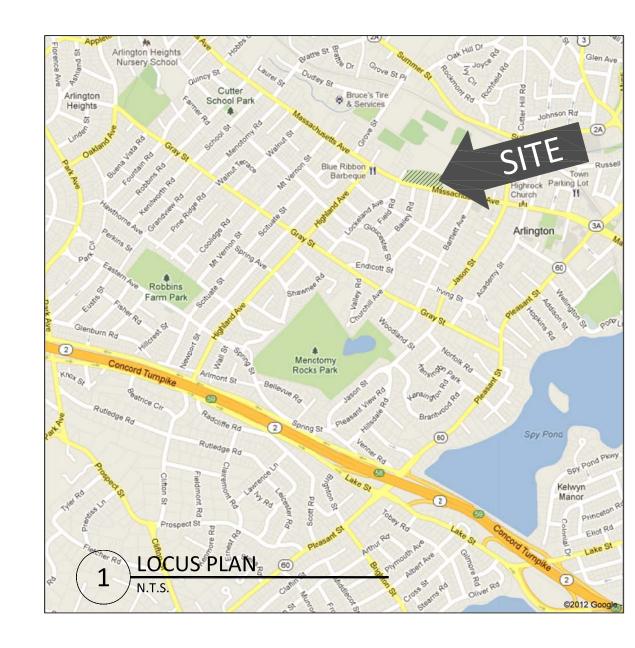
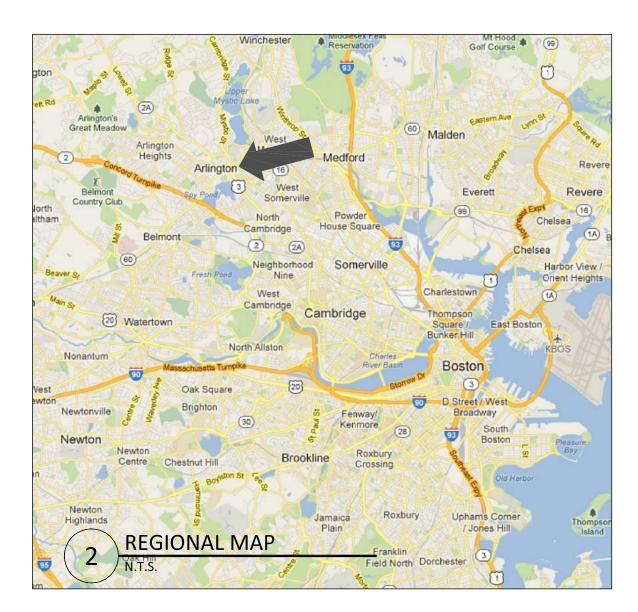
# 6TH FLOOR OFFICE RENOVATION ARLINGTON HIGH SCHOOL

869 MASSACHUSETTS AVENUE ARLINGTON, MA 02476

MARCH 27, 2011

# ISSUED FOR CONSTRUCTION





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#### ARCHITECT:

TUROWSKI2 ARCHITECTURE, Inc.

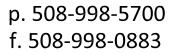
313 WAREHAM ROAD P.O. BOX 1290 MARION, MA 02738 p. 508-758-9777

f. 508-748-2444

#### M/E/P/FP ENGINEER:

GARCIA GALUSKA DESOUSA, INC.

