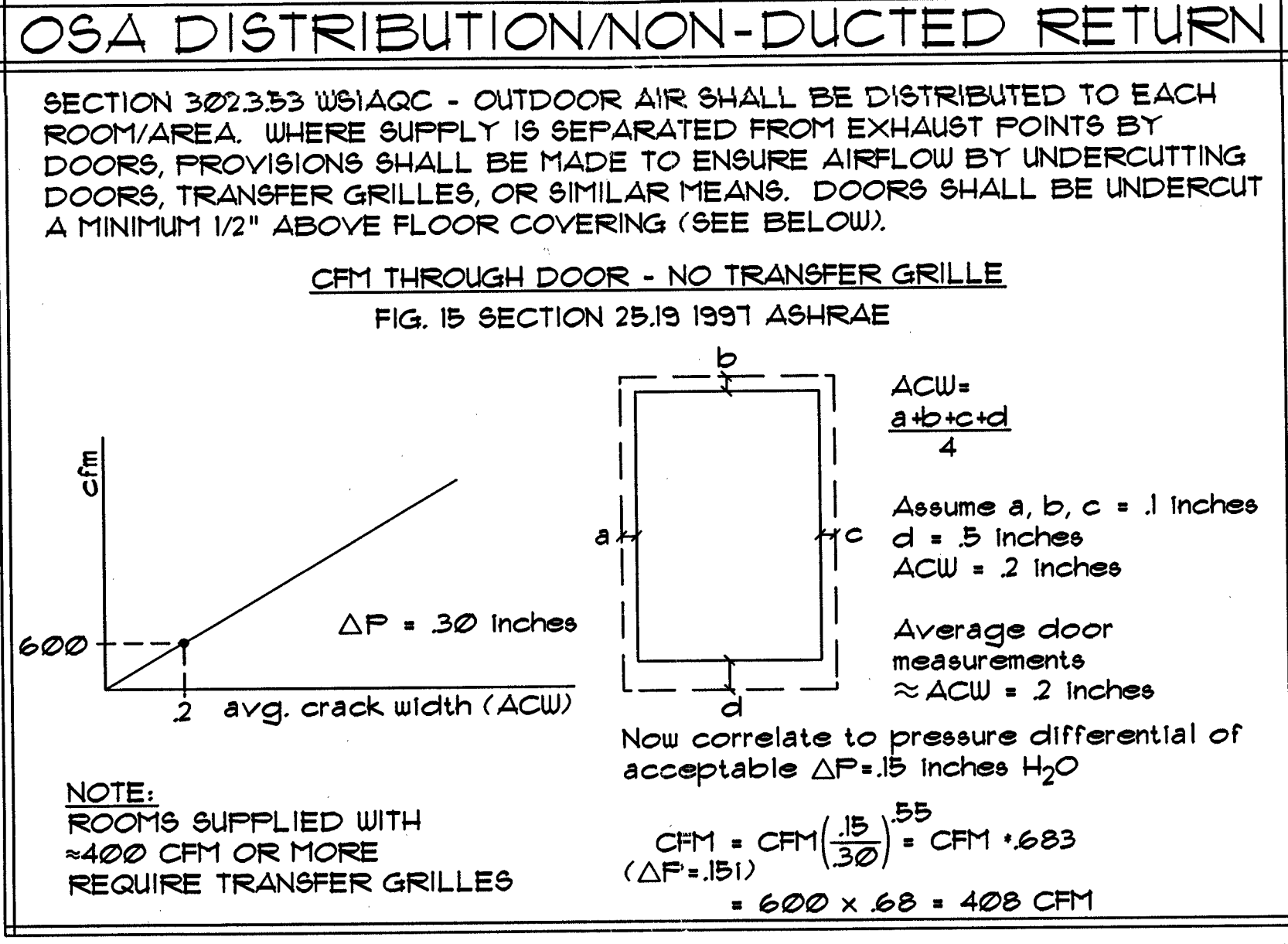


HVAC ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BDD	BACKDRAFT DAMPER
BTUH	BRITISH THERMAL UNIT PER HOUR
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
DB	DECIBEL
DEG	DEGREE
DH	DUCT HEATER
DN	DOWN
EA	EXHAUST AIR
EER	ENERGY EFFICIENCY RATIO
EG	EXHAUST GRILLE
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
FCU	FAN COIL UNIT
FD	FIRE DAMPER, FLOOR DRAIN
FOIC	FURNISHED BY OWNER INST. BY CONTRACTOR
FFM	FEET PER MINUTE
F&D	FIRE AND SMOKE DAMPER
GA	GAUGE
GF	GAS FURNACE
GPM	GALLONS PER MINUTE
GRD	GRILLE, REGISTER, DIFFUSER
GWB	GYPSUM WALLBOARD
HP	HORSEPOWER, HEAT PUMP
HVAC	HEATING, VENTILATING AND AIR CONDITIONING

