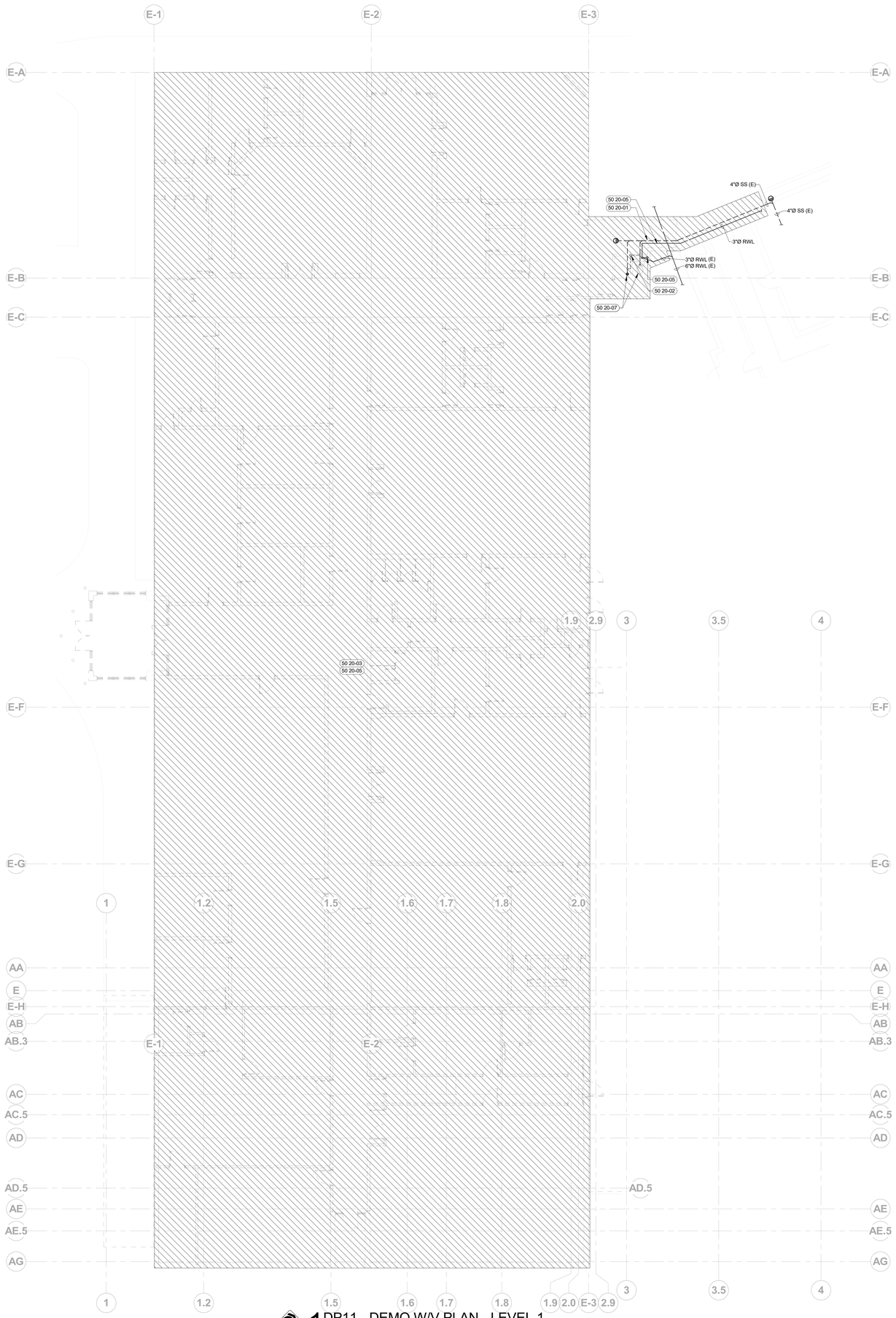

1 DP11 - DEMO W/V PLAN - LEVEL 1
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- SANITARY SEWER
- CSS — CAST IRON SANITARY SEWER
- GW — GREASE WASTE
- RWL — RAIN WATER LEADER
- OFL — OVERFLOW LEADER
- SANITARY VENT
- CD — CONDENSATE DRAIN
- IW — INDIRECT WASTE
- FLOOR CLEANOUT
- FLOOR DRAIN, ROUND
- FLOOR SINK
- TRENCH DRAIN
- XX / ## — FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)

GENERAL NOTES:

A. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL DOCES AND STANDARDS, INCLUDING IBC, ISPC, NFPA.

B. PRIOR TO INSTALLING ANY PIPING, VERIFY EXISTING CONDITIONS AND INVERTS. NOTIFY GC/ARCHITECT OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS NOTED.

C. RECORD DRAWINGS USED FOR DESIGN MAY NOT REFLECT CURRENT LAYOUT OF STORE. PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING AND FIXTURE LOCATIONS PRIOR TO START OF WORK.

D. DEMOLISHED FIXTURES/EQUIPMENTS SHALL BE REMOVED FROM THE BUILDING AND DISPOSED OF PROPERLY.

E. WASTE, VENT AND WATER PIPING FROM DEMOLISHED FIXTURES/EQUIPMENT SHALL BE CAPPED AT MAIN ABOVE CEILING, BELOW FLOOR AND AT WALLS AS REQUIRED. ALL ABANDONED PIPING SHALL BE REMOVED FROM BUILDING AND DISPOSED OF PROPERLY. PATCH FLOOR AND WALLS AS REQUIRED.

F. DEMOLITION: REMOVE ALL WATER, WASTE, VENT AND GAS PIPING WHERE INDICATED, AND ELSEWHERE AS NECESSARY, AND DISPOSE OF OFF SITE.

G. LOCATIONS OF POINTS OF CONNECTION TO TENANT WATER, WASTE AND GAS ARE APPROXIMATE. VERIFY ACTUAL LOCATIONS OF ALL POINTS OF CONNECTION IN FIELD.

H. PLUMBER SHALL COORDINATE REMOVAL OF FIXTURES/EQUIPMENT/PIPING WITH ALL OTHER DISCIPLINES.

I. PRIOR TO BIDDING, OBTAIN A COPY OF THE SPECIFICATIONS AND PLANS, VISIT THE JOB SITE, TAKE NECESSARY MEASUREMENTS, NOTE EXISTING CONDITIONS, AND GATHER ALL OTHER INFORMATION NEEDED FOR AN ACCURATE BID. NO ALLOWANCES WILL BE MADE FOR EXTRA COSTS RESULTING FROM FAILURE TO NOTE EXISTING CONDITIONS.

##-## SHEET NOTES:

50 20-01 DEMOLISH EXISTING WASTE PIPING AS SHOWN SHADED AND REMOVE OFF SITE. CAP AND ABANDON PIPING BELOW FLOOR, ABOVE CEILING, AND CLOSE TO MAIN. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

50 20-02 DEMOLISH EXISTING VENT PIPING AS SHOWN SHADED AND REMOVE OFF SITE. CAP AND ABANDON PIPING BELOW FLOOR AND DEMOLISH ALL PIPING ABOVE CEILING. CAP ALL PIPING CLOSE TO MAIN. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

50 20-03 DEMOLISH ALL EXISTING WASTE PIPING, VENT PIPING, FLOOR DRAINS, FLOOR CLEANOUTS, AND PLUMBING FIXTURES IN THE SHADED AREA AND REMOVE OFF SITE. CAP AND ABANDON ALL WASTE PIPING BELOW FLOOR CLOSE TO MAIN. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

50 20-05 DEMOLISH ALL EXISTING RWL AND OFL ROOF DRAINS AND PIPING IN THE SHADED AREA AND REMOVE OFF SITE. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

50 20-07 DEMOLISH EXISTING PLUMBING FIXTURE WITH ALL ASSOCIATED WASTE, VENT, AND WATER PIPING AND REMOVE OFF SITE. CAP AND ABANDON PIPING BELOW FLOOR OR ABOVE CEILING AND CLOSE TO MAIN. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.03.31 09:45:46-06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

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200 BROAD STREET
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http://www.cshqa.com

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

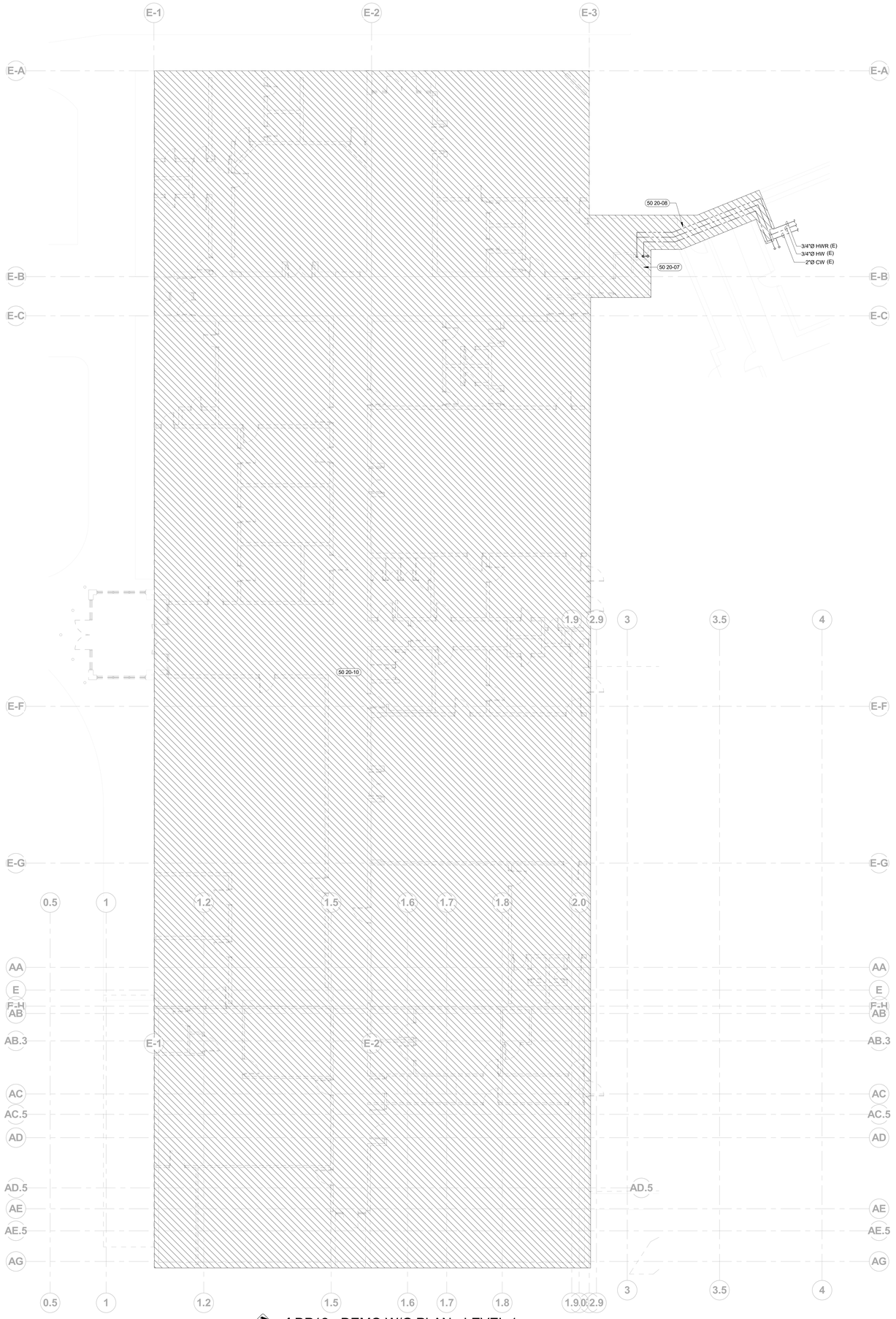
REVISED

SHEET TITLE
DEMO WASTE & VENT PLAN LEVEL 1

SHEET
DP11

ORIGINAL SHEET SIZE
36" × 48"

3/31/2023 9:12:59 AM



1 DP12 - DEMO W/G PLAN - LEVEL 1
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- COLD WATER
- SOFT COLD WATER
- RO — REVERSE OSMOSIS WATER
- DOMESTIC HOT WATER
- DOMESTIC HOT WATER RETURN
- HOT WATER WITH TEMP. MAINTENANCE CABLE
- MPG — MEDIUM PRESSURE GAS
- NG — NATURAL GAS
- PIPE ELBOW UP
- BALL VALVE
- PRESSURE REDUCING VALVE
- SHUT-OFF VALVE
- XX / ## FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
- PIPE ELBOW DOWN
- PIPE TEE BRANCH UP (W/ ELBOW)
- PIPE TEE BRANCH DOWN (W/ ELBOW)
- FLOW DIRECTION INDICATOR

GENERAL NOTES:

A. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL DOCES AND STANDARDS, INCLUDING IBC, ISPC, NFPA.

B. PRIOR TO INSTALLING ANY PIPING, VERIFY EXISTING CONDITIONS AND INVERTS. NOTIFY GC/ARCHITECT OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS NOTED.

C. RECORD DRAWINGS USED FOR DESIGN MAY NOT REFLECT CURRENT LAYOUT OF STORE. PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING AND FIXTURE LOCATIONS PRIOR TO START OF WORK.

D. DEMOLISHED FIXTURES/EQUIPMENTS SHALL BE REMOVED FROM THE BUILDING AND DISPOSED OF PROPERLY.

E. WASTE, VENT AND WATER PIPING FROM DEMOLISHED FIXTURES/EQUIPMENT SHALL BE CAPPED AT MAIN ABOVE CEILING, BELOW FLOOR AND AT WALLS AS REQUIRED. ALL ABANDONED PIPING SHALL BE REMOVED FROM BUILDING AND DISPOSED OF PROPERLY. PATCH FLOOR AND WALLS AS REQUIRED.

F. DEMOLITION: REMOVE ALL WATER, WASTE, VENT AND GAS PIPING WHERE INDICATED, AND ELSEWHERE AS NECESSARY, AND DISPOSE OF OFF SITE.

G. LOCATIONS OF POINTS OF CONNECTION TO TENANT WATER, WASTE AND GAS ARE APPROXIMATE. VERIFY ACTUAL LOCATIONS OF ALL POINTS OF CONNECTION IN FIELD.

H. PLUMBER SHALL COORDINATE REMOVAL OF FIXTURES/EQUIPMENT/PIPING WITH ALL OTHER DISCIPLINES.

I. PRIOR TO BIDDING, OBTAIN A COPY OF THE SPECIFICATIONS AND PLANS, VISIT THE JOB SITE, TAKE NECESSARY MEASUREMENTS, NOTE EXISTING CONDITIONS, AND GATHER ALL OTHER INFORMATION NEEDED FOR AN ACCURATE BID. NO ALLOWANCES WILL BE MADE FOR EXTRA COSTS RESULTING FROM FAILURE TO NOTE EXISTING CONDITIONS.

##-## SHEET NOTES:

50 20-07 DEMOLISH EXISTING PLUMBING FIXTURE WITH ALL ASSOCIATED WASTE, VENT, AND WATER PIPING AND REMOVE OFF SITE. CAP AND ABANDON PIPING BELOW FLOOR OR ABOVE CEILING AND CLOSE TO MAIN. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

50 20-08 DEMOLISH ALL EXISTING CW, HW, PIPING AS SHOWN SHADED WITH ALL ASSOCIATED SHUT-OFF VALVES AND REMOVE OFF SITE. CAP PIPING ABOVE CEILING CLOSE TO MAIN. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

50 20-10 DEMOLISH ALL EXISTING WATER PIPING, GAS PIPING, AND PLUMBING FIXTURES IN THE SHADED AREA AND REMOVE OFF SITE. CAP PIPING ABOVE CEILING CLOSE TO MAIN. VERIFY EXACT DEMO REQUIREMENTS IN FIELD PRIOR TO START OF WORK.

PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.03.31 09:49:46-06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

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CSHQA

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

REVISED

SHEET TITLE
DEMO WATER & GAS PLAN LEVEL 1

SHEET
DP12

ORIGINAL SHEET SIZE
36" x 48"

3/31/2023 9:12:51 AM

PLUMBING ABBREVIATIONS

(D)	DEMOLISH
(E)	EXISTING
(N)	NEW
AFF	ABOVE FINISHED FLOOR
AG	AIR GAP
AL	ALUMINUM
ALT	ALTERNATIVE, ALTERNATE
AP	ACCESS PANEL
APPROX	APPROXIMATE
AR	ACID RESISTANT
ARCH	ARCHITECT, ARCHITECTURAL
ARV	AIR RELIEF VALVE
ATMOS	ATMOSPHERE
AUTO	AUTOMATIC
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOT	BOTTOM
C	COMMON
C/W	COORDINATE WITH
CAB	CABINET
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CL	CENTERLINE
CLG	CEILING
CO	CLEANOUT
CONC	CONCRETE
COND	CONDENSER, CONDENSATE
COTG	CLEANOUT TO GRADE
CP	CONDENSATE PUMP
CPD	CONDENSATE PUMP DISCHARGE
CV-#	CONTROL VALVE
CW	COLD WATER (DOMESTIC)
D	DEPTH, DEEP
DF	DRINKING FOUNTAIN
DIA/	DIAMETER
DS	DOWNSPOUT
DWG	DRAWING
EFF	EFFICIENCY
EL	ELEVATION
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
EMD	END OF MAIN DRIP
EQUIP	EQUIPMENT
ET	EXPANSION TANK
EW	EYE WASH
EWC	ELECTRIC WATER COOLER
EWS	EYE WASH SHOWER
EXP	EXPANSION
EXT	EXTERIOR
EXTN	EXTENSION
F	FAHRENHEIT
FC	FAN COIL
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FIN FL/FF	FINISHED FLOOR
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOV	FUEL OIL VENT
FP	FIRE PROTECTION
FPM	FEET PER MINUTE
FS	FLOOR SINK
FT	FEET
FT HD	FEET OF HEAD
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GCO	GRADE CLEANOUT
GI	GREASE INTERCEPTOR
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
H	HOT (LINE) 24 VOLTS
HB	HOSE BIBB
HDWE	HARDWARE
HOA	HAND-OFF-AUTO SWITCH
HP	HORSEPOWER
HT	HEIGHT/HIGH
HW	HOT WATER
HWR	HOT WATER RECIRCULATION
I/P	INTERFACE PANEL
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
IECC	INTERNATIONAL ENERGY CONSERVATION CODE
IFGC	INTERNATIONAL FUEL GAS CODE
IMC	INTERNATIONAL MECHANICAL CODE
IN WC	INCHES OF WATER COLUMN
INCIN	INCINERATOR
INSUL	INSULATION, INSULATE
INTR	INTERIOR
INV	INVERT
IPC	INTERNATIONAL PLUMBING CODE
ISPC	IDAHO STATE PLUMBING CODE
KW	KILOWATT
LAV	LAVATORY
LG	LENGTH, LONG
LPC	LOW PRESSURE CONDENSATE
LPG	LIQUID PETROLEUM GAS
MA	MILLIAMPS
MAX	MAXIMUM
MECH	MECHANICAL
MFD	MECHANICAL FLOOR DRAIN
MFR	MANUFACTURER
MH	MANHOLE
MHT	MALE HOSE THREAD
MIN	MINIMUM
MISC	MISCELLANEOUS
MTD	MOUNTED
MV	MIXING VALVE
N	NEUTRAL
NC	NORMALLY CLOSED
NG	NATURAL GAS
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO/#	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFL	OVERFLOW LEADER
OPNG	OPENING
OR	OIL RETURN
OS	OIL SUPPLY
OSD	OPEN SITE DRAIN
PE	PNEUMATIC TO ELECTRIC
PREFAB	PREFABRICATED
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
R/RAD	RADIUS
RAC	REVERSE ACTING
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RE:	REFERENCE
REQ'D	REQUIRED
RM	ROOM
RP	RECIRCULATION PUMP
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
RWL	RAINWATER LEADER
SA	SHOCK ABSORBER
SCHED	SCHEDULE
SCW	SOFT COLD WATER
SH	SHOWER
SHT	SHEET
SK	SINK
SMD	SMOKE DETECTOR
SP	SUMP PUMP
SPEC(S)	SPECIFICATIONS
SS	SANITARY SEWER
STD	STANDARD
TD	TRENCH DRAIN
TEMP	TEMPERATURE
TP	TRAP PRIMER
TYP	TYPICAL
U/UR	URINAL
UON	UNLESS OTHERWISE NOTED
V	VENT
VA	VALVE
VAC	VACUUM
VB	VACUUM BREAKER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VPD	VACUUM PUMP DISCHARGE
VTR	VENT THROUGH ROOF
W	WIDE, WIDTH
W/	WITH
W/O	WITHOUT
WB	WATER BOX
WC	WATER CLOSET
WCO	WALL CLEANOUT
WF	WATER FILTER
WG	WATER GAUGE
WH	WATER HEATER
WHE	WATER HEATER EXHAUST
WHS	WATER HEATER SUPPLY
WPD	WATER PRESSURE
WS	WATER SOFTENER

PLUMBING SYMBOLS

AIR RELIEF VENT
PIPE ELBOW UP
PIPE ELBOW DOWN
PIPE TEE BRANCH UP (W/ ELBOW)
PIPE TEE BRANCH DOWN (W/ ELBOW)
INDICATES DIRECTION OF DOWNWARD PITCH
CONCENTRIC REDUCER
ECCENTRIC REDUCER
FLOW DIRECTION INDICATOR
INDICATES EXPANSION LOOP
PIPE ANCHOR
PIPE ALIGNMENT GUIDE
PIPE EXPANSION JOINT
FLEXIBLE CONNECTION, RUBBER
FLEXIBLE CONNECTION, BRAIDED
FLEX COUPLING
FLEXIBLE UNION
UNION
STRAINER
STRAINER, BLOW-OFF
PIPE CAP
BALL VALVE
BUTTERFLY VALVE
CHECK VALVE (ARROW TOWARD DIRECTION OF FREE FLOW)
CHECK VALVE SPRING
DOUBLE CHECK BACK FLOW PREVENTER
REDUCED PRESSURE BACK FLOW PREVENTER
CIRCUIT SETTER
GPM
GATE SHUTOFF VALVE
GATE SHUTOFF VALVE ANGLE
GLOBE VALVE

GLOBE VALVE, ANGLE
HOSE BIBB, EXPOSED
HOSE BIBB, RECESSED W/ LOCKING COVER
MOTOR-OPERATED VALVE
PNEUMATIC-OPERATED VALVE
SOLENOID-OPERATED VALVE
2-WAY CONTROL VALVE (PNEUMATIC)
3-WAY CONTROL VALVE (PNEUMATIC)
GAS SHUTOFF COCK
PRESSURE REDUCING VALVE
PRESSURE REGULATING VALVE
BACK PRESSURE REGULATING VALVE
A.S.M.E. PRESSURE RELIEF VALVE
VALVE IN RISER SHUTOFF
FLEX GAS LINE
YARD BOX (WITH GATE VALVE)
CONTROL STOP
IN-LINE PUMP
TEMPERATURE GAUGE
PRESSURE GAUGE
FLOW SWITCH
FMS
WATER FLOW METER STATION
VTR
VENT-THRU-ROOF
WALL CLEANOUT
FLOOR CLEANOUT
CLEANOUT TO GRADE
TRENCH DRAIN
FLOOR DRAIN, ROUND
FLOOR DRAIN, SQUARE
FLOOR SINK
ROOF DRAIN OR OVERFLOW DRAIN
FIRE HOSE CABINET, SURFACE-MOUNTED

FIRE HOSE CABINET, RECESSED
FIRE HYDRANT, FREE STANDING
FIRE DEPARTMENT SIAMESE CONNECTION
SPRINKLER HEAD
FIRE DEPARTMENT TEST HEADER
(E)
(N)
CONNECT NEW TO EXISTING
SHADED SIDE IS NEW WORK
COMPRESSED AIR OUTLET
KEY NOTES
WC 1 OR WC 1-A
FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
REVISION

PLUMBING LINETYPE LEGEND

SANITARY SEWER		INDIRECT WASTE	IW
CAST IRON SANITARY SEWER	CSS	COLD WATER	
GREASE WASTE	GW	SOFT COLD WATER	
CAST IRON GREASE WASTE	CGW	REVERSE OSMOSIS WATER	RO
COMBINATION WASTE AND VENT	CWV	DOMESTIC HOT WATER	
SANITARY VENT		DOMESTIC HOT WATER RETURN	
CONDENSATE DRAIN	CD	MEDIUM PRESSURE GAS	MPG
		NATURAL GAS	NG

DRAWING INDEX

PLUMBING GENERAL NOTES

A. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE CODES, LOCAL CODES, LOCAL STANDARDS, IBC, ISPC, NFPA, AND THE LANDLORD'S AND TENANT'S REQUIREMENTS INCLUDING SUPPLEMENTS AND DETAILS.

