PLUMBING LEGEND

CONTINUATION / CUT MARK
POINT OF DISCONNECTION FOR DEMOLITION
POINT OF CONNECTION NEW-TO-EXISTING

BRANCHES FROM

ELBOW / TEE UP FROM TOP OF MAIN
RISERS IN PLAN
TOP OF MAIN
BOTTOM OF MAIN
SIDE OF MAIN
DIRECTION OF FLOW INSIDE PIPE

SYSTEMS

DOMESTIC COLD WATER (CW)
DOMESTIC HOT WATER (HW) (XXX DENOTES TEMP)
DOMESTIC HOT WATER RECIRC (HWR) (XXX DENOTES TEMP)
SANITARY WASTE (BELOW FLOOR OR GRADE)
SANITARY WASTE (ABOVE FLOOR OR GRADE)
SANITARY VENT
STORM DRAIN (BELOW FLOOR OR GRADE)
STORM DRAIN (ABOVE FLOOR OR GRADE)
SECONDARY STORM DRAIN (ABOVE FLOOR)
LOW PRESSURE NATURAL GAS (1/2 PSI) (BELOW GRADE)
LOW PRESSURE NATURAL GAS (1/2 PSI) (ABOVE FLOOR OR GRADE)
MEDIUM PRESSURE NATURAL GAS (2 PSI) (BELOW GRADE
MEDIUM PRESSURE NATURAL GAS (2 PSI) (ABOVE FLOOR OR GRADE
LIQUID PROPANE (BELOW GRADE)
LIQUID PROPANE (ABOVE FLOOR OR GRADE)
DEIONIZED WATER
COMPRESSED AIR
FIRE PROTECTION
CONDENSATE DRAIN
ACID RESISTANT WASTE
ACID RESISTANT VENT

VALVES & FITTINGS

BALL VALVE
BUTTERFLY VALVE
CHECK VALVE
GATE VALVE
GLOBE VALVE
PLUG VALVE
PRESSURE REDUCING VALVE
THERMOSTATIC BALANCING VALVE
T&P — TEMPERATURE-PRESSURE RELIEF VALVE
THERMOSTATIC MIXING VALVE
BACKFLOW PREVENTER
PRESSURE REGULATOR
UNION
WATER HAMMER ARRESTOR
CAP
PIPE SLEEVE
PRESSURE GAUGE WITH PETCOCK
HOSE BIBB
FREEZEPROOF WALL HYDRANT
TRAP PRIMER
CLEANOUT (FLOOR OR WALL)
FLOOR / AREA DRAIN AS SCHEDULED
ROOF DRAIN
POSITIVE DISPLACEMENT FLOW METER
HWRP-1 — PUMP (USE INDICATED)
KITCHEN EQUIPMENT CALLOUT

ABBREVIATIONS

ABV	ABOVE
AD	AREA DRAIN
ADA	ADA COMPLIANT
AFF	ABOVE FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BLW	BELOW
BTS	BARRIER-TYPE TRAP SEAL
CD	CONDENSATE
CO	CLEANOUT
CW	COLD WATER (DOMESTIC)
DBL	DOUBLE
DFU	DRAINAGE FIXTURE UNIT
DN	DOWN
DCV	DOUBLE CHECK VALVE
DW	DISHWASHER
DWH	DOMESTIC WATER HEATER
(E)	EXISTING
EA	EACH
EC	ELECTRICAL CONTRACTOR
ECO	EXTERIOR CLEANOUT (AT GRADE)
EEW	EMERGENCY EYE WASH
ESH	EMERGENCY EYEWASH/SHOWER
ET	EXPANSION TANK
F	FAHRENHEIT
FD	FLOOR DRAIN
FLR	FLOOR
FS	FLOOR SINK
FWH	FREEZELESS WALL HYDRANT
GAL	GALLONS
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HW	HOT WATER (DOMESTIC)
HWR	HOT WATER RETURN (DOMESTIC)
HWRP	HOT WATER RECIRCULATION PUMP
IE	INVERT ELEVATION
G	LOW PRESSURE NATURAL GAS (UP TO 1/2 PSI)
LP	LIQUID PROPANE
MAX	MAXIMUM
MBH	THOUSAND BTUH
MG	MEDIUM PRESSURE NATURAL GAS (2 PSI)
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
RD	ROOF DRAIN
RM	ROOM
RPZ	REDUCED PRESSURE ZONE ASSEMBLY
SAN	SANITARY
SS	STAINLESS STEEL
SST	SECONDARY STORMWATER
ST	STORMWATER
TBV	THERMOSTATIC BALANCING VAVLE
THW	TEMPERED HOT WATER
TMV	THERMOSTATIC MIXING VALVE
TW	TEMPERED WATER
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
V	VENT
VB	VACUUM BREAKER
VLV	VALVE
VTR	VENT THROUGH ROOF
W	WATER (DOMESTIC)
WC	WATER CLOSET
WCO	WALL CLEANOUT
WSFU	WATER SUPPLY FIXTURE UNIT

GENERAL NOTES (NEW WORK)

