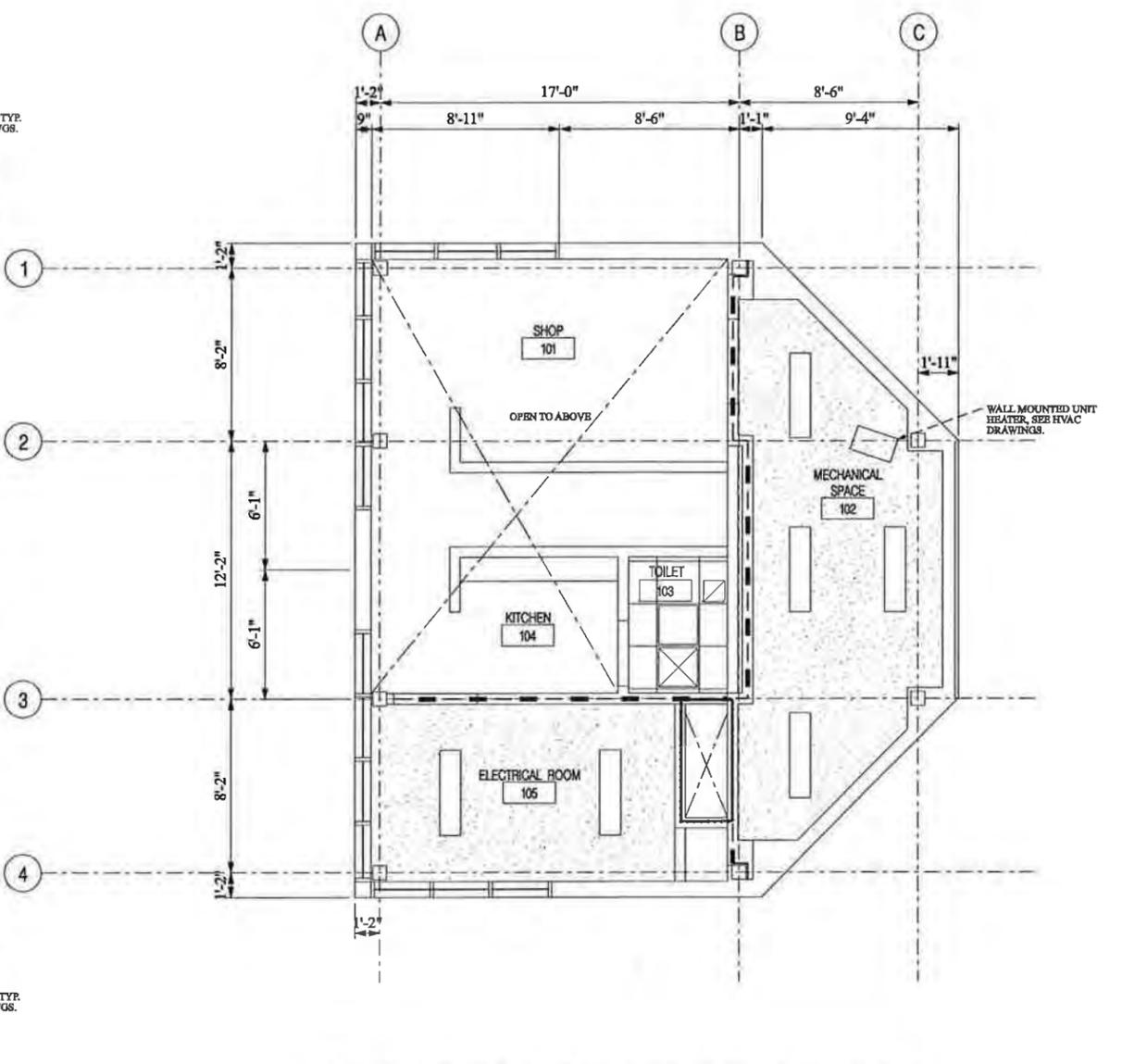


1 CONTROL HOUSE FIRST FLOOR PLAN
1/4" = 1' - 0"

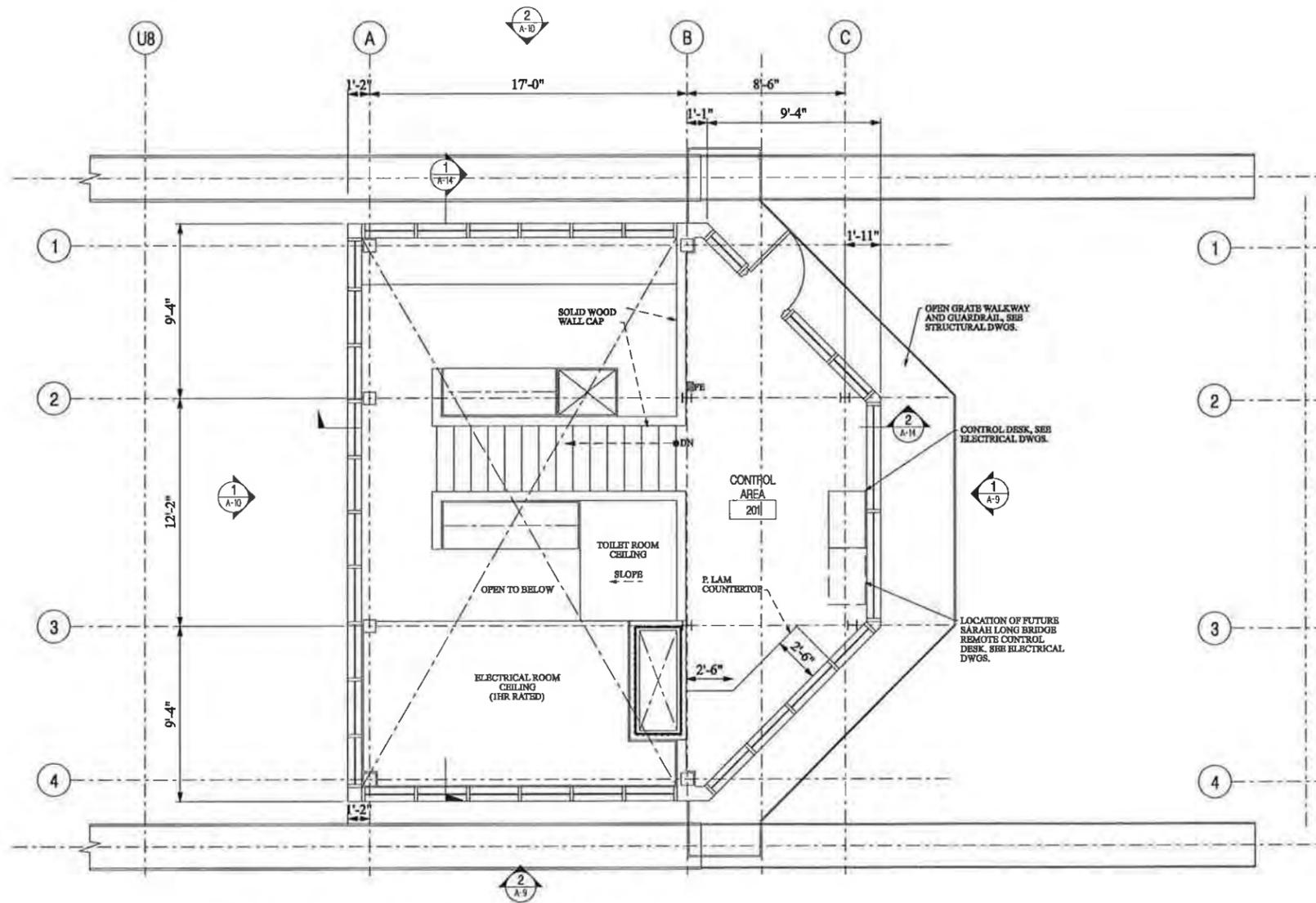


2 CONTROL HOUSE FIRST REFLECTED CEILING PLAN
1/4" = 1' - 0"

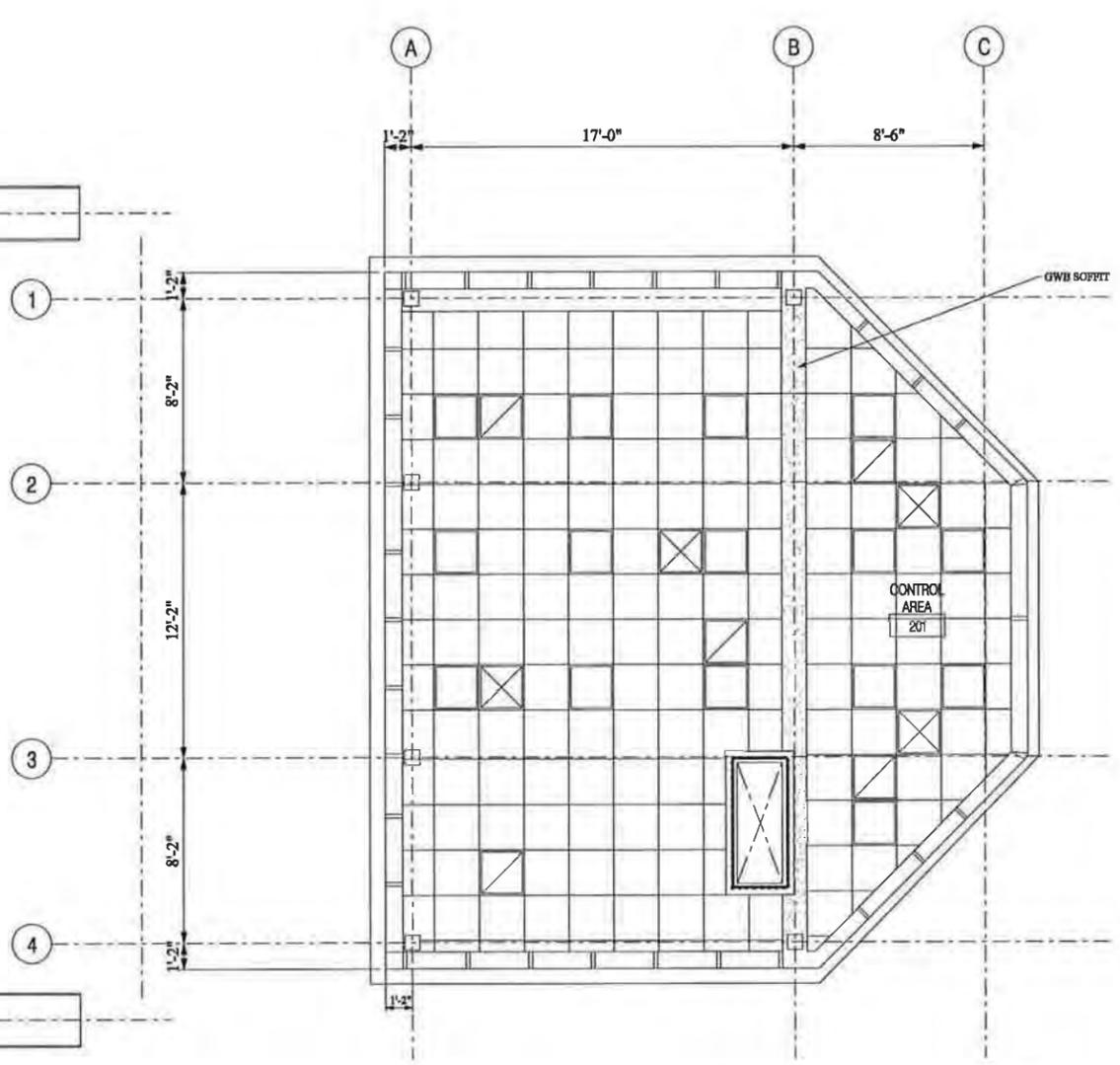
LEGEND	
	RECESSED 4'-0" X 1'-0" FLOURESCENT LIGHT FIXTURE
	RECESSED 2'-0" X 2'-0" FLOURESCENT LIGHT FIXTURE
	2'-0" X 2'-0" ACT
	2 HR RATED WALL
	1 HR RATED WALL

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE FIRST FLOOR AND RCP PLANS									BRIDGE SHEET
DESIGNED	XXX	04/11	CHECKED	XXX	XX/XX	A-1 of A-15			
DRAWN	XXX	04/11	CHECKED	XXX	XX/XX	FILE NUMBER			
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX	-			
ISSUE DATE			FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS			
REV. DATE					1	27			

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-01	1/4" = 1' - 0"



1
A-2 CONTROL HOUSE SECOND FLOOR PLAN
1/4" = 1' - 0"

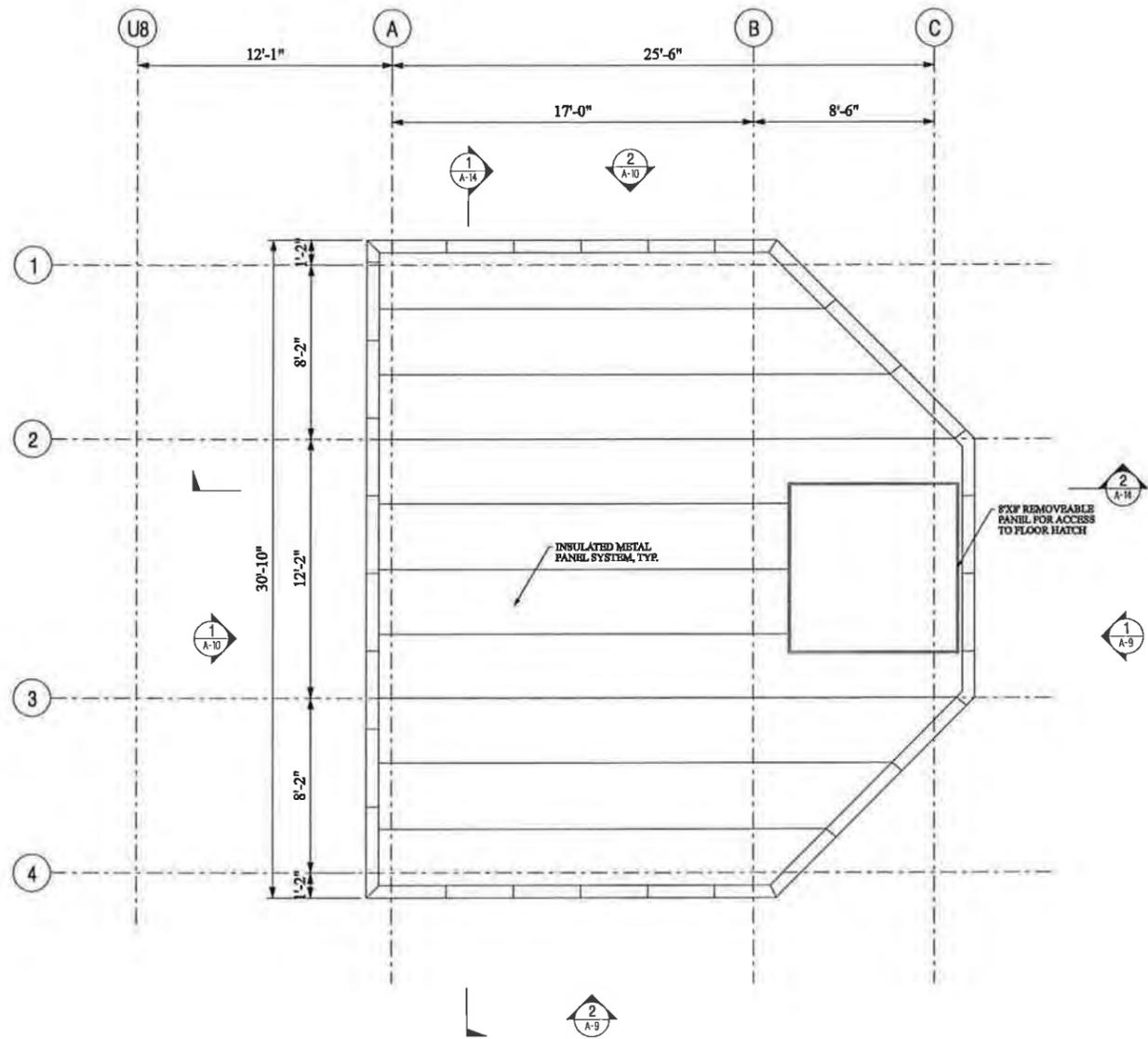


2
A-2 CONTROL HOUSE SECOND FLOOR REFLECTED CEILING PLAN
1/4" = 1' - 0"

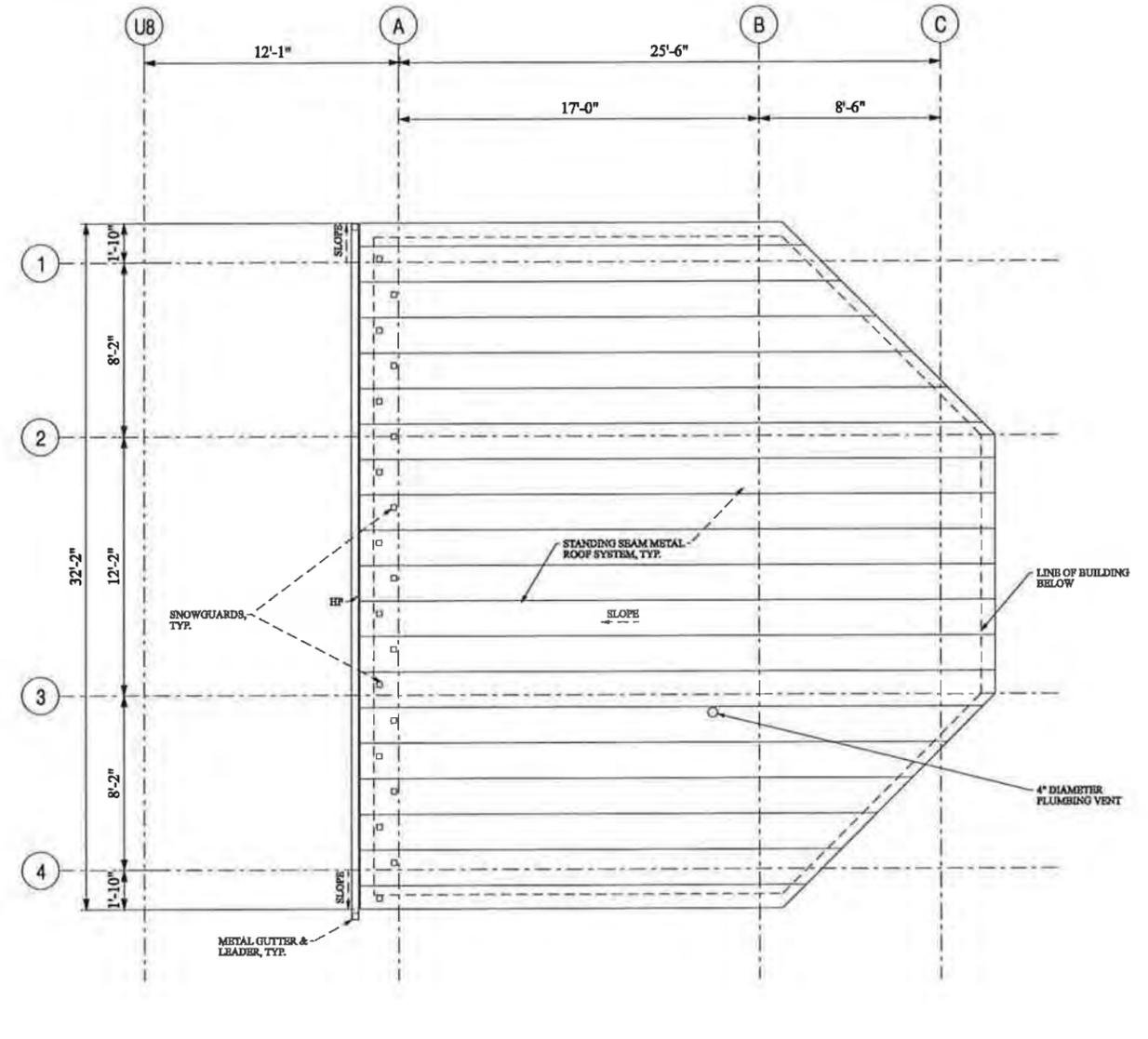
LEGEND	
	2'-0" X 2'-0" FLOURESCENT LIGHT FIXTURE
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILL
	2 HR RATED WALL