370 FAUNCE CORNER ROAD DARTMOUTH, MA 02747 p. 508-998-5700

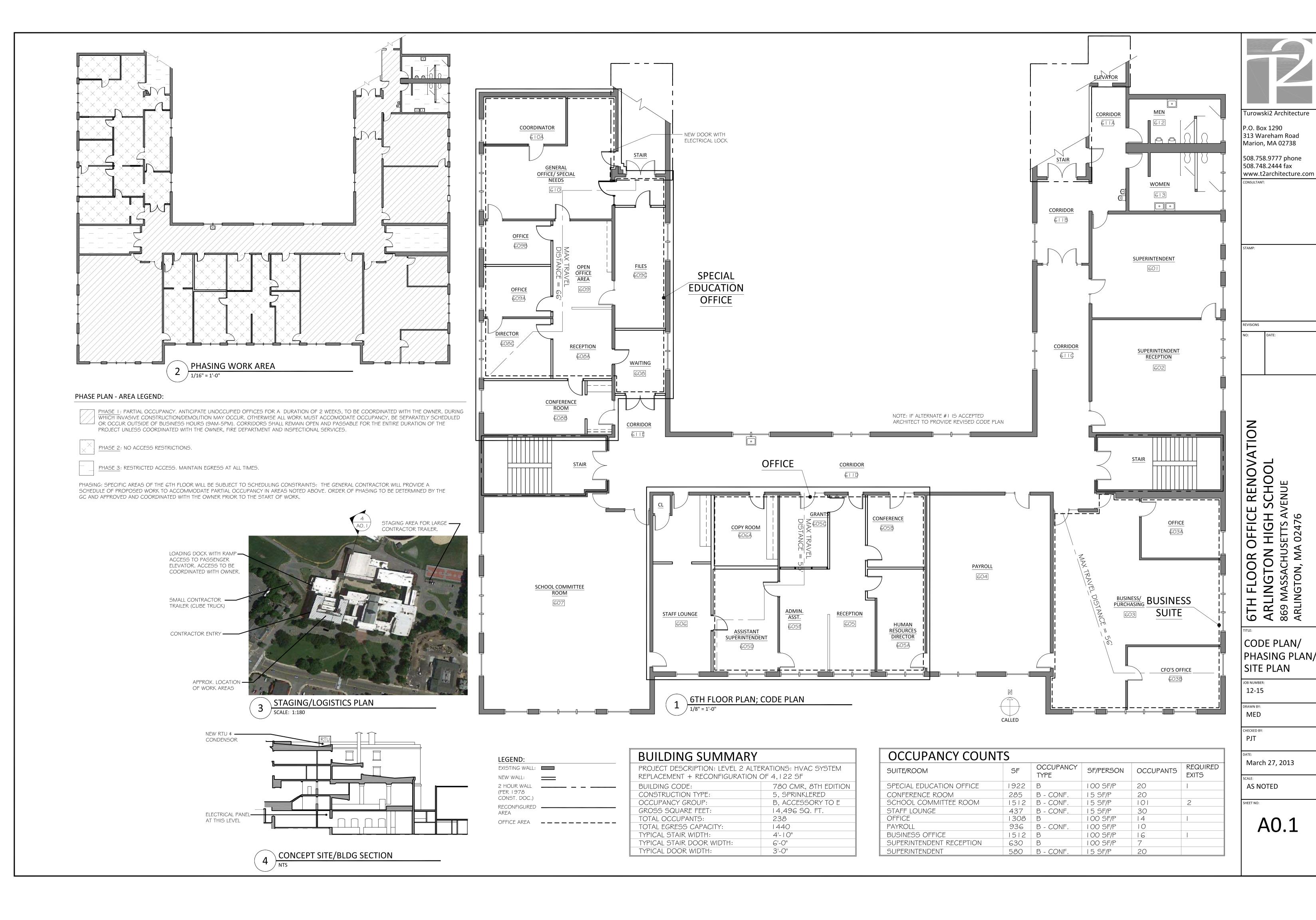


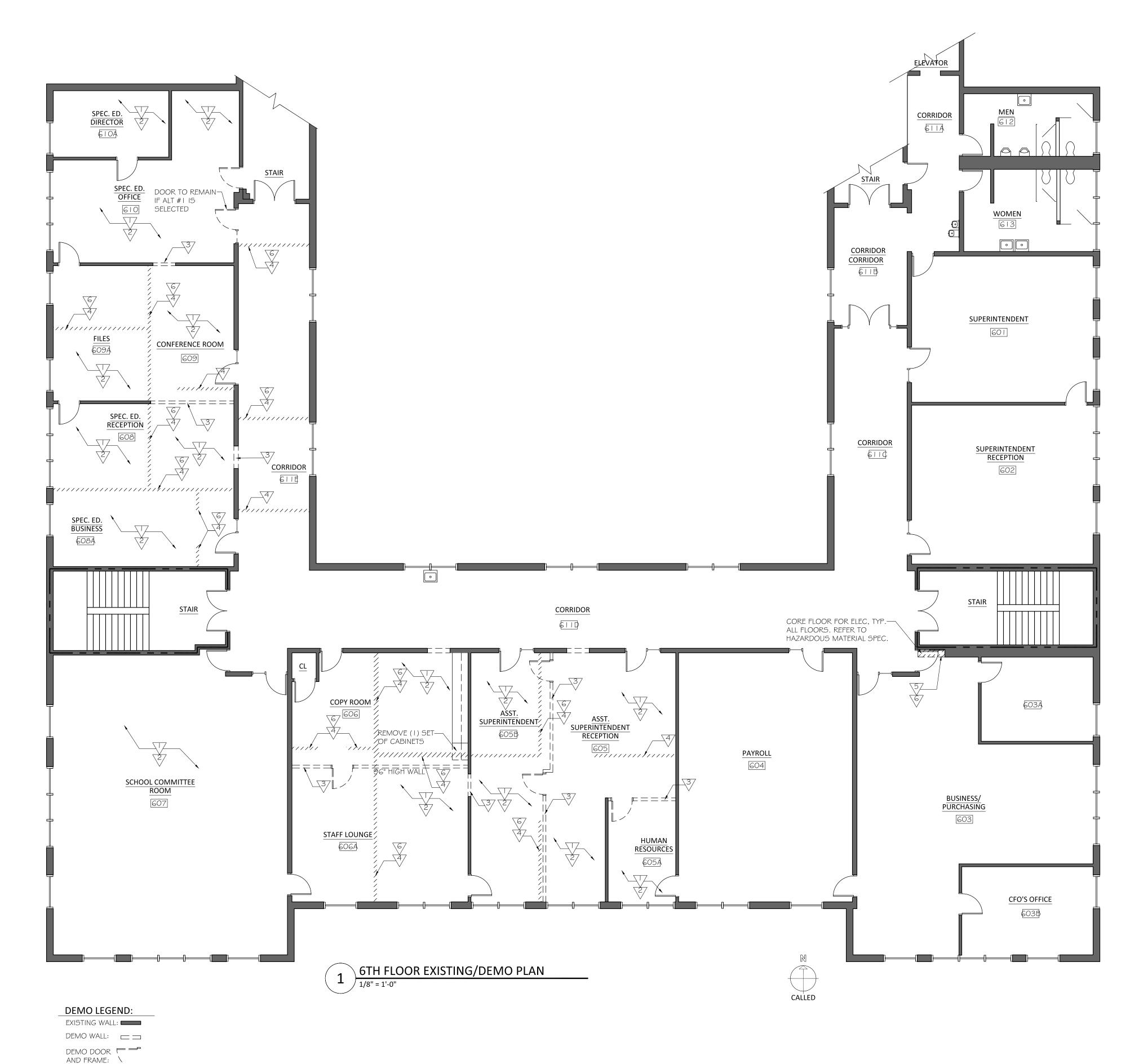


<u>ALTERNATE 1</u>: Deduction of work. Eliminate work associated with creating rooms 608C and 609C from project. Refer to Alternate Floor Plan for extent of reduced work. Eliminate all sprinkler upgrades.

<u>ALTERNATE 2</u>: Deduction of work. Eliminate new roof top unit and modify associated work. Refer to Alternate Roof Plan for extent of reduced scope.









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тамр:

REVISIONS

NO: D

NO: DATE:

6TH FLOOR OFFICE RENOVATION ARLINGTON HIGH SCHOOL 869 MASSACHUSETTS AVENUE ARLINGTON, MA 02476

EXISTING/
DEMO
FLOOR PLAN

OB NUMBER: 12-15

12-15

MED

CHECKED BY:

March 27, 2013

March 27, 2013

AS NOTED

AD1.1

### GENERAL NOTES - DEMO:

- I. REFER TO SPEC. SECTION 003 I 00-PROJECT INFORMATION, 020800-ASBESTOS ABATEMENT, 020820-MISCELLANEOUS HAZARDOUS MATERIAL HANDLING REQUIREMENTS.
- 2. ALL DEMOLITION THAT DISTURBS HAZARDOUS MATERIAL MUST BE PERFORMED UNDER CONTAINMENT.
- PROTECT OWNERS FIXED EQUIPMENT LEFT IN PLACE DURING DEMOLITION.
   SEE MEP/FP DRAWINGS FOR ADDITIONAL DEMO SCOPE.

#### DEMO KEY NOTES:

- THE CONTRACTOR SHALL REMOVE ALL CARPET AND ASSOCIATED ADHESIVE WITHIN FULL CONTAINMENT WITH NEGATIVE AIR FILTRATION (AS AN ENGINEERING CONTROL). CARPET MAY BE DISPOSED OF AS GENERAL CONSTRUCTION WASTE IF NO DISTURBANCE IS MADE TO UNDERLYING ASBESTOS CONTAINING FLOOR TILE.
- THE HAZARDOUS MATERIALS ABATEMENT CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL LOOSE/DAMAGED VINYL ASBESTOS FLOOR TILE RESULTING FROM CARPET REMOVAL (WITHIN FULL CONTAINMENT) TO ESTABLISH SOUND BASE FOR NEW CARPET.
- THE HAZARDOUS MATERIALS ABATEMENT CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL LOOSE/DAMAGED VINYL ASBESTOS FLOOR TILE RESULTING FROM WALL REMOVAL (WITHIN FULL CONTAINMENT) TO ESTABLISH SOUND BASE FOR NEW CARPET.
- THE HAZARDOUS MATERIALS ABATEMENT CONTRACTOR SHALL REMOVE AND DISPOSE OF TOP LAYER VINYL ASBESTOS FLOOR TILE ONLY LEAVING MASTIC ADHESIVE (WITHIN FULL CONTAINMENT) TO EXISTING UNDERLAYMENT TO ACCOMMODATE NEW WALLS.
- THE HAZARDOUS MATERIALS ABATEMENT CONTRACTOR SHALL REMOVE AND DISPOSE OF 4 SF OF ALL FLOORING LAYERS (TO EXISTING SUBFLOOR) TO FACILITATE CORE DRILLING ON ALL FLOORS. REMOVAL SHALL OCCUR WITHIN (6) MINI-ENCLOSURE CONTAINMENTS WHERE NOTED FOR NEW ELECTRICAL CONDUIT EXTENDING FROM 6TH FLOOR TO BASEMENT.

#### GENERAL KEY NOTES:

WHILE UNDER CONTAINMENT GC TO PATCH FLOORING WITH NEW RESILIENT FLOORING TO ESTABLISH ENCAPSULATION AND A SOUND BASE FOR NEW CARPET..

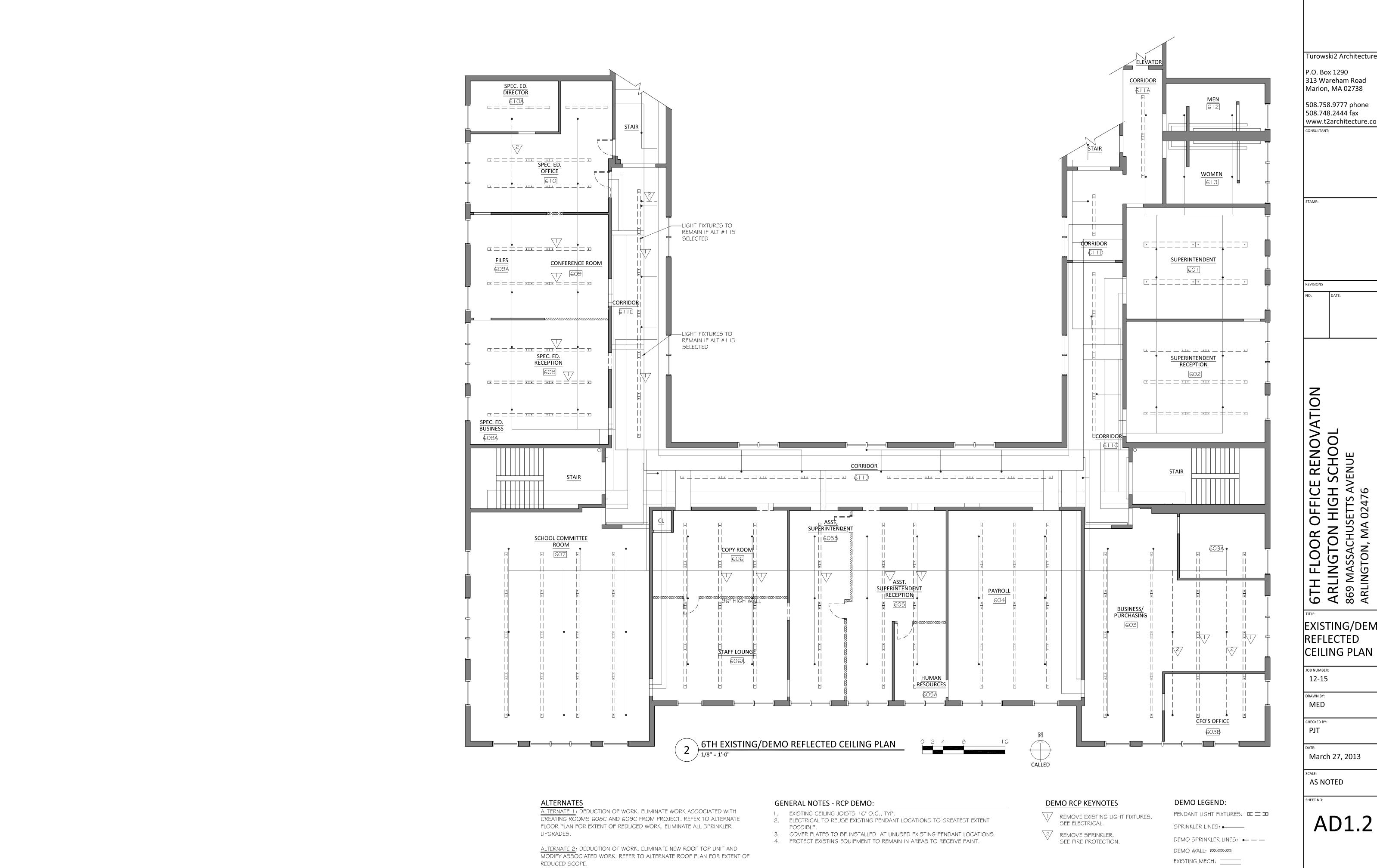
#### <u>ALTERNATES</u>

ALTERNATE 1: DEDUCTION OF WORK. ELIMINATE WORK ASSOCIATED WITH CREATING ROOMS 608C AND 609C FROM PROJECT. REFER TO ALTERNATE FLOOR PLAN FOR EXTENT OF REDUCED WORK. ELIMINATE ALL SPRINKLER UPGRADES.

ALTERNATE 2: DEDUCTION OF WORK. ELIMINATE NEW ROOF TOP UNIT AND MODIFY ASSOCIATED WORK. REFER TO ALTERNATE ROOF PLAN FOR EXTENT OF REDUCED SCOPE.

