

**HARRIMAN**

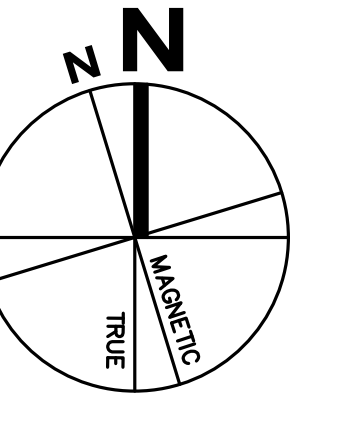
AUBURN PORTLAND PORTSMOUTH BOSTON

**GARRISON ELEMENTARY SCHOOL**

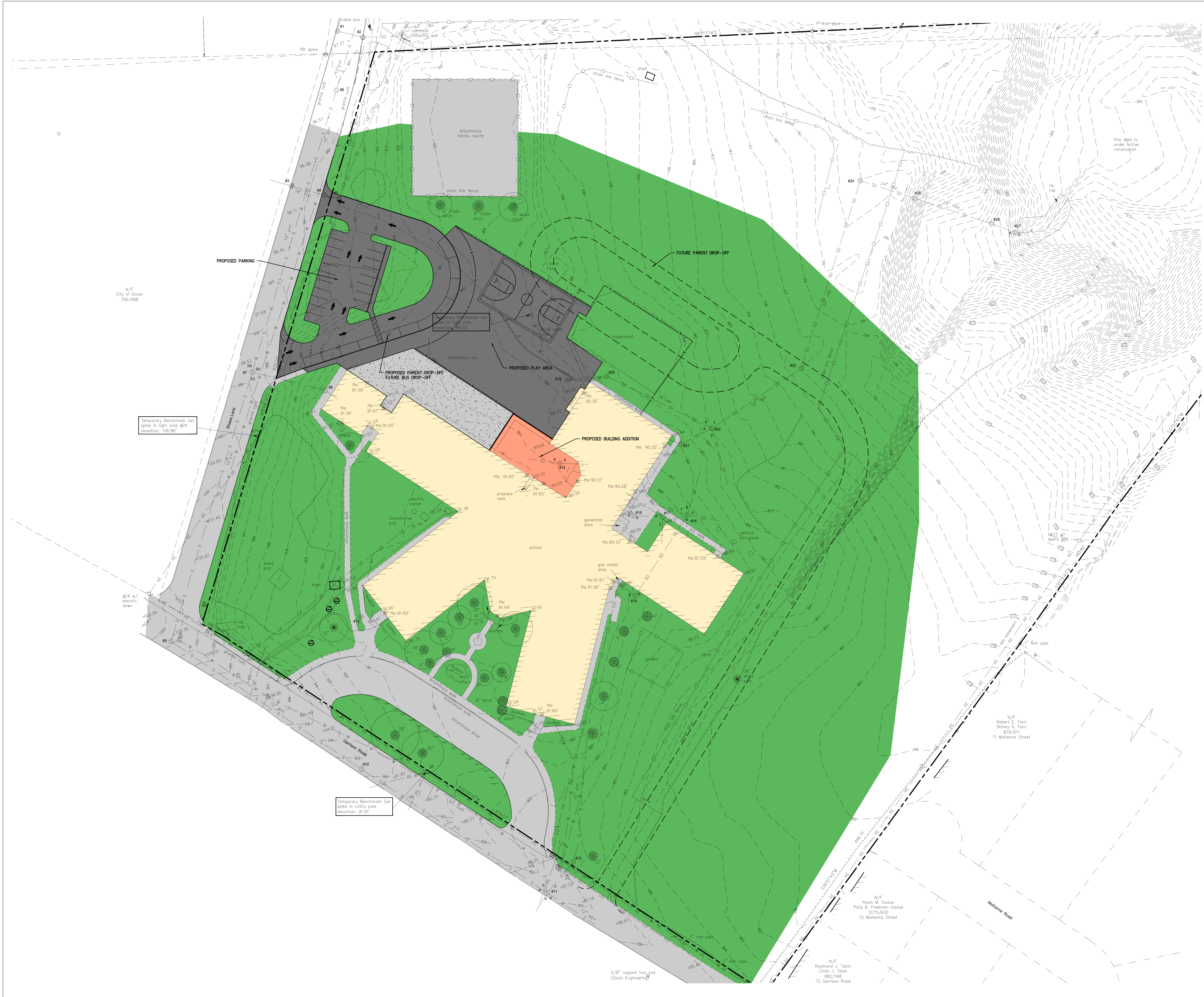
DOVER, NEW HAMPSHIRE

Harriman Project No. 15618

Key Plan



GRAPHIC SCALE  
( IN FEET )



N/F City of Dover 756/488

Temporary Benchmark Set spike in light pole #24 elevation: 100.88'

Temporary Benchmark Set spike in utility pole elevation: 91.91'

N/F Robert E. Ferri Shirley A. Ferri 879/011 11 McKenna Street

N/F Kevin M. Savluk Polly B. Freeman-Savluk 3175/630 12 McKenna Street

N/F Raymond J. Talon Linda J. Talon 982/168 72 Garrison Road

5/8" capped iron rod (Davis Engineering)

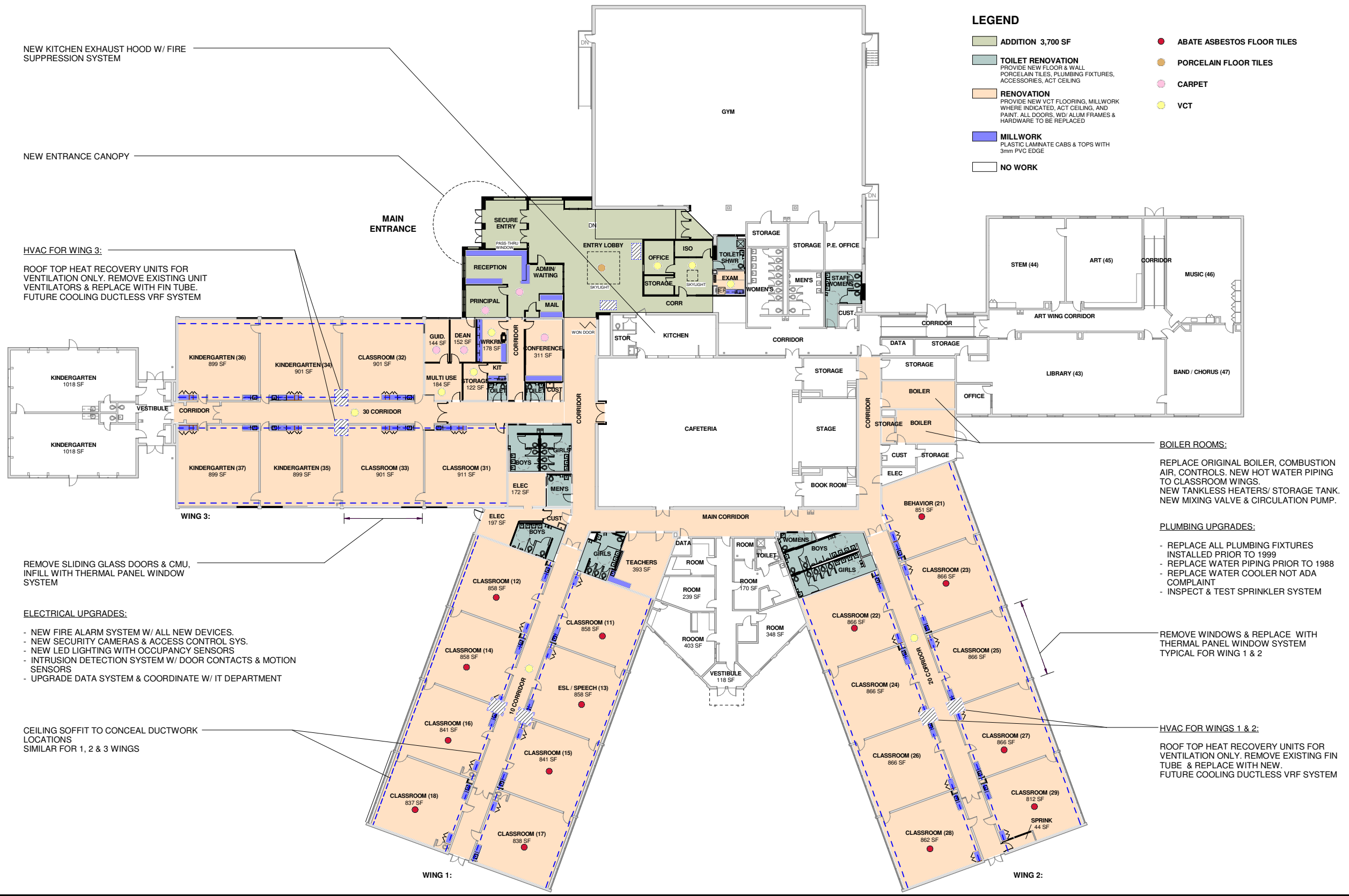
Date	Description	DATE	REVISION

**PRELIMINARY NOT FOR CONSTRUCTION**  
05-09-17


**SITE OVERVIEW PLAN**

**C00.1**





**LEGEND**

- ADDITION 3,700 SF
- TOILET RENOVATION  
PROVIDE NEW FLOOR & WALL PORCELAIN TILES, PLUMBING FIXTURES, ACCESSORIES, ACT CEILING
- RENOVATION  
PROVIDE NEW VCT FLOORING, MILLWORK WHERE INDICATED, ACT CEILING, AND PAINT ALL DOORS, WD/ ALUM FRAMES & HARDWARE TO BE REPLACED
- MILLWORK  
PLASTIC LAMINATE CABS & TOPS WITH 3mm PVC EDGE
- NO WORK
- ABATE ASBESTOS FLOOR TILES
- PORCELAIN FLOOR TILES
- CARPET
- VCT

NEW KITCHEN EXHAUST HOOD W/ FIRE SUPPRESSION SYSTEM

NEW ENTRANCE CANOPY

HVAC FOR WING 3:

ROOF TOP HEAT RECOVERY UNITS FOR VENTILATION ONLY. REMOVE EXISTING UNIT VENTILATORS & REPLACE WITH FIN TUBE. FUTURE COOLING DUCTLESS VRF SYSTEM

REMOVE SLIDING GLASS DOORS & CMU, INFILL WITH THERMAL PANEL WINDOW SYSTEM

**ELECTRICAL UPGRADES:**

- NEW FIRE ALARM SYSTEM W/ ALL NEW DEVICES.
- NEW SECURITY CAMERAS & ACCESS CONTROL SYS.
- NEW LED LIGHTING WITH OCCUPANCY SENSORS
- INTRUSION DETECTION SYSTEM W/ DOOR CONTACTS & MOTION SENSORS
- UPGRADE DATA SYSTEM & COORDINATE W/ IT DEPARTMENT

CEILING SOFFIT TO CONCEAL DUCTWORK LOCATIONS SIMILAR FOR 1, 2 & 3 WINGS

**BOILER ROOMS:**

REPLACE ORIGINAL BOILER, COMBUSTION AIR, CONTROLS. NEW HOT WATER PIPING TO CLASSROOM WINGS. NEW TANKLESS HEATERS/ STORAGE TANK. NEW MIXING VALVE & CIRCULATION PUMP.

**PLUMBING UPGRADES:**

- REPLACE ALL PLUMBING FIXTURES INSTALLED PRIOR TO 1999
- REPLACE WATER PIPING PRIOR TO 1988
- REPLACE WATER COOLER NOT ADA COMPLIANT
- INSPECT & TEST SPRINKLER SYSTEM

REMOVE WINDOWS & REPLACE WITH THERMAL PANEL WINDOW SYSTEM TYPICAL FOR WING 1 & 2

**HVAC FOR WINGS 1 & 2:**

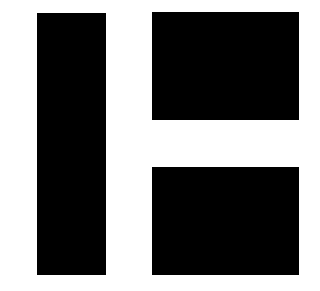
ROOF TOP HEAT RECOVERY UNITS FOR VENTILATION ONLY. REMOVE EXISTING FIN TUBE & REPLACE WITH NEW. FUTURE COOLING DUCTLESS VRF SYSTEM



**DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY SCHOOL  
RENOVATIONS & ADDITIONS - PHASE I**

**SCOPE PHASE I**

05/09/17



HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

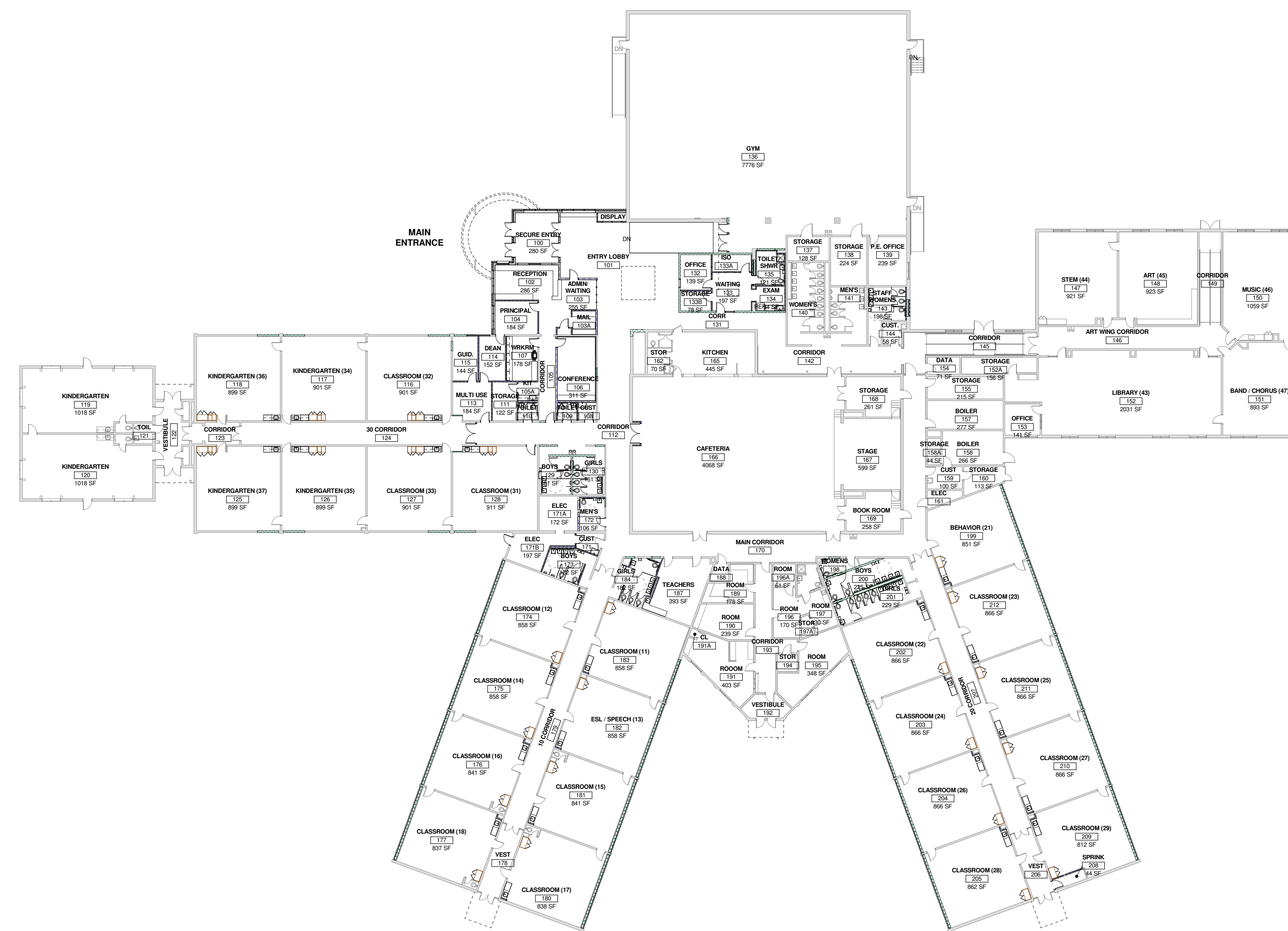
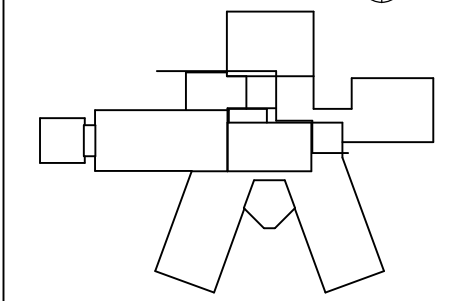
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

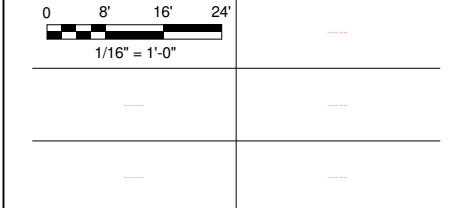
Key Plan

Plot from



Date	Description

SCHMATIC DESIGN  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17

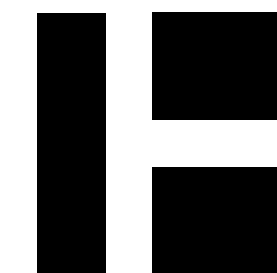


PA/PE: Designer © 2017  
Drawn By: Author Harriman Associates

FIRST FLOOR INDEX PLAN

A01.1

Plot Date: 05/09/17 1:06:02 PM



HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

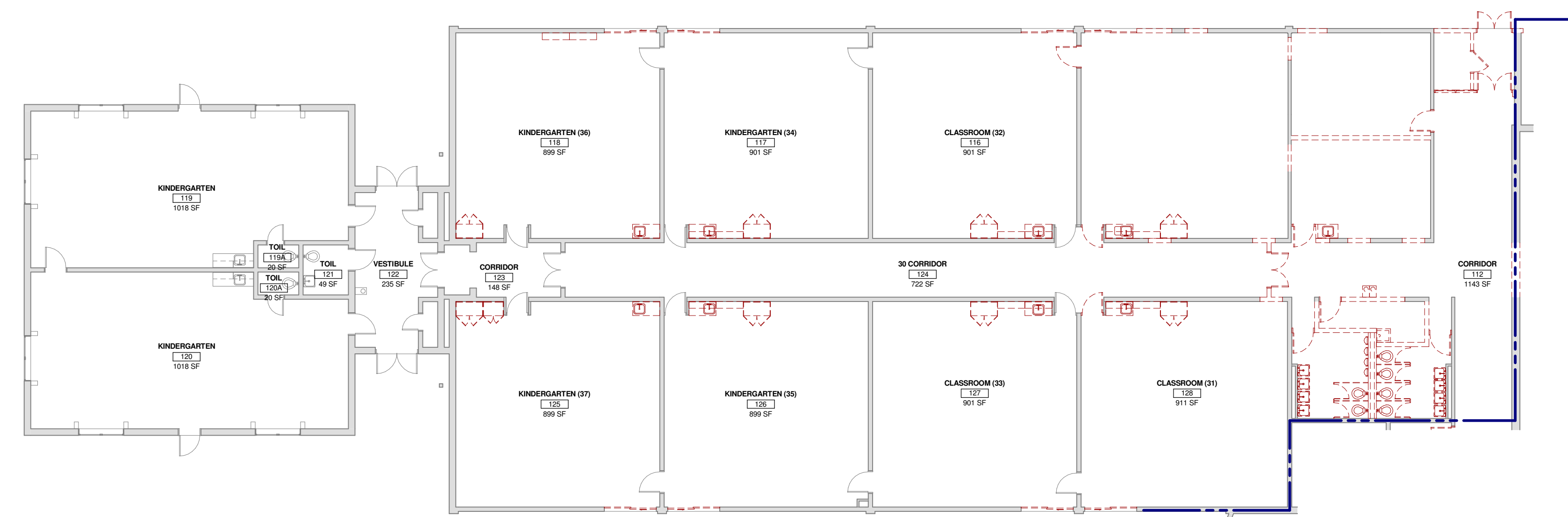
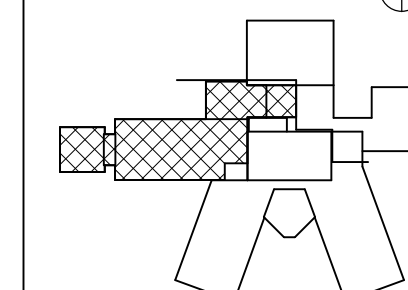
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

Plot North



DEMOLITION GENERAL NOTES:

1. REFER TO FLOOR PLANS TO DETERMINE EXTENT OF REMOVALS AND DEMOLITION IN REFERENCE TO NEW WORK.
2. REFER TO CIVIL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL REMOVALS AND DEMOLITION.
3. ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL, STATE AND NATIONAL SAFETY CODES.
4. CONTRACTOR SHALL IDENTIFY ANY AND ALL LOAD BEARING PARTITIONS PRIOR TO THE REMOVAL OF ANY PARTITIONS. TEMPORARY SHORING OF THE PERMANENT STRUCTURE SHALL BE IN PLACE PRIOR TO REMOVAL OF SUCH PARTITIONS.
5. THE CONTRACTOR SHALL IDENTIFY ALL LOCATIONS WHERE PENETRATIONS ARE REQUIRED IN EXISTING WALLS (MECH, PLUMB, ELEC). PROPER OPENING SIZES SHALL BE PROVIDED WITH HEADERS OR LINTELS.
6. THE CONTRACTOR SHALL COORDINATE WITH OWNER, REMOVAL AND/OR RELOCATION OF ALL TACKBOARDS, MARKERBOARDS, STORAGE, FIXTURES, SHELVES, FURNITURE, ETC. THAT WILL BE DISTURBED AS PART OF THIS PROJECT.
7. TERMINATE AND CAP ANY UTILITY IN WALLS, CEILINGS, FLOORS TO BE REMOVED AND NOT INTENDED FOR REUSE. PENETRATIONS SHALL BE PATCHED, CORE FILLED AND PIPE PROTECTED ACCORDING TO CODE.
8. PATCH ANY DISTURBED FINISHES TO MATCH EXISTING ADJACENT SURFACE UNLESS OTHERWISE NOTED.
9. REMOVAL OF ASBESTOS TO BE COORDINATED BY O&M AND OWNER.
10. REMOVE SLAB IN AREAS INDICATED BY:
  - TO ALLOW FOR INSTALLATION OF NEW UTILITIES, ETC. (CIRCLED)
  - WITH STRUCT FOR INFILL.

Date	Description

SCHMATIC DESIGN  
PRELIMINARY  
NOT FOR  
CONSTRUCTION  
05-09-17

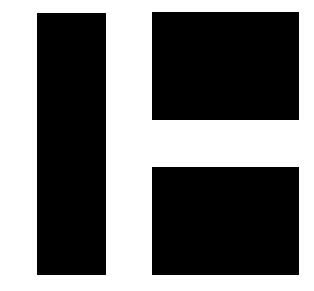
PA: PE Designer © 2017  
Drawn By: Author Harriman Associates

DEMOLITION PLAN - AREA  
A

A05.1

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

Plot Date: 05/09/17 10:47 AM



HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

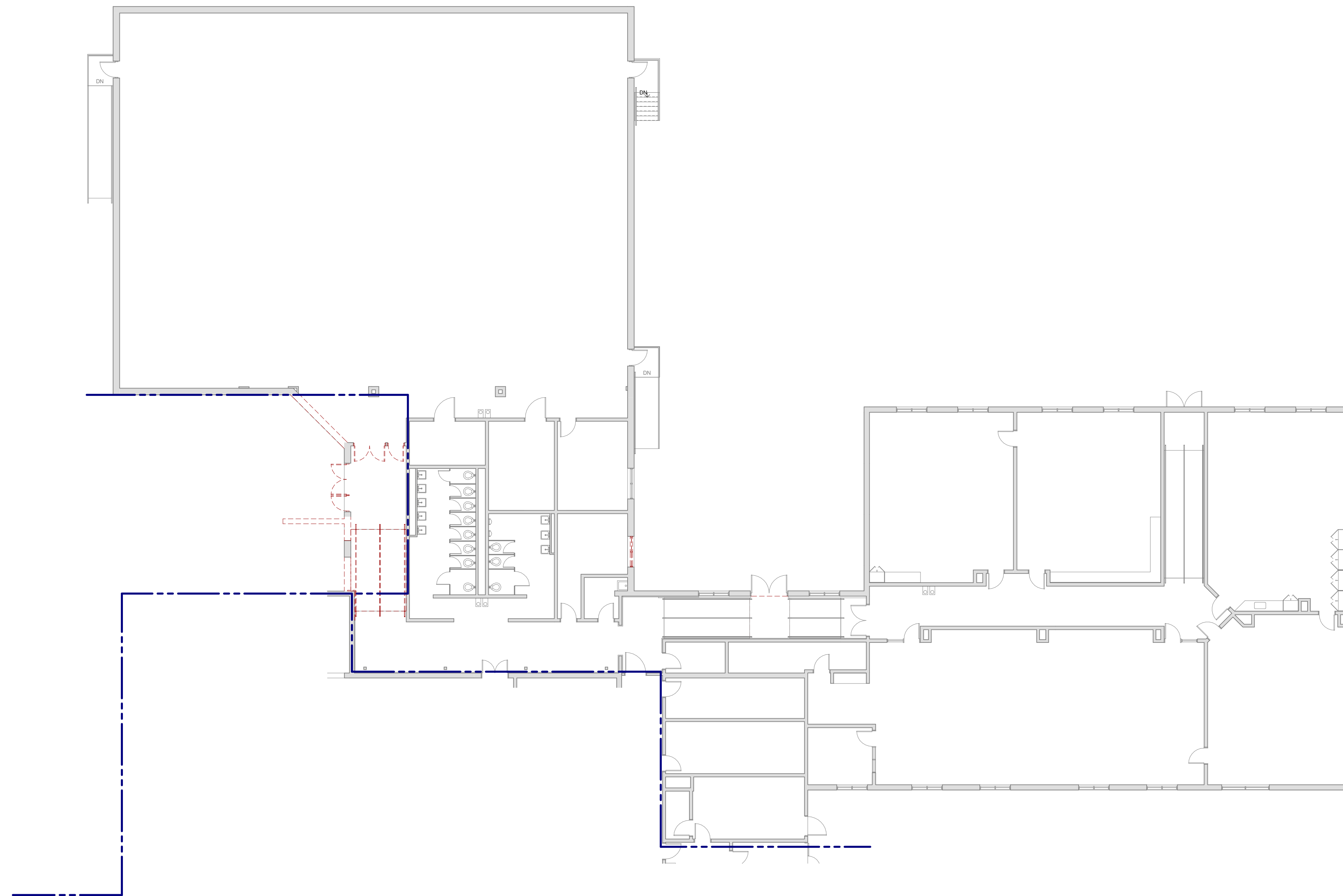
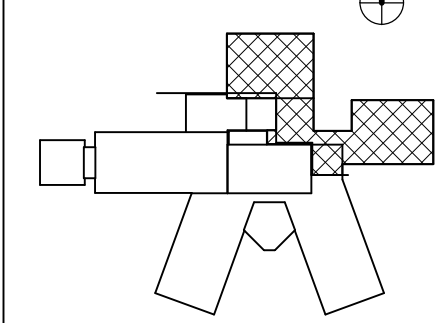
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

North Arrow



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

Plot Date: 05/09/17 10:57 AM

Revisions and Revisions	
Date	Description

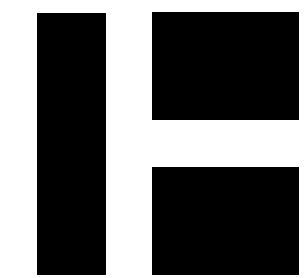
SCHMATIC DESIGN  
PRELIMINARY  
NOT FOR  
CONSTRUCTION  
05-09-17


