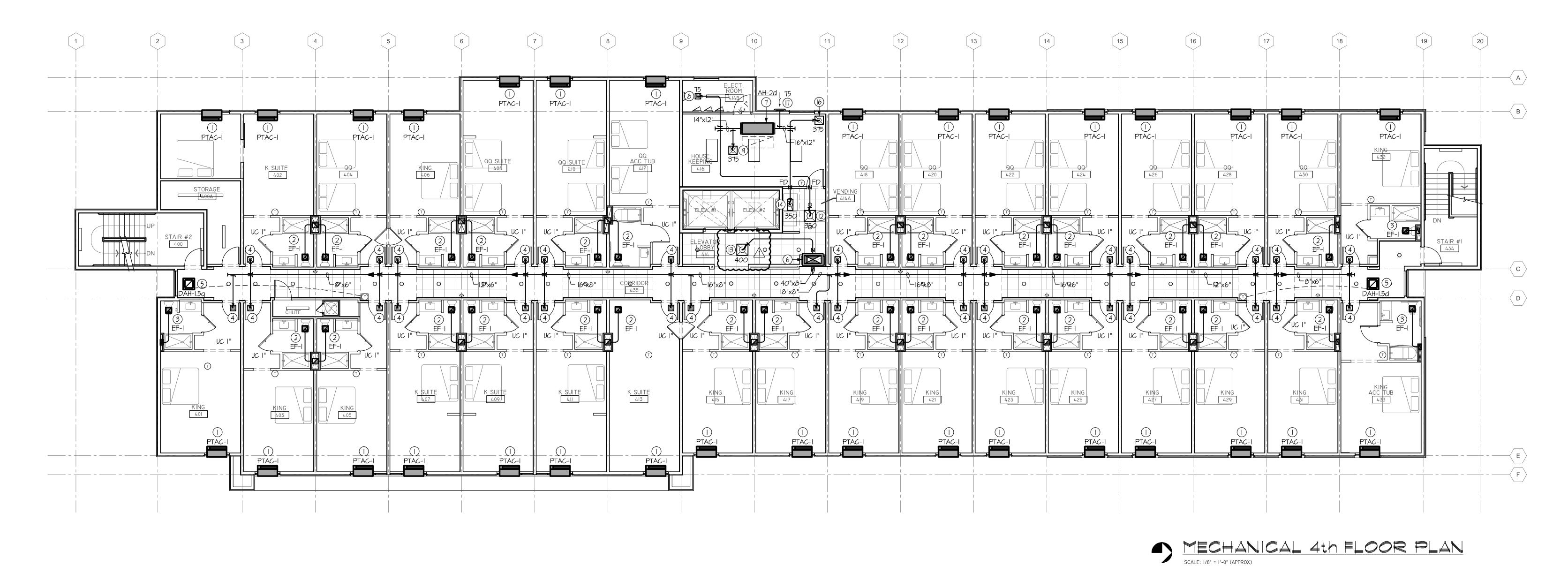
CITY COMMENTS 10-14-2015

MECHANICAL 4TH FLOOR PLAN



KEYNOTES

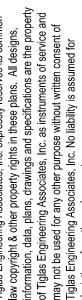
- I AIR CONDITIONING UNIT (PTAC-I) (WINDOW TYPE) INSTALL IN ACCORDANCE WITH 17 12" X 12" OUTSIDE AIR INTAKE LOUVER (L-I) WITH BIRD SCREEN. FIELD ROUTE MANUFACTURERS RECOMMENDATIONS, PROVIDE REMOTE MOUNTED THERMOSTAT IN ACCORDANCE WITH HOLIDAY INN REQUIREMENTS.
- 2 EXHAUST FAN (EF-I), IN CEILING WITH MANUAL WALL SWITCH. FIELD ROUTE 4" ROUND STEEL EXHAUST SUB-DUCT TO RATED 12"x12" (INSIDE CLEAR) EXHAUST SHAFT. SEE 'EXHAUST SHAFT DETAIL' ON SHEET 'M-O' FOR SHAFT PENETRATION DETAIL. SEE ARCHITECTURAL PLANS FOR EXACT SHAFT LOCATION AND CONSTRUCTION DETAILS.
- 3 EXHAUST FAN (EF-I), IN CEILING WITH MANUAL WALL SWITCH. FIELD ROUTE 4" ROUND STEEL EXHAUST SUB-DUCT TO RATED 12"x6" (INSIDE CLEAR) EXHAUST SHAFT. SEE 'EXHAUST SHAFT DETAIL' ON SHEET 'M-O' FOR SHAFT PENETRATION DETAIL. SEE ARCHITECTURAL PLANS FOR EXACT SHAFT LOCATION AND CONSTRUCTION DETAILS.
- 4 ROUTE 4" OSA SUPPLY DUCT WITH VOLUME DAMPER TO 6"x6" CD-2 AND BALANCE TO 40 CFM. DUCT TO BE CONSTRUCTED OF GALVANIZED SHEET METAL (STEEL), MINIMUM 24 GAUGE. PENETRATION OF RATED ASSEMBLY TO BE PROTECTED AS A 'THROUGH PENETRATION' IN ACCORDANCE WITH IMC SECTION 712. FIRESTOPING MATERIAL TO BE TESTED IN ACCORDANCE WITH ASTM E 119, ASTM E 814 OR UL 1479. VERIFY REQUIREMENTS WITH ARCHITECT PRIOR TO CONSTRUCTION.
- 5 DUCTLESS AIR HANDLER (DAH-#), INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE LIQUID/ SUCTION PIPING, SIZED AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS, FIELD ROUTE TO CORRESPONDING CONDENSING UNIT ON ROOF.
- 6 36"xI8" (INSIDE CLEAR) OUTSIDE AIR SUPPLY SHAFT. SEE ARCHITECTURAL PLANS FOR EXACT SHAFT LOCATION/CONSTRUCTION DETAILS. PROVIDE AN ACCESSIBLE COMBINATION FIRE/SMOKE DAMPER AT ALL PENETRATIONS OF THE RATED SHAFT ASSEMBLY.
- 7 AIR HANDLING UNIT (AH-#) MOUNTED WITH SPRING TYPE VIBRATION ISOLATORS ON/ WITH RETURN AIR PLENUM WITH FULL SIZE DUCTS AND FLEX CONNECTORS. PROVIDE FULL-SIZE ACCESS PANEL WHERE LOCATED ABOVE HARD-LID CEILING. PROVIDE LIQUID/ SUCTION PIPING, SIZED AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS, FIELD ROUTE TO CORRESPONDING CONDENSING UNIT ON ROOF. DUCT SMOKE DETECTOR IN RETURN DUCT, INTERLOCK WITH AIR MOVING EQUIPMENT TO SHUT UNIT DOWN ON ACTIVATION.
- 8 6" X 6" CD-2, 6" ROUND NECK, 4-WAY THROW.
- 9 12" X 12" CD-2, 10" ROUND NECK, 4-WAY THROW.
- 10 24" X 24" CD-1, 6" ROUND NECK.
- II 24" X 24" CD-I, 8" ROUND NECK.
- 12 24" X 24" CD-1, IO" ROUND NECK.
- 13 24" X 24" CD-1, 12" ROUND NECK. $\sqrt{1}$ 14 24" X 12" RG-1, 12" ROUND NECK.
- 15 24" X 24" RG-1, 18" ROUND NECK.
- 16 14" X 14" RG-2, 12" ROUND NECK.

- 6" ROUND DUCT TO RETURN DUCT WITH VOLUME DAMPER AND BALANCE TO CFM RATE INDICATED ON PLANS.
- 18 14" X 6" SWS, 8" ROUND BRANCH DUCT WITH FULL SIZE DUCT CONNECTION TO
- 19 18" X 6" SWS, 10" ROUND BRANCH DUCT WITH FULL SIZE DUCT CONNECTION TO DIFFUSER.
- 20 18" X 6" SWS, 12" ROUND BRANCH DUCT WITH FULL SIZE DUCT CONNECTION TO
- 21 24" X 24" RG-2, 18" ROUND NECK.
- 22 18" X 12" OUTSIDE AIR INTAKE LOUVER (L-I) WITH BIRD SCREEN. FIELD ROUTE TO RETURN DUCT WITH VOLUME DAMPER AND BALANCE TO CFM RATE INDICATED ON PLANS.
- 23 4" ROUND DRYER VENT FROM DRYER VENT BOX TO WALL CAP WITH BACKDRAFT DAMPER (NOT TO EXCEED 25' IN LENGTH WITH 5' PER 90° ELBOW). FIELD COORDINATE INSTALLATION WITH EQUIPMENT MANUFACTURER
- 24 EXHAUST FAN (EF-#), IN CEILING WITH FULL SIZE DUCT THRU ROOF TO CAP, MINIMUM OF 10' FROM OUTSIDE AIR INTAKE. FAN TO RUN CONTINUOUSLY U.N.O.
- 25 CONCENTRIC INTAKE/EXHAUST AT GAS WATER HEATER. INSTALL PER MANUFACTURER'S REQUIREMENTS. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 26 4'-0" LD-1, 10" ROUND BRANCH DUCT TO PLENUM BOX.
- 27 6'-0" LD-1, 12" ROUND BRANCH DUCT TO PLENUM BOX.

28 4'-0" LR-I, IO" ROUND BRANCH DUCT TO PLENUM BOX.