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE SECOND FLOOR AND RCP PLANS								BRIDGE SHEET	A-2 OF A-15
DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER			
DRAWN	XXX	03/11	CHECKED	XXX	XX/XX				
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX				
ISSUE DATE			FEDERAL PROJECT NO.			SHEET NO.	2	TOTAL SHEETS	27
REV. DATE									

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-02	1/4" = 1' - 0"



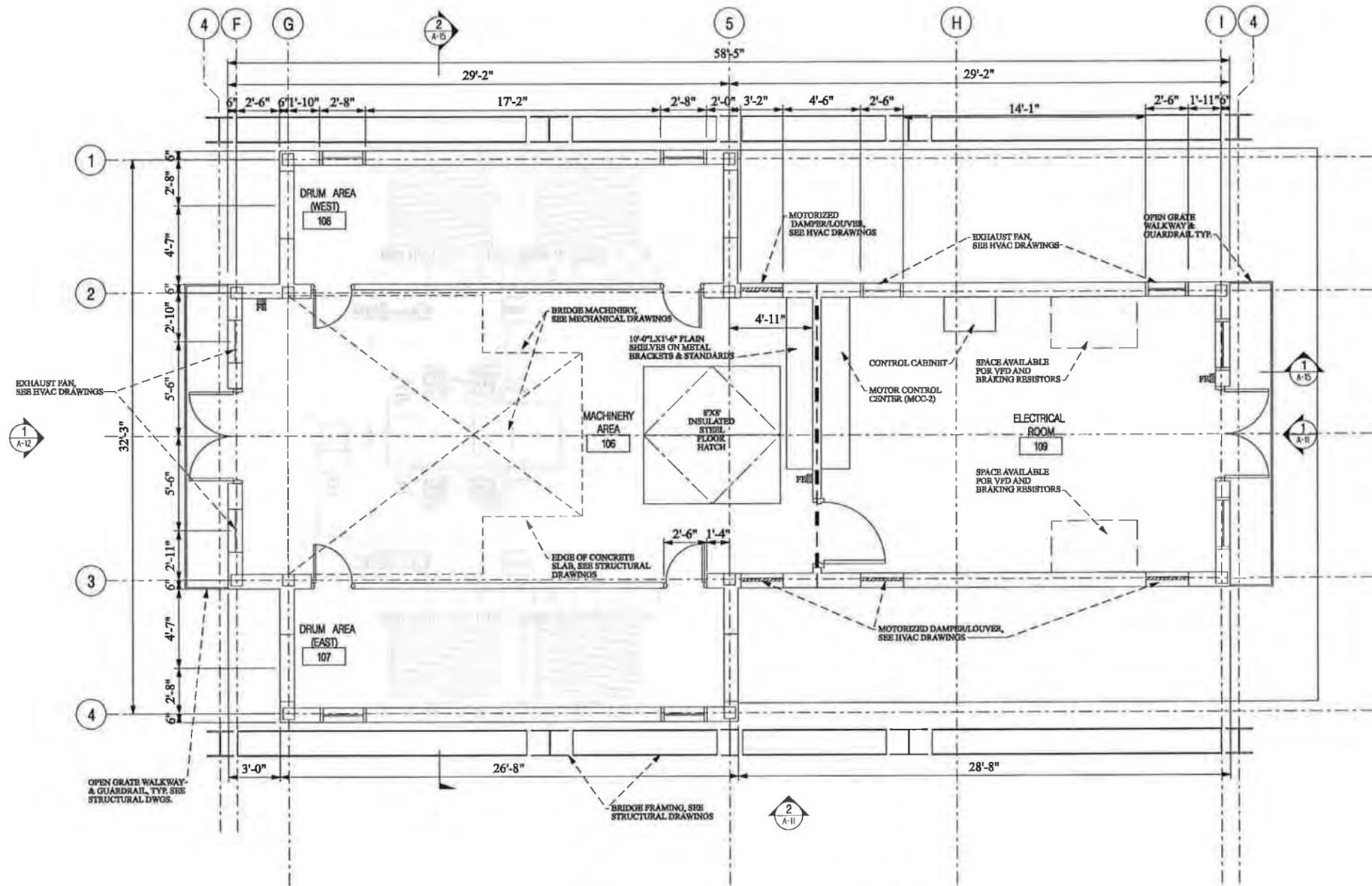
1 CONTROL HOUSE SOFFIT PLAN
1/4" = 1' - 0"



2 CONTROL HOUSE ROOF PLAN
1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE ROOF & SOFFIT PLANS								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL				BY	DATE	CHECKED	BY	DATE	A-3 OF A-15
				DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX
				DRAWN	XXX	03/11	CHECKED	XXX	XX/XX
				QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
				ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS
				REV. DATE	-----			3	27

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-03	1/4" = 1' - 0"

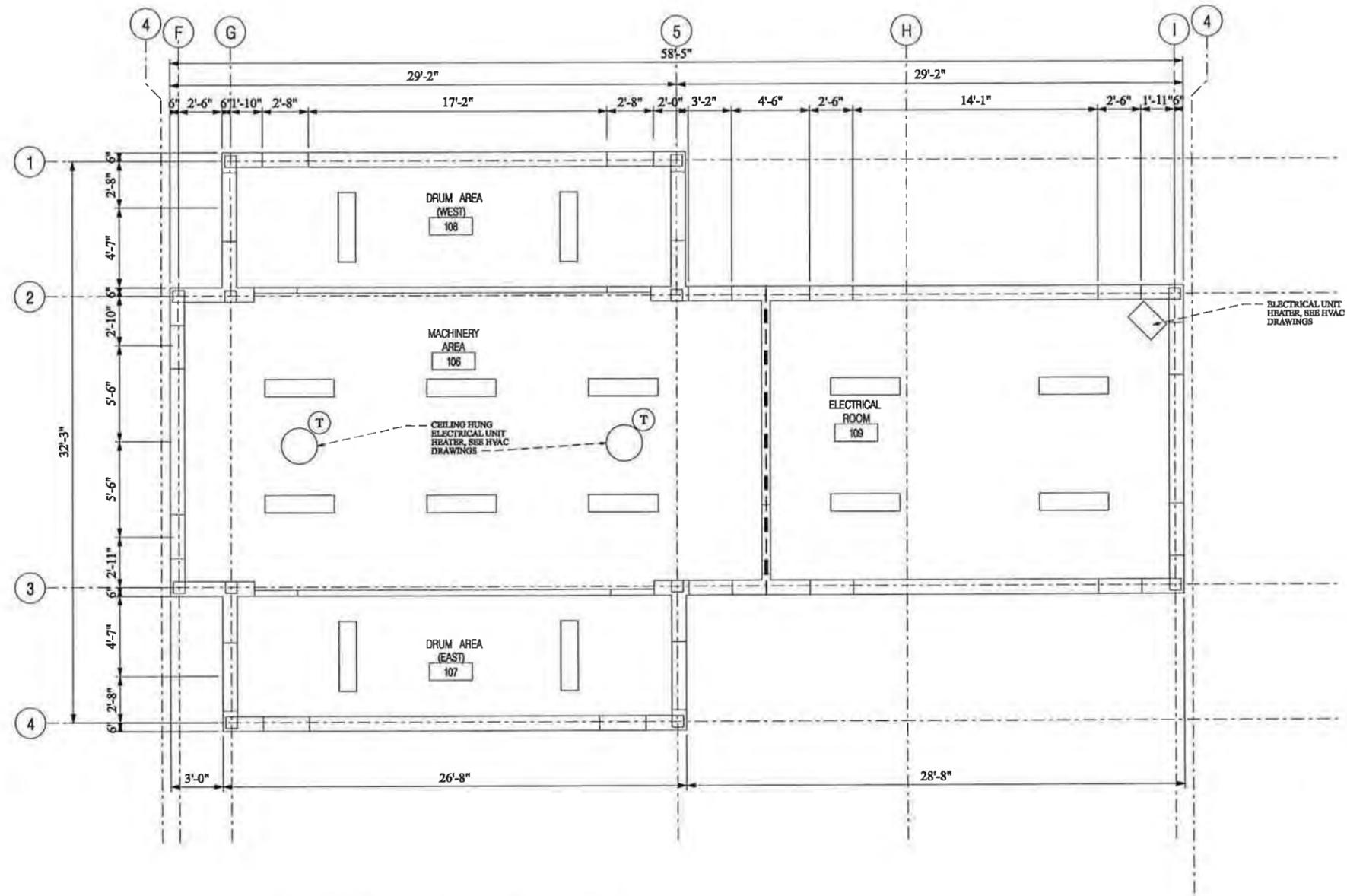


1
A-4
MACHINERY HOUSE FIRST PLAN
1/4" = 1' - 0"

LEGEND	
	SUSPENDED 4'-0" X 1'-0" FLOURESCENT LIGHT FIXTURE
	SUSPENDED ELECTRIC UNIT HEATER
	FIRE EXTINGUISHER
	1 HOUR RATED WALL

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
MACHINERY HOUSE FLOOR PLAN									BRIDGE SHEET
									A-4 of A-15
DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER			
DRAWN	XXX	03/11	CHECKED	XXX	XX/XX				
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX				
ISSUE DATE			FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS			
REV. DATE					4	27			

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-04	1/4" = 1' - 0"

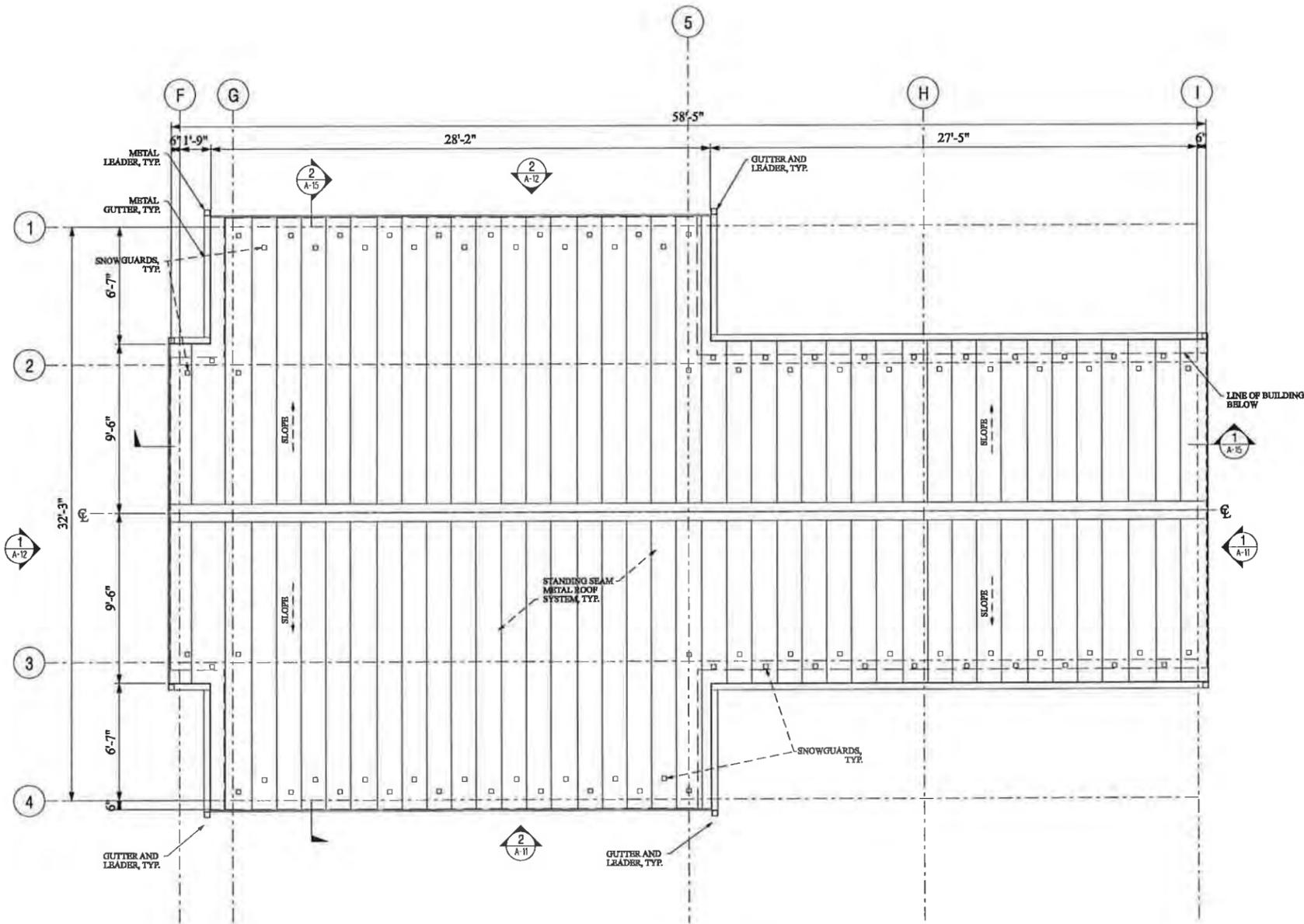


1
A-5 MACHINERY HOUSE RCP PLAN
1/4" = 1' - 0"

LEGEND	
	SUSPENDED 4'-0" X 1'-0" FLOURESCENT LIGHT FIXTURE
	SUSPENDED ELECTRICAL UNIT HEATER
	FIRE EXTINGUISHER
	1 HOUR RATED WALL

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F	BRIDGE SHEET			
LOCATION	U.S. ROUTE 1 OVER FISCATAQUA RIVER								
MACHINERY HOUSE RCP PLAN									BRIDGE SHEET
									A-5 OF A-15
DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER			
DRAWN	XXX	03/11	CHECKED	XXX	XX/XX	-			
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX	-			
ISSUE DATE			FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS		
REV. DATE					5		27		

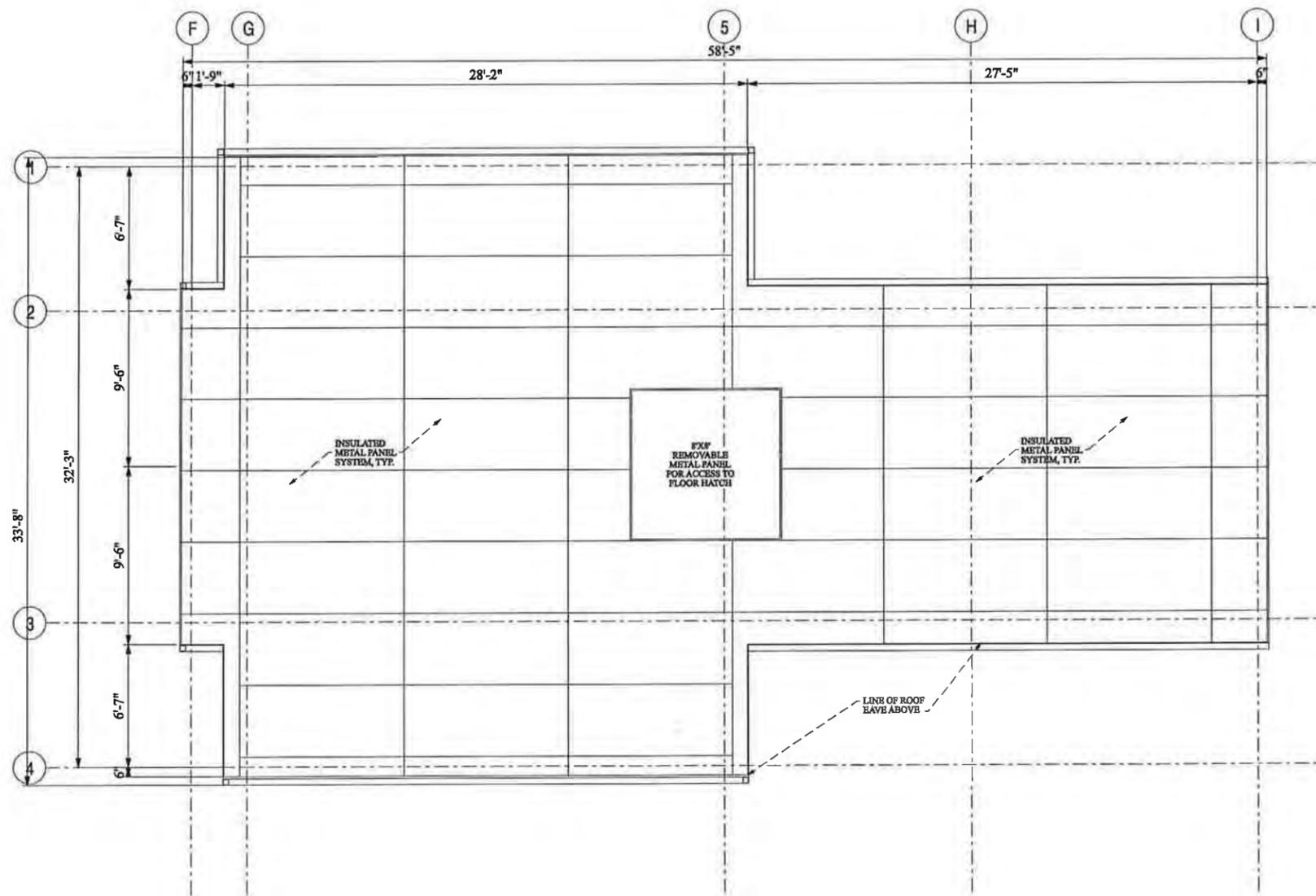
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-05	1/4" = 1' - 0"



1
A-6
MACHINERY HOUSE ROOF PLAN
1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
MACHINERY HOUSE ROOF PLAN									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		A-6 OF A-15
		DESIGNED	XXX 03/11	CHECKED	XXX	XX/XX	FILE NUMBER		
		DRAWN	XXX	03/11	CHECKED	XXX	XX/XX	-	
		QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX	-	
		ISSUE DATE	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS		
		REV. DATE	-----		6		27		

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-06	1/4" = 1' - 0"

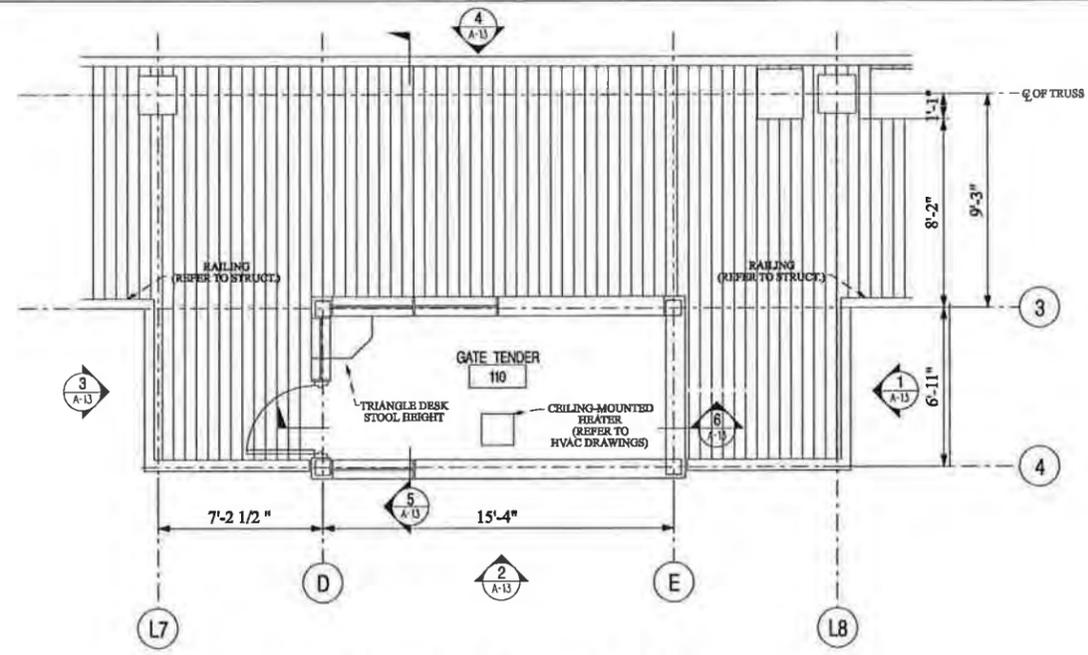


1
A-7
MACHINERY HOUSE SOFFIT PLAN
1/4" = 1' - 0"

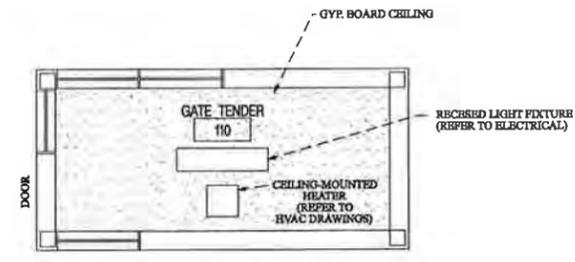
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
MACHINERY HOUSE SOFFIT PLAN									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		DESIGNED	XXX	03/11	XXX	XX/XX	A-7 of A-15		
		DRAWN	XXX	03/11	XXX	XX/XX	FILE NUMBER		
		QUANTITIES	XXX	XX/XX	XXX	XX/XX	-		
		ISSUE DATE			FEDERAL PROJECT NO.	SHEET NO.		TOTAL SHEETS	
		REV. DATE			7		27		