HVAC ABBREVIATIONS	
ID	INSIDE DIMENSION
IRH	INFRARED HEATER
KW	KILOWATT
MBH	THOUSAND BTU PER HOUR
MCD	MOTORIZED CONTROL DAMPER
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OD	OUTSIDE DIMENSION OR DIAMETER
OSA	OUTSIDE AIR
FD	PRESSURE DROP
RPM	REVOLUTIONS PER MINUTE
RA	RETURN AIR
RAG	RETURN AIR GRILLE
SA	SUPPLY AIR
SG	SUPPLY GRILLE
SP	STATIC PRESSURE
SSG	SIDEWALL SUPPLY GRILLE
TBD	TO BE DETERMINED
TG	TRANSFER GRILLE
TYP	TYPICAL
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT TO ROOF
VVT	VARIABLE VOLUME AND TEMPERATURE



HVAC LEGEND	
	INLINE EXHAUST FAN(S)
	ROOFTOP EXHAUST FAN
	SIDEWALL EXHAUST FAN
	VAV FAN BOX
	CEILING EXHAUST FAN
	GAS METER
	VVT DAMPER
	THERMOSTAT
	T-BAR SUPPLY DIFFUSER
	T-BAR RETURN GRILLE
	HARDLID SUPPLY DIFFUSER
	HARDLID RETURN GRILLE
	CEILING RADIATION DAMPER ABOVE DIFFUSER
	CEILING RADIATION DAMPER ABOVE GRILLE
	FIRE DAMPER
	FIRE SMOKE DAMPER
	VOLUME DAMPER
	SMOKE DETECTOR
	FLEXIBLE DUCT SA/RA
	ROUND DUCT UP
	ROUND DUCT DOWN
	ACCESS PANEL
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	ROOFTOP UNIT
	EXHAUST FAN
	SUPPLY FAN
	UNIT HEATER
	CONDENSING UNIT
	HEAT PUMP
	AIR CONDITIONING UNIT
	AIR HANDLING UNIT
	INFRARED HEATER