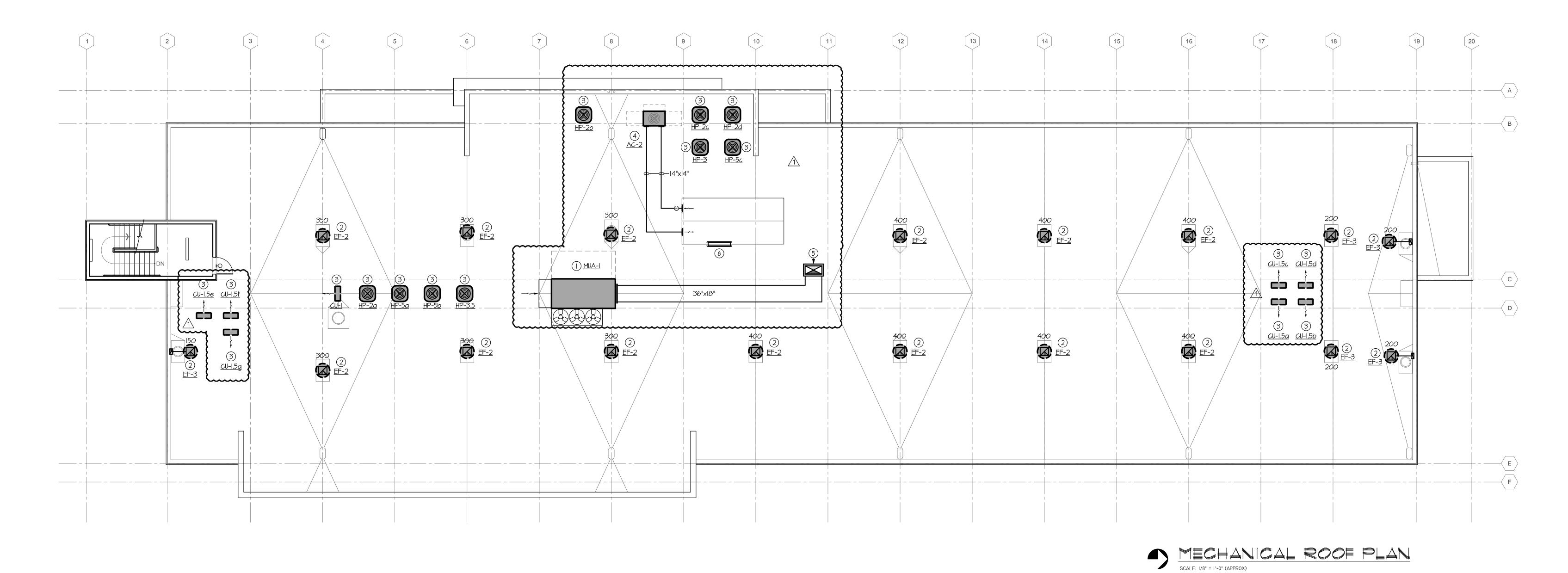
- 29 | 12" X 24" TG-1 WITH 12" X 12" TRANSFER DUCT WITH 1/2" DUCT INSULATION TO 12" X 24" TG-1 WITH MINIMUM OF 1 ELBOW.
- 30 | 12" X 24" TG-1 WITH 12" X 12" TRANSFER DUCT WITH 1/2" DUCT INSULATION TO 12" X 12" TG-1 WITH MINIMUM OF 1 ELBOW.
- 31 4" ROUND OSA SUPPLY DUCT UP/DOWN TO/FROM ADJACENT LEVEL. SEE SHEET M-I/M-2 FOR CONTINUATION.
- 32 24" X 24" WALL LOUVER (L-I) WITH MOTORIZED DAMPER. DAMPER TO BE NORMALLY CLOSED AND TO OPEN UPON ACTIVATION OF ANY DRYER.
- 33 | 16" X 16" RG-2, 14" ROUND NECK.
- 34 6" ROUND DRYER VENT TO WALL CAP WITH BACKDRAFT DAMPER, FIELD VERIFY REQUIREMENTS WITH ACTUAL DRYER UNITS BEING SUPPLIED.
- NOTE: ALL KEYNOTES MAY NOT BE USED ON THIS SHEET.

Tiglas Engineering Associates, Inc. consulting engineers



CITY COMMENTS
10-14-2015

MECHANICAL 5TH FLOOR PLAN



KEYNOTES

- I IOO% OUTSIDE AIR UNIT (MAU-I) MOUNTED ON FACTORY ROOF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. OSA INTAKE TO BE LOCATED MINIMUM IO' FROM ANY EXHAUST FAN OUTLET OR SEWER VENT. VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO CONSTRUCTION.
- 2 EXHAUST FAN (EF-#) ON FACTORY ROOF CURB WITH FULL SIZE DUCT THRU ROOF WITH FLEXIBLE CONNECTION. FAN TO BE LOCATED A MINIMUM OF 36" FROM VERTICAL WALLS AND 120" FROM ANY OSA INTAKES. BALANCE TO CFM RATE INDICATED ON PLANS.
- 3 CONDENSING UNIT (HP-#/CU-#) MOUNTED ON PAD WITH SPRING TYPE VIBRATION ISOLATORS. PROVIDE LIQUID/ SUCTION PIPING, SIZED AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS, FIELD ROUTE TO CORRESPONDING AIR-HANDLING UNIT(S).

1

- AIR CONDITIONING UNIT (AC-2) MOUNTED ON FACTORY ROOF CURB WITH FULL SIZE DUCTS THRU ELEVATOR SHAFT WITH FLEX CONNECTORS. EXPOSED DUCTWORK TO BE INTERNALLY LINED WITH INSULATION, NOT EXTERNALLY WRAPPED. DIMENSIONS INDICATED ON PLANS ARE 'INSIDE CLEAR'. DUCT SMOKE DETECTOR IN RETURN DUCT, INTERLOCK WITH AIR MOVING EQUIPMENT TO SHUT UNIT DOWN ON ACTIVATION.
- 5 36"xl8" (INSIDE CLEAR) OUTSIDE AIR SUPPLY SHAFT. SEE ARCHITECTURAL PLANS FOR EXACT SHAFT LOCATION/CONSTRUCTION DETAILS. SEE SHEET 'M-4' FOR CONTINUATION.
- 6 48" X 30" LOUVER (L-I) WITH BIRD SCREEN. PROVIDE MOTORIZED DAMPER TIED TO DUCT SMOKE DETECTOR AT AC-2 TO OPEN UPON ACTIVATION.

CITY COMMENTS
10-14-2015

PLUMBING
EQUIPMENT
& CALCULATIONS

&	AND
ABV	ABOVE
ADJ	ADJACENT OR ADJUSTABLE
AFF ARCH	ABOVE FINISHED FLOOR ARCHITEC, ARCHITECTURAL
AUTO	AUTOMATIC
В	BOILER
BP	BOILER PUMP
BLDG	BUILDING
BTM	ВОТТОМ
CLG	CEILING
CLR	CLEAR
CO	CLEAN OUT
CONT DN	CONTINUOS DOWN
DN	DOWNSPOUT
DWF	DOMESTIC WATER FOUNTAIN
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL(AL)
ELEV	ELEVATION OR ELEVATOR
ENG	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
EW EWC	EYE WASH
EXIST	ELECTRIC WATER COOLER EXISTING
EXT	EXTERIOR
FBO	FURNISHED BY OWNER
FCO	FLOOR CLEAN OUT
FCT	FACTORY
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FS FCW	FLOOR SINK
FCW FT	FILTERED COLD WATER
F.V.	FOOT, FEET FLUSH VALVE
F.T.	FLUSH TANK
GA	GAGE
GCO	GRADE CLEAN OUT
GWH	GAS WATER HEATER
HB	HOSE BIBB
HGT	HEIGHT
HORIZ HWP	HORIZONTAL HOT WATER PUMP
IN	INCHES
Ľ	LAVATORY
MANUF	MANUFACTURER
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MISC MTD	MISCELLANEOUS MOUNTED
MSB	MOP SERVICE BASIN
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
0/	OVER
OÁ	OVERALL
O.C.	ON CENTER OUTSIDE DIAMETER
O.D. OPNG.	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
OVHD.	OVERHEAD
PLMB	PLUMB(ING)
PORT	PORTABLE
POS	POSITION
PSF PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
R	RADIUS
RD	ROOF DRAIN
REQD	
REV	REVISED, REVISION
S SE	SINK SEWAGE EJECTOR
SF	SECURITY FIXTURE
SH	SHOWER
SF	SQUARE FOOT
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL STRUC	STEEL STRUCTURE, STRUCTURAL
TYP	TYPICAL
ÜR	URINAL
U.N.O.	UNLESS NOTED OTHERWISE
VAR	VARIES, VARIABLE
VERT	VERTICAL
W/	WITH WITHOUT
W/O WC	WATER CLOSET
WB	WASH DRAIN BOX
WH	WALL HYDRANT
WP	WATERPROOF, WATERPROOFING
CVI	WEATHERPROOF COLD WATER
CW HW	HOT WATER
HW HWC	HOT WATER RECIRC.
11110	— · · · · ·