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-07	1/4" = 1' - 0"

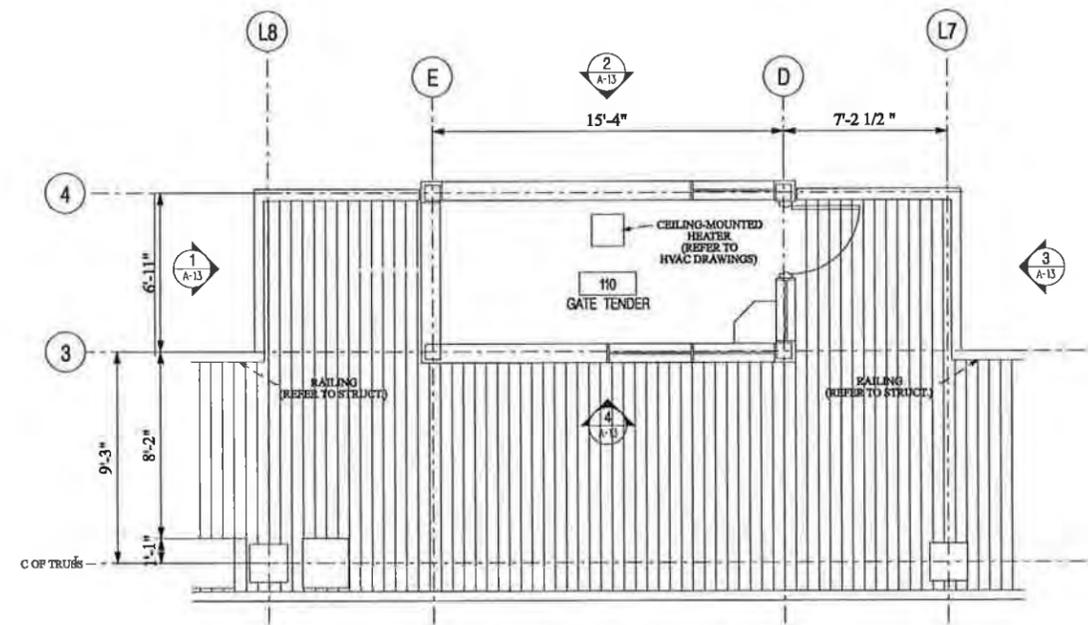
NOTES:
 1. OPERABLE WINDOWS TO BE PROVIDED



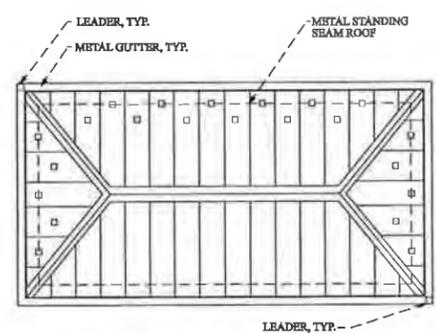
1 SOUTH GATE TENDER PLAN
 1/4" = 1' - 0"



3 GATE TENDER/STORAGE SHED RCP TYP.
 1/4" = 1' - 0"



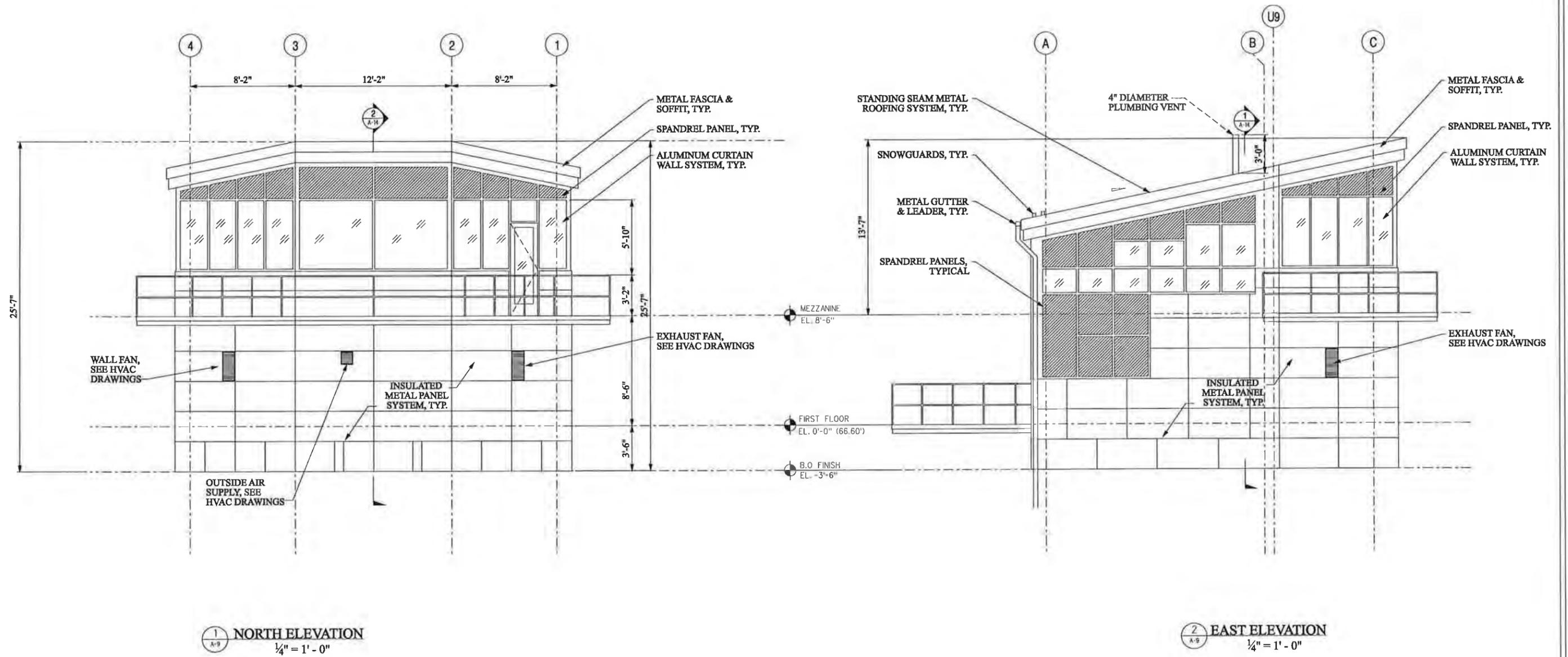
2 NORTH GATE TENDER PLAN
 1/4" = 1' - 0"



4 GATE TENDER/STORAGE SHED ROOF PLAN, TYP.
 1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTBRY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
GATE TENDER/STORAGE SHED PLANS, RCP & ROOF									BRIDGE SHEET
REVISIONS AFTER PROPOSAL									A-8 OF A-15
	BY	DATE	CHECKED	BY	DATE	FILE NUMBER			
	XXX	03/11	XXX	XXX	03/11	XXX/XX			
	XXX	03/11	XXX	XXX	03/11	XXX/XX			
	XXX	03/11	XXX	XXX	03/11	XXX/XX			
ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS			
REV. DATE	-----			8		27			

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-8	1/4" = 1' - 0"

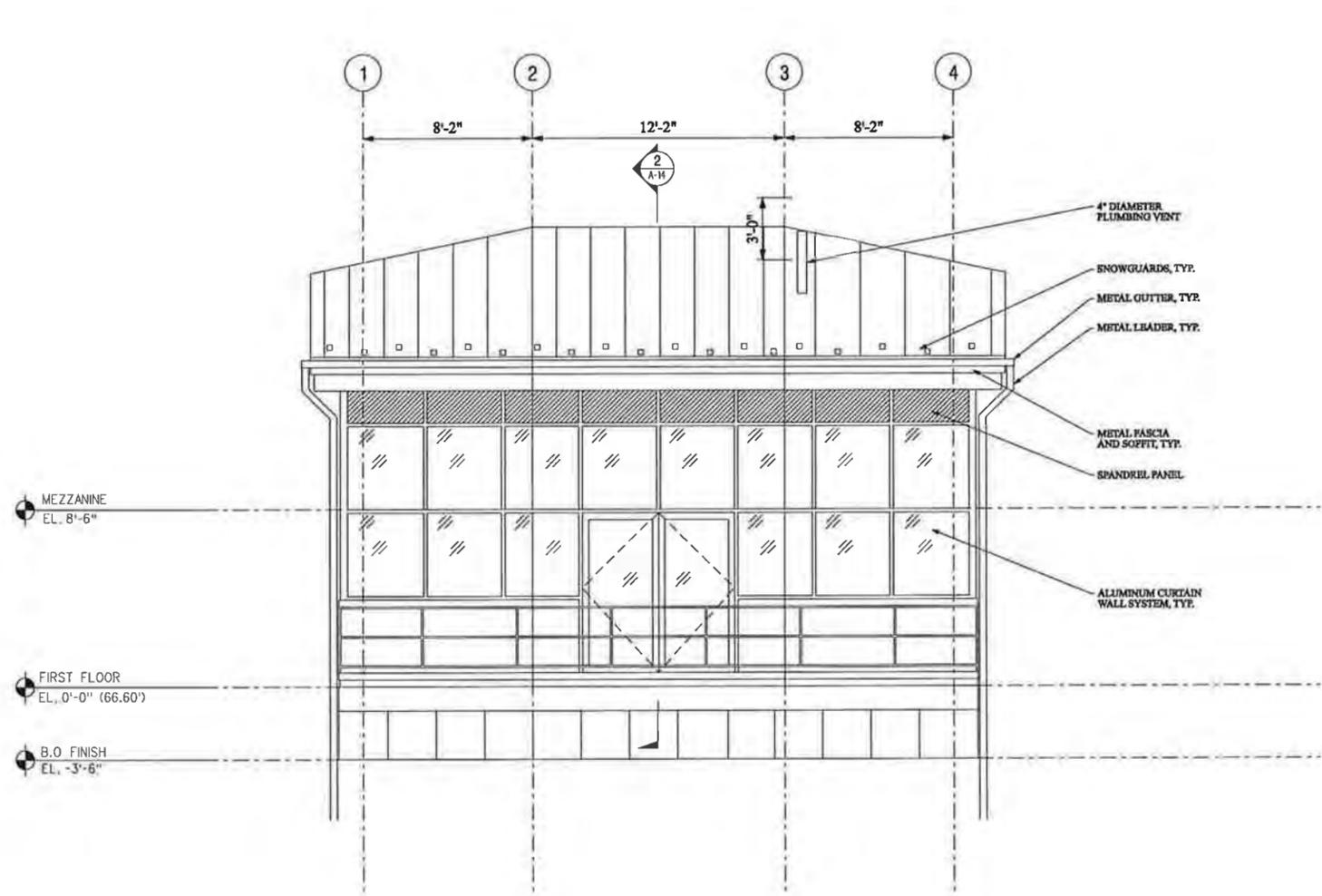


1 NORTH ELEVATION
1/4" = 1' - 0"

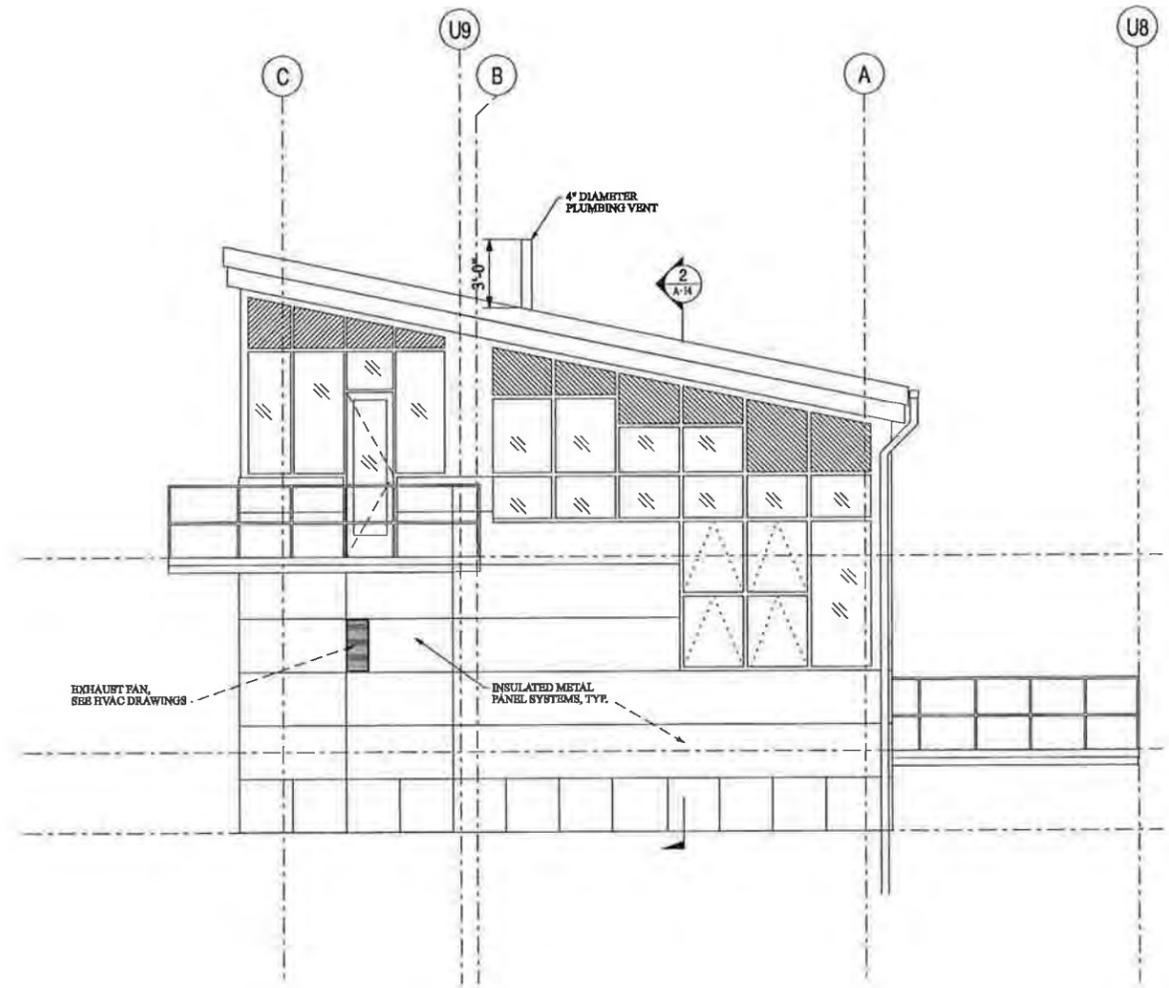
2 EAST ELEVATION
1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE NORTH & EAST ELEVATIONS									BRIDGE SHEET
REVISIONS AFTER PROPOSAL			BY	DATE	BY	DATE	A-9 OF A-15		
			DESIGNED	XXX	03/11	CHECKED	XXX	XXX/XX	FILE NUMBER
			DRAWN	XXX	03/11	CHECKED	XXX	XXX/XX	
			QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX	
			ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS	
			REV. DATE	-----			9	27	

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-09	1/4" = 1' - 0"



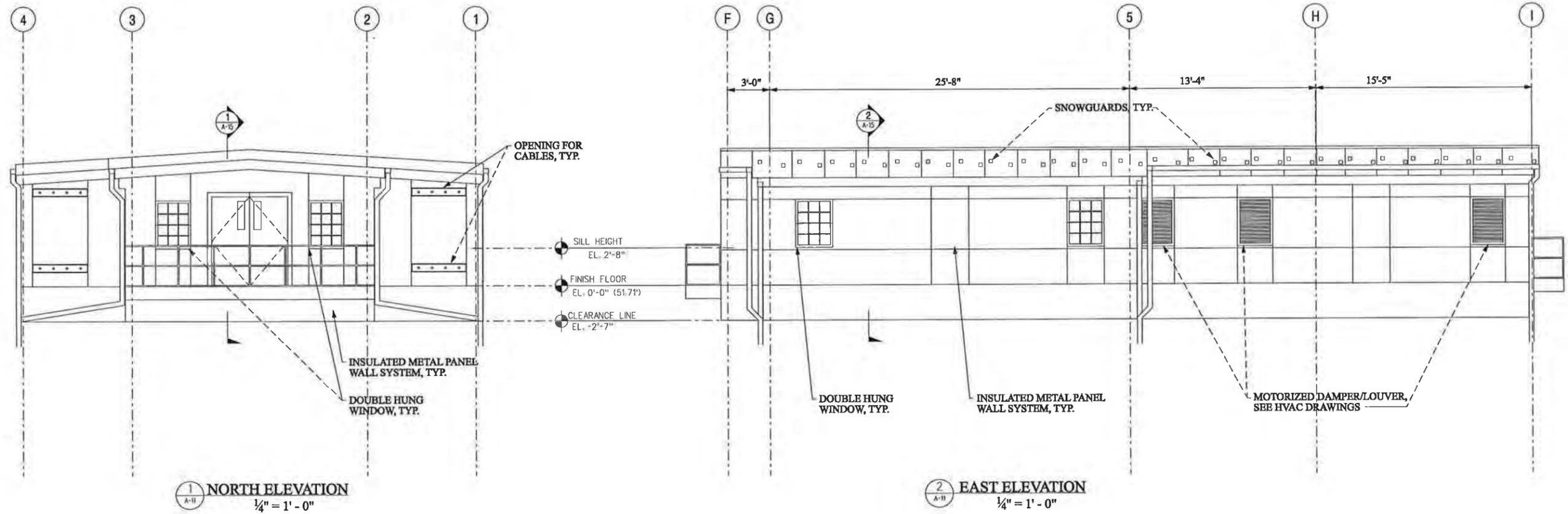
1 SOUTH ELEVATION
A-10
1/4" = 1' - 0"



2 WEST ELEVATION
A-10
1/4" = 1' - 0"

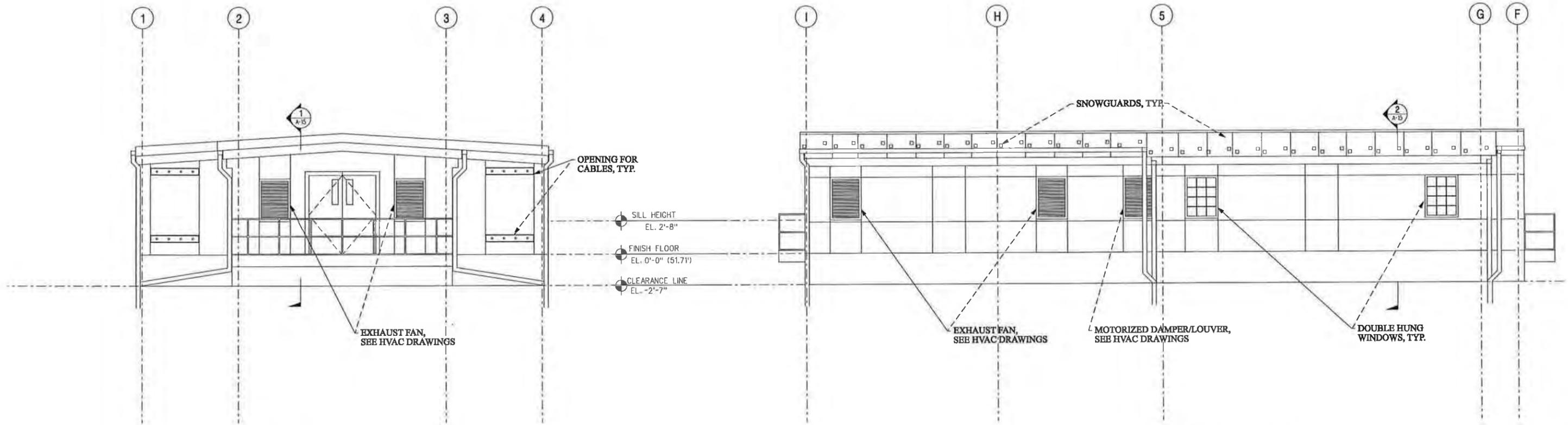
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE SOUTH & WEST ELEVATIONS									
REVISIONS AFTER PROPOSAL				BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET
				XXX	03/11	XXX	XXX	XX/XX	A-10 ⁰ A-15
				XXX	03/11	XXX	XXX	XX/XX	FILE NUMBER
				XXX	XX/XX	XXX	XXX	XX/XX	-
ISSUE DATE				FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS
REV. DATE				-----			10		27