B. PROVIDE SEAL BETWEEN WALLS AND PLUMBING FIXTURES PER HEALTH DISTRICT REQUIREMENTS.

C. COLD AND HOT WATER SUPPLY PIPING SIZES FOR FIXTURE CONNECTIONS ARE NOT SHOWN ON PLANS. SEE FIXTURE SCHEDULE FOR CONNECTION SIZES.

D. INSTALL ALL OVERHEAD PIPING AS CLOSE TO STRUCTURE AS POSSIBLE, OR AS DETAILED OTHERWISE.

E. LOCATE AND LABEL ALL VALVES FOR SERVICE ACCESSIBILITY. VALVES INSTALLED ABOVE CEILINGS SHALL BE ACCESSIBLE THRU CEILING. SEE DRAWINGS FOR LOCATIONS.

F. COORDINATE INSTALLATION WITH THE WORK OF OTHER TRADES PRIOR TO STARTING. IN THE EVENT THAT CONFLICTS ARE FOUND WITH THE WORK OF THE OTHER TRADES, BRING ALL SUCH CONFLICTS TO THE ARCHITECT'S ATTENTION FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK IN THAT AREA. DEFICIENCIES CAUSED BY FAILURE TO PERFORM SUCH VERIFICATIONS SHALL BE CORRECTED AT NO ADDITIONAL EXPENSE TO OWNER. IMMEDIATELY NOTIFY ARCHITECT OF CONDITIONS IN CONFLICT WITH THE PLANS.

G. PROVIDE PIPING EQUIPMENT AND MATERIALS IN ACCORDANCE WITH APPLICABLE PLUMBING CODE REGULATIONS AND STANDARDS, AUTHORITIES HAVING JURISDICTION, OR AS OTHERWISE RECOMMENDED OR DIRECTED BY MANUFACTURERS.

H. COORDINATE INSTALLATION OF PIPING BELOW AND ABOVE GRADE WITH STRUCTURAL COMPONENTS AND OTHER SYSTEM INSTALLATIONS.

I. COORDINATE ALL FIXTURES, EQUIPMENT AND ROUGH-IN CONNECTION LOCATIONS AND SIZES WITH ARCHITECTURAL DRAWINGS, OWNER AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.

J. COORDINATE ALL FURRING REQUIREMENTS AND WALL THICKNESS WITH PIPE AND ACCESS PANEL INSTALLATIONS. COORDINATE ACCESS PANEL LOCATIONS WITH INTERIOR ELEVATIONS TO AVOID CONFLICTS WITH EQUIPMENT, GRAB BARS OR DECORATIVE ELEMENTS.

K. PROVIDE SEISMIC RESTRAINTS FOR ALL PIPE AND EQUIPMENT AS RECOMMENDED IN SMACNA "SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL EQUIPMENT", LATEST EDITION.

L. ALL PIPING SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS UNLESS NOTED OTHERWISE. ALL WALLS IN WHICH WATER OR WASTE LINES ARE INSTALLED MUST BE PATCHED TO MATCH EXISTING AFTER LINES ARE INSTALLED.

M. PRIOR TO BIDDING, OBTAIN A COPY OF THE SPECIFICATIONS AND PLANS, VISIT THE JOB SITE, TAKE NECESSARY MEASUREMENTS, NOTE EXISTING CONDITIONS, AND GATHER ALL OTHER INFORMATION NEEDED FOR AN ACCURATE BID. NO ALLOWANCES WILL BE MADE FOR EXTRA COSTS RESULTING FROM FAILURE TO NOTE EXISTING CONDITIONS.

N. PIPING PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE FIRESTOPPED IN ACCORDANCE WITH APPLICABLE CODES.

O. ALL WORK ON THE PLUMBING DRAWINGS SHALL BE COMPLETED BY THE PLUMBING CONTRACTOR UNLESS SPECIFIED OTHERWISE.

P. ANY DISCREPANCIES OR INADEQUACIES BETWEEN THE PLUMBING DRAWINGS AND OTHER DISCIPLINES SHALL BE BROUGHT TO THE ATTENTION OF OWNER'S REPRESENTATIVE.

Q. INSTALL ALL PIPING RUNS AS HIGH AS POSSIBLE THROUGHOUT ENTIRE BUILDING. INSTALL LONG RUNS WITHIN JOIST SPACE AND OTHER PIPING TIGHT TO BOTTOM OF STEEL. COORDINATE WITH OTHER TRADES - DUCTWORK, FIRE PROTECTION, PIPING, LIGHTING SYSTEMS, ETC.

R. FINAL CONNECTION TO ALL GAS FIRED APPLIANCES TO BE BY PLUMBING CONTRACTOR REGARDLESS OF WHO PROVIDES APPLIANCES. THIS SHALL INCLUDE BUT NOT BE LIMITED TO HVAC EQUIPMENT, COOKING EQUIPMENT, EMERGENCY GENERATORS, DOMESTIC WATER HEATERS, ETC.

S. ALL PLUMBING FIXTURES SHALL HAVE THEIR OWN INDEPENDENT SHUT OFF BALL VALVES, INSTALLED IN AN EASILY ACCESSIBLE LOCATION.

T. COORDINATE ALL FURRING REQUIREMENTS AND WALL THICKNESS WITH PIPE AND ACCESS PANEL INSTALLATIONS. COORDINATE ACCESS PANEL LOCATIONS WITH INTERIOR ELEVATIONS TO AVOID CONFLICTS WITH EQUIPMENT, GRAB BARS, AND DECORATIVE ELEMENTS.

U. REFER TO SPECIFICATIONS FOR ALL PIPING MATERIALS AND SERVICES.

V. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS.

SUBMITTAL REVIEW NOTES

A. STRICT ADHERENCE TO AIA A201 WILL BE OBSERVED WHEN REVIEWING ALL SUBMITTALS. OBTAIN A COPY AND BE FAMILIAR WITH CONTRACTOR RESPONSIBILITIES WHEN SUBMITTING ON PROPOSED PRODUCTS. ANY SUBMITTAL NOT MARKED AS BEING IN CONFORMANCE WITH THE CONTRACT DOCUMENTS WILL BE RETURNED "NOT REVIEWED".

B. SUBMITTALS MUST BE BROKEN OUT ACCORDING TO SPECIFICATION SECTION. COMBINED SUBMITTALS WITH MULTIPLE SPECIFICATION SECTIONS WILL BE RETURNED "NOT REVIEWED".

C. SUBMITTALS MUST INCLUDE ONLY INFORMATION RELEVANT TO THE PROJECT AND BE CLEARLY MARKED WHAT THE PROPOSED PRODUCTS ARE. EXCESSIVELY LENGTHY SUBMITTALS INCLUDING COPIOUS AMOUNTS OF IRRELEVANT INFORMATION AND/OR NOT CLEARLY MARKED WILL BE RETURNED "NOT REVIEWED".

D. SUBMITTALS FOR VALUE ENGINEERING ITEMS NEGOTIATED BETWEEN THE CONTRACTOR AND THE OWNER WILL BE RETURNED "NOT REVIEWED". THE CONTRACTOR ASSUMES COMPLETE RESPONSIBILITY AND LIABILITY FOR VALUE ENGINEERING ITEMS NOT APPROVED BY THIS OFFICE.

E. THE CONTRACTOR MAY SUBMIT UP TO FIVE SUBMITTALS TO THE OFFICE AT ANY ONE TIME. THESE FIVE SUBMITTALS WILL BE RETURNED WITHIN FIVE BUSINESS DAYS. IF MORE THAN FIVE SUBMITTALS ARE IN FOR REVIEW AT ANY ONE TIME, ONE ADDITIONAL BUSINESS DAY WILL BE REQUIRED FOR EACH SUBMITTAL.

F. EXPEDITED REVIEW FOR LONG LEAD ITEMS WILL BE PERFORMED AT OUR DISCRETION. PAST EXPERIENCE WITH THE SUBMITTING CONTRACTOR WILL BE A FACTOR IN OUR DECISION TO PERFORM AN EXPEDITED REVIEW.

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CSHQA

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

REVISED

SHEET TITLE
PLUMBING COVER SHEET

SHEET
P00

ORIGINAL SHEET SIZE
36" x 48"

3/31/2023 9:12:51 AM

WATER MAIN SIZING CALCULATION - 2017 IDAHO STATE PLUMBING CODE

Project Name: Twin Falls Judicial Building Twin Falls, Idaho — **Date:** 12/14/2022
Project #: 21403 Existing Building — **Designer:** Kent Anderson

Pressure available at Street Main	78	PSIG
Pressure loss through water meter	5	PSIG
Pressure loss through backflow device (building supply)	7	PSIG
Pressure loss (Static) due to system height — System Height = 18 FT	7.74	PSIG
Pressure required to operate remote fixture (20 PSI - Flush... (25 PSI...	25	PSIG
Actual length of pipe, service tap to remote fixture	350	Feet
Fitting Factor multiplier (0 to 50% of actual length)	50	%
Equivalent length of piping system	525	Feet (equiv.)
Remaining Pressure =	**33**	**PSIG**
Maximum allowable pressure loss/100ft =	**6.3**	**PSIG**

FIXTURE	SERVI...	WFU	FIX QTY	TOTAL WFU
Bathtub or Combination Bath/Shower (fill)	Either	4		
Bathtub Fill Valve (3/4")	Either	10		
Bidet	Private	1		
Clothes Washer	Either	4		
Dental Unit, cuspidor	Public	1		
Dishwasher, domestic	Either	1.5		
Drinking Fountain or Water cooler	Either	0.5	2	1
Drinking Fountain or Water cooler, assembly	Public	0.75		
Hose Bibb	Either	2.5	1	2.5
Hose Bibb, each additional	Either	1	1	1
Lavatory	Either	1	8	8
Lawn Sprinkler, each head	Either	1		
Mobile Home, each (minimum)	Private	12		
Sinks: Bar Sink	Private	1		
Bar Sink	Public	2	6	12
Clinic Faucet	Public	3		
Clinic Flushometer Valve with or without faucet	Public	8		
Kitchen Sink, domestic	Either	1.5		
Laundry	Either	1.5		
Service or Mop Basin	Private	1.5		
Service or Mop Basin	Public	3	2	6
Washup, each set of faucets	Public	2		
Shower, per head	Either	2		
Urinal, 1.0 GPF flushometer valve	Private	3		
Urinal, 1.0 GPF flushometer valve	Public	4	2	8
Wash Fountain, circular spray	Public	4		
Water Closet, 1.6 GPF Gravity Tank or Flushometer Tank	Either	2.5		
Water Closet, 1.6 GPF Flushometer Valve	Either	5	13	65
			System Total WFU:	**103.5**
			WFU conversion to GPM:	**68**

MISCELLANEOUS FIXTURES	FLOW RATE (GPM)	FIX QTY	TOTAL WFU
Refrigerator ice maker	0.5	6.0	3
		Total Miscellaneous GPM =	**3**
		System Total GPM =	**71.0**
		Water Main Service Size (inches) =	**2.5**

6 PSI LOSS / 100 FT
CW VELOCITY = 8 FPS, HW VELOCITY = 5 FPS

BRANCH PIPING SIZE	GPM		FU-FT		FU-FV	
	CW	HW	CW	HW	CW	-
1/2"	3.4	3.4	3.5	3.5	-	-
3/4"	7.5	7.5	9	9	-	-
1"	15	14	21	20	-	-
1-1/4"	29	24	51	39	12	-
1-1/2"	41	30	90	54	30	-
2"	80	51	275	130	148	-
2-1/2"	112	72	443	236	312	-
3"	180	112	809	443	775	-
4"	300	190	1755	874	1755	-

Notes: 1. The plumbing fixture water fixture units were selected from Table A103.1.
2. The branch pipe chart sizes were selected from Charts A103.1(2) and A105.1(1).
3. WFU refers to water fixture units.

WASTE MAIN SIZING CALCULATION - 2017 IDAHO STATE PLUMBING CODE

Project Name: Twin Falls Judicial Building Twin Falls, Idaho — **Date:** 12/15/2022
Project #: 21403 Existing Building — **Designer:** Kent Anderson

FIXTURE	SERVICE	DFU	SANITARY FIX QTY	SANITARY TOTAL DFU
Bathtub or Combination Bath/Shower	Either	2		
Clothes Washer (domestic 2" standpipe)	Either	3		
Dishwasher (domestic with independent drain)	Either	2		
Drinking Fountain or Water Cooler	Either	0.5	2	1
Food Waste Grinder (commercial)	Public	3		
Floor Drain (emergency)	Public		9	
Floor Drain (2" through 4" trap)	Either	2		
Shower (single head trap)	Either	2		
Multi-Head (each additional)	Either	1		
Lavatory (single)	Either	1	8	8
Lavatory (in sets of two or three)	Either	2		
Washfountain (1-1/2"...	Public	2		
Washfountain (2" trap)	Public	3		
Receptor: indirect waste, up to 7.5 GPM	Either	1		
indirect waste, 8 GPM to 30 GPM	Either	4		
Sinks: Bar	Private	1		
Bar	Public	2	6	12
Clinical	Public	6		
Commercial (with food waste)	Public	3		
Special purpose (1-1/2" trap)	Public	3		
Special purpose (2" trap)	Public	4		
Special purpose (3" trap)	Public	6		
Kitchen (domestic with/without disposal or DW)	Either	2		
Laundry (with/without discharge from a cloths washer	Either	2		
Service or mop basin (2" or 3" trap)	Public	3	2	6
Wash (each set of faucets)	Public	2		
Urinal (1.0 GPF integral trap)	Either	2	2	4
Water Closet (1.6 GPF, gravity tank or flushometer valve)	Private	3		
Water Closet (1.6 GPF, gravity tank or flushometer valve)	Public	4	13	52
Total System Drainage Fixture Units:			**SS Units:**	**83**
Sanitary Sewer System Main Pipe Size:			**SS Size:**	**4**

Notes: 1. The plumbing fixture drainage fixture units were selected from Tables 702.1 and 702.2(2).
2. The sanitary sewer system main pipe size was selected from Table 703.2.
3. DFU refers to drainage fixture units.
4. SS refers to sanitary sewer.

NATURAL GAS CALCULATION

Project Name: Twin Falls Judicial Building Twin Falls, Idaho — **Date:** 2/1/2023
Project Number: 21403 Existing Building — **Designer:** Kent Anderson

DELIVERY PRESSURE = 2 PSI
TOTAL DEVELOPED LENGTH = 222 FT
TOTAL BUILDING CONNECTED LOAD = 784 MBH
DELIVERY PIPE SIZE = 1 IN
CODE USED = 2018 INTERNATIONAL FUEL GAS CODE
TABLES USED = 402.4(1) AND 402.4(5)

MARK TOTAL MBH	DIST. METER TO PRV, FT	PIPE SIZE ENTER. PRV,...	PIPE SIZE EXIT. PRV, IN	EQUIPMENT SERVED	CAPACITY MBH	DIST. PRV TO EQUIP., FT	PIPE SIZE SERV. EQUIP., IN
PRV-1A	60	3/4	1-1/4	RTU-1	92.4	27	1
185 MBH				RTU-2	92.4	27	1
PRV-2A	117	3/4	1-1/4	RTU-3	92.4	26	1
185 MBH				RTU-4	92.4	28	1
PRV-3A	178	3/4	1-1/4	RTU-5	92.4	23	1
185 MBH				RTU-6	92.4	24	1
PRV-4A	222	3/4	1-1/4	RTU-7	105	25	1
PRV-5A	21	3/4	1	WH-1	125	20	1
				TOTAL CONNECTED LOAD =	**784**		

NOTES: 1. A 1" NATURAL GAS PIPE AT 2 PSI AND 250 FT TOTAL DEVELOPED LENGTH CAN DELIVER 1,040 CFH.
2. THE LONGEST LENGTH METHOD WAS USED TO CALCULATE THE GAS PIPING. ALL PIPING LENGTHS ARE SHOWN AS TOTAL DEVELOPED LENGTH FROM METER TO PRV OR PRV TO EQUIPMENT. ALL GAS PIPING SHALL BE STANDARD WEIGHT BLACK STEEL PER SPECIFICATION.
3. THE SYSTEM PRESSURE ENTERING THE PRESSURE REGULATORS IS 2 PSI AND THE PRESSURE EXITING THE REGULATORS IS 7 IN WC.
4. FURNISH GAS PRESSURE REGULATOR FISHER SERIES CS400 OR EQUAL FOR ALL NEW REGULATORS. INSTALL VENT LIMITED REGULATORS WHEN INTALLING REGULAATORS INSIDE THE BUILDING.

WATER MAIN SIZING CALCULATION - 2017 IDAHO STATE PLUMBING CODE

Project Name: Twin Falls Judicial Building Twin Falls, Idaho — **Date:** 12/14/2022
Project #: 21403 New Building Addition — **Designer:** Kent Anderson

Pressure available at Street Main	78	PSIG
Pressure loss through water meter	5	PSIG
Pressure loss through backflow device (buidlding supply)	5	PSIG
Pressure loss (Static) due to system height — System Height = 42 FT	18.06	PSIG
Pressure required to operate remote fixture (20 PSI - Flush... (25 PSI...	25	PSIG
Actual length of pipe, service tap to remote fixture	400	Feet
Fitting Factor multiplier (0 to 50% of actual length)	25	%
Equivalent length of piping system	500	Feet (equiv.)
	25	**PSIG**
	5.0	**PSIG**

FIXTURE	SERVI...	WFU	QTY Bmt	QTY 1st	QTY 2nd	TOTAL WFU
Bathtub or Combination Bath/Shower (fill)	Either	4				
Bathtub Fill Valve (3/4")	Either	10				
Bidet	Private	1				
Clothes Washer	Either	4				
Dental Unit, cuspidor	Public	1				
Dishwasher, domestic	Either	1.5				
Drinking Fountain or Water cooler	Either	0.5		3	3	3
Drinking Fountain or Water cooler, assembly	Public	0.75				
Hose Bibb	Either	2.5		1		2.5
Hose Bibb, each additional	Either	1		2		2
Lavatory	Either	1	5	22	26	53
Lawn Sprinkler, each head	Either	1				
Mobile Home, each (minimum)	Private	12				
Sinks: Bar Sink	Private	1				
Bar Sink	Public	2		4	4	16
Clinic Flushometer Valve with or without faucet	Public	8				
Kitchen Sink, domestic	Either	1.5				
Laundry	Either	1.5				
Service or Mop Basin	Private	1.5				
Service or Mop Basin	Public	3	1	1	1	9
Washup, each set of faucets	Public	2				
Shower, per head	Either	2				
Urinal, 1.0 GPF flushometer valve	Private	3				
Urinal, 1.0 GPF flushometer valve	Public	4		2	4	24
Wash Fountain, circular spray	Public	4				
Water Closet, 1.6 GPF Gravity Tank or Flushometer Tank	Either	2.5				
Water Closet, 1.6 GPF Flushometer Valve	Either	5	5	25	28	290
					System Total WFU:	**399.5**
					WFU conversion to GPM:	**130**

MISCELLANEOUS FIXTURES	FLOW RATE (GPM)	QTY Bmt	QTY 1st	QTY 8th	TOTAL GPM
Ice machine	1.0		1.0	1.0	2
Refrigerator ice maker	0.5		1.0	1.0	1
				Total Miscellaneous GPM =	**3.0**
				System Total GPM =	**133.0**
				Water Main Service Size (inches) =	**3**

5 PSI LOSS / 100 FT
CW VELOCITY = 8 FPS, HW VELOCITY = 5 FPS

BRANCH PIPING SIZE	GPM		FU-FT		FU-FV	
	CW	HW	CW	HW	CW	-
1/2"	3	3	3	3	-	-
3/4"	6.5	6.5	8	8	-	-
1"	14	14	20	20	-	-
1-1/4"	27	24	46	39	10	-
1-1/2"	38	30	78	54	25	-
2"	75	51	250	130	132	-
2-1/2"	112	72	443	236	312	-
3"	180	112	809	443	775	-
4"	300	190	1755	874	1755	-

Notes: 1. The plumbing fixture water fixture units were...
2. The branch pipe chart sizes were selected fro...
3. WFU refers to water fixture units.

WASTE MAIN SIZING CALCULATION - 2017 IDAHO STATE PLUMBING CODE

Project Name: Twin Falls Judicial Building Twin Falls, Idaho — **Date:** 12/15/2022
Project #: 21403 New Building Addition — **Designer:** Kent Anderson

FIXTURE	SERVICE	DFU	SANITARY QTY Bmt	QTY 1st	QTY 2nd	TOTAL DFU
Bathtub or Combination Bath/Shower	Either	2				
Clothes Washer (domestic 2" standpipe)	Either	3				
Dishwasher (domestic with independent drain)	Either	2				
Drinking Fountain or Water Cooler	Either	0.5		3	3	3
Food Waste Grinder (commercial)	Public	3				
Floor Drain (emergency)	Public		7	21	23	
Floor Drain (2" through 4" trap)	Either	2				
Shower (single head trap)	Either	2				
Multi-Head (each additional)	Either	1				
Lavatory (single)	Either	1	5	22	26	53
Lavatory (in sets of two or three)	Either	2				
Washfountain (1-1/2" trap)	Public	2				
Washfountain (2" trap)	Public	3				
Receptor: indirect waste, up to 7.5 GPM	Either	1				
indirect waste, 8 GPM to 30 GPM	Either	4				
Sinks: Bar	Private	1				
Bar	Public	2		4	4	16
Clinical	Public	6				
Commercial (with food waste)	Public	3				
Special purpose (1-1/2" trap)	Public	3				
Special purpose (2" trap)	Public	4				
Special purpose (3" trap)	Public	6				
Kitchen (domestic with/without disposal or DW)	Either	2				
Laundry (with/without discharge from a cloths washer	Either	2				
Service or mop basin (2" or 3" trap)	Public	3	1	1	1	9
Wash (each set of faucets)	Public	2				
Urinal (1.0 GPF integral trap)	Either	2		2	4	12
Water Closet (1.6 GPF, gravity tank or flushometer valve)	Private	3				
Water Closet (1.6 GPF, gravity tank or flushometer valve)	Public	4	5	25	28	232
Total System Drainage Fixture Units:					**SS Units:**	**325**
Sanitary Sewer Waste System Main Pipe Sizes:					**SS Size:**	**(3) 4"**

Notes: 1. The plumbing fixture drainage fixture units were selected from Tables 702.1 and 702.2(2).
2. The sanitary sewer system main pipe size was selected from Table 703.2.
3. DFU refers to drainage fixture units.
4. SS refers to sanitary sewer.