KEY	DESCRIPTION	MANUF.	MODEL			CON	NECTION	S		REMARKS		
KET				TRAP	W	V	CW	DHW	GAS			
TUB	BATHTUB TUB/SHOWER VALVE	AMERICAN STAND. KOHLER	2390.202 ICH (LH) 2391.202 ICH (RH) K-T10275-4A-CP	2"	2"	1-1/2"	1/2"	1/2"		1.75 GPM MAX, PRESSURE BALANCING (KOHLER FORTE WITH SIMPLE SMART LOGO) SEE ARCHITECTURAL FOR COLOR AND MOUNTING SHOWER HEAD MOUNTED @ 6'-6"		
HTUB (ADA)	BATHTUB TUB/SHOWER VALVE	AMERICAN STAND. KOHLER	2390.202 ICH (LH) 2391.202 ICH (RH) K-T10827-4A-CP	2"	2"	1-1/2"	1/2"	1/2"		1.75 GPM MAX, PRESSURE BALANCING (KOHLER FORTE WITH SIMPLE SMART LOGO) SEE ARCHITECTURAL FOR COLOR AND MOUNTING FIXTURE AND INSTALLATION TO COMPLY WITH ALL ADA REQUIREMENTS. SHOWER HEAD MOUNTED @ 6'-6"		
LAV	LAVATORY FAUCET	TOTO MOEN	LHT-242G L4621	2"	2"	1-1/2"	1/2"	1/2"		0.5 GPM MAX PROVIDE POP-UP DRAIN, SEE ARCHITECTURAL FOR COLOR AND MOUNTING.		
HLAV (ADA)	LAVATORY FAUCET	тото тото	LT-579G TEL3LK10R	2"	2"	1-1/2"	1/2"	1/2"		0.5 GPM MAX SEE ARCHITECTURAL FOR COLOR AND MOUNTING FIXTURE AND INSTALLATION TO COMPLY WITH ALL ADA REQUIREMENTS.		
SH	SHOWER DRAIN SHOWER VALVE	J.R. SMITH KOHLER	2005 K-T10827-4A-CP	2"	2"	1-1/2"	1/2"	1/2"		2.5 GPM MAX, PRESSURE BALANCING SEE ARCHITECTURAL FOR COLOR AND MOUNTING		
HSH (ADA)	SHOWER DRAIN SHOWER VALVE	J.R. SMITH MOEN	2005 8343	2"	2"	1-1/2"	1/2"	1/2"		2.5 GPM MAX, PRESSURE BALANCING SEE ARCHITECTURAL FOR COLOR AND MOUNTING FIXTURE AND INSTALLATION TO COMPLY WITH ALL ADA REQUIREMENTS.		
WC	FLUSH TANK WATER CLOSET SEAT	TOTO CENTOCO	CST744S 800STS	INT.	3"	2"	1/2"			1.6 GPF SEE ARCHITECTURAL FOR COLOR AND MOUNTING ELONGATED BOWL		
HWC (ADA)	FLUSH TANK WATER CLOSET SEAT	TOTO CENTOCO	CST744SL 800STS	INT.	3"	2"	1/2"			1.6 GPF (LOCATE FLUSH HANDLE ON MANEUVERING SIDE OF ADA TOILETS) SEE ARCHITECTURAL FOR COLOR AND MOUNTING FIXTURE AND INSTALLATION TO COMPLY WITH ALL ADA REQUIREMENTS.		
TD	TROUGH DRAIN	JR SMITH	2210-A	4"	4"	3"				JR SMITH MODEL SSQ-9-2052-1836/12 TROUGH DRAIN WITH LIGHT DUTY GRATE AND PERFORATED SEDIMENT BUCKET (LINT INTERCEPTOR) WITH MAX. 1/2" OPENINGS.		
НВ	HOSE BIBB	JR SMITH	5609				3/4"			NON-FREEZE WITH INTEGRAL VACUUM BREAKER CHROME PLATED WITH T-HANDLE KEY		
LS	LAUNDRY SINK FAUCET	SWAN MOEN	MF 8940	2"	2"	1-1/2"	1/2"	1/2"		1 COMPARTMENT SINK, PROVIDE FIXTURE WITH CROME PLATED SUPPLIES WITH LOOSE KEY STOPS. 1.5 GPM MAX		
SK-1	1-COMP PREP SINK FAUCET	CUSTOM BY FS CONTR.	PER FS DWGS PER FS DWGS	2"	2"	1-1/2"	1/2"	1/2"		STAINLESS STEEL 1—COMPARTMENT SINK, GRID STRAINER, 2.2 GPM FLOW RESTRICTOR. FIXTURE INSTALLATION SHALL MEET ALL ADA REQUIREMENTS.		
SK-3	3-COMP SINK FAUCET	CUSTOM BY FS CONTR.	PER FS DWGS PER FS DWGS	2"	2"	1-1/2"	1/2"	1/2"		STAINLESS STEEL 3—COMPARTMENT SINK, GRID STRAINER, 2.2 GPM FLOW RESTRICTOR. FIXTURE INSTALLATION SHALL MEET ALL ADA REQUIREMENTS.		
BS	1-COMPARTMENT BAR SINK	ELKAY	LH-1722-C	2"	2"	1-1/2"	1/2"	1/2"		STAINLESS STEEL 1—COMPARTMENT SINK WITH GOOSENECK FAUCET, METAL WING HANDLES, GRID STRAINER, 2.2 GPM FLOW RESTRICTOR. ADA COMPLIANT.		
HS	HAND SINK	ELKAY	CHS-1716	2"	2"	1-1/2"	1/2"	1/2"		STAINLESS STEEL WALL HUNG SINK WITH LK-499 GOOSENECK FAUCET, METAL WING HANDLES, GRID STRAINER, 2.2 GPM FLOW RESTRICTOR. ADA COMPLIANT.		
FD	FLOOR DRAIN	JR SMITH	2005-A	2"	2"	1-1/2"				PROVIDE PROSET 'TRAPGUARD' INSERT.		
FS	FLOOR SINK	JR SMITH	3100	2"	2"	1-1/2"				PROVIDE 1/2" GRATE AND DOME BOTTOM STRAINER, PROSET 'TRAPGUARD' INSERT.		
MS	MOP SINK FAUCET W/ VACUUM BREAKER	FIAT FIAT	MSB-2424 830 AA	2"	2"	1-1/2"	3/4"	(2) 3/4"		PROVIDE HOSE AND HOSE BRACKET, MOP HANGER, ALTERNATE STRAINER, SILICONE SEALANT AND ALUMINUM BUMPER GUARD. PROVIDE ATMOSPHIRIC BACKFLOW PREVENTER.		
RD OD	ROOF DRAIN BODY OVERFLOW ROOF DRAIN	JR SMITH JR SMITH	1010-C-CID 1070-C-CID							PRIMARY/OVERFLOW ROOF DRAIN WITH CAST IRON COVER, UNDERDECK CLAMP. (OVERFLOW TO BE 2" ABOVE ROOF DRAIN)		
DN	DOWN SPOUT NOZZLE	JR SMITH	1770							CAST BRONZE		
WHA	WATER HAMMER ARRESTOR	JR SMITH	HYDROTROL 5000							WHA-A = 5005, WHA-B = 5010, WHA-C= 5020, WHA-D= 5030		
WB-1	WASHER BOX	GUY GRAY	B-200	2"	2"	1-1/2"	3/4"	3/4"		WASHER BOX WITH WATER HAMMER ARRESTOR (WHA-A), IN LOCKING ACCESS DOOR		
SP	ELEVATOR SUMP PUMP	STANCOR	SE-50							1/2 HP-120V-10 WITH 20" DIA X 24" DEEP SUMP, 55 GPM @ 10' TDH PROVIDE 'OIL MINDER' CONTROL TO PREVENT PUMPING HYDRAULIC FLUID.		
WH-1	WATER HEATER	WATER HEATER (MAINT R117)		-	-	-	2"	2"	700 MBH	PVI CONQUEST (130 GALLON) GAS FIRED WATER HEATER WITH FAN ASSISTED DIRECT COMBUSTION AIR TO FACTORY WALL CAPS. 700 MBH NATURAL GAS INPUT, 815 GPH RECOVERY @ 100F RISE. 97% THERMAL		
										EFFICIENCY PROVIDE FULL SIZE T&P RELIEF TO FLOOR SINK, AIR INTAKE ASSEMBLY. INSTALL PER MANUFACTURER'S RQUIREMENTS, SEE MANUFACTURER'S REQUIRED PIPING METHODS. ELEC: 120V-1PH-11 AMPS. OPER. WEIGHT: 1800 LBS		
EXP	THERMAL EXPANSION TANK	AMTROL	AT-80V-C				1-1/4"			53 GALLON TANK VOLUME THERMAL EXPANSION ABSORBER. STAND MODEL, INSTAL PER MANUFACTURER'S REQUIREMENTS.		
RP	RECIRCULATION PUMP	ARMSTRONG	E7							20 GPM @ 30' HEAD. PROVIDE WILO GDX-T-110D-110V TIMER & AQUASTAT. PUMP ELECTRICAL: 2 FLA-120V-1 PHASE ALL BRONZE CONSTRUCTION INSTALL PER MANUFACTURER'S REQUIREMENTS.		
TV	TEMPERING VALVE	LEONARD	TM-2020B-LF-DT				2"	2"		HI-LO THERMOSTATIC WATER MIXING VALVE. PROVIDE 'DT' DIAL THERMOMETER ON OUTLET. INSTALL PER MANUFACTURER'S REQUIREMENTS, INSTALL PER MANUFACTURER'S REQUIREMENTS, SEE MANUFACTURER'S REQUIRED PIPING METHODS. FLOW RATE = 1 - 226 GPM		
GT	GREASE TRAP	JAY R SMITH	8050 50 GPM / 100 LBS		3"	3"	<u></u>			JAY R SMITH 8050 50 GPM / 100 LBS. GREASE TRAP (GT), 3" W & 3" V, PROVIDE ACCESSIBLE, VENTED FLOW CONTROL FITTING, INSTALL PER LOCAL CODE REQUIREMENTS.		
RPBP	POOL BACKFLOW PREV.	WATTS	909QT				1"			PROVIDE DISCHARGE AIR-GAP FITTING FOR REDUCED PRESSURE ZONE COORDINATE WITH POOL CONTRACTOR AS REQUIRED. INSTALL PER MANUFACTURER'S AND LOCAL CODE REQUIREMENTS.		
BP	DUPLEX DCW BOOSTER PUMP SYSTEM	QUANTUM FLOW	GENIUS V SERIES				3"			DUPLEX VARIABLE SPEED BOOSTER PUMP RATED FOR A SYSTEM CAPACITY OF 17 GPM, WITH A SYSTEM PRESSURE OF 75 PSI, INCLUDING A ASSEMBLY MIN SUCTION PRESURE OF 25 PSI. ON A SS STEEL SKID, 3" STAINLESS STEEL SUCTION AND DISCHARGE MANIFOLDS, VARIABLE SPEED DRIVES, TOUCH SCREEN PLC CONTROLLER, AND TOUCH SAFE NEMA 1 CONTROL PANEL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. U.L. LISTED ELEC: (2) 5HP-208V-3PH		