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CODES INDICATED.
2. REFER TO CIVIL PLANS FOR LOCATIONS AND INVERT ELEVATIONS OF WATER SUPPLY, SANITARY DRAIN AND STORM DRAIN LINES.
3. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF ALL PLUMBING FIXTURES.
4. UNDERGROUND WASTE PIPING SHALL BE MINIMUM SIZE OF 3".
5. PENETRATIONS THROUGH FIRE RATED CEILINGS, FLOORS OR WALLS SHALL BE SEALED TO MAINTAIN FIRE RATING INTEGRITY. REFER TO ARCHITECTURAL DRAWINGS FOR FIRESTOPPING DETAILS AND DETAILS OF PENETRATIONS THROUGH NON-FIRE RATED CEILINGS, FLOORS, AND WALLS.
6. PROVIDE APPROVED VACUUM BREAKERS FOR ALL WATER SUPPLIES WITH HOSE CONNECTIONS.
7. COORDINATE PLUMBING RISERS WITHIN WALLS WITH WALL CONSTRUCTION AND OTHER TRADES.
8. IN GENERAL, ABOVE-FLOOR PLUMBING PIPING SHALL BE RUN AS HIGH AS POSSIBLE, BELOW AND AVOIDING DUCTWORK AS APPLICABLE FOR ACCESSIBILITY AND MAINTENANCE.
9. THE PLUMBING CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION OF SYSTEMS AND COMMENCEMENT OF INSTALLATION. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO REVIEW THE WORK OF OTHER TRADES (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, ARCHITECTURAL, CIVIL, FIRE ALARM, HVAC AND ELECTRICAL) AS IT AFFECTS THE PLUMBING WORK, AND AS THE PLUMBING CONTRACTOR'S WORK AFFECTS OTHER TRADES TO ENSURE THAT THE CONSTRUCTION DOCUMENTS ARE CLOSELY FOLLOWED. WHERE DISCREPANCIES ARISE, THEY SHALL BE REFERRED TO THE A/E PRIOR TO PROCEEDING FURTHER.
10. THIS DESIGN IS BASED ON MANUFACTURERS AND MODELS INDICATED, AND IS INTENDED TO SHOW THE GENERAL SIZE, CONFIGURATION, LOCATION, CONNECTIONS AND/OR SUPPORT FOR EQUIPMENT OR SYSTEMS SPECIFIED WITH RELATION TO THE OTHER BUILDINGS / SYSTEMS. SEE SPECIFICATION SECTIONS FOR TECHNICAL REQUIREMENTS.

DIVISION OF LABOR MATRIX

ITEM	SPECIFIED BY	FURNISHED BY	INSTALLED BY	POWER WIRING	CONTROL/ INTERLOCK WIRING	FIRE ALARM WIRING	NOTES
VARIABLE SPEED DRIVES (DIV 22 EQUIPMENT)	DIV 26	DIV 22	DIV 26	DIV 26	DIV 22/25	DIV 26/28	
COMBINATION MOTOR STARTERS (DIV 22 EQUIPMENT)	DIV 26	DIV 26	DIV 26	DIV 26	DIV 22/25	DIV 26/28	
CONTROL VALVES (DIV 22 EQUIPMENT)	DIV 25	DIV 25	DIV 22	DIV 26	DIV 25	-	
IMMERSION WELL & METERS (DIV 22 EQUIPMENT)	DIV 25	DIV 25	DIV 22	DIV 26	DIV 25	-	

GENERAL NOTES (APPLIES TO ALL EQUIPMENT):

1. THESE DIVISIONS ARE BASE SCOPE. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ENTIRE SCOPE OF WORK IS COVERED.
2. ALL EXPOSED PLUMBING FIXTURES SHALL BE COORDINATED WITH THE ARCHITECT FOR ALL FINISHES AND COLOR SELECTIONS.

SPECIFIC NOTES (AS NOTED IN THE SCHEDULE):

1. PLUMBING CONTRACTOR TO COORDINATE THE INSTALLATION OF ALL DOMESTIC WATER PIPING AND PLUMBING EQUIPMENT. MECHANICAL CONTRACTOR TO INSTALL STEAM PIPING AND STEAM SPECIALTIES.

DESIGN CODES/STANDARDS

CODE/STANDARD	YEAR/VERSION
VIRGINIA BUILDING CODE (VBC)	2021
VIRGINIA MECHANICAL CODE (VMC)	2021
VIRGINIA PLUMBING CODE (VPC)	2021
VIRGINIA ENERGY CONSERVATION CODE (VECC)	2021
VIRGINIA FUEL GAS CODE (VFGC)	2021
NATIONAL ELECTRICAL CODE (NEC)	2020

SHEET LIST - PLUMBING

SHEET NO	SHEET NAME
P000	LEGENDS, ABBREVIATIONS & GENERAL NOTES
P101	FLOOR PLAN
P102	FLOOR PLAN
P501	DETAILS
P502	DETAILS
P601	RISERS
P701	SCHEDULES