NATURAL GAS CALCULATION

Project Name: Twin Falls Judicial Building Twin Falls, Idaho — **Date:** 2/17/2023
Project Number: 21403 New Building Addition — **Designer:** Kent Anderson

DELIVERY PRESSURE = 2 PSI
TOTAL DEVELOPED LENGTH = 338 FT
TOTAL BUILDING CONNECTED LOAD = 6,303 MBH
DELIVERY PIPE SIZE = 2.5 IN
CODE USED = 2018 INTERNATIONAL FUEL GAS CODE
TABLES USED = 402.4(1) AND 402.4(5)

MARK TOTAL MBH	DIST. METER TO PRV, FT	PIPE SIZE ENTER. PRV,...	PIPE SIZE EXIT. PRV, IN	EQUIPMENT SERVED	CAPACITY MBH	DIST. PRV TO EQUIP., FT	PIPE SIZE SERV. EQUIP., IN
PRV-1B	171	3/4	1-1/4	RTU-20	92.4	17	1
197.4 MBH				RTU-21	105	12	1
PRV-2B	188	3/4	1	RTU-19	92.4	8	1
PRV-3B	176	3/4	1	RTU-16	92.4	13	1
PRV-4B	195	3/4	1-1/4	DOAS-1	200	39	1-1/4
292.4 MBH				RTU-14	92.4	29	1
PRV-5B	246	3/4	1-1/4	RTU-10	92.4	18	1
184.8 MBH				RTU-13	92.4	14	1
PRV-6B	278	3/4	1	DOES-2	120	18	1
PRV-7B	338	3/4	1	RTU-8	105	27	1
PRV-8B	247	3/4	1	RTU-11	92.4	17	1
PRV-9B	225	3/4	1-1/4	RTU-9	92.4	16	1
184.8 MBH				RTU-12	92.4	16	1
PRV-10B	215	3/4	1	RTU-15	105	18	1
PRV-11B	193	3/4	1	RTU-17	151.2	13	1
PRV-12B	169	3/4	1	RTU-18	92.4	14	1
PRV-13B	114	3/4	1-1/4	RTU-22	151.2	35	1
302.4 MBH				RTU-23	151.2	16	1
PRV-14B	80	3/4	1	WH-2	150	10	1
PRV-15B	100	2	3	GENERATOR	4,140	10	3
				TOTAL CONNECTED LOAD =	**6,303**		

NOTES: 1. A 2-1/2" NATURAL GAS PIPE AT 2 PSI AND 350 FT TOTAL DEVELOPED LENGTH CAN DELIVER 8,210 CFH.
2. THE LONGEST LENGTH METHOD WAS USED TO CALCULATE THE GAS PIPING. ALL PIPING LENGTHS ARE SHOWN AS TOTAL DEVELOPED LENGTH FROM METER TO PRV OR PRV TO EQUIPMENT. ALL GAS PIPING SHALL BE STANDARD WEIGHT BLACK STEEL PER SPECIFICATION.
3. THE SYSTEM PRESSURE ENTERING THE PRESSURE REGULATORS IS 2 PSI AND THE PRESSURE EXITING THE REGULATORS IS 7 IN WC.
4. FURNISH GAS PRESSURE REGULATOR FISHER SERIES CS400 OR EQUAL FOR ALL NEW REGULATORS.

PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON
Digitally signed by Kent Anderson
Date: 2023.04.13 08:22:01-06'00'

KENT R. ANDERSON, P.E.
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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

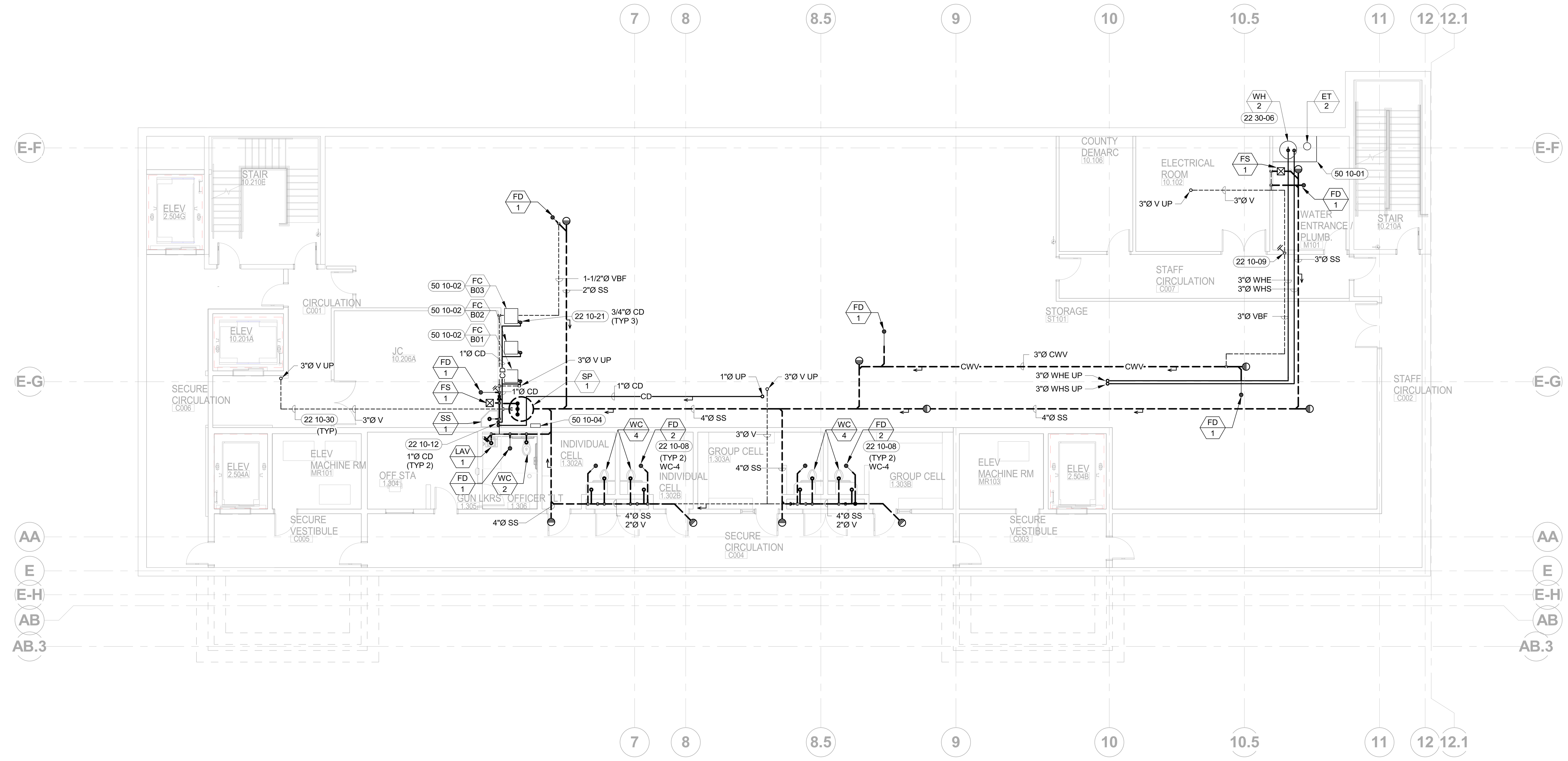
REVISED

SHEET TITLE
PLUMBING CALCULATIONS

SHEET
P01

ORIGINAL SHEET SIZE 36" x 48"

4/13/2023 8:16:49 AM



1 WASTE & VENT PLAN - BASEMENT
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

Symbol	Description	Symbol	Description
- - - -	SANITARY SEWER	(cleanout) - - -	FLOOR CLEANOUT
—CSS—	CAST IRON SANITARY SEWER	(drain) - - -	FLOOR DRAIN, ROUND
—GW—	GREASE WASTE	(sink) - - -	FLOOR SINK
—RWL—	RAIN WATER LEADER	(trench)	TRENCH DRAIN
—OFL—	OVERFLOW LEADER	XX / ##	FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
---------	SANITARY VENT		
—CD—	CONDENSATE DRAIN		
—IW—	INDIRECT WASTE		

GENERAL NOTES:

A. EXISTING BUILDING WASTE AND VENT PIPING IS EXISTING. CONTRACTOR SHALL VERIFY EXACT LOCATION AND FLOW LINE ELEVATION OF ALL CONNECTION POINTS PRIOR TO INSTALLATION OF NEW PIPING. ALERT GENERAL CONTRACTOR IMMEDIATELY UPON DISCOVERY OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS AND CONNECTION POINTS NOTED.

B. SLOPE ALL SS, GW, CD, RWL, AND OFL PIPING AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.

C. ALL CONDENSATE PIPING IS 3/4"Ø UNLESS NOTED OTHERWISE.

D. PROVIDE INDIRECT WASTE PIPING TO RECEPTORS FROM ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION. PIPING SHALL BE TYPE DWV OR TYPE M COPPER INSTALLED A MINIMUM OF 1/2" OFF OF ADJACENT FLOOR AND WALL SURFACES.

E. INSTALL ALL PLUMBING VTR AND GAS VENTS A MINIMUM OF 10'-0" FROM ALL OSA INTAKES.

F. INSTALL ALL NEW BELOW GROUND WASTE OR VENT PIPING. PROVIDE FOR ALL EXCAVATION AND BACKFILL AS REQUIRED. REFER TO GENERAL NOTES FOR SLOPE REQUIREMENTS.

G. ROUTE ALL ABOVE GROUND VENT PIPING OVERHEAD AS HIGH AS POSSIBLE IN ROOF STRUCTURE. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

H. FURNISH ALL FLOOR CLEANOUTS WITH HEAVY DUTY NICKEL BRONZE TOP WITH CAST IRON ADJUSTABLE STRAINER AND ABS PLUG.

I. INSULATE ALL RAIN WATER PIPING ABOVE GRADE.

J. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

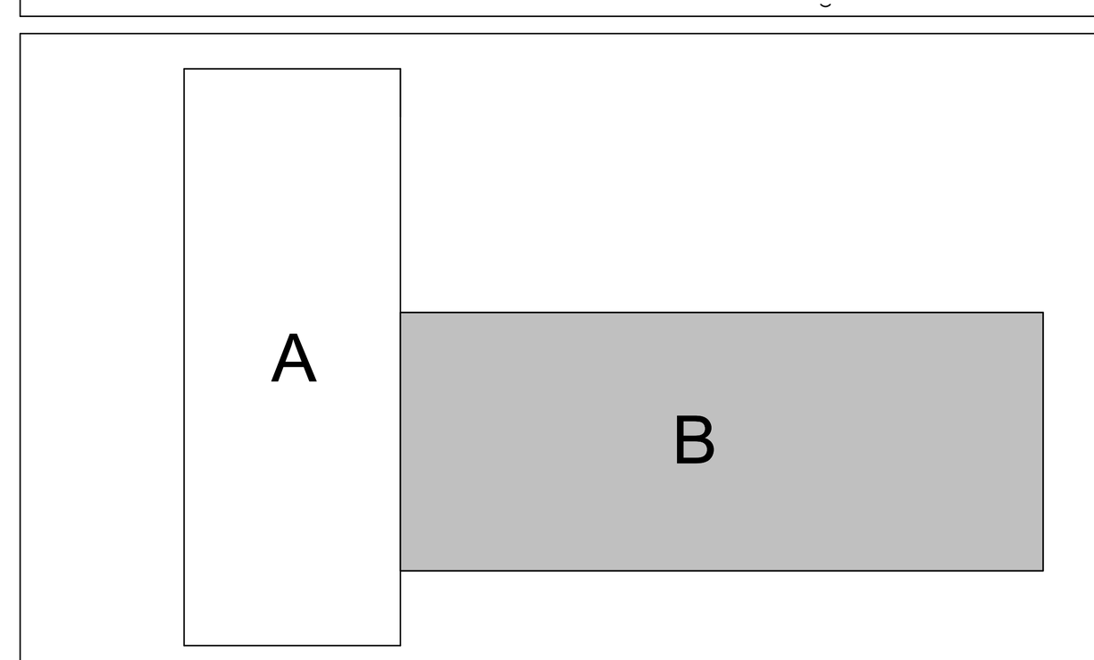
K. ALL VENTS SHARED BY BACK TO BACK WATER CLOSETS, LAVARORIES, AND FLOOR DRAINS ARE 2"Ø, 1-1/2"Ø, 1-1/2"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

L. REFER TO THE PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

##-## SHEET NOTES:

22 10-08	INSTALL TRAP PRIMER PIPING ON FLOOR DRAIN, TRENCH DRAIN, OR FLOOR SINK OUTLET TO THE TRAP PRIMER SYSTEM INDICATED. RE: WATER AND GAS PLAN FOR WATER CONNECTION AND TRAP PRIMER LOCATIONS.
22 10-09	EXTEND 3"Ø SANITARY VENT PIPING TO BEGIN COMBINATION WASTE AND VENT SYSTEM. RISE UP AT WALL/COLUMN AND PROVIDE CLEANOUT. RE: ARCHITECTURAL DETAILS FOR EXPOSED PIPING PROTECTION (WHERE APPLICABLE).
22 10-12	ROUTE 1"Ø CD PIPE DOWN IN WALL AND DRAIN INDIRECT TO SERVICE SINK
22 10-21	CONNECT NEW CONDENSATE DRAIN TO MECHANICAL UNIT WITH P-TRAP AND ROUTE AS SHOWN. SIZE AS INDICATED. COORDINATE CONNECTION REQUIREMENTS WITH EQUIPMENT IN FIELD. RE: AC UNIT CONDENSATE DRAIN DETAIL.
22 10-30	ROUTE NEW WASTE OR VENT PIPING OVERHEAD. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT PRIOR TO CONSTRUCTION.
22 30-06	RE: P71-20 FOR GAS FIRED WATER HEATER PIPING DETAIL.
50 10-01	4" THICK HOUSEKEEPING PAD. COORDINATE EXACT PAD DIMENSIONS WITH EQUIPMENT MOUNTING REQUIREMENTS PRIOR TO CONSTRUCTION. RE: ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
50 10-02	EQUIPMENT FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
50 10-04	INSTALL SUMP PUMP SP-1 CONTROL PANEL ON WLL AT 48" AFF TO BOTTOM OF PANEL.

KEY PLAN:



PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.03.31 09:45:46-06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	**CHECKED**
KRA	KRA

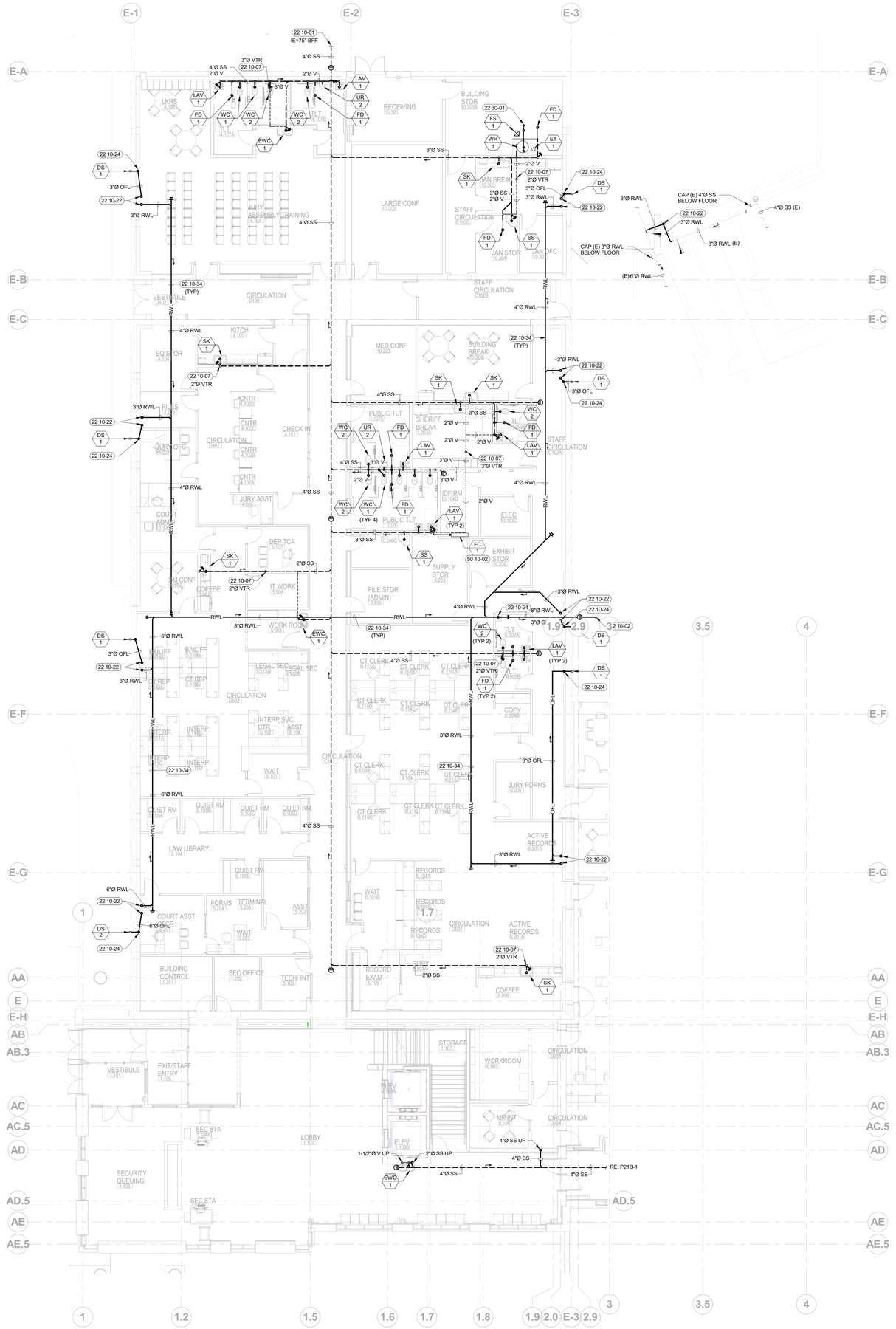
REVISED

SHEET TITLE
WASTE & VENT PLAN BASEMENT

SHEET
P20

ORIGINAL SHEET SIZE 36" x 48"

3/31/2023 9:12:57 AM



1 WASTE & VENT PLAN - LEVEL 1 AREA A
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- SANITARY SEWER
- CSS — CAST IRON SANITARY SEWER
- GW — GREASE WASTE
- RWL — RAIN WATER LEADER
- OFL — OVERFLOW LEADER
- SANITARY VENT
- CD — CONDENSATE DRAIN
- IW — INDIRECT WASTE
- FLOOR CLEANOUT
- FLOOR DRAIN, ROUND
- FLOOR SINK
- TRENCH DRAIN
- XX / ## — FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)

GENERAL NOTES:

A. EXISTING BUILDING WASTE AND VENT PIPING IS EXISTING. CONTRACTOR SHALL VERIFY EXACT LOCATION AND FLOW LINE ELEVATION OF ALL CONNECTION POINTS PRIOR TO INSTALLATION OF NEW PIPING. ALERT GENERAL CONTRACTOR IMMEDIATELY UPON DISCOVERY OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS AND CONNECTION POINTS NOTED.

B. SLOPE ALL SS, GW, CD, RWL, AND OFL PIPING AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.

C. ALL CONDENSATE PIPING IS 3/4"∅ UNLESS NOTED OTHERWISE.

D. PROVIDE INDIRECT WASTE PIPING TO RECEPTORS FROM ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION. PIPING SHALL BE TYPE DWV OR TYPE M COPPER INSTALLED A MINIMUM OF 1/2" OFF OF ADJACENT FLOOR AND WALL SURFACES.

E. INSTALL ALL PLUMBING VTR AND GAS VENTS A MINIMUM OF 10'-0" FROM ALL OSA INTAKES.

F. INSTALL ALL NEW BELOW GROUND WASTE OR VENT PIPING. PROVIDE FOR ALL EXCAVATION AND BACKFILL AS REQUIRED. REFER TO GENERAL NOTES FOR SLOPE REQUIREMENTS.

G. ROUTE ALL ABOVE GROUND VENT PIPING OVERHEAD AS HIGH AS POSSIBLE IN ROOF STRUCTURE. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

H. FURNISH ALL FLOOR CLEANOUTS WITH HEAVY DUTY NICKEL BRONZE TOP WITH CAST IRON ADJUSTABLE STRAINER AND ABS PLUG.

I. INSULATE ALL RAIN WATER PIPING ABOVE GRADE.

J. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

K. ALL VENTS SHARED BY BACK TO BACK WATER CLOSETS, LAVARORIES, AND FLOOR DRAINS ARE 2"Ø, 1-1/2"Ø, 1-1/2"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

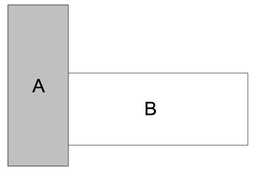
L. REFER TO THE PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

SHEET NOTES:

(## ##-##)

22 10-01	EXTEND SS 5'-0" FROM EDGE OF BUILDING AND CONNECT TO SANITARY SEWER MAIN. RE: CIVIL DRAWINGS FOR CONTINUATION.
22 10-02	EXTEND RWL 5'-0" FROM EDGE OF BUILDING AND CONNECT TO STORM SEWER MAIN. RE: CIVIL DRAWINGS FOR CONTINUATION.
22 10-07	ROUTE SANITARY VENT PIPING THROUGH ROOF. LOCATE 10'-0" MINIMUM FROM ANY AIR INTAKE AND COORDINATE WITH HVAC. EXTEND ABOVE LOCAL SNOW AND DRIFT-LINE CONDITION. SIZE AS INDICATED.
22 10-22	ROUTE RWL AND OFL THROUGH ROOF.
22 10-24	ROUTE RWL OR OFL DOWN IN WALL TO BELOW FLOOR. COORDINATE PIPE ROUTING WITH THE BUILDING STRUCTURE AND WALL FRAMING PRIOR TO CONSTRUCTION.
22 10-34	INSTALL RWL TIGHT TO STRUCTURE AND SLOPE AT 1/8" PER FT.
22 30-01	INSTALL CONCENTRIC ROOF VENT KIT FURNSIHED WITH THE WATER HEATER INDICATED. DO NOT INSTALL WITHIN 10'-0" FROM ALL AIR INTAKES INTO THE BUILDING.
50 10-02	EQUIPMENT FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

KEY PLAN:



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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