////.

FLOORING:



Turowski2 Architecture

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**EXISTING/DEMO** REFLECTED CEILING PLAN

AD1.2

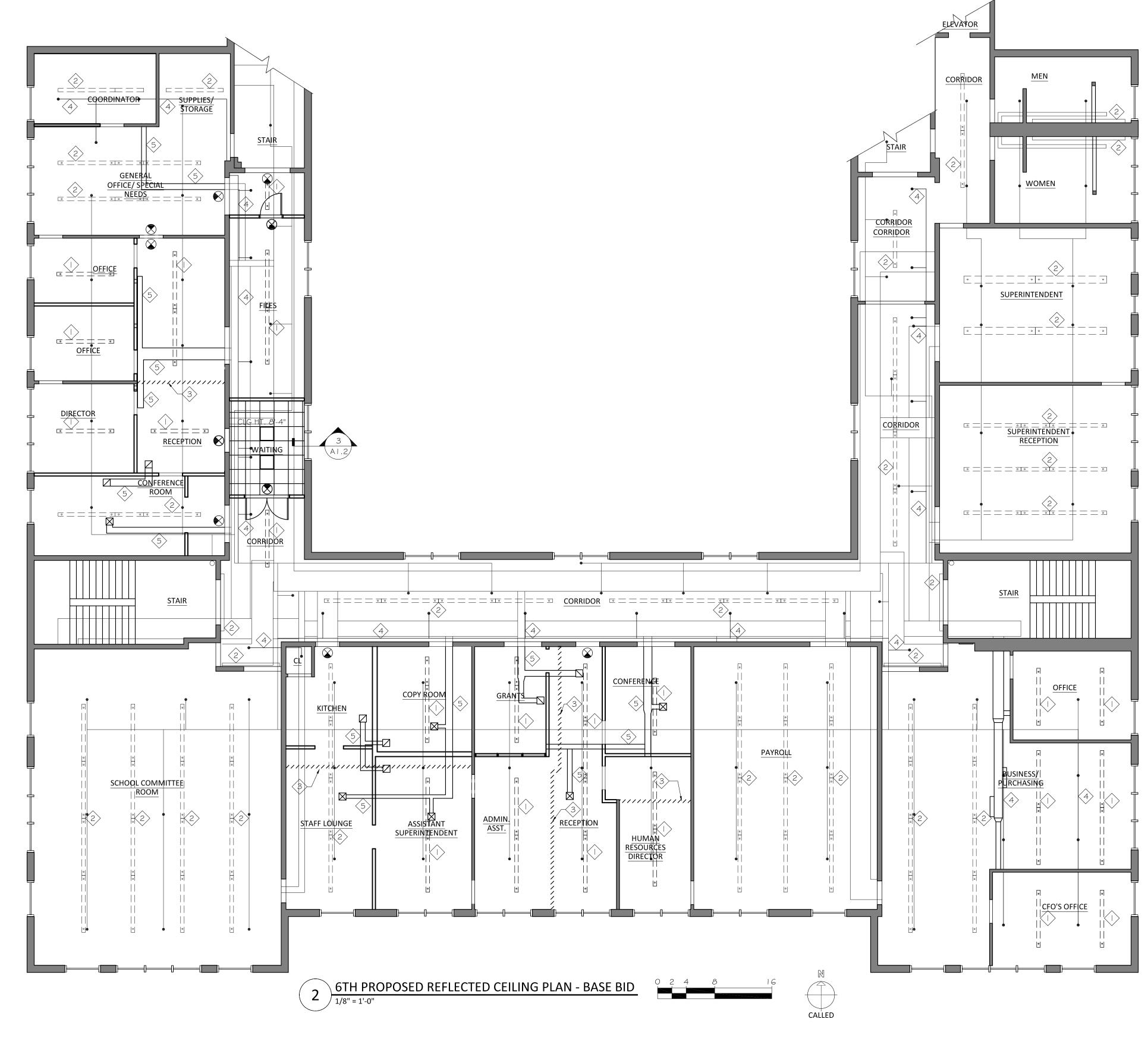


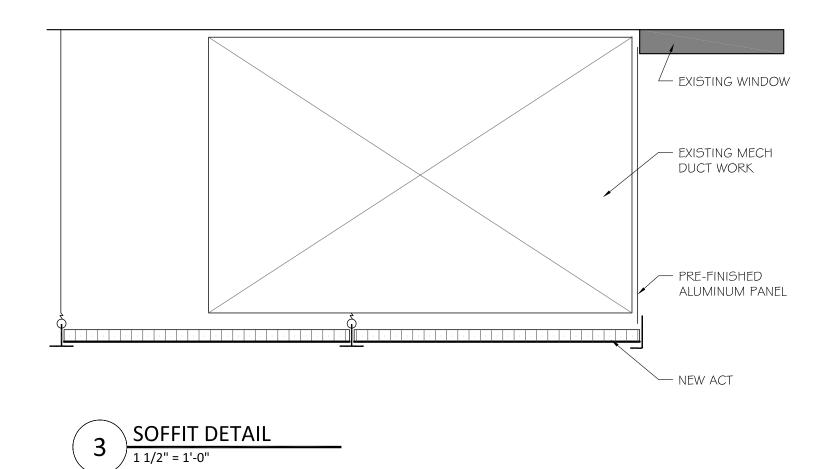
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**PROPOSED FLOOR PLAN** 

A1.1





#### **ALTERNATES**

ALTERNATE I: DEDUCTION OF WORK, ELIMINATE WORK ASSOCIATED WITH CREATING ROOMS 608C AND 609C FROM PROJECT. REFER TO ALTERNATE FLOOR PLAN FOR EXTENT OF REDUCED WORK. ELIMINATE ALL SPRINKLER UPGRADES.

ALTERNATE 2: DEDUCTION OF WORK. ELIMINATE NEW ROOF TOP UNIT AND MODIFY ASSOCIATED WORK. REFER TO ALTERNATE ROOF PLAN FOR EXTENT OF REDUCED SCOPE.

# **KEY NOTES**

NEW LIGHT FIXTURES REFER TO ELEC DWGS

2 EXISTING LIGHT FIXTURES

PATCH GYP BD CEILING TO MATCH EXISTING; WHERE WALL WAS REMOVED.

4 NEW SPRINKLER REFER TO MECH DWGS

5 NEW MECH

#### LEGEND:

PENDANT LIGHT FIXTURES: 📼 🗀 重

2x2 RECESSED LIGHT FIXTURES WITH 2x2 2x2 RECESSED LIGHT
FIXTURES WITH 2x2
SUSPENDED ACOUSTIC CEILING: EXIT SIGN:

SPRINKLER LINES: ●

# EXISTING MECH: NEW MECH:

#### **GENERAL NOTES:**

I. PROTECT EXISTING EQUIPMENT TO REMAIN IN AREAS TO RECEIVE PAINT.

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ARLINGTON HIGH SCHOOL
869 MASSACHUSETTS AVENUE
ARLINGTON, MA 02476

PROPOSED REFLECTED CEILING PLAN

JOB NUMBER: 12-15

MED CHECKED BY:

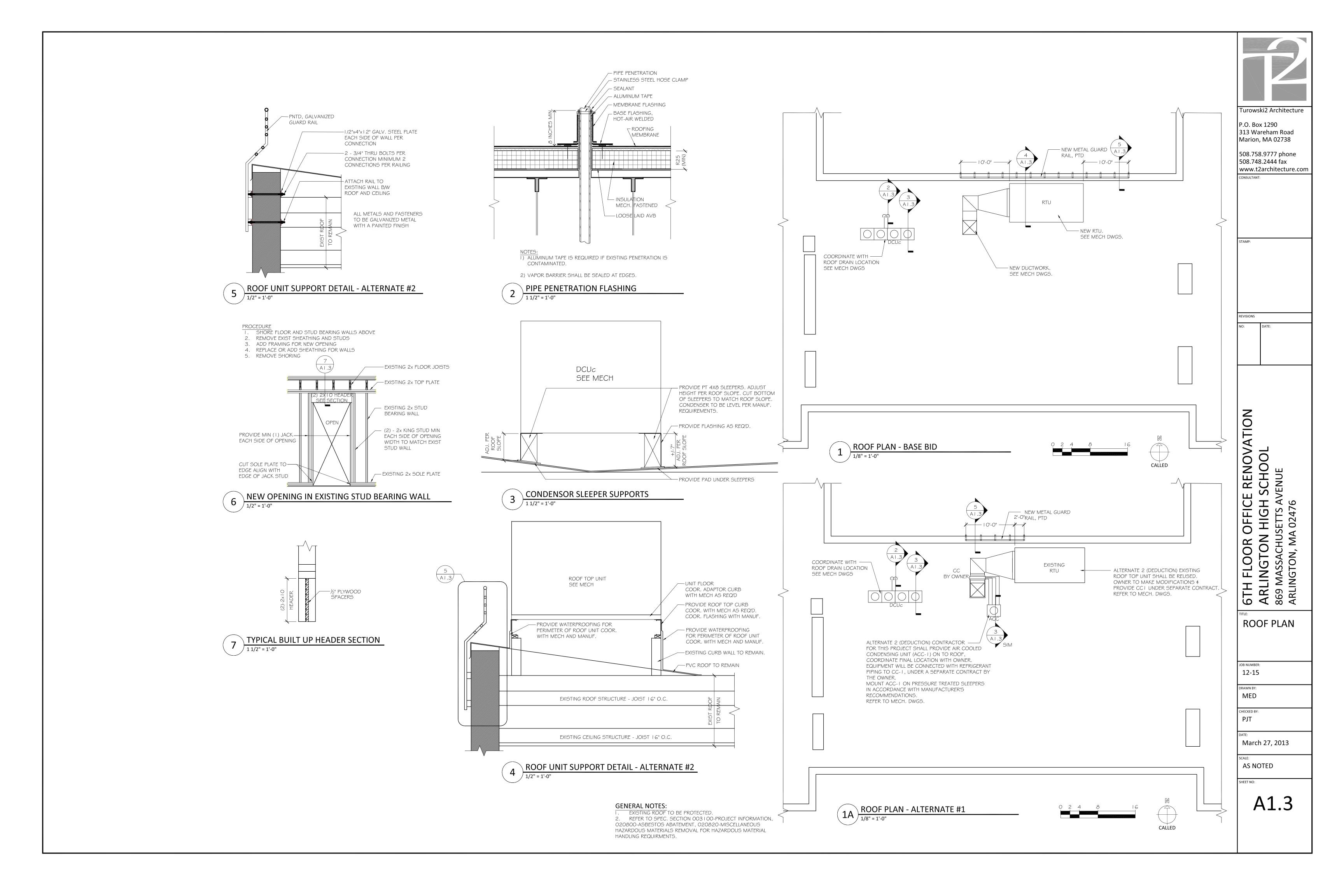
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PJT