VIRGINIA TECH NON-CAPITAL CONSTRUCTION

FORESTRY RESEARCH OPERATIONS CENTER

140 INVENTIVE LANE
BLACKSBURG, VA 24061

VT PROJECT CODE WO# 26-819490

DESIGNER
CLARKNEXSEN
A JMT Company
213 SOUTH JEFFERSON, SUITE 1011
ROANOKE, VIRGINIA 24011
540-982-0800

CONSULTANT
2RW CONSULTANTS, INC.
2677 PROSPERITY AVE., SUITE 275
FAIRFAX, VA 22031
703. 718.4355

PROFESSIONAL SEAL
COMMONWEALTH OF VIRGINIA
LUCAS W. HOFFMANN
Lic. No. 042595
10.28.2026
PROFESSIONAL ENGINEER

UBO CONFORMANCE

SUBMITTAL
10/23/2026
ISSUED FOR CONSTRUCTION

REVISIONS

KEY PLAN

SHEET
LEGENDS, ABBREVIATIONS & GENERAL NOTES

P000

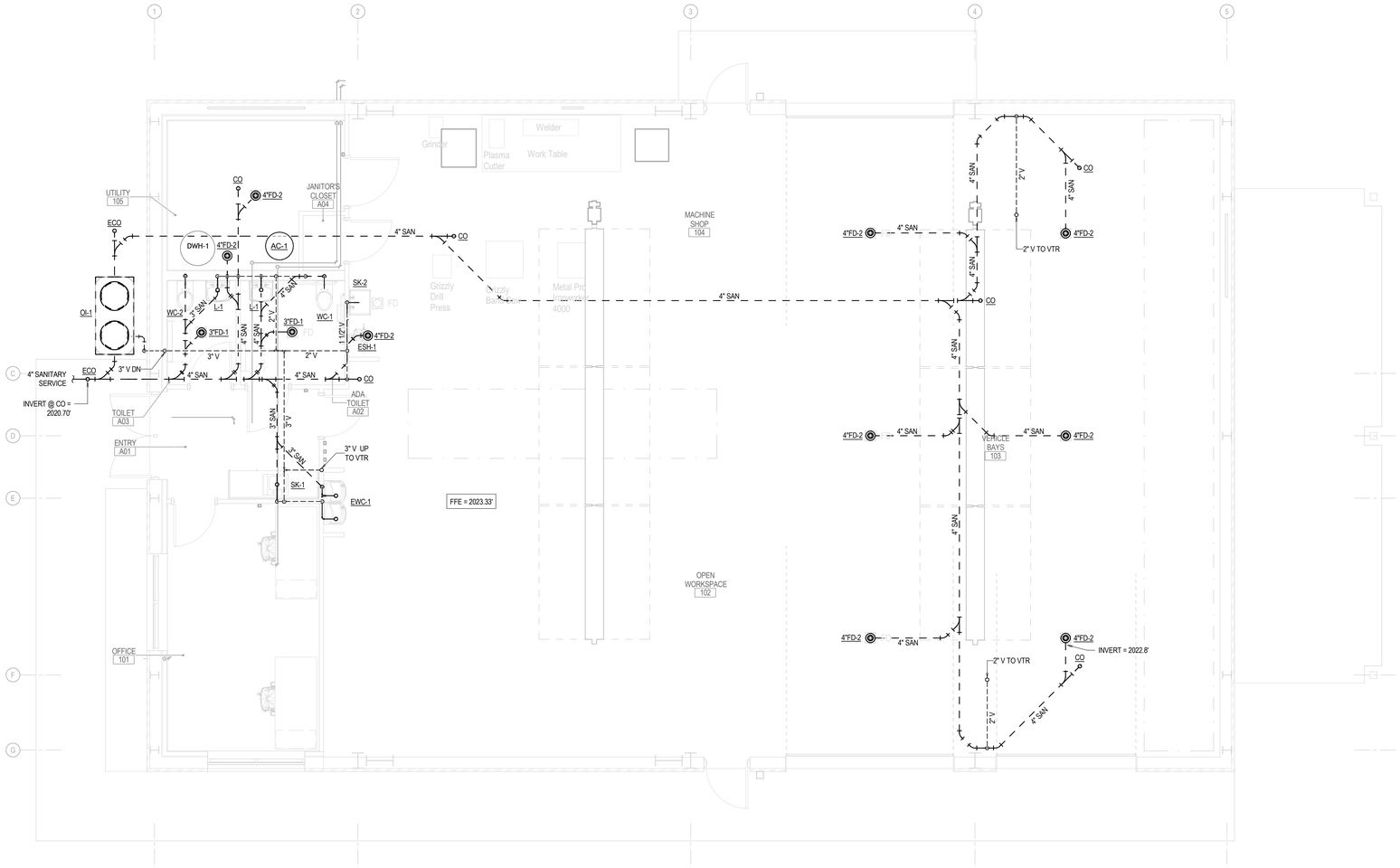
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DRAWN: Author
REVIEW: Checker

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(E) KEY NOTES (NEW WORK)

1. PROVIDE MANHOLE EXTENSION AND INSTALL COVER FLUSH WITH FINISHED GRADE. FIELD COORDINATE INSTALLATION LOCATION.



1 – P101 FIRST FLOOR PLAN - GRAVITY

SCALE: 1/4" = 1'-0"

0 1' 2' 4' 8'

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DESIGNER

CLARKNEXSEN
A JMT Company

213 SOUTH JEFFERSON, SUITE 1011
ROANOKE, VIRGINIA 24011
540·982·0800

CONSULTANT

2RW CONSULTANTS, INC.

2677 PROSPERITY AVE., SUITE 275
FAIRFAX, VA 22031
703. 718.4355

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LUCAS W. HOFFMANN
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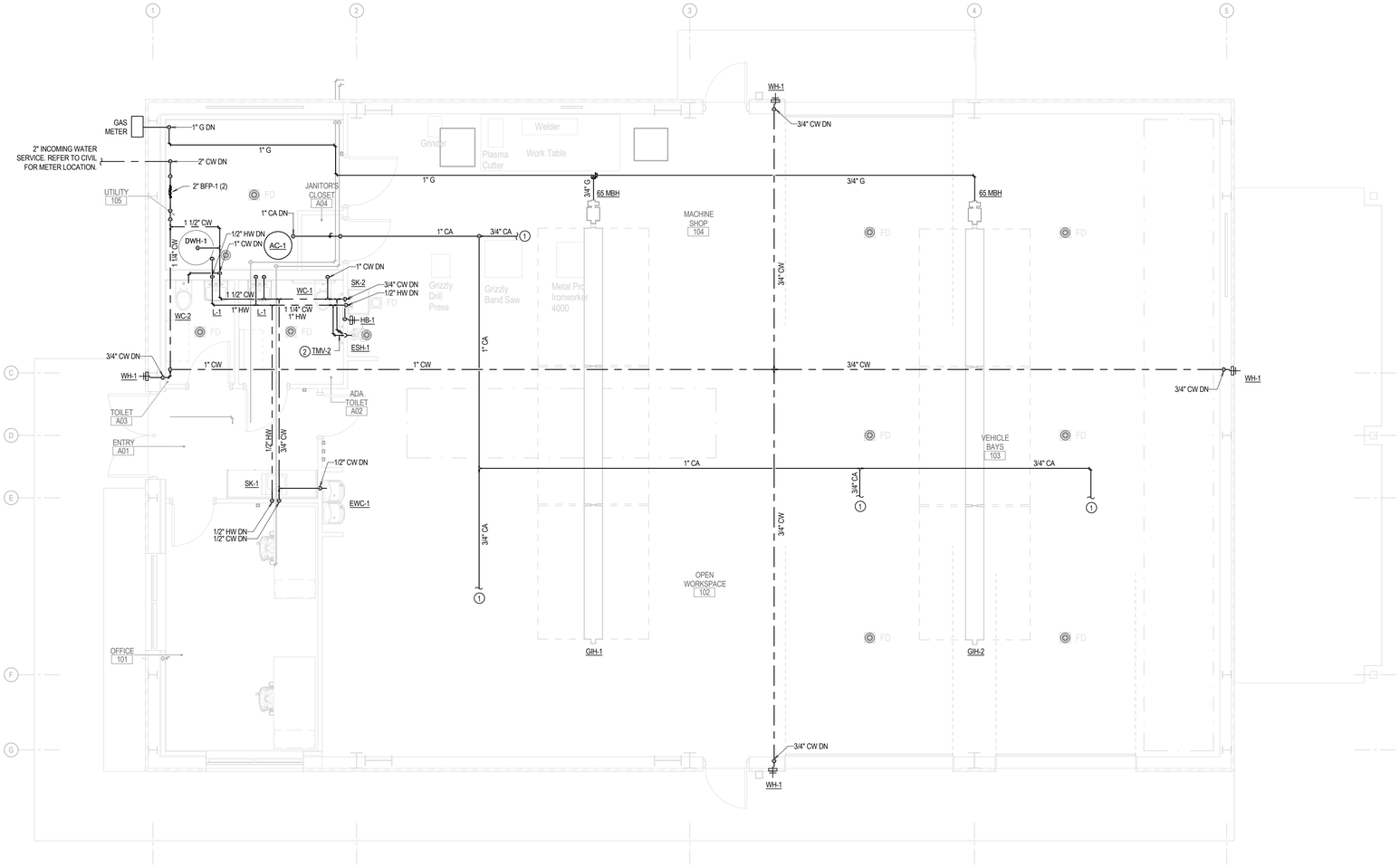
FLOOR PLAN