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-10	1/4" = 1' - 0"



STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
MACHINERY HOUSE NORTH & EAST ELEVATIONS									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		XXX	03/11	XXX	XXX	XX/XX	A-11 ⁰² A-15		
		XXX	03/11	XXX	XXX	XX/XX	FILE NUMBER		
		XXX	XX/XX	XXX	XXX	XX/XX	-		
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS	
				-----		11		27	

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-11	1/4" = 1' - 0"

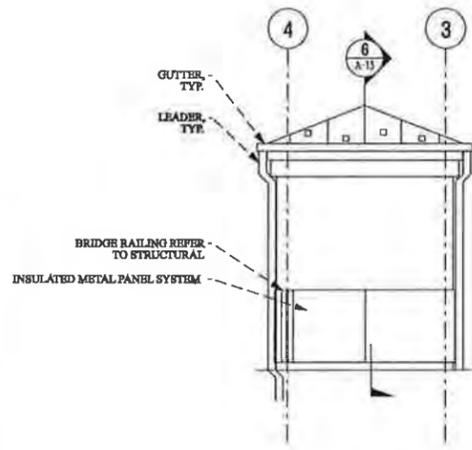


1 SOUTH ELEVATION
1/4" = 1' - 0"

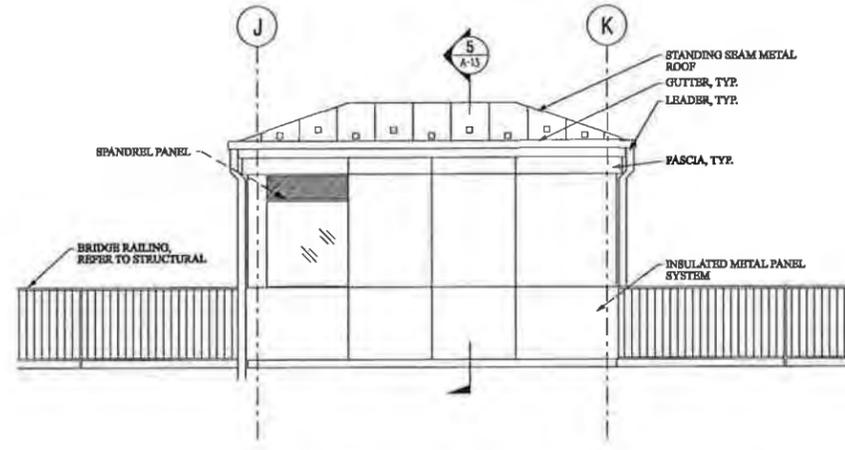
2 WEST ELEVATION
1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME		BRIDGE NO.	247/084		STATE PROJECT	13678		
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
MACHINERY HOUSE SOUTH & WEST ELEVATIONS									BRIDGE SHEET
REVISIONS AFTER PROPOSAL			BY	DATE	CHECKED	BY	DATE	A-12 OF A-15	
			DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER
			DRAWN	XXX	03/11	CHECKED	XXX	XX/XX	
			QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX	
			ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS	
			REV. DATE	-----			12	27	

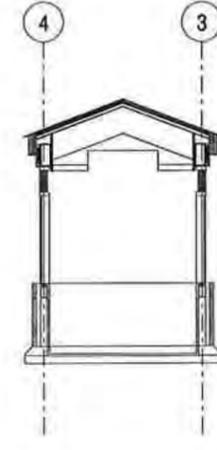
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-12	1/4" = 1' - 0"



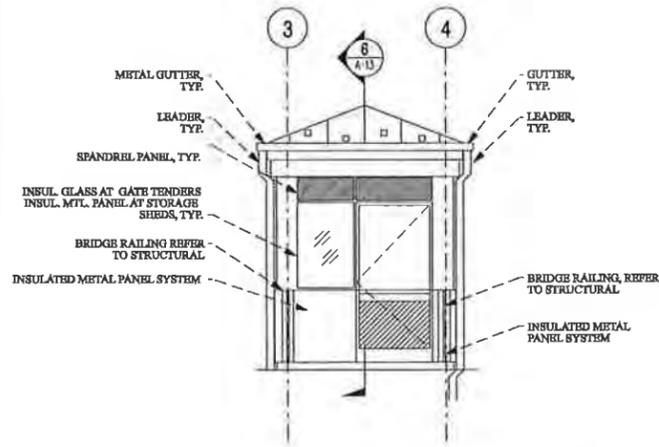
1 SOUTH GATE TENDER NORTH ELEVATION
1/4" = 1' - 0"



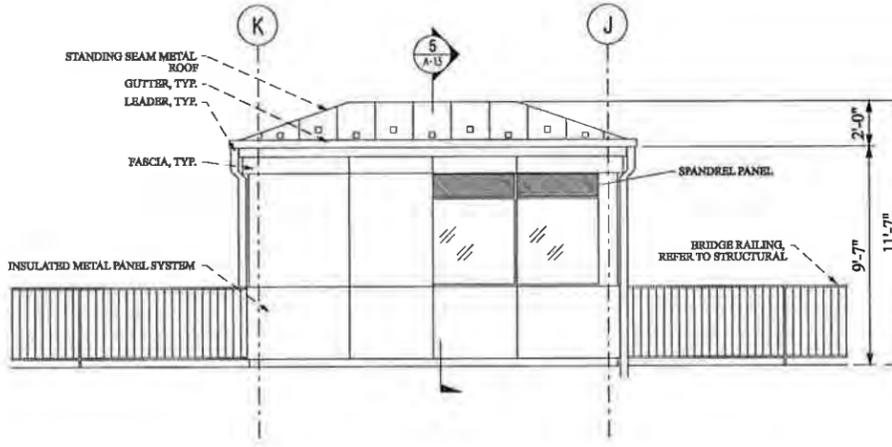
2 SOUTH GATE TENDER EAST ELEVATION
1/4" = 1' - 0"



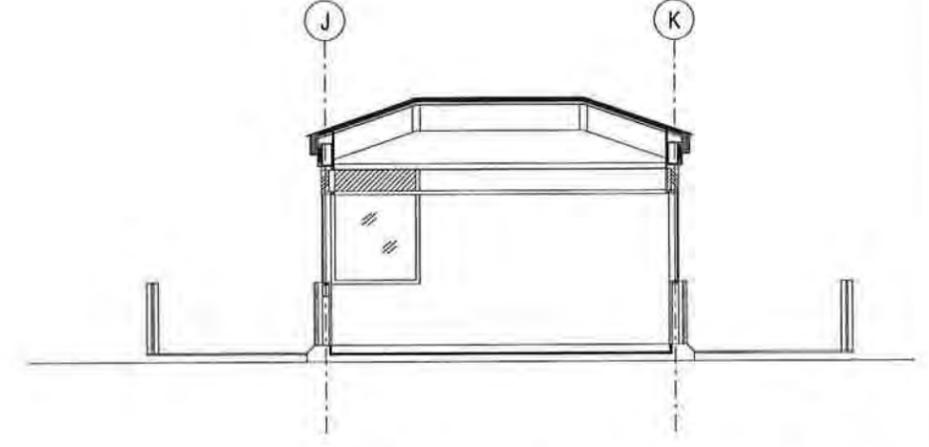
5 SOUTH GATE TENDER BUILDING SECTION
1/4" = 1' - 0"



3 SOUTH GATE TENDER SOUTH ELEVATION
1/4" = 1' - 0"



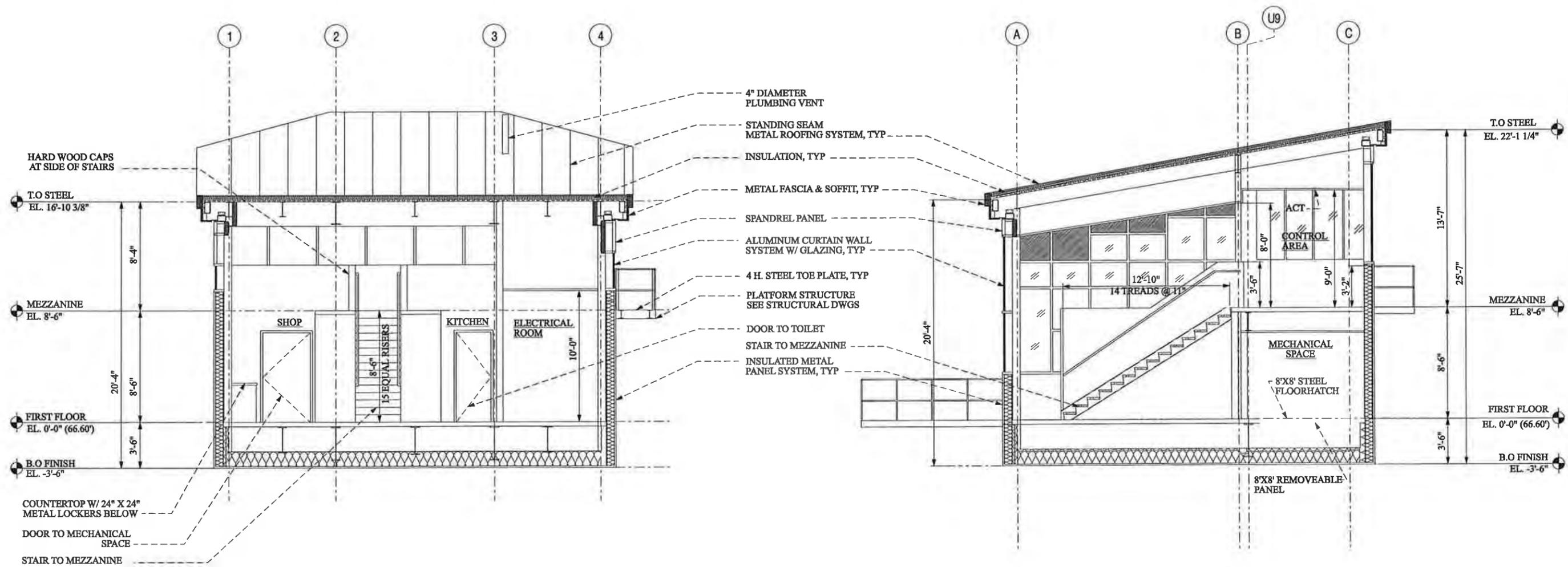
4 SOUTH GATE TENDER WEST ELEVATION
1/4" = 1' - 0"



6 SOUTH GATE TENDER BUILDING SECTION
1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
GATE TENDER/STORAGE SHED ELEVATIONS & SECTS									
REVISIONS AFTER PROPOSAL				BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET
				DESIGNED	XXX	03/11	XXX	XX/XX	A-130P-A-15
				DRAWN	XXX	03/11	XXX	XX/XX	FILE NUMBER
				QUANTITIES	XXX	XX/XX	XXX	XX/XX	
				ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS
				REV. DATE	-----			13	27

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-13	1/4" = 1' - 0"

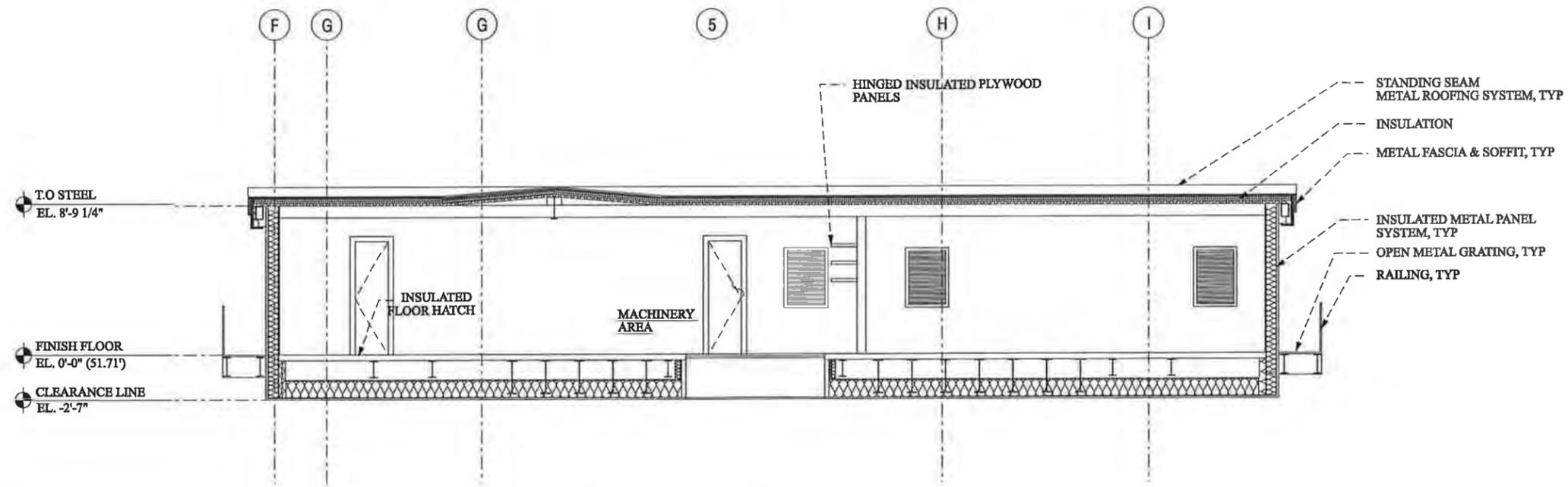


1 WEST-EAST SECTION
1/4" = 1' - 0"

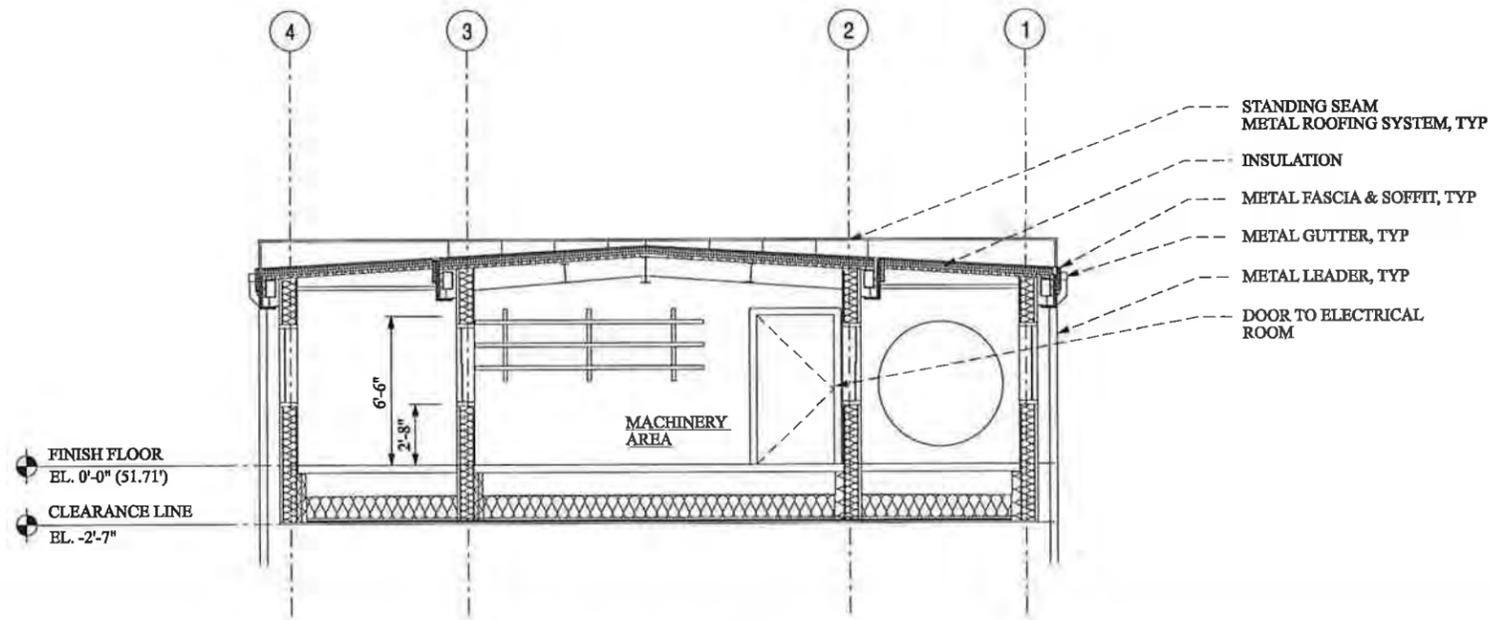
2 SOUTH-NORTH SECTION
1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE BUILDING SECTIONS									BRIDGE SHEET
REVISIONS AFTER PROPOSAL			BY	DATE	CHECKED	BY	DATE	A-14 ^{OP} A-15	
DESIGNED			XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER	
DRAWN			XXX	03/11	CHECKED	XXX	XX/XX	-	
QUANTITIES			XXX	XX/XX	CHECKED	XXX	XX/XX	-	
ISSUE DATE			FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS	
REV. DATE			-----			14		27	

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	A-14	1/4" = 1' - 0"



1 NORTH ELEVATION
1/4" = 1' - 0"



2 EAST ELEVATION
1/4" = 1' - 0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
MACHINERY HOUSE BUILDING SECTIONS									BRIDGE SHEET
REVISIONS AFTER PROPOSAL			BY	DATE	CHECKED	BY	DATE	A-15 of A-15	
DESIGNED			XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER	
DRAWN			XXX	03/11	CHECKED	XXX	XX/XX	-	
QUANTITIES			XXX	XX/XX	CHECKED	XXX	XX/XX	-	
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE		ISSUB DATE	FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS	
SUPER	A-15	1/4" = 1' - 0"		REV. DATE	*****		15	27	

HVAC LEGEND

ABBREVIATIONS

HP	HEAT PUMP
SA	SUPPLY AIR
RA	RETURN AIR
EA	EXHAUST AIR
OA	OUTDOOR AIR
VD	VOLUME DAMPER
M.O.D.	MOTOR OPERATED DAMPER
PRB	POWER ROOF EXHAUST FAN
CEF	CEILING EXHAUST FAN
EXP	EXPANSION TANK
A.F.F.	ABOVE FINISHED FLOOR
TYP.	TYPICAL
	NEW WORK KEYED NOTE
FCU	FAN COIL UNIT
OHD	OVERHEAD DOOR

VALVES & FITTINGS

	GLOBE VALVE
	O, S, & Y GATE VALVE W/ TAMPER SWITCH
	BALL VALVE
	WAFER CHECK VALVE
	HOSE GATE VALVE
	PLUG VALVE OR BALANCING COCK
	PRESSURE RELIEF VALVE
	MOTOR OPERATED GATE VALVE
	PIPE INCREASER OR DECREASER
	PIPE BREAK
	PIPE WELL & TEMP SENSOR
	FLOW SWITCH
	LIQUID & SUCTION PIPING
	LIQUID PIPING
	SUCTION PIPING