WA	TER & WASTE	CALCULATION (IPC)					
MARK	FIXTURE NAME	WATER F.U.			WASTE F.U.		
		#	F.U.	Total	F.U.	Total	
W	WATER CLOSET (FT) (PUB)	3	5	15.0	6	18	
MC	WATER CLOSET (FT) (PRI)	II2	2.2	246.4	3	336	
LAV	LAVATORY (PUB)	3	2	6.0	- 1	3	
LAV	LAVATORY (PRI)	II2	0.7	78.4	- 1	II2	
TUB	TUB/SHOWER COMBO (PRI)	5	1.4	7.0	2	10	
SH	SHOWER (PRI)	107	1.4	149.8	2	214	
K5	SINK (PUB)	2	4.0	8.0	2	4	
ИB	WASHER BOX (PUB)	4	3	12.0	3	12	
MS	MOP SINK	1	3	3.0	3	3	
H5	HAND SINK	1	2	2.0	3	3	
L5	LAUNDRY SINK SINK (PUB)	1	3	3.0	2	2	
HB	HOSE BIBB	6	2.5	15.0	-	-	
ICE	ICE/ WATER	6	0.5	3.0	-	-	
F5	FLOOR SINK 2" TRAP	5	-	-	2	10	
FD	FLOOR DRAIN 2" TRAP	4	-	-	2	8	
	TOTAL FI		735.00				
	GPM (PREDOMINATELY FLUSH TANK) = 170.00						
(2	NATER REQUIREMENT: 2) 2" WATER METERS NASTE REQUIREMENT:	AND	3" BUI	LDING S	SUPPL'	Ý	
6" BUILDING DRAIN AT 1/4" SLOPE.							

DOMESTIC PIPING	BEFOR	E BOOSTER
CTREET PRECCURE *	60 PSI	
STREET PRESSURE *	+	
TOTAL DEVELOPED LENGTH	200 FT	
VERTICAL RISE	IO FT	ALL PIPING SIZED
		AT AN
<u>LOSSES</u>		ALLOWABLE LOSS
NEW (2) 2" WATER METERS	6.00 PSI	OF 6.5 PSI PER
RPBP	12 PSI	100' OF PIPE.
STATIC LOSS	4.30 PSI	
FIXTURE DEMAND	25 PSI	
TOTAL LOSSES	47.3 PSI	
Losses per 100' of Pipe	6.35 PSI	PER 2012 IPC

DOMESTIC PIPING	G: AFTEI	R BOOSTER
PUMP OUTLET PRESSURE	75 PSI	
TOTAL DEVELOPED LENGTH	300 FT	
VERTICAL RISE	45 FT	ALL PIPING SIZED
	-	ALL PIPING SIZED
LOSSES		ALLOWABLE LOSS
STATIC LOSS	19.35 PSI	OF 11.8 PSI PER
FIXTURE DEMAND	20 PSI	100' OF PIPE.
TOTAL LOSSES	39.4 PSI	
Losses per 100' of Pipe	11.88 PSI	PER 2012 IPC

* CONTRACTOR TO CONFIRM AVAILABLE STREET PRESSURE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

GENERAL NOTE: WASTE PIPE

ALL SANITARY PIPING IS TO SLOPE AT A MINIMUM OF 1/4" PER FOOT.

CPVC PIPING NOTE:

INSTALLATION OF CPVC PIPING FOR DOMESTIC HOT AND COLD WATER SHALL BE INSTALLED IN ACCORDANCE IWTH IAPMO INSTALLATION STANDARD 20-2006 AND MANUFACTURER'S INSTALLATION INSTRUCTIONS INCLUDING ALL SAFETY REQUIREMENTS AND PRECAUTIONS.

GREASE TRAP SIZING							
MARK	FIXTURE NAME	#	SIZE	GALLON CONVERSION	GALLONS		
5K	3-COMP SINK	ı	18"x18"x12"x3	/ 23I GALLONS/ CUBIC INCH	50.49		
5K	PREP SINK	ı	18"x18"x12"	/ 231 GALLONS/ CUBIC INCH	16.83		
M5	MOP SINK	1	20 GALLONS. PER	MANUFACTURERS INFORMATION	20		
HS	HAND SINK	1	IO GALLONS. PER	MANUFACTURERS INFORMATION	10		
				TOTAL GALLONS =	97.32		

STORAGE CAPACITY / 2.0 = FLOW RATE = 48.66

REQUIRES 50 GPM / IOO LBS.

PER IPC IOO3.3.4.I AND PDI GIOI

Tiglas

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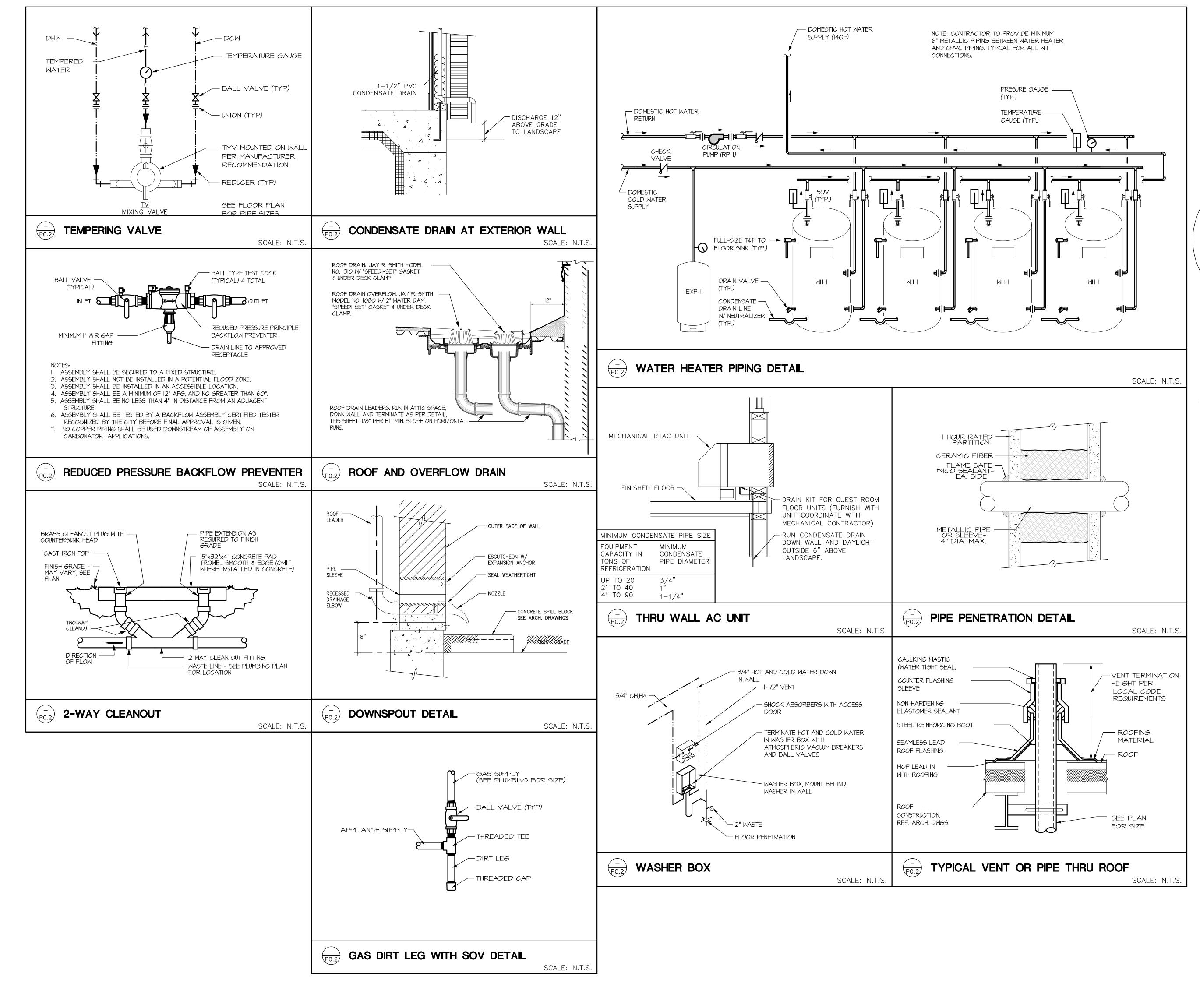
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Holiday Inn EXPRESS & Suites