PA/PE: Designer © 2017  
Drawn By: Author Harriman Associates

DEMOLITION PLAN - AREA  
B

A05.2





HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

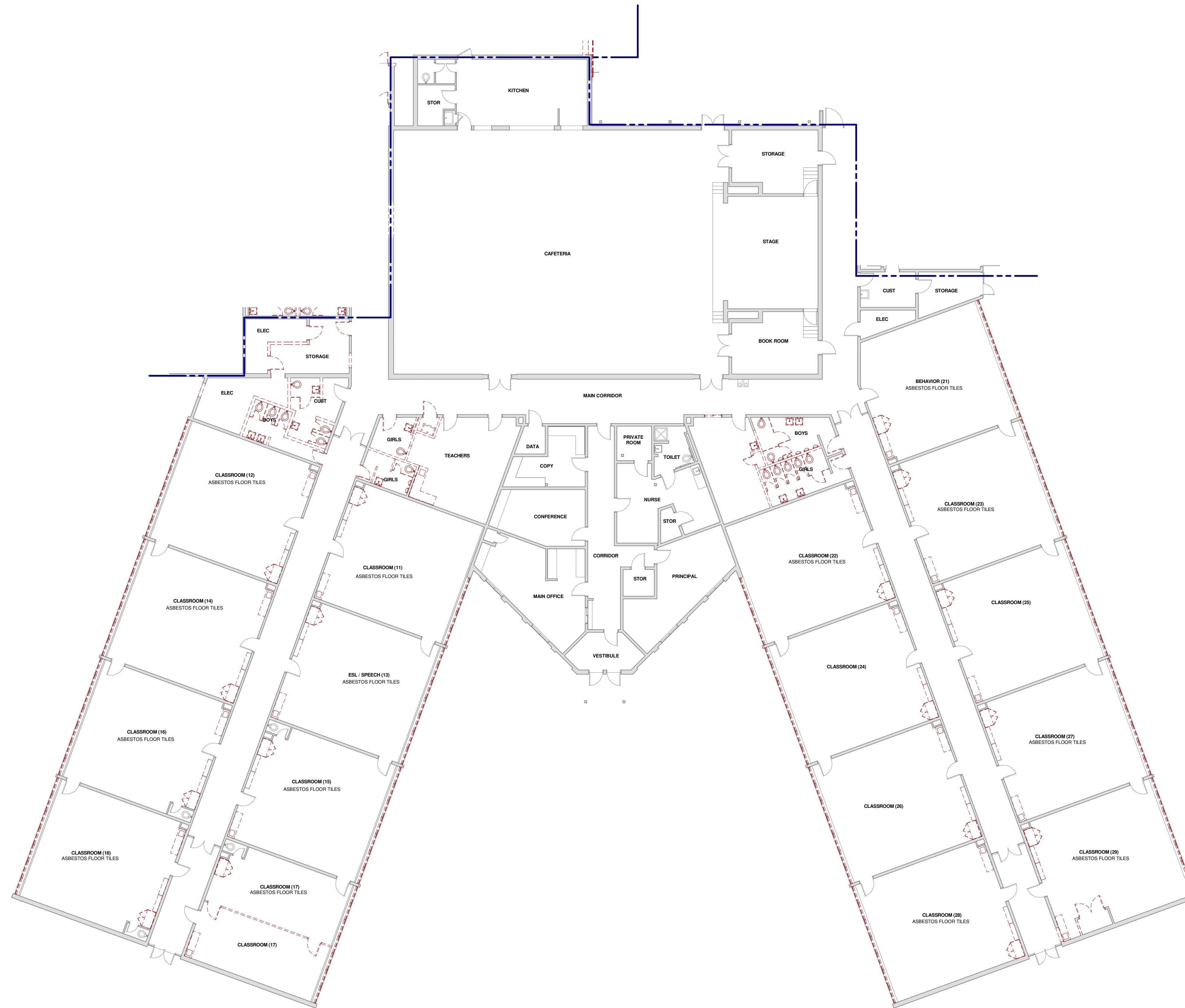
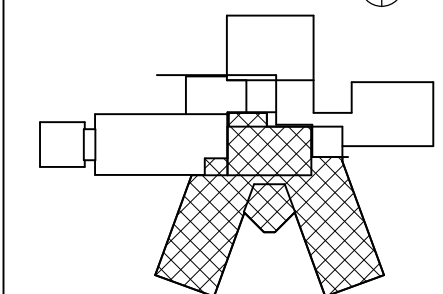
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

Plot North



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

Revisions	
Date	Description

SCHMATIC DESIGN  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17


PA: PE: Designer © 2017  
Drawn By: Author Harriman Associates

DEMOLITION PLAN - AREA  
C

A05.3

P:\01\061\_052017\_1261.dwg



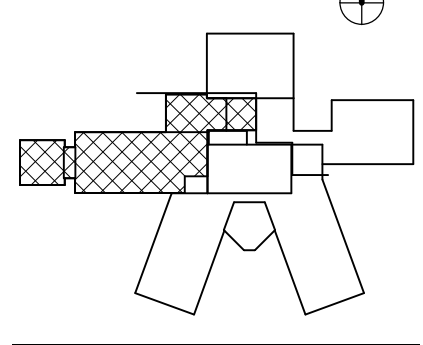
AUBURN PORTLAND PORTSMOUTH BOSTON

DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan



GENERAL NOTES:

- FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
- ALL DOORS JAMBS TO BE LOCATED 1" GP/POW OR 5" CMU FROM ADJACENT WALL AT HINGE SIDE UNLESS NOTED OTHERWISE.
- SEE DRAWING A6.1 FOR PARTITION TYPES.
- SEE DRAWING A6.1 FOR DOOR SCHEDULE.
- SEE DRAWING A6.1 FOR ROOM FINISH SCHEDULE.
- PROVIDE CONTROL JOINTS IN GP/POW PARTITIONS AT A MAX SPACING OF 30'-0". LOCATE AT EDGE OF DOOR FRAME UP TO CEILING WHERE PRACTICAL UNLESS NOTED OTHERWISE.

SYMBOLS LEGEND

- PARTITION TAG
  - DOOR & BIPROVED LITE NUMBERS SEE A6.1 FOR SCHEDULE
  - MISCELLANEOUS ITEMS MARKER
- ROOM NAME  
NUMBER IN PARENTHESES DENOTES EXISTING SCHOOL ROOM NUMBER SEE A6.1 FOR ROOM FINISH SCHEDULE

Date	Description

SCHMATIC DESIGN  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17

PA/PE: Designer © 2017  
Drawn By: Author Harriman Associates

FIRST FLOOR - AREA A &  
PARTITION TYPES  
DETAILS

A10.1

**PARTITION NOTES**

- SEE DETAILS A6.2 FOR TYPICAL PARTITION CONNECTION DETAILS.
- SEE SECTIONS AND DETAILS FOR CONNECTIONS OTHER THAN THOSE SHOWN.
- IN TOILET ROOMS WITH GP/POW WALLS, PROVIDE 5/8" MOLD RESISTANT GP/POW LEOU OR GP/POW ON ALL STUD PARTITIONS WITHIN THE ROOM WHERE THE GP/POW EXTENDS ABOVE THE ROOM CEILING. PROVIDE MOLD RESISTANT TO A MIN 4" ABOVE THE CEILING AND USE 5/8" GP/POW TO THE TOP OF THE PARTITION.
- ALL GP/POW TO BE ABUSE BOARD TYPE X GP/POW.
- USE 20 GA STEEL STUDS IN PARTITIONS WITH ABUSE RESISTANT GP/POW. TIE BACKER ROUND AND ETC RATED WALLS.
- ALL FIRE-RATED PARTITIONS SHALL BE STENCILED ON THE WALL SURFACE JUST ABOVE THE CEILING LINE INDICATING THE PARTITIONS FIRE RATING. "1 HR", "2 HR", ETC IN RED OR GRANGE PAINT ON EACH SIDE OF THE PARTITION. "SMOKE PARTITIONS" "SMOKE" IN GREEN PAINT.
- ALL PARTITIONS EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK. SEAL ALL PARTITIONS TO DECK FOR SMOKE & SOUND CONTROL. FILL ALL Voids BETWEEN TOP OF PARTITION AND DECK AS SPECIFIED AND DETAILED ON A6.2.
- WHERE GP/POW & STUD PARTITIONS INTERSECT BEAMS OR JOIST, FRAME AROUND BOTH SIDES OF BEAMS & JOIST WITH METAL STUDS AND GP/POW TO MAINTAIN CONTINUITY OF PARTITION TO UNDERSIDE OF DECK.
- WHERE CMU WALLS, RATED AND NON-RATED, INTERSECT BEAMS OR JOISTS, FRAME AROUND BOTH SIDES OF BEAMS OR JOIST WITH METAL STUDS AND GP/POW TO MAINTAIN CONTINUITY OF PARTITION TO UNDERSIDE OF DECK.
- TOP OF PARTITION CLOSURE DETAILS SHOWN ARE TYPICAL. ACTUAL FIELD CONDITIONS MAY VARY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFY ACTUAL CONDITIONS AND MODIFYING CLOSURE DETAILS TO MEET ACTUAL CONDITIONS AND MAINTAINING CONTINUITY OF PARTITIONS FROM FLOOR TO DECK ABOVE.
- ALL PARTITIONS TYPES SHOWN MAY NOT BE APPLICABLE TO THIS PROJECT.
- WHERE 5/8" ABUSE RESISTANT GP/POW IS NOTED, EXTEND UP TO 8" ABOVE CEILING THEN USE 5/8" GP/POW UP TO DECK AND SEAL TIGHT.
- PROVIDE 5/8" MOLD RESISTANT GP/POW FROM FLOOR TO ROOF OR FLOOR DECK ABOVE ON INSIDE FACE OF EXTERIOR WALLS.
- PROVIDE 3/8" ACOUSTICAL SEALANT JOINT WITH CASING BEAD AROUND PERIMETER OF GP/POW ASSEMBLIES WHEN ABUTTING DISSIMILAR MATERIALS. UNLESS NOTED OR DETAILED ELSEWHERE IN THIS SET.
- AT PARTITIONS WHERE 5/8" ABUSE RESISTANT GP/POW IS NOTED SUCH AS IN CORRIDOR, STAIRS, HALLS, CLASSROOMS AND STORAGE ROOMS, THE INTENT FOR THE ABUSE BOARD TO BE ON ALL SIDES OF THE ROOM.

**PARTITION LEGEND**

STUD OR CMU SIZE	PARTITION OR WALL TAG NO.
3/8" STEEL STUDS	010
1/2" HR FIRE RATED	UL NO. V446
FIRE RATING	UL DESIGN NO. WHERE APPLICABLE

**E6 PARTITION LEGEND & NOTES**  
SCALE: 1/2" = 1'-0"

**PARTITION TAG KEY**

INDICATES PARTITION HAS BATT INSULATION

A = SOUND ATTENUATING BATTS  
T = THERMAL BATTS  
N = NO INSULATION  
R = SOUND BATTS AND RESILIENT CHANNELS

TYPE OF GYPSUM DRYWALL

1 = GP/POW FULL HEIGHT ES  
2 = ABUSE RESISTANT GP/POW FULL HEIGHT ES  
3 = IMPACT RESISTANT GP/POW FULL HEIGHT ES  
4 = FIRE RATED GP/POW FULL HEIGHT ES  
5 = ABUSE / FIRE GP/POW FULL HEIGHT ES  
6 = IMPACT / FIRE GP/POW FULL HEIGHT ES  
7 = GP/POW VARYING HEIGHT ES  
8 = ABUSE RESISTANT GP/POW VARYING HGT ES  
9 = IMPACT RESISTANT GP/POW VARYING HGT ES

**PARTITION TAG KEY GENERAL NOTES**

- NOT ALL PARTITION TAGS SHOWN TO THE LEFT ARE USED ON THIS PROJECT. VERIFICATION OF PARTITION TAGS USED MUST BE MADE FROM THE FLOOR PLANS THEN REFERENCED HERE FOR EXACT MATERIALS USED.
- SEE GENERAL NOTE #16 IN DETAIL A7/A6.1 FOR FURTHER INSTRUCTIONS REGARDING THE USE OF ABUSE RESISTANT GP/POW.

**E7 PARTITION KEY TAG**  
SCALE: 1/2" = 1'-0"

**VERTICALLY REINFORCED GROUTED PIERS**  
CMU WALL SCHEDULED

UNDRERSIDE OF ROOF OR FLOOR STRUCTURE

CEILING

FLOOR LINE

PLAN

NOTE: WHERE CMU WALL INTERSECTS STEEL FRAMING, EITHER PARALLEL OR PERPENDICULAR TO WALL, REFER TO WALL TYPE FOR DETAIL TO CLOSE OFF TOP OF

4" CMU  
NON-RATED  
8" CMU  
NON-RATED  
8" CMU  
NON-RATED  
12" CMU  
NON-RATED

SECTION

CONNECT TO STRUCTURE REF. A40.2

CEILING WHERE OCCURS

PLAN

5/8" GP/POW SEE FLOOR PLAN FOR PARTITION TAG INDICATING GP/POW TYPE AND STUD SIZE

3/5/8" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED

SECTION

CONNECT TO STRUCTURE REF. A40.2

CEILING WHERE OCCURS

PLAN

ADDITIONAL LAYER OF 5/8" GP/POW WITHIN AUDITORIUM SPACE OR STAGE

INSULATION SUPPORT ANCHORS

STEEL STUDS @ 16" OC

8" STEEL STUDS SEE FLOOR PLAN FOR PARTITION TAG INDICATING GP/POW TYPE AND STUD SIZE

3/5/8" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED

SECTION

CONNECT TO STRUCTURE REF. A40.2

CEILING WHERE OCCURS

PLAN

STEEL STUDS @ 16" OC

5/8" GP/POW SEE FLOOR PLAN FOR PARTITION TAG INDICATING GP/POW TYPE AND STUD SIZE

7/8" HAT CHANNELS  
NON-RATED  
1 5/8" STEEL STUDS  
NON-RATED  
2 1/2" STEEL STUDS  
NON-RATED  
3 5/8" STEEL STUDS  
NON-RATED  
4" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED

SECTION

CONNECT TO STRUCTURE REF. A40.2

CEILING WHERE OCCURS

PLAN

INSULATION SUPPORT ANCHORS

STEEL STUDS @ 16" OC

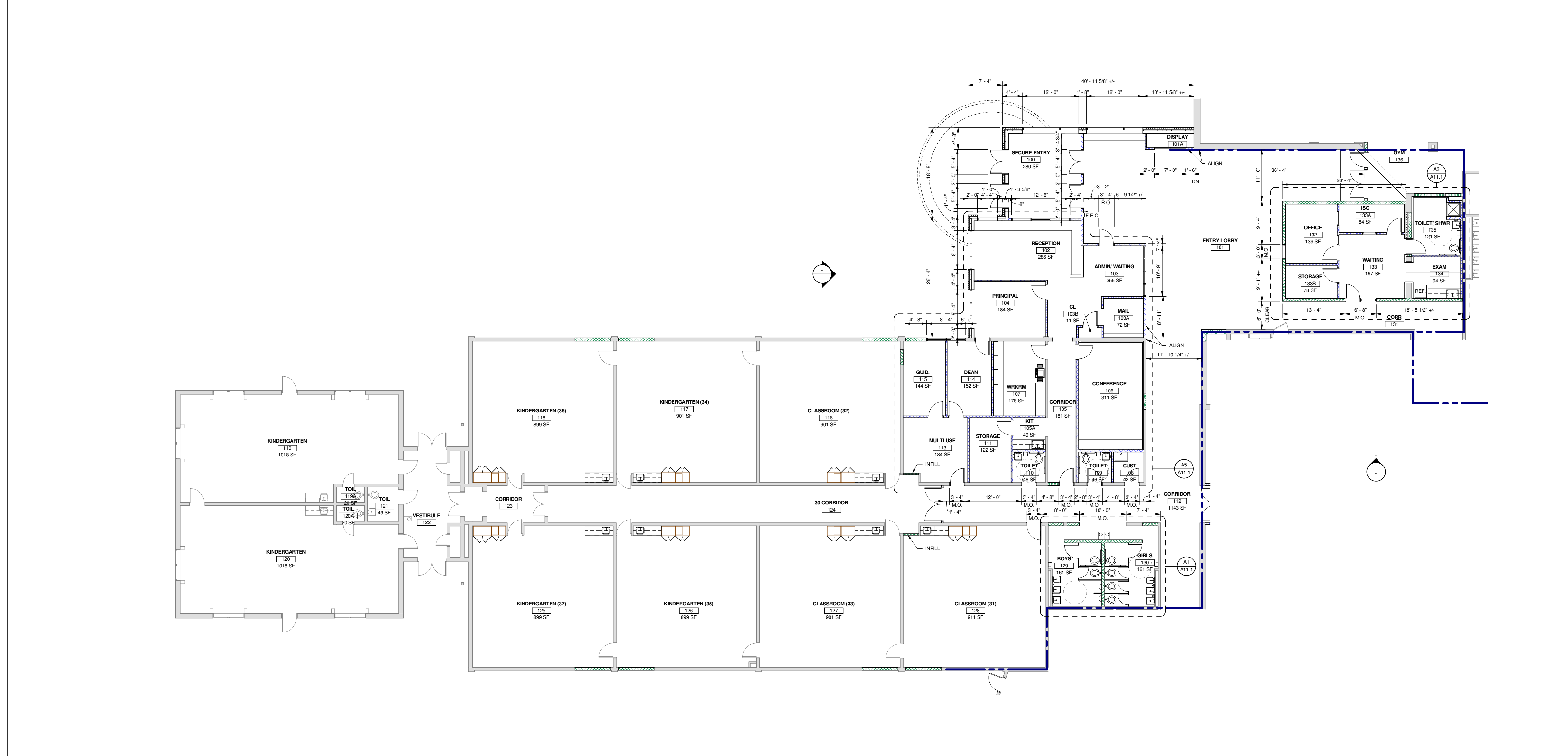
5/8" GP/POW SEE FLOOR PLAN FOR PARTITION TAG INDICATING GP/POW TYPE AND STUD SIZE

7/8" HAT CHANNELS  
NON-RATED  
1 5/8" STEEL STUDS  
NON-RATED  
2 1/2" STEEL STUDS  
NON-RATED  
3 5/8" STEEL STUDS  
NON-RATED  
4" STEEL STUDS  
NON-RATED  
8" STEEL STUDS  
NON-RATED

SECTION

CONNECT TO STRUCTURE REF. A40.2

CEILING WHERE OCCURS



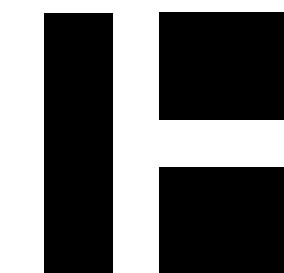
A1 FIRST FLOOR - AREA A  
SCALE: 1/8" = 1'-0"

P:\01\05\2017\15618.dwg









HARRIMAN

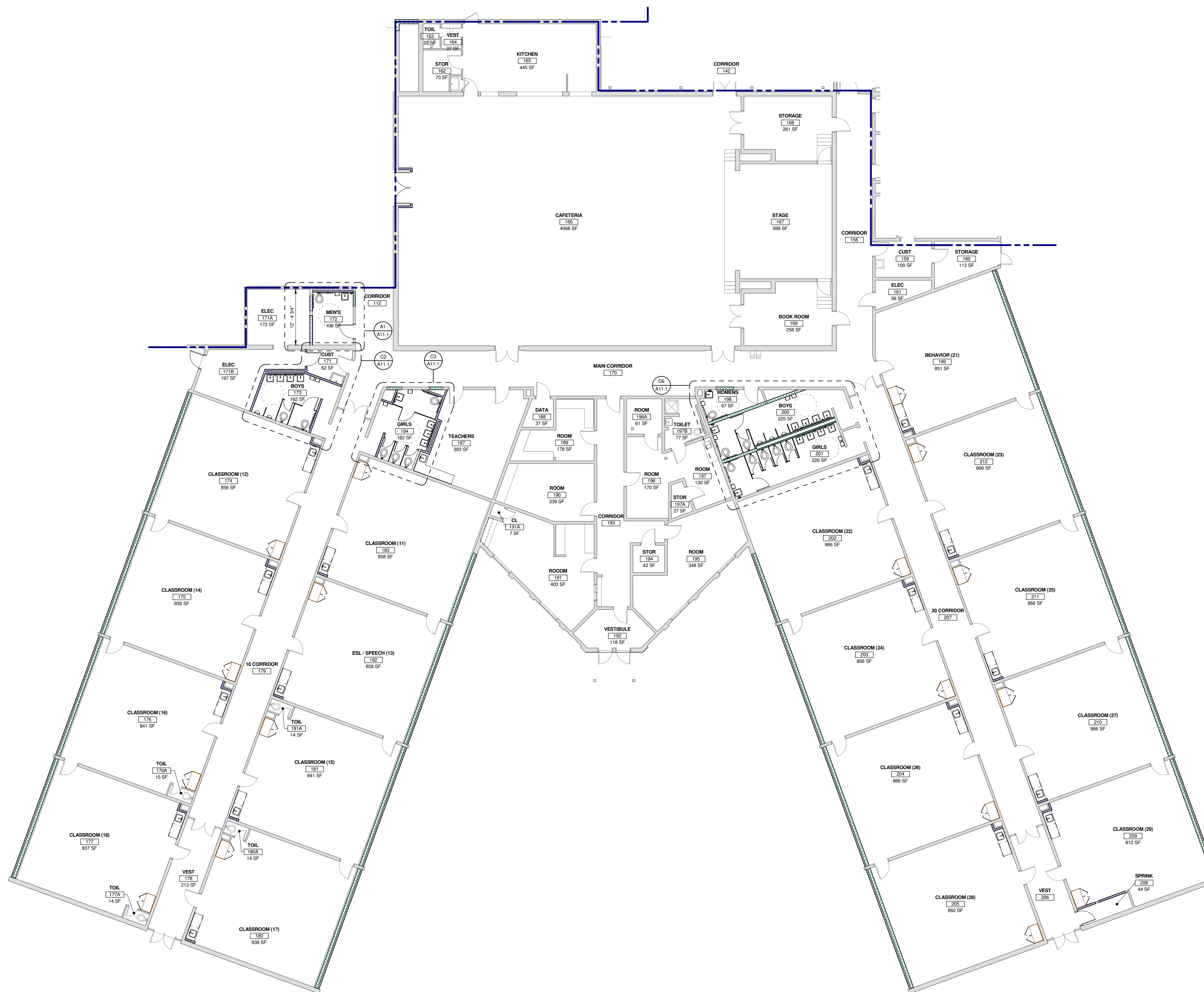
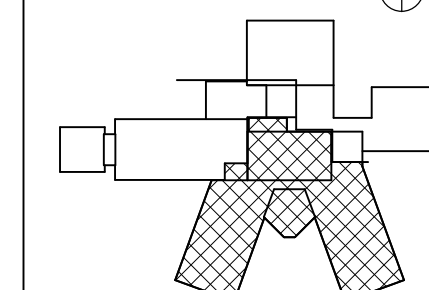
AUBURN PORTLAND PORTSMOUTH BOSTON

DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan



A1 FIRST FLOOR - AREA C  
SCALE: 1/8" = 1'-0"

Notes and Revisions	
Date	Description

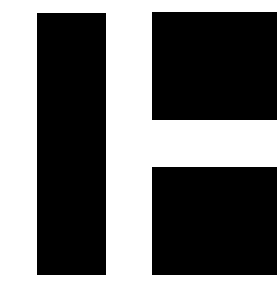
SCHMATIC DESIGN  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17

PA: PE: Designer © 2017  
Drawn By: Author Harriman Associates

FIRST FLOOR - AREA C

A10.3

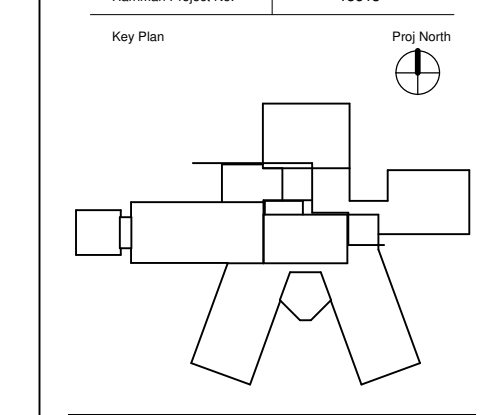
P:\01\Draws\15618\15618\_052017\_15618.dwg



HARRIMAN  
AUBURN PORTLAND PORTSMOUTH BOSTON

DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH  
Harriman Project No. 15618  
Key Plan



- GENERAL NOTES**
- GC TO PROVIDE SOLID BLOCKING IN STUD WALLS FOR MOUNTING OF ALL OWNER & GC PROVIDED ACCESSORIES
  - ALL DOOR JAMBS TO BE LOCATED 4" (GPOW) OR 6" (GMS) FROM ADJACENT WALL AT HINGE SIDE UNLESS NOTED OTHERWISE.
  - SEE DRAWING A6.1 FOR PARTITION TYPES.
  - SEE DRAWING A6.1 FOR DOOR SCHEDULE.
  - SEE DRAWING A6.1 FOR ROOM FINISH SCHEDULE.
  - PROVIDE CONTROL JOINTS IN GPOW PARTITIONS AT A MAX SPACING OF 30'. LOCATE AT EDGE OF DOOR FRAME UP TO CEILING WHERE PRACTICAL UNLESS NOTED OTHERWISE.