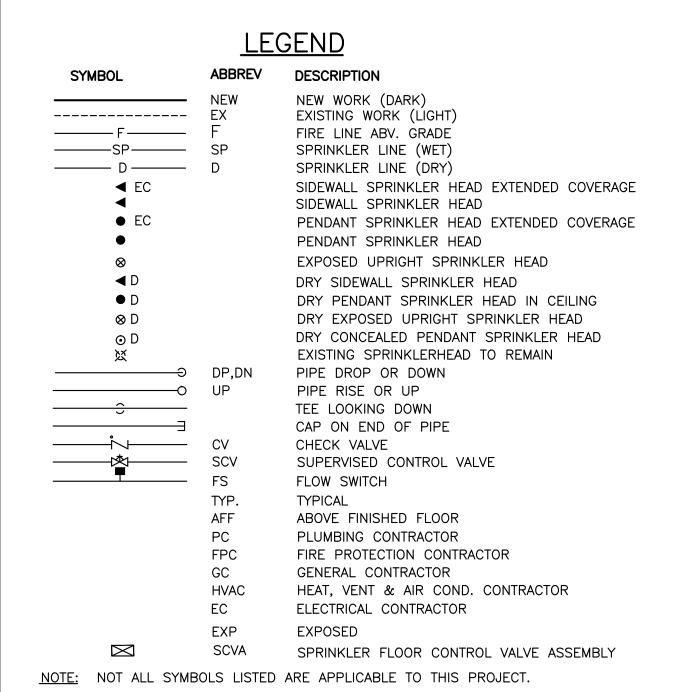
March 27, 2013

AS NOTED

A1.2



ROOM   FLOOR   CEILING   HEIGHT   WALL   NOATH   EAST   SOUTH   WEST   SUST   CEIST   SUST   SUST	LOCATION   SIZE   DOOR   FRAME   DETAILS   DOOR   FRAME   DETAILS   DOOR   PROVIDED	ER NONE
3-0' 2-0' 3-0' 5-5 5-5 5-5 5-5 5-5 5-5 5-5 5-5 5-5 5-	3'-O"  2" 3'-O"  2" 3'-O"  3'-O"  2" 3'-O"	TO'-O" M.O.  EQ 2" EQ 2" EQ 2" EXISTING CEILING  REVISIONS  NO: DATE:  SOUND BAT INSUL.
EXISTING CEILING HT  FIND CEILING HT  FIND CEILING HT  FOUND JE  FOUND BLOOD  GEA. SIDE)  SOUND BATT INSUL.  FIND, WOOD CAP  FIND, WOOD CAP  FIND, WOOD CAP  FIND, WOOD CAP  W' GYP, BD.  (EA. SIDE)  3.5/8" MTL STUD  WOOD BLOOD  GRANDER  FIND, WOOD CAP  WOOD BLOOD  GRANDER  FIND, WOOD CAP  WOOD BLOOD  GRANDER  FIND, WOOD CAP  W' GYP, BD.  (EA. SIDE)  3.5/8" MTL STUD  3.5/8" MTL STUD  3.5/8" MTL STUD  3.5/8" MTL STUD  WOOD SATT INSUL.  FIND, WOOD CAP  SOUND BATT INSUL.  SOUND BATT INSUL.	GHT  WETAL STUD PARTITION WALL SEE WALL TYPES  METAL CHANNEL ACOUSTIC SEALANT-BOTH SIDES OF WALL HOLLOW METAL FRAME ANCHORED TO WALL HOLLOW METAL FRAME ANCHORED TO WALL WOOL INSULATION DOOR PER SCHEDULE  WARIES VERIFY W WALL TYPE  OTUD  OTU	SOUND BAI INSUL. (PER WALL TYPE)  5/8" GYP BD. (EA. SIDE)  METAL STUD PARTITION WALL  METAL CHANNEL  HOLLOW METAL FRAME ANCHORED TO WALL  DOOR PER SCHEDULE  VARIES VERIFY FRAME DEPTH W/ WALL TYPE  TYP. DOOR HEAD AT GYP BD WALL  1 1/0" 1/0"
TING FLOOR  EXISTING FLOOR  O'-O"  O'-O"  WALL TYPE 2A  WALL TYPE 2B	$\langle \ \ \rangle$	TYP. DOOR HEAD AT EXIST WALL  1 1/2" = 1'-0"  TITLE:  SCHEDU  TYPES &
Land T. GLASS	SOUND DAT INSUL.  (PER WALL TYPE)  METAL STUD PARTITION  WALL  METAL CHANNEL  FLOOR FINISH REMOVAL.  HOLLOW METAL FRAME ANCHORED TO WALL  EXIST SUBFLOOR  DOOR PER SCHEDULE	SOUND BAT INSUL. (PER WALL TYPE)  METAL STUD PARTITION WALL (SEE WALL TYPES)  METAL CHANNEL  HOLLOW METAL FRAME ANCHORED TO WALL  JOB NUMBER: 12-15  DRAWN BY: MED  CHECKED BY: PJT
VARIES VERIFY W/ WALL TYPE  SALES VERIFY W/	THRESHOLD DETAIL  3" = 1'-0"  EXIST FLOOR STRUCT  CORRIDOR SIDE  ROOM SIDE	ANCHORED TO WALL  DOOR PER SCHEDULE  DATE:  March 27, 2  SCALE:  AS NOTED
VARIES VERIFY WY WALL TYPE  WALL TYPE  WARIES VERIFY WY WALL TYPE  WALL TYPE  WARIES VERIFY WY WALL TYPE  VARIES VERIFY WY WALL TYPE  TO STANDARD HM FRAME PROFILE	TUDESTIOLD DETAIL	TYP. DOOR JAMB AT GYP BD WALL  1 1/2" = 1'-0"  TYP. DOOR JAMB AT EXIST WALL  1 1/2" = 1'-0"



- - FIELD DIRECTIVE FROM THE ARCHITECT AS TO THE LOCATIONS OF ALL VISIBLE EQUIPMENT. 2. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING HEIGHTS AND AND LAYOUTS. REFER TO THE RESPECTIVE HVAC AND ELECTRICAL DRAWINGS FOR LIGHTING, DIFFUSER AND REGISTER LAYOUTS IN CEILINGS AND FOR PIPING, DUCTWORK AND EQUIPMENT At CEILINGS FOR COORDINATION PURPOSES. IN THE EVENT OF CONFLICT OR IF DIMENSIONS ARE NOT SHOWN, OBTAIN FIELD DIRECTIVE FROM THE ARCHITECT AS TO THE LOCATIONS OF ALL VISIBLE EQUIPMENT.