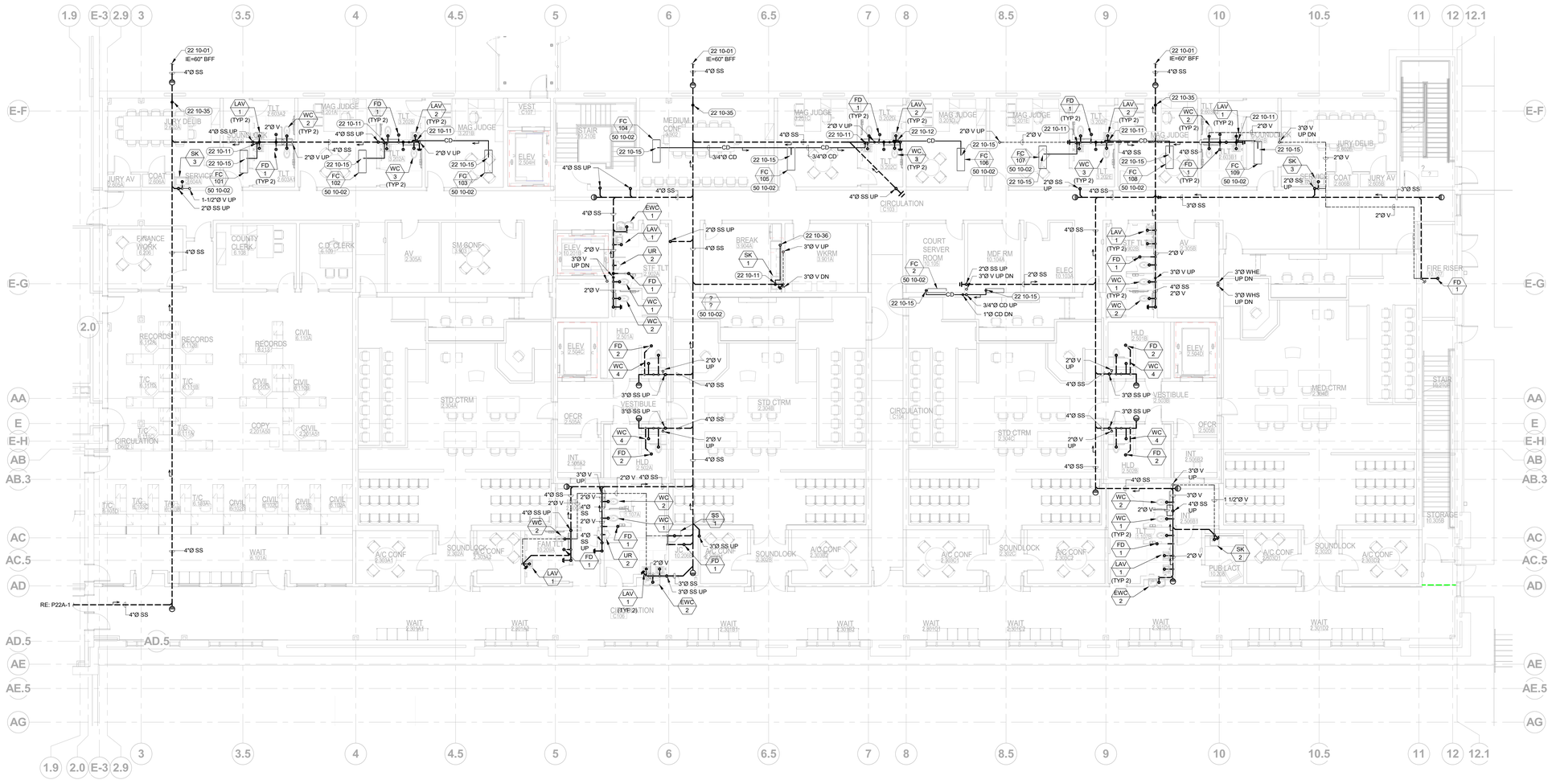
REVISED

SHEET NAME: WASTE & VENT PLAN LEVEL 1 - AREA A

SHEET: P21A

ORIGINAL SHEET SIZE 36" x 48"

3/31/2023 9:13:05 AM



1 WASTE & VENT PLAN - LEVEL 1 AREA B
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- SANITARY SEWER
- CSS — CAST IRON SANITARY SEWER
- GW — GREASE WASTE
- RWL — RAIN WATER LEADER
- OFL — OVERFLOW LEADER
- SANITARY VENT
- CD — CONDENSATE DRAIN
- IW — INDIRECT WASTE
- FLOOR CLEANOUT
- FLOOR DRAIN, ROUND
- FLOOR SINK
- TRENCH DRAIN
- XX / ## — FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)

GENERAL NOTES:

A. EXISTING BUILDING WASTE AND VENT PIPING IS EXISTING. CONTRACTOR SHALL VERIFY EXACT LOCATION AND FLOW LINE ELEVATION OF ALL CONNECTION POINTS PRIOR TO INSTALLATION OF NEW PIPING. ALERT GENERAL CONTRACTOR IMMEDIATELY UPON DISCOVERY OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS AND CONNECTION POINTS NOTED.

B. SLOPE ALL SS, GW, CD, RWL, AND OFL PIPING AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.

C. ALL CONDENSATE PIPING IS 3/4"Ø UNLESS NOTED OTHERWISE.

D. PROVIDE INDIRECT WASTE PIPING TO RECEPTORS FROM ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION. PIPING SHALL BE TYPE DWV OR TYPE M COPPER INSTALLED A MINIMUM OF 1/2" OFF OF ADJACENT FLOOR AND WALL SURFACES.

E. INSTALL ALL PLUMBING VTR AND GAS VENTS A MINIMUM OF 10'-0" FROM ALL OSA INTAKES.

F. INSTALL ALL NEW BELOW GROUND WASTE OR VENT PIPING. PROVIDE FOR ALL EXCAVATION AND BACKFILL AS REQUIRED. REFER TO GENERAL NOTES FOR SLOPE REQUIREMENTS.

G. ROUTE ALL ABOVE GROUND VENT PIPING OVERHEAD AS HIGH AS POSSIBLE IN ROOF STRUCTURE. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

H. FURNISH ALL FLOOR CLEANOUTS WITH HEAVY DUTY NICKEL BRONZE TOP WITH CAST IRON ADJUSTABLE STRAINER AND ABS PLUG.

I. INSULATE ALL RAIN WATER PIPING ABOVE GRADE.

J. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

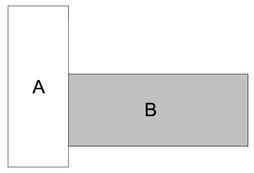
K. ALL VENTS SHARED BY BACK TO BACK WATER CLOSETS, LAVARORIES, AND FLOOR DRAINS ARE 2"Ø, 1-1/2"Ø, 1-1/2"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

L. REFER TO THE PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

SHEET NOTES:

22 10-01	EXTEND SS 5'-0" FROM EDGE OF BUILDING AND CONNECT TO SANITARY SEWER MAIN. RE: CIVIL DRAWINGS FOR CONTINUATION.
22 10-11	ROUTE 3/4"Ø CD OR IW PIPE DOWN IN WALL AND DRAIN INDIRECT TO SINK TAILPIECE. PROVIDE TAILPIECE CD FITTING FOR CONNECTION.
22 10-12	ROUTE 1"Ø CD PIPE DOWN IN WALL AND DRAIN INDIRECT TO SERVICE SINK.
22 10-15	CONNECT 3/4"Ø CD TO MECHANICAL UNIT AND ROUTE IN CEILING SPACE AS SHOWN. COORDINATE CD ROUTING WITH STRUCTURE AND DUCTWORK.
22 10-35	ROUTE SS PIPING DOWN AT 45 DEGREES AT THIS POINT TO THE INVERT ELEVATION SHOWN EXITING THE BUILDING.
22 10-36	CONNECT 3/4"Ø CD PIPING TO OWNER FURNISHED ICE MAKER AND ROUTE IN BACK OF MILLWORK AS SHOWN.
50 10-02	EQUIPMENT FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

KEY PLAN:



PROFESSIONAL ENGINEER
REGISTERED
10955
STATE OF IDAHO
KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.04.18 10:48:42-06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE: 200 W BROAD STREET, BOISE, ID 83702

KENT R. ANDERSON, P.E.
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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

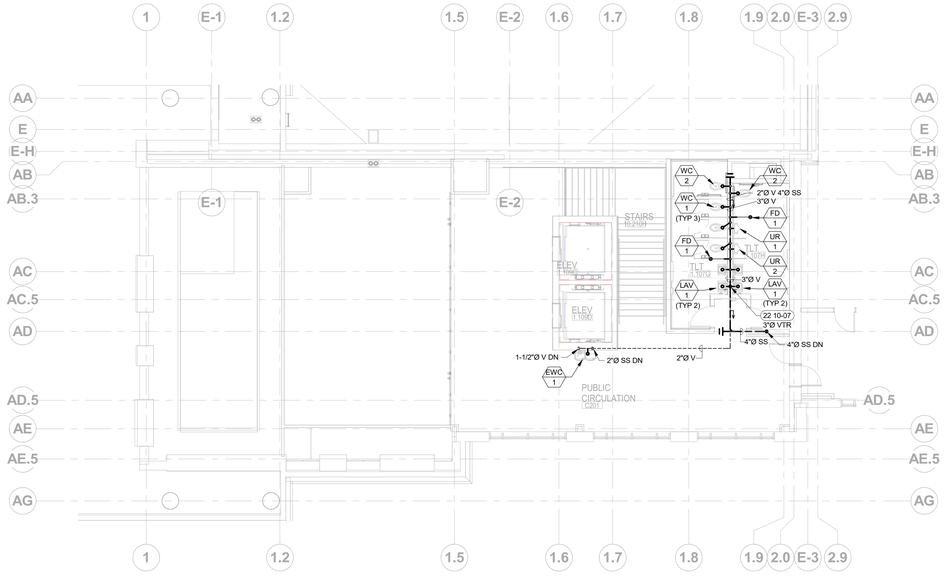
REVISED

SHEET TITLE
WASTE & VENT PLAN LEVEL 1 - AREA B

SHEET
P21B

ORIGINAL SHEET SIZE
36" x 48"

4/18/2023 10:26:49 AM



1 WASTE & VENT PLAN - LEVEL 2 AREA A
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- SANITARY SEWER
- CAST IRON SANITARY SEWER (CSS)
- GREASE WASTE (GW)
- RAIN WATER LEADER (RWL)
- OVERFLOW LEADER (OFL)
- SANITARY VENT
- CONDENSATE DRAIN (CD)
- INDIRECT WASTE (IW)
- FLOOR CLEANOUT
- FLOOR DRAIN, ROUND
- FLOOR SINK
- TRENCH DRAIN
- FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES) (XX / ##)

GENERAL NOTES:

A. EXISTING BUILDING WASTE AND VENT PIPING IS EXISTING. CONTRACTOR SHALL VERIFY EXACT LOCATION AND FLOW LINE ELEVATION OF ALL CONNECTION POINTS PRIOR TO INSTALLATION OF NEW PIPING. ALERT GENERAL CONTRACTOR IMMEDIATELY UPON DISCOVERY OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS AND CONNECTION POINTS NOTED.

B. SLOPE ALL SS, GW, CD, RWL, AND OFL PIPING AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.

C. ALL CONDENSATE PIPING IS 3/4"Ø UNLESS NOTED OTHERWISE.

D. PROVIDE INDIRECT WASTE PIPING TO RECEPTORS FROM ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION. PIPING SHALL BE TYPE DWV OR TYPE M COPPER INSTALLED A MINIMUM OF 1/2" OFF OF ADJACENT FLOOR AND WALL SURFACES.

E. INSTALL ALL PLUMBING VTR AND GAS VENTS A MINIMUM OF 10'-0" FROM ALL OSA INTAKES.

F. INSTALL ALL NEW BELOW GROUND WASTE OR VENT PIPING. PROVIDE FOR ALL EXCAVATION AND BACKFILL AS REQUIRED. REFER TO GENERAL NOTES FOR SLOPE REQUIREMENTS.

G. ROUTE ALL ABOVE GROUND VENT PIPING OVERHEAD AS HIGH AS POSSIBLE IN ROOF STRUCTURE. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

H. FURNISH ALL FLOOR CLEANOUTS WITH HEAVY DUTY NICKEL BRONZE TOP WITH CAST IRON ADJUSTABLE STRAINER AND ABS PLUG.

I. INSULATE ALL RAIN WATER PIPING ABOVE GRADE.

J. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

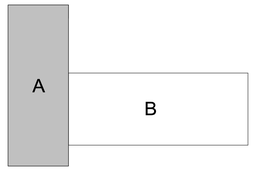
K. ALL VENTS SHARED BY BACK TO BACK WATER CLOSETS, LAVARORIES, AND FLOOR DRAINS ARE 2'Ø, 1-1/2"Ø, 1-1/2"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

L. REFER TO THE PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

SHEET NOTES:

22 10-07 ROUTE SANITARY VENT PIPING THROUGH ROOF. LOCATE 10'-0" MINIMUM FROM ANY AIR INTAKE AND COORDINATE WITH HVAC. EXTEND ABOVE LOCAL SNOW AND DRIFT-LINE CONDITION. SIZE AS INDICATED.

KEY PLAN:



PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.03.31 09:45:46 -06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

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CSHQA

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

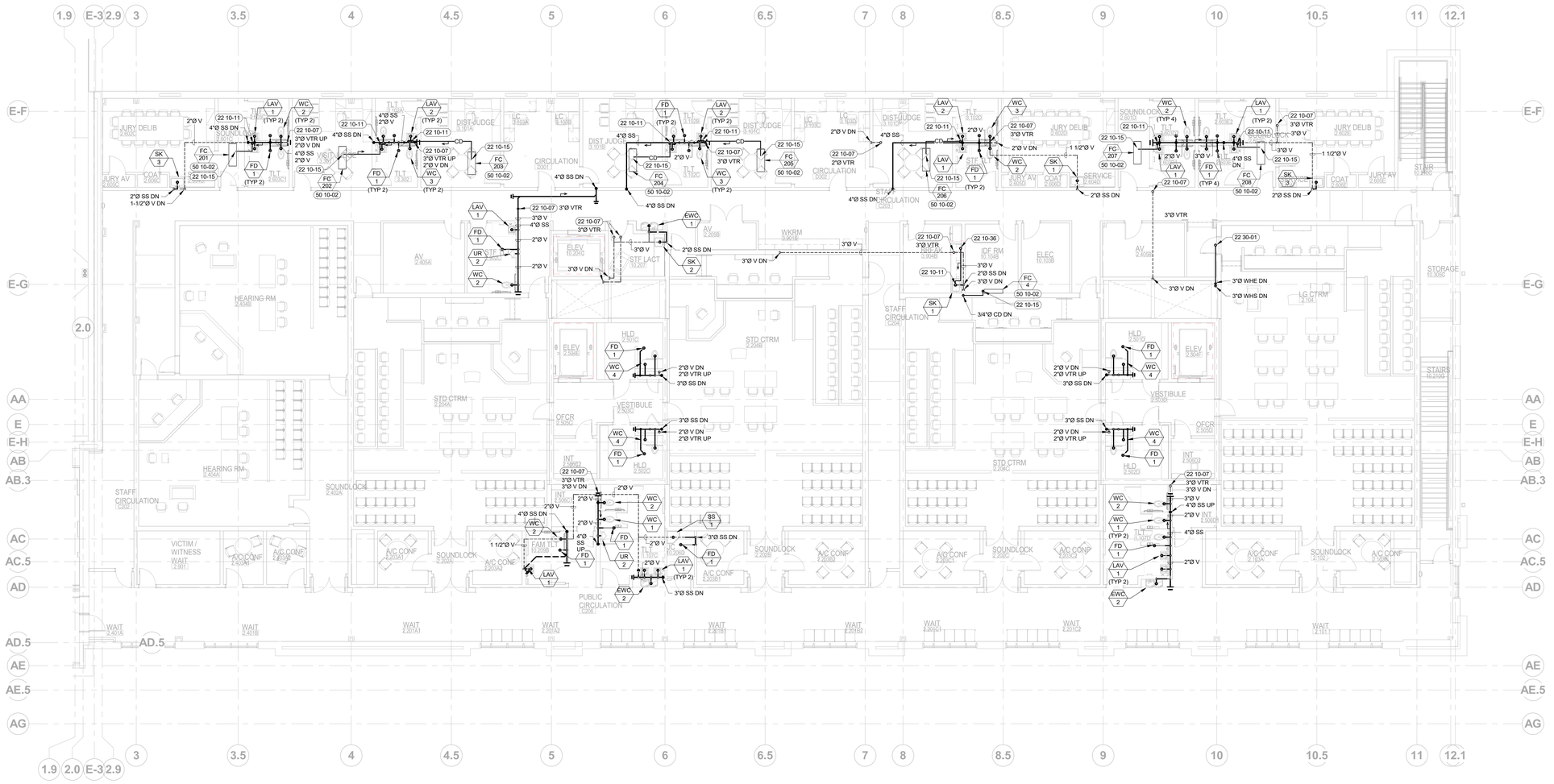
REVISED

SHEET NAME
WASTE & VENT PLAN LEVEL 2 - AREA A

SHEET
P22A

ORIGINAL SHEET SIZE
36" x 48"

3/31/2023 9:13:21 AM



1 WASTE & VENT PLAN - LEVEL 2 AREA B
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

----	SANITARY SEWER	-o-	FLOOR CLEANOUT
—CSS—	CAST IRON SANITARY SEWER	-●-	FLOOR DRAIN, ROUND
—GW—	GREASE WASTE	-⊠-	FLOOR SINK
—RWL—	RAIN WATER LEADER	▭	TRENCH DRAIN
—OFL—	OVERFLOW LEADER	XX / ##	FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
----------	SANITARY VENT		
—CD—	CONDENSATE DRAIN		
—IW—	INDIRECT WASTE		

GENERAL NOTES:

A. EXISTING BUILDING WASTE AND VENT PIPING IS EXISTING. CONTRACTOR SHALL VERIFY EXACT LOCATION AND FLOW LINE ELEVATION OF ALL CONNECTION POINTS PRIOR TO INSTALLATION OF NEW PIPING. ALERT GENERAL CONTRACTOR IMMEDIATELY UPON DISCOVERY OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS AND CONNECTION POINTS NOTED.

B. SLOPE ALL SS, GW, CD, RWL, AND OFL PIPING AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.

C. ALL CONDENSATE PIPING IS 3/4"Ø UNLESS NOTED OTHERWISE.

D. PROVIDE INDIRECT WASTE PIPING TO RECEPTORS FROM ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION. PIPING SHALL BE TYPE DWV OR TYPE M COPPER INSTALLED A MINIMUM OF 1/2" OFF OF ADJACENT FLOOR AND WALL SURFACES.

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H. FURNISH ALL FLOOR CLEANOUTS WITH HEAVY DUTY NICKEL BRONZE TOP WITH CAST IRON ADJUSTABLE STRAINER AND ABS PLUG.

I. INSULATE ALL RAIN WATER PIPING ABOVE GRADE.

J. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

K. ALL VENTS SHARED BY BACK TO BACK WATER CLOSETS, LAVARORIES, AND FLOOR DRAINS ARE 2"Ø, 1-1/2"Ø, 1-1/2"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

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SHEET NOTES:

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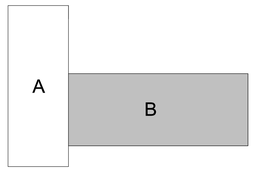
22 10-11	ROUTE 3/4"Ø CD OR IW PIPE DOWN IN WALL AND DRAIN INDIRECT TO SINK TAILPIECE. PROVIDE TAILPIECE CD FITTING FOR CONNECTION.
22 10-15	CONNECT 3/4"Ø CD TO MECHANICAL UNIT AND ROUTE IN CEILING SPACE AS SHOWN. COORDINATE CD ROUTING WITH STRUCTURE AND DUCTWORK.
22 10-36	CONNECT 3/4"Ø CD PIPING TO OWNER FURNISHED ICE MAKER AND ROUTE IN BACK OF MILLWORK AS SHOWN.
22 30-01	INSTALL CONCENTRIC ROOF VENT KIT FURNISHED WITH THE WATER HEATER INDICATED. DO NOT INSTALL WITHIN 10'-0" FROM ALL AIR INTAKES INTO THE BUILDING.
50 10-02	EQUIPMENT FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

KEY PLAN:



PROFESSIONAL ENGINEER
REGISTERED
10955
STATE OF IDAHO
KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.04.18 10:48:42 -06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC., 200 W BROAD STREET, BOISE, ID 83702

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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

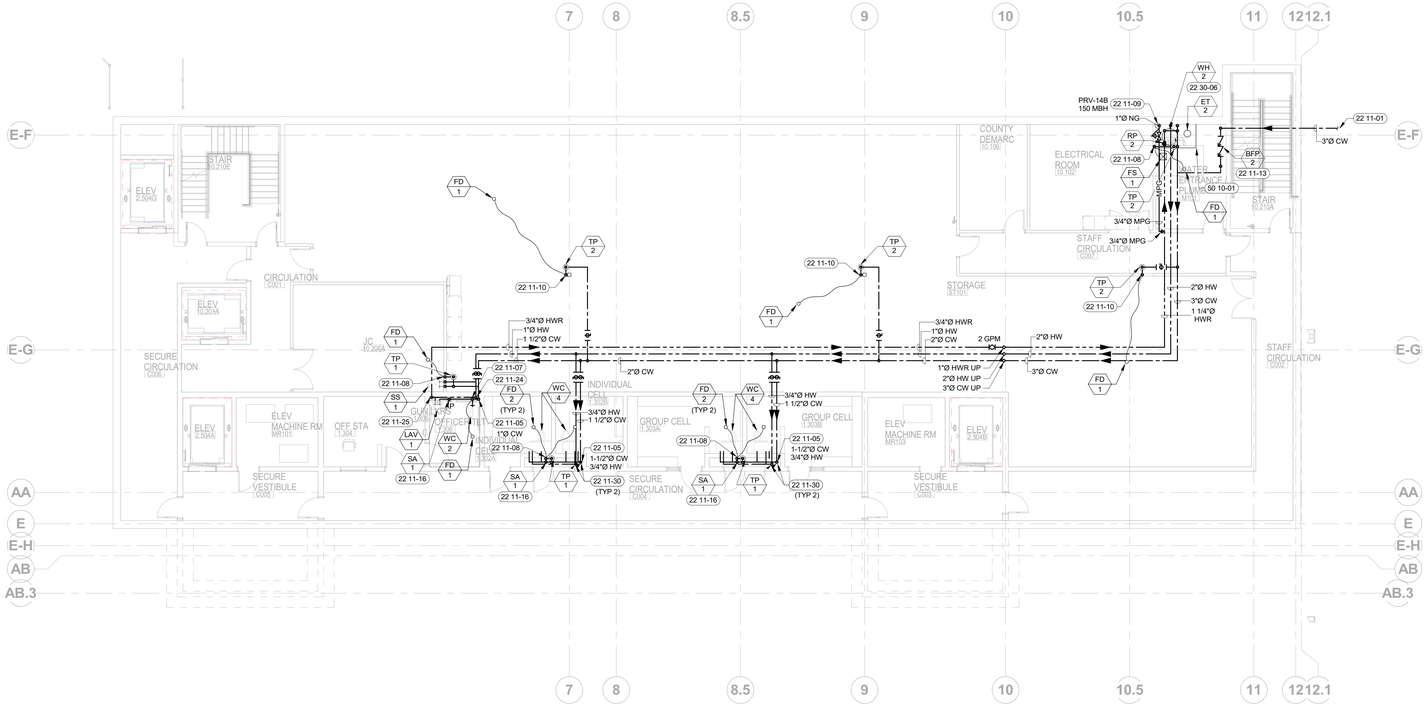
REVISED

SHEET NAME
WASTE & VENT PLAN LEVEL 2 - AREA B

SHEET
P22B

ORIGINAL SHEET SIZE
36" x 48"

4/18/2023 10:28:52 AM



1 WATER & GAS PLAN - BASEMENT
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- COLD WATER
- SOFT COLD WATER
- RO — REVERSE OSMOSIS WATER
- DOMESTIC HOT WATER
- DOMESTIC HOT WATER RETURN
- HOT WATER WITH TEMP. MAINTENANCE CABLE
- MPG — MEDIUM PRESSURE GAS
- NG — NATURAL GAS
- PIPE ELBOW UP
- BALL VALVE
- PRESSURE REDUCING VALVE
- SHUT-OFF VALVE
- XX / ## — FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
- PIPE ELBOW DOWN
- PIPE TEE BRANCH UP (W/ ELBOW)
- PIPE TEE BRANCH DOWN (W/ ELBOW)
- FLOW DIRECTION INDICATOR

GENERAL NOTES:

A. CONTRACTOR TO INSTALL SHUT OFF VALVES AT EACH BRANCH LINE TAKE-OFF. ALL PLUMBING FIXTURES, APPLIANCES, AND BRANCH LINES SHALL HAVE THEIR OWN INDEPENDENT SHUT-OFF VALVES INSTALLED IN AN EASILY ACCESSIBLE AND CONVENIENT LOCATION. BRANCHES SHALL COME OFF BOTTOM OR SIDE OF MAIN TO PREVENT AIR ENTRAPMENT.