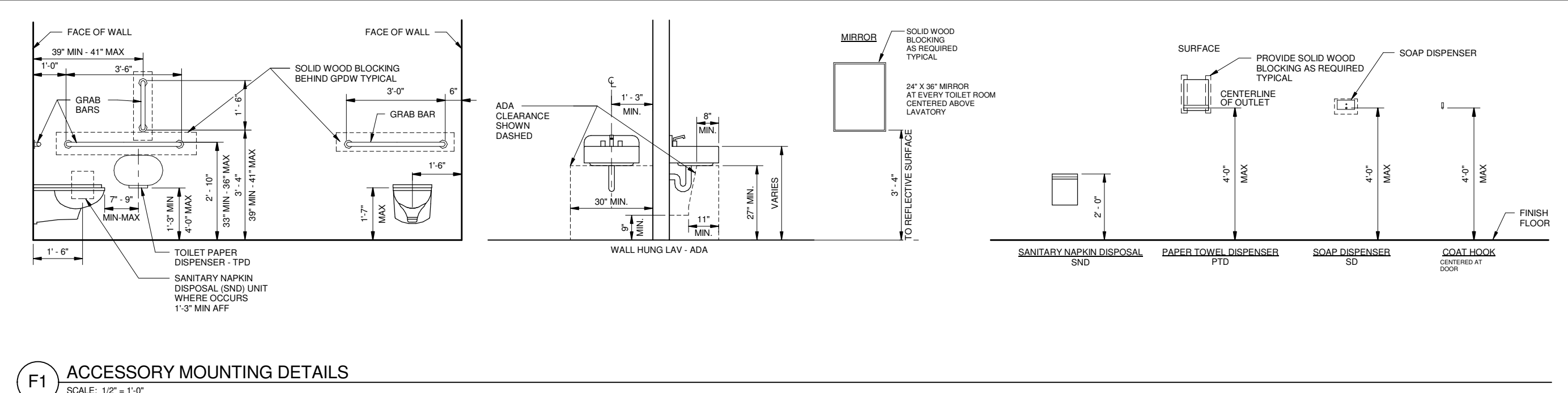
- SYMBOLS LEGEND**
- PARTITION TAG SEE A6.1 FOR PARTITION TAG KEY & PARTITION DEFINITION DETAILS
  - WATER CLOSET
  - URINAL
  - LAVATORY
  - PAPER TOWEL DISPENSER (OWNER FURNISHED GC INSTALLED)
  - GRAB BARS
  - TOILET TISSUE DISPENSER (OWNER FURNISHED GC INSTALLED)
  - ROBE HOOKS
  - SOAP DISPENSER (OWNER FURNISHED GC INSTALLED)
  - MIRROR

**Revisions and Revisions**

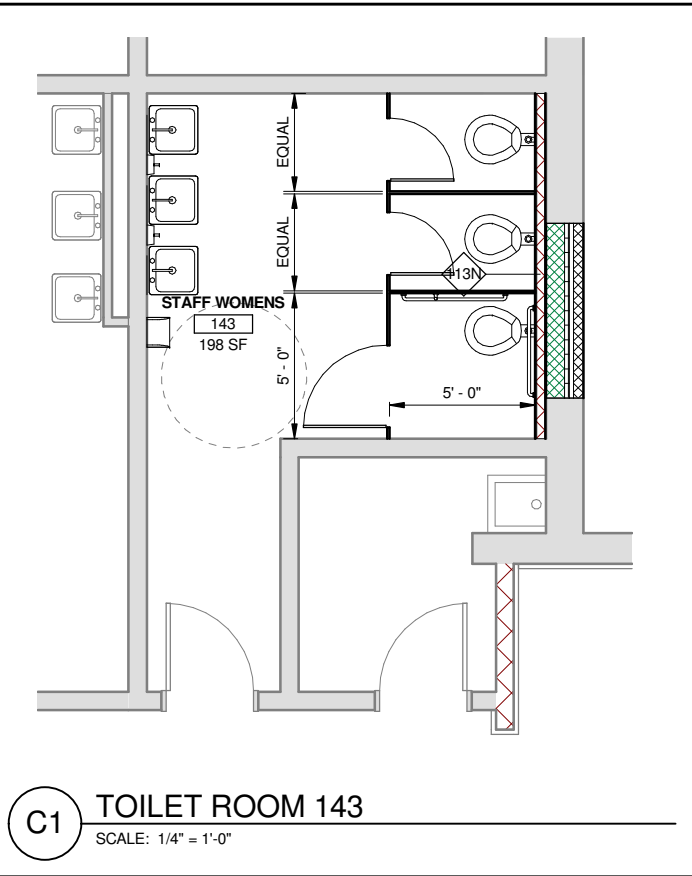
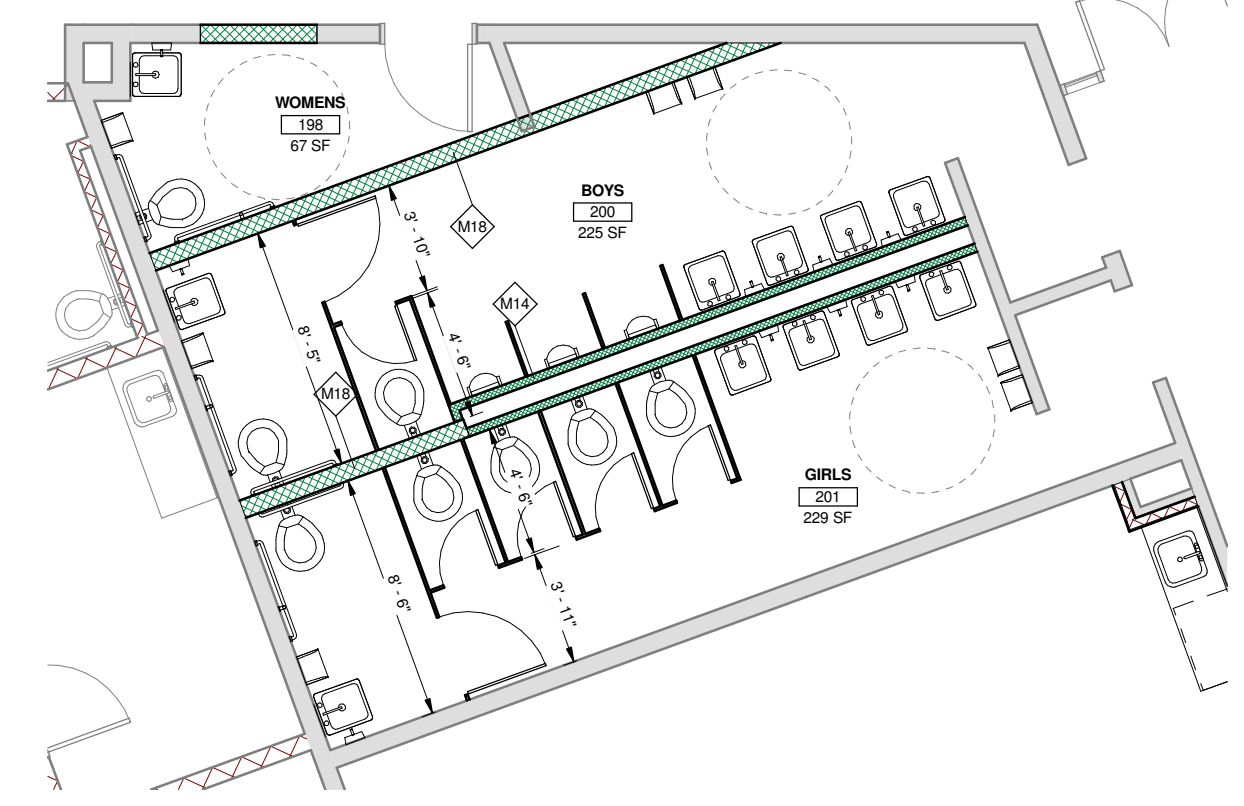
Date	Description

**SCHEMATIC DESIGN  
PRELIMINARY  
NOT FOR  
CONSTRUCTION  
05-09-17**

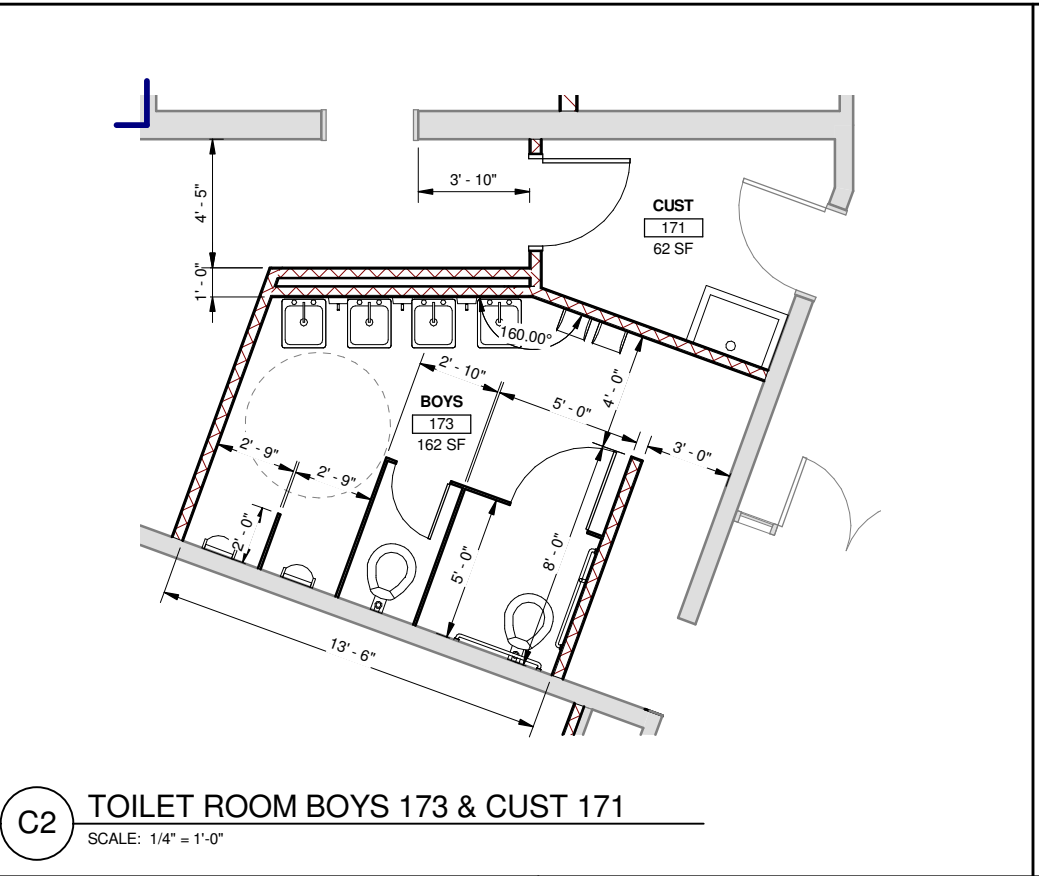
PA/PE: Designer © 2017  
Drawn By: Author Harriman Associates



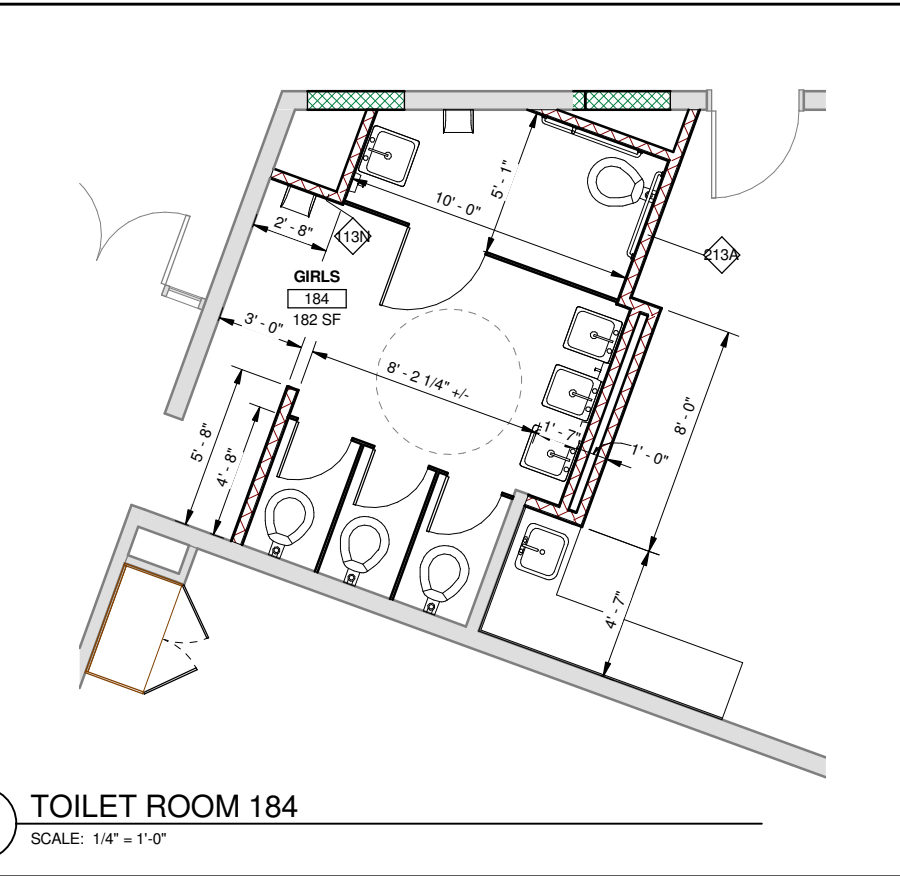
**D6 TOILET ROOMS WOMENS 198, BOYS 200 & GIRLS 201**  
SCALE: 1/4" = 1'-0"



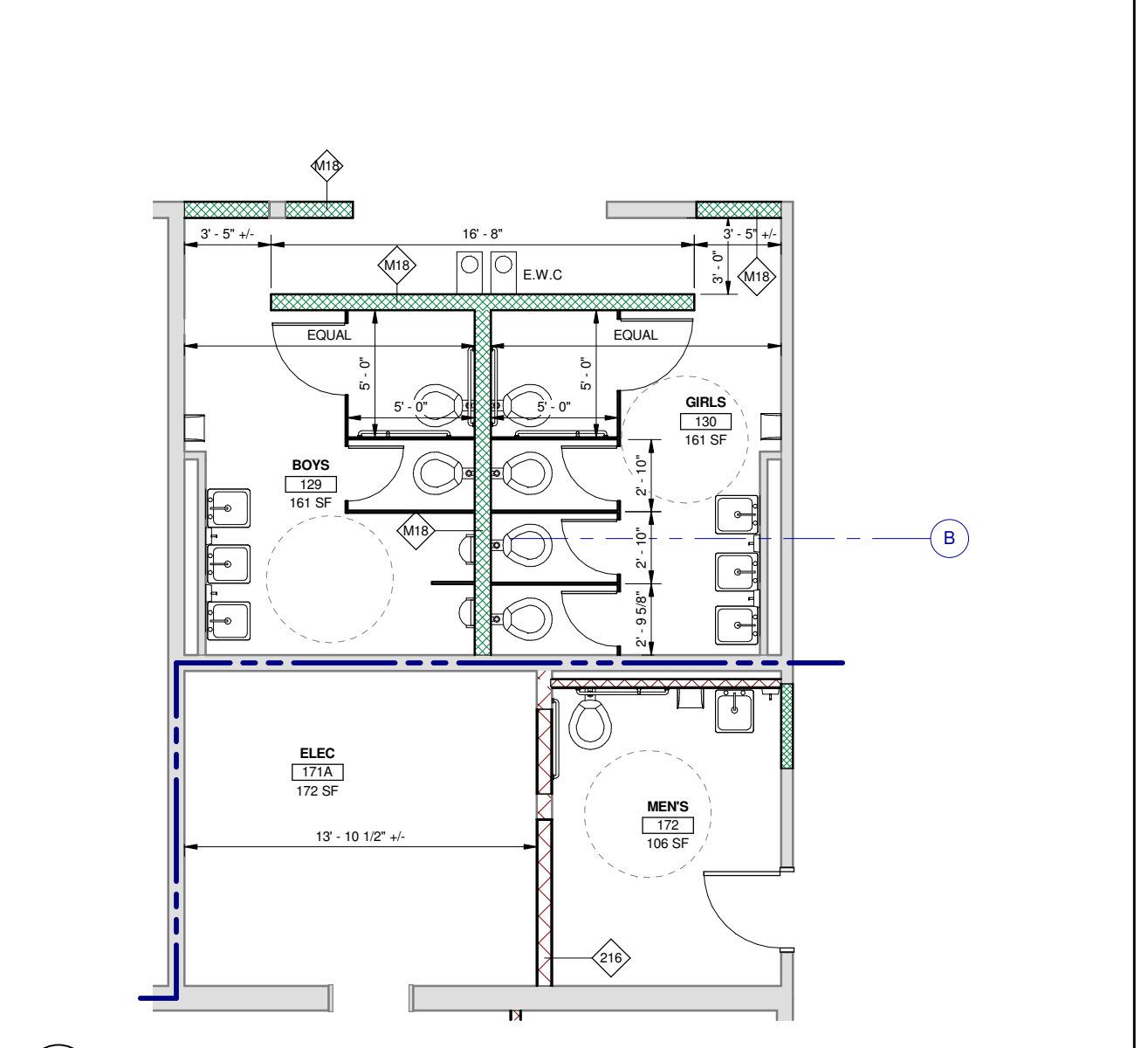
**C1 TOILET ROOM 143**  
SCALE: 1/4" = 1'-0"



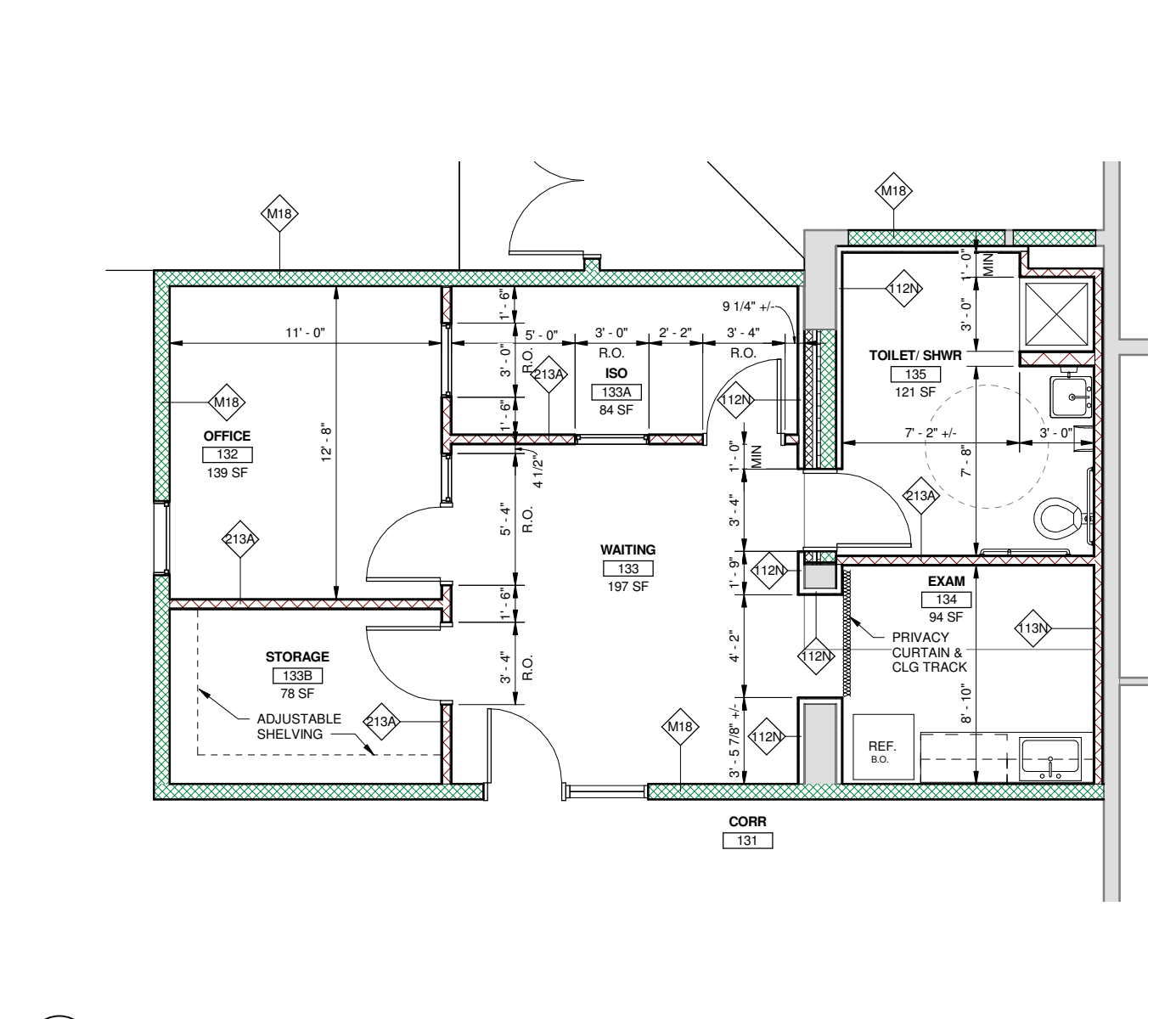
**C2 TOILET ROOM BOYS 173 & CUST 171**  
SCALE: 1/4" = 1'-0"



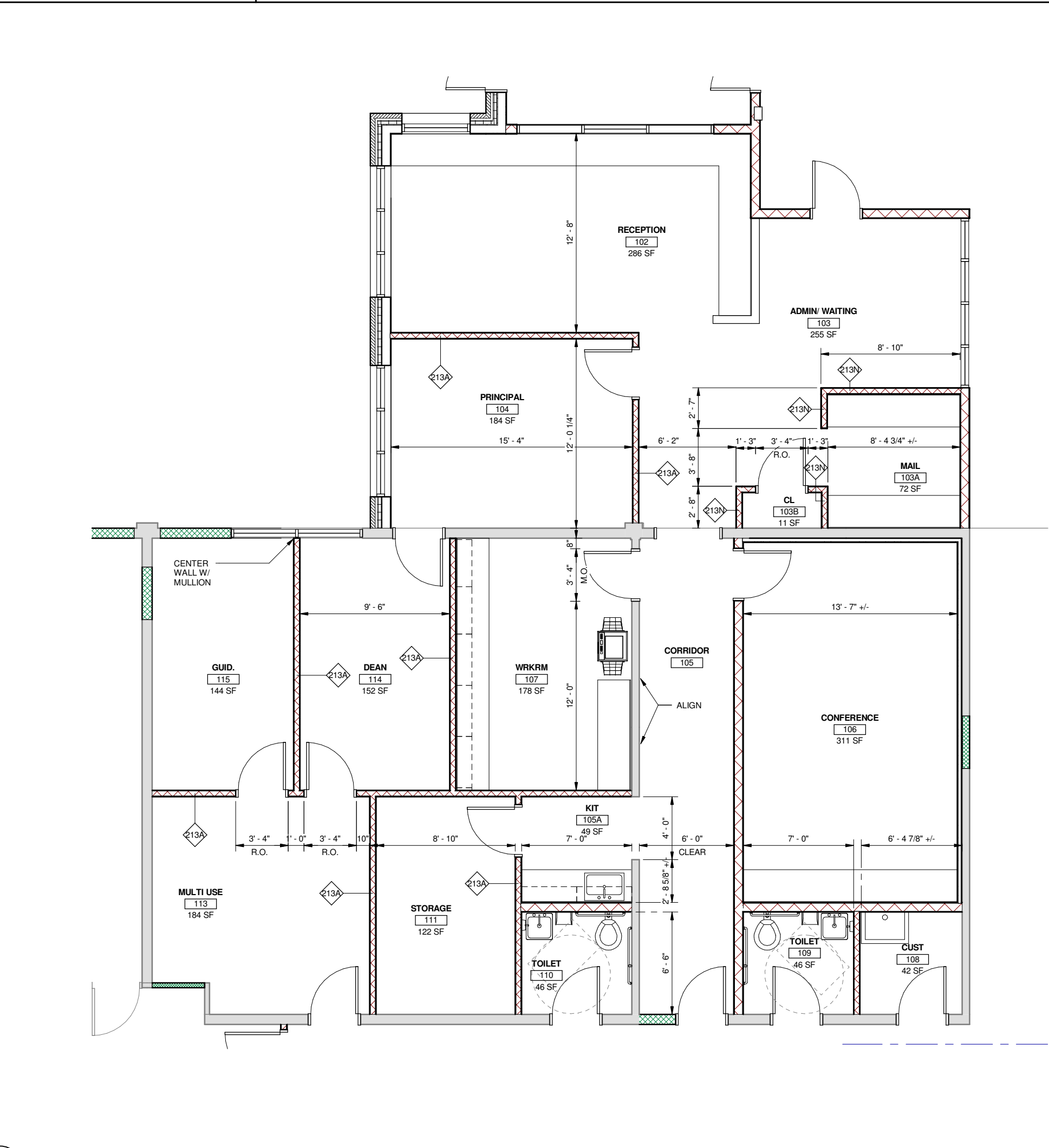
**C3 TOILET ROOM 184**  
SCALE: 1/4" = 1'-0"



**A1 TOILET ROOMS BOYS 129, GIRLS 130 & MEN'S 172**  
SCALE: 1/4" = 1'-0"



**A3 NURSE AREA**  
SCALE: 1/4" = 1'-0"



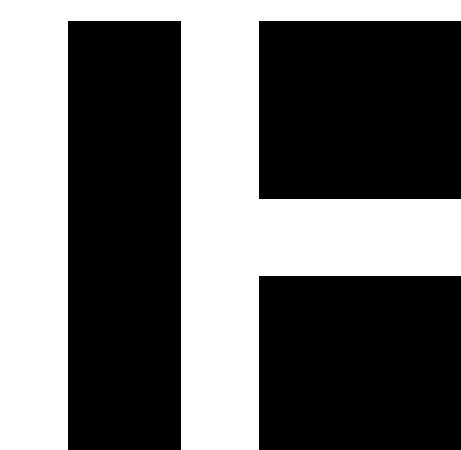
**A5 ADMIN AREA**  
SCALE: 1/4" = 1'-0"

**ENLARGED PLANS**

**A11.1**

Proj Date: 05/09/17 1:03:29 PM





HARRIMAN

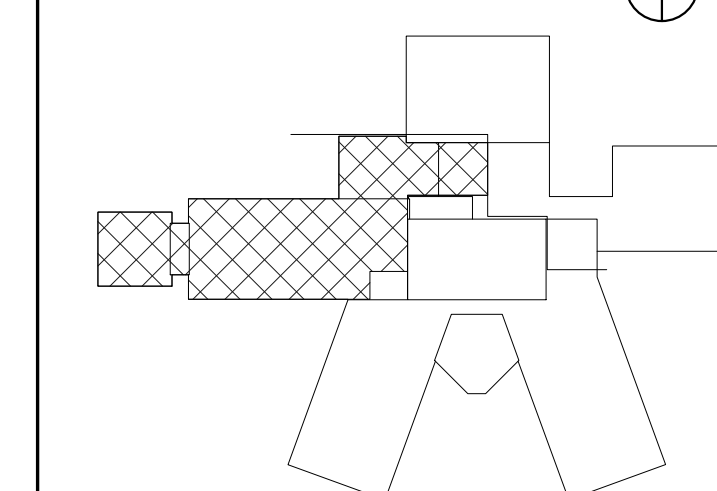
AUBURN PORTLAND PORTSMOUTH BOSTON

DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

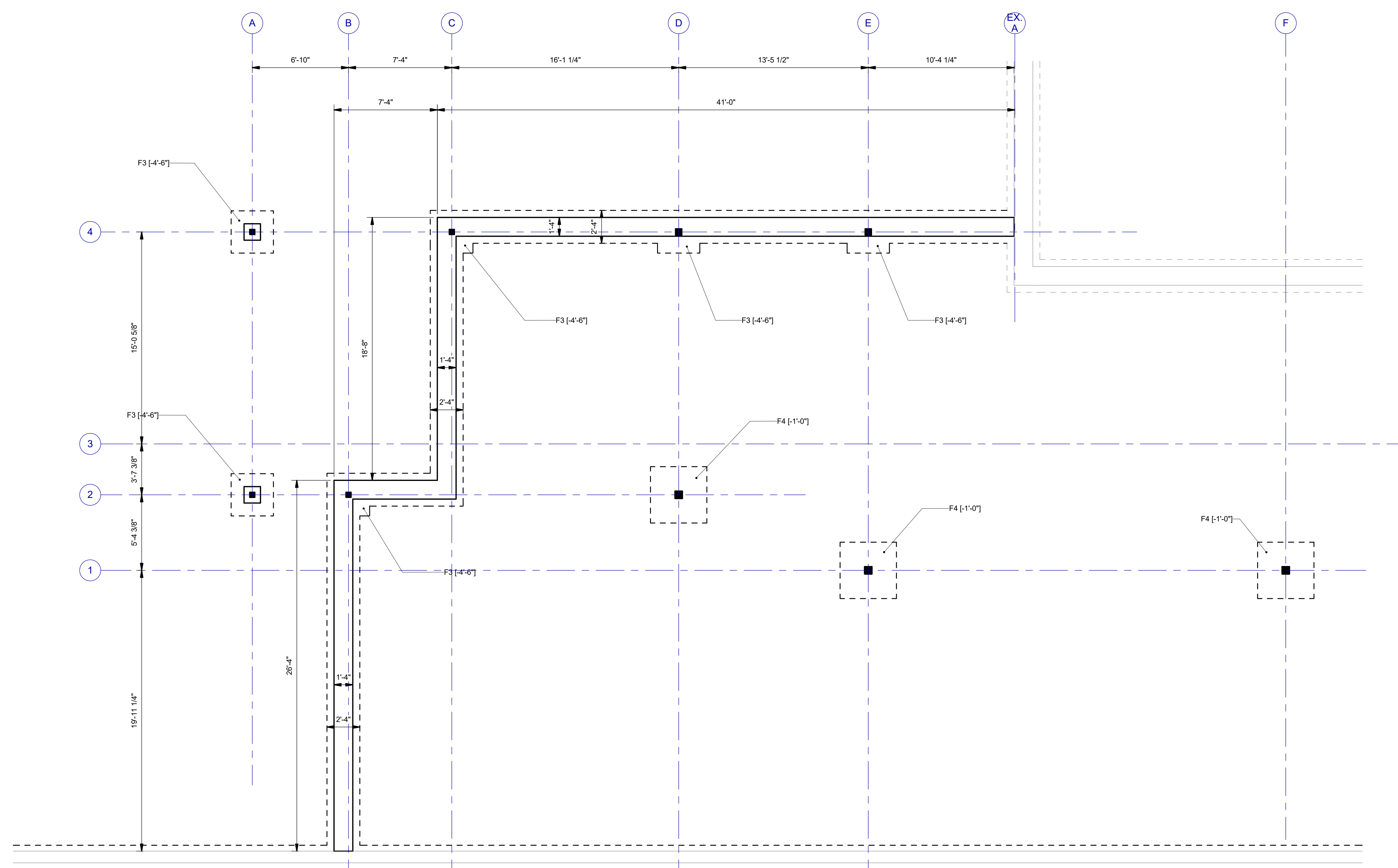
Harriman Project No. 15618

Key Plan



FOUNDATION PLAN NOTES:

- TOP OF CONCRETE ELEVATION IS REFERENCED (+) FROM FINISH FLOOR ELEVATION XXX.XX' (+9'-0").
- SEE ADDITIONAL APPLICABLE FOUNDATION NOTES ON DRAWING 550.1.
- (8'-0") INDICATES TOP OF CONCRETE ELEVATION.
- (4'-0") INDICATES TOP OF FOOTING ELEVATION.
- PIERS AND SPREAD FOOTINGS ARE CENTERED ON COLUMNS, UNLESS NOTED OTHERWISE.
- SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF ALL DEPRESSION SLABS. VERIFY DEPRESSION SLAB ELEVATION WITH ACTUAL FLOORING PRODUCT TO BE INSTALLED.
- ( ) INDICATES SPAN OF STRUCTURAL SLAB. SEE DETAIL XX/XXXX.
- UNLESS NOTED OTHERWISE ON PLANS, ALL CONCRETE SLABS-ON-GRADE SHALL BE 4" THICK WITH FIBER REINFORCING.