1. THE FIRE PROTECTION DRAWINGS ARE DIAGRAMMATIC AND ARE TO BE USED FOR THE PURPOSE

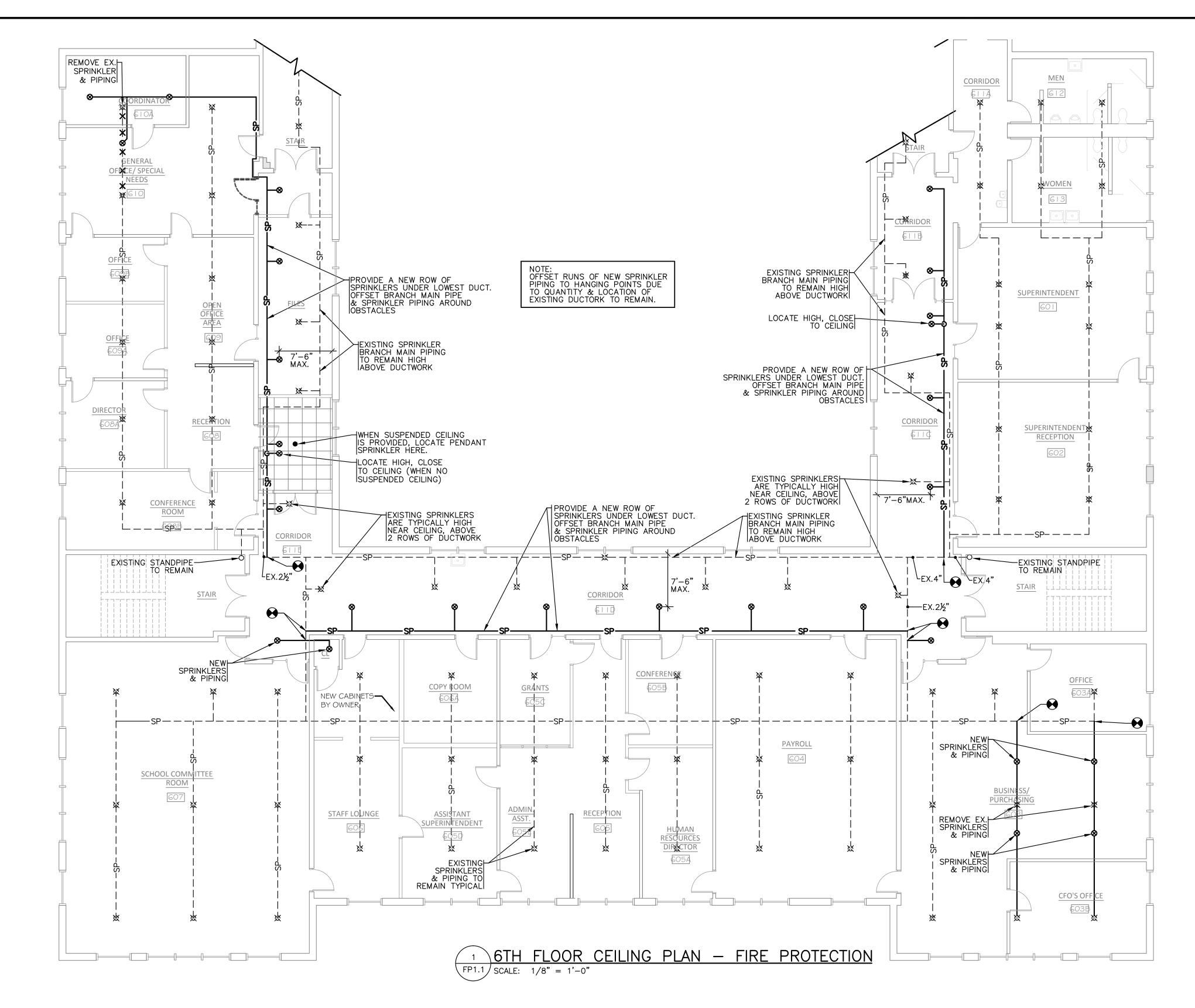
DIMENSIONS FOR EXACT LOCATIONS OF ALL SPRINKLER HEADS, AND EQUIPMENT, INCLUDING

OF ESTABLISHING GENERAL LOCATIONS OF PIPING RUNS, SIZES OF PIPING, AND QUANTITIES OF

FIXTURES AND EQUIPMENT TO BE FURNISHED HEREIN. REFER TO ARCHITECTURAL DRAWINGS FOR

MOUNTING HEIGHTS. IN THE EVENT OF CONFLICT OR IF DIMENSIONS ARE NOT SHOWN, OBTAIN

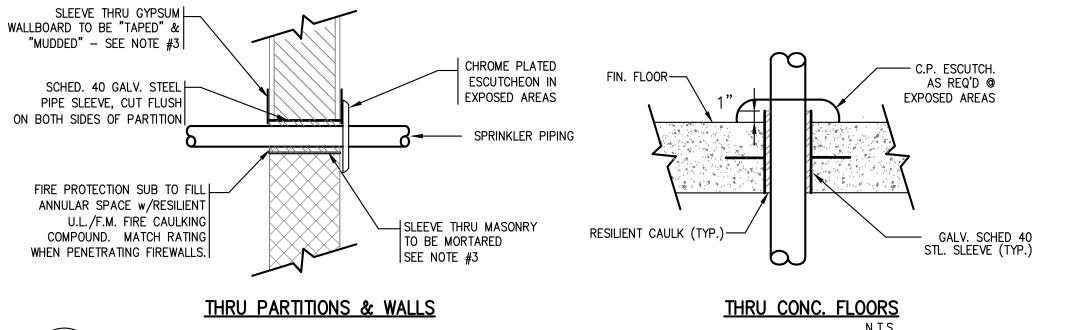
- 3. THE SPRINKLER CONTRACTOR SHALL PROVIDE AS PART OF THIS CONTRACT ALL SPRINKLERS BELOW FIXED OBSTRUCTIONS 48" AND LARGER AS REQUIRED BY NFPA 13, 8.6.5.3.3. IT IS THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR TO PROVIDE THE REQUIRED SPRINKLERS AND ALL ASSOCIATED PIPING, FITTINGS, HANGERS, ETC. FOR A COMPLETE INSTALLATION.
- 4. SPECIFIC ATTENTION IS DIRECTED TO THE REQUIREMENTS OF MBC 914.7, 3305.3, 3306.1, AND NFPA 241-2004 REGARDING THE MAINTENANCE OF FIRE PROTECTION SYSTEMS DURING CONSTRUCTION AND DEMOLITION. MAINTAIN THE SYSTEMS AS REQUIRED BY THESE STANDARDS AS A MINIMUM.
- 5. REFER TO NFPA 13 TABLE 8.3.2.5(a) FOR TEMPERATURE RATING OF SPRINKLERS BASED ON DISTANCE FROM HEAT SOURCES SUCH AS HEATING DUCTS, DIFFUSERS AND UNIT HEATERS.
- 6. THE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING THE SPRINKLER SYSTEM BACK ON LINE AND OPERATIONAL AT THE END OF EACH WORKING DAY
- 7. PAY ALL COSTS ASSOCIATED WITH ACTIVATING & DEACTIVATING THE FIRE ALARM SYSTEM TO PERFORM THE SPRINKLER WORK.
- 8. SPRINKLER CONTRACTOR IS TO PROTECT EXISTING SPRINKLER PIPING AND HEADS TO REMAIN. CONTRACTOR IS TO FIX ALL LEAKS THAT OCCUR IN THE EXISTING SYSTEM AT NO COST TO THE OWNER.



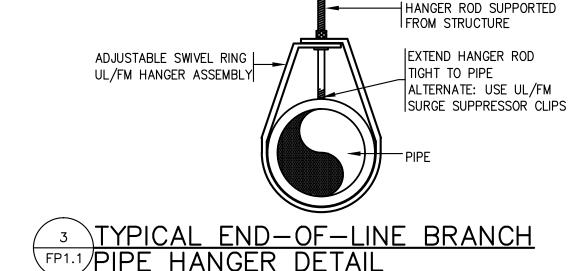


- 2. WHERE CONC. WALLS, SLABS, ETC., ARE CORE DRILLED, INSTALL SLEEVE FLUSH WITH BOTH SIDES, CAULKED & LEADED IN PLACE.
- 3. REFER TO DIVISION 4 & 9 FOR PROCEDURES & METHODS OF PATCHING AROUND SLEEVES AT GYPSUM, PLASTER & MASONRY. REFER TO SPECS FOR DELINEATION OF RESPONSIBILITY
- 4. SLEEVES SHALL BE SIZED TO PROVIDE MIN. 1" CLEARANCE BETWEEN PIPE O.D. & SLEEVE I.D. FOR PIPING UP TO 3" IN SIZE. PROVIDE 2" CLEARANCE BETWEEN PIPE O.D. & SLEEVE I.D. FOR PIPING 4" IN SIZE AND GREATER.

**SLEEVE NOTES** 



TYPICAL SLEEVE CONDITION DETAILS



NOTE: TO BE USED AT ALL END-OF-LINE BRANCH HANGERS THROUGHOUT PROJECT

SCALE:

<u>ALTERNATES</u>

ALTERNATE #1: ELIMINATE ALL SPRINKLER WORK. ALTERNATE #2: DOES NOT APPLY TO WORK OF THIS SECTION

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ATIO 

E RENC SCHOC VENUE HIGH OFFICE 1 ISE1 024 ARLINGTON I
869 MASSACHUS
ARLINGTON, MA

6TH FLOOR SPRINKLER REVISIONS FIRE PROTECTION

JOB NUMBER: 12-15

REJ

CMG

March 27, 2013

AS NOTED

	ROOFTOP UNIT WITH ENERGY RECOVERY																																					
UNIT	MANUF.	ADEA SEDVED	MIN EER	TOTAL	O.A.	MAX. COIL			HE	ATING DAT	4								CO	OLING DAT	Ä			VAV CONTRO	)L	SUF	PLY AIR				RETU	JRN All	R	E	NERGY WH	IEEL	REMARK	<b>/</b> S
NO.	NO.	AREA SERVED	(W/O WHEEL)	C.F.M.	C.F.M.	VEL.	ENT.	LVG.	HW	COIL DATA	١		R	EHEAT I	DATA	ENT.	COND.	LVG.	COND.	M.B.	.H.	NO. OF	STEPS/	VFD	E.S.P.	пр //	N.T. DI	ı R.F	ьм F	S D H	P VOI	ı T PH	I RDM	CAP	ACITY (MB	⊣)	] KEMAKA	.5
						F.P.M.	AIR°F	AIR°F	MBH	GPM E	WT LW	T WP	D CAP ME	H LAT	EAT	D.B.*F	W.B.*F	D.B.*F	W.B.*F	SENS.	TOTAL	COMP.	COMP.	DRIVE	IN.W.G.	п.Р.   V		1.   1	IVI   L.	.3.1 . 11.	' .   VOI	<u> </u>	1. K.F.W	HEAT	SENSIBLI	LATENT		
RTU-1	RN-015-8-0-EB09	6TH FLR	11.3	4000	4000	500	41.1	88.4	216.0	20	200 18	0 2.6	78	65	58	82	69	54	53	113	183	2	2	YES	1.0	5 2	08 3	17	60 1	.0" 3	20	8 3	1760	203.8	134.87	69.0	_	
ROOFTO	UNIT SELECTIONS FOR RTU	-1 BASED ON	"AAON".		-	-			-	-	-	-		-		-	-			-		-	-	-		-	-	-	-	-	-	-	-					

ROOFTOP MANUF. SHALL PROVIDE VARIABLE FREQUENCY DRIVES FOR SUPPLY AND RETURN AIR FANS AND ENERGY RECOVERY WHEELS (IF APPLICABLE) FOR EACH UNIT IN ACCORDANCE WITH DIV. 260000 REQUIREMENTS.