P101

DESIGN: Designer
DRAWN: Author
REVIEW: Checker

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1 — P102 FIRST FLOOR PLAN - PRESSURE

SCALE: 1/4" = 1'-0"

0 1' 2' 4' 8'

KEY NOTES (NEW WORK)

1. PROVIDE RETRACTABLE CORD REEL DROP FOR COMPRESSED AIR SYSTEM. CORD REEL TO BE MOUNTED TO BUILDING STRUCTURE ABOVE. FIELD COORDINATE LOCATION WITH EQUIPMENT SERVED. SET RETRACTION STOP SO THAT CORD IS REACHABLE FROM GROUND LEVEL. PROVIDE ALL REQUIRED BRACKETS, SUPPORTS, AND HARDWARE PER MANUFACTURER. MANUFACTURER/MODEL: REELCRAFT SERIES 83050 OLP OR EQUIVALENT, AND FEMALE INDUSTRIAL QUICK-CONNECT FITTING; MILTON INDUSTRIES OR EQUIVALENT.
2. INSTALL THERMOSTATIC MIXING VALVE (TMV-2) ABOVE CEILING WITH ACCESS.

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DESIGNER

CLARKNEXSEN
A JMT Company

213 SOUTH JEFFERSON, SUITE 1011
ROANOKE, VIRGINIA 24011
540·982·0800

CONSULTANT

2RW CONSULTANTS, INC.

2677 PROSPERITY AVE., SUITE 275
FAIRFAX, VA 22031
703. 718.4355

PROFESSIONAL SEAL

COMMONWEALTH OF VIRGINIA
LUCAS W. HIFFMANN
Lic. No. 042595
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KEY PLAN

SHEET

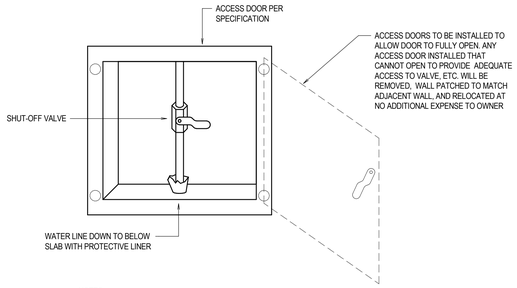
FLOOR PLAN

P102

DESIGN: Designer
DRAWN: Author
REVIEW: Checker

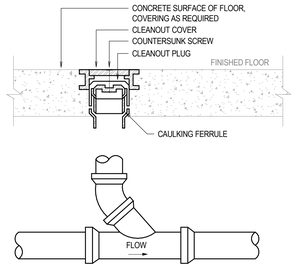
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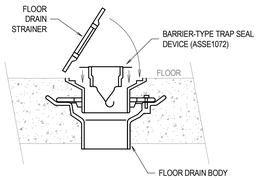


NOTES:
1. DETAIL IS SIMILAR FOR WATER HAMMER ARRESTOR ACCESS PANELS.

1 – P501 ACCESS DOOR DETAIL
SCALE: NONE

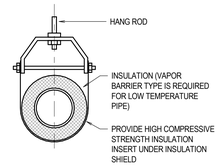


2 – P501 FLOOR CLEANOUT DETAIL
SCALE: NONE

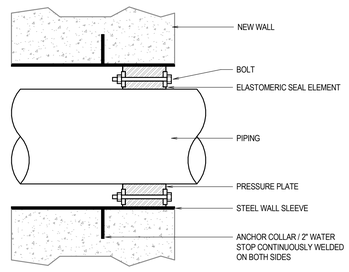


NOTES:
1. INSTALL BARRIER-TYPE TRAP SEAL DEVICE WITHIN FLOOR DRAIN BODY.

3 – P501 FLOOR DRAIN DETAIL WITH TRAP GUARD
SCALE: NONE

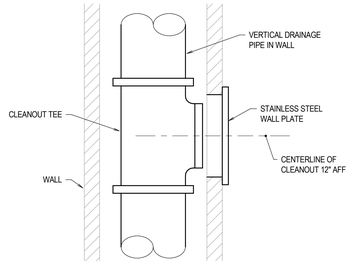


4 – P501 PIPE HANGER DETAIL
SCALE: NONE



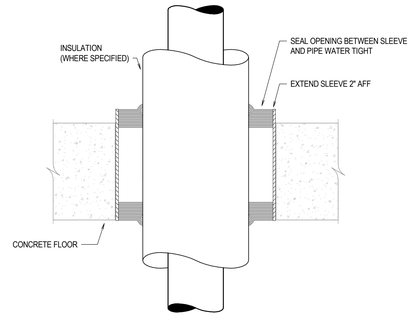
NOTES:
1. FIELD VERIFY EXACT LOCATIONS OF PENETRATIONS PRIOR TO FORMING OF WALL. COORDINATE WITH OTHER TRADES AS REQUIRED.

5 – P501 BELOW GRADE PIPE SLEEVE
SCALE: NONE



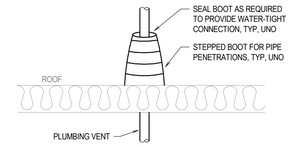
NOTES:
1. COORDINATE LOCATION AND DIRECTION OF VERTICAL WALL CLEANOUTS WITH CABINETRY WORK AND THE OWNER AND THE ARCHITECT PRIOR TO INSTALLATION AT THE PRE-CONSTRUCTION AND PER-INSTALLATION MEETINGS.