HVAC NOTES	
1.	DUCT INSULATION SHALL MEET REQUIREMENTS OF SECTION 1414.2 OF THE 2003 WSEC AND TABLE 14-5.
2.	SMOKE DETECTOR(S) INSTALLED IN MAIN RETURN AIR DUCTS AS PER SECTION 606 OF THE 2003 IMC. HVAC SMOKE DUCT DETECTORS SHALL SHUT DOWN POWER TO THE UNIT UPON ACTIVATION AND, A "SUPERVISORY" ZONE SHALL BE INITIATED AT THE FIRE ALARM PANEL UPON SMOKE DUCT DETECTOR ACTIVATION. IMC SECTION 606.2.1.
3.	DUCTWORK-MAINTRUNK IS R-4.2 IN UNCONDITIONED SPACES AND R-8 IN UNCONDITIONED SPACES AS PER THE WSEC.
4.	ALL SINGLE PACKAGE HVAC UNITS HAVING A SUPPLY CAPACITY OF GREATER THAN 1900 CFM OR A TOTAL COOLING CAPACITY GREATER THAN 54 MBH TO HAVE AN ECONOMIZER.
5.	EQUIPMENT INSTALLATION INSTRUCTIONS TO BE ON SITE FOR INSPECTIONS.
6.	ALL HVAC EQUIPMENT TO BE LABELED TO THE SPACE SERVED.
7.	DUCTS TO BE SUPPORTED AT EACH DIRECTION CHANGE - VERTICAL AT 12'-0" MAX, HORIZONTAL AT 10'-0" MAX. WITH STRAP, OR 8'-0" MAX. F TRAPEZE SUPPORT.
8.	THERMOSTAT TO HAVE NIGHT SETBACK AND SEVEN DAY TYPE, WITH 5 DEGREE DEADBAND.
9.	THE HVAC INSTALLATION SHALL BE COMPLETE WHEN ALL SECTIONS OF 1416 WSEC HAVE BEEN SATISFIED. THIS SHALL INCLUDE AS-BUILT DRAWINGS, SUBMITTALS, O&M MANUALS, SYSTEM BALANCE REPORT, AND A COMMISSIONING REPORT.
10.	DUCT SEALING SHALL MEET REQUIREMENTS OF WSEC 1414.1. DUCT WORK WHICH IS DESIGNATED TO OPERATE AT PRESSURES ABOVE 1/2" WATER COLUMN STATIC PRESSURE SHALL BE SEALED IN ACCORDANCE WITH STANDARD RS-18. EXTENT OF SEALING IS AS FOLLOWS: 1. STATIC PRESSURE: 1/2" TO 2"; SEAL TRANSVERSE JOINTS. 2. STATIC PRESSURE 2: 2" TO 3"; SEAL ALL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS. 3. STATIC PRESSURE: ABOVE 3"; SEAL ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, AND DUCT WALL PENETRATIONS.
11.	NREC FORMS, DUCTING PLANS (BALANCING FEATURES) AS WELL AS VIAQ INFORMATION IS REQUIRED ALONG WITH A MECHANICAL PERMIT AT THE TIME OF THE TENANT IMPROVEMENT PERMIT.
12.	PIPING INSULATION SHALL MEET THE REQUIREMENTS OF 1415 OF THE WSEC.

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PERMIT ISSUE	1/3/06	1
PERMIT ISSUE REVISION	1/24/07	2
PERMIT ISSUE REVISION	2/14/07	3
AS-BUILT	3/30/07	4

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT

Building Planning  
Engineering Public Works  
Fire Traffic

SPLIT AIR CONDITIONER SCHEDULE

ID	BRAND NAME	MODEL NUMBER	COOLING		SEER	VOLTAGE/PHASE	MCA	MOCP	WEIGHT	SOUND RATING
			SENSIBLE	TOTAL						
AC-1	MITSUBISHI	MS24UN	-	-	-	115/1	11	15	40 LBS.	-
CU-1	MITSUBISHI	MU24UN	19,380	22,800	10.4	208/230/1	22	25	152 LBS.	43 DB

FAN SCHEDULE

ID	BRAND NAME	MODEL NUMBER	CFM	SP	HP/AMP	FLOW	V/PH	SOUND RATING	DUCT	LOCATION
EF-1	FANTECH	FX-6	191	3.75	.74	CV	115/1φ	69 SONES	6"φ	BREAK ROOM
EF-2	NUTONE	QTRN110	90	25	.9	CV	115/1φ	15 SONES	4"φ	JANITOR'S CLOSET
EF-3	FANTECH	FX-6	191	3.75	.74	CV	115/1φ	69 SONES	6"φ	COFFEE/BREAK ROOM
EF-4	ILG	CRBA12-1/4	1200	.5	1/4	CV	115/1φ	-	16x16 BDD	W.C.'S/SHOWER
EF-5	ILG	CRBA10-1/4	780	.625	1/4	CV	115/1φ	11.6 SONES	12x12 BDD	W.C.'S/COFFEE
EF-7	NUTONE	QTRN110	90	25	.9	CV	115/1φ	15 SONES	4"φ	MEN'S/WOMEN'S W.C.
EF-8	FANTECH	FX-6	191	3.75	.74	CV	115/1φ	69 SONES	6"φ	MEN'S/WOMEN'S W.C.
EF-9	CENTRAL BLOWER	FC-60A	400	.75	-	CV	-	-	10"φ	H3 PAINT MIX/STORAGE
EF-10	CENTRAL BLOWER	FC-60A	400	.75	-	CV	-	-	10"φ	H3 PAINT MIX/STORAGE
SF-1	FANTECH	FX-8	361	3.75	1.02	CV	115/1φ	73 SONES	8"φ	SHIPPING OFFICE
CF-1-21	LEADING EDGE	6000-1	-	-	-	CIRC.	-	-	-	MANUFACTURING AREA

GAS UNIT HEATER SCHEDULE

ID	BRAND NAME	MODEL NUMBER	CFM	BTUH INPUT	BTUH OUTPUT	EFFICIENCY	GAS CONNECTION	VENT OUTLET	V/PH	FLA	WT.
UH-1-14	REZNOR	F-300E	3,800	300,000	240,000	80%	3/4"φ	10"φ	115/1φ	4.0	221 LBS.