REFER TO DETAILS FOR ROOF CURB AND RTU MOUNTING INFORMATION.

					DUC	CTLESS C	OOLIN	G UN	IT SYSTE	MS								
UNIT	MANUF.	EVAD LOCATION	COND.	EVAPORATOR UNTS						CONDENSER UNITS								REMARKS
NO.	NO.	EVAP. LOCATION	PUMP	CFM	COOLING MBH	HTG MBH	V	PH	MAX. FUSE	TAG	MODEL	TONS	COOLING MBH	HTG MBH	٧	PH	MAX. FUSE	REMARKS
DCUe-1	PKFY 18	SUPERINTENDENT	CP-1	320	18	20.0	208	1	15.0									
DCUe-2	PKFY 24	SUPERINT. REC.	CP-1	570	24	27.0	208	1	15.0	]								
DCUe-3	PKFY 12	B/P OFFICE	CP-1	320	12	13.5	208	1	15.0	1								
DCUe-4	PKFY 15	BUSINESS PURCHASING	CP-1	320	15	17.0	208	1	15.0	_								
DCUe-5	PKFY 15	CFO'S OFFICE	CP-1	320	15	17.0	208	1	15.0									
DCUe-6	PKFY 15	BUSINESS PURCHASING	CP-1	320	15	17.0	208	1	15.0									
DCUe-7	PKFY 24	PAYROLL	CP-1	570	24	27.0	208	1	15.0									
DCUe-8	PKFY 06	SM CONFERENCE RM	CP-1	170	06	6.7	208	1	15.0	DCUc-1	PUHY-P288	24.0	288.0	323.0	208	3	1	SEE NOTE
DCUe-9	PKFY 12	HR DIRECTOR	CP-1	320	12	13.5	208	1	15.0	]							MOD 2-50	
DCUe-10	PKFY 06	GRANTS OFFICE	CP-1	170	06	6.7	208	1	15.0	1							MOD 3-35	
DCUe-11	PKFY 12	ADMIN ASSIST. RECPT.	CP-1	320	12	13.5	208	1	15.0	1								
DCUe-12	PKFY 12	ASSIST. SUPERINTEND.	CP-1	320	12	13.5	208	1	15.0	]								
DCUe-13	PKFY 12	STAFF LOUNGE	CP-1	320	12	13.5	208	1	15.0									
DCUe-14	PKFY 12	COORDINATOR	CP-1	320	12	13.5	208	1	15.0									
DCUe-15	PKFY 08	GEN OFF/SPEC. NEEDS	CP-1	170	08	9.0	208	1	15.0									
DCUe-16	PKFY 06	OFFICE	CP-1	170	06	6.7	208	1	15.0									
DCUe-17	PKFY 06	OFFICE	CP-1	170	06	6.7	208	1	15.0									
DCUe-18	PKFY 12	DIRECTOR	CP-1	320	12	13.5	208	1	15.0									
DCUe-19	PKFY 12	LG CONFERENCE RM	CP-1	320	12	13.5	208	1	15.0									
DCUe-20	PKFY 08	RECPT. OPEN OFFICE	CP-1	170	08	9.0	208	1	15.0									
DCUe-21	PKFY 30	SCHOOL COMM. RM	CP-1	710	30	34.0	208	1	15.0									
DCUe-22	PKFY 30	SCHOOL COMM. RM	CP-1	710	30	34.0	208	1	15.0	]								
DCUe-23	PKFY 30	SCHOOL COMM. RM	CP-1	710	30	34.0	208	1	15.0									

SELECTION BASED ON TRANE

SELECTION BASED ON "MITSUBISHI", PROVIDE WIRED T'STAT, LOW AMBIENT CONTROL AND INTERNAL MOUNTED CONDENSATE PUMP OF MODEL LISTED ABOVE. CFM BASED ON FANS SET AT LOW SPEED. PROVIDE WITH AIR COOLED CONDENSING UNIT AS INDICATED IN THE SCHEDULE. ALL REFRIGERANT TUBING SHALL BE SIZED BY UNIT MANUFACTURER. PROVIDE ALL NECESSARY JOINT KITS, FITTINGS AND ACCESSORIES FOR A COMPLETE OPERATING SYSTEM PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE NECESSARY EQUIPMENT FOR BMS INTERFACE. SYSTEM SHALL BE CAPABLE OF HEATING OR COOLING SYSTEM CHANGEOVER.

SYSTEM PUHY-P288 IS MADE UP OF 3 MODULES: MOD 1-PUHY 120, MOD 2-PUHY P96, MOD 3-PUHY P72. ELECTRICAL REQUIREMENTS BASED ON EACH MODULE.

	DIFFU:	SERS	
NO.	SIZE	STYLE	REMARKS
Α	SEE PLANS	530D	
В	SEE PLANS	AMX	
	TION BASED RICE		

NOTE 1: REFER TO DRAWINGS FOR FLOW DIRECTION, SIZE, CFM AND QUANTITIES

CP-1 SI-30

RET TI REG	URN/EXH/ RANSFER ISTER(R/E)
NO.	STYLE
1	530D
2	80D
	TION BASED RICE"

NOTE #1: REFER TO

REMARKS

DRAWINGS FOR

THROW DIRECTION,

SIZE & CFM AND

		QUANTITIES	
			_
CONDENSA	ATE PUMPS		
			_

WATER WATTS/HP VOLT PH.

10' 50 W 120 1

CP-1 SELECTION BASED ON "SAUERMANN". PROVIDE OVERFLOW SAFETY SWITCH FOR EACH PUMP W/ ALARM, ALSO EACH PUMP SHALL BE FURNISHED WITH PROVISIONS FOR DIRECT CONNECTION (HARD WIRE) WITH PIGTAIL READY FOR CONNECTION BY ELECTRICAL CONTRACTOR.

SERVICE G.P.H.

DCUe 3.0

AIR CONDITION	DNING	DESI	GN [	ATA		
		SUM	MER		WIN	TER
DESIGN AREA	0	UT	I	Ν	OUT	IN
	D.B.	W.B.	D.B.	RH %	D.B.	D.B.
ARLINGTON, MASSACHUSETTS	87	74	75	50	7.0	72

	AIR (	COOLED	CO	NDENSI	NG UN	IITS (F	OR ALTE	RNATE	1 01	NLY)
UNIT NO.	MANUF. NO.	SERVICE	ENT. D.B.	NOMINAL TONS	FANS NO./HP.	COMP. NO./TONS		REFRIG CIRCUITS		REMARKS
ACC-1	TTA150	AHU-1	95	12.5	1/1	2/5.6	208/3	2	R410A	

IF ALTERNATE NUMBER 1 IS ACCEPTED FOR THE PROJECT THE CONTRACTOR SHALL PROVIDE THIS EQUIPMENT AND PLACE ON ROOF. CONTRACTOR TO COORDINATE LOCATION ON ROOF WITH OWNER. UNIT SHALL BE MOUNTED ON 4x4 PT SLEEPERS IN ACCORNDACE WITH THE MANUFACTURER'S RECOMMENDATIONS. OWNER SHALL BE RESPOSIBLE FOR CONNECTING EQUIPMENT INTO EXISTING

#### GENERAL NOTES

1 ALL PIPING AND DUCTWORK UNLESS DIMENSIONED IS SHOWN DIAGRAMATICALLY ONLY, EXACT LOCATION SHALL BE DETERMINED IN FIELD AFTER COORDINATING WITH OTHER

2 FOR TYPICAL PIPING DIAGRAMS AND CONNECTIONS AT EQUIPMENT, SEE DETAIL DRAWINGS.

3 EXACT LOCATION OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES SHALL BE COORDINATED WITH LIGHTING FIXTURES. REFER TO REFLECTED CEILING PLAN.

4 FOR DETAILS OF ROOF CURBS, FLASHING, PIPING, AND VENTS THRU ROOF REFER TO ARCHITECTURAL DRAWINGS.

5 FOR LOCATION OF OPENINGS IN ROOF AND FLOORS REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS. PROVIDE TO SUIT EQUIPMENT.

6 AUTOMATIC VENTS, VALVES, ETC. THAT MUST BE SERVICED SHALL BE LOCATED IN ACCESSIBLE POSITIONS.

7 GENERAL CONTRACTOR SHALL PROVIDE CONCRETE BASES A 4" MINIMUM HEIGHT. LOCATION AND DIMENSIONS ARE APPROXIMATE.

8 THIS CONTRACTOR SHALL PROVIDE REMOVABLE PANELS AT LOCATIONS WHERE ACCESS TO VALVES, DAMPERS, FIRE DAMPERS, ETC. ARE REQUIRED.