DUCTWORK

	SUPPLY DIFFUSERS (SD)
	RETURN (RG) OR EXHAUST (EG) GRILLE
	OPPOSED BLADE DAMPERS
	PARALLEL BLADE DAMPERS
	MOTOR OPERATED DAMPER
	VOLUME DAMPER
	POWER OR GRAVITY ROOF VENTILATOR-SUPPLY (SRV)
	POINT OF CHANGE IN DUCT CONSTRUCTION (BY STATIC PRESSURE CLASS)
	DUCT (1ST FIGURE, SIDE SHOWN 2ND FIGURE, SIDE NOT SHOWN)
	DIRECTION OF FLOW
	DUCT SECTION (EXHAUST OR RETURN) DUCT SECTION (SUPPLY)
	INCLINED RISE (R) OR DROP (D) ARROW IN DIRECTION OF AIR FLOW
	TRANSITIONS: GIVE SIZES NOTE F.O.T. (FLAT ON TOP) OR F.O.B. (FLAT ON BOTTOM), IF APPLICABLE
	STANDARD BRANCH FOR SUPPLY & RETURN (NO SPLITTER)
	SPLITTER DAMPER
	VOLUME DAMPER MANUAL OPERATION
	AUTOMATIC DAMPERS MOTOR OPERATED
	ACCESS DOOR (AD), ACCESS PANEL (AP)
	TURNING VANES DOUBLE WALL
	FLEXIBLE CONNECTION
	SUPPLY AIR DIFFUSER (CEILING)
	RETURN AIR GRILLE (CEILING)
	SIDEWALL DIFFUSER/GRILLE
	EXHAUST AIR GRILLE (CEILING)
	BOTTOM OF BEAM
	TOP OF DUCT

TEMPERATURE CONTROLS

SEE TEMPERATURE CONTROL DRAWINGS FOR ADDITIONAL LEGEND

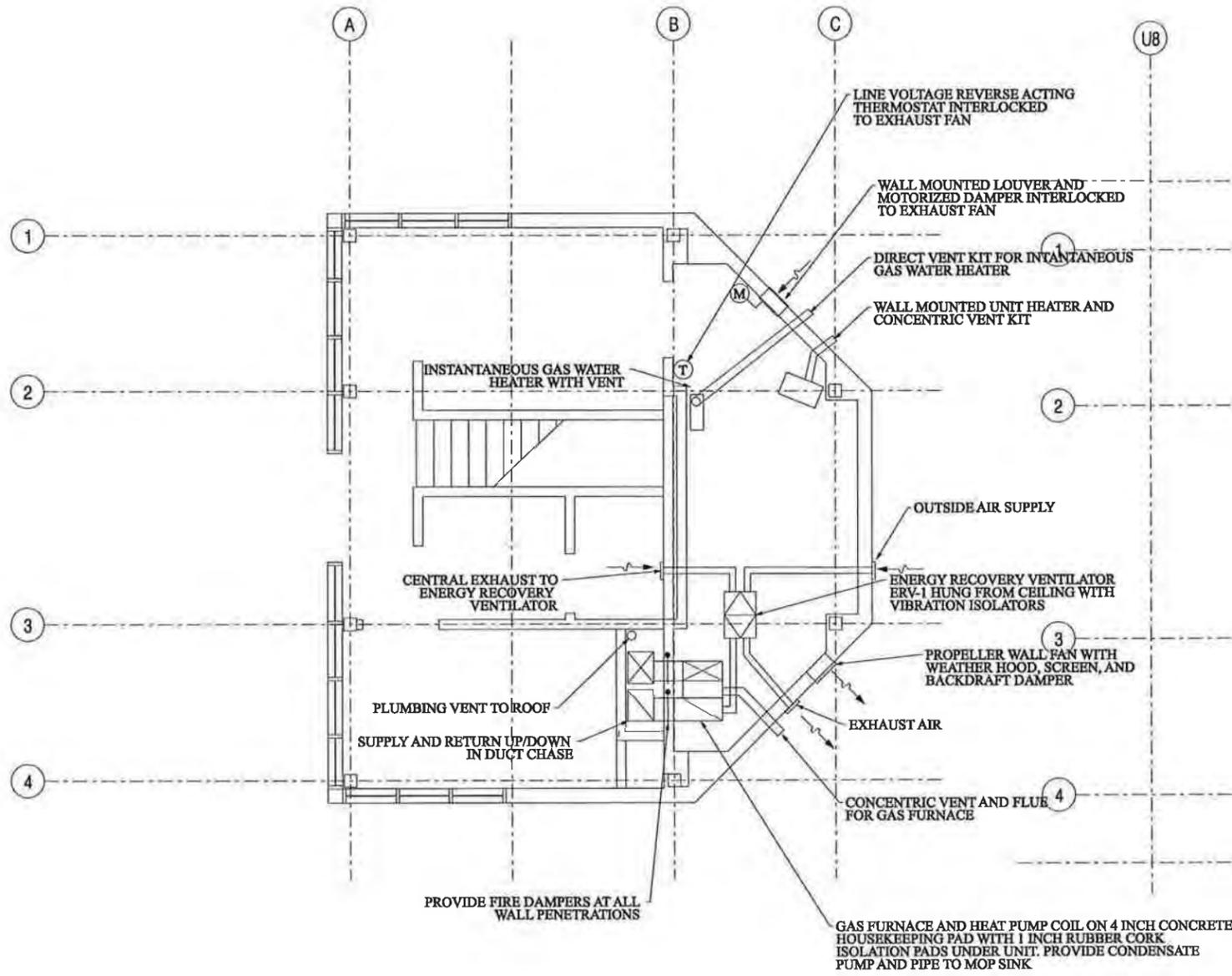
	THERMOSTAT
	OUTDOOR AIR THERMOSTAT
	TEMPERATURE SENSOR
	NIGHT THERMOSTAT
	EMCS SENSOR
	HUMIDITY SENSOR
	CURRENT TRANSDUCER
LCM	LOCAL CONTROL MODULE
	MOTOR
AMS	AIR FLOW MEASURING STATION
M.O.D.	MOTOR OPERATED DAMPER
FS	FLOW SWITCH
DS	DOOR SWITCH
	WATER METER W/PULSE HEAD
UNC	UNIVERSAL NETWORK CONTROLLER

GENERAL NOTES:

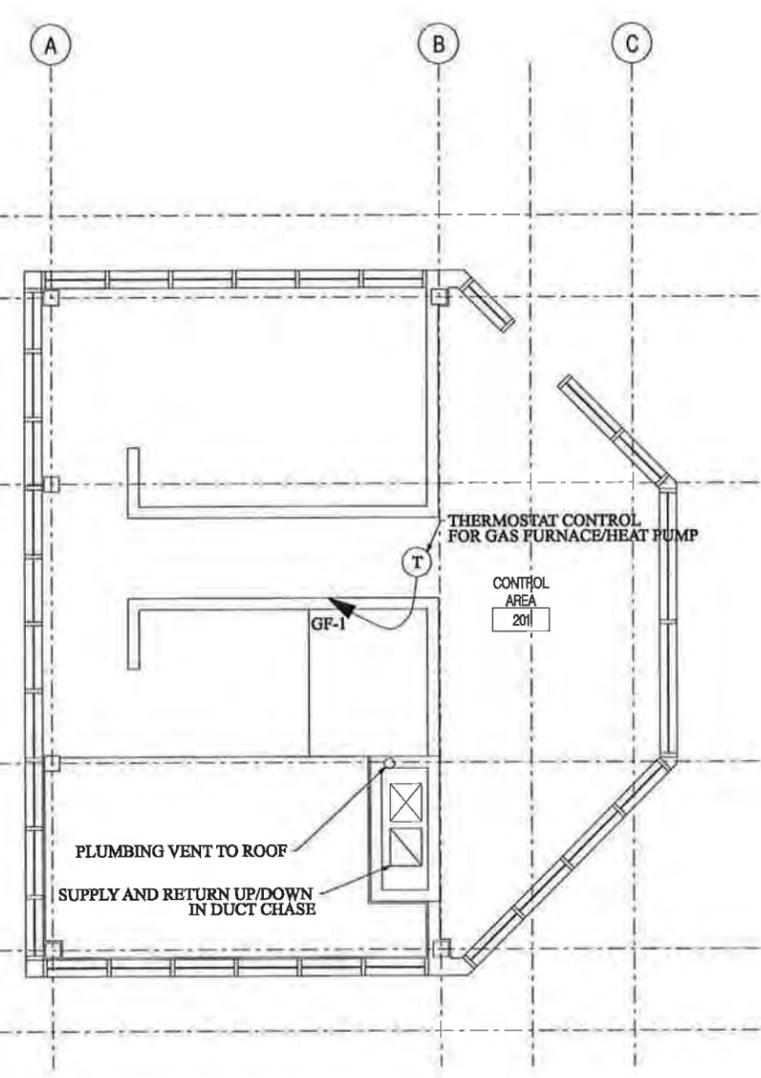
1. THESE LEGENDS ARE COMPOSED OF STANDARD SYMBOLS AND ARE PERTINENT TO THE CONDITIONS ON THIS SET OF DRAWINGS TO THE EXTENT APPLICABLE.
2. ADDITIONAL LEGENDS AND/OR ANOTHER LEGEND SHEET MAY APPEAR IN THIS SET OF DRAWINGS TO INDICATE SPECIFIC CONDITIONS IN LIEU OF SYMBOLS SHOWN ON THIS SHEET.

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
HVAC LEGEND									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		DESIGNED	XXX	03/11	XXX	XX/XX	H-1 of H-7		
		DRAWN	XXX	03/11	XXX	XX/XX	FILE NUMBER		
		QUANTITIES	XXX	XX/XX	XXX	XX/XX	-		
		ISSUE DATE			FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS
		REV. DATE					16		27

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	H-1 LEGEND	



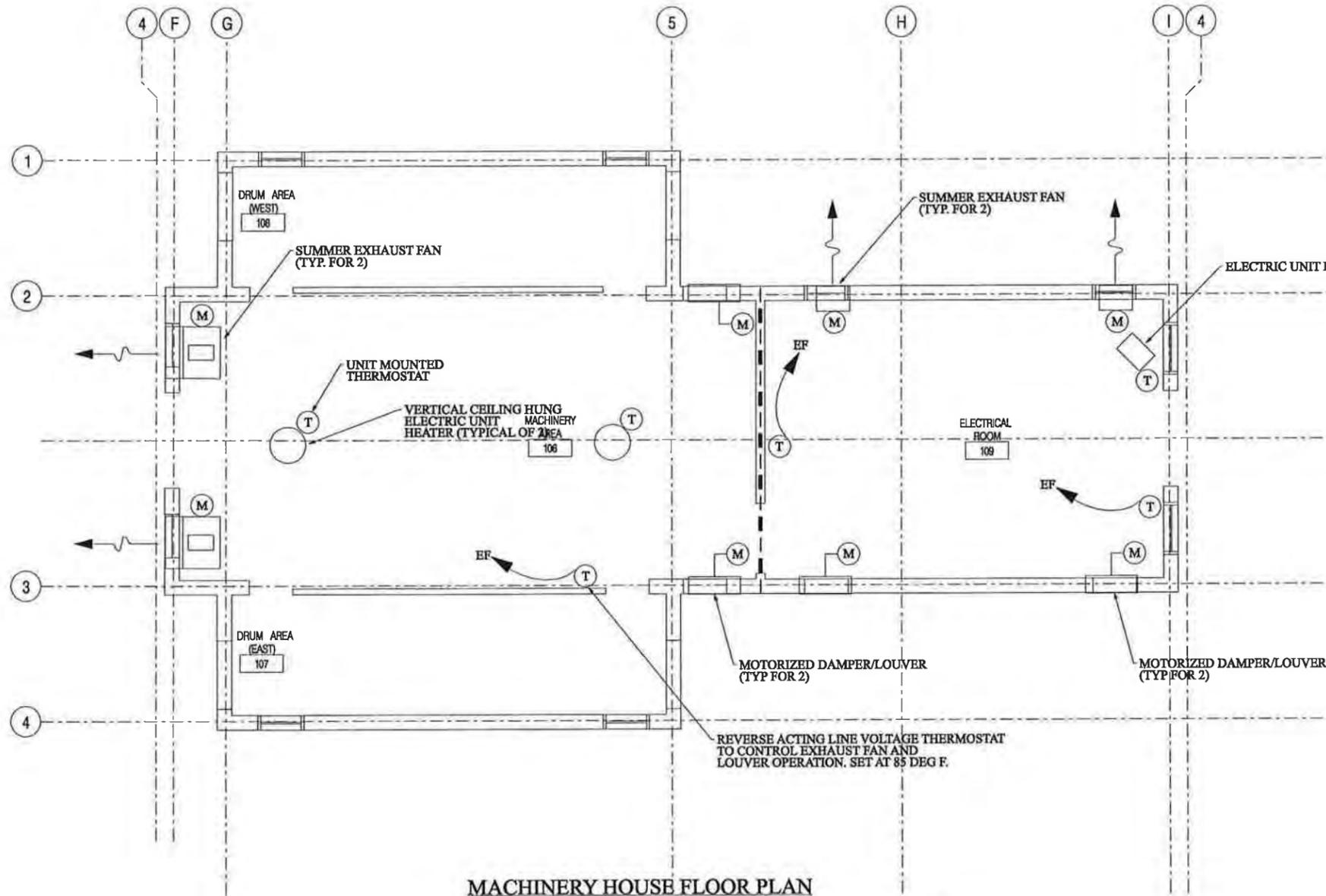
CONTROL HOUSE FIRST FLOOR PLAN



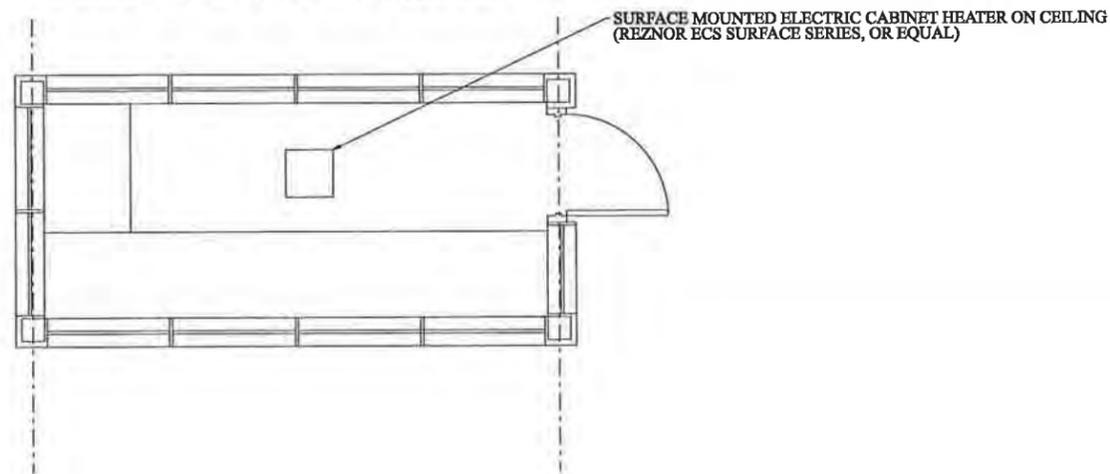
CONTROL HOUSE MEZZANINE FLOOR PLAN

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME		BRIDGE NO.	247/084	STATE PROJECT	13678F			
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE HVAC PLAN									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		DESIGNED	XXX	03/11	XXX	XX/XX	H-2 of H-7		
		DRAWN	XXX	03/11	XXX	XX/XX	FILE NUMBER		
		QUANTITIES	XXX	XX/XX	XXX	XX/XX	-		
		ISSUE DATE	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS		
		REV. DATE	-----		17		27		

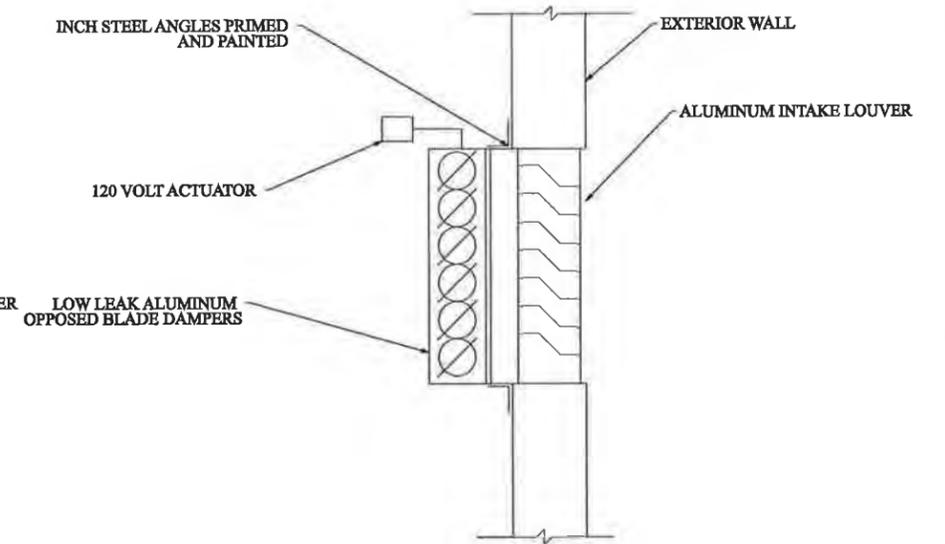
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	H-2	



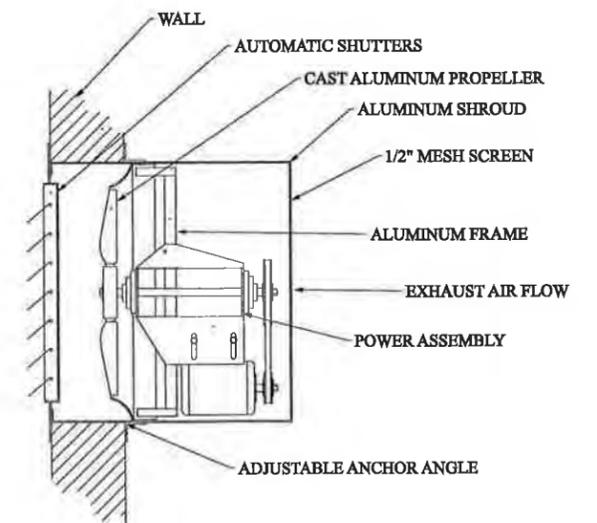
MACHINERY HOUSE FLOOR PLAN



GATE HOUSE / STORAGE SHED FLOOR PLAN (TYP. FOR 2)



INTAKE LOUVER DETAIL



WALL EXHAUST FAN DETAIL

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	H-3 MACHINERY ROOM	

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
MACHINERY HOUSE HVAC PLAN									
BRIDGE SHEET									
H-3 OF H-7									
FILE NUMBER									
-									
TOTAL SHEETS									
18 27									
DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX				
DRAWN	XXX	03/11	CHECKED	XXX	XX/XX				
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX				
ISSUE DATE			FEDERAL PROJECT NO.			SHEET NO.			
REV. DATE									

HVAC INDOOR DESIGN CONDITIONS								
ROOM	SUMMER MAXIMUM SPACE DRY BULB (DEG. F)	WINTER MINIMUM SPACE DRY BULB (DEG. F)	SPACE PRESSURE	AIR CONDITIONING (HEAT PUMP)	COOLING VENTILATION	EXHAUST VENTILATION	SYSTEM TYPE	REMARKS
CONTROL HOUSE								
SHOP	75	68	POSITIVE	X			SUPPLY	
MECHANICAL SPACE	104	60	NEGATIVE		X		EXHAUST	SUMMER COOLING VENTILATION BASED ON CALCULATED COOLING LOAD
TOILET	75	68	NEGATIVE	X		X	EXHAUST	MAIN BUILDING EXHAUST
KITCHEN	75	68	POSITIVE	X			SUPPLY	
ELECTRICAL ROOM	85	68	POSITIVE			X	EXHAUST	
CONTROL AREA	75	68	POSITIVE	X			SUPPLY	
MACHINERY HOUSE								
MACHINE ROOM	104	60	NEGATIVE		X		EXHAUST	SUMMER COOLING VENTILATION BASED ON CALCULATED COOLING LOAD
ELECTRICAL ROOM	104	60	NEGATIVE		X		EXHAUST	SUMMER COOLING VENTILATION BASED ON CALCULATED COOLING LOAD
GATE HOUSE/STORAGE SHED								
GATE HOUSE / STORAGE SHED NORTH	AMBIENT	68	POSITIVE				SUPPLY	HEATING ONLY
GATE HOUSE / STORAGE SHED SOUTH	AMBIENT	68	POSITIVE				SUPPLY	HEATING ONLY

DUCTWORK REQUIREMENTS			
SYSTEM TYPE	MAXIMUM FRICTION RATE (IN.WG/100FT)	MAXIMUM VELOCITY (FT./MIN.)	COMMENTS
LOW PRESSURE DUCTS	0.05	800	
INTAKE LOUVERS	-	500	MAXIMUM VELOCITY THROUGH FREE AREA
EXHAUST OR RELIEF LOUVERS	-	700	MAXIMUM VELOCITY THROUGH FREE AREA

HEAT PUMP UNIT DATA															
MARK NO.	LOCATION	AMBIENT (DEG F)	REFRIG.	COOLING CAPACITY		HEATING CAPACITY		FAN DATA				MAX UNIT WEIGHT (LBS)	MIN SEER	MANUFACTURER	REMARKS
				HIGH	LOW	HIGH	LOW	CFM	MCA	VOLTS	HZ				
HP-1	SEE PLANS	95	R-410A										19	CARRIER 25HNA9 OR EQUAL	1 2 3
BY DESIGN BUILD CONTRACTOR															

REMARKS
1. LOW AMBIENT CONTROL
2. SUPPORT FEET
3. TWO STAGE CONTROL

HVAC DESIGN REQUIREMENTS		
REQUIREMENTS	YES	NO
DUCT SMOKE DETECTOR	X	
FIRE DAMPER(S)	X	
SMOKE DAMPERS(S)		X
FIRE RATED ENCLOSURE		X
FIRE RATED ROOF/FLOOR CEILING ASSEMBLY	X	
FIRE STOPPING	X	
SMOKE CONTROL		X

NOTES:

- THE SCHEDULES PRESENTED ON THIS SHEET ARE GENERIC AND REPRESENT THE ANTICIPATED EQUIPMENT REQUIREMENTS BASED ON THIS PROPOSED PRELIMINARY DESIGN. THE DESIGN BUILD CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PROPER SIZE OF EACH PIECE OF EQUIPMENT. THE EQUIPMENT PROPOSED BY THE DESIGN BUILD CONTRACTOR SHALL BE OF EQUAL OR GREATER QUALITY THAN THE EQUIPMENT SPECIFIED ON THIS SHEET.