B. PROVIDE MIXING VALVE ON ALL HAND SINKS, LAVATORIES AND BREAK ROOM COUNTERTOP SINKS LOCATED TO BE EASILY ACCESSIBLE. REFER TO SCHEDULE AND DETAILS FOR MAKE, MODEL AND TEMPERATURE SETTING.

C. PROVIDE FIXTURE BRANCH PIPING, PRESSURE REGULATORS AND BACKFLOW PREVENTION TO ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION.

D. INSTALL CHECK VALVES IN HOT AND COLD WATER SUPPLY LINES SERVING ALL 1, 2 AND 3-COMPARTMENT SINKS AND MOP SINKS.

E. ROUTE ALL WATER OR GAS PIPING OVERHEAD AS HIGH AS POSSIBLE. RE: PIPING SUPPORT DETAILS. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

F. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

G. ALL WATER PIPING SHARED BY BACK TO BACK WATER CLOSETS AND LAVARORIES ARE 1-1/4"Ø AND 3/4"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

H. RE: PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

SHEET NOTES:

##-##

22 11-01 EXTEND DOMESTIC WATER, FIRE PROTECTION WATER, AND NATURAL GAS 5'-0" OUT FROM EDGE OF BUILDING AND CONNECT TO SERVICE MAIN. RE: CIVIL DRAWINGS FOR CONTINUATION.

22 11-05 ROUTE WATER PIPING DOWN IN WALL TO FIXTURES AND EQUIPMENT. REFER TO FIXTURE SCHEDULE FOR CONNECTION SIZES AND REQUIREMENTS. SIZE AS INDICATED.

22 11-07 ROUTE 1/2"Ø PEX TUBING INDEPENDENTLY FROM FLUSH VALVE TRAP PRIMER DIVERTER BELOW FLOOR TO FLOOR DRAIN TRAP. REFER TO WASTE AND VENT DRAWING FOR FLOOR DRAIN LOCATION.

22 11-08 ROUTE 1/2"Ø PEX TUBING INDEPENDENTLY FROM TRAP PRIMER MANIFOLD DOWN IN WALL TO BELOW FLOOR AND CONNECT TO FLOOR DRAIN TRAPS. REFER TO WASTE AND VENT DRAWING FOR FLOOR DRAIN LOCATIONS.

22 11-09 CONNECT NATURAL GAS PIPING TO EQUIPMENT. PROVIDE CSA-LISTED SHUT-OFF VALVE, FLEXIBLE APPLIANCE CONNECTOR, 3" MIN DIRT LEG, AND UNION. SIZE AS INDICATED. RE: GAS TO UNIT CONNECTION DETAIL.

22 11-10 ROUTE 1/2"Ø PEX TUBING INDEPENDENTLY FROM TRAP PRIMER MANIFOLD DOWN AGAINST COLUMN TO BELOW FLOOR AND CONNECT TO FLOOR DRAIN TRAPS. REFER TO WASTE AND VENT DRAWING FOR FLOOR DRAIN LOCATIONS.

22 11-13 INSTALL BACKFLOW PREVENTER ON WALL WITH ACCESS FOR MAINTENANCE AND TESTING. RE: BACKFLOW PREVENTER DETAIL.

22 11-16 INSTALL SHOCK ARRESTER ON THE CW PIPE IN WALL. FURNISH AND INSTALL A 12"X12" ACCESS PANEL. COORDINATE THE EXACT ACCESS PANEL LOCATION WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.

22 11-24 ROUTE HW MAIN DOWN IN WALL TO LAVATORY ROUGH-IN HEIGHT, OFFSET HORIZONTALLY, AND ROUTE IN WALL TO FIXTURES. TERMINATE EACH LAVATORY HW SUPPLY WITHIN 2'-0" OF THE FIXTURE SUPPLY PIPE.

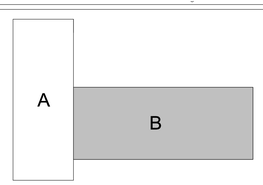
22 11-25 ROUTE HW MAIN UP IN WALL TO ABOVE CEILING.

22 11-30 INSTALL A SHUT-OFF BALL VALVE AT 5'-0" AFF IN AN ACCESSIBLE LOCATION IN THE VERTICAL POTION OF THE MAIN COLD AND HOT WATER PIPING MAINS SERVING THE INDIVIDUAL CELL WATER CLOSET COMBI FIXTURES.

22 30-06 RE: P71-20 FOR GAS FIRED WATER HEATER PIPING DETAIL.

50 10-01 4" THICK HOUSEKEEPING PAD. COORDINATE EXACT PAD DIMENSIONS WITH EQUIPMENT MOUNTING REQUIREMENTS PRIOR TO CONSTRUCTION. RE: ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

KEY PLAN:



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CSHQA

AGENCY REVIEW SET

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DRAWN	CHECKED
KRA	KRA

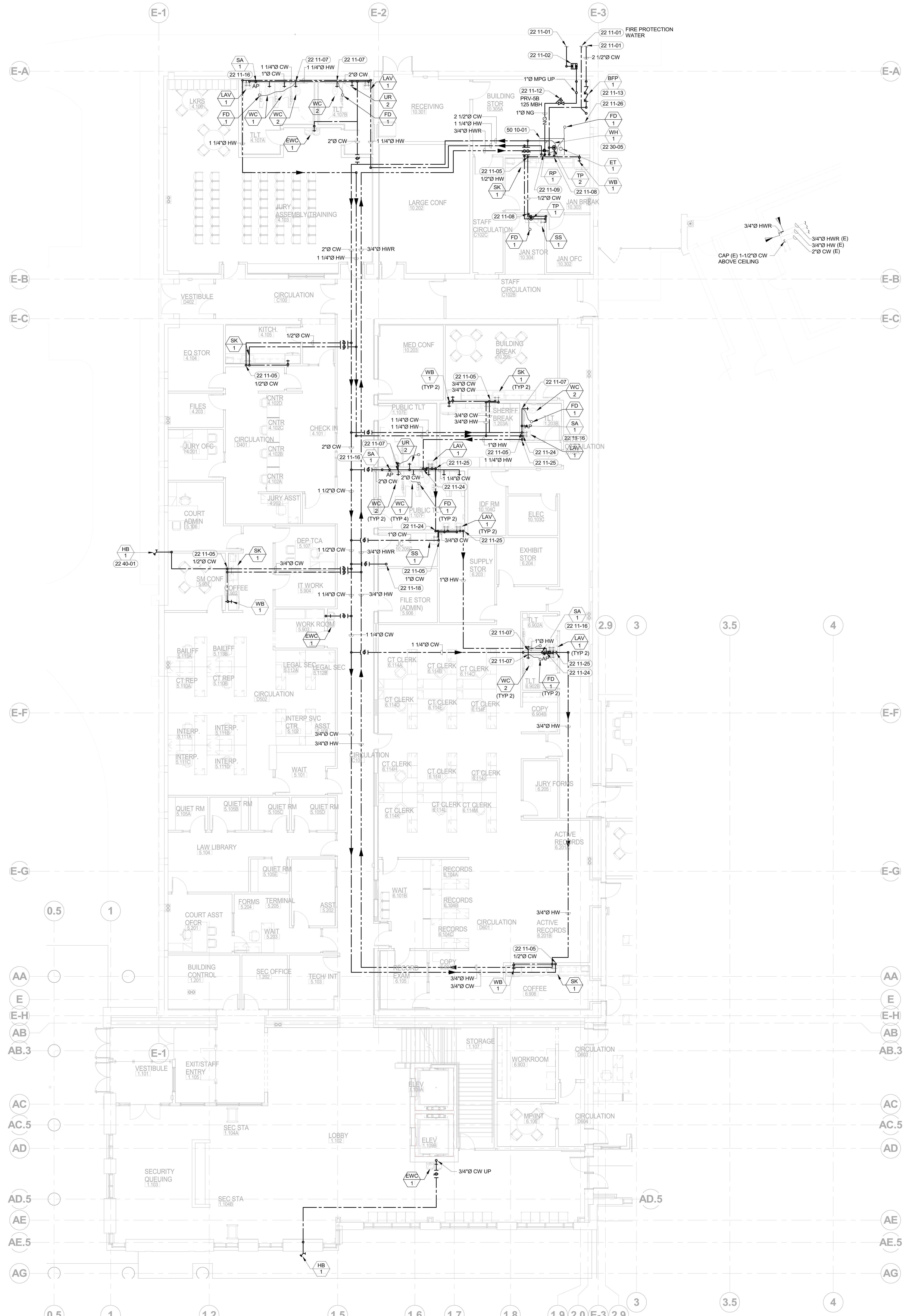
REVISED

SHEET TITLE
WATER & GAS PLAN BASEMENT

SHEET
P30

ORIGINAL SHEET SIZE
36" x 48"

3/31/2023 01:13:39 AM



1 WATER & GAS PLAN - LEVEL 1 AREA A
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

COLD WATER	BALL VALVE
SOFT COLD WATER	PRESSURE REDUCING VALVE
RO — REVERSE OSMOSIS WATER	SHUT-OFF VALVE
DOMESTIC HOT WATER	XX / ## — FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
DOMESTIC HOT WATER RETURN	PIPE ELBOW DOWN
HOT WATER WITH TEMP. MAINTENANCE CABLE	PIPE TEE BRANCH UP (W/ ELBOW)
MPG — MEDIUM PRESSURE GAS	PIPE TEE BRANCH DOWN (W/ ELBOW)
NG — NATURAL GAS	FLOW DIRECTION INDICATOR
PIPE ELBOW UP	

GENERAL NOTES:

A. CONTRACTOR TO INSTALL SHUT OFF VALVES AT EACH BRANCH LINE TAKE-OFF. ALL PLUMBING FIXTURES, APPLIANCES, AND BRANCH LINES SHALL HAVE THEIR OWN INDEPENDENT SHUT-OFF VALVES INSTALLED IN AN EASILY ACCESSIBLE AND CONVENIENT LOCATION. BRANCHES SHALL COME OFF BOTTOM OR SIDE OF MAIN TO PREVENT AIR ENTRAPMENT.

B. PROVIDE MIXING VALVE ON ALL HAND SINKS, LAVATORIES AND BREAK ROOM COUNTERTOP SINKS LOCATED TO BE EASILY ACCESSIBLE. REFER TO SCHEDULE AND DETAILS FOR MAKE, MODEL AND TEMPERATURE SETTING.

C. PROVIDE FIXTURE BRANCH PIPING, PRESSURE REGULATORS AND BACKFLOW PREVENTION TO ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION.

D. INSTALL CHECK VALVES IN HOT AND COLD WATER SUPPLY LINES SERVING ALL 1, 2 AND 3-COMPARTMENT SINKS AND MOP SINKS.

E. ROUTE ALL WATER OR GAS PIPING OVERHEAD AS HIGH AS POSSIBLE. RE: PIPING SUPPORT DETAILS. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

F. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

G. ALL WATER PIPING SHARED BY BACK TO BACK WATER CLOSETS AND LAVARORIES ARE 1-1/4"Ø AND 3/4"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

H. RE: PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

(## ##-##) SHEET NOTES:

22 11-01 EXTEND DOMESTIC WATER, FIRE PROTECTION WATER, AND NATURAL GAS 5'-0" OUT FROM EDGE OF BUILDING AND CONNECT TO SERVICE MAIN. RE: CIVIL DRAWINGS FOR CONTINUATION.

22 11-02 PROVIDE FOR AND COORDINATE A NEW GAS SERVICE FOR THIS PROJECT WITH THE LOCAL NATURAL GAS SERVICE PROVIDER. PROVIDE FOR ALL FEES, PRIMARY REGULATOR AT METER, AND SLEEVE PIPING AT EXTERIOR WALL. DELIVERY PRESSURE 7 IN WC, TOTAL CONNECTED LOAD 784 MBH.

22 11-05 ROUTE WATER PIPING DOWN IN WALL TO FIXTURES AND EQUIPMENT. REFER TO FIXTURE SCHEDULE FOR CONNECTION SIZES AND REQUIREMENTS. SIZE AS INDICATED.

22 11-07 ROUTE 1/2"Ø PEX TUBING INDEPENDENTLY FROM FLUSH VALVE TRAP PRIMER DIVERTER BELOW FLOOR TO FLOOR DRAIN TRAP. REFER TO WASTE AND VENT DRAWING FOR FLOOR DRAIN LOCATION.

22 11-08 ROUTE 1/2"Ø PEX TUBING INDEPENDENTLY FROM TRAP PRIMER MANIFOLD DOWN IN WALL TO BELOW FLOOR AND CONNECT TO FLOOR DRAIN TRAPS. REFER TO WASTE AND VENT DRAWING FOR FLOOR DRAIN LOCATIONS.

22 11-09 CONNECT NATURAL GAS PIPING TO EQUIPMENT. PROVIDE CSA-LISTED SHUT-OFF VALVE, FLEXIBLE APPLIANCE CONNECTOR, 3" MIN DIRT LEG, AND UNION. SIZE AS INDICATED. RE: GAS TO UNIT CONNECTION DETAIL.

22 11-12 INSTALL NG PRESSURE REGULATOR AS SHOWN. INLET PRESSURE = 2 PSI (NOMINAL). DISCHARGE PRESSURE = 7" WC, UNLESS OTHERWISE INDICATED. SIZE REGULATOR FOR THE CONNECTED LOAD SHOWN. REDUCE PIPE SIZE AS NECESSARY. INSTALL PRESSURE REGULATOR VENT OUTLET A MINIMUM OF 10'-0" FROM ALL OSA INTAKES. RE: GAS PRESSURE REGULATOR AND CONNECTION DETAILS.

22 11-13 INSTALL BACKFLOW PREVENTER ON WALL WITH ACCESS FOR MAINTENANCE AND TESTING. RE: BACKFLOW PREVENTER DETAIL.

22 11-16 INSTALL SHOCK ARRESTER ON THE CW PIPE IN WALL. FURNISH AND INSTALL A 12"X12" ACCESS PANEL. COORDINATE THE EXACT ACCESS PANEL LOCATION WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.

22 11-18 ROUTE CW UP THROUGH ROOF AND CONNECT TO ROOF MOUNTED HOSE BIBB. SIZE AND ROUTING DIRECTION AS INDICATED.

22 11-24 ROUTE HW MAIN DOWN IN WALL TO LAVATORY ROUGH-IN HEIGHT, OFFSET HORIZONTALLY, AND ROUTE IN WALL TO FIXTURES. TERMINATE EACH LAVATORY HW SUPPLY WITHIN 2'-0" OF THE FIXTURE SUPPLY PIPE.

22 11-25 ROUTE HW MAIN UP IN WALL TO ABOVE CEILING.

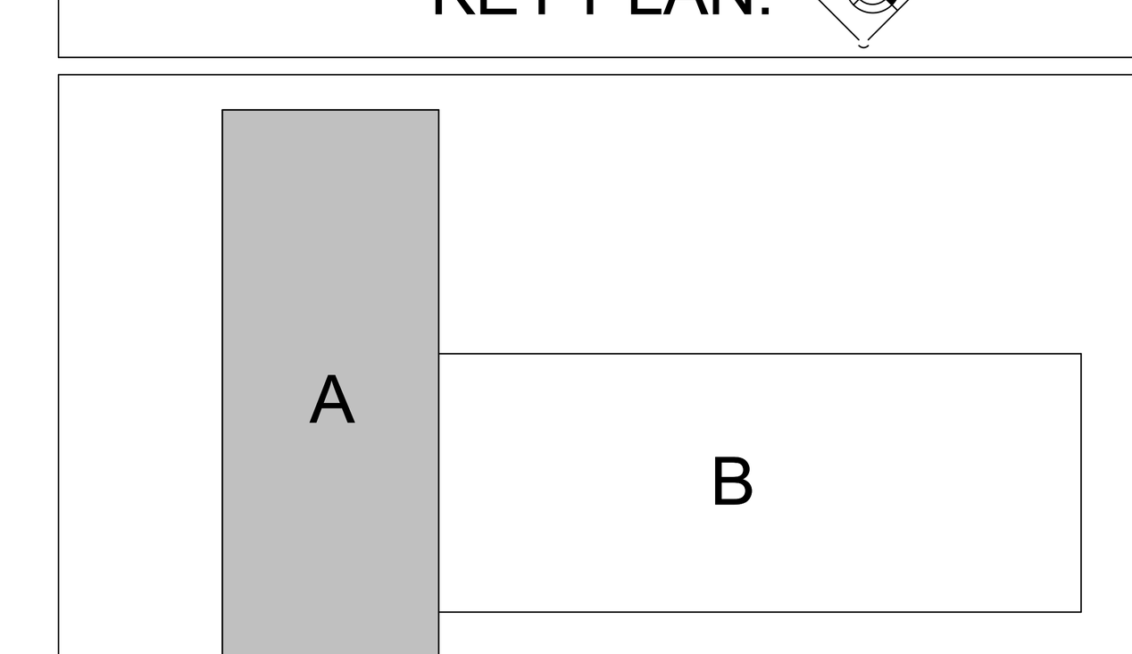
22 11-26 DESIGNATED FIRE PROTECTION WATER SERVICE AREA. DO NOT INSTALL ANYTHING IN THIS AREA.

22 30-05 RE: P71-19 FOR GAS FIRED WATER HEATER PIPING DETAIL.

22 40-01 INSTALL FIXTURE ON WALL AT 18" AFF.

50 10-01 4" THICK HOUSEKEEPING PAD. COORDINATE EXACT PAD DIMENSIONS WITH EQUIPMENT MOUNTING REQUIREMENTS PRIOR TO CONSTRUCTION. RE: ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

KEY PLAN:



PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.03.31 09:45:46-06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

KENT R. ANDERSON, P.E.
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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

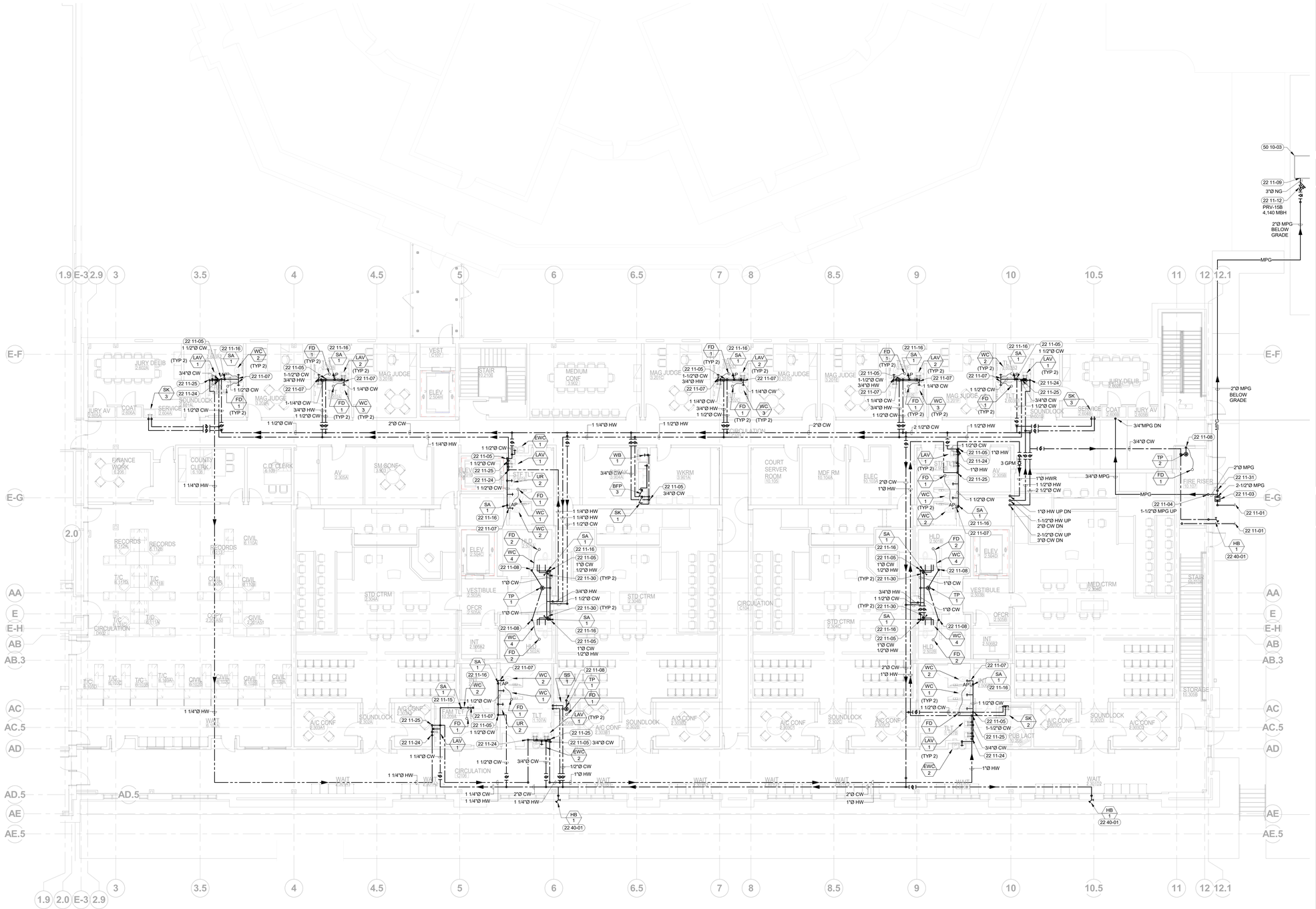
REVISED

SHEET
WATER & GAS PLAN LEVEL 1 - AREA A

SHEET
P31A

ORIGINAL SHEET SIZE 36" x 48"

3/31/2023 9:13:47 AM



WATER & GAS PLAN - LEVEL 1 AREA B
1/8" = 1'-0"

LEGEND:
(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- COLD WATER
- SOFT COLD WATER
- RO — REVERSE OSMOSIS WATER
- DOMESTIC HOT WATER
- DOMESTIC HOT WATER RETURN
- HOT WATER WITH TEMP. MAINTENANCE CABLE
- MPG — MEDIUM PRESSURE GAS
- NG — NATURAL GAS
- PIPE ELBOW UP
- BALL VALVE
- PRESSURE REDUCING VALVE
- SHUT-OFF VALVE
- XX / ## — FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
- PIPE ELBOW DOWN
- PIPE TEE BRANCH UP (W/ ELBOW)
- PIPE TEE BRANCH DOWN (W/ ELBOW)
- FLOW DIRECTION INDICATOR

GENERAL NOTES:

A. CONTRACTOR TO INSTALL SHUT OFF VALVES AT EACH BRANCH LINE TAKE-OFF. ALL PLUMBING FIXTURES, APPLIANCES, AND BRANCH LINES SHALL HAVE THEIR OWN INDEPENDENT SHUT-OFF VALVES INSTALLED IN AN EASILY ACCESSIBLE AND CONVENIENT LOCATION. BRANCHES SHALL COME OFF BOTTOM OR SIDE OF MAIN TO PREVENT AIR ENTRAPMENT.

B. PROVIDE MIXING VALVE ON ALL HAND SINKS, LAVATORIES AND BREAK ROOM COUNTERTOP SINKS LOCATED TO BE EASILY ACCESSIBLE. REFER TO SCHEDULE AND DETAILS FOR MAKE, MODEL AND TEMPERATURE SETTING.

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D. INSTALL CHECK VALVES IN HOT AND COLD WATER SUPPLY LINES SERVING ALL 1, 2 AND 3-COMPARTMENT SINKS AND MOP SINKS.