9 ALL DUCTWORK SHALL HAVE JOINTS AND SEAMS FILLED WITH SEALANT FOR AIR TIGHT INSTALLATIONS.

10 PROVIDE SWING JOINTS AT ALL PIPING TAKEOFFS FROM MAINS (MINIMUM OF 3 ELBOWS).

11 ALL AIR VENTS SHALL BE INSTALLED WITH COCKS SUCH THAT VENTS CAN BE REMOVED WITHOUT DRAINING SUPPLY AND RETURN

12 PROVIDE DUCT ACCESS DOORS FOR ALL FIRE AND CONTROL DAMPERS LOCATED IN DUCTWORK RUNS.

13 HVAC CONTRACTOR SHALL COORDINATE ALL WORK WITH PLUMBING AND ELECTRICAL CONTRACTORS.

14 HVAC CONTRACTOR SHALL INFORM G.C. AS TO THE LOCATION AND SIZE OF ALL ACCESS PANELS.

15 ALL DOOR GRILLES SHALL BE BY G.C.

16 ALL SUPPORT STEEL UNLESS SHOWN ON STRUCTURAL DRAWINGS SHALL BE PROVIDED BY H.V.A.C. CONTRACTOR.

17 ALL DUCT ELBOWS SHALL BE LONG RADIUS (R=1.5), OR

SQUARE TYPE WITH DOUBLE THICKNESS TURNING VANES.

18 DUCT SMOKE DETECTORS INDICATED ARE TO BE PROVIDED & WIRED BY ELECTRICAL CONTRACTOR AND INSTALLED BY THIS CONTRACTOR. FIRE ALARM INTERLOCK BY E.C.

19 FOR ALL CONNECTIONS TO BUILDING STEEL REFER TO STRUCTURAL

20 TOTAL DYNAMIC HEAD AND STATIC PRESSURE INDICATED IN THE SCHEDULES IS BASED ON ENGINEERING ANALYSIS AND MAY NOT NECESSARILY MATCH ACTUAL INSTALLED CONDITIONS. THIS CONTRACTOR SHALL PROVIDE REQUIRED SHEAVES, BELTS AND DRIVES TO MEET VOLUME FLOW CHARACTERISTICS

21 PROVIDE 4" FLEXIBLE CONNECTION AT EACH DUCT CONNECTION TO FAN OR AIR HANDLING UNIT.

22 THE MANUFACTURER LISTED IN THE SCHEDULES REFLECTS THE BASIS OF DESIGN AS INDICATED ON THE CONTRACT DRAWINGS AND IS NOT INTENDED TO SUGGEST THE REQUIRED PROVIDER. REFER TO THE SPECIFICATIONS FOR A COMPLETE DESCRIPTION OF EACH PRODUCT REQUIRED AND REFERENCE "OR EQUAL" REQUIREMENTS.

23 PROVIDE ISOLATION VALVES AT EACH DUCTLESS COOLING UNIT INDOOR EVAPORATOR FOR SERVICING PURPOSES.

24 PROVIDE ALL DUCTWORK TRANSITIONS, FITTINGS AND OFFSETS REQUIRED FOR NEW DUCTWORK CONNECTIONS. TYPICAL FOR ALL NEW DUCTWORK CONNECTIONS AS WELL.

25 PROVIDE DUCT CONNECTIONS FROM DUCT MOUNTED SUPPLY AND RETURN GRILLES TO NEW OR EXISTING DUCTWORK. DUCTWORK SHALL BE FULL WIDTH AND HEIGHT OF GRILLE.

#### **LEGEND**

DIA

SYMBOL

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MANUF

HVAC

MD

FD

#### DIAMETER HHWS HEATING HOT WATER SUPPLY HHWR HEATING HOT WATER RETURN REFRIGERANT LIQUID REFRIGERANT SUCTION GATE VALVE GLOBE VALVE CHECK VALVE BUTTERFLY VALVE BALL VALVE THREE-WAY CONTROL VALVE TWO-WAY CONTROL VALVE FLOW METERING ELEMENT CIRCUIT SETTER VALVE TRIPLE DUTY VALVE DRAIN VALVE PLUG VALVE SAFETY VALVE STRAINER UNION AUTOMATIC AIR VENT PIPE UP (ELBOW) PIPE DOWN (ELBOW) PRESSURE GAGE WITH GAGE COCK THERMOMETER BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF BOTTOM BRANCH CONNECTION OUT OF SIDE CAP ON END OF PIPE FLOW IN DIRECTION OF ARROW THERMOSTAT SUPPLY AIR DUCT SECTION RETURN/EXHAUST AIR DUCT SECTION SUPPLY AIR RETURN/EXHAUST AIR MOTORIZED DAMPER FIRE DAMPER VOLUME DAMPER BACKDRAFT DAMPER SMOKE DETECTOR BMS SENSOR THERMOSTAT

DESCRIPTION

CONNECT NEW TO EXISTING

LIMIT OF DEMOLITION

KEY NOTE (DEMOLITION DRAWINGS)

TO BE DEMOLISHED ABOVE FINISHED FLOOR AUTOMATIC TEMP. CONTROL BUILDING MANAGEMENT SYSTEM CUBIC FEET PER MINUTE DOOR GRILLE ENTERING AIR TEMPERATURE EXHAUST FAN ENTERING WATER TEMPERATURE EXTERNAL STATIC PRESSURE EXISTING TO REMAIN ENTERING DRY BULB ENTERING WET BULB FAN COIL GENERAL CONTRACTOR HEATING, VENTILATING AND AIR COND. HORSEPOWER LEAVING AIR TEMPERATURE LEAVING DRY BULB

LEAVING WET BULB LEAVING WATER TEMPERATURE MANUFACTURER NOT TO SCALE OUTSIDE AIR PLUMBING CONTRACTOR PRESSURE DROP PHASE RETURN AIR

REHEAT COIL ROOF TOP UNIT SUPPLY AIR OR SOUND ATTENUATOR TO BE REMOVED TOTAL DYNAMIC HEAD TOTAL STATIC PRESSURE

UNDERCUT DOOR UNIT HEATER (CABINET OR HORIZONTAL) UNIT VENTILATÓR

VOLTS VELOCITY

ROOF HOOD

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HVAC LEGEND, **SCHEDULES AND GENERAL NOTES** 

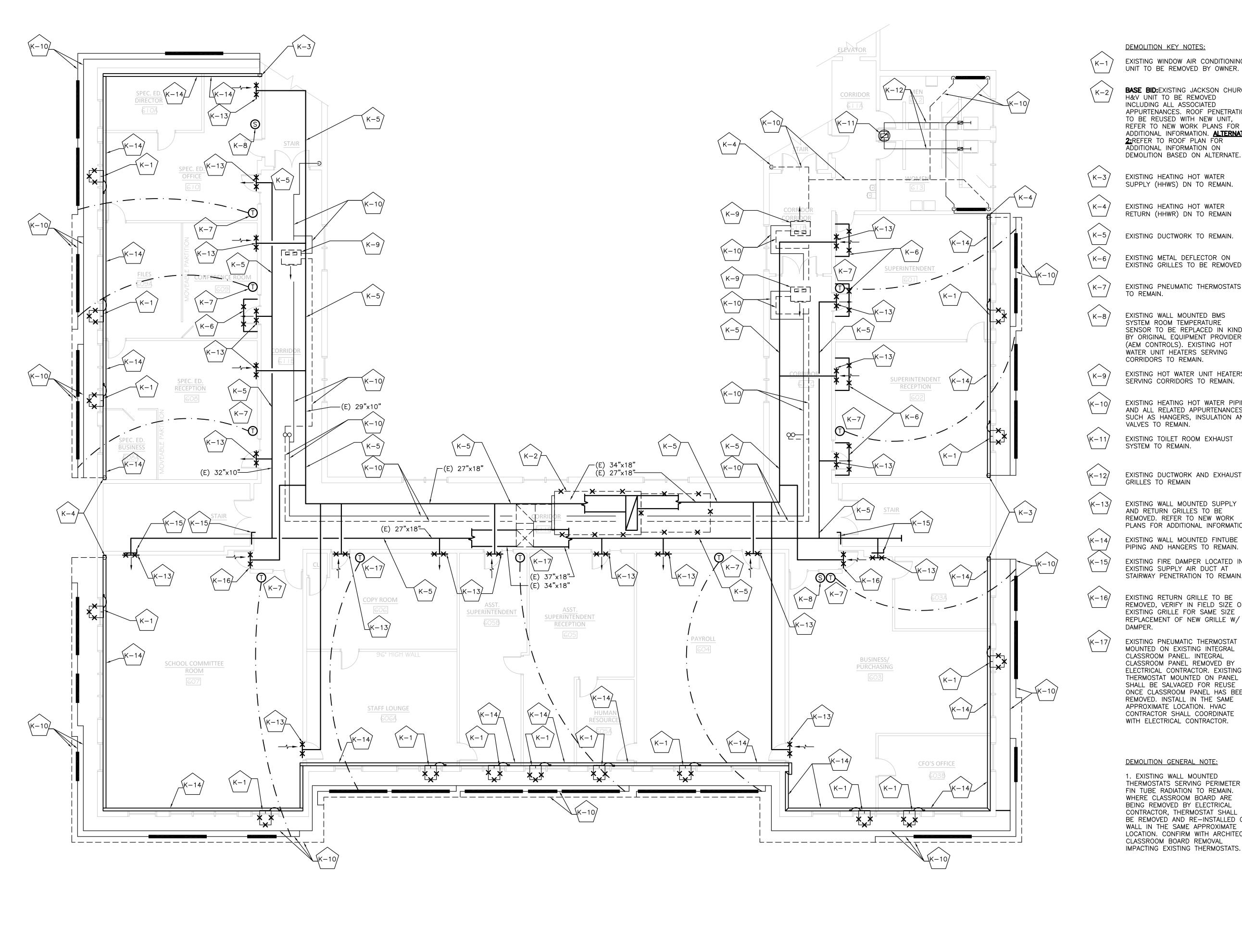
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March 27, 2013

**AS NOTED** 

SHEET NO:





EXISTING WINDOW AIR CONDITIONING UNIT TO BE REMOVED BY OWNER.