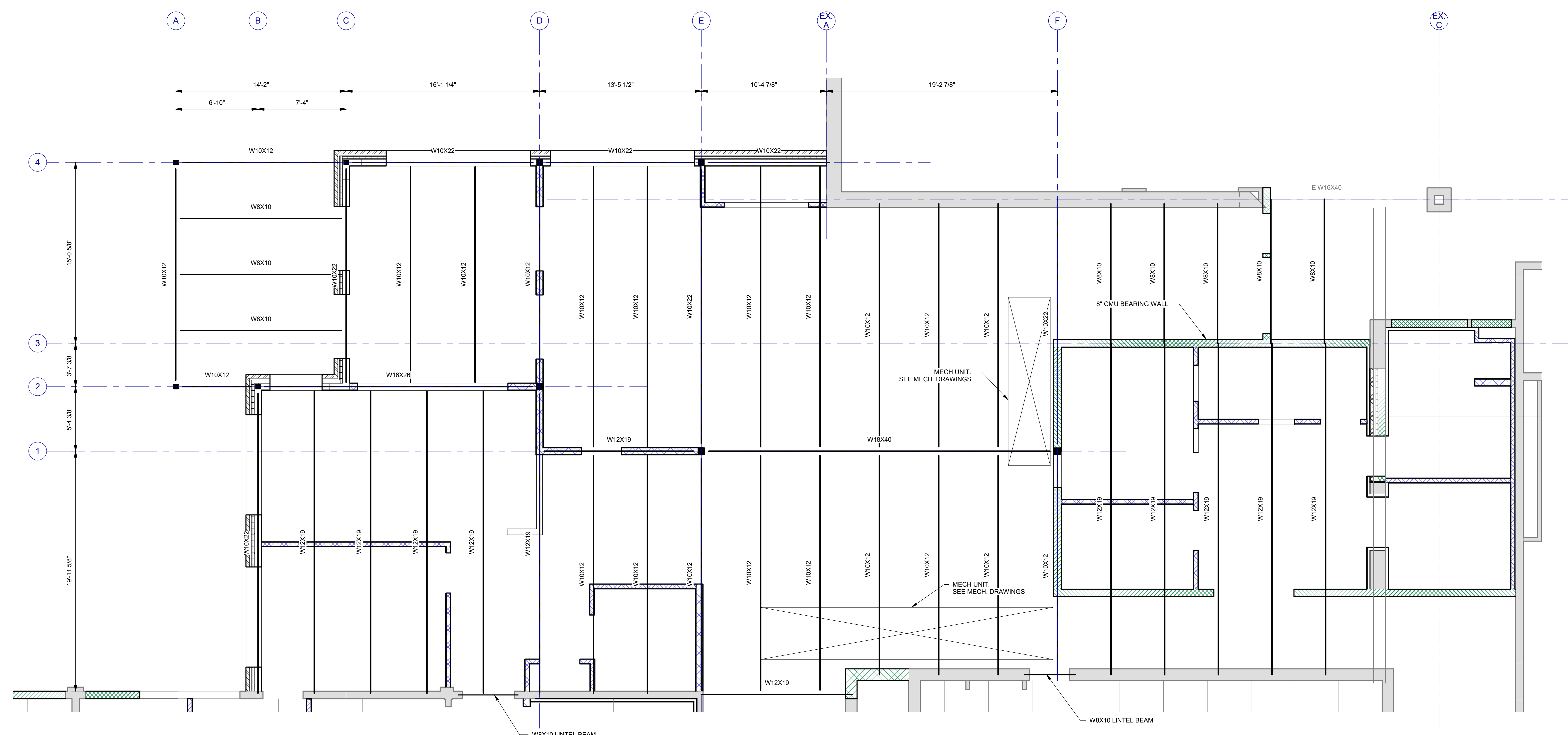


STEEL COLUMN SCHEDULE		
LOCATION	TYPE	BASE PLATE
A-2	HSS4X4X1/4	BP1
A-4	HSS4X4X1/4	BP1
B-2	HSS4X4X1/4	BP1
C-4	HSS4X4X1/4	BP1
D-2	HSS6X6X3/8	BP2
D-4	HSS6X6X3/8	BP2
E-1	HSS6X6X3/8	BP3
E-4	HSS6X6X3/8	BP2
F-1	HSS6X6X3/8	BP3

BASE PLATE SCHEDULE						
MARK	DEPTH	WIDTH	THICKNESS	ANCHORS	EMBEDMENT	PLATE TYPE
BP1	10"	10"	3/4"	(4) 3/4" DIA. F1554 (GR.36)	9"	A
BP2	11"	11"	3/4"	(4) 3/4" DIA. F1554 (GR.36)	9"	A
BP3	1'-0"	1'-0"	3/4"	(4) 3/4" DIA. F1554 (GR.36)	9"	A

FOOTING SCHEDULE				
FOOTING MARK	LENGTH	WIDTH	THICKNESS	REINFORCING (BOTTOM)
F3	3'-0"	3'-0"	1'-0"	(3) #5 (EACH WAY)
F4	4'-0"	4'-0"	1'-0"	(4) #5 (EACH WAY)

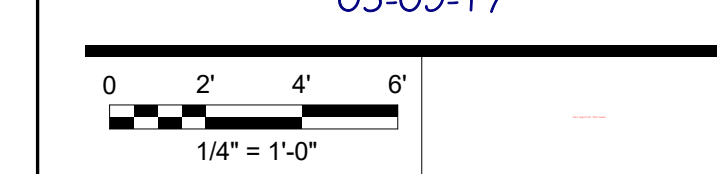
B1 FOUNDATION PLAN  
SCALE: 1/4" = 1'-0"



A1 ROOF FRAMING PLAN AT NEW ENTRY WAY  
SCALE: 1/4" = 1'-0"

Issues and Revisions	
Date	Description

PROGRESS REVIEW  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17



PA/PE: JCF © 2017  
Drawn By: ZPP Harriman Associates

FOUNDATION PLAN &  
FRAMING PLAN

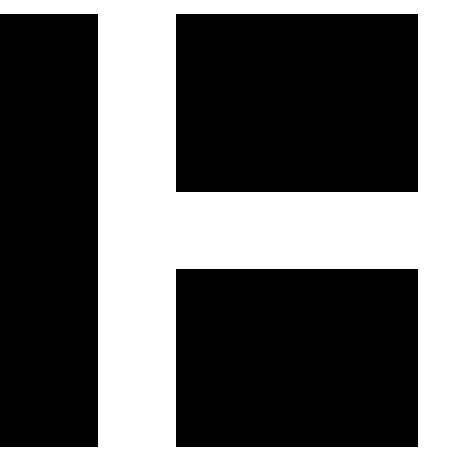
S10.1

P:\DC\DWG\050917\110524\AM







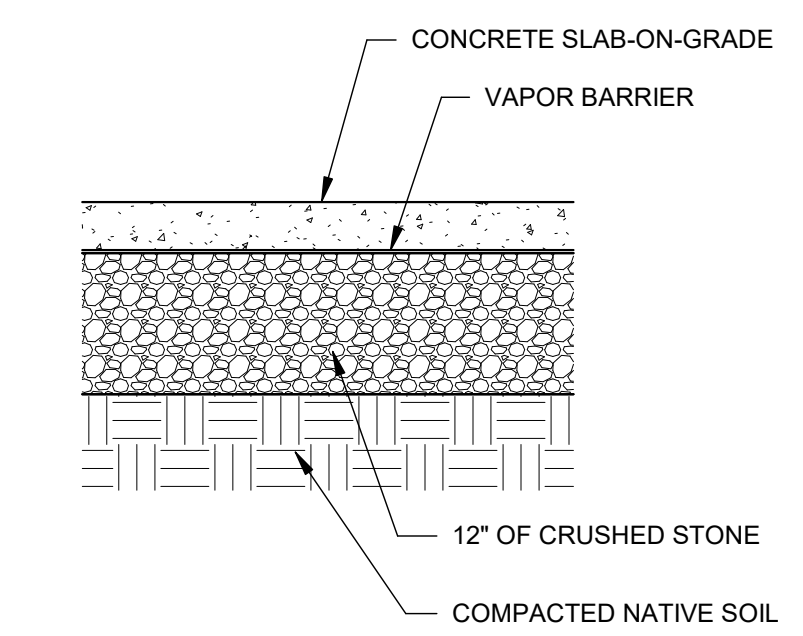
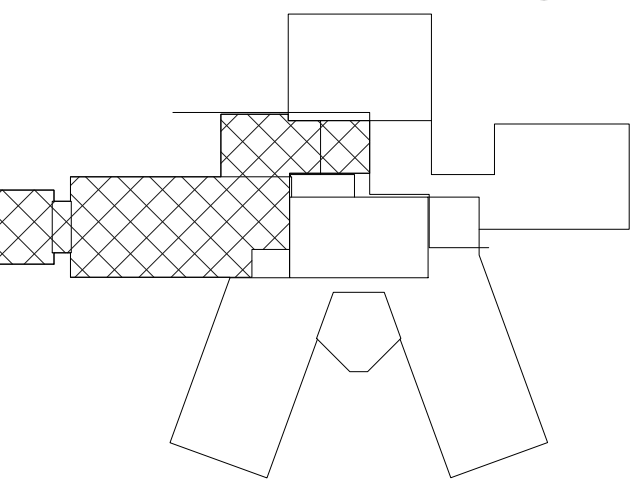


DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan



C7 GRAVEL SUB-BASE DETAIL  
SCALE: 3/4" = 1'-0"

SOIL BEARING

1. WALL AND COLUMN FOOTINGS DESIGNED FOR AN ASSUMED SOIL BEARING OF XXXX PSF.
2. IF ADEQUATE SOIL BEARING IS NOT ENCOUNTERED AT THE INDICATED BOTTOM OF FOOTING LOCATION, CONTRACTOR IS TO REPORT TO THE ARCHITECT BEFORE PROCEEDING WITH THAT PART OF THE WORK.
3. ALL EXCAVATIONS FOR THE FOUNDATION SHALL BE APPROVED BY THE ENGINEER BEFORE PLACING ANY CONCRETE FOOTINGS.

CONCRETE

1. STRENGTH OF CONCRETE AT 28 DAYS TO BE 3000 PSI. EXCEPT FOR SLABS, BEAMS AND COLUMNS TO BE 3000 PSI AND EXTERIOR SLABS TO BE 4500 PSI.
2. ALL EXTERIOR FOOTINGS TO BE MIN. X'-Y" BELOW FINISH GRADE.
3. TOP OF ALL FOOTINGS TO BE MIN. 8" BELOW BOTTOM OF FLOOR SLAB UNLESS NOTED OTHERWISE.
4. BOTTOM OF ALL FOOTINGS TO BE ON ADEQUATE SOIL BEARING.
5. ALL SLABS ON FILL TO BE 4" THICK UNLESS NOTED OTHERWISE.
6. SLABS AND BEAMS UNDER CONCRETE WALLS SHALL BE ADEQUATELY SHORED UNTIL WALLS ARE SET.
7. IF BASEMENT AND FIRST FLOOR SLABS ARE NOT POURED BEFORE BACKFILLING, FOUNDATION WALLS TO BE ADEQUATELY BRACED BEFORE BACKFILLING AND UNTIL ABOVE SLABS ARE PLACED AND SET.
8. SEE SPECIFICATIONS FOR SPECIAL REQUIREMENTS FOR ARCHITECTURAL EXPOSED CONCRETE, ANCHORING OF MASONRY TO CONCRETE WALLS AND COLUMNS, AND CHAMFER OF EXTERNAL CORNERS OF CONCRETE BEAMS, COLUMNS, ETC.
9. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS FOR SIZE AND LOCATION OF DOOR FRAMES, THRESHOLDS, ETC. AND CONCRETE PADS, PIERS, PIPE SLEEVES, ETC.
10. ALL WOOD NAILERS ON CONCRETE OR MASONRY TO BE ANCHORED WITH 1/2" DIA. ANCHOR BOLTS SPACED AT 2'-0" O.C. AND EXTENDED 1'-0" INTO CONCRETE OR MASONRY.
11. CONCRETE FILL FOR BEAM UNITS, BLOCKS, BOND BEAMS, AND CONCRETE BLOCKS USED AS SOLID MASONRY UNITS, TO BE CONCRETE, TESTING 3000 PSI AT 28 DAYS.

CONCRETE REINFORCING

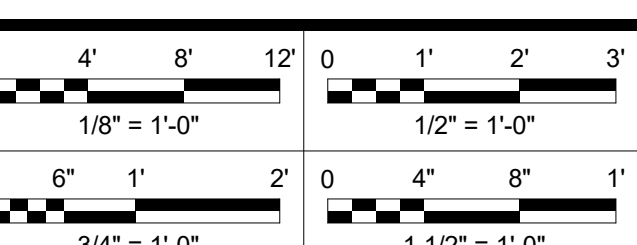
1. ALL REINFORCING STEEL TO BE ASTM-A615 GRADE 60, DETAILED AND FABRICATED IN ACCORDANCE WITH THE AIA MANUFACTURER'S STANDARD PRACTICE (ACH-315-LATEST).
2. REINFORCEMENT TO HAVE MIN. CONCRETE COVER AS FOLLOWS:  
A. CONCRETE DEPOSITED AGAINST GROUND, INCLUDING FOOTINGS - 3"  
B. CONCRETE EXPOSED TO EARTH OR WEATHER, INCLUDING WALLS, PIERS, WALLS, COLUMNS, AND EXTERIOR SLABS - 2"  
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:  
I. SLABS, WALLS, AND JOISTS - 3/4"  
II. BEAMS AND CORNERS, TIES, STRIPS, REINFORCEMENT - 1 1/2"
3. PROVIDE ADEQUATE KEYS AND DOWELS AT ALL WALL INTERSECTIONS AND CONSTRUCTION JOINTS.
4. LAP ALL REINFORCEMENT 36 BAR DIAMETERS AT SPLICES, AND 12" MIN. AT CORNERS UNLESS SHOWN OTHERWISE.
5. AT ALL OPENINGS IN STRUCTURAL SLABS, PROVIDE ONE HALF THE NUMBER OF INTERRUPTED BARS PLACED ON EACH SIDE OF THE OPENING AND STAGGERED WITH OTHER SLAB BARS. PROVIDE #4 x 9" LONG DIAGONAL BAR TOP AND BOTTOM AT EACH CORNER OF OPENING, UNLESS SHOWN OTHERWISE.
6. PROVIDE DOWELS IN WALLS AND COLUMN FOOTINGS EQUIVALENT IN SIZE AND NUMBER TO VERTICAL STEEL EXTENDING 24 BAR DIA. INTO FOOTING AND INTO WALL OR COLUMN UNLESS SHOWN OTHERWISE. LOWER END OF DOWELS SHALL HAVE 90 DEGREE BEND WITH 4" MIN. HORIZONTAL DIMENSION AND ALL DOWELS SHALL BE SET IN PLACE BEFORE CONCRETE IS PLACED.
7. DISCONTINUOUS ENDS OF ALL TOP REINFORCING BARS TO BE HOOKED.
8. ALL CONCRETE WALLS ON LEDGE TO HAVE #8 DOWELS x 3'-0" LONG, GROUTED 1'-0" INTO LEDGE.
9. ALL CONCRETE PIERS ON LEDGE TO HAVE (2) #8 DOWELS x 3'-0" LONG, GROUTED 1'-0" INTO LEDGE AND SPACED AT 3'-0" O.C.
10. ALL 4" THICK CONCRETE SLABS ON FILL TO BE REINFORCED WITH FIBER REINFORCING UNLESS SHOWN OTHERWISE.
11. ALL CONCRETE SLABS, PADS, BEAMS AND PIERS SHALL HAVE REINFORCEMENT THAT WILL HAVE A MIN. RATIO OF REINFORCEMENT AREA TO GROSS CONCRETE AREA OF 0.0033 UNLESS SHOWN OTHERWISE.

Issues and Revisions	
Date	Description

PROGRESS REVIEW

PRELIMINARY  
NOT FOR  
CONSTRUCTION

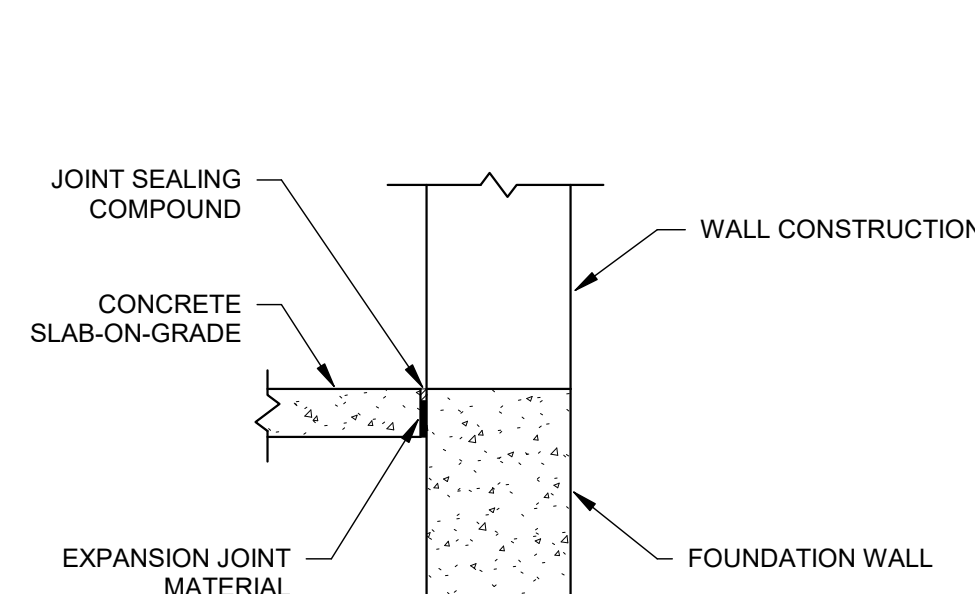
05-09-17



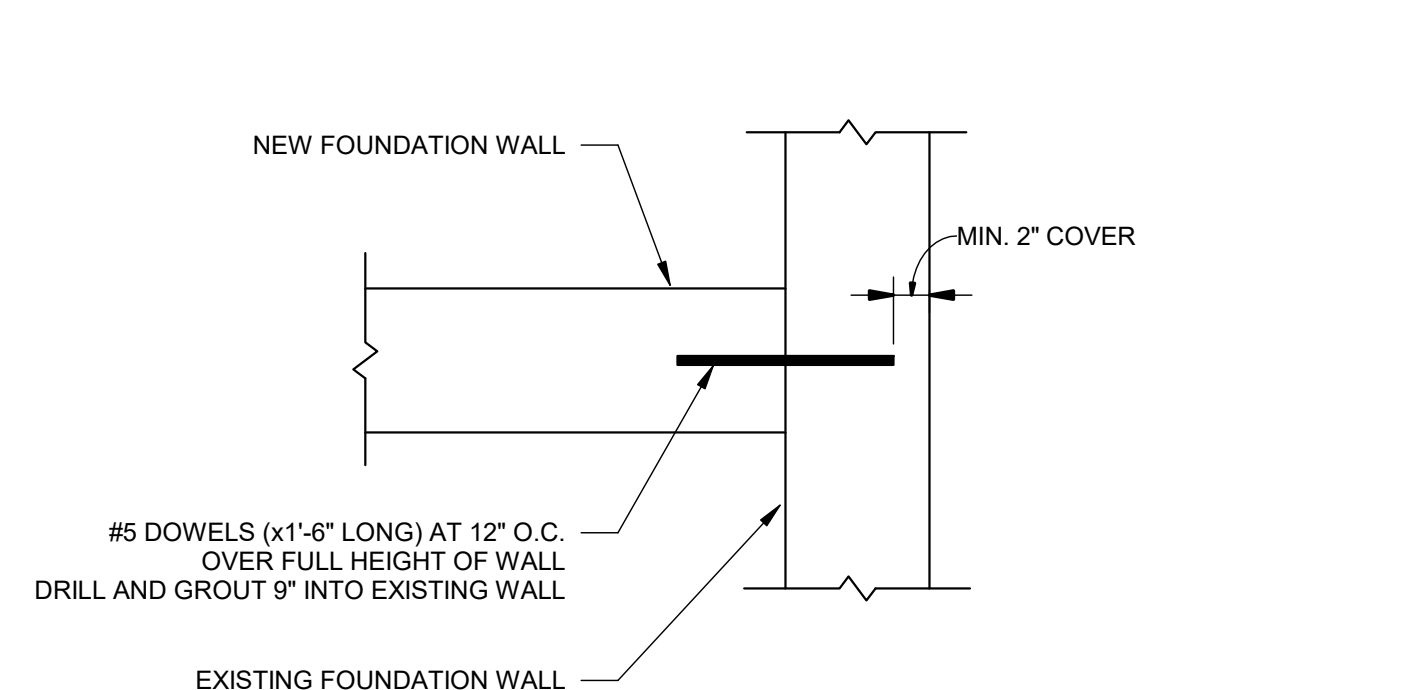
PA/PE: JCF © 2017  
Drawn by: ZPP Harriman Associates

TYPICAL FOUNDATION  
NOTES AND DETAILS

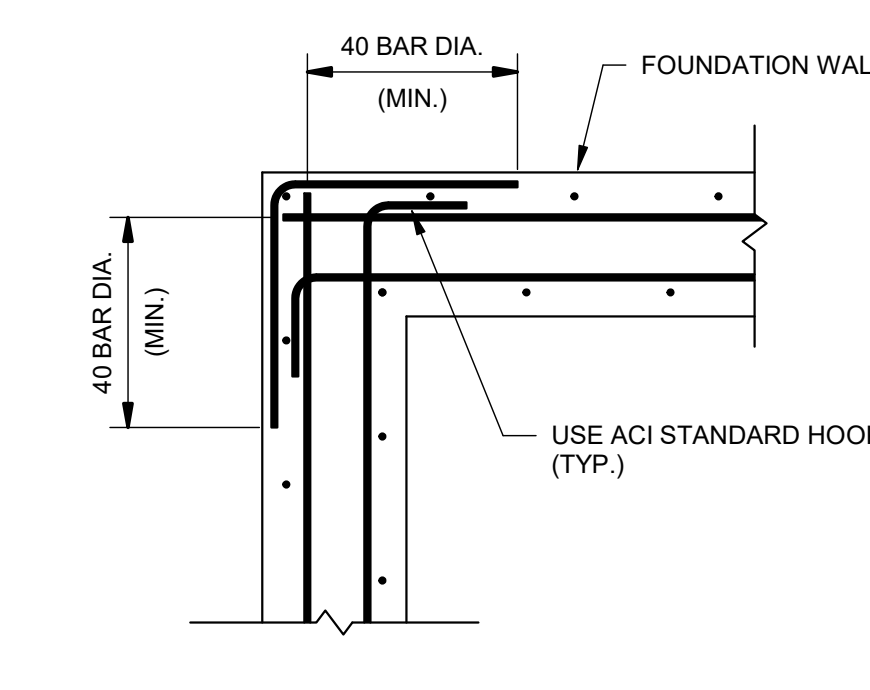
S50.1



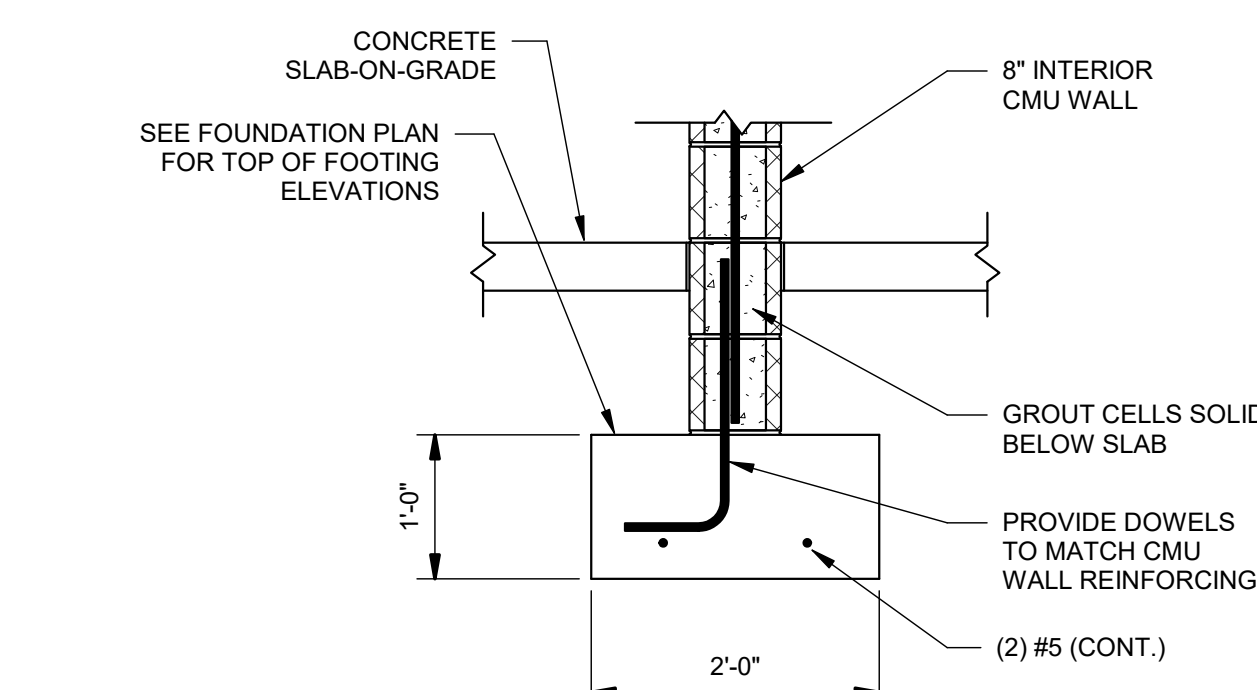
B1 TYP. SLAB-ON-GRADE ISOLATION/EXPANSION JOINT DETAIL  
SCALE: 3/4" = 1'-0"