GAS FURNACE UNIT DATA																
MARK NO.	LOCATION	EFFICIENCY	HEATING STAGES	CFM	EXT. S.P (IN WG)	HEATING DATA			FAN MOTOR DATA					MAX UNIT WEIGHT (LBS)	MANUFACTURER	
						AIRSIDE DATA		CAPACITY (MBH)	HP	F.L.A	MCA	VOLTS	HZ			PH
						EAT (DEG F)	DB									
GF-1	MECH. ROOM	95%	3												CARRIER ICS 58MVC OR EQUAL	
BY DESIGN BUILD CONTRACTOR																

REMARKS
1. VARIABLE SPEED MOTOR
2. PROVIDE UNIT MANUFACTURER DIGITAL COMMUNICATING ROOM THERMOSTAT AND INTEGRAL CONTROLS TO OPERATE GF-1 AND HP-1
3. FILTER CABINET
4. PROVIDE AND INSTALL CONDENSATE PUMP AND CONDENSATE LINE TRAP
5. CONCENTRIC VENT KIT

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
HVAC SCHEDULES #1									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		XXX	03/11	XXX	XXX	XX/XX	H-4 OF H-7		
DESIGNED		XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER		
DRAWN		XXX	03/11	CHECKED	XXX	XX/XX			
QUANTITIES		XXX	XX/XX	CHECKED	XXX	XX/XX			
ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS			
REV. DATE		-----		19		27			

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
	H-4	

UNIT HEATER SCHEDULE																				
SERVES	CFM	TEMP RISE (DEG F)	HEATING DATA				ELECTRICAL						MOUNTING HEIGHT (FT)	MANUFACTURER	REMARKS					
			ACTUAL CAPACITY (BTUH)	EAT	LAT	THROW	HP	VOLTS	PH	HZ	KW	AMPS								
MACHINERY ROOM			BY DESIGN BUILD CONTRACTOR												8	MODINE VE SERIES	1		3	4
CONTROL HOUSE MECHANICAL ROOM			BY DESIGN BUILD CONTRACTOR												8	MODINE HDS SERIES		2	3	4
ELECTRICAL ROOMS			BY DESIGN BUILD CONTRACTOR												8	MODINE HER SERIES	1		3	4
GATE HOUSE / STORAGE SHEDS			BY DESIGN BUILD CONTRACTOR												8	REZNOR ESC SERIES	1			

- REMARKS**
- ELECTRIC CEILING MOUNTED HEATER
 - GAS FRED SEALED COMBUSTION HEATER WITH CONCENTRIC VENT KIT
 - UNIT MOUNTED THERMOSTAT
 - HANGING MOUNTING KIT
 - WALL MOUNTED THERMOSTAT

EXHAUST FAN SCHEDULE																		
SERVES	FAN DATA							ELECTRICAL				HZ	MANUFACTURER	REMARKS				
	TYPE	LOCATION	CFM	EXT. SP. IN WG.	DIA. (IN)	DRIVE	RPM	HP	VOLT	PH								
MECHANICAL ROOM	WALL MOUNTED PROPELLER	MECHANICAL ROOM					BY DESIGN BUILD CONTRACTOR					COOK		2	3	4	5	
MACHINERY HOUSE	WALL MOUNTED PROPELLER	MACHINERY ROOM WALL					BY DESIGN BUILD CONTRACTOR					COOK	1	2	3	4	5	
MACHINERY HOUSE	WALL MOUNTED PROPELLER	ELECTRICAL ROOM WALL					BY DESIGN BUILD CONTRACTOR					COOK		2	3	4	5	

- REMARKS**
- BELT DRIVE WITH BELT TENSIONER
 - DISCONNECT SWITCH
 - BRICK VENT AND SCREEN
 - REVERSE ACTING LINE VOLTAGE THERMOSTAT FIELD MOUTNED BY M.C.
 - WALL COLLAR, WEATHER HOOD, MOTORIZED INTAKE SHUTTER, BRIDSCREEN

ENERGY RECOVERY VENTILATOR																		
MARK NO.	SUPPLIES	OUTDOOR AIR S/A INLET TEMP T1 S/W	#DOOR AIR S/A INLET TEMP T2 S/W	SUPPLY AIR CFM	APD	L.A.T. S/A TEMP T3 S/W	EXHAUST AIR CFM	APD	TOTAL RECOVERED S/W (MBH)	EFF. %	HP	VOLT	PHASE	HZ	WEIGHT	ACCESSORIES	MANUFACTURER	MODEL
ERV-1	GF-1															1,2,3,4,5,6	RENEWARE	ERV SERIES

ACCESSORIES:
1. ON BOARD 24 VOLT TRANSFORMER
2. SET OF TWO FILTERS
3. BALACING DAMPERS
4. PERCENTAGE RUNTIME CONTROL
5. PERCENT TIMER WITH FURNACE INTERLOCK
6. DEHUMIDISTAT CONTROL

- NOTES:**
- THE SCHEDULES PRESENTED ON THIS SHEET ARE GENERIC AND REPRESENT THE ANTICIPATED EQUIPMENT REQUIREMENTS BASED ON THIS PROPOSED PRELIMINARY DESIGN. THE DESIGN BUILD CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PROPER SIZE OF EACH PIECE OF EQUIPEMENT. THE EQUIPMENT PROPOSED BY THE DESIGN BUILD CONTRACTOR SHALL BE OF EQUAL OR GREATER QUALITY THAN THE EQUIPMENT SPECIFIED ON THIS SHEET.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

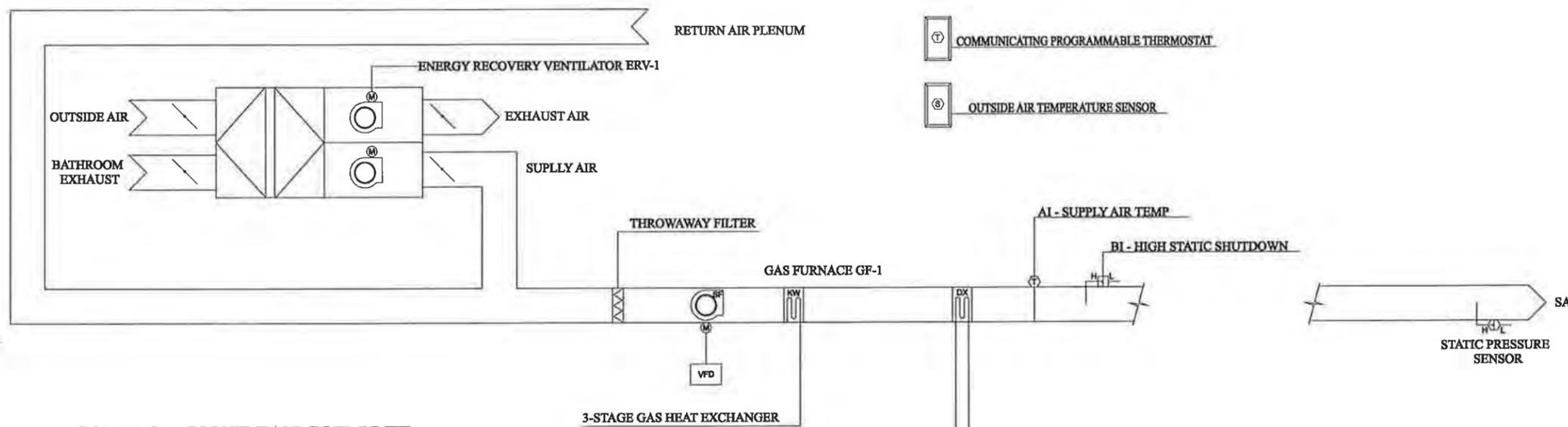
TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

HVAC SCHEDULE #2

REVISIONS AFTER PROPOSAL		BY	DATE	BY	DATE
DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX
DRAWN	XXX	03/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
ISSUE DATE			FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE				20	27

BRIDGE SHEET
H-5 OF H-7
FILE NUMBER
-

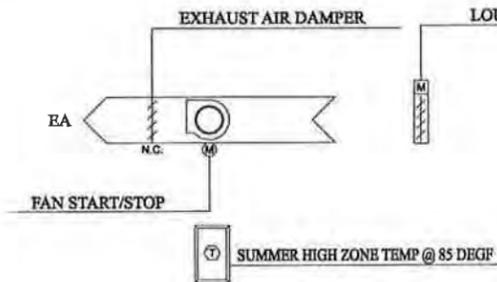
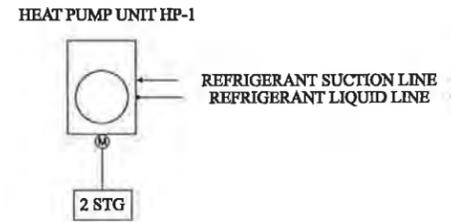
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
	H-5	



- NOTES:
1. THE CONTROL HOUSE HVAC SYSTEM SHALL CONSIST OF A TWO STAGE HEAT PUMP UNIT AND A COMPATIBLE VARIABLE SPEED GAS FURNACE PACKAGE SYSTEM SHALL BE SIMILAR TO CARRIER INFINITY.
 2. AN OUTDOOR AIR TEMPERATURE SENSOR SHALL BE INSTALLED AND WIRED TO PROVIDE A READOUT ON THE MAIN THERMOSTAT CONTROLLER.
 3. THE ENERGY RECOVERY VENTILATOR SHALL BE WIRED TO THE FAN COIL TERMINAL STIP TO SIGNAL THAT THE SYSTEM REQUIRES BLOWER OPERATION CONTINUOUSLY WHENEVER THE VENTILATOR IS OPERATING.
 4. PROVIDE A FILTER KIT, DISCONNECT KIT, AND CONDENSATE DRAIN TRAP KIT.

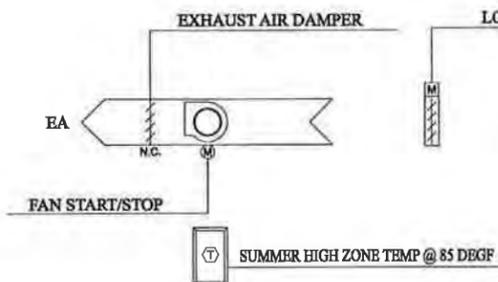
CONTROL HOUSE FAN COIL UNIT

- NOTES:
1. FURNACE ORIENTATION SHALL BE UPFLOW AND RETURN DUCTWORK SHALL ENTER THE GAS FURNACE FROM THE SIDE.
 2. PROVIDE EXTERIOR FILTER BOX AND 2 INCH FILTER.
 3. SYSTEM SHALL CONSIST OF A 2 STAGE HEAT PUMP AND 3 STAGE GAS FURNACE. THE INSTALLING CONTRACTOR SHALL ENABLE THE GAS FURNACE TO OPERATE FOR HEATING WHEN THE TEMPERATURE DROPS BELOW A USER DEFINABLE SETPOINT
 4. FURNACE BLOWER SHALL RUN CONTINUOUSLY.



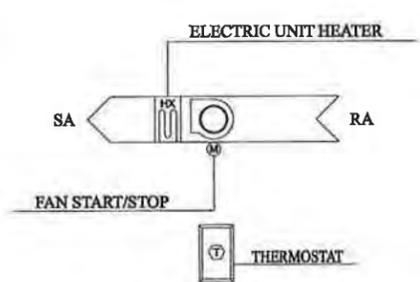
CONTROL HOUSE MECHANICAL ROOM EXHAUST FAN

- NOTES:
1. MECHANICAL ROOM EXHAUST FAN INTERLOCKED TO REVERSE ACTING THERMOSTAT SET AT 85 DEGREES F.
 2. MOTORIZED DAMEPR ON INTAKE LOUVER TO BE INTERLOCKED TO EXHAUST FAN START CIRCUIT.



MACHINERY HOUSE EXHAUST FANS (TYP. OF 2)

- NOTES:
1. MACHINERY ROOM EXHAUST FAN INTERLOCKED TO REVERSE ACTING THERMOSTAT SET AT 85 DEGREES F.
 2. MOTORIZED DAMEPR ON INTAKE LOUVERS TO BE INTERLOCKED TO EXHAUST FAN START CIRCUITS.

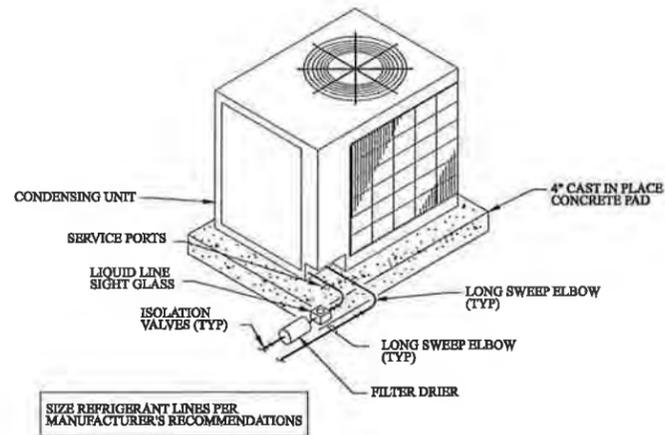


ELECTRIC UNIT HEATERS (TYPICAL FOR MACHINERY HOUSE)

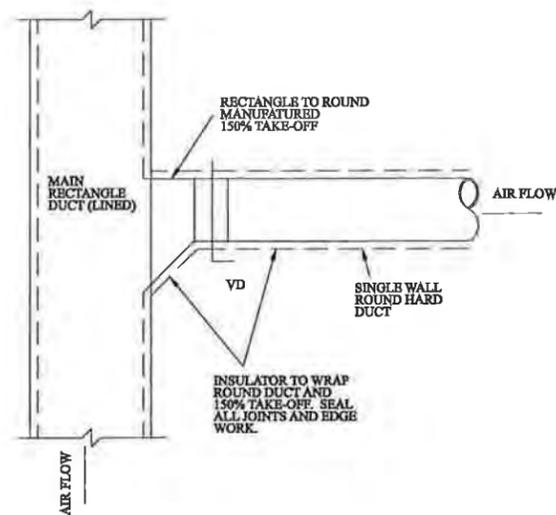
- NOTES:
1. UNIT HEATERS CONTROLLED BY UNIT MOUNTED THERMOSTAT. THE CONTROL HOUSE UNIT HEATERS ARE SIMILAR BUT HAVE A SEALED COMBUSTION HEAT EXCHANGER FOR GAS HEATING.

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
HVAC SCHEMATICS									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		XXX	03/11	XXX	XXX	XX/XX	H-6 OF H-7		
DESIGNED		XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER		
DRAWN		XXX	03/11	CHECKED	XXX	XX/XX	-		
QUANTITIES		XXX	XX/XX	CHECKED	XXX	XX/XX	TOTAL SHEETS		
ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.		21			
REV. DATE		-----		21		27			

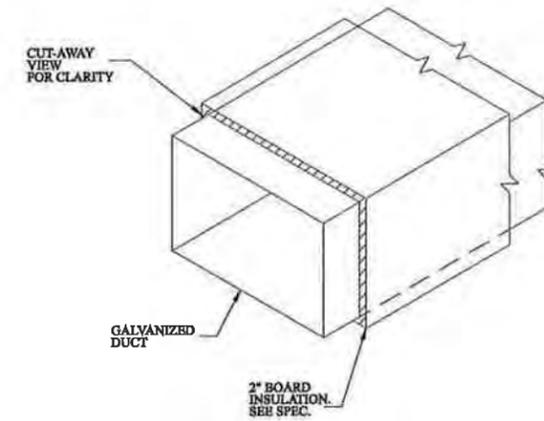
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	H-6	



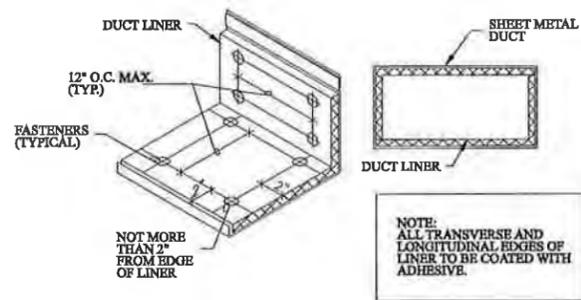
CONDENSING UNIT DETAIL



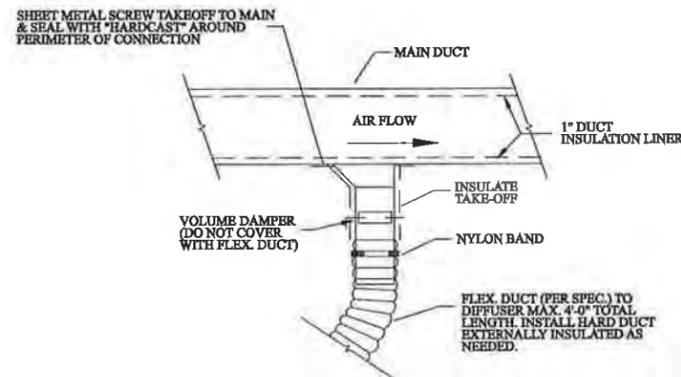
150% DUCT TAKE OFF DETAIL



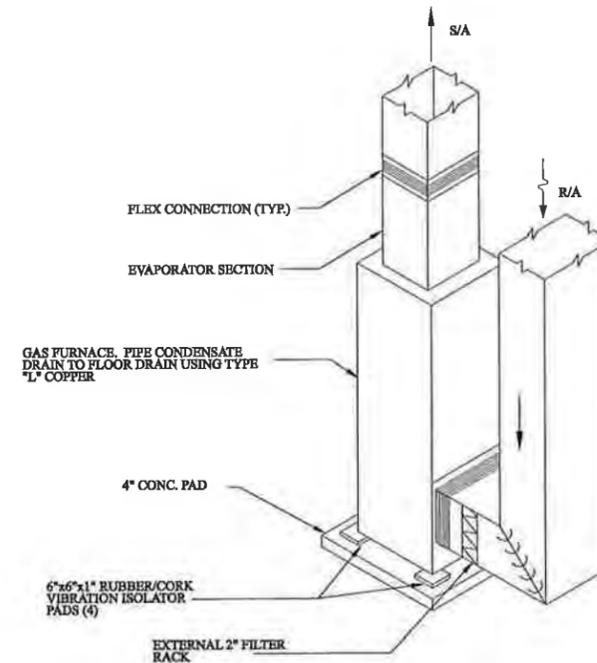
OUTSIDE AIR DUCT INSULATION



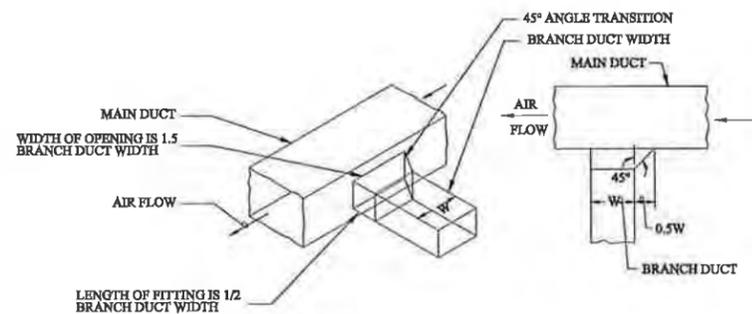
DUCT LINER DETAIL



FLEXIBLE DUCT DETAIL



GAS FURNACE UNIT DETAIL



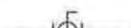
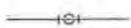
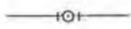
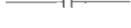
DUCT TAKE OFF DETAIL