E. ROUTE ALL WATER OR GAS PIPING OVERHEAD AS HIGH AS POSSIBLE. RE: PIPING SUPPORT DETAILS. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

F. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

G. ALL WATER PIPING SHARED BY BACK TO BACK WATER CLOSETS AND LAVARORIES ARE 1-1/4"Ø AND 3/4"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

H. RE: PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

##-## SHEET NOTES:

22 11-01 EXTEND DOMESTIC WATER, FIRE PROTECTION WATER, AND NATURAL GAS 5'-0" OUT FROM EDGE OF BUILDING AND CONNECT TO SERVICE MAIN. RE: CIVIL DRAWINGS FOR CONTINUATION.

22 11-03 PROVIDE FOR AND COORDINATE A NEW GAS SERVICE FOR THIS PROJECT WITH THE LOCAL NATURAL GAS SERVICE PROVIDER. PROVIDE FOR ALL FEES, PRIMARY REGULATOR AT METER, AND SLEEVE PIPING AT EXTERIOR WALL. DELIVERY PRESSURE 7 IN WC, TOTAL CONNECTED LOAD 6,303 MBH.

22 11-04 ROUTE MPG PIPING UP TO SECOND FLOOR. SIZE AS INDICATED.

22 11-05 ROUTE WATER PIPING DOWN IN WALL TO FIXTURES AND EQUIPMENT. REFER TO FIXTURE SCHEDULE FOR CONNECTION SIZES AND REQUIREMENTS. SIZE AS INDICATED.

22 11-07 ROUTE 1/2"Ø PEX TUBING INDEPENDENTLY FROM FLUSH VALVE TRAP PRIMER DIVERTER BELOW FLOOR TO FLOOR DRAIN TRAP. REFER TO WASTE AND VENT DRAWING FOR FLOOR DRAIN LOCATION.

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22 11-09 CONNECT NATURAL GAS PIPING TO EQUIPMENT. PROVIDE CSA-LISTED SHUT-OFF VALVE, FLEXIBLE APPLIANCE CONNECTOR, 3" MIN DIRT LEG, AND UNION. SIZE AS INDICATED. RE: GAS TO UNIT CONNECTION DETAIL.

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22 11-15 INSTALL SHOCK ARRESTER ON THE CW PIPE IN CEILING SPACE. FURNISH AND INSTALL AN 18"X18" ACCESS PANEL. COORDINATE THE EXACT ACCESS PANEL LOCATION WITH ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO CONSTRUCTION.

22 11-16 INSTALL SHOCK ARRESTER ON THE CW PIPE IN WALL. FURNISH AND INSTALL A 12"X12" ACCESS PANEL. COORDINATE THE EXACT ACCESS PANEL LOCATION WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.

22 11-24 ROUTE HW MAIN DOWN IN WALL TO LAVATORY ROUGH-IN HEIGHT, OFFSET HORIZONTALLY, AND ROUTE IN WALL TO FIXTURES. TERMINATE EACH LAVATORY HW SUPPLY WITHIN 2'-0" OF THE FIXTURE SUPPLY PIPE.

22 11-25 ROUTE HW MAIN UP IN WALL TO ABOVE CEILING.

22 11-26 DESIGNATED FIRE PROTECTION WATER SERVICE AREA. DO NOT INSTALL ANYTHING IN THIS AREA.

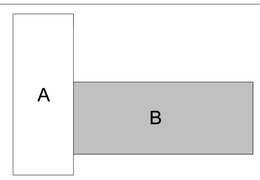
22 11-30 INSTALL A SHUT-OFF BALL VALVE AT 5'-0" AFF IN AN ACCESSIBLE LOCATION IN THE VERTICAL POTION OF THE MAIN COLD AND HOT WATER PIPING MAINS SERVING THE INDIVIDUAL CELL WATER CLOSET COMBI FIXTURES.

22 11-31 TRANSITION TO PLASTIC PIPE AND ROUTE 2"Ø MPG PIPING DOWN BELOW GRADE. THE BELOW GRADE PIPING SHALL BE ONE CONTINUOUS LENGTH WITH NO JOINTS OR CONNECTIONS AND BE COMPLIANT WITH ASTM D2513 PLASTIC PIPE RATED FOR DIRECT BURIAL. INSTALL THE GAS PIPING BELOW GRADE WITH A MINIMUM OF 18" OF COVER.

22 40-01 INSTALL FIXTURE ON WALL AT 18" AFF.

50 10-03 STAND-BY GENERATOR FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

KEY PLAN:



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THERON W. WARD JUDICIAL BUILDING
REMODEL & EXPANSION
427 Shoshone St N Twin Falls, ID

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

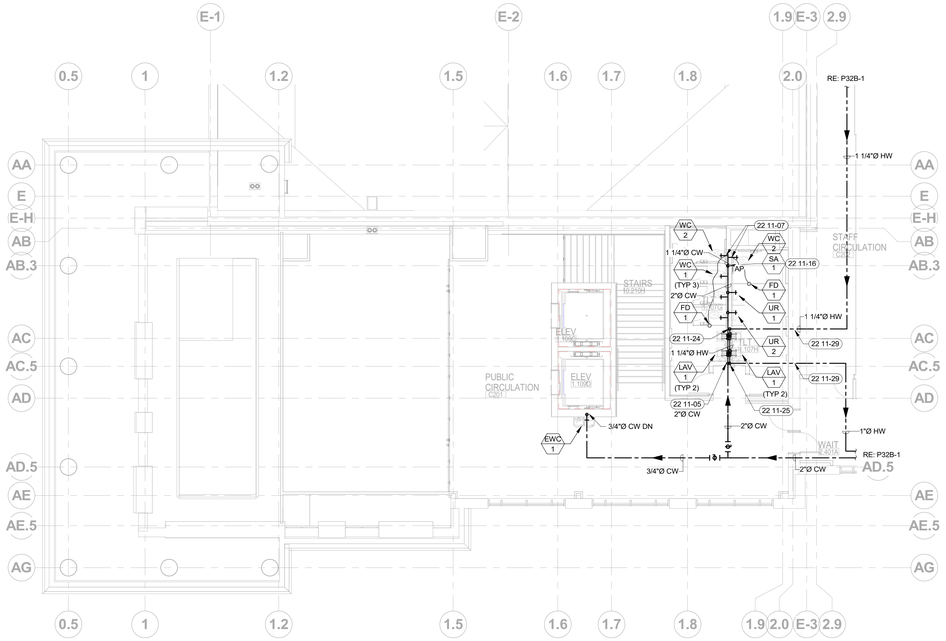
REVISED

SHEET
WATER & GAS PLAN LEVEL 1 - AREA B

SHEET
P31B

ORIGINAL SHEET SIZE
36" x 48"

4/18/2023 10:28:59 AM



1 WATER & GAS PLAN - LEVEL 2 AREA A
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- COLD WATER
- SOFT COLD WATER
- RO — REVERSE OSMOSIS WATER
- DOMESTIC HOT WATER
- DOMESTIC HOT WATER RETURN
- HOT WATER WITH TEMP. MAINTENANCE CABLE
- MPG — MEDIUM PRESSURE GAS
- NG — NATURAL GAS
- PIPE ELBOW UP
- BALL VALVE
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- SHUT-OFF VALVE
- XX / ## FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)
- PIPE ELBOW DOWN
- PIPE TEE BRANCH UP (W/ ELBOW)
- PIPE TEE BRANCH DOWN (W/ ELBOW)
- FLOW DIRECTION INDICATOR

GENERAL NOTES:

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B. PROVIDE MIXING VALVE ON ALL HAND SINKS, LAVATORIES AND BREAK ROOM COUNTERTOP SINKS LOCATED TO BE EASILY ACCESSIBLE. REFER TO SCHEDULE AND DETAILS FOR MAKE, MODEL AND TEMPERATURE SETTING.

C. PROVIDE FIXTURE BRANCH PIPING, PRESSURE REGULATORS AND BACKFLOW PREVENTION TO ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION.

D. INSTALL CHECK VALVES IN HOT AND COLD WATER SUPPLY LINES SERVING ALL 1, 2 AND 3-COMPARTMENT SINKS AND MOP SINKS.

E. ROUTE ALL WATER OR GAS PIPING OVERHEAD AS HIGH AS POSSIBLE. RE: PIPING SUPPORT DETAILS. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.

F. INSTALL ACOUSTICAL CAULKING TO ALL PIPES PENETRATING ACOUSTICAL WALLS. SEE ARCHITECT'S DRAWINGS FOR ALL ACOUSTICAL WALLS.

G. ALL WATER PIPING SHARED BY BACK TO BACK WATER CLOSETS AND LAVARORIES ARE 1-1/4"Ø AND 3/4"Ø RESPECTIVELY UNLESS OTHERWISE NOTED.

H. RE: PLUMBING DETAIL SHEET FOR ALL DETAILS THAT ARE NOT REFERENCED.

##-## SHEET NOTES:

22 11-05 ROUTE WATER PIPING DOWN IN WALL TO FIXTURES AND EQUIPMENT. REFER TO FIXTURE SCHEDULE FOR CONNECTION SIZES AND REQUIREMENTS. SIZE AS INDICATED.

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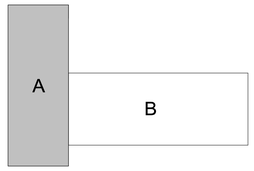
22 11-25 ROUTE HW MAIN UP IN WALL TO ABOVE CEILING.

22 11-29 APPLY 3-HOUR FIRE RATED CAULKING PER SPECIFICATION AT THE LOCATION SHOW.

KEY PLAN:



PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.03.31 09:46:49-06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

KENT R. ANDERSON, P.E.

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CSHQA

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

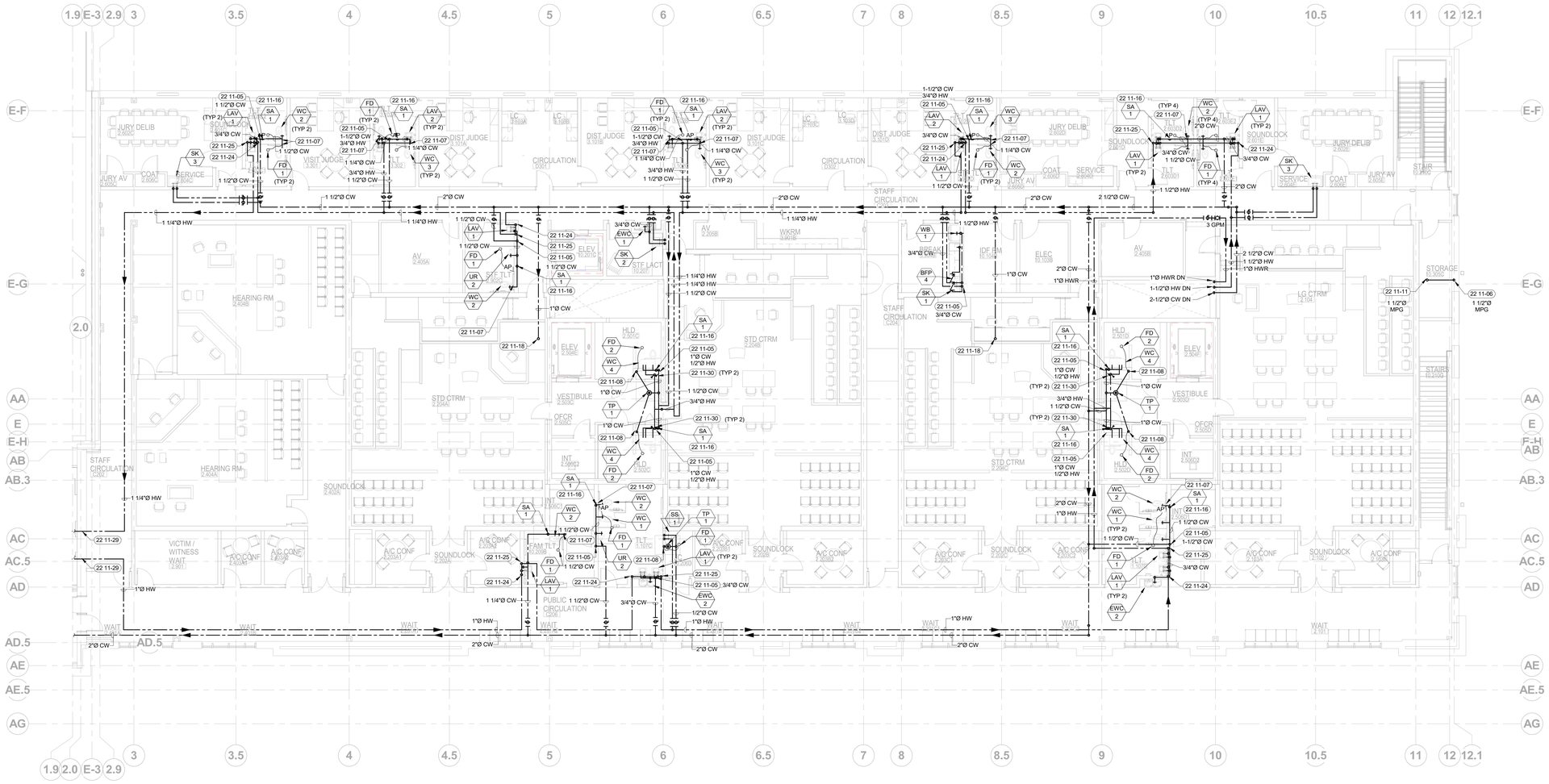
REVISED

SHEET TITLE
WATER & GAS PLAN LEVEL 2 - AREA A

SHEET
P32A

ORIGINAL SHEET SIZE
36" x 48"

3/31/2023 9:14:01 AM



1 WATER & GAS PLAN - LEVEL 2 AREA B
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- COLD WATER
- SOFT COLD WATER
- REVERSE OSMOSIS WATER (RO)
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- DOMESTIC HOT WATER RETURN
- HOT WATER WITH TEMP MAINTENANCE CABLE
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- NATURAL GAS (NG)
- PIPE ELBOW UP
- BALL VALVE
- PRESSURE REDUCING VALVE
- SHUT-OFF VALVE
- FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES) (XX / ##)
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22 11-06 ROUTE MPG PIPING UP FROM FLOOR BELOW TO ROOF DECK AND HOLD TIGHT TO BOTTOM OF STRUCTURE. SIZE AS INDICATED.

22 11-07 ROUTE 1/2"Ø PEX TUBING INDEPENDENTLY FROM FLUSH VALVE TRAP PRIMER DIVERTER BELOW FLOOR TO FLOOR DRAIN TRAP. REFER TO WASTE AND VENT DRAWING FOR FLOOR DRAIN LOCATION.

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22 11-11 ROUTE MPG PIPE THROUGH ROOF. SIZE AS INDICATED.

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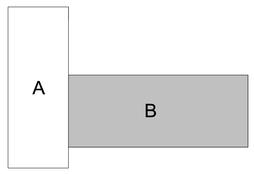
KEY PLAN:



PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.04.18 10:48:42-06'00'

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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

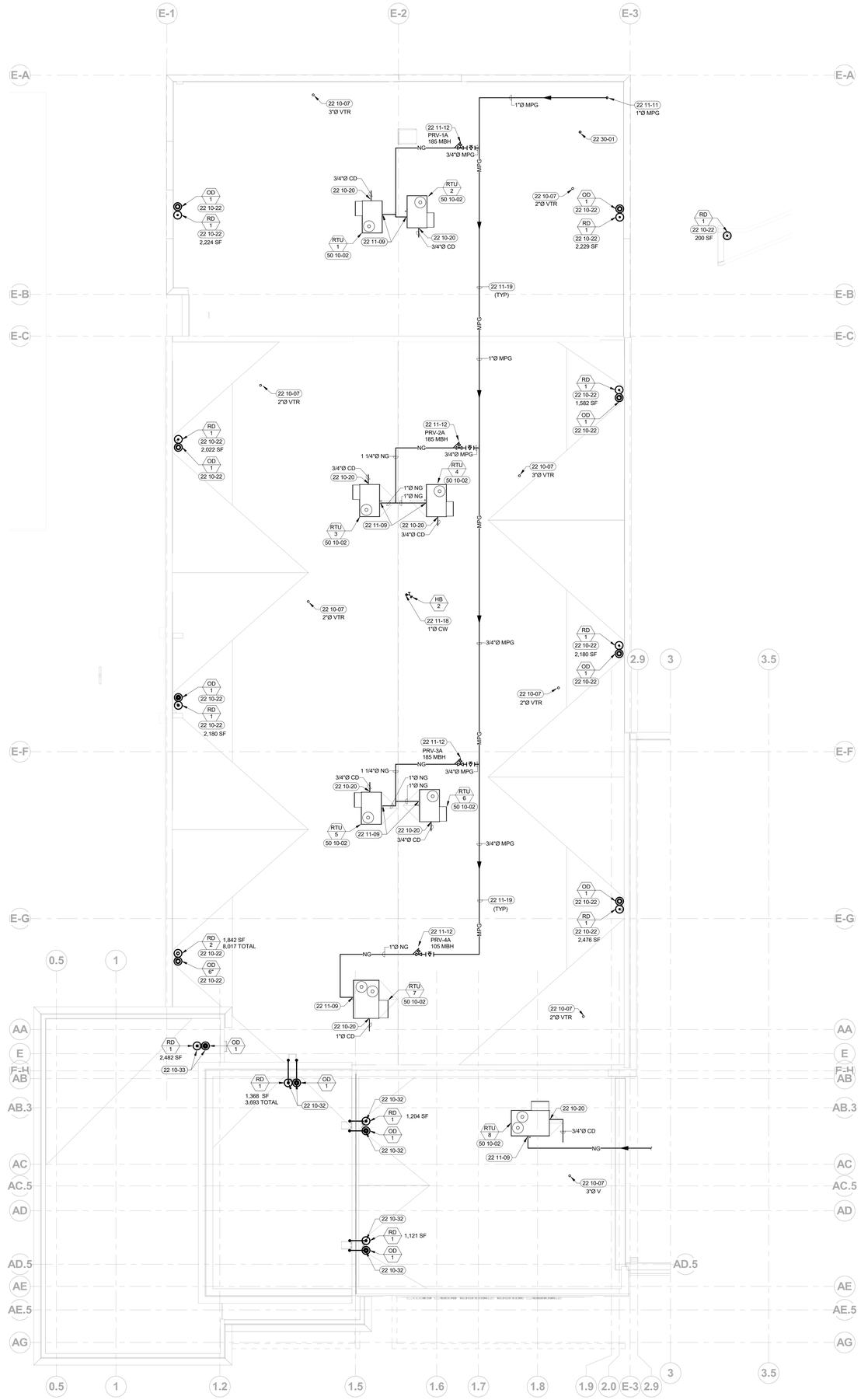
REVISED

SHEET TITLE
WATER & GAS PLAN LEVEL 2 - AREA B

SHEET
P32B

ORIGINAL SHEET SIZE
36" x 48"

4/18/2023 10:29:07 AM



1 PLUMBING ROOF PLAN - AREA A
1/8" = 1'-0"

3/31/2023 9:14:18 AM

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- MPG — MEDIUM PRESSURE GAS
- NG — NATURAL GAS
- PIPE ELBOW UP
- PIPE ELBOW DOWN
- PIPE TEE BRANCH UP (W/ ELBOW)
- PIPE TEE BRANCH DOWN (W/ ELBOW)
- FLOW DIRECTION INDICATOR
- BALL VALVE
- PRESSURE REDUCING VALVE
- GAS SHUT-OFF VALVE
- FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES) — XX / ##

GENERAL NOTES:

A. COORDINATE ALL PLUMBING PIPING ROOF PENETRATIONS WITH THE GENERAL CONTRACTOR. ALL PIPING PENETRATING THE ROOF MUST BE INSTALLED WITH A PREMANUFACTURED PENETRATION BOOT ASSEMBLY OR PROPERLY SEALED PER THE ARCHITECTURAL DRAWINGS.

B. REFER TO THE MECHANICAL PLANS FOR EQUIPMENT AND DUCTWORK LOCATIONS BEFORE INSTALLING ANY PIPING. COORDINATE WITH THE MECHANICAL CONTRACTOR.

C. INSTALL ALL PLUMBING VTR AND GAS VENTS A MINIMUM OF 10'-0" FROM ALL OSA INTAKES.

D. ALL CONDENSATE PIPING IS 1"Ø UNLESS NOTED OTHERWISE.

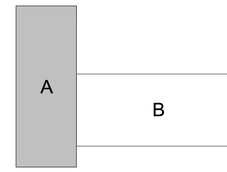
E. REFER TO THE PLUMBING DETAIL SHEET ALL PLUMBING DETAILS THAT ARE NOT REFERENCED.