BASE BID: EXISTING JACKSON CHURCH H&V UNIT TO BE REMOVED INCLUDING ALL ASSOCIATED APPURTENANCES. ROOF PENETRATION TO BE REUSED WITH NEW UNIT, REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION. ALTERNATE 2:REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION ON

EXISTING HEATING HOT WATER

SUPPLY (HHWS) DN TO REMAIN.

RETURN (HHWR) DN TO REMAIN

EXISTING DUCTWORK TO REMAIN.

EXISTING METAL DEFLECTOR ON EXISTING GRILLES TO BE REMOVED.

EXISTING PNEUMATIC THERMOSTATS

EXISTING WALL MOUNTED BMS SYSTEM ROOM TEMPERATURE SENSOR TO BE REPLACED IN KIND BY ORIGINAL EQUIPMENT PROVIDER (AEM CONTROLS). EXISTING HOT WATER UNIT HEATERS SERVING

CORRIDORS TO REMAIN. EXISTING HOT WATER UNIT HEATERS SERVING CORRIDORS TO REMAIN.

EXISTING HEATING HOT WATER PIPING AND ALL RELATED APPURTENANCES SUCH AS HANGERS, INSULATION AND VALVES TO REMAIN.

EXISTING TOILET ROOM EXHAUST SYSTEM TO REMAIN.

EXISTING DUCTWORK AND EXHAUST GRILLES TO REMAIN

EXISTING WALL MOUNTED SUPPLY AND RETURN GRILLES TO BE REMOVED. REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION.

EXISTING WALL MOUNTED FINTUBE PIPING AND HANGERS TO REMAIN.

EXISTING FIRE DAMPER LOCATED IN EXISTING SUPPLY AIR DUCT AT STAIRWAY PENETRATION TO REMAIN.

EXISTING RETURN GRILLE TO BE

REMOVED, VERIFY IN FIELD SIZE OF EXISTING GRILLE FOR SAME SIZE REPLACEMENT OF NEW GRILLE W/ DAMPER.

EXISTING PNEUMATIC THERMOSTAT MOUNTED ON EXISTING INTEGRAL CLASSROOM PANEL. INTEGRAL CLASSROOM PANEL REMOVED BY ELECTRICAL CONTRACTOR. EXISTING THERMOSTAT MOUNTED ON PANEL SHALL BE SALVAGED FOR REUSE ONCE CLASSROOM PANEL HAS BEEN REMOVED. INSTALL IN THE SAME APPROXIMATE LOCATION. HVAC CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR.

**DEMOLITION GENERAL NOTE:** 

1. EXISTING WALL MOUNTED THERMOSTATS SERVING PERIMETER FIN TUBE RADIATION TO REMAIN. WHERE CLASSROOM BOARD ARE BEING REMOVED BY ELECTRICAL CONTRACTOR, THERMOSTAT SHALL BE REMOVED AND RE-INSTALLED ON WALL IN THE SAME APPROXIMATE LOCATION. CONFIRM WITH ARCHITECT CLASSROOM BOARD REMOVAL IMPACTING EXISTING THERMOSTATS.



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**HVAC 6TH FLOOR EXISTING CONDITIONS** AND DEMOLITION PLAN JOB NUMBER:

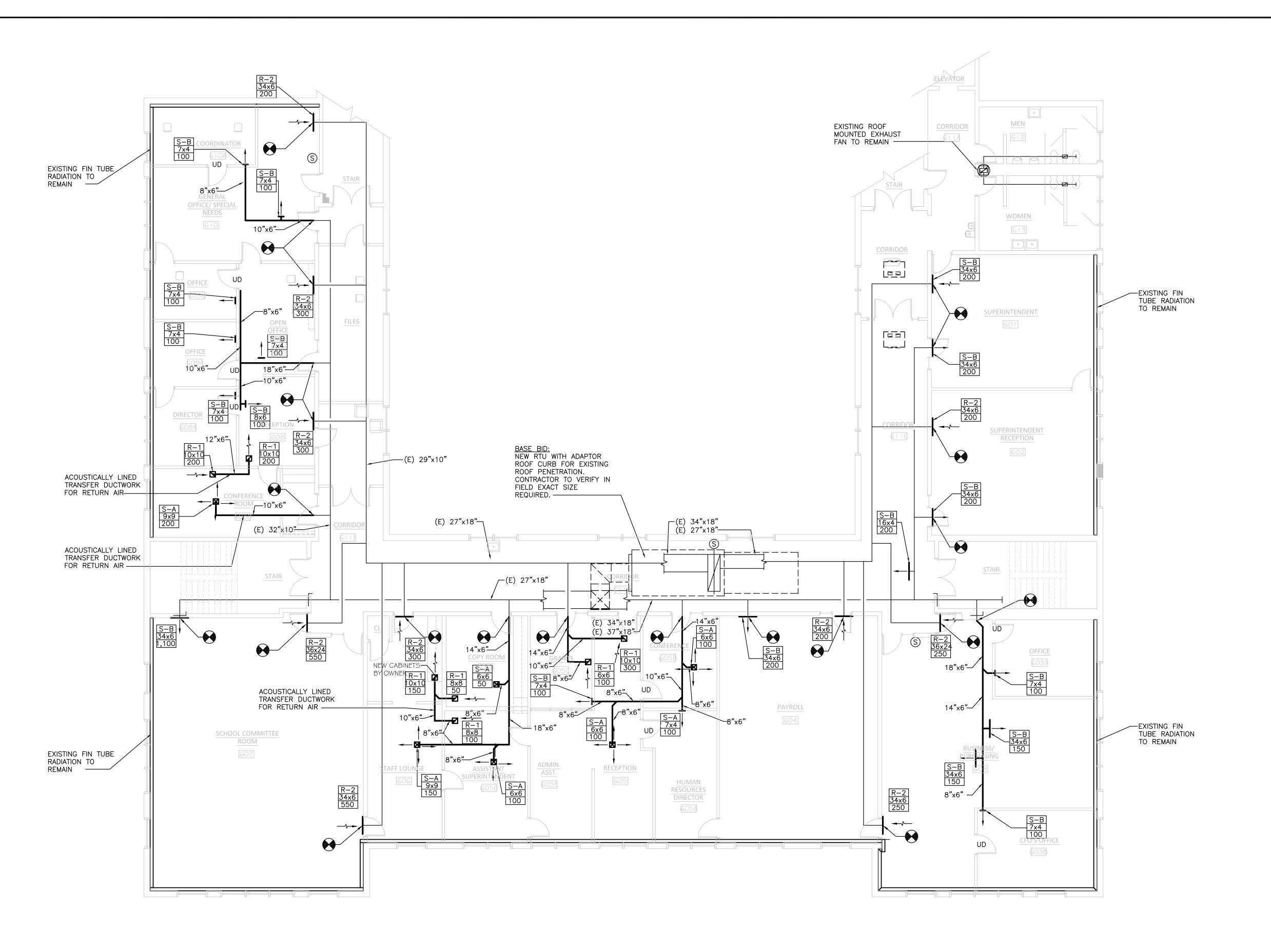
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BDM

March 27, 2013

**AS NOTED** 



NEW WORK NOTES:

- 1. ALL EXPOSED DUCTWORK & RELATED APPURTENANCES SHALL BE PAINTED. FINISH SHALL BE APPROVED BY THE ARCHITECT. CONFIRM PRIMING AND PAINTING REQUIREMENTS WITH ARCHITECTURAL SPECIFICATIONS.
- CONDENSATE FROM DCUe UNITS SHALL RISE INTO THE ATTIC SPACE TO RUN HORIZONTAL.
- 3. HORIZONTAL CONDENSATE RUNS SHALL BE PITCHED MINIMUM 1/8"=1'-0". CLEANOUTS SHALL BE PROVIDED AT EVERY CHANGE OF DIRECTION IN CONDENSATE PIPING
- 4. CP-1 SHALL BE MOUNTED BELOW CEILING IN EACH SPACE TO REMAIN IN AN ACCESSIBLE LOCATION.
- 5. REFRIGERANT LINES AND CONDENSATE PIPING FOR UNITS MOUNTED ON NEW WALLS SHALL HAVE PIPING CONCEALED TO THE GREATEST EXTENT POSSIBLE. PIPING TO EQUIPMENT MOUNTED ON EXISTING TO REMAIN WALLS SHALL BE CONCEALED BY PIPING ENCLOSURE, FINISH SHALL BE APPROVED BY ARCHITECT.
- 6. PROVIDE ALL DUCT TRANSITIONS, FITTINGS & OFFSETS REQUIRED FOR EXISTING TO NEW DUCTWORK CONNECTIONS. TYPICAL FOR ALL NEW DUCTWORK CONNECTIONS AS WELL.
- 7. PROVIDE DUCT CONNECTIONS FROM NEW GRILLE TO NEW OR EXISTING DUCTWORK. DUCTWORK SHALL BE FULL WIDTH AND HEIGHT OF GRILLE, MOUNTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 8. PROVIDE ISOLATION VALVES AT EACH DUCTLESS COOLING INDOOR EVAPORATOR (DCUe) FOR SERVICING.



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HVAC 6TH FLOOR DUCTWORK VENTILATION LAYOUT

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March 27, 2013

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