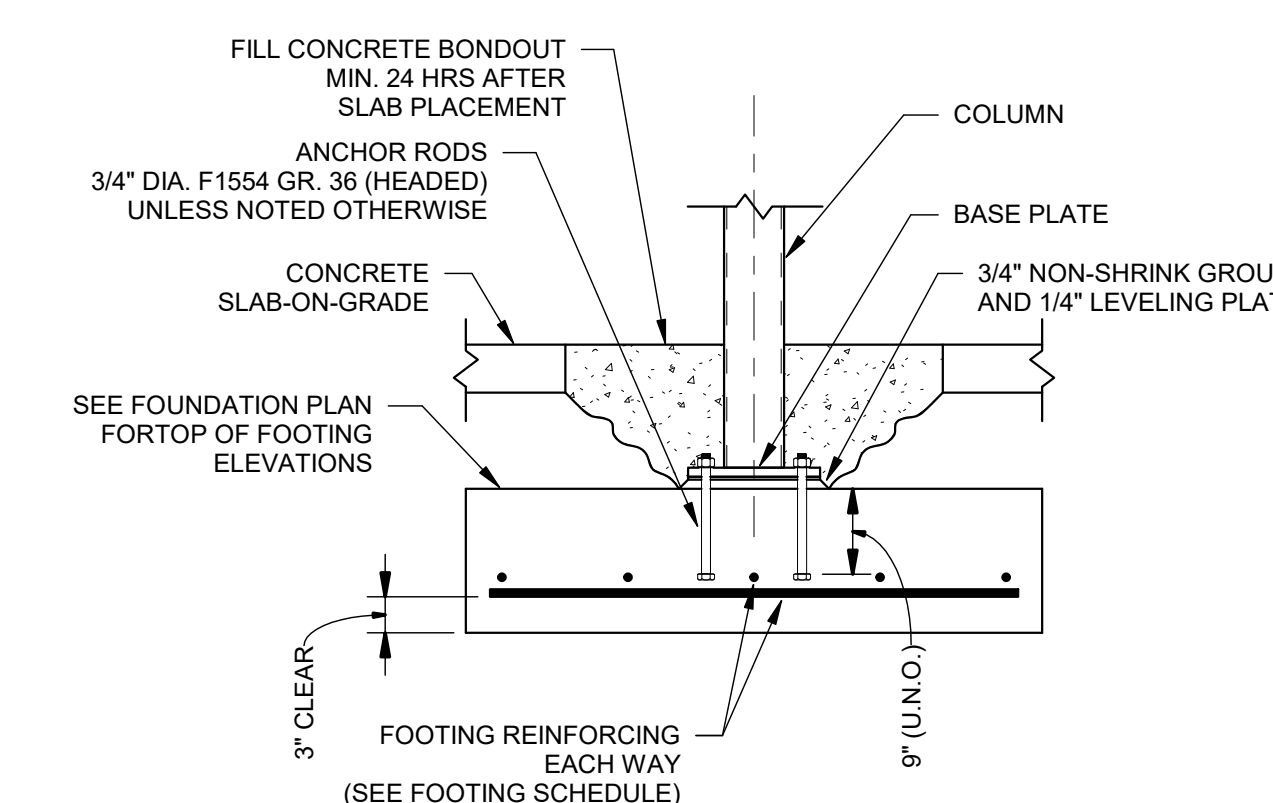
B2 TYP. DOWEL DETAIL AT NEW FOUNDATION TO EXISTING  
SCALE: 3/4" = 1'-0"



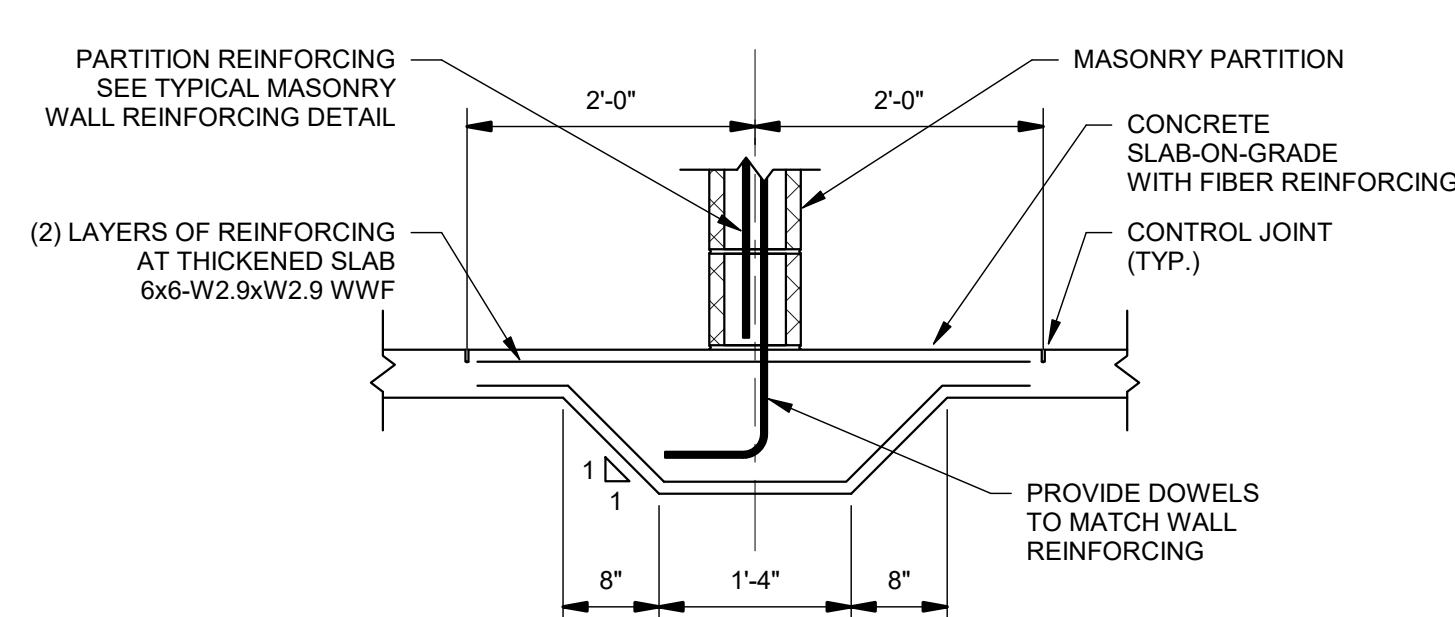
B3 TYP. CORNER REINFORCING DETAIL  
SCALE: 3/4" = 1'-0"



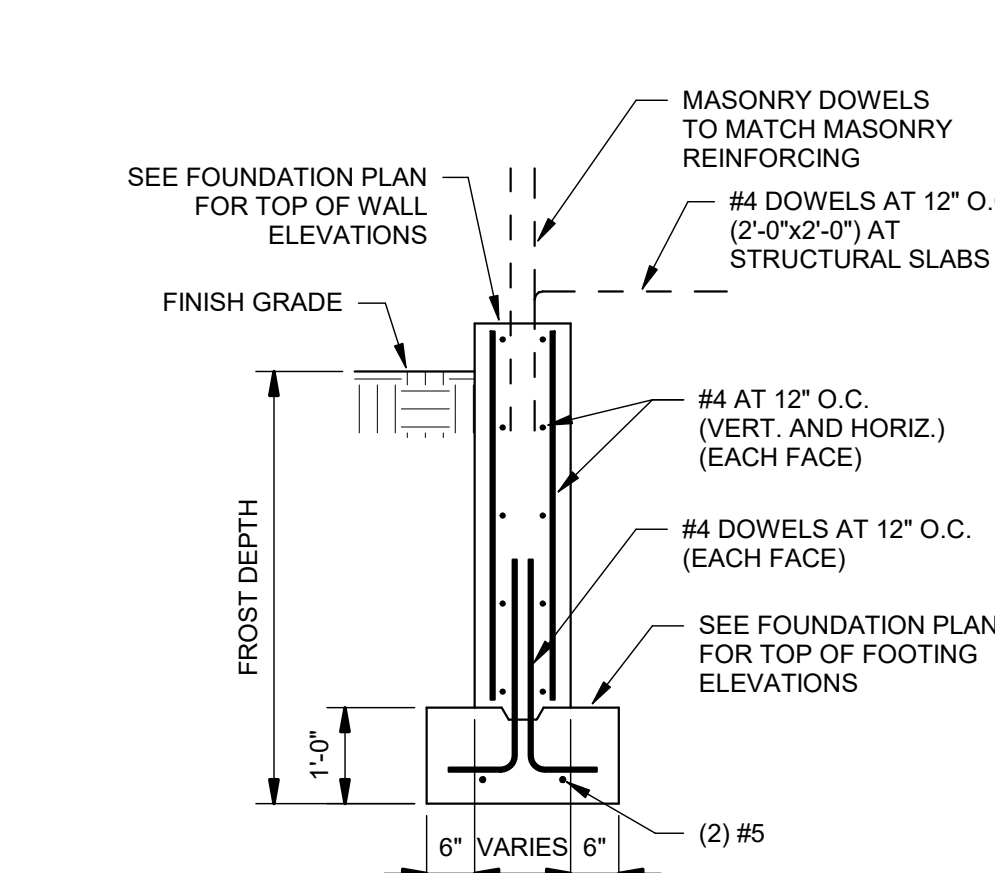
B4 DETAIL AT 8" INTERIOR CMU WALL  
SCALE: 3/4" = 1'-0"



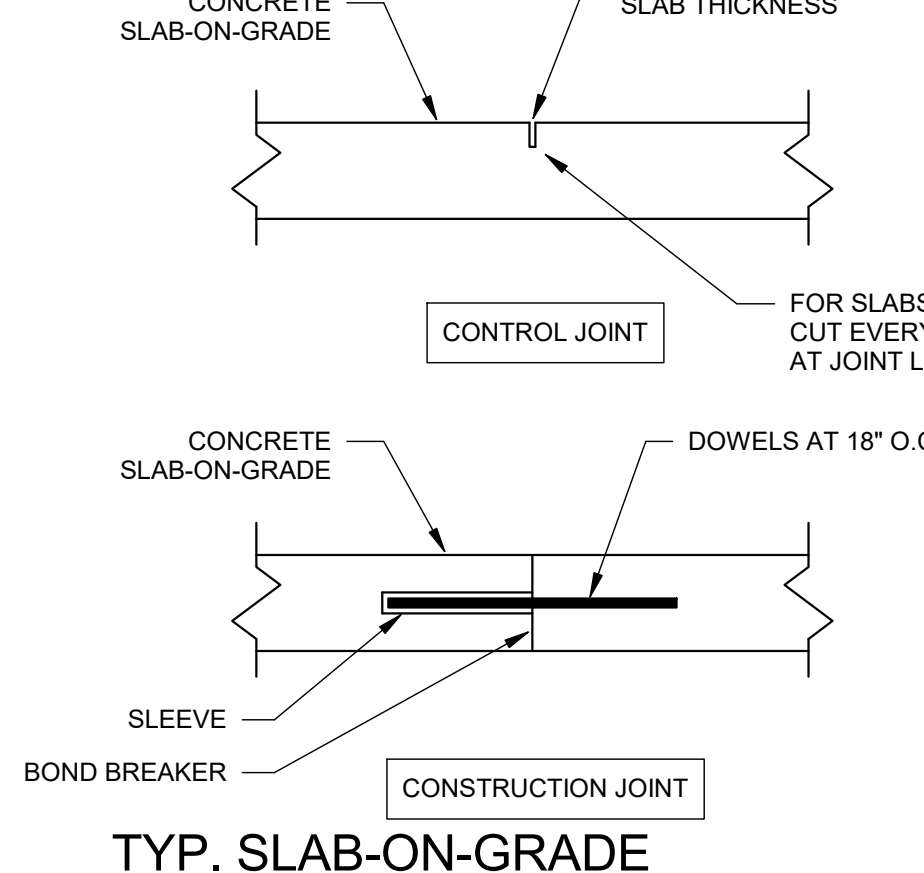
B5 TYP. INTERIOR COLUMN FOOTING DETAIL  
SCALE: 3/4" = 1'-0"



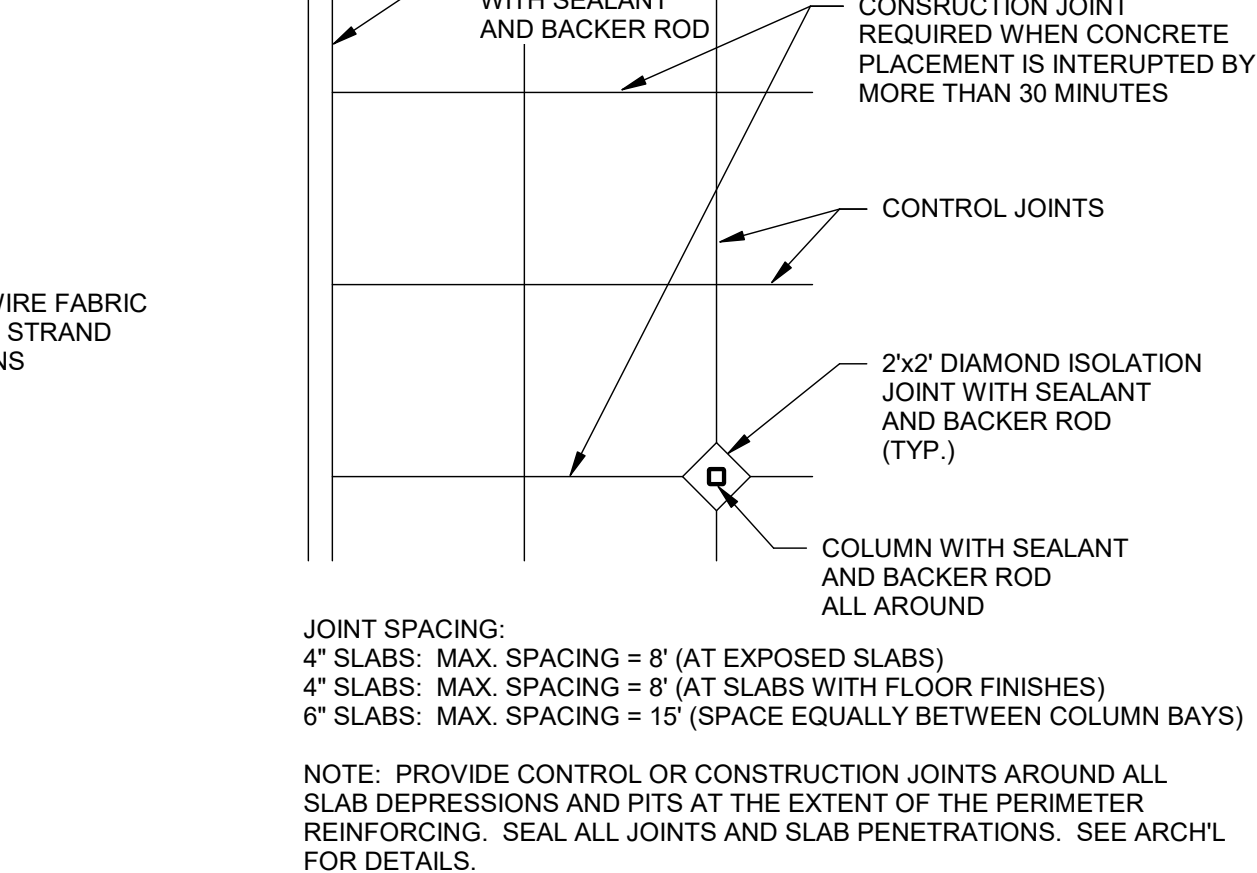
A1 TYP. THICKENED SLAB UNDER CMU PARTITIONS DETAIL  
SCALE: 3/4" = 1'-0"



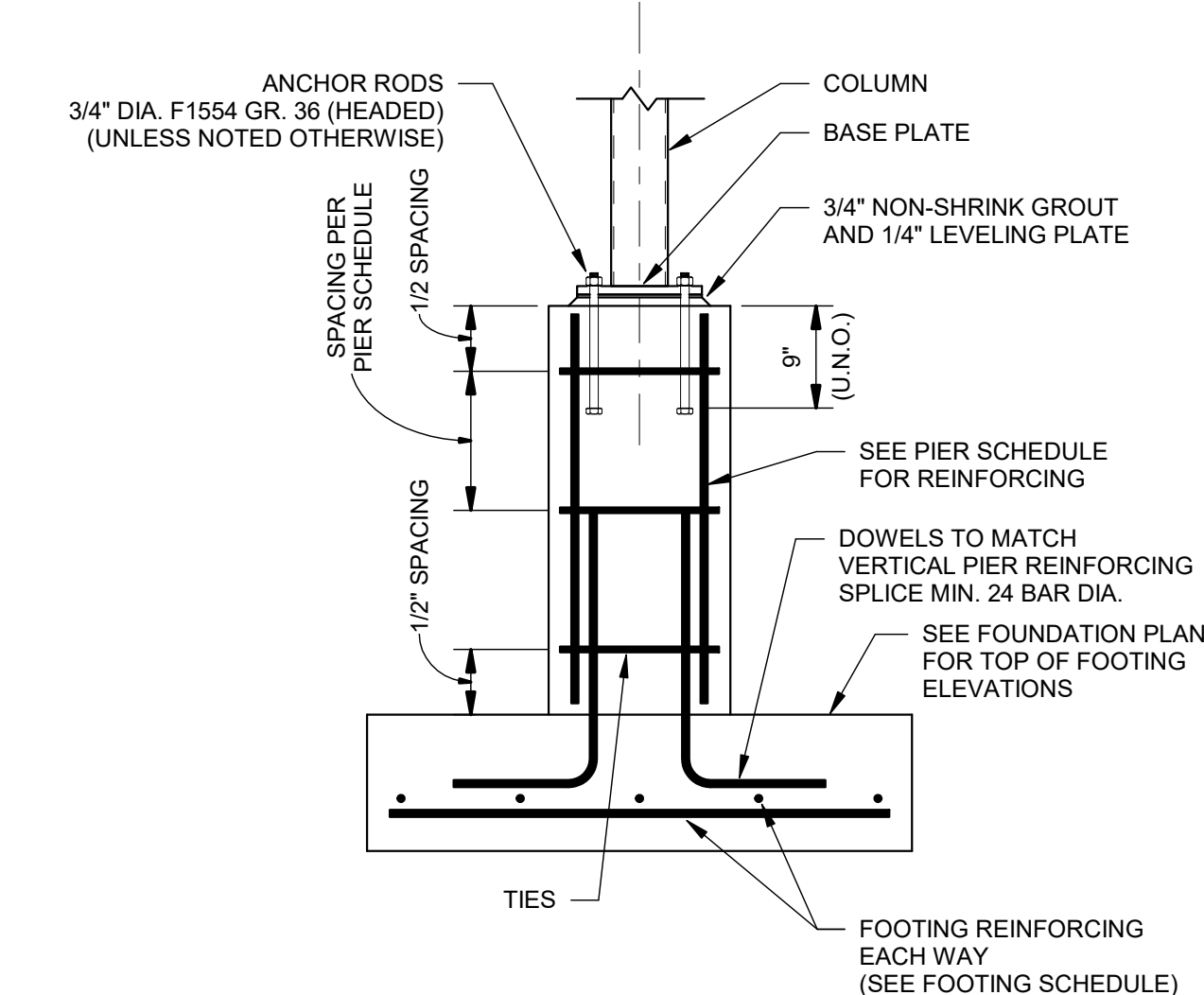
A2 TYP. 10"-16" FOUNDATION WALL  
SCALE: 1/2" = 1'-0"



A3 TYP. SLAB-ON-GRADE CONTROL/CONSTRUCTION JOINT DETAILS  
SCALE: 1 1/2" = 1'-0"



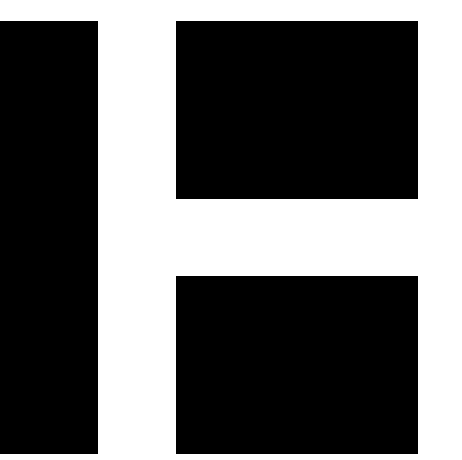
A4 TYP. SLAB-ON-GRADE JOINT LAYOUT  
SCALE: 1/8" = 1'-0"



A5 TYP. PIER AND FOOTING DETAIL  
SCALE: 3/4" = 1'-0"

A7 GENERAL FOUNDATION NOTES  
SCALE: 3/4" = 1'-0"





HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

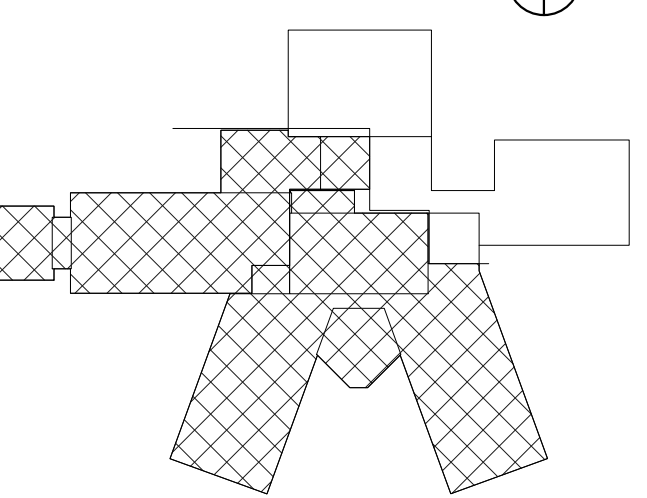
DOVER SCHOOL DISTRICT
GARRISON ELEMENTARY
SCHOOL
RENOVATIONS &
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

Plot North



MASONRY

- 1. ALL MASONRY WALLS AND PARTITIONS SHALL BE REINFORCED.
2. COMPRESSIVE STRENGTH OF MASONRY (Fm) SHALL BE MIN. 1500 PSI.
3. COMPRESSIVE STRENGTH OF LOAD BEARING CONCRETE MASONRY UNITS SHALL BE IN ACCORDANCE WITH ASTM C90.
4. MORTAR SHALL BE TYPE S, WITH A MIN. COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.
5. GROUT SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
6. COMPRESSIVE STRENGTH OF LOAD BEARING BRICK SHALL BE IN ACCORDANCE WITH ASTM C55.
7. EXPANSION BOLTS IN HOLLOW MASONRY WALL SHALL BE LOCATED AT SOLID BLOCK OR BOND BEAM.
8. SHW INDICATES SOLID MASONRY UNITS OR HOLLOW CONCRETE UNITS WITH ALL VOIDS COMPLETELY FILLED WITH 3000 PSI CONCRETE OR GROUT.
9. WOOD NAILERS ON MASONRY SHALL BE ANCHORED WITH 1/2" DIA. ANCHOR BOLTS AT 2'-0" O.C. AND EXTEND 6" INTO SOLID MASONRY U.N.D.
10. WHERE BEAMS, JOISTS, OR COLUMNS BEAR ON MASONRY, THE MASONRY SHALL BE SOLID OR FILLED SOLID A MIN. 0' F2'-0" TO EACH SIDE OF THE CENTRELINE OF BEARING. FOUR COURSES HIGH, OR A CONTINUOUS CONCRETE FILLED BOND BEAM SHALL BE LOCATED UNDER THE BEARING.
11. MASONRY LOCATED BELOW TOP OF SLAB ON FILL SHALL BE SOLID OR FILLED SOLID.

WOOD FRAMING

- 1. ALL WOOD MARKED SPF OR NOT MARKED ON THE DRAWINGS ARE TO HAVE THE FOLLOWING MINIMUM ALLOWABLE WORKING STRESSES:
Fv = 135 PSI HORIZONTAL SHEAR STRESS
Fb = 875 PSI BENDING STRESS SINGLE MEMBER USE
E = 1400000 PSI MODULUS OF ELASTICITY
Fc = 1150 PSI COMPRESSION PARALLEL TO GRAIN
Fc = 425 PSI COMPRESSION PERPENDICULAR TO GRAIN.
2. ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL, LATEST EDITION, AND THE NFPA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) 2005 EDITION.
3. INDIVIDUAL TIMBER FRAMING SHALL BE VISUALLY GRADED, MINIMUM No.1 No.2 SPRUCE-PINE-FIR KLM DRIED TO 19% MAXIMUM MOISTURE CONTENT UNLESS NOTED OTHERWISE ON DRAWINGS.
4. WOOD JOISTS (T.J.), LAMINATED VENEER LUMBER (LVL) AND PARALLEL STRAND LUMBER (PSL) SHALL BE AS SPECIFIED ON THE DRAWINGS.
5. PRESSURED TREATED LUMBER SHALL BE USED FOR SILL MEMBERS, EXTERIOR EXPOSURE, OR WHERE SHOWN ON THE DRAWINGS. TIMBER SHALL BE SOUTHERN YELLOW PINE TREATED WITH PRESERVATIVE.
6. ALL PLYWOOD SHALL BE APA PERFORMANCE RATED. PLYWOOD SHALL BE NAILED TO THE FRAMING AS FOLLOWS (U.N.D.):
ROOFS: 8d NAILS AT 6" ON EDGES AND 12" AT INTERMEDIATE SUPPORTS.
WALLS: 8d NAILS AT 6" ON EDGES AND 12" AT INTERMEDIATE SUPPORTS.
7. FLOOR SHEATHING SHALL BE 3/4" APA PERFORMANCE RATED STURD-FLOOR TONGUE AND GROOVE PANELS. PLYWOOD SHALL BE BLUED-SCREWED TO FLOOR FRAMING AT 8" O.C.
8. ALL BUILT UP BEAMS AND COLUMNS SHALL BE NAILED AS FOLLOWS (MIN.):
BEAMS: (2) 10d NAILS AT 12" O.C. IN EACH PIECE.
COLUMNS: 10d NAILS AT 12" O.C.
9. JOIST HANGERS, BEAM HANGERS, POST BASES AND CAP PLATES SHALL BE AS INDICATED ON THE DRAWINGS AND MANUFACTURED BY SIMPSON COMPANY. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES.

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL SHALL BE ASTM A992, BR. 50 (Fy=50 KSI), EXCEPT STRUCTURAL TUBING TO BE Fy=46 KSI, UNLESS NOTED OTHERWISE.
2. FABRICATION SHALL NOT BEGIN UNTIL SHOP DRAWINGS HAVE BEEN APPROVED.
3. CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR.
4. BASE PLATES AND BEARING PLATES SHALL BE GROUTED WITH NON-SHRINK GROUT AND AT PROPER GRADE, BEFORE PLACING STEEL.
5. CONTRACTOR SHALL APPLY TWO BRUSH COATS OF ASPHALT TO COLUMNS AND BASE PLATES EXPOSED TO FULL AFTER COLUMN IS IN PLACE.
6. STEEL BEAMS ENCASED IN CONCRETE SHALL RECEIVE CLIPS OR BE WRAPPED WITH WIRE MESH, UNLESS NOTED OTHERWISE.
7. STEEL BEAMS TO RECEIVE WOOD NAILERS SHALL HAVE BOLT HOLES DRILLED FOR 1/2" DIA. BOLT AT 2'-0" O.C. STAGGERED.
8. VERIFY WITH MECHANICAL DRAWINGS FOR LOCATION OF DUCTS, PIPING, ETC. THROUGH FLOOR AND ROOF CONSTRUCTION BEFORE SPACING JOISTS.
9. ALL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED IN STRUCTURAL DRAWINGS TO BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER HIRED BY THE STEEL FABRICATOR. THE COMPLETE CONNECTION DESIGN PACKAGE WITH ALL SUPPORTING CALCULATIONS SHALL BE STAMPED BY THE PROFESSIONAL ENGINEER AND FORWARDED TO HARRIMAN PRIOR TO OR WITH THE STRUCTURAL STEEL SHOP DRAWINGS FOR REVIEW AND APPROVAL. SHOP DRAWINGS WILL NOT BE REVIEWED WITHOUT ALL SUPPORTING CONNECTION CALCULATIONS PROVIDED.