SHEET NOTES:

(## ##-##)

22 10-07	ROUTE SANITARY VENT PIPING THROUGH ROOF. LOCATE 10'-0" MINIMUM FROM ANY AIR INTAKE AND COORDINATE WITH HVAC. EXTEND ABOVE LOCAL SNOW AND DRIFT-LINE CONDITION. SIZE AS INDICATED.
22 10-20	CONNECT NEW CONDENSATE DRAIN TO MECHANICAL UNIT WITH P-TRAP AND SPILL ONTO ROOF. SIZE AS INDICATED. ROUTE DRAIN PIPING DOWNHILL IN DIRECTION OF DOWNWARD ROOF PITCH. COORDINATE CONNECTION REQUIREMENTS WITH EQUIPMENT IN FIELD. RE: AC UNIT CONDENSATE DRAIN DETAIL AND PIPE SUPPORT ON ROOF DETAIL.
22 10-22	ROUTE RWL AND OFL THROUGH ROOF.
22 10-32	ROUTE RWL AND OFL DOWN IN WALL. TRANSITION TO CAST IRON PIPE IN HEATED SPACE. ROUTE THROUGH EXTERIOR WALL 12" ABOVE LOWER FINISHED ROOF, EXTEND 18" OUTSIDE TO CLEAR EXISTING BUILDING EXTERIOR WALL, TURN DOWN 90°, AND SPILL ONTO LOWER ROOF.
22 10-33	ROUTE RWL AND OFL DOWN, TRANSITION TO CAST IRON PIPE IN HEATED SPACE. ROUTE DOWN THROUGH ROOF SOFFIT, AND TERMINATE 2" PAST UNDERSIDE OF SOFFIT OVERHANG AND SPILL ONTO LOWER ROOF.
22 11-09	CONNECT NATURAL GAS PIPING TO EQUIPMENT. PROVIDE CSA-LISTED SHUT-OFF VALVE, FLEXIBLE APPLIANCE CONNECTOR, 3" MIN DIRT LEG, AND UNION. SIZE AS INDICATED. RE: GAS TO UNIT CONNECTION DETAIL.
22 11-11	ROUTE MPG PIPE THROUGH ROOF. SIZE AS INDICATED.
22 11-12	INSTALL NG PRESSURE REGULATOR AS SHOWN. INLET PRESSURE = 2 PSI (NOMINAL). DISCHARGE PRESSURE = 7" WC, UNLESS OTHERWISE INDICATED. SIZE REGULATOR FOR THE CONNECTED LOAD SHOWN. REDUCE PIPE SIZE AS NECESSARY. INSTALL PRESSURE REGULATOR VENT OUTLET A MINIMUM OF 10'-0" FROM ALL OSA INTAKES. RE: GAS PRESSURE REGULATOR AND CONNECTION DETAILS.
22 11-18	ROUTE CW UP THROUGH ROOF AND CONNECT TO ROOF MOUNTED HOSE BIBB. SIZE AND ROUTING DIRECTION AS INDICATED.
22 11-19	ROUTE NEW GAS PIPING ON ROOF WITH PIPE SUPPORTS SPACED AT MINIMUM 7'-0" ON CENTERS. RE: PIPE SUPPORT ON ROOF DETAIL.
22 30-01	INSTALL CONCENTRIC ROOF VENT KIT FURNISHED WITH THE WATER HEATER INDICATED. DO NOT INSTALL WITHIN 10'-0" FROM ALL AIR INTAKES INTO THE BUILDING.
50 10-02	EQUIPMENT FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

KEY PLAN:



PROFESSIONAL ENGINEER
REGISTERED
10955
STATE OF IDAHO
KENT R. ANDERSON
Digitally signed by Kent Anderson
Date: 2023.03.31 09:46:06 06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

KENT R. ANDERSON, P.E.
200 BROAD STREET
BOISE, IDAHO
(208) 343-4635 • FAX 208-343-1858

THERON W. WARD JUDICIAL BUILDING
REMODEL & EXPANSION

427 Shoshone St N Twin Falls, ID

200 BROAD STREET
BOISE, ID 83702
(208) 343-4635 • FAX (208) 343-1858
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CSHQA

AGENCY REVIEW SET

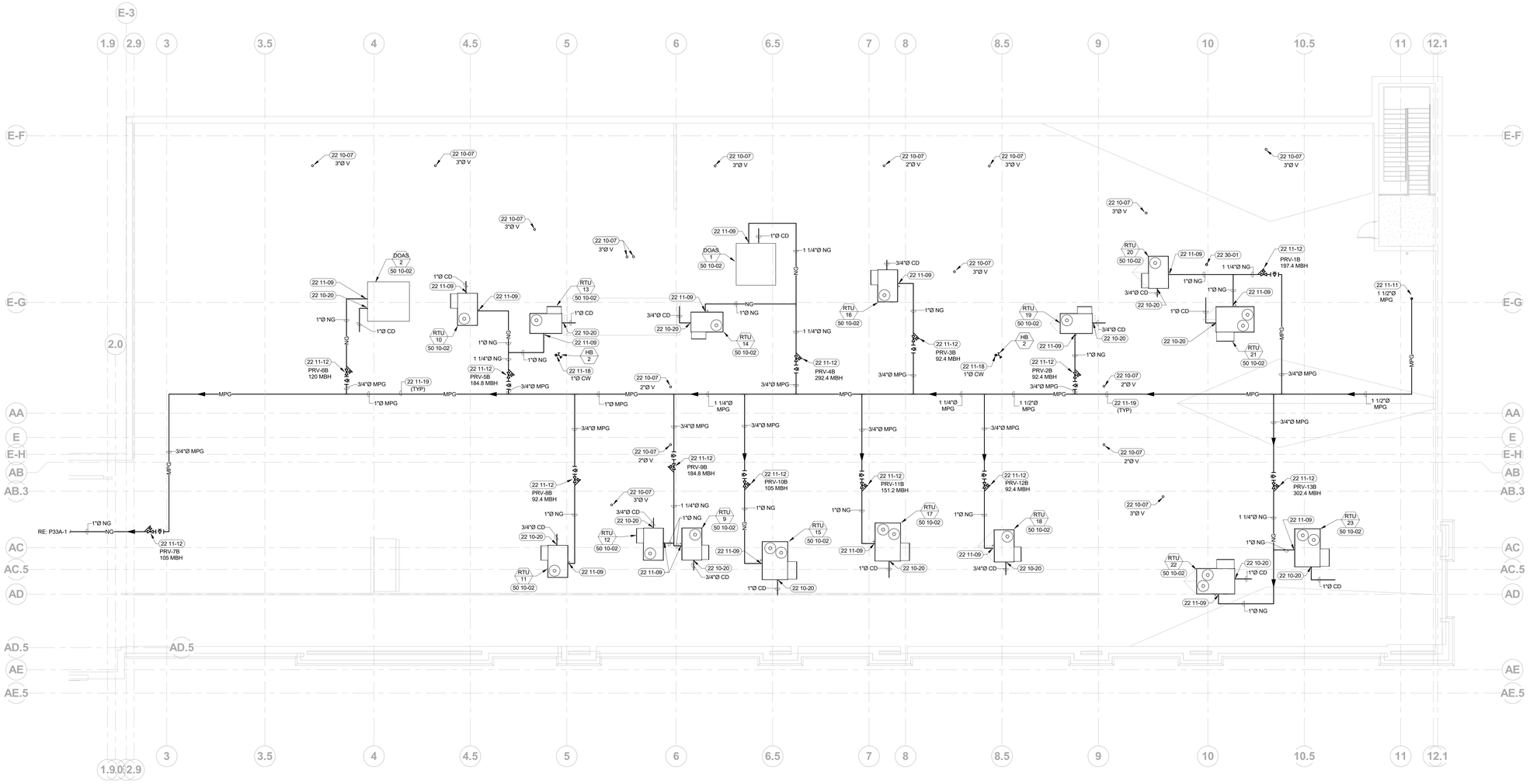
PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

REVISED

SHEET TITLE
PLUMBING ROOF PLAN - AREA A

SHEET
P33A

ORIGINAL SHEET SIZE
36" x 48"



1 PLUMBING ROOF PLAN - AREA B
1/8" = 1'-0"

LEGEND:

(RE: PLUMBING COVER SHEET FOR ADDITIONAL INFORMATION)

- MPG — MEDIUM PRESSURE GAS
- NG — NATURAL GAS
- PIPE ELBOW UP
- PIPE ELBOW DOWN
- PIPE TEE BRANCH UP (W/ ELBOW)
- PIPE TEE BRANCH DOWN (W/ ELBOW)
- FLOW DIRECTION INDICATOR
- BALL VALVE
- PRESSURE REDUCING VALVE
- GAS SHUT-OFF VALVE
- XX / ## — FIXTURE OR EQUIPMENT CALLOUT (RE: FIXTURE AND EQUIPMENT SCHEDULES)

GENERAL NOTES:

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B. REFER TO THE MECHANICAL PLANS FOR EQUIPMENT AND DUCTWORK LOCATIONS BEFORE INSTALLING ANY PIPING. COORDINATE WITH THE MECHANICAL CONTRACTOR.

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E. REFER TO THE PLUMBING DETAIL SHEET ALL PLUMBING DETAILS THAT ARE NOT REFERENCED.

SHEET NOTES:

(## ##-##)

22 10-07	ROUTE SANITARY VENT PIPING THROUGH ROOF. LOCATE 10'-0" MINIMUM FROM ANY AIR INTAKE AND COORDINATE WITH HVAC. EXTEND ABOVE LOCAL SNOW AND DRIFT-LINE CONDITION. SIZE AS INDICATED.
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22 11-09	CONNECT NATURAL GAS PIPING TO EQUIPMENT. PROVIDE CSA-LISTED SHUT-OFF VALVE, FLEXIBLE APPLIANCE CONNECTOR, 3" MIN DIRT LEG, AND UNION. SIZE AS INDICATED. RE: GAS TO UNIT CONNECTION DETAIL.
22 11-11	ROUTE MPG PIPE THROUGH ROOF. SIZE AS INDICATED.
22 11-12	INSTALL NG PRESSURE REGULATOR AS SHOWN. INLET PRESSURE = 2 PSI (NOMINAL). DISCHARGE PRESSURE = 7" WC, UNLESS OTHERWISE INDICATED. SIZE REGULATOR FOR THE CONNECTED LOAD SHOWN. REDUCE PIPE SIZE AS NECESSARY. INSTALL PRESSURE REGULATOR VENT OUTLET A MINIMUM OF 10'-0" FROM ALL OSA INTAKES. RE: GAS PRESSURE REGULATOR AND CONNECTION DETAILS.
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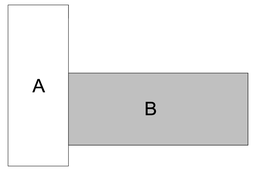
22 30-01	INSTALL CONCENTRIC ROOF VENT KIT FURNISHED WITH THE WATER HEATER INDICATED. DO NOT INSTALL WITHIN 10'-0" FROM ALL AIR INTAKES INTO THE BUILDING.
50 10-02	EQUIPMENT FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

KEY PLAN:



PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

Digitally signed by Kent Anderson
Date: 2023.03.31 09:45:46-06'00'

ORIGINAL DOCUMENTS ARE HELD AT CSHQA, INC. OFFICE, 200 W BROAD STREET, BOISE, ID 83702

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CSHQA

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

REVISED

SHEET TITLE

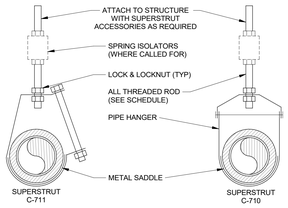
PLUMBING ROOF PLAN - AREA B

SHEET

P33B

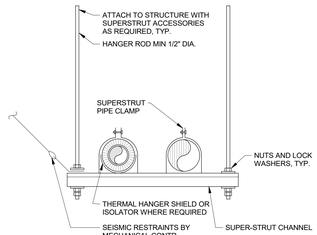
ORIGINAL SHEET SIZE
36" x 48"

3/31/2023 9:14:24 AM

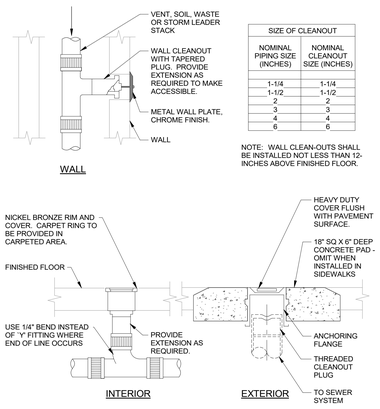


PIPE SIZE (IN)	MAX SUPPORT SPAN (FT)	MIN. ROD SIZE (IN)
ABS PIPE	4 FT	1/2 IN
CAST IRON PIPE	5 FT	5/8 IN
CPVC 1 IN AND SMALLER	3 FT	1/2 IN
CPVC 1-1/4 IN AND LARGER	4 FT	1/2 IN
COPPER PIPE	12 FT	3/8 IN
COPPER TUBE 1-1/4 IN AND SMALLER	6 FT	3/8 IN
COPPER TUBE 1-1/2 IN AND LARGER	10 FT	1/2 IN
STEEL PIPE	12 FT	5/8 IN
PEX PIPE	32 FT	3/8 IN
PVC PIPE	4 FT	1/2 IN
POLYPROPYLENE 1 IN AND SMALLER	32 FT	1/2 IN
POLYPROPYLENE 1-1/4 IN AND LARGER	4 FT	1/2 IN

1 SINGLE PIPE SUPPORT
NTS



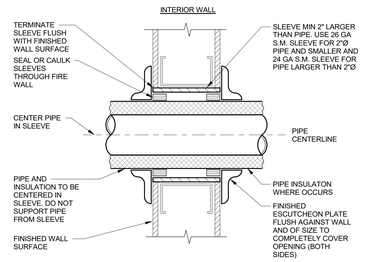
2 TRAPEZE SPRING HANGER
NTS



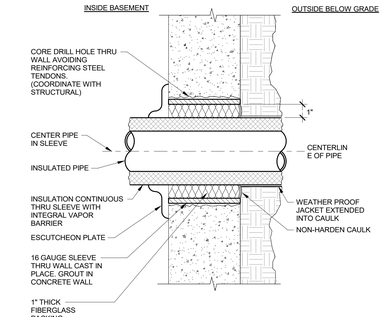
SIZE OF CLEANOUT	
NOMINAL PIPING SIZE (INCHES)	NOMINAL CLEANOUT SIZE (INCHES)
1-1/4	1-1/4
1-1/2	1-1/2
2	2
3	3
4	4
6	6

NOTE: WALL CLEAN-OUTS SHALL BE INSTALLED NOT LESS THAN 12-INCHES ABOVE FINISHED FLOOR.

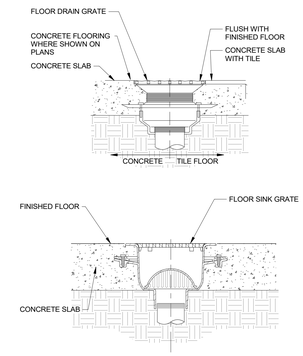
3 FLOOR AND WALL CLEANOUT
NTS



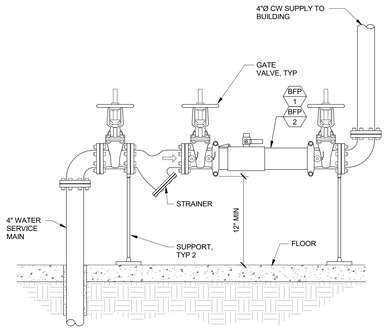
4 PIPE PENETRATION THRU FRAMED WALL
NTS



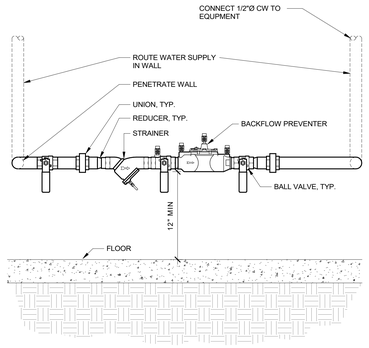
5 PIPE PENETRATION THROUGH BASEMENT WALL
NTS



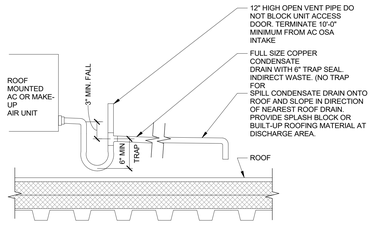
6 FLOOR DRAIN FLOOR SINK
NTS



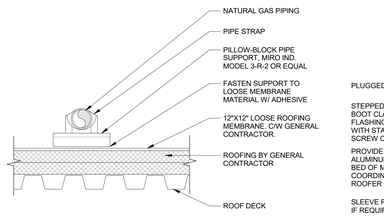
7 BACKFLOW PREVENTER
NTS



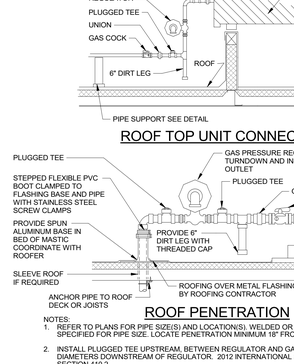
8 BACKFLOW PREVENTER SERVING EQUIPMENT
NTS



9 HVAC UNIT CONDENSATE DRAIN
NTS



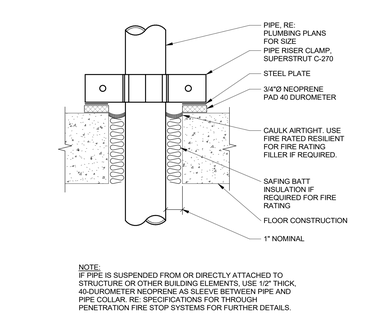
10 PIPE SUPPORT ON ROOF
NTS



GAS PRESSURE REGULATOR PIPING AND CONNECTION
NTS

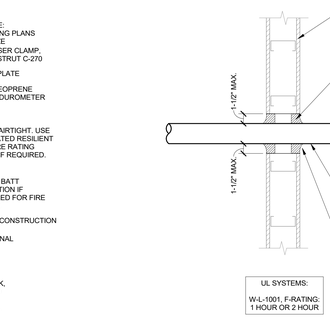
11 GAS PRESSURE REGULATOR PIPING AND CONNECTION
NTS

12 MIXING VALVE DETAIL
NTS



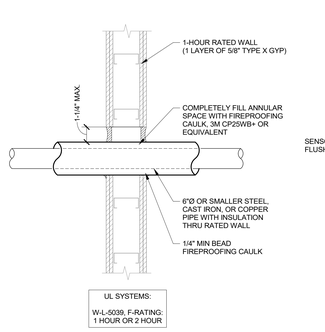
NOTE:
IF PIPE IS SUSPENDED FROM OR DIRECTLY ATTACHED TO STRUCTURE OR OTHER BUILDING ELEMENTS, USE 1/2" THICK, 40-DUROMETER NEOPRENE AS SLEEVE BETWEEN PIPE AND PIPE COLLAR. RE: SPECIFICATIONS FOR THROUGH PENETRATION FIRE STOP SYSTEMS FOR FURTHER DETAILS.

13 PIPE ISOLATION AT CONCRETE FLOOR PENETRAION
NTS



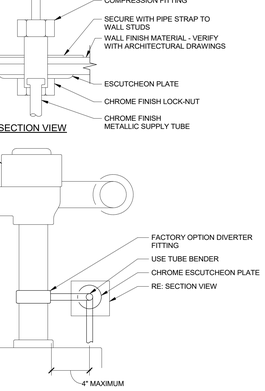
UL SYSTEMS:
W-L-1001, F-RATING: 1 HOUR OR 2 HOUR

14 PIPE FIRESTOPPING THRU WALL
NTS

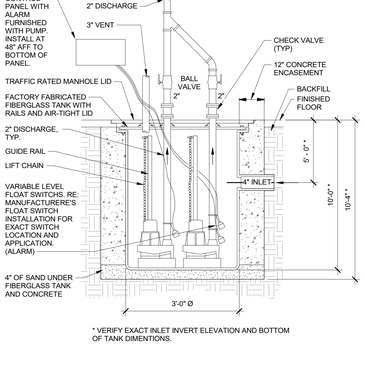


UL SYSTEMS:
W-L-5039, F-RATING: 1 HOUR OR 2 HOUR

15 INSULATED PIPE FIRESTOPPING THRU WALL
NTS

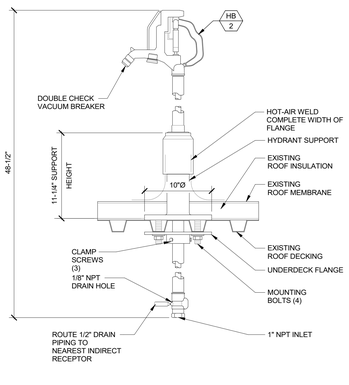


16 TRAP PRIMER AT FLUSH VALVE
NTS

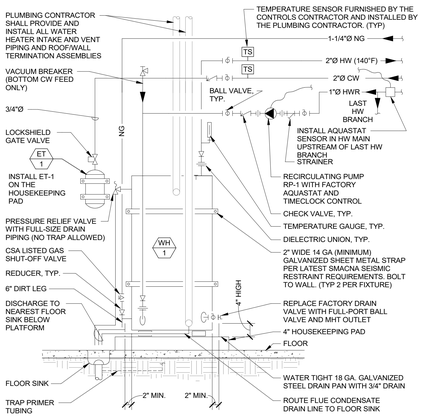


* VERIFY EXACT INLET INVERT ELEVATION AND BOTTOM OF TANK DIMENTIONS.

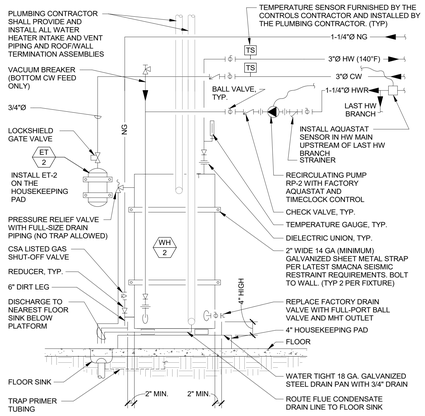
17 DUPLEX SEWAGE EJECTOR PUMP
NTS



18 ROOF MOUNTED HOSE BIBB
NTS



19 WATER HEATER PIPING - WH-1
NTS



20 WATER HEATER PIPING - WH-2
NTS

3/31/2023 9:14:25 AM

PROFESSIONAL ENGINEER REGISTERED Idaho 10955 STATE OF IDAHO KENT R. ANDERSON
Digitally signed by Kent Anderson
Date: 2023.03.31 09:45:46 -06'00'

KENT R. ANDERSON, P.E.
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ROSE, IDAHO
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CSHQA

AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

REVISED

SHEET TITLE
PLUMBING DETAILS

SHEET
P71

ORIGINAL SHEET SIZE
36" x 48"