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084	STATE PROJECT	13678F		
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
HVAC DETAILS									
REVISIONS AFTER PROPOSAL	BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET			
DESIGNED	XXX	03/11	CHECKED	XXX	XX/XX	H-7 of H-7			
DRAWN	XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER			
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX	-			
ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS				
REV. DATE	-----			22	27				

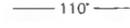
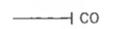
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	H-7	

PLUMBING LEGEND

VALVES & FITTINGS

	GLOBE VALVE
	O, S, & Y GATE VALVE W/ TAMPER SWITCH
	GATE VALVE
	WAFER CHECK VALVE
	PLUG VALVE OR BALANCING COCK
	STRAINER
	PRESSURE RELIEF VALVE
	MOTORIZED VALVE
	PRESSURE REDUCING VALVE
	BUTTERFLY VALVE
	BALL VALVE
	ELBOW DOWN
	ELBOW UP
	TEE DOWN
	TEE UP
	CAP
	UNION
	PIPE INCREASER OR DECREASER
	FLANGE
	BLIND FLANGE
	WATER METER WITH PULSE HEAD
	RPZ (REDUCED PRESSURE BACKFLOW PREVENTER)

PLUMBING

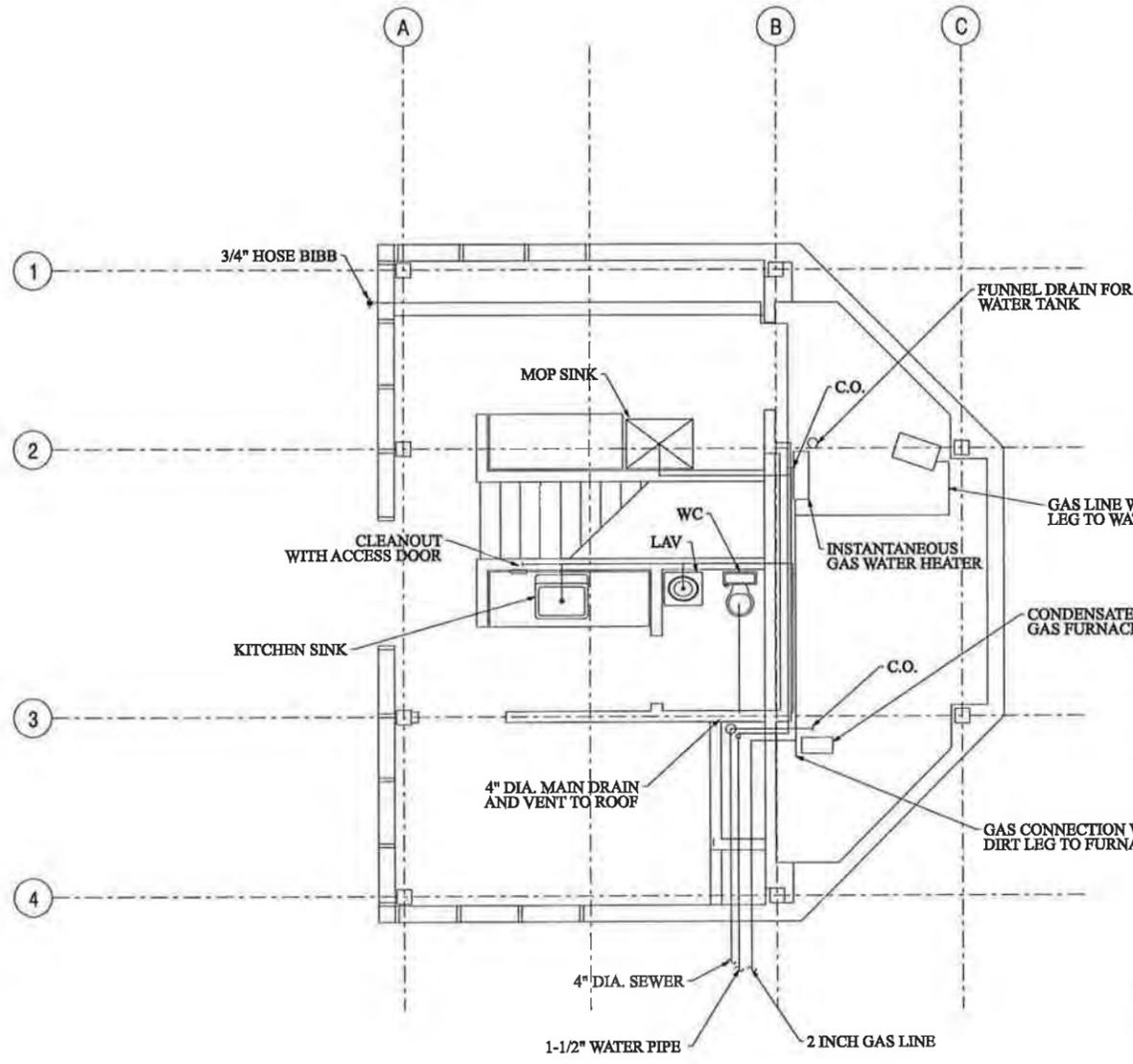
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	RECIRCULATING DOMESTIC HOT WATER
	SANITARY
	VENT
	TEMPERED WATER
	HOSE BIB
	WALL CLEAN OUT
	FLOOR CLEANOUT
	FLOOR DRAIN W/ TRAP
	P TRAP
WC	WATER CLOSET
LAV	LAVATORY
FD	FLOOR DRAIN
FS	FLOOR SINK 16"x16"x12"
DWH	DOMESTIC WATER HEATER
EWC	ELECTRIC WATER COOLER
	WASTE PIPING BELOW SLAB
	WASTE PIPING
C.O.	CLEAN OUT
G.C.	GENERAL CONTRACTOR
VTR	VENT THROUGH ROOF
FCO	FLOOR CLEAN OUT
	KEYED WORK NUMBER
WCO	WALL CLEAN OUT
	CONNECT NEW TO EXISTING
CA	COMPRESSED AIR
EWS	EMERGENCY EYE WASH STATION
AC-#	AIR COMPRESSOR
MV-#	MIXING VALVE
L.O.C.	LIMIT OF CONTRACT
HR	HOSE REEL
HB	HOSE BIBB
YH	YARD HYDRANT
Y.C.O.	YARD CLEAN PUT
AC-1	AIR COMPRESSOR
MAV-1	MOTORIZED AIR VALVE
RAD-1	REFRIGERATED AIR DRYER
HR-1	HOSE REEL
TW	TEMPERED WATER
THW	TEMPERED HOT WATER

GENERAL NOTES:

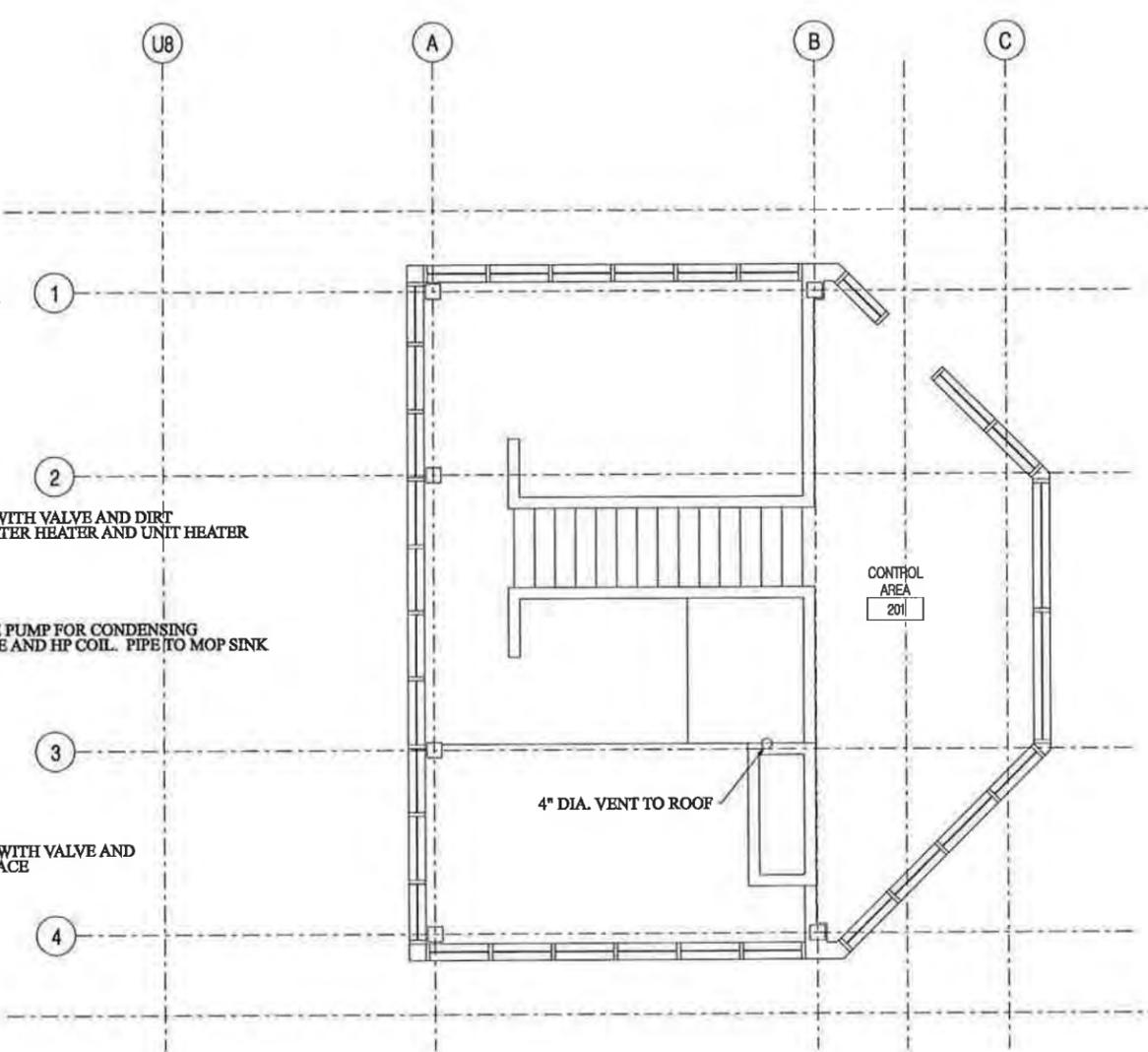
1. THESE LEGENDS ARE COMPOSED OF STANDARD SYMBOLS AND ARE PERTINENT TO THE CONDITIONS ON THIS SET OF DRAWINGS TO THE EXTENT APPLICABLE.
2. ADDITIONAL LEGENDS AND/OR ANOTHER LEGEND SHEET MAY APPEAR IN THIS SET OF DRAWINGS TO INDICATE SPECIFIC CONDITIONS IN LIEU OF SYMBOLS SHOWN ON THIS SHEET.

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	P-1 LEGEND	

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
PLUMBING LEGEND									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		DESIGNED	XXX 03/11	CHECKED	XXX	XX/XX	P-1 OF P-5		
		DRAWN	XXX 03/11	CHECKED	XXX	XX/XX	FILE NUMBER		
		QUANTITIES	XXX XX/XX	CHECKED	XXX	XX/XX			
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS		
		REV. DATE				23	27		



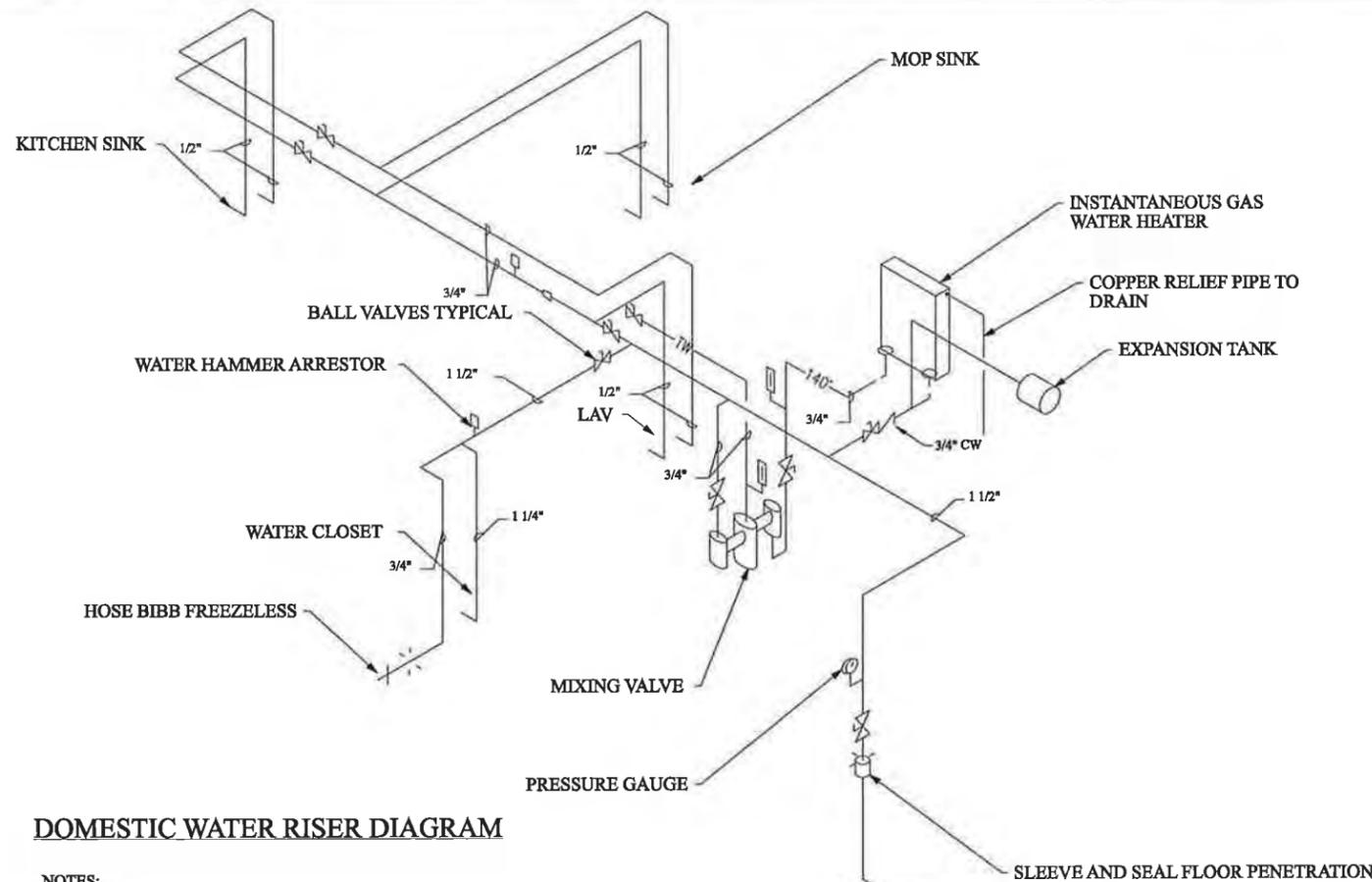
CONTROL HOUSE FIRST FLOOR PLUMBING PLAN



CONTROL HOUSE MEZZANINE PLUMBING PLAN

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE PLUMBING PLAN									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED BY	DATE	BRIDGE SHEET			
		DESIGNED	XXX 03/11	CHECKED	XXX XX/XX	P-2 of P-5			
		DRAWN	XXX 03/11	CHECKED	XXX XX/XX	FILE NUMBER			
		QUANTITIES	XXX XX/XX	CHECKED	XXX XX/XX	-			
		ISSUED DATE		FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS	
		REV. DATE				24		27	

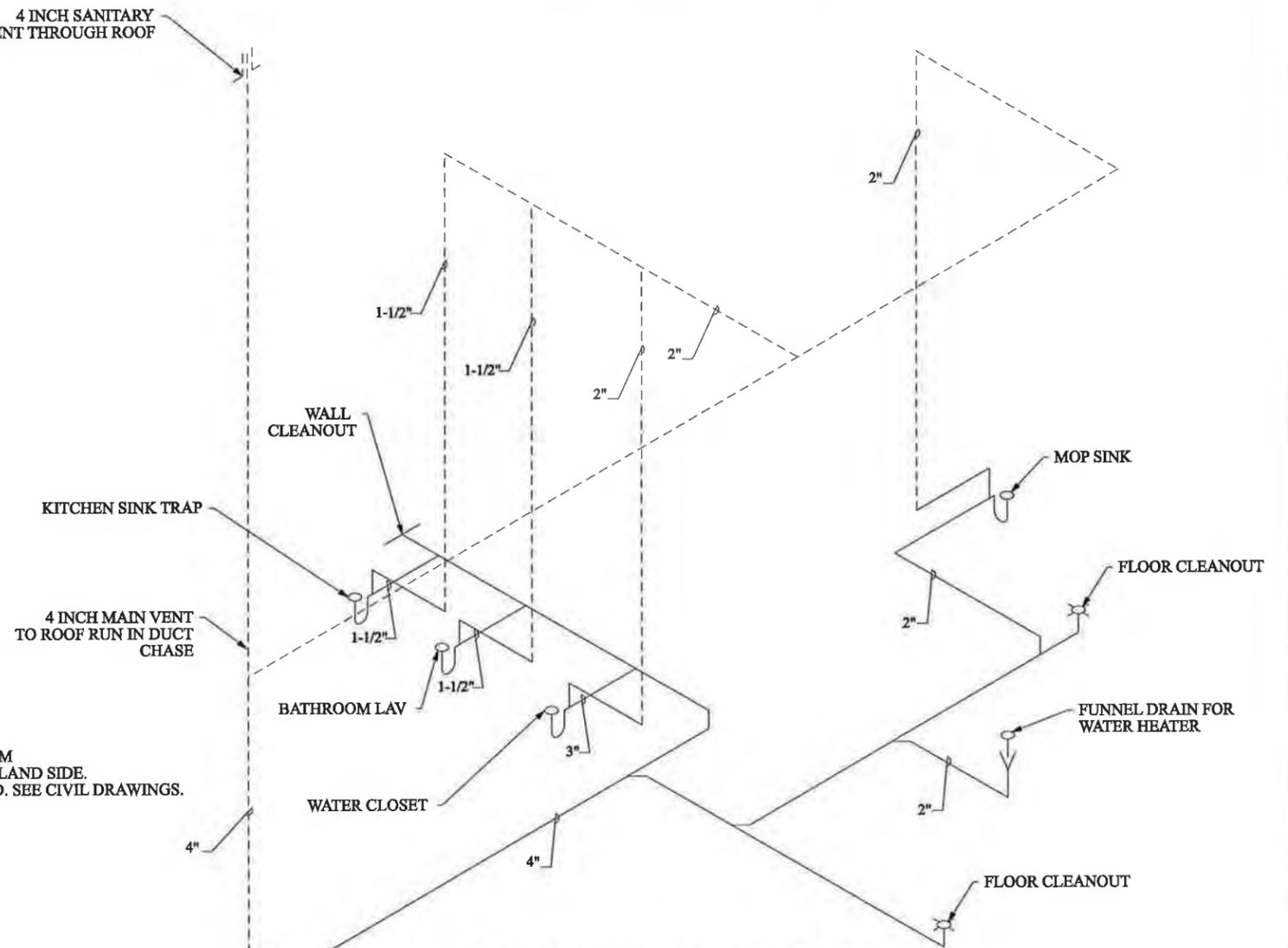
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
P-2 CONTROL HOUSE PLUMBING		



DOMESTIC WATER RISER DIAGRAM

NOTES:

1. DOMESTIC WATER HEATER TO BE LOCATED IN THE MECHANICAL ROOM
2. PROVIDE EXPANSION COMPENSATORS AT APPROXIMATELY EVERY 100 FEET FOR THE WATER PIPE.
3. WATER PIPE SHALL BE INSULATED THROUGHOUT ITS ENTIRE LENGTH, BOTH EXTERIOR AND INTERIOR OF THE BUILDING.
4. PROVIDE 10 FEET MAXIMUM HORIZONTAL AND VERTICAL SUPPORT SPACING FOR WATER PIPE.
5. WATER PIPE INSULATION SHALL BE CONTINUOUS THROUGH SIDEWALK STRINGER DIAPHRAGMS.
6. LIMITS OF HEAT TRACE SHALL BE FROM THE INSIDE OR EXTERIOR WALL OF THE CONTROL HOUSE TO 4 FEET BELOW GRADE.
7. HEAT TRACING SHALL BE REDUNDANT CIRCUITS.



