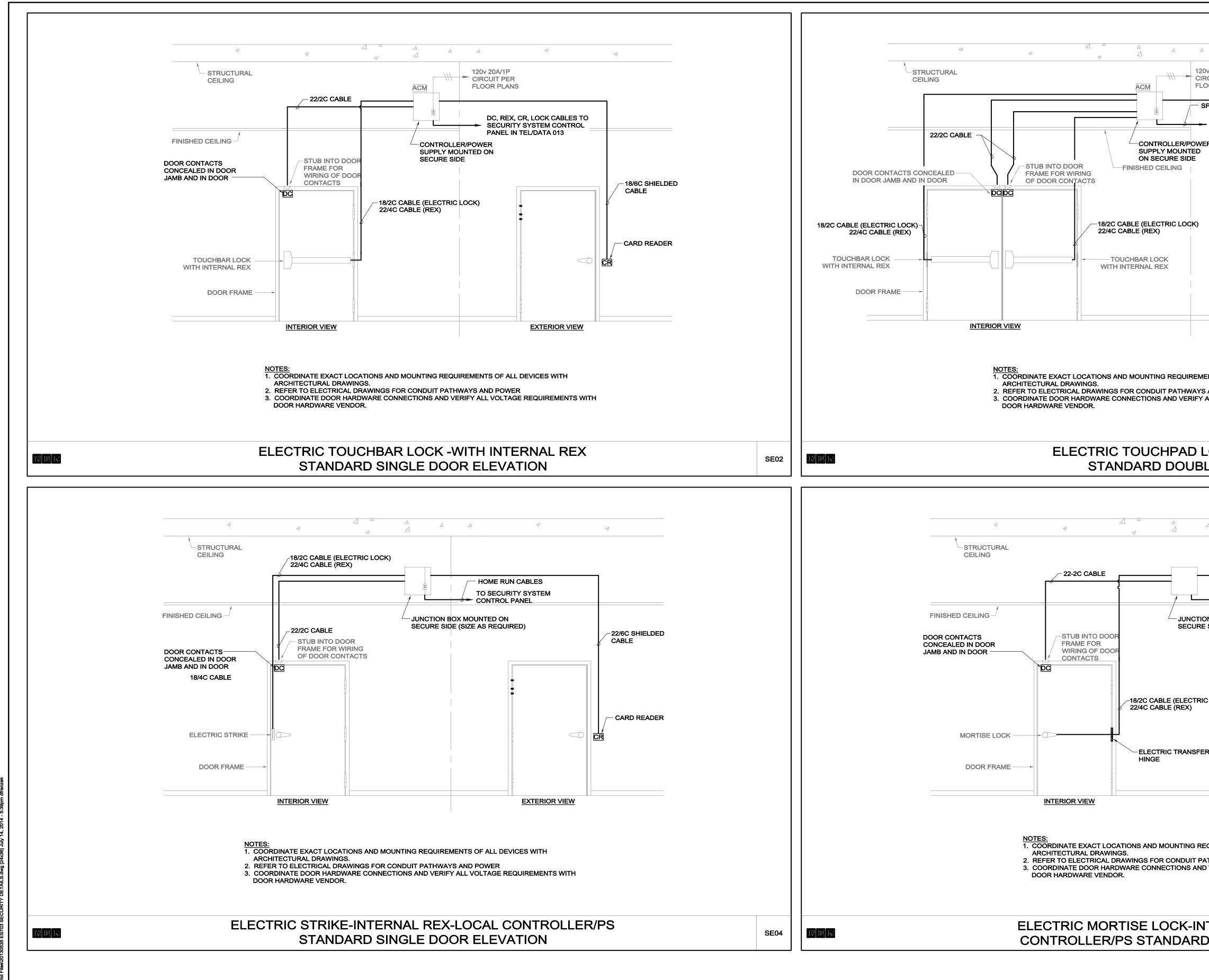


VIDEO WALL DIAGRAM NOTES:









|   | $\frown$  |
|---|---|
|   | Architects / Engineers / Planners   |
| Dv 20A/1P<br>RCUIT PER<br>OOR PLANS   | 211 Congress Street, 11th Floor<br>Boston, Massachusetts 02110<br>TEL. (617) 778-1440<br>www.cdrmaguire.com   |
| SPECIFY CABLE (LAN, RS485)<br>DC, REX, CR, LOCK CABLES TO<br>- SECURITY SYSTEM CONTROL<br>PANEL IN TEL/DATA 013<br>ER | Right       Right <th< th=""></th<> |
| ENTS OF ALL DEVICES WITH  | REVISIONS         Number       Description       Date   |
|   |   |
| LE DOOR ELEVATION   |   |
|   | ISSUED FOR<br>BID   |
| HOME RUN CABLES<br>TO SECURITY SYSTEM<br>CONTROL PANEL  |   |
| C LOCK)   | WALTHAM POLICE  |
| EXTERIOR VIEW   | STATION<br>RENOVATION   |
| EQUIREMENTS OF ALL DEVICES WITH<br>ATHWAYS AND POWER<br>D VERIFY ALL VOLTAGE REQUIREMENTS WITH                        | 155 LEXINGTON STREET<br>WALTHAM, MASSACHUSETTS  |
| ITERNAL REX-CENTRALIZED<br>D SINGLE DOOR ELEVATION  | SECURITY<br>DETAILS   |
|   | PROJECT NUMBER: 20130535DESIGNED BY:CMDRAWN BY:JDCHECKED BY:BPDATE:July-Aug.SCALE:2016 N.T.S.SHEET NUMBER:  |
|   | ES703<br>SHEET 151 OF 157   |