6 – P501 WALL CLEANOUT DETAIL
SCALE: NONE



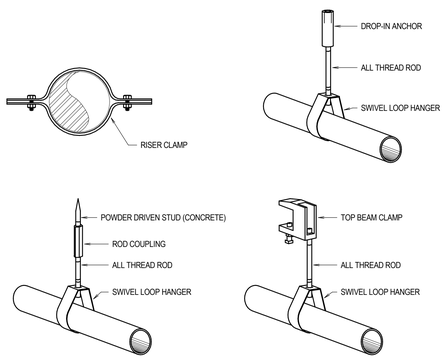
NOTES:
1. SIZE SLEEVE ONE SIZE LARGER THAN INSULATION / PIPE DIAMETER.
2. SEAL OPENING BETWEEN SLEEVE AND PIPE WATER TIGHT.
3. RECESS PACKING MATERIAL FROM BOTH SURFACES OF FLOOR TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
4. INSTALL PACKING MATERIAL SYMETRICALLY ON BOTH SIDES OF FLOOR.

7 – P501 FLOOR PENETRATION DETAIL
SCALE: NONE



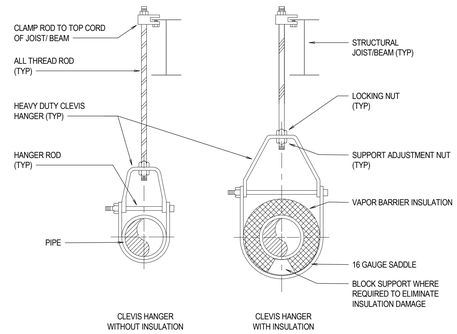
NOTES:
1. DETAIL IS TYPICAL FOR ALL VENT LINES, UNO.
2. SPECIAL ATTENTION SHALL BE PAID TO ENSURE INSULATION ENVELOPE BELOW ROOF ASSEMBLY IS MAINTAINED.

8 – P501 ROOF PENETRATION DETAIL
SCALE: NONE



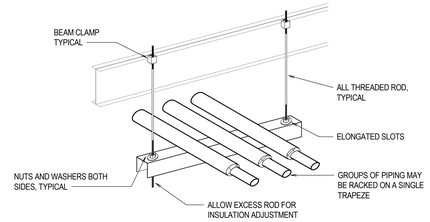
NOTES:
1. COORDINATE WITH STRUCTURAL MEMBERS FOR ATTACHMENT.
2. CONNECT TO TOP OF JOIST.
3. HANGER ROD DIAMETERS SHALL BE IN ACCORDANCE WITH MSS SP-69 TABLE 4.

9 – P501 TYPICAL PIPE SUPPORT HANGER DETAILS
SCALE: NONE



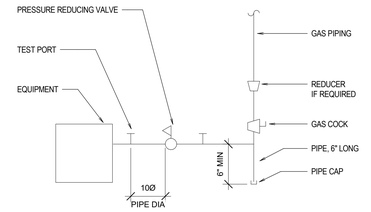
NOTES:
1. HANGER ROD DIAMETERS SHALL BE IN ACCORDANCE WITH MSS SP-69 TABLE 4.

10 – P501 PIPE SUPPORT HANGER DETAILS
SCALE: NONE



NOTES:
1. COORDINATE WITH STRUCURAL MEMBERS FOR ATTACHMENT. PROVIDE BEAM CLAMPS FOR I-BEAM STEEL MEMBERS APPLICATIONS AS SHOWN. PROVIDE DROP IN ANCHORS FOR ATTACHING TO A CONCRETE SLAB.

11 – P501 TRAPEZE PIPE HANGER DETAIL
SCALE: NONE



12 – P501 GAS DIRT LEG DETAIL
SCALE: NONE

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DESIGNER
CLARKNEXSEN
A JMT Company
213 SOUTH JEFFERSON, SUITE 1011
ROANOKE, VIRGINIA 24011
540-982-0800

CONSULTANT
2RW CONSULTANTS, INC.
2677 PROSPERITY AVE., SUITE 275
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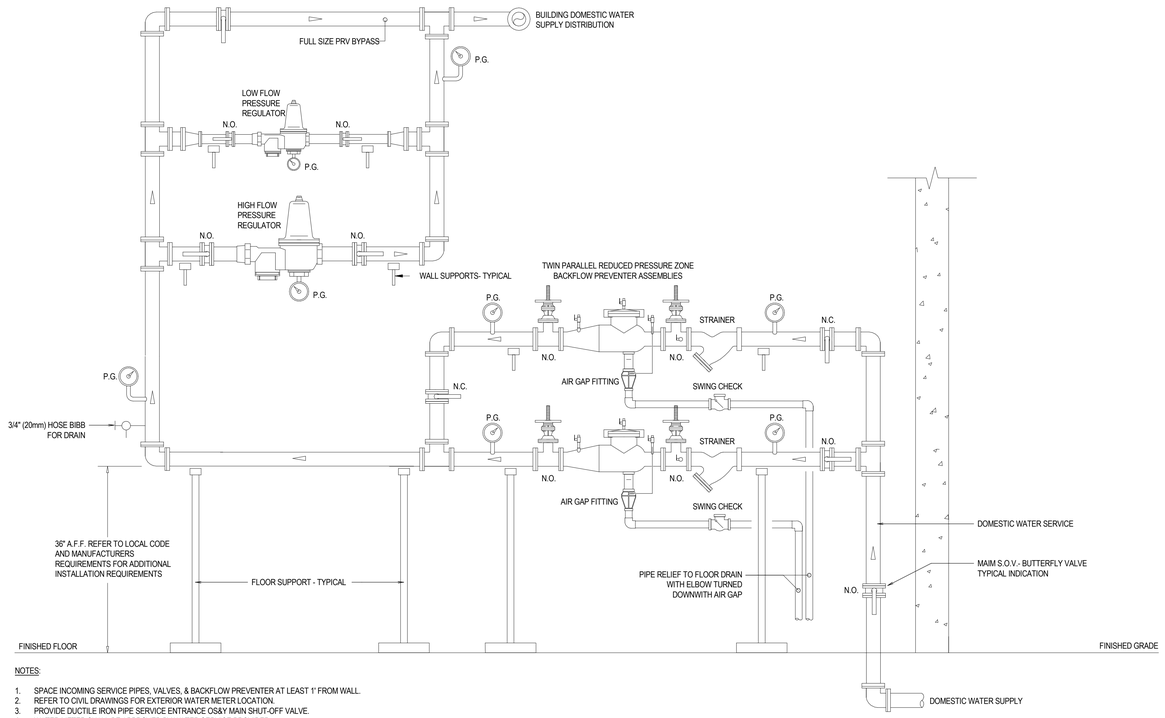
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DETAILS