PLUMBING FIXTURE SCHEDULE

FIXTURE		BASIS OF DESIGN		TRIM			CONNECTIONS, IN				REMARKS
MARK	ITEM	MFR	MODEL	ITEM	MFR	MODEL	CW	HW	W	V	
DS-1	DOWNSPOUT NOZZLE	J.R. SMITH	1770T	-	-	-	-	-	3	-	FURNISH WITH CAST BRONZE BODY AND FLANGE. INSTALL AT 18" ABOVE FINISHED FLOOR.
DS-2	DOWNSPOUT NOZZLE	J.R. SMITH	1770T	-	-	-	-	-	6	-	FURNISH WITH CAST BRONZE BODY AND FLANGE. INSTALL AT 18" ABOVE FINISHED FLOOR.
EWC-1	ADA ELECTRIC WATER COOLER (HI-LOW, BOTTLE FILLER)	ELKAY	LZSTL8WSLK	BACK SPLASH	ELKAY	1000004920	1/2	-	2	1-1/2	DUAL "HIGH-LOW" WALL MOUNTED DRINKING FOUNTAIN WITH STAINLESS STEEL TOP, BACK SPLASH, 1.1 GPM BOTTLE FILLER, AND 8 GPH CHILLED WATER CAPACITY. FURNISH WITH MOUNTING HANGER AND FLEXIBLE SAFETY BUBBLER HEADS. ELECTRICAL LOAD 6.0 FLA 115 VOLTS. 5 YEAR WARRANTY. ADA COMPLIANT (BARRIER-FREE).
EWC-2	ADA ELECTRIC WATER COOLER (HI-LOW, BOTTLE FILLER)	ELKAY	LZSTL8WSLK	-	-	-	1/2	-	2	1-1/2	DUAL "HIGH-LOW" WALL MOUNTED DRINKING FOUNTAIN WITH STAINLESS STEEL TOP, 1.1 GPM BOTTLE FILLER, AND 8 GPH CHILLED WATER CAPACITY. FURNISH WITH MOUNTING HANGER AND FLEXIBLE SAFETY BUBBLER HEADS. ELECTRICAL LOAD 6.0 FLA 115 VOLTS. 5 YEAR WARRANTY. ADA COMPLIANT (BARRIER-FREE).
FD-1	FLOOR DRAIN (ROUND)	J.R. SMITH	2005YA-P050-U	-	-	-	-	-	2	1-1/2	CAST IRON BODY WITH ADJUSTABLE STRAINER HEAD. FURNISH WITH ROUND TOP, VANDAL PROOF SCREWS, AND 1/2" CW TRAP PRIMER CONNECTION.
FD-2	FLOOR DRAIN (ROUND, LIGATURE RESISTANT)	AQUA DESIGN	303070XN	-	-	-	-	-	2	1-1/2	STAINLESS STEEL BODY WITH ADJUSTABLE STRAINER HEAD. FURNISH WITH ROUND LIGATURE RESISTANT TOP, TAMPER RESISTANT SCREWS, AND 1/2" CW TRAP PRIMER CONNECTION.
FS-1	FLOOR SINK (DEEP BODY - 1/2 GRATE)	J.R. SMITH	3160Y-12	-	-	-	-	-	3	2	FURNISH 12"x12"x10" DEEP FLOOR SINK WITH CAST IRON BODY AND ACID RESISTANT ENAMEL FINISH. FURNISH WITH 1/2 TOP GRATE AND BOTTOM DOME STRAINER.
HB-1	HOSE BIBB (WALL MTD - NON FREEZE)	WOODFORD	65	-	-	-	3/4	-	-	-	FREEZELESS WALL HYDRANT WITH CHROME FINISH WITH ANTI-SIPHON VACUUM BREAKER. FURNISH WITH RECESSED LOCKING BOX AND LOOSE TEE KEY OPERATOR.
HB-2	HOSE BIBB (ROOF MTD - NON FREEZE)	WOODFORD	RHY2-MS	-	-	-	1	-	-	-	FREEZELESS ROOF HYDRANT WITH VARIABLE FLOW PLUNGER, UNDER DECK FLANGE, BOOT SEAL, AUTO-DRAINING AND DOUBLE CHECK BACK FLOW PREVENTER.
LAV-1	ADA LAVATORY (PUBLIC, SQUARE WALL-MTD)	ZURN	Z5344	FAUCET	ZURN	Z6915-XL-F-HW6-CWB	1/2	1/2	2	1-1/2	WALL MTD VITREOUS CHINA LAVATORY WITH FLOOR MOUNTED SUPPORTS. FURNISH WITH FAUCET (4" CENTERS) WITH HARDWIRED POWERED SENSOR OPERATED VALVE, VANDAL PROOF STRAINER, P6000-HW6 POWER CONVERTER FOR POWERING UP TO 8 SENSOR FAUCETS, AND 0.5 GPM FLOW RESTRICTOR. INSULATE CW, HW, AND SS LINES FOR ADA COMPLIANCE. ADA COMPLIANT (BARRIER-FREE). FURNISH MV-1 AND SET OUTLET TO 105°F.
LAV-2	ADA LAVATORY (JUDGES, SQUARE WALL-MTD)	ZURN	Z5344	FAUCET	ZURN	Z81101-XL-3M	1/2	1/2	2	1-1/2	WALL-MOUNTED VITREOUS CHINA LAVATORY WITH FLOOR MOUNTED SUPPORTS. FURNISH WITH DECK MOUNTED CHROME PLATED FAUCET (4" CENTERS), LEVER HANDLES WITH VANDAL RESISTANT SCREWS, AND VANDAL RESISTANT 0.5 GPM AERATOR. INSULATE CW, HW, AND SS LINES FOR ADA COMPLIANCE. ADA COMPLIANT (BARRIER-FREE). PROVIDE MIXING VALVE MV-1 FOR HW INLET AND SET TO 105°F.
MV-1	MIXING VALVE (LAVATORIES, HAND SINKS)	WATTS	LFUSG-B	-	-	-	3/8	3/8	-	-	INSTALL VALVE UNDER FIXTURE AND SIZE ACCORDING TO FIXTURE WATER SUPPLY. SET TO 105°F. RE: MIXING VALVE DETAIL.
OD-1	OVERFLOW DRAIN	J.R. SMITH	1080Y-R-C-CID	-	-	-	-	-	3	-	CAST IRON OVERFLOW DRAIN WITH 2" EXTERIOR WATER DAM, COMBINATION FLASHING CLAMP/GRAVEL STOP, AND BOTTOM NO-HUB OUTLET. FURNISH WITH CAST IRON DOME, SUMP RECEIVER, AND UNDER DECK CLAMP.
OD-2	OVERFLOW DRAIN	J.R. SMITH	1080Y-R-C-CID	-	-	-	-	-	6	-	CAST IRON OVERFLOW DRAIN WITH 2" EXTERIOR WATER DAM, COMBINATION FLASHING CLAMP/GRAVEL STOP, AND BOTTOM NO-HUB OUTLET. FURNISH WITH CAST IRON DOME, SUMP RECEIVER, AND UNDER DECK CLAMP.
RD-1	ROOF DRAIN	J.R.SMITH	1010Y-R-C-CID	-	-	-	-	-	3	-	CAST IRON ROOF DRAIN WITH COMBINATION FLASHING CLAMP/GRAVEL STOP, AND BOTTOM NO-HUB OUTLET. FURNISH WITH CAST IRON DOME, SUMP RECEIVER, AND UNDER DECK CLAMP.
RD-2	ROOF DRAIN	J.R.SMITH	1010Y-R-C-CID	-	-	-	-	-	6	-	CAST IRON ROOF DRAIN WITH COMBINATION FLASHING CLAMP/GRAVEL STOP, AND BOTTOM NO-HUB OUTLET. FURNISH WITH CAST IRON DOME, SUMP RECEIVER, AND UNDER DECK CLAMP.
SA-1	SHOCK ARRESTER	J.R. SMITH	5005 THRU 5050	-	-	-	-	-	-	-	STAINLESS STEEL PRECHARGED HYDROTROL WATER HAMMER ARRESTER. SIZE ARRESTER FOR THE FIXTURES SERVED AND INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
SK-1	ADA DOUBLE BOWL SINK (BREAK / COFFEE / KITCHEN, COUNTER-MTD)	ELKAY	LRAD3321	FAUCET	ZURN	Z871C1-XL	1/2	1/2	2	1-1/2	COUNTER MOUNTED, 18 GAUGE TYPE 304 STAINLESS STEEL DOUBLE BOWL SINK, WITH SELF-RIMMING EDGE, TWO (2) STRAINERS, AND THREE (3) HOLES 4" OC. INSIDE BOWL DIMENSIONS (EACH): 13-1/2" L, 16" W, 6-1/2" D. FURNISH WITH ADA COMPLIANT DECK-MOUNTED LONG GOOSENECK SWING SPOUT FAUCET WITH LEVER BLADE HANDLES AND 2.2 GPM AERATOR. ADA COMPLIANT (BARRIER-FREE).
SK-2	ADA SINK (LACT, COUNTER-MTD)	ELKAY	LRAD1720	FAUCET	ZURN	Z812B1-XL	1/2	1/2	2	1-1/2	COUNTER MOUNTED, 18 GA TYPE 304 STAINLESS STEEL SINGLE BOWL SINK WITH SELF-RIMMING EDGE, STRAINER, AND TWO (2) HOLES (4") OC. INSIDE BOWL DIMENSIONS: 14" L, 14" W, 6-1/2" D. FURNISH WITH ADA COMPLIANT DECK-MOUNTED SWIVEL GOOSENECK FAUCET WITH LEVER HANDLES AND 2.2 GPM PRESSURE COMPENSATING AERATOR. ADA COMPLIANT (BARRIER-FREE).
SK-3	ADA SINK (MEETING, COUNTER-MTD)	ELKAY	LRAD2219	FAUCET	ZURN	Z812B1-XL	1/2	1/2	2	1-1/2	COUNTER MOUNTED, 18 GA TYPE 304 STAINLESS STEEL SINGLE BOWL SINK WITH SELF-RIMMING EDGE, STRAINER, AND TWO (2) HOLES (4") OC. INSIDE BOWL DIMENSIONS: 18" L, 14" W, 6-1/2" D. FURNISH WITH ADA COMPLIANT DECK-MOUNTED SWIVEL GOOSENECK FAUCET WITH LEVER HANDLES AND 2.2 GPM PRESSURE COMPENSATING AERATOR. ADA COMPLIANT (BARRIER-FREE).
SS-1	SERVICE SINK (FLOOR-MTD)	ZURN	Z5850-D3-RG	FAUCET	ZURN	Z842M1	1/2	1/2	3	2	FLOOR (CORNER) MOUNTED ENAMELED CAST IRON SERVICE SINK. FURNISH WITH VINYL-COATED WIRE RIM GUARD, GRID DRAIN, 2 FT HOSE WITH WALL HOOK, AND WALL MOUNTED POLISHED CHROME FAUCET WITH TOP BRACE, STOPS, VACUUM BREAKER, 3/4" THREADED HOSE OUTLET, AND PAIL HOOK WITH WALL SUPPORT.
TP-1	TRAP PRIMER (AUTO-PNEUMATIC)	PPP	P2-500	-	-	-	1/2	-	-	-	INSTALL TRAP PRIMER ABOVE CEILING IN AN ACCESSIBLE LOCATION. FURNISH TRAP PRIMER WITH DISTRIBUTION UNIT (NO. DU-U) FOR PRIMING 2 FLOOR DRAIN TRAPS AND A LOCKABLE STAINLESS STEEL ACCESS COVER. SEE PLANS FOR APPLICABILITY
TP-2	TRAP PRIMER (AUTO-ELECTRIC)	PPP	SMP-500-115V	-	-	-	1/2	-	-	-	ELECTRONIC PRIMER ASSEMBLY COMPLETE WITH TIME CLOCK, SOLENOID, AND VACUUM BREAKER. FURNISH TRAP PRIMER WITH DISTRIBUTION UNIT (NO. DU-U) FOR PRIMING 2 FLOOR DRAIN TRAPS AND A LOCKABLE STAINLESS STEEL ACCESS COVER. INSTALL TRAP PRIMER IN AN ACCESSIBLE LOCATION. ELECTRICAL REQUIREMENTS: 115 V, 1 PH, 60 HZ. SEE PLANS FOR APPLICABILITY.
UR-1	URINAL (WALL-MTD)	ZURN	Z5755	FLUSH VALVE	SLOAN	ROYAL 186 EES-1.0-HW	3/4	-	2	1-1/2	VITREOUS CHINA WALL MOUNTED URINAL WITH WASHOUT FLUSH ACTION. FURNISH WITH 1.0 GPF HARDWIRED POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER, STAINLESS STEEL STRAINER, AND J.R. SMITH 0637 CARRIER SUPPORT.
UR-2	ADA URINAL (WALL-MTD)	ZURN	Z5755	FLUSH VALVE	SLOAN	ROYAL 186 EES-1.0-HW	3/4	-	2	1-1/2	VITREOUS CHINA WALL MOUNTED URINAL WITH WASHOUT FLUSH ACTION. FURNISH WITH 1.0 GPF HARDWIRED POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER, STAINLESS STEEL STRAINER, AND J.R. SMITH 0637 CARRIER SUPPORT. ADA COMPLIANT (BARRIER FREE)
WB-1	WATER BOX (REFRIGERATOR ICE MAKER)	GUY GRAY	MIB1AB	-	-	-	1/2	-	-	-	STEEL ICEMAKER BOX WITH WHITE POWDER COAT FINISH AND ONE QUARTER-TURN VALVE. MOUNT FIXTURE FLUSH TO WALL AT 48" AFF TO TOP OF BOX.
WC-1	WATER CLOSET (PUBLIC, FLOOR-MTD)	ZURN	Z5655-BWL1	FLUSH VALVE	SLOAN	ROYAL 111 EES-1.6-TMO-HW	1	-	3	2	VITREOUS CHINA, FLOOR MOUNTED, ADA WATER CLOSET WITH SIPHON-JET ACTION. FURNISH WITH 1.6 GPF HARDWIRED POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER AND CHURCH NO. 9500CT SEAT.
WC-2	ADA WATER CLOSET (PUBLIC, FLOOR-MTD)	ZURN	Z5665-BWL1	FLUSH VALVE TRAP PRIMER	SLOAN SLOAN	ROYAL 111 EES-1.6-TMO-HW VBF-72-A1	1	-	3	2	VITREOUS CHINA, FLOOR MOUNTED, ADA WATER CLOSET WITH SIPHON-JET ACTION. FURNISH WITH 1.6 GPF HARDWIRED POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER ,TRAP PRIMER DIVERTER, AND CHURCH NO. 9500CT SEAT. ADA COMPLIANT (BARRIER FREE). RE: TRAP PRIMER AT FLUSH VALVE DETAIL.
WC-3	ADA WATER CLOSET (JUDGES, FLOOR-MTD)	ZURN	Z5665-BWL1	FLUSH VALVE TRAP PRIMER	SLOAN SLOAN	ROYAL 111-1.6 VBF-72-A1	1	-	3	2	VITREOUS CHINA, FLOOR MOUNTED, ADA WATER CLOSET WITH SIPHON-JET ACTION. FURNISH WITH 1.6 GPF MANUALLY OPERATED FLUSH VALVE ON OPEN SIDE,TRAP PRIMER DIVERTER, AND CHURCH SEAT NO. 9500CT. ADA COMPLIANT (BARRIER FREE). RE: TRAP PRIMER AT FLUSH VALVE DETAIL.
WC-4	ADA WATER CLOSET / LAVATORY (HOLDING CELL, FLOOR-MTD)	ACORN	RIGHT HAND: LR1449-RO-2-03-M-BRS-1.6 GPF-FVH-CO1-PC-TWE-SW LEFT HAND: LR1449-LO-2-03-M-BRS-1.6 GPF-FVH-CO1-PC-TWE-SW	-	-	-	1/2 (LAVATORY) 1 (WATER CLOSET)	1/2 (LAVATORY)	3	2	STAINLESS STEEL FLOOR MOUNTED LIGATURE RESISTENT COMBINATION LAV/TOILET ADA PENAL-WARE WATER CLOSET WITH REAR PLUMBING ACCESS. FURNISH WITH RIGHT OR LEFT TOILET ORENTATION (VERIFY ORIENTATION AND QUANTITY). ON-FLOOR WALL OUTLET WASTE CONSTRUCTION, SINGLE TEMP METERING LAVATORY VALVE SET TO 105°F. BRASS BODY VALVE. 1.6 GPF MANUALLY OPERATED FLUSH VALVE ON OPEN SIDE, HYDRAULIC FLUSH VALVE, CLEANOUT WITH 2-3/8" OD O-RING CONNECTION TO IN-HUB 4", PINNED CLEANOUT PLUG, TOILET FLOOD-TROL WITH AUTO-RESET, 10" TOILET WASTE EXTENSION, AND WALL SLEEVE. ADA COMPLIANT (BARRIER FREE).

REMARKS:

1. RE: ARCHITECTURAL DRAWINGS FOR ADA ACCESSIBLE FIXTURE APPLICABILITY, BARRIER CLEARANCE, AND MOUNTING HEIGHT.

GAS FIRED WATER HEATER SCHEDULE

REFERENCE							PERFORMANCE						ELECTRICAL				CONNECTIONS			
MARK	ITEM	BASIS OF DESIGN MFR	BASIS OF DESIGN MODEL	TYPE	LOCATION	DETAIL REFERENCE	FUEL TYPE	STORAGE GAL	INPUT MBH	EFF %	RECOVERY GPH	TEMP RISE °F	VOLTAGE	PHASE	MCA	MOCP	CW IN	HW IN	OP. WEIGHT LBS	REMARKS
WH-1	WATER HEATER	LOCHINVAR	SWR125N	GAS FIRED, DIRECT VENT	BUILDING STOR 10.305A	P71-19	NAT. GAS	65	125	96	145	100	120	1	-	15	1-1/2	1-1/2	1,110	1, 2, 3
WH-2	WATER HEATER	LOCHINVAR	SWR150N	GAS FIRED, DIRECT VENT	WATER ENTRANCE / PLUMBING ROOM M101	P71-20	NAT. GAS	90	150	96	175	100	120	1	-	15	1-1/2	1-1/2	1,360	1, 2, 3

REMARKS:

1. SET OPERATING TEMPERATURE AT 140°F.
2. INSTALL WITH HEAT TRAPS AT CW AND HW CONNECTIONS.
3. FURNISH WITH CONCENTRIC ROOF VENT KIT AND CONDENSATE NEUTRALIZATION KIT.

PLUMBING PIPING INSULATION SCHEDULE

System Or Service	Avg. Pipe Temp (°F)	Insulation Type	Pipe Location		Jacket (c)		Insulation Thickness			
			Indoor	Outdoor	All Svc.	Metal	Pipe Sizes (in.) 0.5-1.25	1.5-4	5-8	10-30
Horizontal and Vertical Rainwater Conductors and Roof Drain Bodies	55	Mineral Fiber	X		X		1	1	1	1
				X		X	1	1	1	1
		OR								
		Flexible Cellular	X	X(a)			0.5	0.5	0.5	0.5
Condensate Drains for Air□Conditioning Equipment	60	Mineral Fiber	X				0.5	-	-	-
		OR								
		Flexible Cellular	X	X(a)			0.5	-	-	-
Hot and Recirculated Hot Water	105 to 140	FOR MAINS:								
		Mineral Fiber	X		X		1	1.5	1.5	1.5
		FOR BRANCHES, DROPS, AND RUNOUTS:								
		Mineral Fiber	X		X		1	-	-	-
		OR								
		Flexible Cellular	X				1	-	-	-
Handicapped Fixture Trap and Supply	40 to 140	Mineral Fiber	X(b)				0.5	-	-	-
Domestic Cold and Trap Primer Water	40 to 50	FOR MAINS:								
		Mineral Fiber	X		X		0.5	1	1	1
		FOR BRANCHES, DROPS, AND RUNOUTS:								
		Mineral Fiber	X		X		1	-	-	-
		OR								
		Flexible Cellular	X				1	-	-	-

a = Jacket required on outdoor piping.
b = Polyvinyl chloride (PVC) jacket required.
c= Protective jackets consisting of 0.016 inches 316 stainless steel shall be used for exposed (exterior) insulation systems and where exposed in interior mechanical equipment rooms, or other high traffic areas (up to 10 feet above finished floor). As an alternative, PVC jacket and fitting covers may be used in these interior spaces.

INSULATION SPECIFICATION:

Flexible Cellular: ASTM C 534, 5 pcf density, k = 0.27 Btu-in/h-ft2 at 75 °F
Mineral Fiber: ASTM C 547, 4 pcf density, k = 0.23 Btu-in/h-ft2 at 75 °F

WATER PUMP SCHEDULE

REFERENCE							PERFORMANCE			ELECTRICAL				
MARK	ITEM	BASIS OF DESIGN MFR	BASIS OF DESIGN MODEL	TYPE	LOCATION	DETAIL REFERENCE	FLOW GPM	TDH FT	TEMP. °F	MOTOR WATTS	VOLTS	PHASE	MCA	REMARKS
RP-1	HOT WATER CIRCULATOR	GRUNDFOS	UP15-42F SPD 2	SYMPLEX	JAN STOR 10.304	P71-19	4	12	140	65	115	1	0.57	1, 2, 3, 4
RP-2	HOT WATER CIRCULATOR	GRUNDFOS	UP26-96F	SYMPLEX	WATER ENTRANCE/PLUMBING ROOM M101	P71-20	8	20	140	205	115	1	1.7	1, 2, 3, 4

REMARKS:

1. PUMP MUST BE LISTED FOR POTABLE WATER USE.
2. PROVIDE PUMP WITH ALL BRONZE CONSTRUCTION DESIGNED FOR DOMESTIC SERVICE.
3. FURNISH PUMP WITH AUTOMATIC TIME CLOCK AND 5°F DIFFERENTIAL AQUASTAT FOR PUMP CONTROL.
4. ALL PUMP CONTROL WIRING SHALL BE INSTALLED BY THE PLUMBING CONTRACTOR.

EXPANSION TANK SCHEDULE

REFERENCE					PERFORMANCE					
MARK	BASIS OF DESIGN MFR	BASIS OF DESIGN MODEL	SERVICE	LOCATION	DETAIL REFERENCE	TYPE	TANK VOL GAL	ACCEPT. FACTOR	CONNECTI... IN	WEIGHT LBS	REMARKS
ET-1	AMTROL	ST-12	DOMESTIC HOT WATER	JAN STOR 10.304	P71-19	DIAPHRAGM	4.4	0.73	3/4	36	1, 2
ET-2	AMTROL	ST-25V	DOMESTIC HOT WATER	WATER ENTRANCE/PLUMBING ROOM M101	P71-20	DIAPHRAGM	10.3	1.00	3/4	110	1, 2

REMARKS:

1. PROVIDE UNISTRUT BRACKET SECURED TO WALL WITH STRAP AROUND TANK.
2. PROVIDE ISOLATION VALVE (LESS HANDLE OR LOCK-SHIELD).

BACKFLOW PREVENTER SCHEDULE

REFERENCE							CONNECTIONS		PERFORMANCE		
MARK	ITEM	BASIS OF DESIGN MFR	BASIS OF DESIGN MODEL	TYPE	SERVICE	DETAIL REFERENCE	WATER IN	WASTE IN	FLOW RATE GPM	PRES. DROP PSI	REMARKS
BFP-1	BACKFLOW PREVENTER	WATTS	757-OSY	DOUBLE CHECK	EXISTING BUILDING SUPPLY	P71-7	2-1/2	-	68	7	1, 2
BFP-2	BACKFLOW PREVENTER	WATTS	757-OSY	DOUBLE CHECK	NEW BUILDING SUPPLY	P71-7	3	-	405	4	1, 2
BFP-3	BACKFLOW PREVENTER	WATTS	LF007QT-OSY	DOUBLE CHECK	ICE MACINE SUPPLY	P71-8	1/2	-	2	6	1, 2
BFP-4	BACKFLOW PREVENTER	WATTS	LF007QT-OSY	DOUBLE CHECK	ICE MACINE SUPPLY	P71-8	1/2	-	2	6	1, 2

REMARKS:

1. PROVIDE BRACKETS, SUPPORTS, AND PIPING REDUCERS AS NECESSARY.
2. FURNISH WITH OUTSIDE STEM AND YOKE RESILIENT SEATED GATE VALVES AND STRAINER ON INLET.

SEWAGE PUMP SCHEDULE

REFERENCE							PERFORMANCE				CONNECTIONS		ELECTRICAL					
MARK	ITEM	BASIS OF DESIGN MFR	BASIS OF DESIGN MODEL	TYPE	LOCATION	DETAIL REFERENCE	NO. OF PUMP MOTORS	FLOW / EA GPM	HEAD / EA FT	MOTOR RPM	SUCTION IN	DISCHARGE IN	PUMP MOTOR HP EACH	PUMP MOTOR HP TOTAL	VOLTS	PHASE	MCA	REMARKS
SP-1	SEWAGE PUMP	WEIL	2516	DUPLEX GRINDER PUMP	10.206A	P71-17	2	40	30	3,450	2	2	5	10	460	3	7.5	1, 2, 3

REMARKS:

1. FURNISH A DUPLEX GRINDER PUMP PACKAGE COMPLETELY FACTORY PRE-ASSEMBLED INCLUDING A 36" DIAMETER X 120" HIGH FIBERGLASS BASIN WITH ANTI-FLOATATION FLANGE AND CURB RING, AIR TIGHT STEEL COVER (NO. 8804K1326) WITH TWO 2" WASTE AND ONE 3" VENT FLANGE WITH A SINGLE HINGED ACCESS DOOR AND GASTIGHT SEALENT (NO. 8800K708), AND TWO GRINDER PUMPS WITH STAINLESS STEEL LIFTING CABLE AND IMPELLER (CURVE N0. 650).
2. FURNISH PUMP PACKARE WITH A COMPLETE GUIDE RAIL REMOVAL SYSTEM WITH DUPLEX BCB SYSTEM (NO. 2613K7021), DISCHARGE FLAGE KIT FLOOR ELBOW (NO. 2613K102), SUB BASE (NO. 2613K501), SLIDING BRACKET, GUIDE PIPE BRACKET, SUB BASE (NO. 2613K501), LEVEL CONROL LIFTING STATION (NO. 2613K601), AND 2" DUPLEX WASTEWATER VALVE ASSEMBLY (NO. 2616K1043).
3. FURNISH PUMP PACKAGE WITH A DUPLEX NEMA 4X ALTERNATING THREE PHASE 6.3-10.0 AMP CONTROL PANEL (NO. W-8150-T-100) WITH AUDIBLE AND VISUAL HIGH WATER LEVEL ALARM, AND TETHERED LEVEL CONTROL FLOAT SWITCH WITH FOUR MECHANICAL FLOATS (NO. 8233K1016) WITH 60 FT CORD, AND HWA TYPE 4X RED FLASHING DONE LIGHT ON TOP OF PANEL (NO. 8100K7102).

PROFESSIONAL ENGINEER REGISTERED 10955 STATE OF IDAHO KENT R. ANDERSON

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AGENCY REVIEW SET

PROJECT	DATE
21403.000	03-31-23
DRAWN	CHECKED
KRA	KRA

REVISED

SHEET TITLE
SCHEDULES

SHEET
P81

ORIGINAL SHEET SIZE 36" x 48"

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