PACKAGE ROOF-TOP UNIT EQUIPMENT SCHEDULE

ID	BRAND NAME	MODEL NUMBER	CFM	S.P.	GAS HEATING		NET COOLING CAPACITY (BTUH)	SEER OR EER	EFFICIENCY OR COP	OSA CFM ECONO.	V/PH	MCA	MOCP	SOUND RATING	WT.
					INPUT (BTUH)	OUTPUT (BTUH)									
RTU-1	CARRIER	48TME004	1200	.5	74,000	40,592 MBH	36,000	10.0	80%	-	460/3φ	7.6	15	8.1 BELS	625 LBS.
RTU-2	CARRIER	48TMD028	10,000	.5	275,000	223,000	278,000	10.0	81%	3,000	460/3φ	64	80	-	2,550 LBS.
RTU-3	CARRIER	48TMD006	2,000	.5	74,000	59,200	57,800	10.0	80%	800	460/3φ	13.2	20	8.0 BELS	755 LBS.
RTU-4	CARRIER	48TMD009	3,400	.5	125 MBH	72/100 MBH	100,000	10.1	80%	600	460/3φ	21	25	8.2 BELS	1,098 LBS.

SCOPE OF WORK JOB - #06123	
1.	INSTALL (4) PACKAGE ROOFTOP UNITS.
2.	INSTALL (9) EXHAUST FANS.
3.	INSTALL (14) UNIT HEATERS.
4.	INSTALL (1) SUPPLY FAN.
5.	INSTALL (21) CIRCULATION FANS.
6.	INSTALL DUCTWORK AND GRILLES.
7.	INSTALL NATURAL GAS PIPING.
8.	INSTALL SPLIT TYPE AC SYSTEM.

NOTE: These plans are diagrammatical only. Please verify all dimensions at job site.

AS-BUILT

PRCTI20230310

PROJECT TITLE:

I.D.X.

1301 LEVEE ROAD NORTH, BLDG. B, SUITE 100 - PUYALLUP, WASHINGTON

PRINT/PLOT DATE:	3/30/07
PROJECT START DATE:	12/28/06
DRAFTER:	CFN
ENGINEER:	CE
PROJECT MANAGER:	SR
JOB NUMBER:	06123
SHEET NUMBER:	

M-C



UR

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4	3/30/07	AS-BUILT

ENGINEER'S SIGNATURE	
----------------------	--

PROJECT TITLE:

I.D.X.

1301 LEVEE ROAD NORTH, BLDG. B, SUITE 100 - PUYALLUP, WASHINGTON

PRINT/PLOT DATE:

3/30/07

PROJECT START DATE:

12/28/06

DRAFTER:

CFN

ENGINEER:

CE

PROJECT MANAGER:

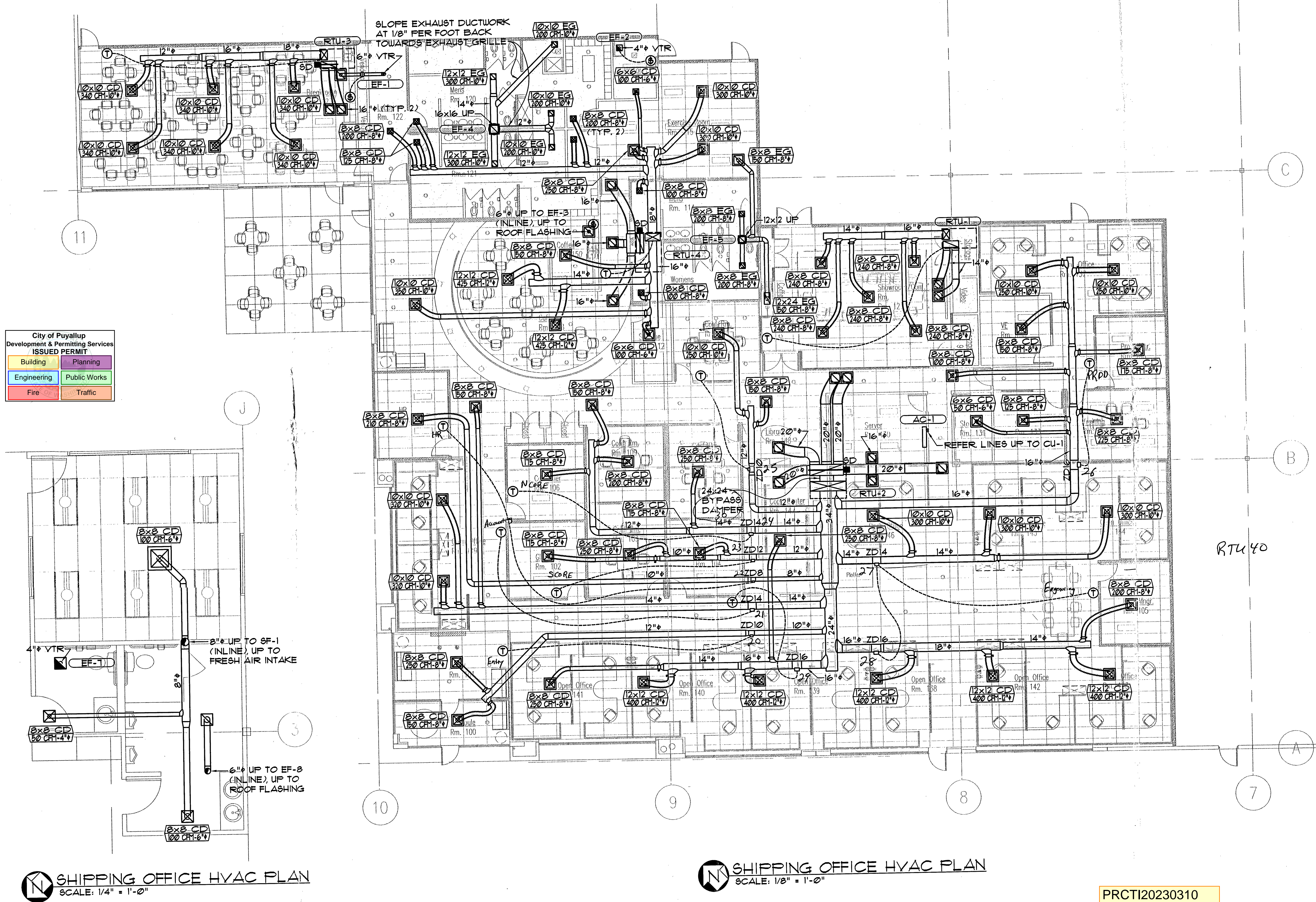
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JOB NUMBER:

06123

SHEET NUMBER:

M-1



PRCTI20230310

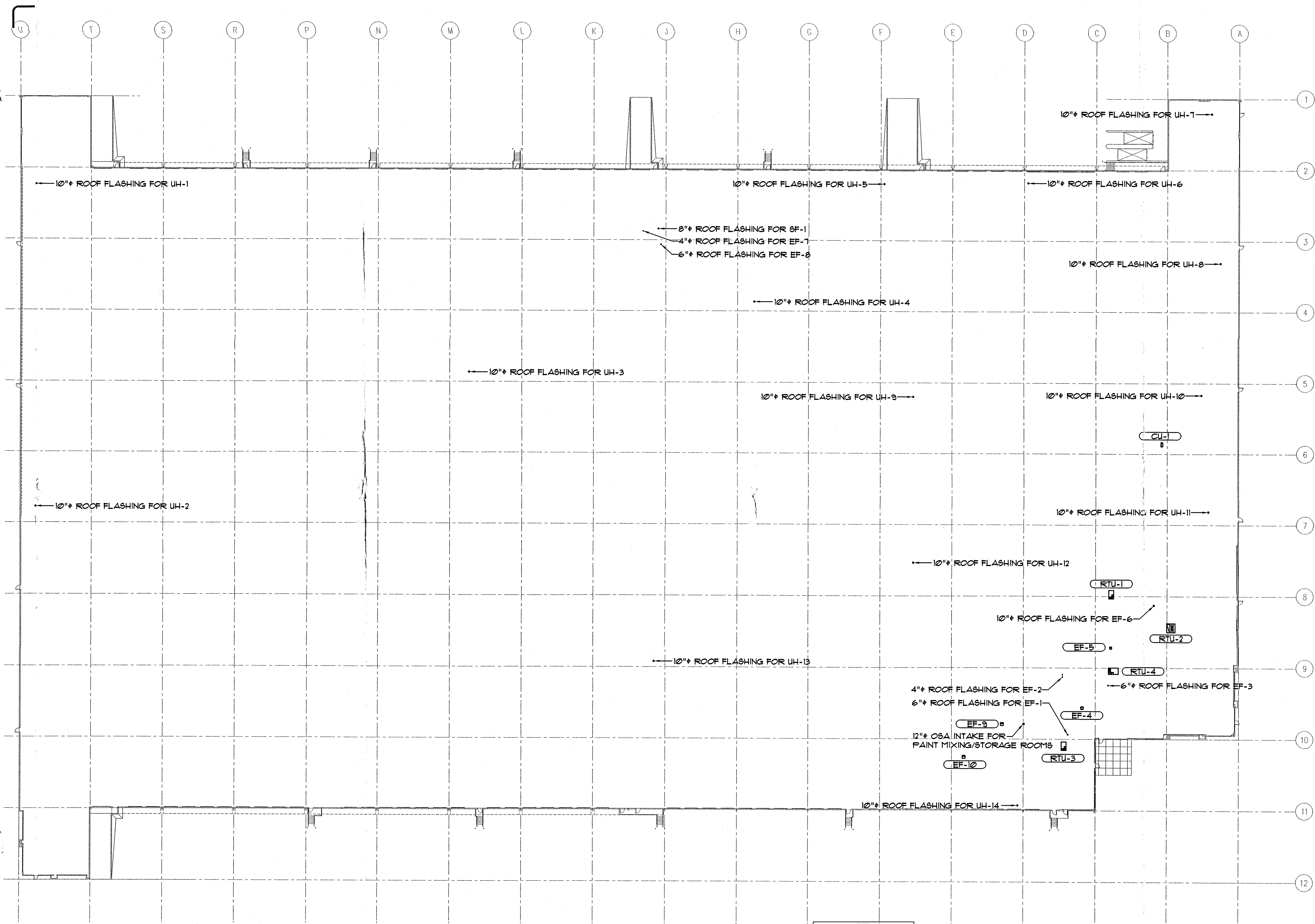
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Please verify all dimensions at job site.









**ROOF HVAC PLAN**  
SCALE: 1" = 30'-0"

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT

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Fire	Traffic

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3	2/14/07	PERMIT ISSUE REVISION
4	3/30/07	AS-BUILT