JOB NUMBER

DATE
07-24-2015

PLUMBING DETAILS

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Fax: 602.992.1541

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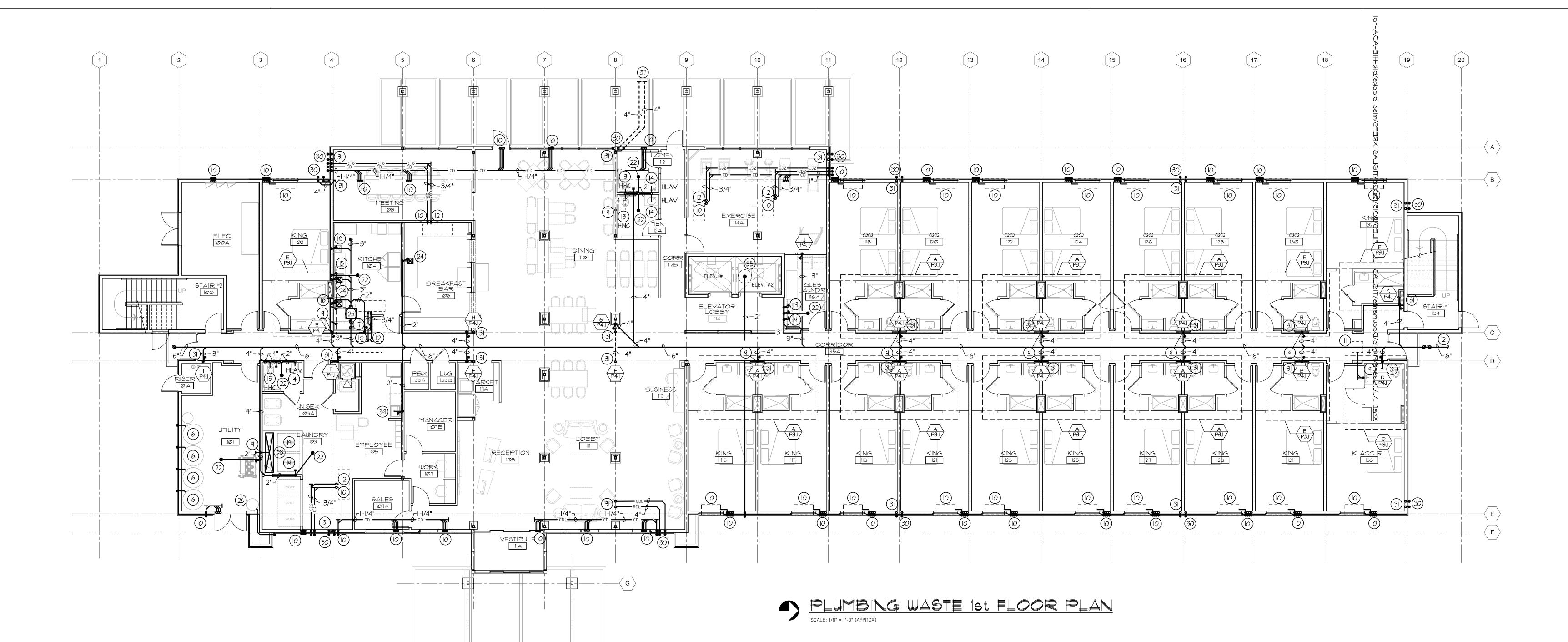
Figure 1

Someting Associates, inc. Consulting Engineers

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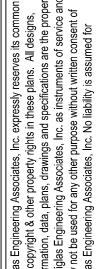
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PLUMBING WASTE IST FLOOR PLAN



- 3" DCW FROM (2) 2" WATER METERS, SEE CIVIL FOR CONTINUATION.
- 2 6" WASTE, WITH 2-WAY SURFACE CLEANOUT, SLOPE 1/4" PER FOOT. SEE CIVIL DRAWINGS FOR CONTINUATION.
- 3 SHUT OFF VALVE, (SOV) (FULL PORT BALL VALVE TYPE) IN CONCRETE YARD BOX WITH CAST IRON COVER.
- 4 SHUT OFF VALVE ABOVE CEILING, (FULL PORT BALL VALVE TYPE) PROVIDE ACCESS DOOR AS REQUIRED. (TYPICAL)
- 5 3/4" DCW DOWN TO HB WITH VB AT 18" AFG.
- 6 WATER HEATER (WH-I), 2" DCW, 2" DHW, PROVIDE HEAT TRAPS ON INLET AND OUTLET, FULL SIZE T & P RELIEF TO 'ELL' AT 6" AFG.
- 7 RECIRCULATING PUMP (RP) COMPLETE WITH AQUASTAT & TIMER, INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- 8 EXPANSION TANK (EXP) I 1/4" CONNECTION, INSTALLED PER MANUFACTURERS RECOMMENDATIONS..
- 9 VENT THRU ROOF (VTR), LOCATE A MINIMUM OF 10' FROM A FRESH AIR INTAKE.
- IO AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' DOWN AT 6" AFG TO LANDSCAPE AREA, FLOOR SINK, MOP SINK (SEE FLOOR PLAN).
- II AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' AT LAVATORY TAILPIECE.
- 12 AIR CONDITIONING COIL, SECONDARY DRAIN PAN ROUTE 3/4" CONDENSATE DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' DOWN AT 18" AFG TO LANDSCAPE AREA, FLOOR SINK, MOP SINK (SEE FLOOR PLAN).
- 13 WATER CLOSET (HWC), I-1/2" DCW, 3" W, 2" V.
- 14 LAVATORY (H-LAV), 1/2" DCW, 1/2" DHW, 2" W, 1 1/2" V.
- 15 3-COMPARTMENT SINK (SK-3), I/2" DCW, I/2" DHW, ROUTE ALL 3 COMPARTMENTS 2" W INDIRECTLY WASTED TO FLOOR SINK WITH AIR GAP.
- 16 PREP SINK (SK-1), 1/2" DCW, 1/2" DHW, 2" IW (WITH AIR GAP).
- 17 MOP SINK (MS), 3/4" DCW, 3/4" DHW, 3" W, 2" V. PROVIDE 3/4" WATTS 009QT BACKFLOW PREVENTER FOR CHEMICAL SYSTEM (FBO).
- 18 HAND SINK (HS), 1/2" DCW, 1/2" DHW, 2"W, ₺ 1 1/2"V.
- 19 WASHING MACHINE (WB), 3/4" DCW, 3/4" DHW, 2" IW. PROVIDE WATER HAMMER ARRESTOR (WHA-A), IN LOCKING ACCESS DOOR.

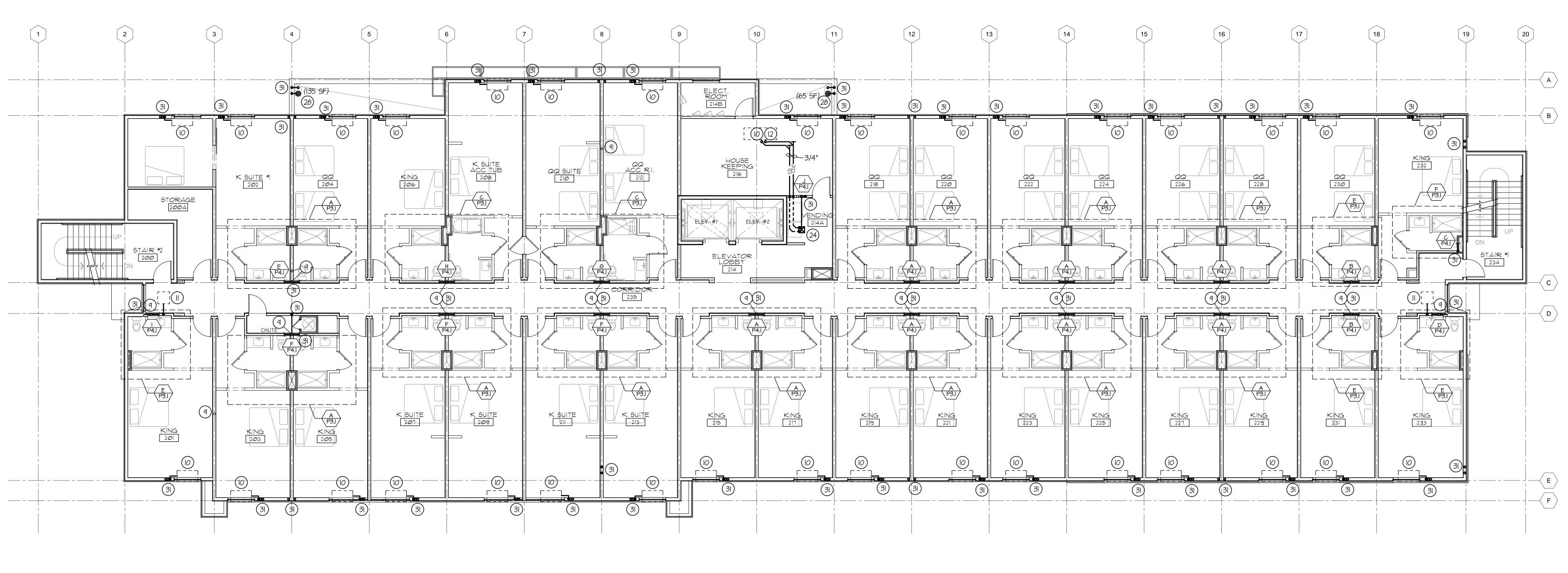
- 20 LAUNDRY SINK (LS), I/2" DCW, I/2" DHW, 2"W, & 1 I/2"V.
- 21 I/2" DCW TO 3/8" FITTING AT FIXTURE (FBO). PROVIDE WATTS # 007-U BACKFLOW PREVENTER. PROVIDE FULL SIZE DRAIN TO APPROVED RECEPTACLE.
- 22 2" FD WITH 2" W, I I/2" V. PROVIDE PROSET TRAP GUARD INSERT.
- 23 TROUGH DRAIN (TD) WITH 4" W, 3" V.
- 24 FLOOR SINK (FS), 2" W, & I I/2" V. ALL INDIRECT PIPING SHALL BE TRAPPED AND DISCHARGE TO FLOOR SINK WITH A MINIMUM AIR GAP. FLOOR SINK MUST BE ACCESSIBLE
- 25 GREASE TRAP (GT), 3" W & 3" V, WITH VENTED FLOW CONTROL FITTING, INSTALL PER LOCAL CODE REQUIREMENTS.
- 26 STUB-OUT FOR WATER SOFTENER (FBO), PROVIDE BYPASS VALVES, ETC PER MANUFACTURERS RECOMMENDATIONS.
- 27 DOMESTIC WATER BOOSTER PUMP (BP), 3" DCW", INSTALL PER MANUFACTURES RECOMENDATIONS.
- 28 3" ROOF DRAIN (RD) AND OVERFLOW DRAIN (OD). SLOPE HORIZONTAL RUNS AT 1/8" PER
- 29 4" ROOF DRAIN (RD) AND OVERFLOW DRAIN (OD).SLOPE HORIZONTAL RUNS AT 1/8" PER
- 30 RD LEADER (RDL) AND OD LEADER (ODL) DOWN IN WALL TO DOWNSPOUT NOZZLE (DN) AT
- 18" AFG. 31 PIPING UP/ DOWN TO/ FROM SECOND FLOOR.
- 32 NEW GAS METER BY LOCAL UTILITY, CONTRACTOR SHALL COORDINATE FULLY.
- 33 PROVIDE GAS COCK, UNION AND DIRT LEG, TYPICAL.
- 34 TEMPERING VALVE (TV), 2" DCW, 2" DHW, 2" TW, INSTALL PER MANUFACTURERS
- 35 SUMP PUMP (SP), PROVIDE 24" RD. SUMP WITH COVER, FIELD ROUTE 2" W UP & 'ELL' THRU
- 36 SWIMMING POOL EQUIPMENT I" DOW MAKE UP WATER SUPPLY WITH BACKFLOR PREVENTER (RPBP). FIELD ROUTE AND VERIFY EXACT LOCATION.
- 37 4" RD LEADER (RDL) AND 4" OD LEADER (ODL) ROUTED IN PATIO SLAB TO TERMINATE TO DAYLIGHT AT FACE OF CURB. SEE ARCHITECT FOR EXACT LOCATION.
- 38 THERMAL EXPANSION LOOP(S).
- 39 BAR SINK (BS), I/2" DCW, I/2" DHW, 2"W, & I I/2"V.
- NOTE: NOT ALL KEYNOTES MAY BE USED.