P501

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DRAWN: Author
REVIEW: Checker

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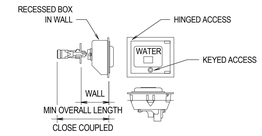
NOTES:

1. SPACE INCOMING SERVICE PIPES, VALVES, & BACKFLOW PREVENTER AT LEAST 1' FROM WALL.
2. REFER TO CIVIL DRAWINGS FOR EXTERIOR WATER METER LOCATION.
3. PROVIDE DUCTILE IRON PIPE SERVICE ENTRANCE OS&Y MAIN SHUT-OFF VALVE.
4. WATER METER SHALL BE APPROVED BY WATER SERVICE PROVIDER.

1 / -- | P502

WATER SERVICE ENTRANCE DETAIL

SCALE: NONE



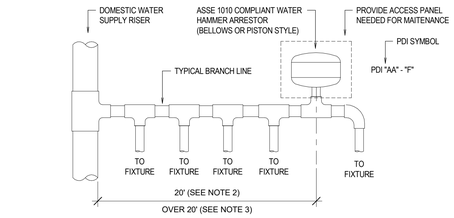
NOTES:

1. COORDINATE FINAL LOCATION WITH THE ARCHITECT.
2. COORDINATE INSTALLATION METHOD WITH THE APPROPRIATE WALL TYPE AND MANUFACTURERS INSTALLATION INSTRUCTIONS.

2 / -- | P502

WATER SHUTOFF FOR ICE MAKER DETAIL

SCALE: NONE



WATER HAMMER ARRESTOR SIZES							
PDI UNITS	AA	A	B	C	D	E	F
FIXTURE UNITS	1-3	1-11	12-32	33-60	61-113	114-154	155-330

NOTE: SCHEDULE PER PDI-WH201

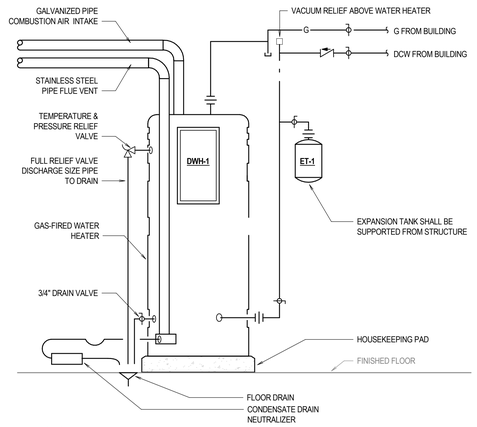
NOTES:

1. INSTALL WATER HAMMER ARRESTORS AT THE END OF BRANCH LINE BETWEEN THE LAST TWO FIXTURES SERVED.
2. ONE WATER HAMMER ARRESTOR PER 20' LINE.
3. LINES EXCEEDING 20' IN LENGTH, ADD ADDITIONAL WATER HAMMER ARRESTOR CENTERED IN LINE BETWEEN FIXTURES.
4. THE SUM OF FIXTURE UNIT RATING OF UNITS OVER 20' IN LENGTH SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF THE BRANCHES.
5. SCHEDULE PER [PDI-WH201].

3 / -- | P502

WATER HAMMER ARRESTOR DETAIL

SCALE: NONE



NOTES:

1. PROVIDE PIPE-CONFIGURED HEAT TRAPS ON VERTICAL WATER PIPES CONNECTING TO THE INLET AND OUTLET OF THE TANK.
2. REFER TO MECHANICAL DRAWINGS FOR COMBUSTION AIR INTAKE AND FLUE VENT ROUTING.

4 / -- | P502

ELECTRIC DOMESTIC WATER HEATER PIPING DETAIL

SCALE: NONE

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FORESTRY RESEARCH OPERATIONS CENTER

140 INVENTIVE LANE
BLACKSBURG, VA 24061

VT PROJECT CODE WO# 26-819490

DESIGNER

CLARKNEXSEN
A JMT Company

213 SOUTH JEFFERSON, SUITE 1011
ROANOKE, VIRGINIA 24011
540-982-0800

CONSULTANT

2RW CONSULTANTS, INC.

2677 PROSPERITY AVE., SUITE 275
FAIRFAX, VA 22031
703. 718.4355

PROFESSIONAL SEAL

COMMONWEALTH OF VIRGINIA
LUCAS W. HIFFMANN
Lic. No. 042595
10.28.2026
PROFESSIONAL ENGINEER

UBO CONFORMANCE

SUBMITTAL

10/23/2026

ISSUED FOR CONSTRUCTION

REVISIONS

KEY PLAN

SHEET

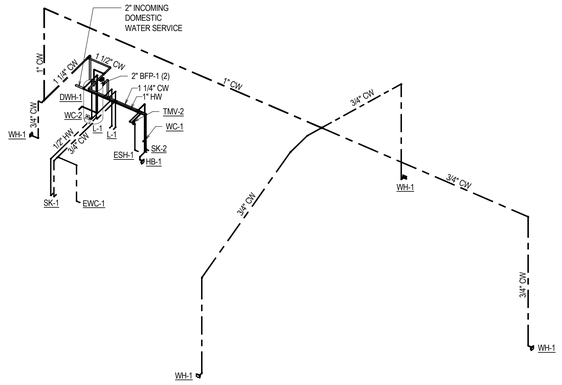
DETAILS

P502

DESIGN: Designer
DRAWN: Author
REVIEW: Checker

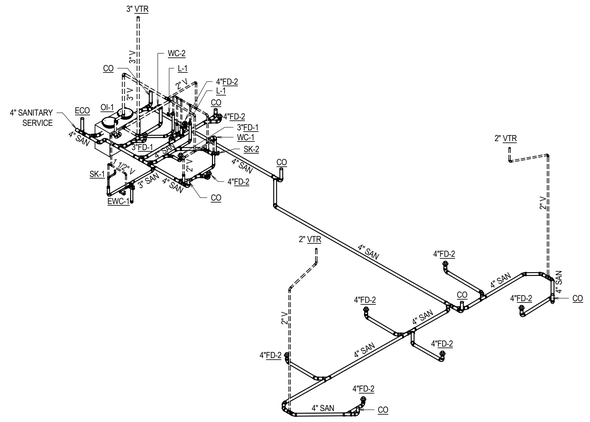
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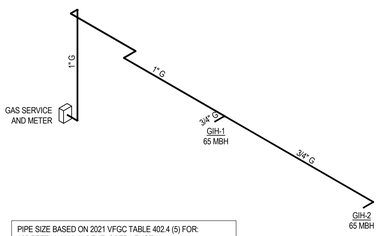
1 -- P601 PRESSURE RISER DIAGRAM - DOMESTIC WATER