SANITARY WASTE RISER DIAGRAM

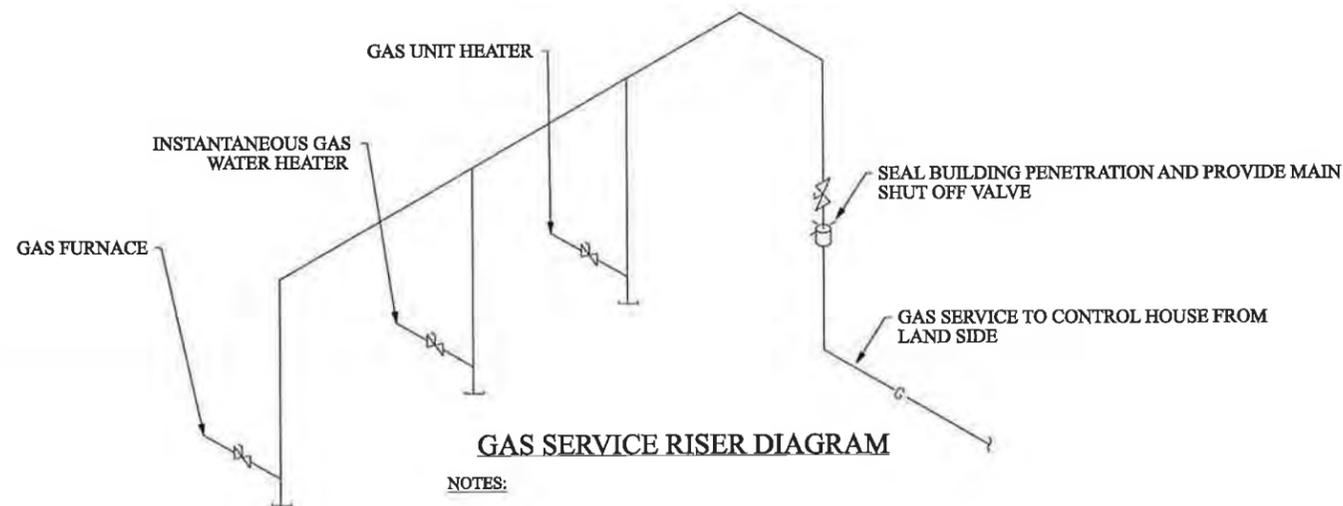
NOTES:

1. PROVIDE A CLEANOUT FOR SEWER PIPE AT EVERY 90 DEGREE BEND AS REQUIRED.
2. INSULATION SHALL STOP INSIDE OF MECHANICAL ROOM FOR SEWER PIPE.
3. SEWER PIPE SHALL BE HEAT TRACED WHERE EXPOSED. LIMITS OF HEAT TRACE SHALL BE FROM THE INSIDE OR EXTERIOR WALL IN CONTROL HOUSE TO 4 FEET BELOW GRADE. HEAT TRACING SHALL BE REDUNDANT CIRCUITS.
4. SEWER PIPE INSULATION SHALL BE INTERRUPTED WHERE PIPE PASSES THROUGH DIAPHRAGM.
5. PROVIDE 10 FEET MAXIMUM HORIZONTAL HANGER SUPPORT SPACING AND 10 FEET MAXIMUM VERTICAL SUPPORT SPACING FOR SEWER PIPE.

1-1/2" WATER SERVICE HUNG FROM BRIDGE STEEL TO PORTSMOUTH LAND SIDE. RPZ AND WATER METER ON LAND. SEE CIVIL DRAWINGS.

4 INCH MAIN VENT TO ROOF RUN IN DUCT CHASE

4 INCH DIAMETER SEWER CONNECT TO EXISTING CITY OF PORTSMOUTH SEWER SYSTEM. SEE CIVIL DRAWINGS.



GAS SERVICE RISER DIAGRAM

NOTES:

1. GAS SERVICE SHALL BE ROUTED ALONG BRIDGE STEEL ADJACENT TO SEWER AND WATER PIPING.
2. SEE CIVIL DRAWINGS FOR POINT OF CONNECTION ON LAND AND METER LOCATION.
3. PROVIDE GAS REGULATOR AS REQUIRED.
4. DESIGN BUILD CONTRACTOR TO VERIFY PIPE SIZE BASED ON TOTAL CONNECTED LOAD AND DISTANCE PIPE MUST RUN FROM LAND TO THE EQUIPMENT.

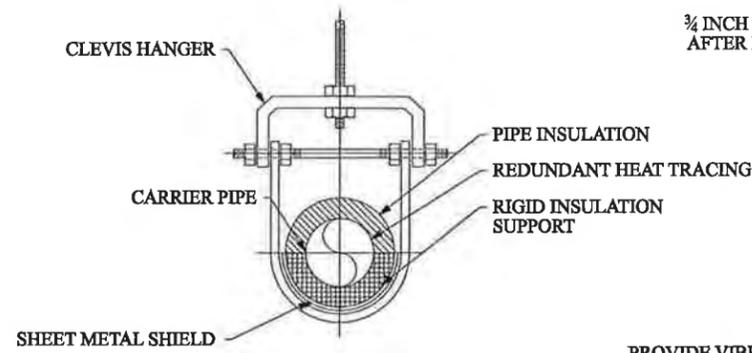
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	P-3 RISERS	

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTEBY, ME	BRIDGE NO.	247/084	STATE PROJECT	13678F				
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
CONTROL HOUSE RISER DIAGRAMS									
INCLUDED SHEET P-3 OF P-5									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	FILE NUMBER		
		DESIGNED	XXX	03/11	XXX	XX/XX			
		DRAWN	XXX	03/11	XXX	XX/XX			
		QUANTITIES	XXX	XX/XX	XXX	XX/XX			
		ISSUB DATE	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS		
		REV. DATE			25		27		

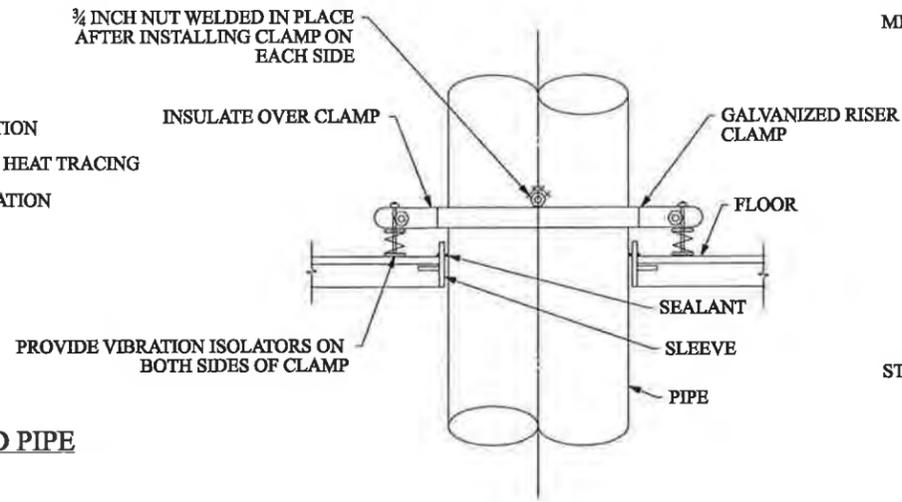
PLUMBING FIXTURE SCHEDULE								
FIXTURE	MARK	DESCRIPTION	CONNECTIONS				MOUNTING	NOTES
			CW	HW	WASTE	VENT		
LAVATORY	LAV-1	AMERICAN STANDARD ORBIT UNDERCOUNTER SINK, OR APPROVED EQUAL; VITREOUS CHINA; WHITE; FRONT OVERFLOW; MOUNTING KIT; 15-1/2" ROUND; 0.5 GPM VANDAL RESISTANT AERATOR	1/2"	1/2"	2"	1-1/4"	DROP IN LAVATORY IN COUNTER TOP	
KITCHEN SINK	SK-1	SINGLE BOWL, 4 HOLE, STAINLESS STEEL WITH SPRAYED INSULATION ON BOTTOM. FAUCET SHALL BE SINGLE LEVER WITH SPRAY NOZZLE WITH HOSE. DROP IN UNDER COUNTER ANCHORS.	1/2"	1/2"	2"	1-1/4"	DROP IN SINK IN COUNTER TOP	
MOP SINK	SK-2	MOLDED STONE 24" X 24" X 12" FLOOR MOP SINK WITH MOP HANGER, FAUCET WITH PAIL HOOK AND VACUUM BREAKER.	3/4"	3/4"	3"	2"		SET LEVEL. CAULK ALL SEAMS. MOUNT MOP HANGER TO ALLOW DRAINAGE INTO MOP SINK
WATER CLOSET	WC-1	FLOOR MOUNTED WATER CLOSET. 1.6 GALLON PER FLUSH. VITREOUS CHINA; WHITE	1"	-	4"	2"	RIM TO FLOOR = 15 INCHES (NON ADA)	
HOSE BIBB	HB	WOODFORD COLD WATER HOSE BIBB, OR APPROVED EQUAL; INSIDE MOUNT; VACUUM BREAKER BACKFLOW PREVENTER; 3/4 INCH	3/4"	-	-	-		
WATER HEATER	WH-1	INSTANTANEOUS GAS WATER HEATER WITH DIRECT VENT KIT; 82% EFFICIENT; 40-140 DEG TEMP RISE	3/4"	3/4"	3"Ø"	-		
NOTES: SUBMIT ALL CUT SHEETS OF PROPOSED TO ARCHITECT FOR APPROVAL SUBMIT EQUALS OR SUBSTITUTIONS FOR ENGINEER'S REVIEW AND APPROVAL								

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
PLUMBING SCHEDULES									
REVISIONS AFTER PROPOSAL				BY	DATE	BY	DATE	BRIDGE SHEET	
								P-4 OF P-5	
DESIGNED				XXX	03/11	CHECKED	XXX	XX/XX	FILE NUMBER
DRAWN				XXX	03/11	CHECKED	XXX	XX/XX	
QUANTITIES				XXX	XX/XX	CHECKED	XXX	XX/XX	
ISSUE DATE						FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS	
REV. DATE							26	27	

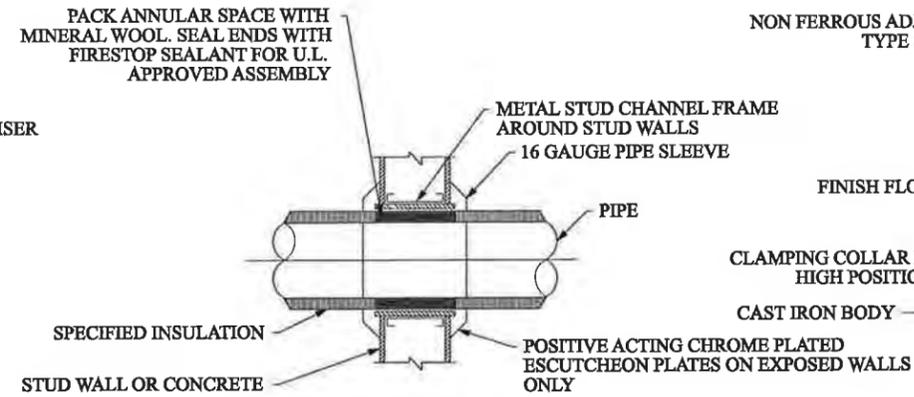
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	P-4 SCHEDULES	



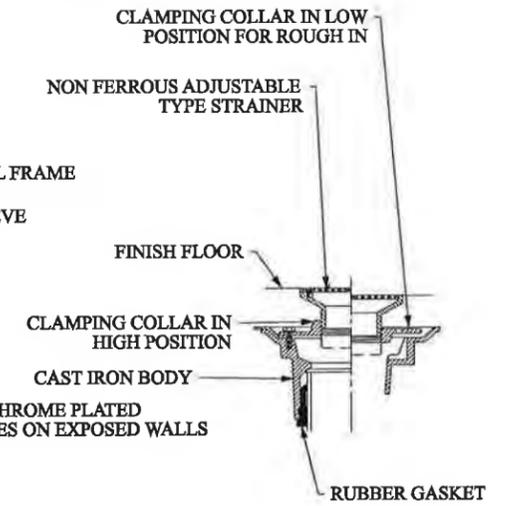
PIPE HANGER DETAIL FOR ALL INSULATED PIPE



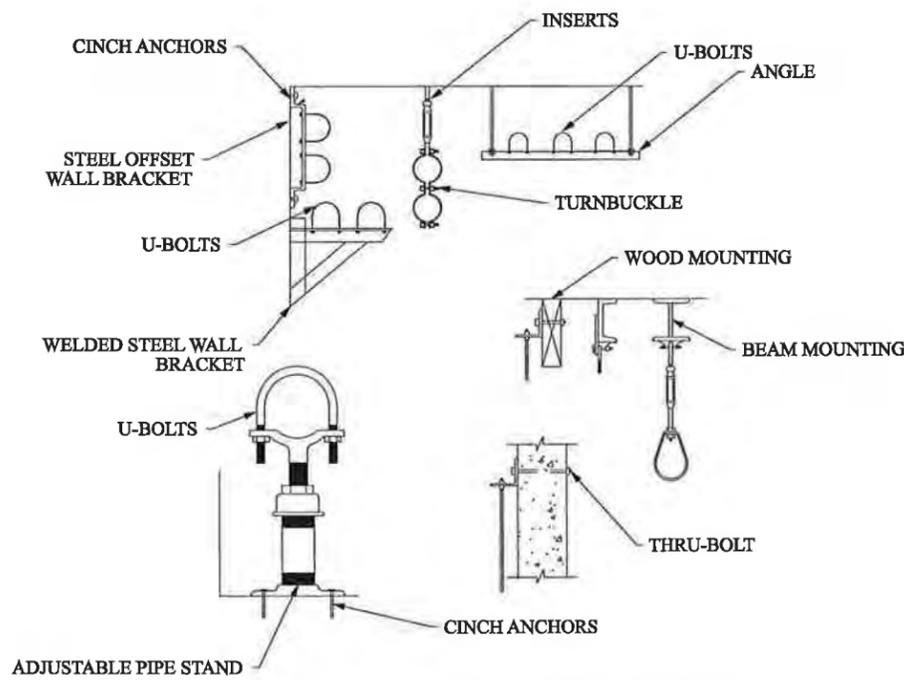
RISER CLAMP SUPPORT DETAIL



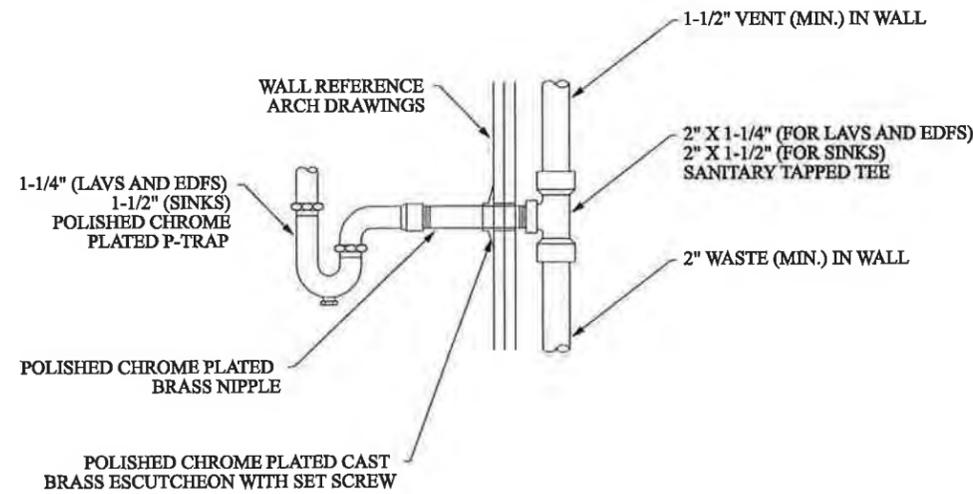
PIPE THROUGH WALL DETAIL



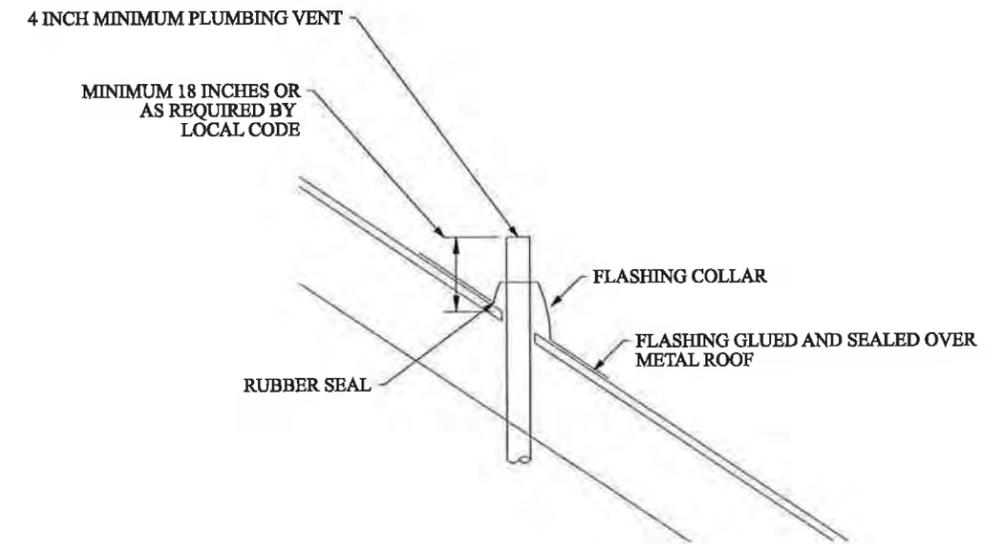
FLOOR DRAIN DETAIL



TYPICAL PIPE SUPPORT DETAILS



TYPICAL DRAIN PIPING DETAIL



VENT THROUGH ROOF DETAIL

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
	P-5 DETAILS	

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO.	247/084		STATE PROJECT	13678F	
LOCATION	U.S. ROUTE 1 OVER PISCATAQUA RIVER								
PLUMBING DETAILS									
REVISIONS AFTER PROPOSAL				BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET
				XXX	03/11	XXX	XXX	XX/XX	P-5 OF P-5
				XXX	03/11	XXX	XXX	XX/XX	FILE NUMBER
				XXX	XX/XX	XXX	XXX	XX/XX	*
				ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS
				REV. DATE	-----			27	27