2ND FLOOR PLAN

PLUMBING WASTE

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PLUMBING WASTE 2nd FLOOR PLAN SCALE: 1/8" = 1'-0" (APPROX)

PLUMBING KEYNOTES

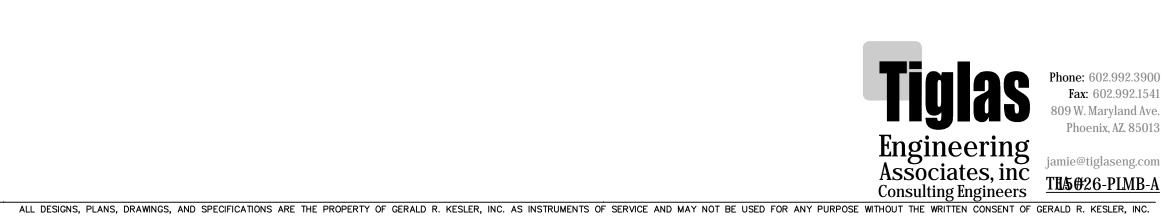
- I 3" DCW FROM (2) 2" WATER METERS, SEE CIVIL FOR CONTINUATION.
- 2 6" WASTE, WITH 2-WAY SURFACE CLEANOUT, SLOPE 1/4" PER FOOT. SEE CIVIL DRAWINGS FOR CONTINUATION.
- 3 SHUT OFF VALVE, (SOV) (FULL PORT BALL VALVE TYPE) IN CONCRETE YARD BOX WITH CAST IRON COVER.
- 4 SHUT OFF VALVE ABOVE CEILING, (FULL PORT BALL VALVE TYPE) PROVIDE ACCESS
- 5 3/4" DCW DOWN TO HB WITH VB AT 18" AFG.

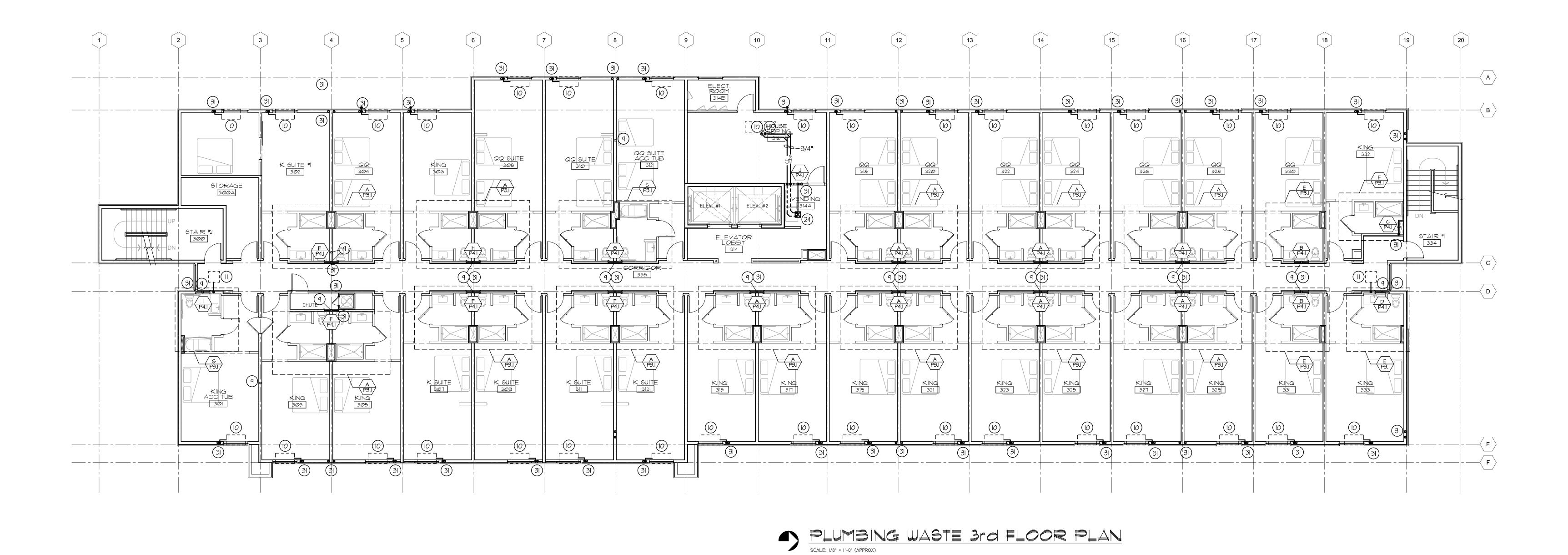
SIZE T & P RELIEF TO 'ELL' AT 6" AFG.

DOOR AS REQUIRED. (TYPICAL)

- 6 WATER HEATER (WH-I), 2" DCW, 2" DHW, PROVIDE HEAT TRAPS ON INLET AND OUTLET, FULL
- 7 RECIRCULATING PUMP (RP) COMPLETE WITH AQUASTAT & TIMER, INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- 8 EXPANSION TANK (EXP) I 1/4" CONNECTION, INSTALLED PER MANUFACTURERS RECOMMENDATIONS..
- 9 VENT THRU ROOF (VTR), LOCATE A MINIMUM OF 10' FROM A FRESH AIR INTAKE.
- IO AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' DOWN AT 6" AFG TO LANDSCAPE AREA, FLOOR SINK, MOP SINK (SEE FLOOR PLAN).
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- 16 PREP SINK (SK-I), I/2" DCW, I/2" DHW, 2" IW (WITH AIR GAP).
- 17 MOP SINK (MS), 3/4" DCW, 3/4" DHW, 3" W, 2" V. PROVIDE 3/4" WATTS OO9QT BACKFLOW PREVENTER FOR CHEMICAL SYSTEM (FBO).
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- 19 WASHING MACHINE (WB), 3/4" DCW, 3/4" DHW, 2" IW. PROVIDE WATER HAMMER ARRESTOR (WHA-A), IN LOCKING ACCESS DOOR.