STEEL DECK

- 1. ROOF DECK SHALL BE 1 1/2" - 22 GAUGE, TYPE B (PAINTED) FASTENING PATTERN: DECK ATTACHMENT - 5/8" DIA. PUDDLE WELDS OR APPROVED MECHANICAL FASTENERS.
PATTERN - 357
SIDELAP - #10 TEK SCREWS AT 12" O.C. MAX.
2. COMPOSITE FLOOR DECK SHALL BE 1 1/2" - 20 GAUGE (GALV. G60) FASTENING PATTERN: DECK ATTACHMENT - 5/8" PUDDLE WELDS OR APPROVED MECHANICAL FASTENERS.
PATTERN - AT SUPPORTS, MAX. 12" O.C.
SIDELAP - #10 TEK SCREWS AT 24" MAX.

MISCELLANEOUS

- 1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK.
2. CONTRACTOR SHALL REPORT ANY VARIATIONS FOUND AT THE SITE BEFORE PROCEEDING WITH THAT PART OF THE WORK.

DESIGN INFORMATION

DESIGN CODE = 2006 IBC AND ASCE 7-05

LIVE LOADS:

- CLASSROOMS = 40 PSF
CORRIDORS (UPPER FLOORS) = 60 PSF
LIBRARY (READING ROOMS) = 60 PSF
LIBRARY (STACK AREAS) = 150 PSF
MEETING ROOMS / LOUNGES = 100 PSF
TOILET ROOMS = 60 PSF
LOBBIES, STAIRS AND EXITS = 100 PSF
MECHANICAL ROOMS = 200 PSF
LIGHT STORAGE = 125 PSF

SNOW LOAD:

- Ps = 60 PSF
Cs = 1.0
Is = 1.1
Pf = 47 PSF

WIND LOAD:

- BASIC WIND SPEED (V) = 98 MPH (3 SEC GUST)
W = 1.15 (CATEGORY II)
EXPOSURE CATEGORY = C
RWT, PRESSURE COEF. (GCp) = +/- 0.18
COMPONENTS AND CLADDING: CORNER TRIBUTARY AREA = 65 SQ. FT. (WALL STUDS)
WIND PRESSURE (FIELD WALLS) = -25 PSF
WIND PRESSURE (CORNER WALLS) = -28 PSF
\* PRESSURES SHALL BE ADJUSTED FOR COMPONENTS WITH TRIBUTARY AREAS DIFFERENT THAN ABOVE.

SEISMIC LOAD:

- SEISMIC USE GROUP = II
Ms = 1.25 (CATEGORY III)
SITE CLASS = D
Ss = 0.332, S1 = 0.078
Sds = 0.340, Sd1 = 0.125
SEISMIC DESIGN CATEGORY = C
SI, R. SYSTEM = ORDINARY CENTRICAL BRACED FRAMES
ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE
R = 3.0
BASE SHEAR (V) = 0.141W

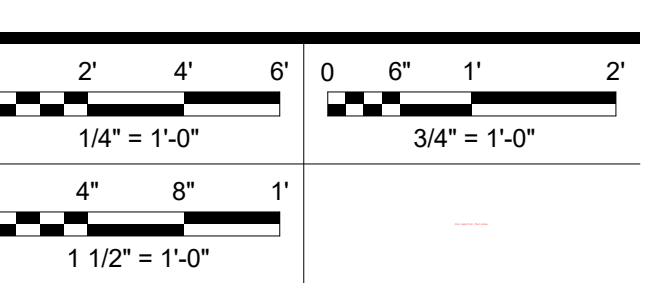
Issues and Revisions

Table with 2 columns: Date, Description

PROGRESS REVIEW

PRELIMINARY
NOT FOR
CONSTRUCTION

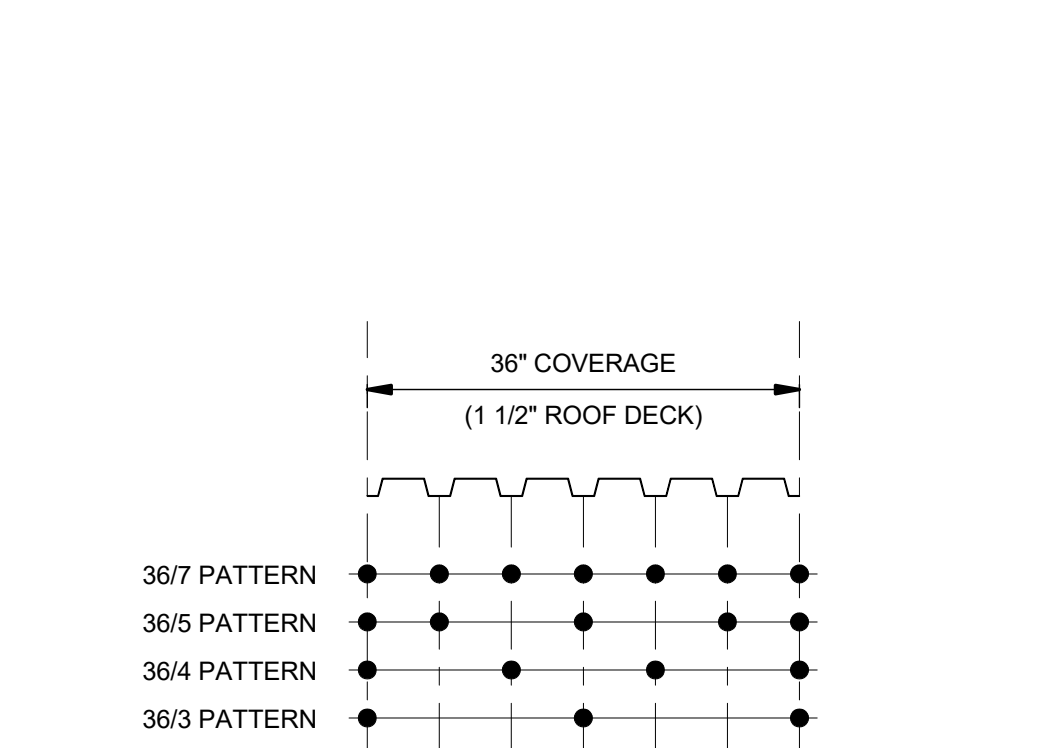
05-09-17



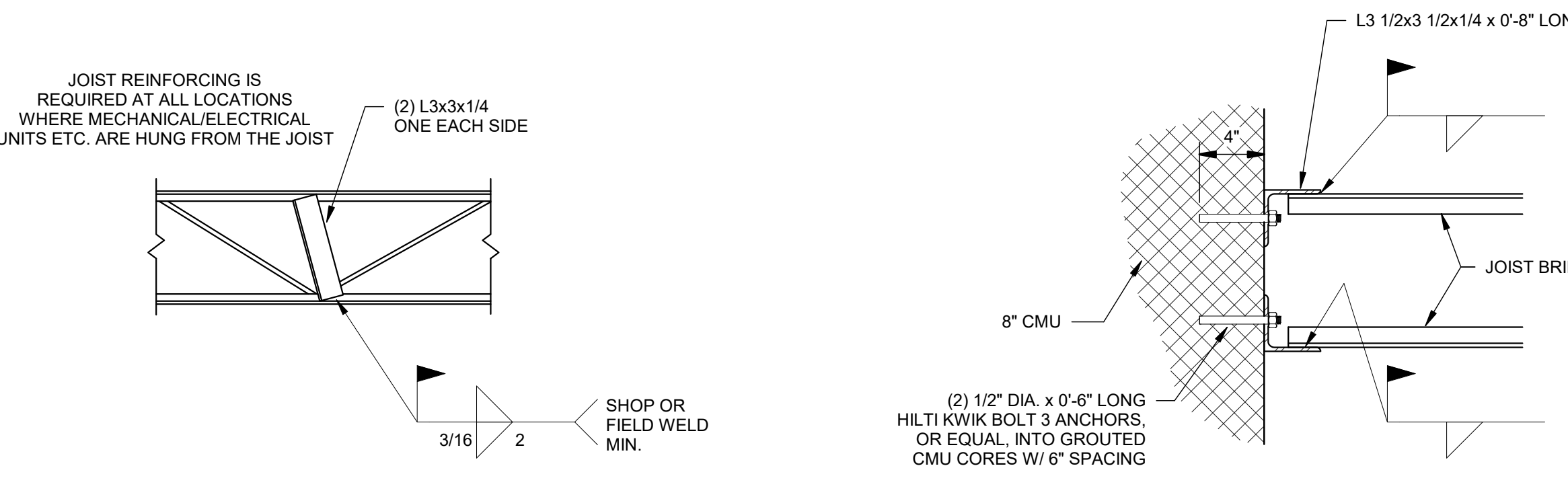
PA / PE: JCF © 2017 Harriman Associates
Drawn By: ZJP

FRAMING NOTES AND DETAILS

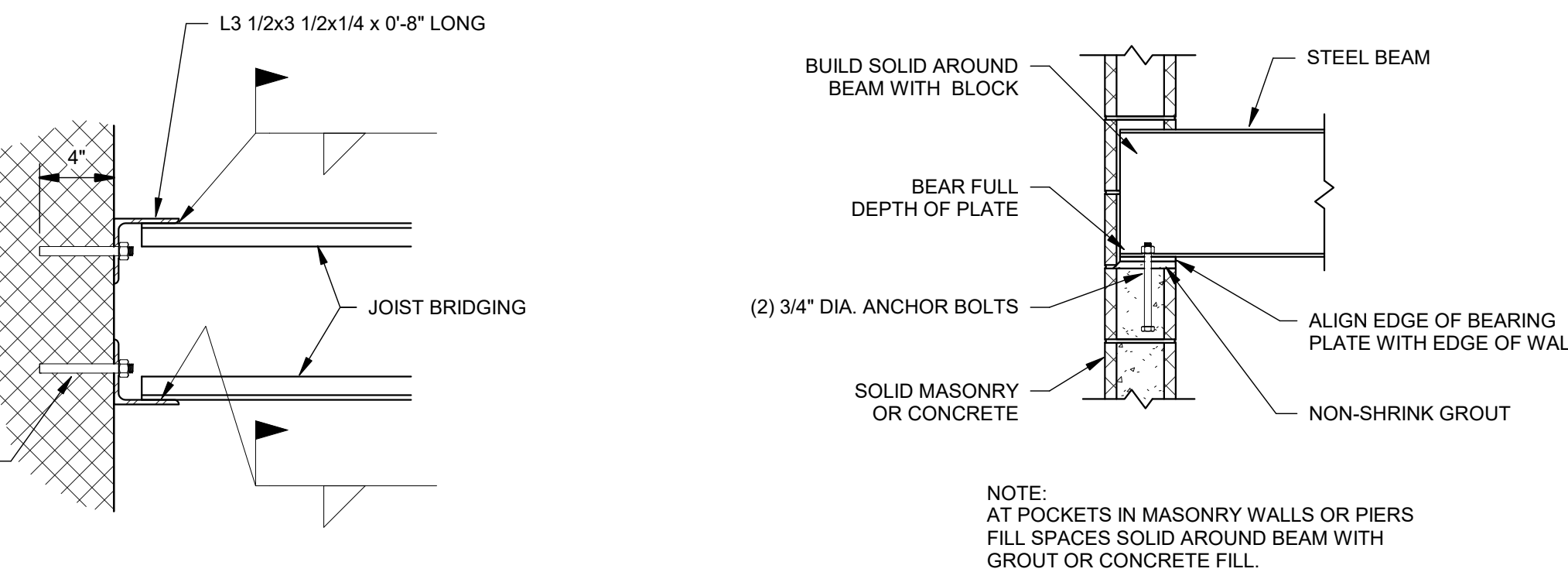
S60.1



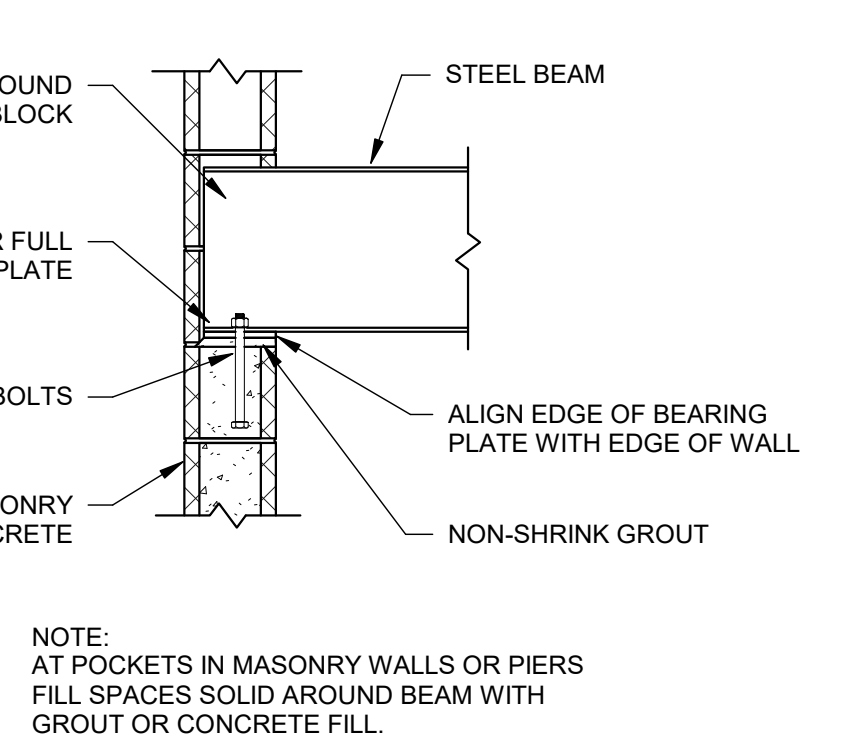
B1 TYP. ROOF DECK FASTENER LAYOUT
SCALE: 3/4" = 1'-0"



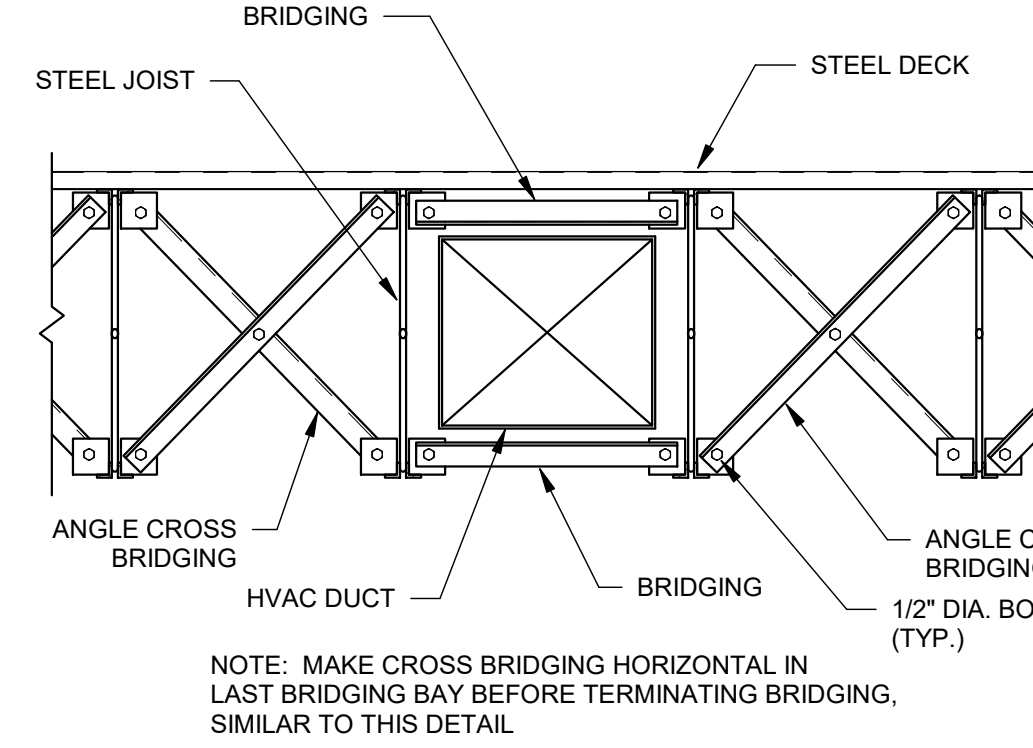
B2 TYP. JOIST REINFORCING
SCALE: 3/4" = 1'-0"



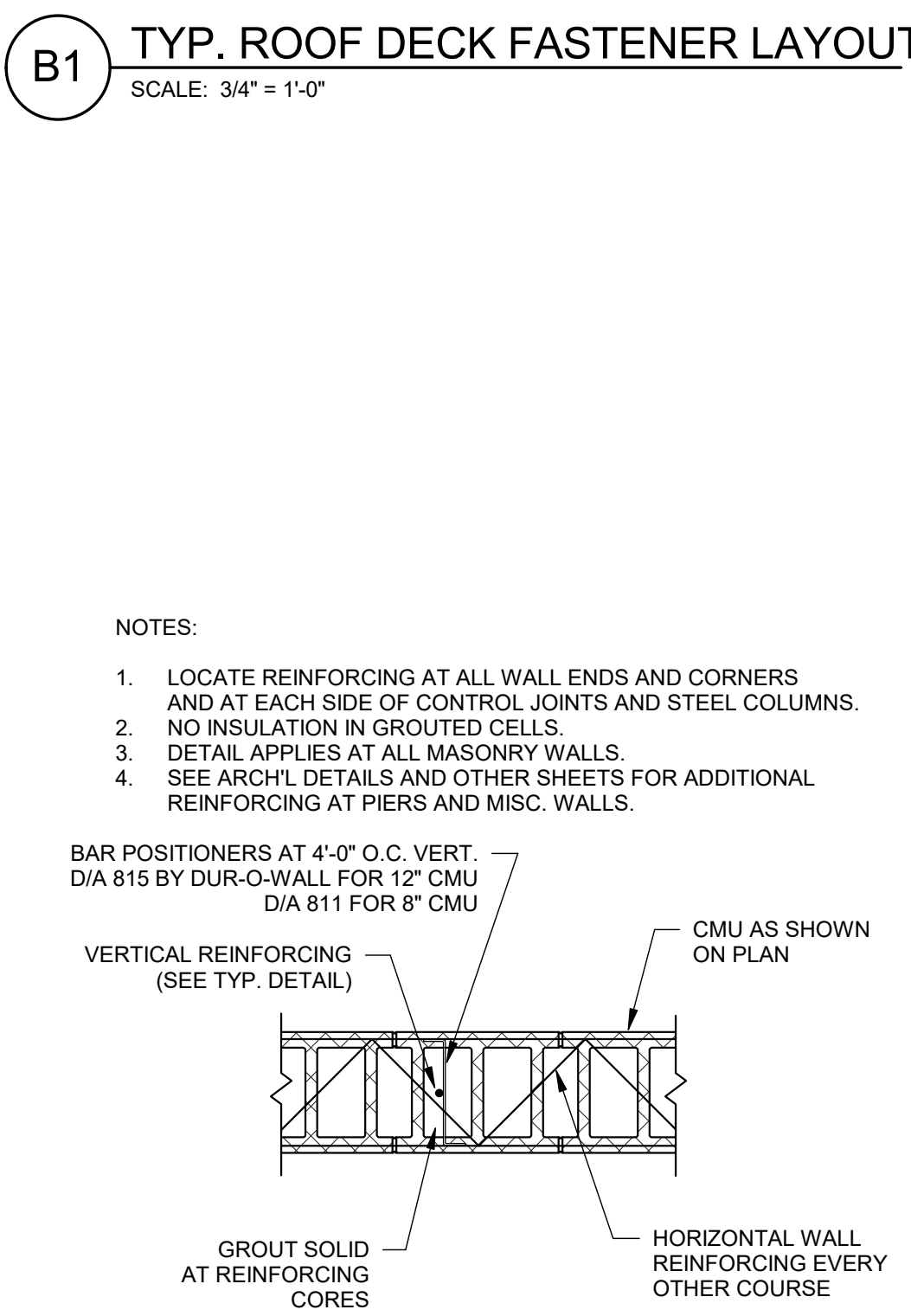
B3 TYP. JOIST BRIDGING ANCHORAGE TO CMU WALL
SCALE: 1 1/2" = 3'-0"



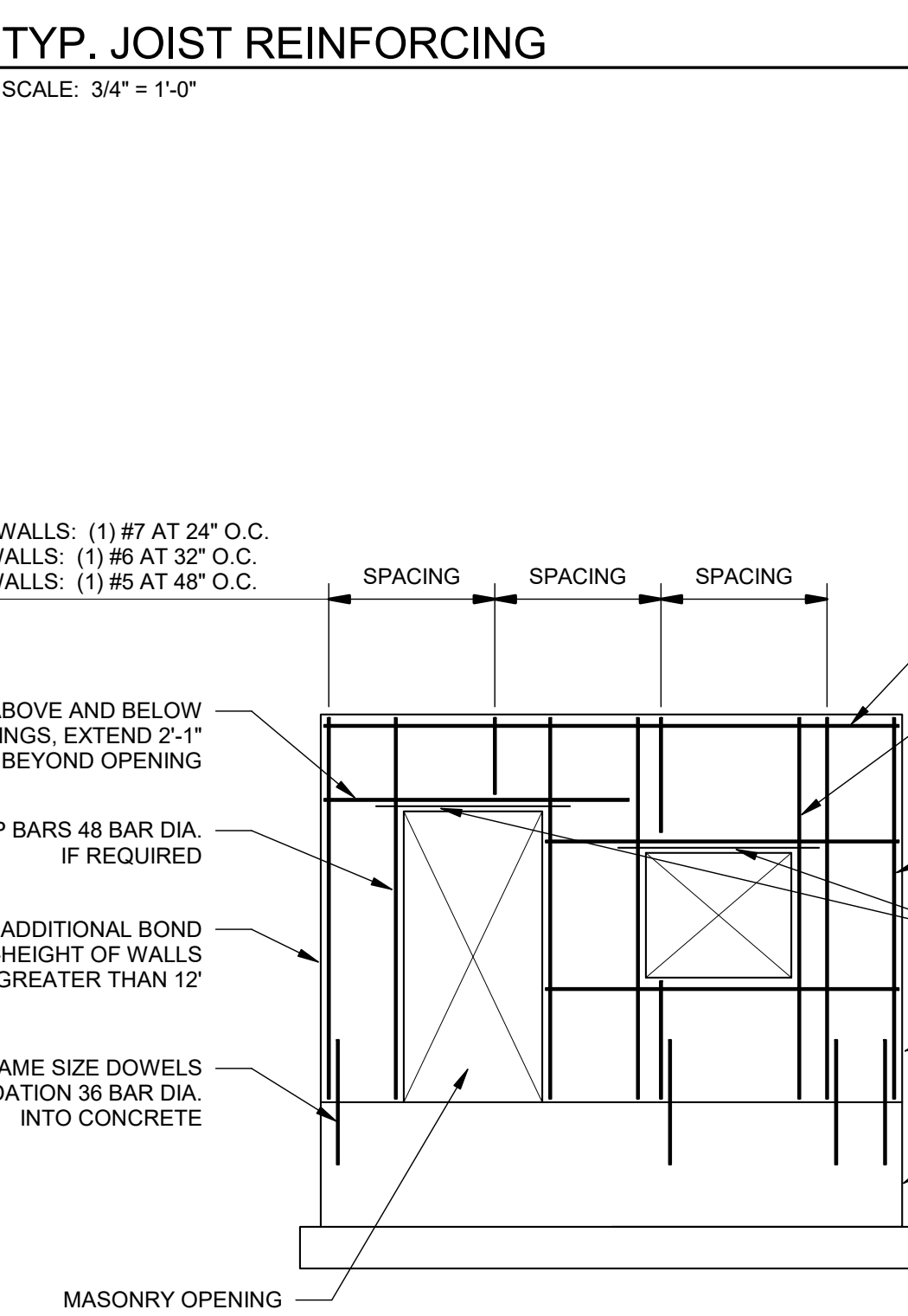
B4 TYP. BEAM BEARING DETAIL
SCALE: 3/4" = 1'-0"



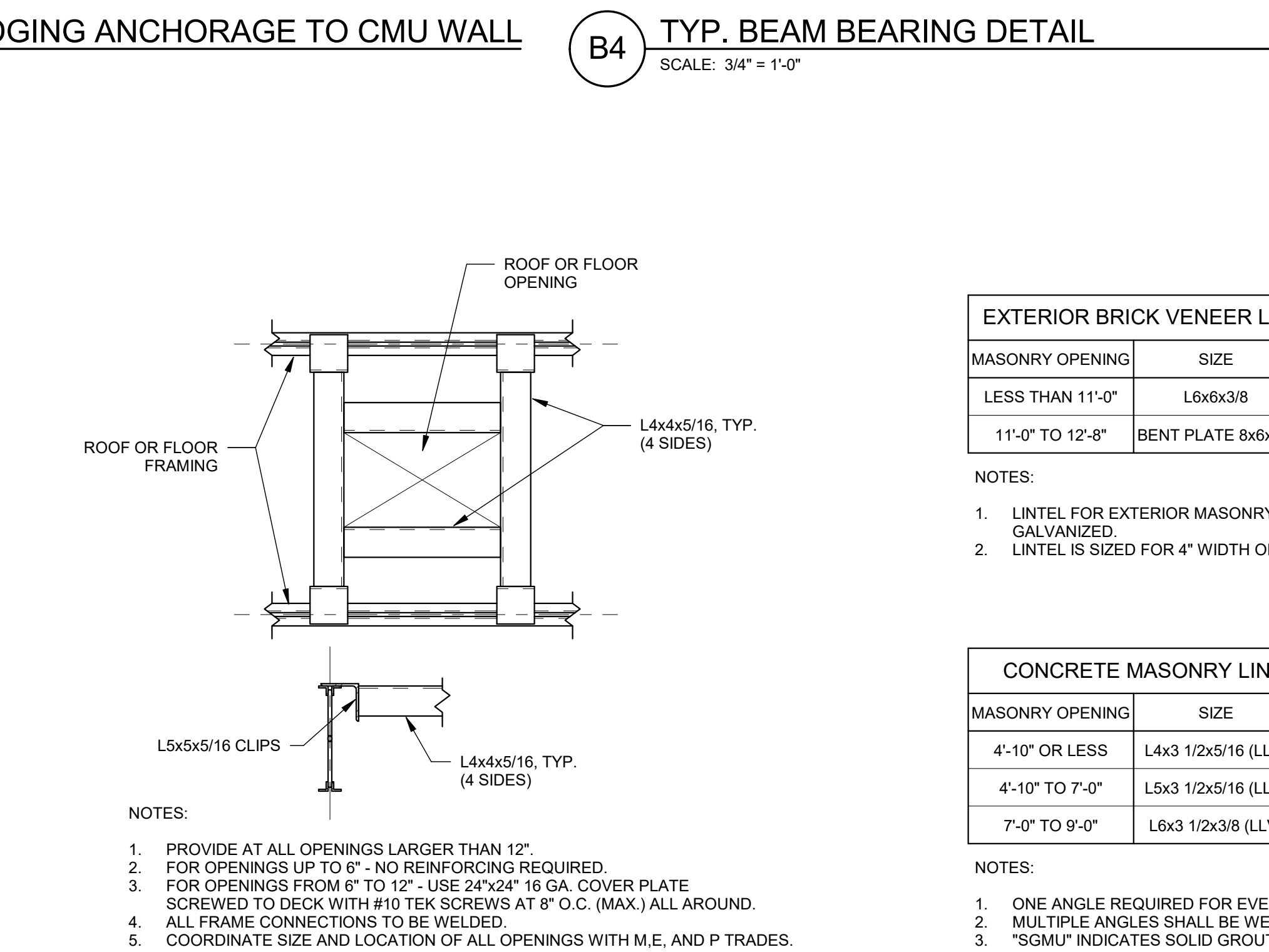
B5 TYP. JOIST BRIDGING AT HVAC DUCT
SCALE: 3/4" = 1'-0"