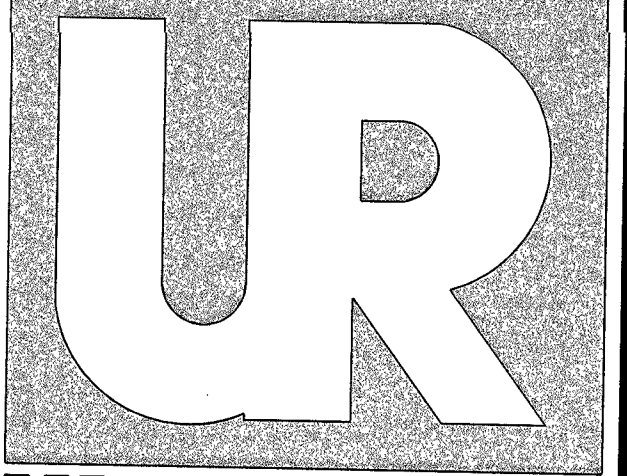
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JOB NUMBER:	06123
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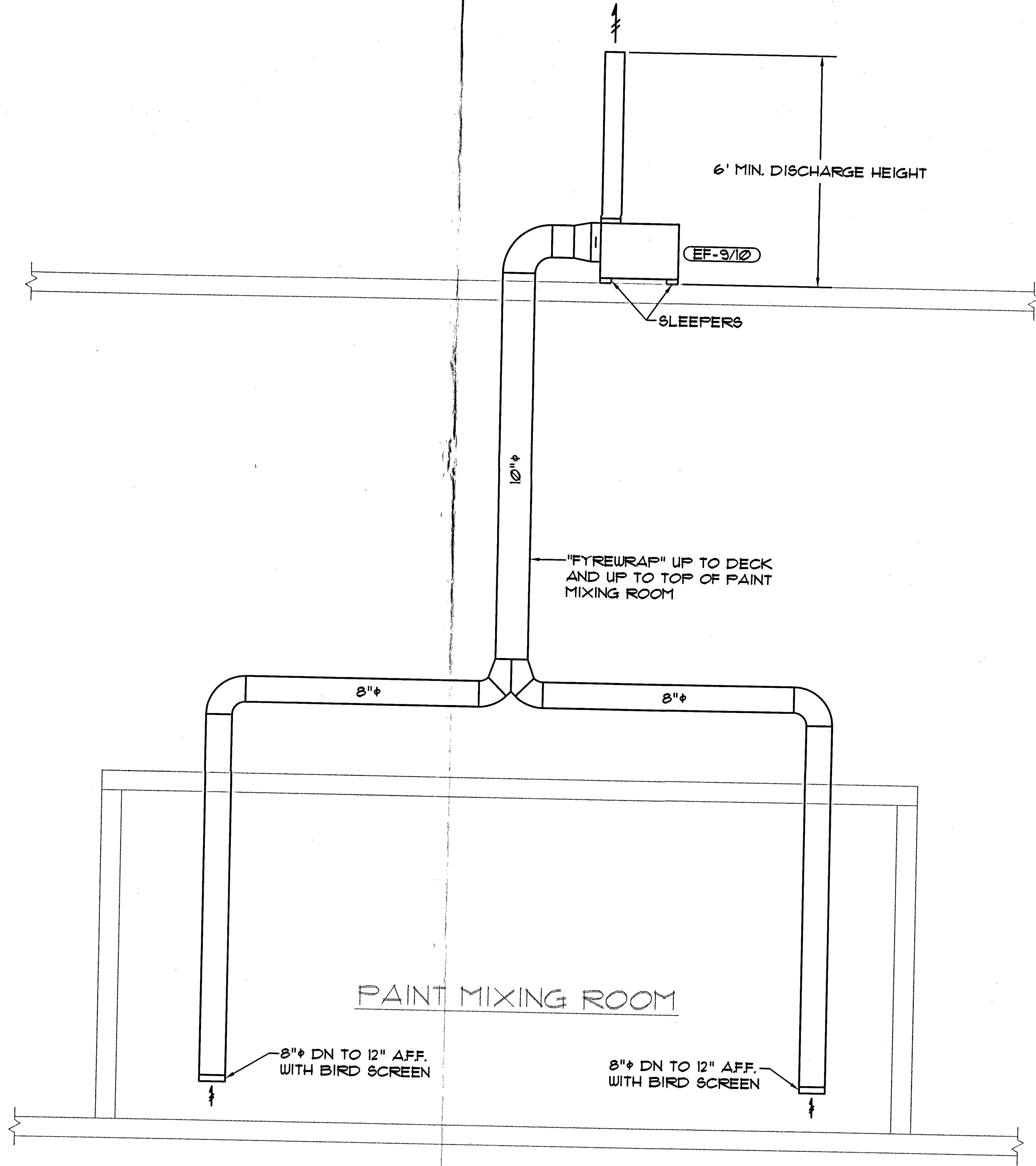
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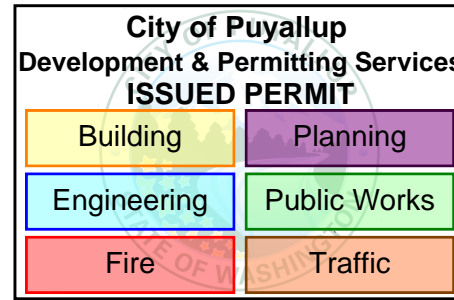
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PRINT/PLOT DATE:	3/30/07
PROJECT START DATE:	12/28/06
DRAFTER:	CFN
ENGINEER:	CE
PROJECT MANAGER:	SR
JOB NUMBER:	06123
SHEET NUMBER:	