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- 21 I/2" DCW TO 3/8" FITTING AT FIXTURE (FBO). PROVIDE WATTS # 007-U BACKFLOW PREVENTER. PROVIDE FULL SIZE DRAIN TO APPROVED RECEPTACLE.
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- 24 FLOOR SINK (FS), 2" W, & 1 1/2" V. ALL INDIRECT PIPING SHALL BE TRAPPED AND DISCHARGE TO FLOOR SINK WITH A MINIMUM AIR GAP. FLOOR SINK MUST BE ACCESSIBLE FOR CLEANING.
- 25 GREASE TRAP (GT), 3" W & 3" V, WITH VENTED FLOW CONTROL FITTING, INSTALL PER LOCAL CODE REQUIREMENTS.
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PLUMBING KEYNOTES

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- 2 6" WASTE, WITH 2-WAY SURFACE CLEANOUT, SLOPE 1/4" PER FOOT. SEE CIVIL DRAWINGS FOR CONTINUATION.
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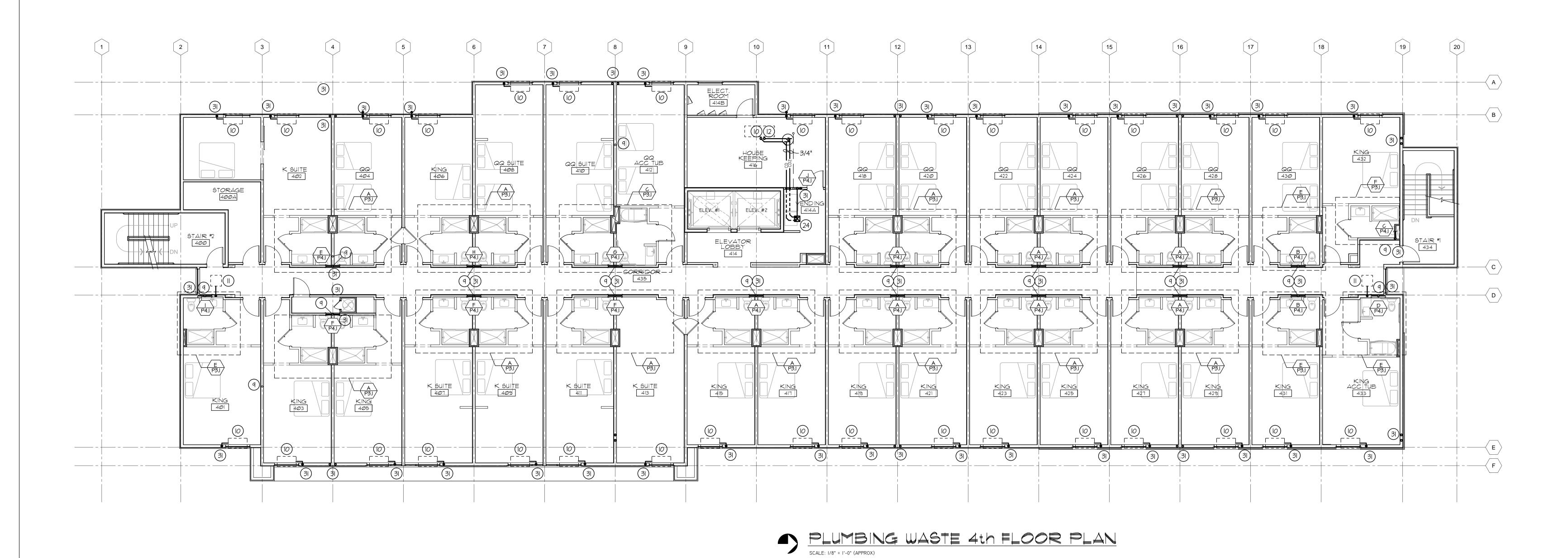
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14



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LOCAL CODE REQUIREMENTS.

MANUFACTURERS RECOMMENDATIONS.

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33 PROVIDE GAS COCK, UNION AND DIRT LEG, TYPICAL.

(RPBP). FIELD ROUTE AND VERIFY EXACT LOCATION.

FOR CLEANING.

RECOMENDATIONS.

RECOMMENDATIONS.

18" AFG.

21 I/2" DCW TO 3/8" FITTING AT FIXTURE (FBO). PROVIDE WATTS # 007-U BACKFLOW

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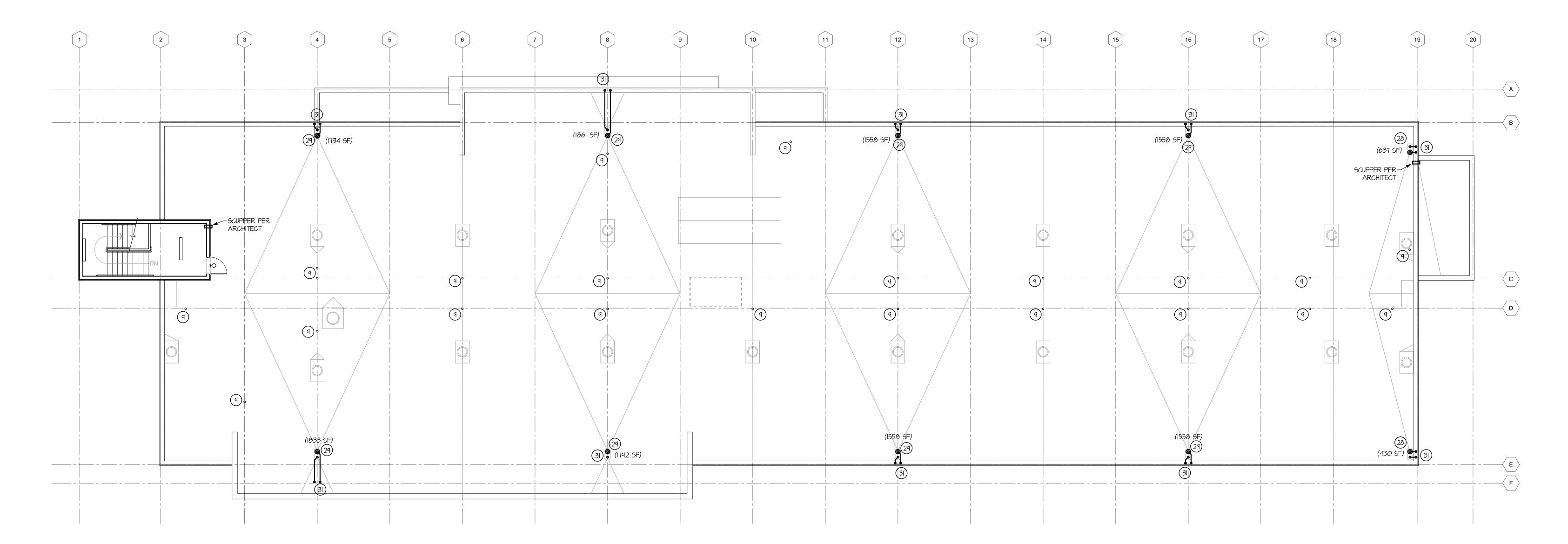
34 TEMPERING VALVE (TV), 2" DCW, 2" DHW, 2" TW, INSTALL PER MANUFACTURERS

DISCHARGE TO FLOOR SINK WITH A MINIMUM AIR GAP. FLOOR SINK MUST BE ACCESSIBLE

PREVENTER. PROVIDE FULL SIZE DRAIN TO APPROVED RECEPTACLE.

22 2" FD WITH 2" W, I I/2" V. PROVIDE PROSET TRAP GUARD INSERT.

NOTE: NOT ALL KEYNOTES MAY BE USED.