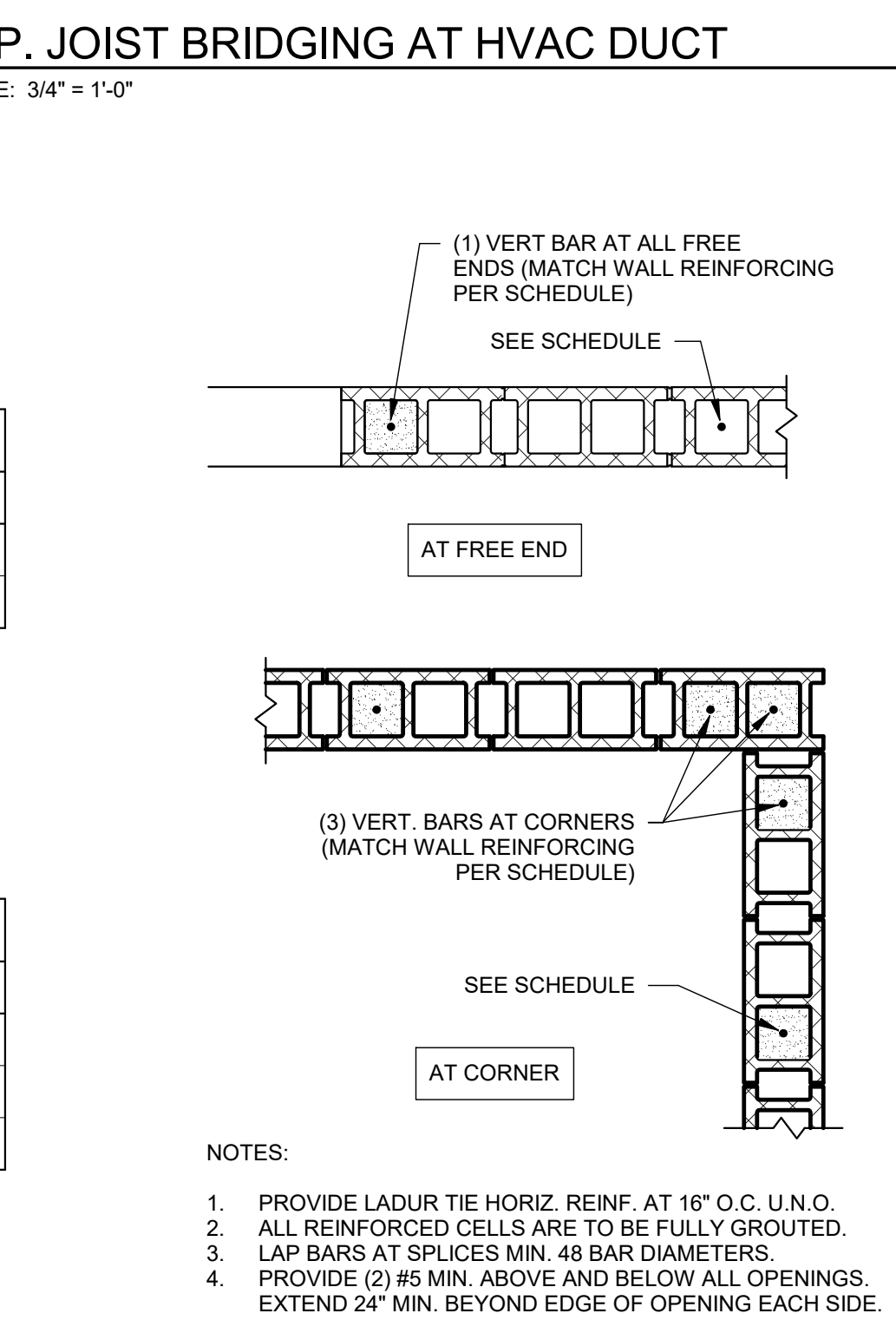
A1 TYP. MASONRY REINFORCING PLAN
SCALE: 3/4" = 1'-0"



A2 TYP. MASONRY WALL REINFORCING
SCALE: 1/4" = 1'-0"



A3 TYP. FRAME AT ROOF OR FLOOR OPENING
SCALE: 3/4" = 1'-0"

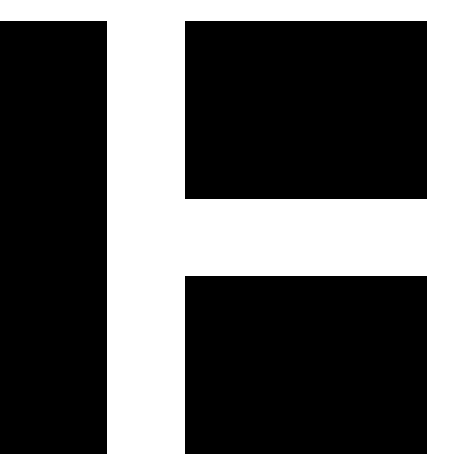


A5 TYP. STEEL LINTEL SCHEDULE
SCALE: 3/4" = 1'-0"

A6 S60 - TYP. PLAN DETAILS AT CMU WALLS
SCALE: 3/4" = 1'-0"

A7 GENERAL FRAMING NOTES
SCALE: 3/4" = 1'-0"





HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

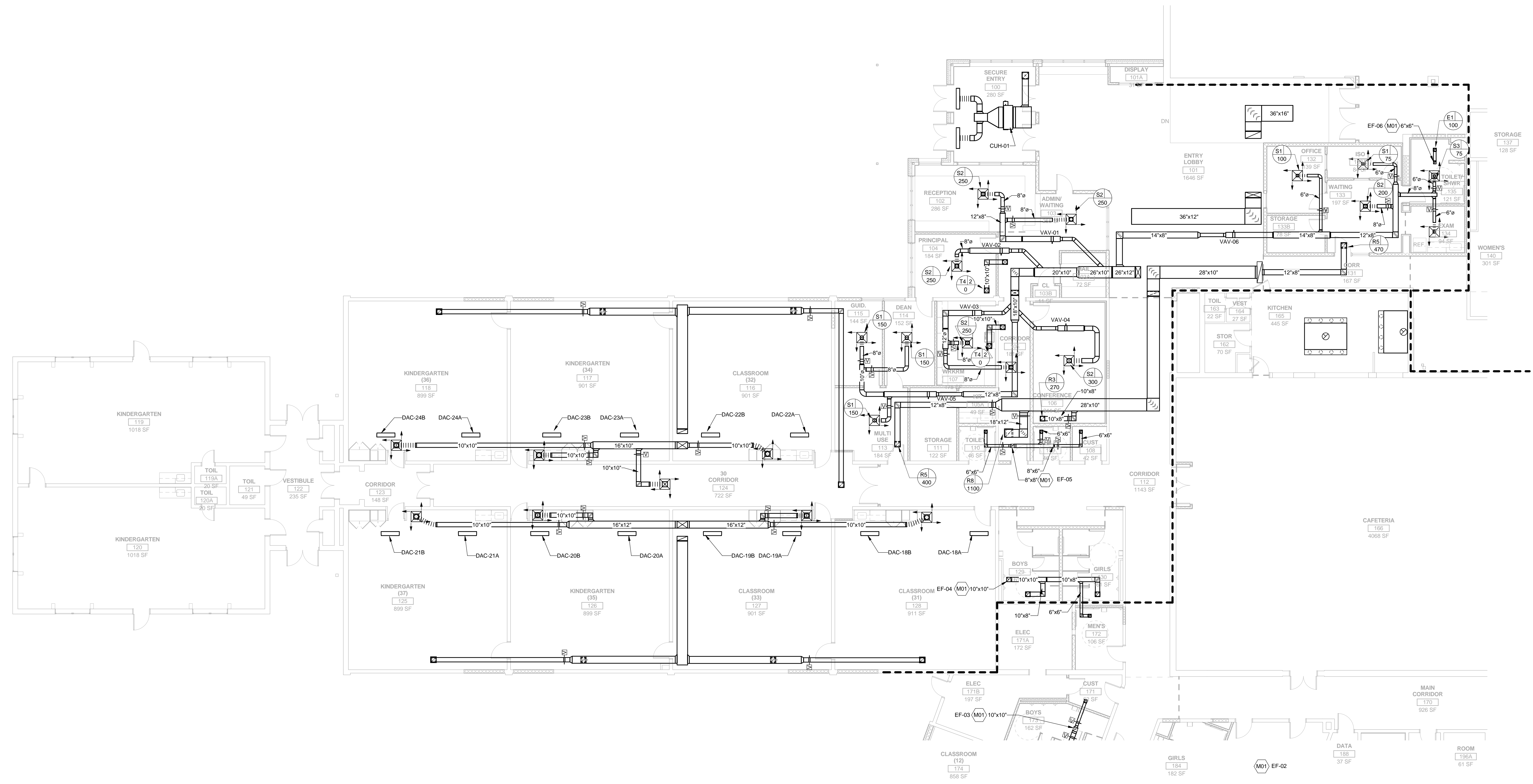
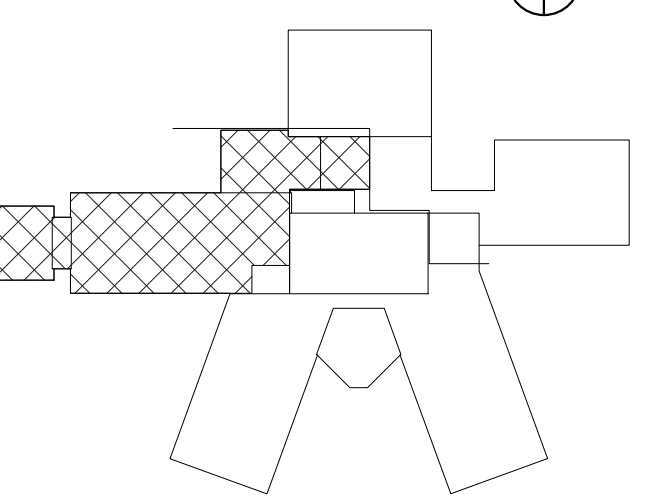
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

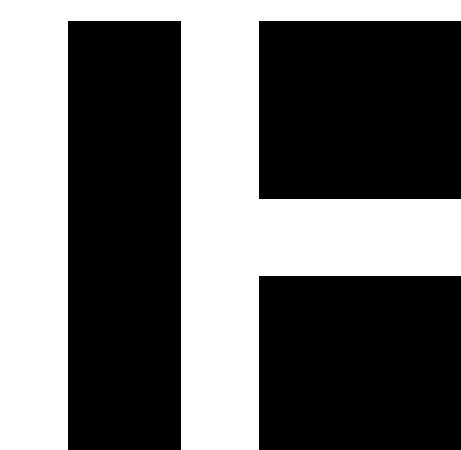
Key Plan

Proj North









HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

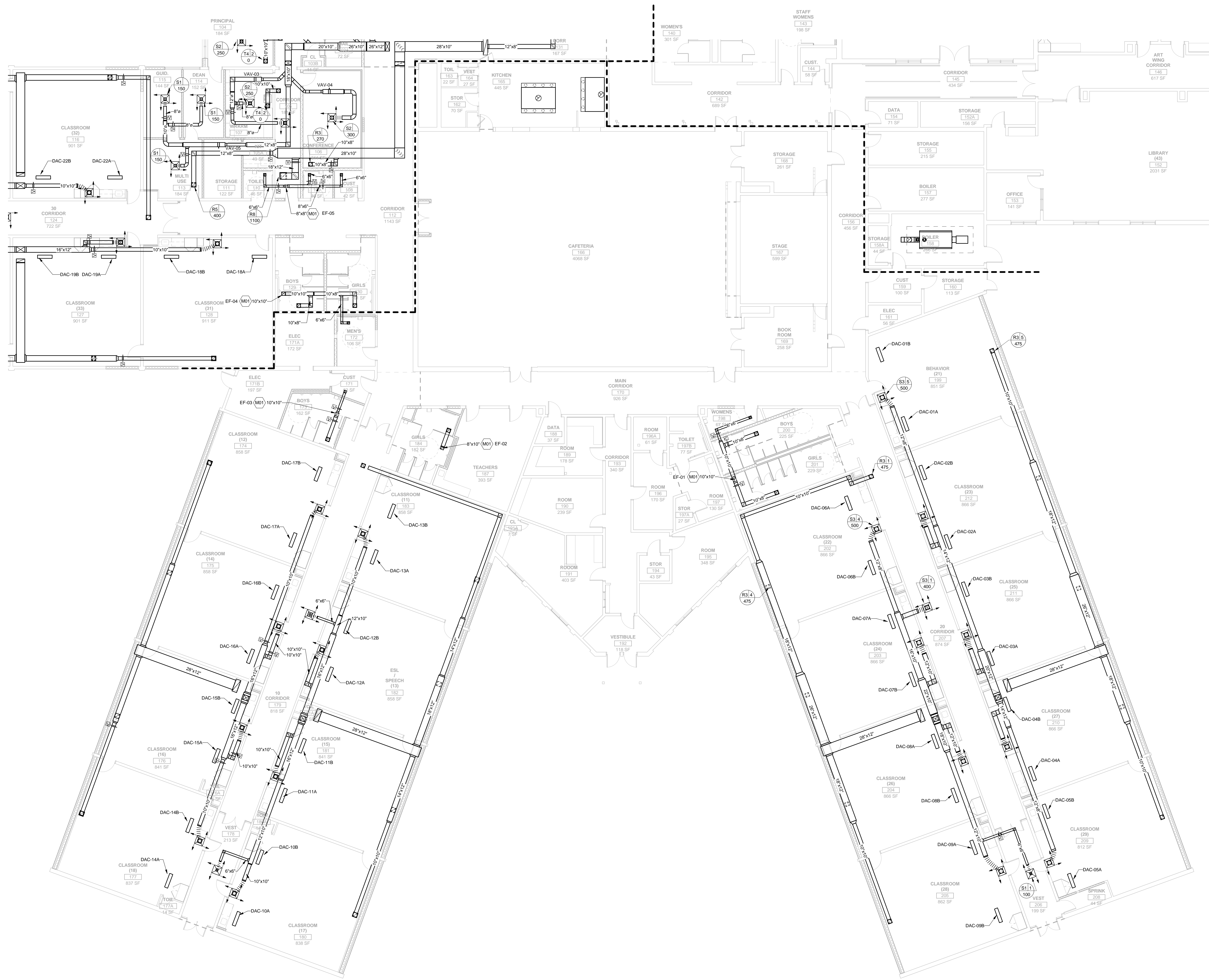
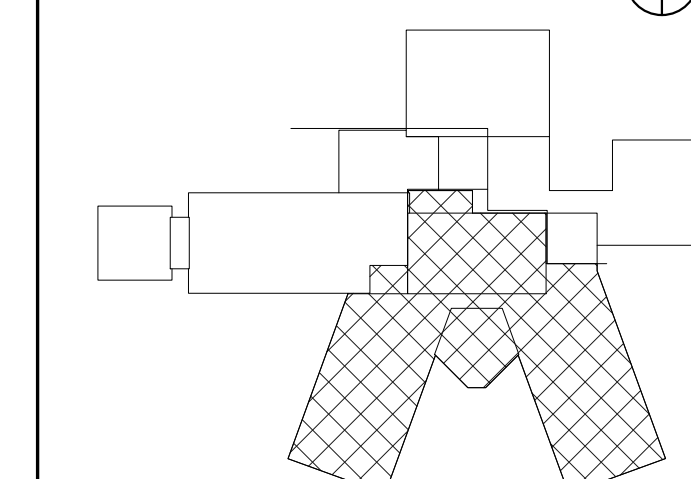
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

Proj North



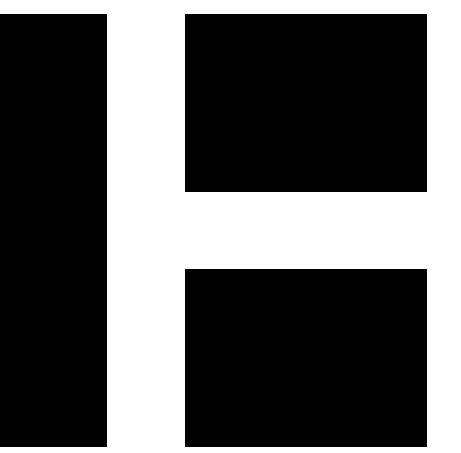
Issues and Revisions	
Date	Description

SCHEMATIC DESIGN  
**PRELIMINARY  
 NOT FOR  
 CONSTRUCTION**  
 05-09-17

PA / PE : JSC © 2017  
 Drawn by: BPH/JSC Harriman Associates

DUCTWORK - AREA C

M10.3



HARRIMAN

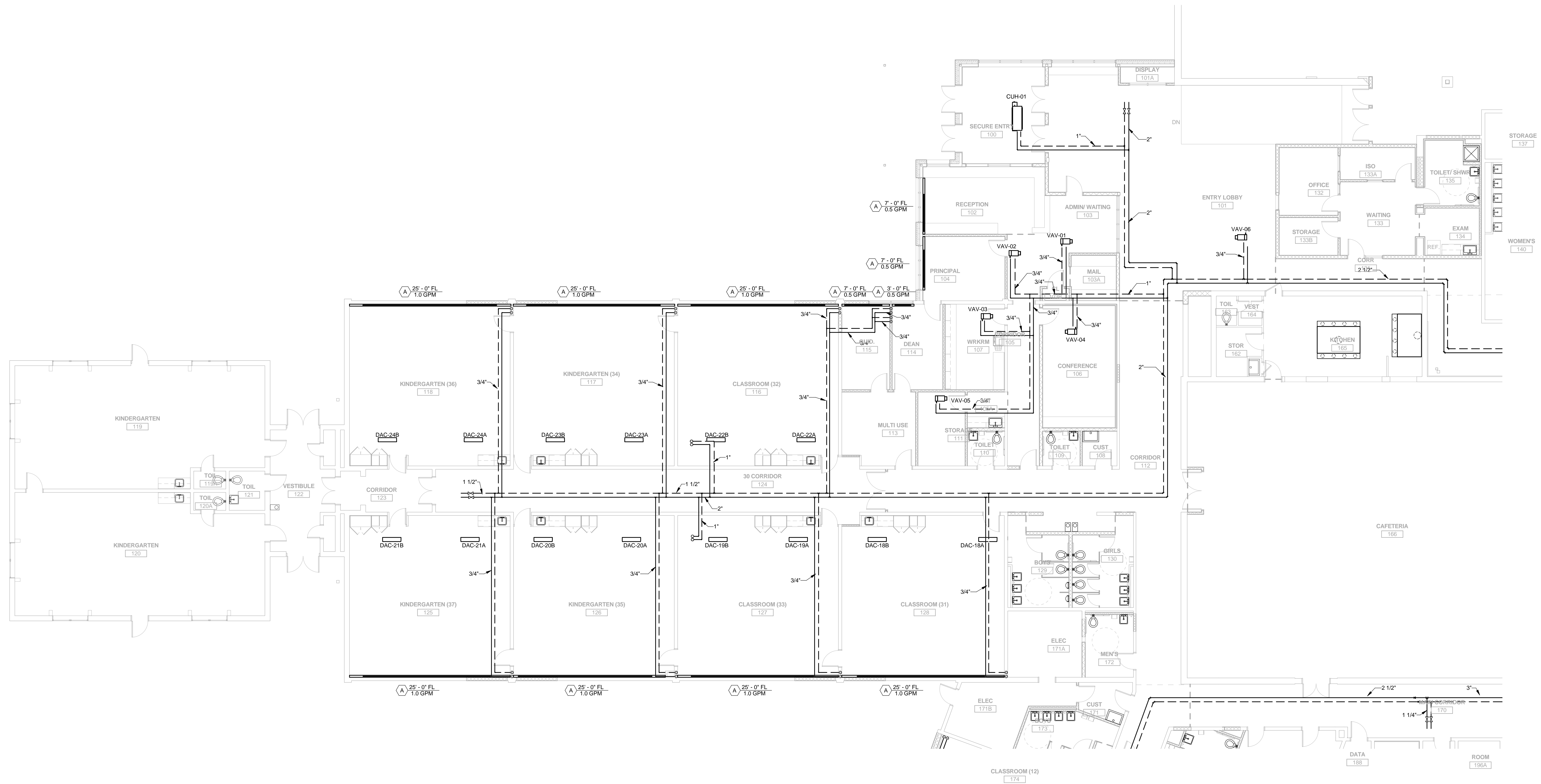
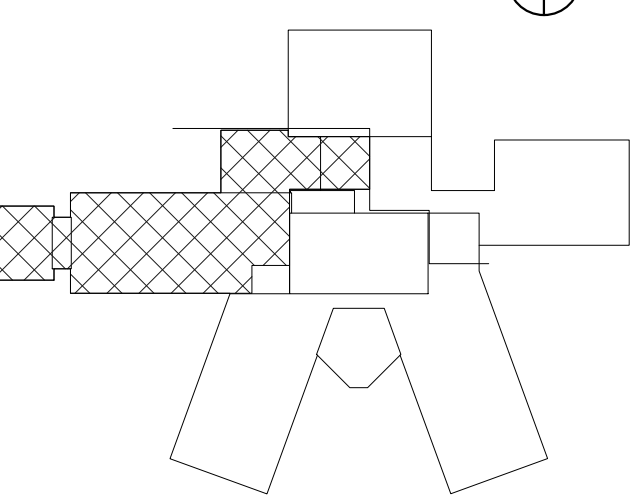
AUBURN PORTLAND PORTSMOUTH BOSTON

DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY SCHOOL  
RENOVATIONS & ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan Proj North



Issues and Revisions

Date	Description

SCHEMATIC DESIGN  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17

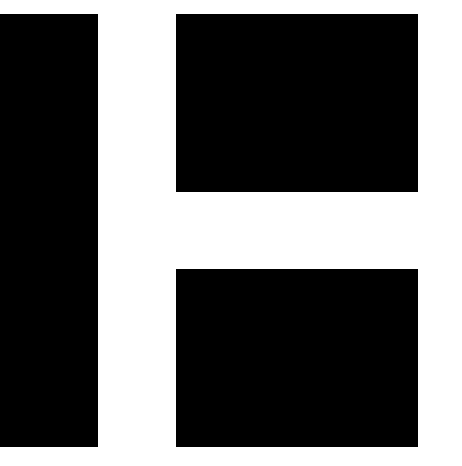
PA / PE: JSC © 2017  
Drawn by: JSC Harriman Associates

PIPING - AREA A

M20.1

P:\DC\DWG\050917\2017\2017.M





HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

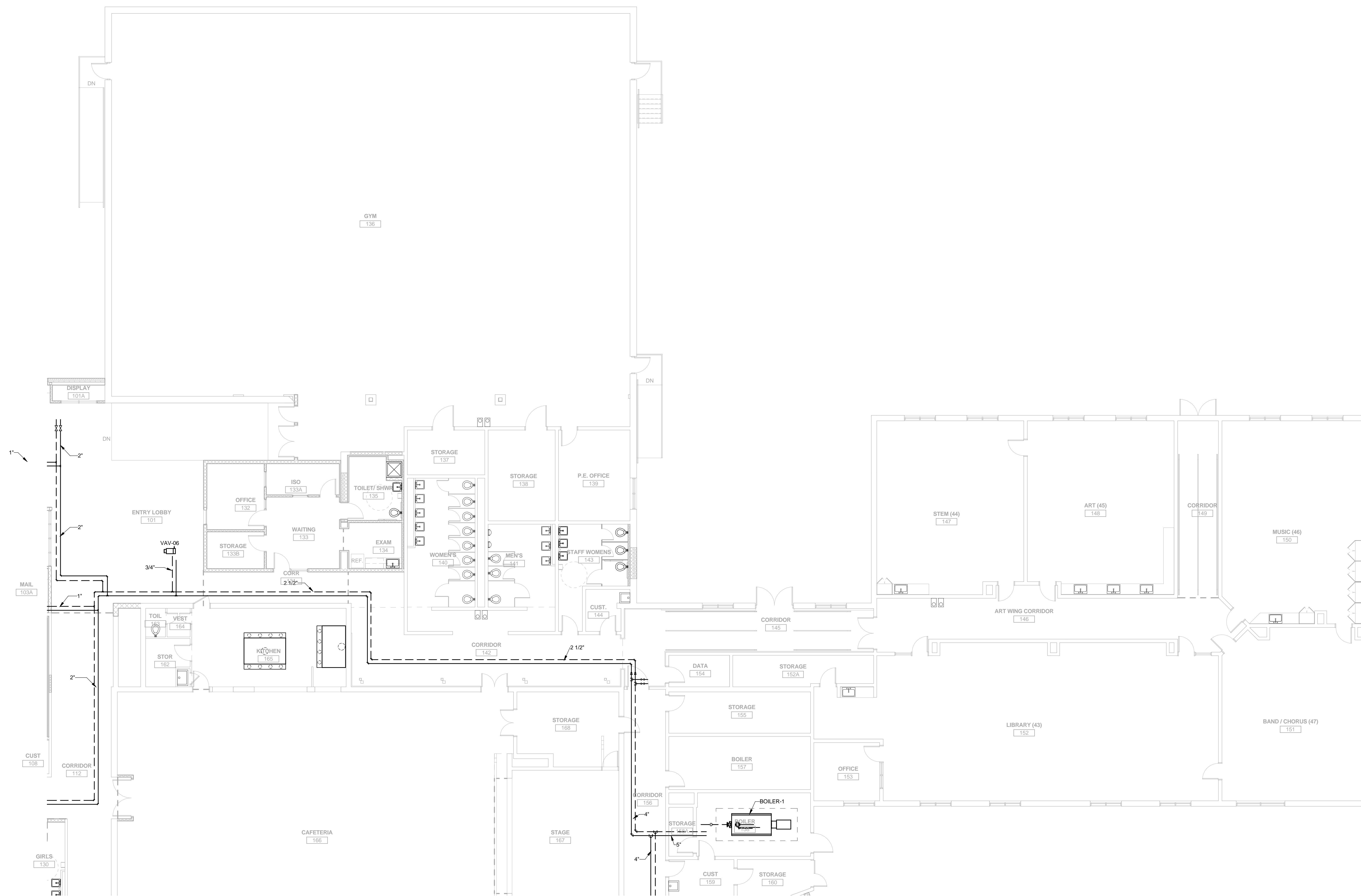
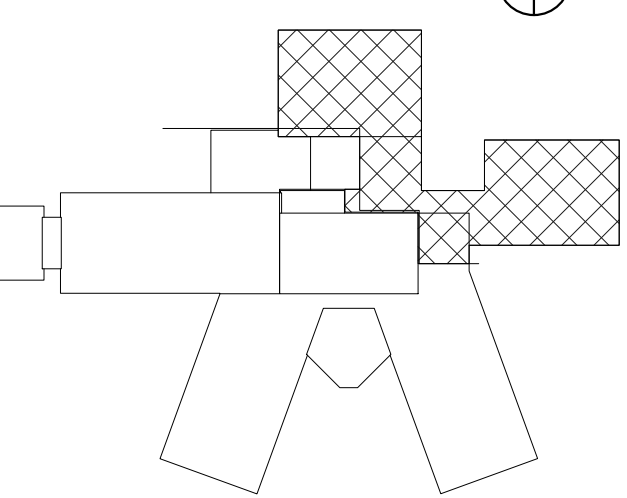
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