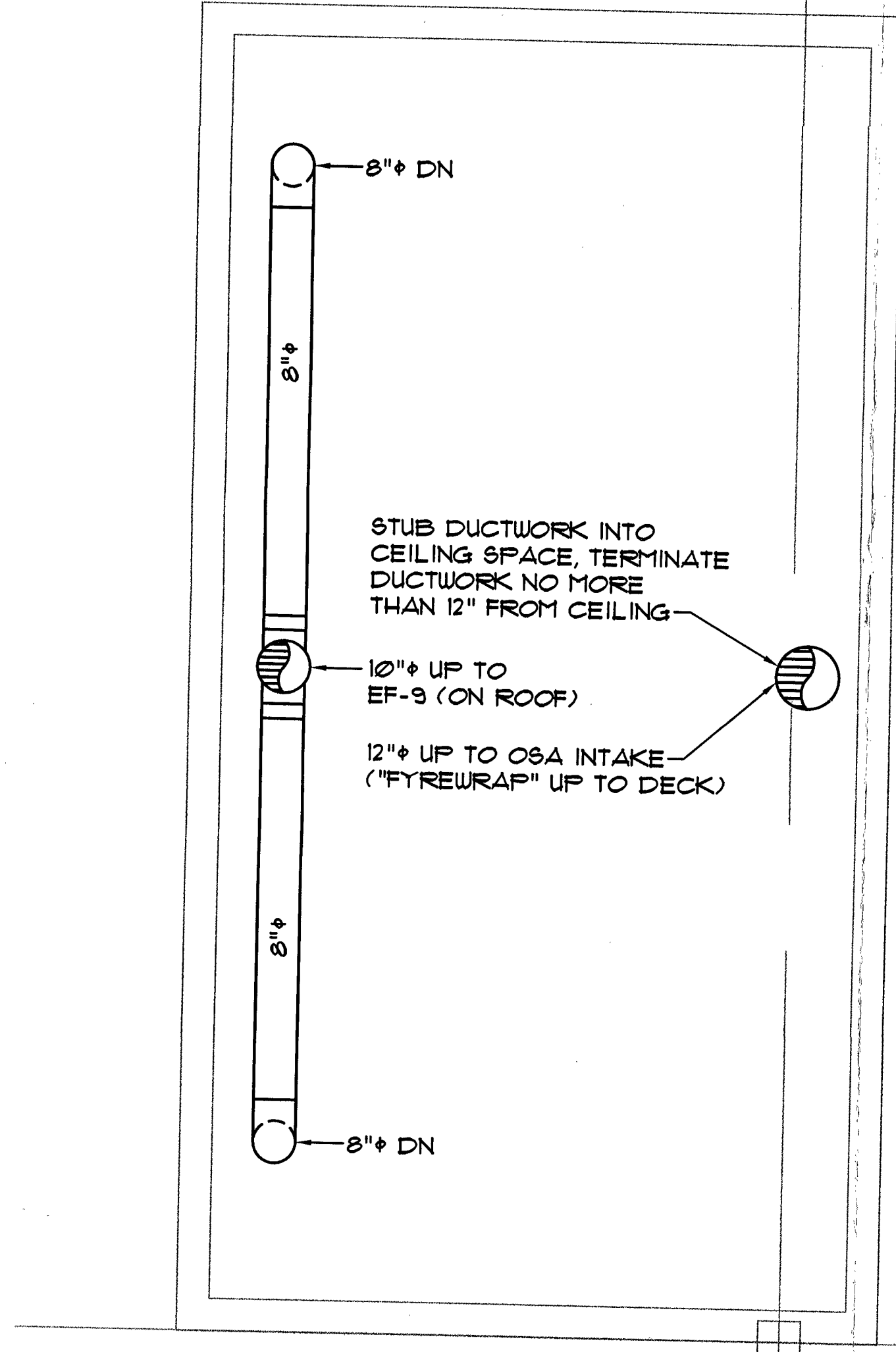
M-D



1 DETAIL - PAINT MIXING ROOM EXHAUST  
SCALE: NTS



NOTE: These plans are diagrammatical only.  
Please verify all dimensions at job site.



2 DETAIL - PAINT MIXING ROOM EXHAUST  
SCALE: 1/2" = 1'-0"

PRCT120230310

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