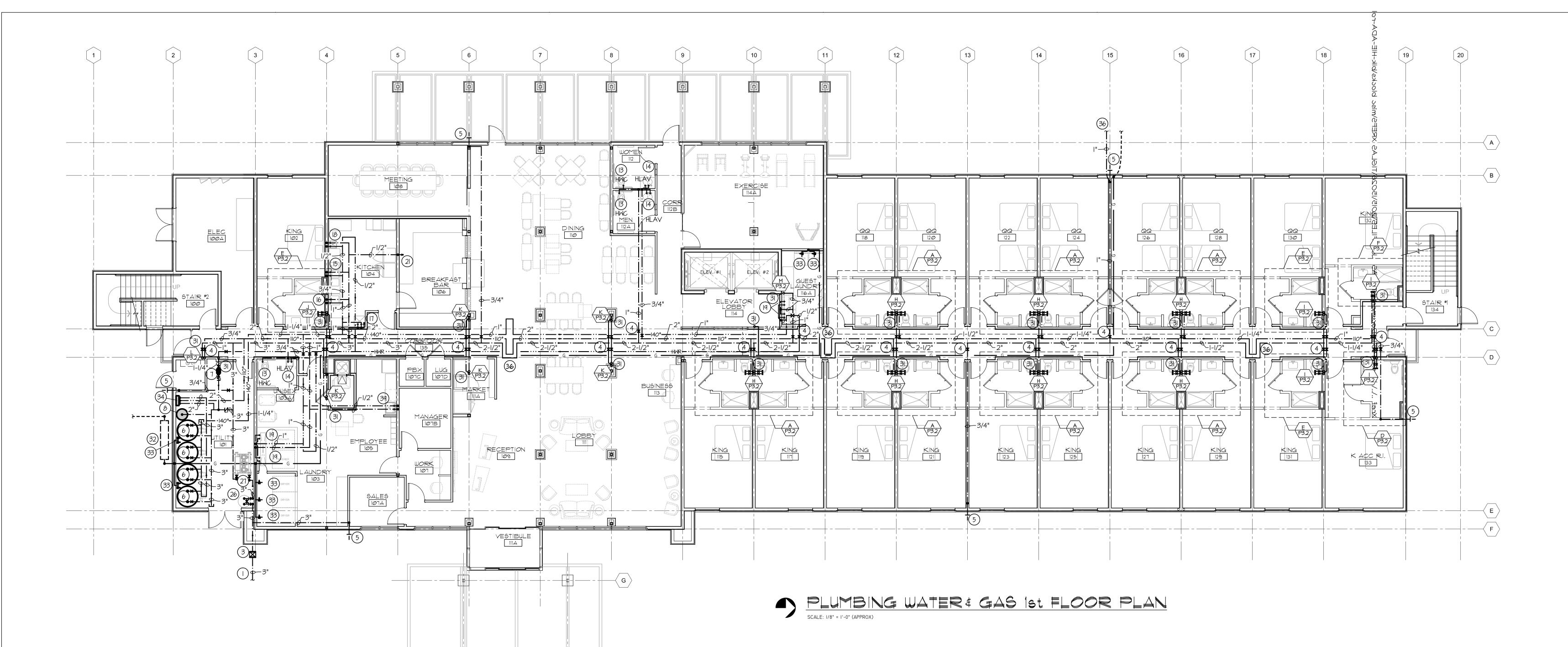




- I 3" DCW FROM (2) 2" WATER METERS, SEE CIVIL FOR CONTINUATION.
- 2 6" WASTE, WITH 2-WAY SURFACE CLEANOUT, SLOPE 1/4" PER FOOT. SEE CIVIL DRAWINGS FOR CONTINUATION.
- 3 SHUT OFF VALVE, (SOV) (FULL PORT BALL VALVE TYPE) IN CONCRETE YARD BOX WITH CAST IRON COVER. 4 SHUT OFF VALVE ABOVE CEILING, (FULL PORT BALL VALVE TYPE) PROVIDE ACCESS
- DOOR AS REQUIRED. (TYPICAL)
- 5 3/4" DCW DOWN TO HB WITH VB AT 18" AFG.
- 6 WATER HEATER (WH-I), 2" DCW, 2" DHW, PROVIDE HEAT TRAPS ON INLET AND OUTLET, FULL SIZE T & P RELIEF TO 'ELL' AT 6" AFG.
- 7 RECIRCULATING PUMP (RP) COMPLETE WITH AQUASTAT & TIMER, INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- 8 EXPANSION TANK (EXP) I I/4" CONNECTION, INSTALLED PER MANUFACTURERS RECOMMENDATIONS..
- 9 VENT THRU ROOF (VTR), LOCATE A MINIMUM OF 10' FROM A FRESH AIR INTAKE.
- IO AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' DOWN AT 6" AFG TO LANDSCAPE AREA, FLOOR SINK, MOP SINK (SEE FLOOR PLAN).
- II AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' AT LAVATORY TAILPIECE.
- 12 AIR CONDITIONING COIL, SECONDARY DRAIN PAN ROUTE 3/4" CONDENSATE DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' DOWN AT 18" AFG TO LANDSCAPE AREA, FLOOR SINK, MOP SINK (SEE FLOOR PLAN).
- 13 WATER CLOSET (HMC), I-1/2" DCM, 3" W, 2" V.
- 14 LAVATORY (H-LAV), 1/2" DCW, 1/2" DHW, 2" W, 1 1/2" V.
- 15 3-COMPARTMENT SINK (SK-3), I/2" DCW, I/2" DHW, ROUTE ALL 3 COMPARTMENTS 2" W INDIRECTLY WASTED TO FLOOR SINK WITH AIR GAP.
- 16 PREP SINK (SK-1), 1/2" DCW, 1/2" DHW, 2" IW (WITH AIR GAP).
- 17 MOP SINK (MS), 3/4" DCW, 3/4" DHW, 3" W, 2" V. PROVIDE 3/4" WATTS 009QT BACKFLOW PREVENTER FOR CHEMICAL SYSTEM (FBO).
- 18 HAND SINK (HS), 1/2" DCW, 1/2" DHW, 2"W, \$ 1 1/2"V.
- 19 WASHING MACHINE (WB), 3/4" DCW, 3/4" DHW, 2" IW. PROVIDE WATER HAMMER ARRESTOR (WHA-A), IN LOCKING ACCESS DOOR.



PLUMBING WATER & GAS
IST FLOOR PLAN



5.4

- 3" DCW FROM (2) 2" WATER METERS, SEE CIVIL FOR CONTINUATION.
- 2 6" WASTE, WITH 2-WAY SURFACE CLEANOUT, SLOPE I/4" PER FOOT. SEE CIVIL DRAWINGS
- 3 SHUT OFF VALVE, (SOV) (FULL PORT BALL VALVE TYPE) IN CONCRETE YARD BOX WITH CAST IRON COVER.
- 4 SHUT OFF VALVE ABOVE CEILING, (FULL PORT BALL VALVE TYPE) PROVIDE ACCESS DOOR AS REQUIRED. (TYPICAL)
- 5 3/4" DCW DOWN TO HB WITH VB AT 18" AFG.
- 6 WATER HEATER (WH-I), 2" DCW, 2" DHW, PROVIDE HEAT TRAPS ON INLET AND OUTLET, FULL SIZE T & P RELIEF TO 'ELL' AT 6" AFG.
- 7 RECIRCULATING PUMP (RP) COMPLETE WITH AQUASTAT & TIMER, INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- 8 EXPANSION TANK (EXP) I I/4" CONNECTION, INSTALLED PER MANUFACTURERS RECOMMENDATIONS..
- 9 VENT THRU ROOF (VTR), LOCATE A MINIMUM OF 10' FROM A FRESH AIR INTAKE.
- IO AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT I/8" PER FOOT TO 'ELL' DOWN AT 6" AFG TO LANDSCAPE AREA, FLOOR SINK, MOP SINK (SEE FLOOR PLAN).
- II AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT I/8" PER FOOT TO 'ELL' AT LAVATORY TAILPIECE.
- I2 AIR CONDITIONING COIL, SECONDARY DRAIN PAN ROUTE 3/4" CONDENSATE DRAIN TO SLOPE AT I/8" PER FOOT TO 'ELL' DOWN AT I8" AFG TO LANDSCAPE AREA, FLOOR SINK, MOP SINK (SEE FLOOR PLAN).
- 13 WATER CLOSET (HWC), 1-1/2" DCW, 3" W, 2" V.
- 14 LAVATORY (H-LAV), 1/2" DCW, 1/2" DHW, 2" W, 1 1/2" V.
- IS 3-COMPARTMENT SINK (SK-3), I/2" DCW, I/2" DHW, ROUTE ALL 3 COMPARTMENTS 2" WINDIRECTLY WASTED TO FLOOR SINK WITH AIR GAP.
- 16 PREP SINK (SK-I), I/2" DCW, I/2" DHW, 2" IW (WITH AIR GAP).
- I7 MOP SINK (MS), 3/4" DCW, 3/4" DHW, 3" W, 2" V. PROVIDE 3/4" WATTS OO9QT BACKFLOW PREVENTER FOR CHEMICAL SYSTEM (FBO).
- 18 HAND SINK (HS), 1/2" DCW, 1/2" DHW, 2"W, & 1 1/2"V.
- I9 WASHING MACHINE (WB), 3/4" DCW, 3/4" DHW, 2" IW. PROVIDE WATER HAMMER ARRESTOR (WHA-A), IN LOCKING ACCESS DOOR.

- 20 LAUNDRY SINK (LS), 1/2" DCW, 1/2" DHW, 2"W, & 1 1/2"V.
- 21 I/2" DCW TO 3/8" FITTING AT FIXTURE (FBO). PROVIDE WATTS # 007-U BACKFLOW PREVENTER. PROVIDE FULL SIZE DRAIN TO APPROVED RECEPTACLE.
- 22 2" FD WITH 2" W, I 1/2" V. PROVIDE PROSET TRAP GUARD INSERT.
- 22 Z ID MIII Z M, I I/Z V. I NOVIDE I NOSEI INAI OUAND INSEI
- 23 TROUGH DRAIN (TD) WITH 4" W, 3" V.
- 24 FLOOR SINK (FS), 2" W, & 1 1/2" V. ALL INDIRECT PIPING SHALL BE TRAPPED AND DISCHARGE TO FLOOR SINK WITH A MINIMUM AIR GAP. FLOOR SINK MUST BE ACCESSIBLE FOR CLEANING.
- 25 GREASE TRAP (GT), 3" W & 3" V, WITH VENTED FLOW CONTROL FITTING, INSTALL PER LOCAL CODE REQUIREMENTS.
- 26 STUB-OUT FOR WATER SOFTENER (FBO), PROVIDE BYPASS VALVES, ETC PER MANUFACTURERS RECOMMENDATIONS.
- 27 DOMESTIC WATER BOOSTER PUMP (BP), 3" DCW", INSTALL PER MANUFACTURES RECOMENDATIONS.
- 28 3" ROOF DRAIN (RD) AND OVERFLOW DRAIN (OD). SLOPE HORIZONTAL RUNS AT 1/8" PER FOOT.
- 29 4" ROOF DRAIN (RD) AND OVERFLOW DRAIN (OD).SLOPE HORIZONTAL RUNS AT 1/8" PER FOOT.
- 30 RD LEADER (RDL) AND OD LEADER (ODL) DOWN IN WALL TO DOWNSPOUT NOZZLE (DN) AT 18" AFG.
- 31 PIPING UP/ DOWN TO/ FROM SECOND FLOOR.
- 32 NEW GAS METER BY LOCAL UTILITY, CONTRACTOR SHALL COORDINATE FULLY.
- 33 PROVIDE GAS COCK, UNION AND DIRT LEG, TYPICAL.
- 34 TEMPERING VALVE (TV), 2" DCW, 2" DHW, 2" TW, INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- 35 SUMP PUMP (SP), PROVIDE 24" RD. SUMP WITH COVER, FIELD ROUTE 2" W UP & 'ELL' THRU WALL
- 36 SWIMMING POOL EQUIPMENT I" DCW MAKE UP WATER SUPPLY WITH BACKFLOR PREVENTER (RPBP). FIELD ROUTE AND VERIFY EXACT LOCATION.
- 4" RD LEADER (RDL) AND 4" OD LEADER (ODL) ROUTED IN PATIO SLAB TO TERMINATE TO DAYLIGHT AT FACE OF CURB. SEE ARCHITECT FOR EXACT LOCATION.
- 38 THERMAL EXPANSION LOOP(S).
- 39 BAR SINK (BS), 1/2" DCW, 1/2" DHW, 2"W, & 1 1/2"V.
- NOTE: NOT ALL KEYNOTES MAY BE USED.