Proj North



Issues and Revisions

Date	Description

SCHEMATIC DESIGN  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17

PA / PE: JSC	© 2017 Harriman Associates
Drawn By: JSC	

PIPING - AREA B

**M20.2**



HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

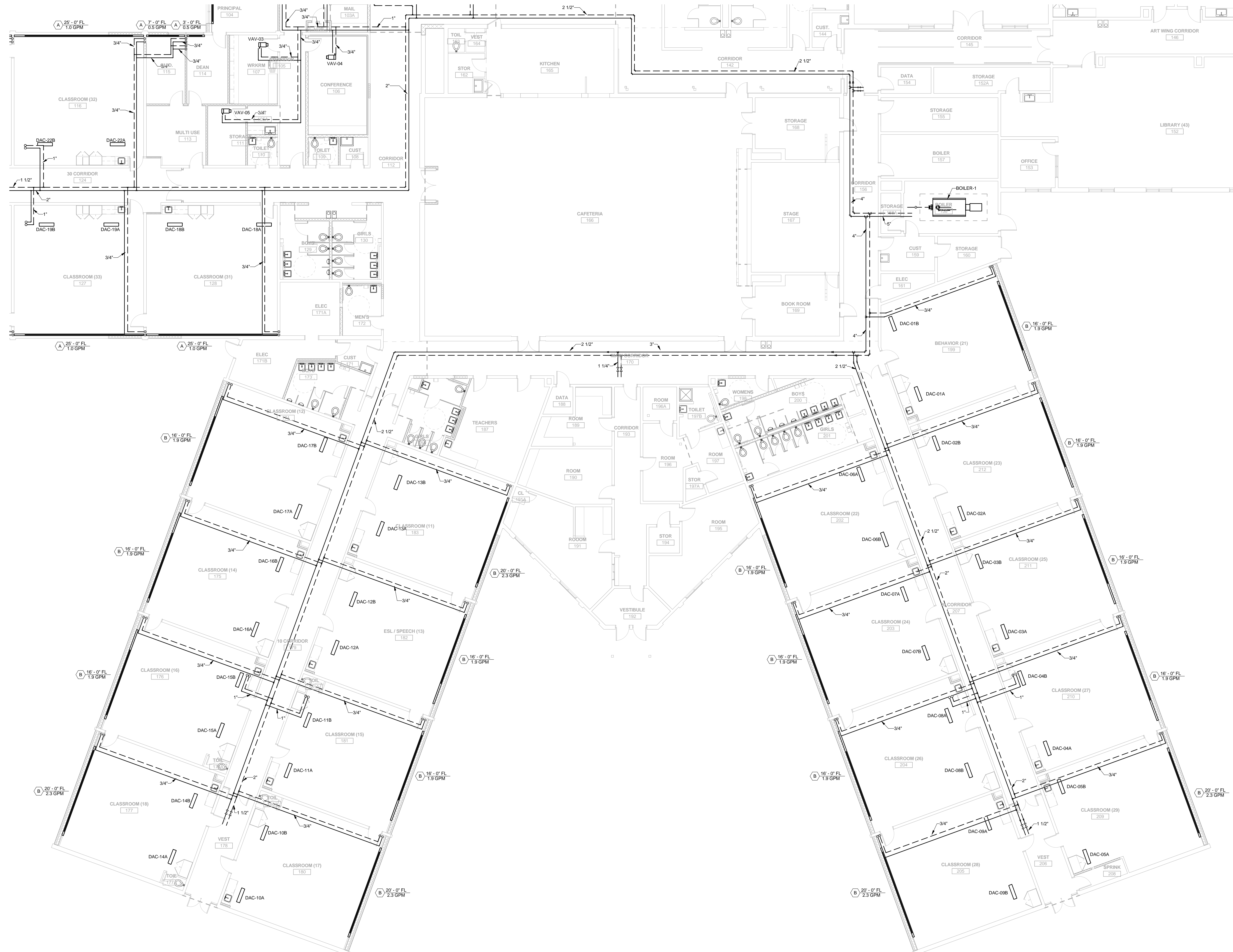
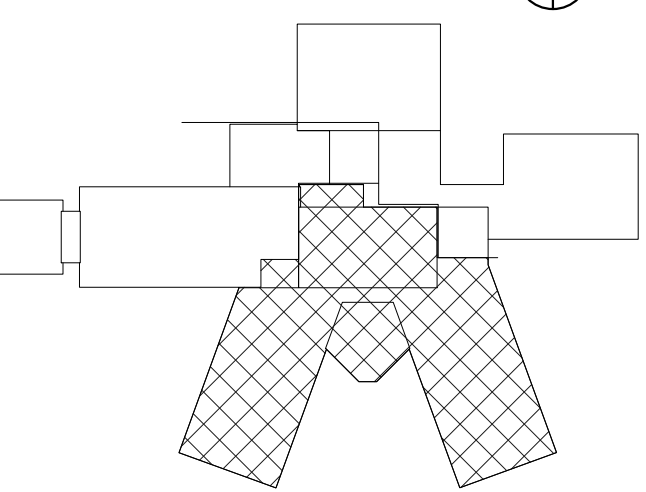
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

Proj North



Issues and Revisions

Date	Description

SCHEMATIC DESIGN  
PRELIMINARY  
NOT FOR  
CONSTRUCTION  
05-09-17

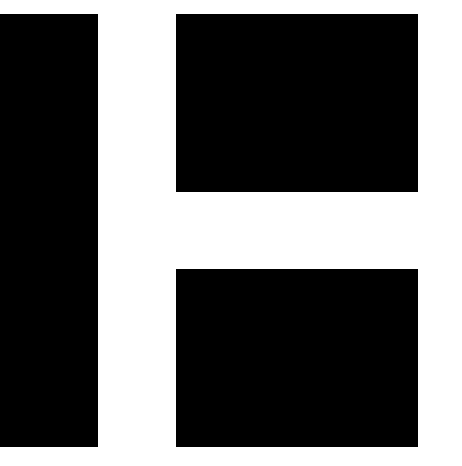
PA / PE: JSC © 2017  
Drawn by: JSC Harriman Associates

PIPING - AREA C

M20.3

P:\CDM\0502017\83023 AM





HARRIMAN

AUBURN PORTLAND PORTSMOUTH BOSTON

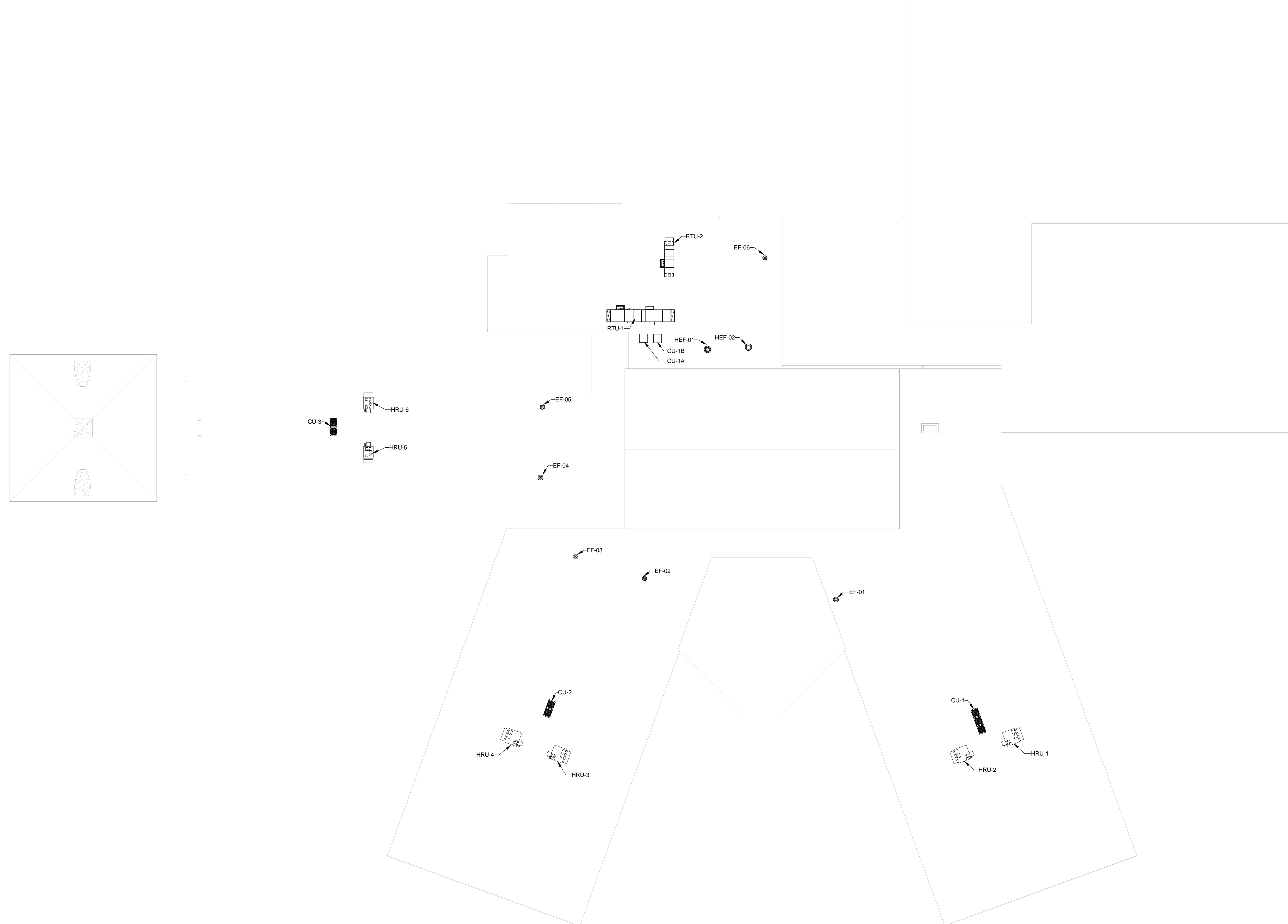
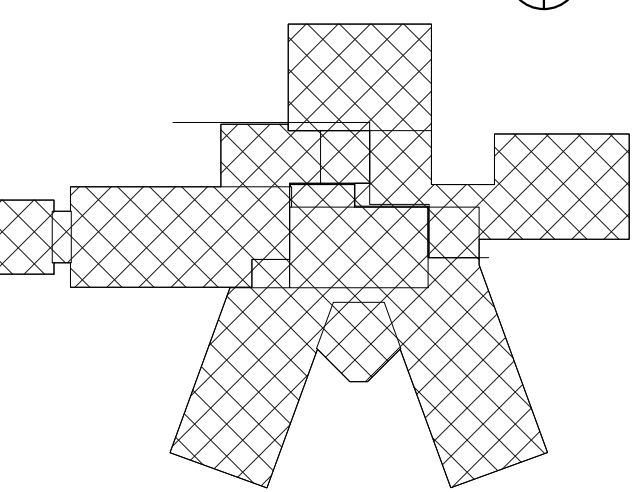
DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan

Proj North



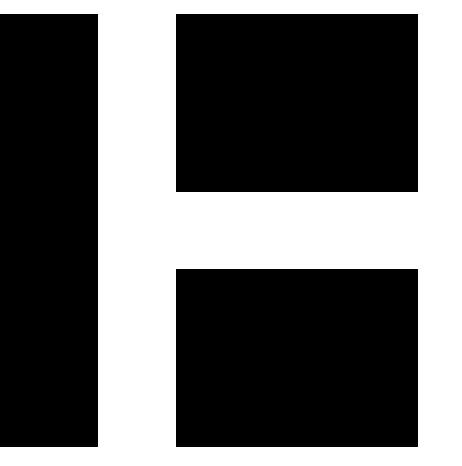
Issues and Revisions	
Date	Description

SCHEMATIC DESIGN  
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
05-09-17


PA / PE: CG © 2017  
Drawn By: Harriman Associates

ROOF PLAN -  
MECHANICAL

M25.1



HARRIMAN

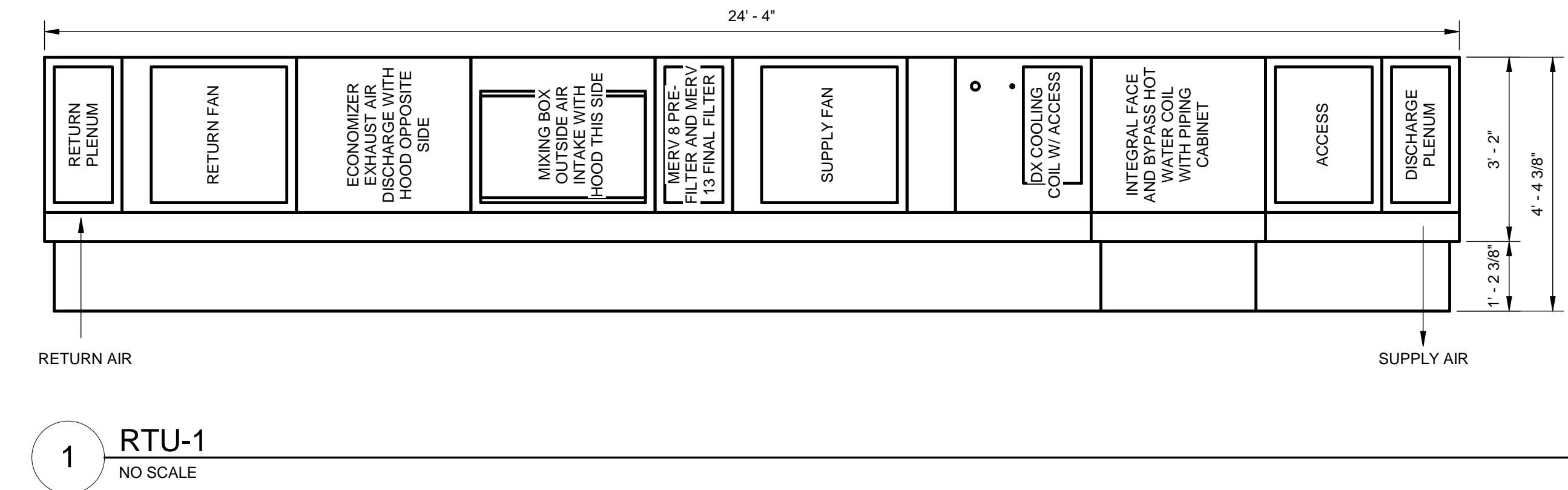
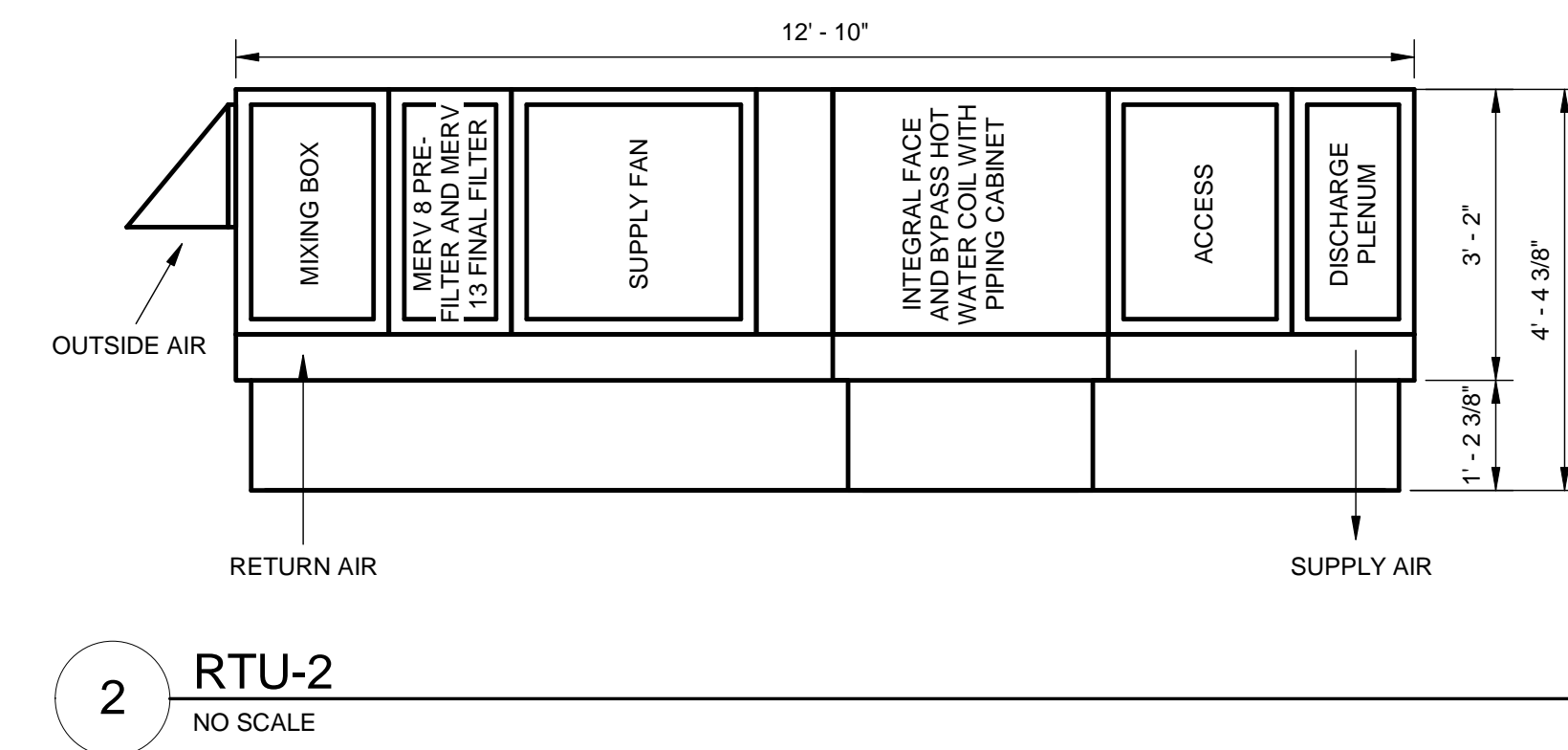
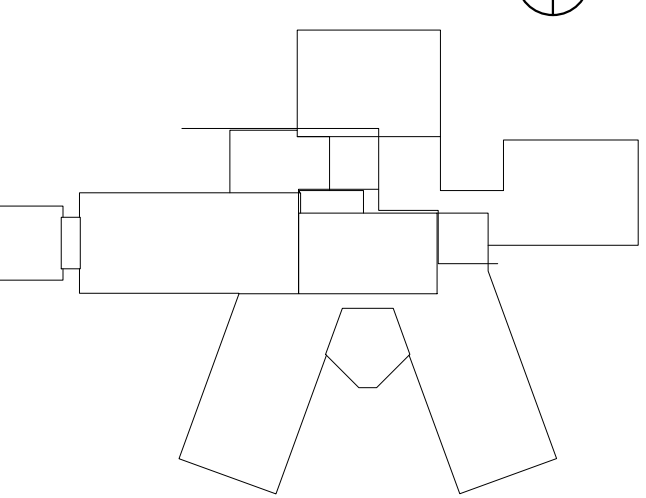
AUBURN PORTLAND PORTSMOUTH BOSTON

DOVER SCHOOL DISTRICT  
GARRISON ELEMENTARY  
SCHOOL  
RENOVATIONS &  
ADDITIONS - PHASE I

DOVER, NH

Harriman Project No. 15618

Key Plan Proj North



HEAT RECOVERY UNIT											
TAG	MFR	MODEL	AIR FLOW (CFM)	HP	AIR FLOW (CFM)	HP	ELECTRICAL			WEIGHT (LBS)	NOTES
							VOLTS	PHASE	MCA		
HRU-1	RENEWARE	RD4XT	2500	5	2250	5	208 V	3	41.8	2600	PROVIDE INTEGRAL HOT WATER COIL. LAT = 75 DEG F
HRU-2	RENEWARE	RD4XT	2500	5	2250	5	208 V	3	41.8	2600	PROVIDE INTEGRAL HOT WATER COIL. LAT = 75 DEG F
HRU-3	RENEWARE	RD4XT	2500	5	2250	5	208 V	3	41.8	2600	PROVIDE INTEGRAL HOT WATER COIL. LAT = 75 DEG F
HRU-4	RENEWARE	RD4XT	2000	5	1800	5	208 V	3	41.8	2600	PROVIDE INTEGRAL HOT WATER COIL. LAT = 75 DEG F
HRU-5	RENEWARE	RD4XT	2000	5	1800	5	208 V	3	41.8	2600	PROVIDE INTEGRAL HOT WATER COIL. LAT = 75 DEG F
HRU-6	RENEWARE	RD4XT	2000	5	1800	5	208 V	3	41.8	2600	PROVIDE INTEGRAL HOT WATER COIL. LAT = 75 DEG F

CONDENSING UNIT SCHEDULE				
TAG	MANUFACTURER	MODEL	SERVICE	WEIGHT (LBS)
CU-1A	TRANE	4TTA360	RTU-1	226
CU-1B	TRANE	4TTA360	RTU-1	226

BOILER						
TAG	MANUFACTURER	MODEL	FUEL TYPE	INPUT (MBH)	OUTPUT (MBH)	NOTES
BOILER-1	BUJERUS	GB15-12	NATURAL GAS	3392	2822	POWER FLAME BURNER

RTU								
TAG	MANUFACTURER	AREA SERVED	MINIMUM OUTDOOR AIRFLOW (CFM)	SUPPLY FAN		RETURN FAN		
				AIRFLOW (CFM)	ESP (IN-WG)	HP	AIRFLOW (CFM)	HP
RTU-1	TRANE	ADMIN	500	2500	2.00 in-wg	5.0	2250	1.5
RTU-2	TRANE	LOBBY	200	2000	1.50 in-wg	3.0	0	0

CABINET UNIT HEATER									
TAG	MANUFACTURER	MODEL	SERVICE	AIRFLOW (CFM)	WATER FLOW (GPM)	ELECTRIC			
						ROWS	HP	VOLTS	PHASE
CUH-01	TRANE	FFC608	100 SECURE ENTRY	1000	6.3	2	.4	120	1

VAV W/ HW REHEAT																			
TAG	MANUFACTURER	MODEL	SERVICE	INLET SIZE	COOLING AIRFLOW (CFM)	HEATING AIRFLOW (CFM)	HEATING AIRFLOW (CFM)	EAT (DEG F)	LAT (DEG F)	APD (FT-HD)	CAPACITY (BTU)	EWT (DEG F)	LWT (DEG F)	WATER FLOW (GPM)	WPD (FT-HD)	ROWS	DISCHARGE NC	RADIATED NC	NOTES
VAV-02	TRANE	VCWF	106 PRINCIPAL	8"	350	125	125	60°F	91°F	0.04 in-wg	4160.0 Btu/h	130°F	113°F	0.5	0.7	1	21	21	
VAV-03	TRANE	VCWF	107 WORKROOM	8"	450	135	225	60°F	85°F	0.00 in-wg	8100.0 Btu/h	130°F	110°F	0.6	0.0	2	22	22	
VAV-04	TRANE	VCWF	108 CONFERENCE	8"	300	100	150	60°F	88°F	0.05 in-wg	4480.0 Btu/h	130°F	112°F	0.5	0.7	1	21	21	
VAV-05	TRANE	VCWF	114 DEAN / 115 GUIDANCE	8"	450	135	225	60°F	85°F	0.00 in-wg	8100.0 Btu/h	130°F	110°F	0.6	0.0	2	22	22	
VAV-06	TRANE	VCWF	NURSE'S AREA	8"	500	150	250	60°F	85°F	0.12 in-wg	6780.0 Btu/h	130°F	120°F	1.3	3.8	1	24	23	

FINTUBE RADIATION										
TAG	MANUFACTURER	MODEL	CAPACITY (MBH/FT)	PIPE SIZE (IN)	FIN DIMENSIONS			ENCLOSURE DIMENSIONS W x H (IN)	MOUNTING HEIGHT AFF	NOTES
					W	H	PPF			
A	STERLING	JVB-FT	1800	3/4"	4-1/4" x 3-5/8"	50	2	5-5/16" x 24"	4"	
B	STERLING	JVB-FT	2000	3/4"	4-1/4" x 3-5/8"	50	3	5-5/16" x 24"	4"	

FAN										
TAG	MANUFACTURER	MODEL	SERVICE	AIR FLOW (CFM)	ESP (INWG)	ELECTRIC				
						HP	VOLTS	PHASE		
EF-01	GREENHECK	G-085-VG	198 WOMENS / 200 BOYS / 201 GIRLS	850	0.30	0.17	115 V	1		
EF-02	GREENHECK	G-070-VG	184 GIRLS	300	0.25	0.10	115 V	1		
EF-03	GREENHECK	G-080-VG	171 CUSTODIAN / 173 BOYS	400	0.25	0.10	115 V	1		
EF-04	GREENHECK	G-080-VG	129 BOYS / 130 GIRLS / 172 MENS	700	0.30	0.10	115 V	1		
EF-05	GREENHECK	G-070-VG	108 CUSTODIAN / 109 TOILET / 110 TOILET	300	0.25	0.10	115 V	1		
EF-06	GREENHECK	G-080-VG	135 TOILET SHOWER	100	0.25	0.10	115 V	1		
HEF-01	GREENHECK	QUE-141-VG	KITCHEN HOOD	1800	1.25	0.75	115 V	1		
HEF-02	GREENHECK	QUE-141-VG	DISHWASHER HOOD	1800	1.25	0.75	115 V	1		

DUCTLESS AIR CONDITIONER		
TAG	SERVICE	COOLING CAPACITY (BTU)
VRF-01	OUTDOOR UNIT	312,000
CU-1	OUTDOOR UNIT	18,000
DAC-01A	199 BEHAVIOR 21	18,000
DAC-01B	199 BEHAVIOR 21	18,000
DAC-02A	212 CLASSROOM 23	18,000
DAC-02B	212 CLASSROOM 23	18,000
DAC-03A	211 CLASSROOM 25	18,000
DAC-03B	211 CLASSROOM 25	18,000
DAC-04A	210 CLASSROOM 27	18,000
DAC-04B	210 CLASSROOM 27	18,000
DAC-05A	209 CLASSROOM 29	18,000
DAC-05B	209 CLASSROOM 29	18,000
DAC-06A	202 CLASSROOM 22	18,000
DAC-06B	202 CLASSROOM 22	18,000
DAC-07A	203 CLASSROOM 24	18,000
DAC-07B	203 CLASSROOM 24	18,000
DAC-08A	204 CLASSROOM 26	18,000
DAC-08B	204 CLASSROOM 26	18,000
DAC-09A	205 CLASSROOM 28	18,000
DAC-09B	205 CLASSROOM 28	18,000
VRF-02	OUTDOOR UNIT	240,000
CU-2	OUTDOOR UNIT	18,000
DAC-10A	180 CLASSROOM 17	18,000
DAC-10B	180 CLASSROOM 17	18,000
DAC-11A	181 CLASSROOM 15	18,000
DAC-11B	181 CLASSROOM 15	18,000
DAC-12A	182 ESL/SPEECH 13	18,000
DAC-12B	182 ESL/SPEECH 13	18,000
DAC-13A	183 CLASSROOM 11	18,000
DAC-13B	183 CLASSROOM 11	18,000
DAC-14A	177 CLASSROOM 18	18,000
DAC-14B	177 CLASSROOM 18	18,000
DAC-15A	176 CLASSROOM 16	18,000
DAC-15B	176 CLASSROOM 16	18,000
DAC-16A	175 CLASSROOM 14	18,000
DAC-16B	175 CLASSROOM 14	18,000
DAC-17A	174 CLASSROOM 12	18,000
DAC-17B	174 CLASSROOM 12	18,000
VRF-03	OUTDOOR UNIT	216,000
CU-3	OUTDOOR UNIT	18,000
DAC-18A	128 CLASSROOM 31	18,000
DAC-18B	128 CLASSROOM 31	18,000
DAC-19A	127 CLASSROOM 33	18,000
DAC-19B	127 CLASSROOM 33	18,000
DAC-20A	126 KINDERGARTEN 35	18,000
DAC-20B	126 KINDERGARTEN 35	18,000
DAC-21A	125 KINDERGARTEN 37	18,000
DAC-21B	125 KINDERGARTEN 37	18,000
DAC-22A	116 CLASSROOM 32	18,000
DAC-22B	116 CLASSROOM 32	18,000
DAC-23A	117 KINDERGARTEN 34	18,000
DAC-23B	117 KINDERGARTEN 34	18,000
DAC-24A	118 KINDERGARTEN 36	18,000
DAC-24B	118 KINDERGARTEN 36	18,000

Issues and Revisions

Date Description

Table with 2 columns: Date, Description

SCHEMATIC DESIGN  
PRELIMINARY  
NOT FOR  
CONSTRUCTION  
05-09-17

PA / PE: JSC  
Drawn By: JSC

© 2017  
Harriman Associates

SCHEDULES

M40.1