SCALE: NONE



2 -- P601 GRAVITY RISER DIAGRAM - SANITARY

SCALE: NONE

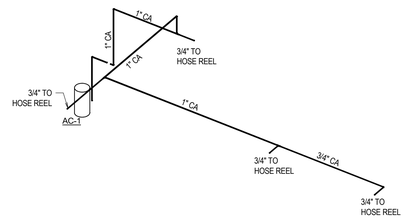


PIPE SIZE BASED ON 2021 VFGC TABLE 402.4 (5) FOR:
100 FEET MAXIMUM DEVELOPED LENGTH
TOTAL LOAD OF 130 CFH
SCHEDULE 40 BLACK STEEL PIPE
0.6 SPECIFIC GRAVITY
LESS THAN 2 PSI INLET PRESSURE
6.0 W.C. PRESSURE DROP
(2) GIH @ 65 CFH EACH

NOTE:
1. COORDINATE PRESSURE REGULATING VALVE (PRV) SETTING WITH EQUIPMENT MANUFACTURERS' INSTRUCTIONS.

3 -- P601 PRESSURE RISER DIAGRAM - NATURAL GAS

SCALE: NONE



4 -- P601 PRESSURE RISER DIAGRAM - COMPRESSED AIR

SCALE: NONE

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RISERS

P601

DESIGN: Designer
DRAWN: Author
REVIEW: Checker

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22 30 00 - ELECTRIC STORAGE WATER HEATER SCHEDULE

MARK	LOCATION	SERVICE	CONFIGURATION	DESIGN CAPACITY			ELECTRICAL			BASIS OF DESIGN	
				STORAGE GAL	RECOVERY GPH	°F RISE	V-PH	KW	FREQ	MFR	MODEL
DWH-1	UTILITY	GENERAL BUILDING	VERTICAL STORAGE	119	99	100	240-3	24	60	BRADFORD WHITE	CEHD120243CF

NOTES: APPLY TO ALL MARKS, UNLESS NOTED OTHERWISE.

1. FLOOR MOUNTED ON HOUSEKEEPING PAD.
2. ROUTE T&P DISCHARGE TO FLOOR DRAIN.

22 07 19, 22 10 05 - PIPE & INSULATION SCHEDULE

SYSTEM	MATERIAL	INSULATION			
		TYPE	PIPE SIZE, IN	THICKNESS, IN	JACKET
DOMESTIC CW (BELOW GRADE)	DUCTILE IRON HDPE PRESSURE PIPE, SDR 9	-	-	-	-
DOMESTIC CW (ABOVE GRADE)	COPPER, TYPE L, WROT FITTINGS	GLASS FIBER	LESS THAN 1-1/2"	1/2	VAPOR BARRIER
		GLASS FIBER	1-1/2"	1	VAPOR BARRIER
SANITARY WASTE, ABOVE GRADE	CAST IRON, SERVICE WEIGHT, NO HUB	-	-	-	-
SANITARY WASTE, BELOW GRADE	CAST IRON, EXTRA HEAVY WEIGHT, HUB & SPIGOT	-	-	-	-

22 30 00 - EXPANSION TANK SCHEDULE

MARK	LOCATION	SERVICE	CONFIGURATION	TANK VOLUME GAL	ACCPTANCE VOLUME GAL	CONN SIZE IN	BASIS OF DESIGN	
							MFR	MODEL
ET-1	UTILITY	DOMESTIC HOT WATER	HYDROPNEUMATIC BLADDER, INLINE	6.4	3.2	3/4	AMTROL	ST-12C-DD

NOTES: APPLY TO ALL MARKS, UNLESS NOTED OTHERWISE.

1. 150 PSI MAXIMUM WORKING PRESSURE.
1. TANKS SHALL BE PRECHARGED WITH 65 PSIG COMPRESSED AIR. SET FINAL CHARGE BASED ON AVAILABLE WATER PRESSURE.

22 15 00 - AIR COMPRESSOR SCHEDULE

MARK	SERVICE	CFM @ 175 PSI	MAX PRESSURE PSIG	HP	TANK GAL	ORIENTATION	ELECTRICAL		DIMENSIONS			WEIGHT LBS	BASIS OF DESIGN	
							V-PH	FREQ	LENGTH	WIDTH	HEIGHT		MFR	MODEL
AC-1	UTILITY	16.8	175	5	80	VERTICAL	208-3	60	48"	40"	76"	597	INGERSOLL RAND	2475N5-P

NOTES:

1. COORDINATE INSTALLATION WITH MAUFACTURER'S INSTRUCTIONS.

22 10 06 - PRESSURE PIPING SPECIALTIES SCHEDULE

MARK	DESCRIPTION	MIN BRANCH PIPING SIZES		FLOW	MOUNTING / REMARKS	BASIS OF DESIGN
		CW	HW			
BFP-1	BACKFLOW PREVENTER (ENTERING SERVICE)	1-1/2"	-	-	ASSE 1013 CERTIFIED, REDUCED PRESSURE PRINCIPLE DOUBLE CHECK TYPE BACKFLOW PREVENTER	ZURN WILKINS 975XL
WH-1	FREEZELESS WALL HYDRANT	3/4"	-	-	ENCASED, FREEZELESS, SELF-DRAINING, ANTI-SIPHON VANDAL RESISTANT INTEGRAL VACUUM BREAKER, POLISHED CHROME FACE PLATE, SATIN NICKEL BRONZE BOX, TEE KEY HANDLE, COORD WITH WALL ASS'Y, PROVIDE ACCESSIBLE ISOLATION VALVE WITHIN BLDG	WOODFORD B65
HB-1	HOSE BIB	3/4"	-	-	[20"] AFF, INTERIOR, VACUUM BRKR, CHROME, KEY HANDLE IN PUBLIC SPACES, COORD WITH WALL ASS'Y, PROVIDE ACCESSIBLE ISOLATION VALVE WITHIN BLDG	WOODFORD B4
TMV-1	THERMOSTATIC MIXING VALVE (HANDWASHING FIXTURES)	1/2"	1/2"	0.25 - 4.0 GPM	MOUNT BELOW BASIN, SINGLE OUTLET, 5 PSI PRESSURE DROP AT MAX FLOW, ASSE 1070 LISTED	LEONARD 170A-LF
TMV-2	THERMOSTATIC MIXING VALVE (EMERGENCY SHOWER)	3/4"	3/4"	20 GPM	INSTALL EXPOSED IN CEILING WITH ACCESS, ANSI Z358.1	GUARDIAN G6040

NOTES: APPLY TO ALL MARKS, UNLESS NOTED OTHERWISE.

1. TMV-1 & 2: INSTALL ISOLATION VALVES ON THERMOSTATIC MIXING VALVE TO ALLOW INSPECTION AND MAINTENANCE.
2. WH-1: MOUNT IN EXTERIOR WALL AT 1'-4" ABOVE FINISHED SLAB/GRADE, UNO. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND ELEVATIONS.

22 10 06 - DRAINAGE PIPING SPECIALTIES SCHEDULE

MARK	DESCRIPTION	MIN BRANCH PIPING SIZES		FLOW	MOUNTING / REMARKS	BASIS OF DESIGN
		W	V			
FD-1	FLOOR DRAIN, FINISHED FLOOR AREAS	PER PLANS	PER PLANS	-	CAST IRON, BOTTOM OUTLET, MEMBRANE CLAMP, 5"Ø NICKEL BRONZE STRAINER, TRAP PRIMER CONNECTION, ASSE 1072 TRAP SEAL	MIFAB F1100P-C-TS-7-MG
FD-2	FLOOR DRAIN, UNFINISHED AREAS	PER PLANS	PER PLANS	-	CAST IRON, BOTTOM OUTLET, COMBINATION MEMBRANE CLAMP & FRAME, 7"Ø CAST IRON, SLOTTED MEDIUM DUTY GRATE, TRAP PRIMER CONNECTION, ASSE 1072 TRAP SEAL	MIFAB F1300P-C-MG
AP	ACCESS PANEL	-	-	-	12"x12" LOCKABLE METAL ACCESS PANEL	REFER TO ARCHITECTURAL DRAWINGS
CO	FLOOR CLEANOUT	-	-	-	FLOOR, STAINLESS STEEL TOP WITH ABS OR BRONZE PLUG, SAME SIZE AS SAN LINE, PROVIDE CARPET MARKER IN CARPETED AREAS	MIFAB C1000P-TOS-3-C
ECO	EXTERIOR GRADE CLEANOUT WITH COVER	-	-	-	UNFINISHED GRADE, CAST IRON HOUSING WITH HEAVY-DUTY STAINLESS STEEL COVER AND ABS OR BRONZE PLUG, SAME SIZE AS SAN LINE	MIFAB C1220P-3
WCO	WALL CLEANOUT	-	-	-	WALL, CAST IRON CLEANOUT TEE WITH BRONZE PLUG, SS COVER, SAME SIZE AS SAN LINE, FACE OF WALL	MIFAB C1460-RD
TG-1	TRAP SEAL	-	-	-	ASSE 1072 CERTIFIED TRAP SEALING DEVICE	MIFAB MI-GARD
OI-1	OIL INTERCEPTOR	4"	2"	100 GPM	BELOW GRADE, 250 GALLONS, DUAL MANWAY; WITH 24 INCH FRP ROUND FRAME AND TRAFFIC-RATED COVER	STRIEM OS-100

NOTES: APPLY TO ALL MARKS, UNLESS NOTED OTHERWISE.

1. FLOOR DRAINS: COORDINATE EXACT PLACEMENT OF FLOOR DRAINS WITH EQUIPMENT LOCATIONS AND ARCHITECTURAL PLANS PRIOR TO ROUGH IN.
2. FLOOR DRAINS, ASSOCIATED TRAPS, AND ROOF DRAINS: SHALL BE SAME SIZE AS CONNECTING PIPING SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL PLANS FOR EXACT FLOOR DRAIN LOCATION.

22 40 00 - PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	MIN BRANCH PIPING SIZES				FLOW	MOUNTING / REMARKS	BASIS OF DESIGN
		CW	HW	SAN	V			
WC-1	WATER CLOSET, FLUSH VALVE (ACCESSIBLE)	1"	-	4"	2"	1.28 GPF	WALL-HUNG, TOP SPUD, BOWL RIM 17" AFF, BARRIER-FREE, ELONGATED, VITREOUS CHINA, COLOR WHITE, DC-POWERED SENSOR FLUSH VALVE, SIPHON JET ACTION, REAR DRAIN OUTLET, HIGH EFFICIENCY	TOILET: KOHLER KINGSTON ULTRA K-84325-SS SEAT: BEMIS 1955SSCT FLUSH VALVE: SLOAN G2 8111-1.28
WC-2	WATER CLOSET, FLUSH VALVE	1"	-	4"	2"	1.28 GPF	WALL-HUNG, TOP SPUD, BOWL RIM 15" AFF, ELONGATED, VITREOUS CHINA, COLOR WHITE, DC-POWERED SENSOR FLUSH VALVE, SIPHON JET ACTION, REAR DRAIN OUTLET, HIGH EFFICIENCY	TOILET: KOHLER KINGSTON ULTRA K-84325-SS SEAT: BEMIS 1955SSCT FLUSH VALVE: SLOAN G2 8111-1.28
L-1	LAVATORY (ACCESSIBLE)	1/2"	1/2"	1-1/2"	1-1/2"	0.5 GPM	WALL-HUNG, VITREOUS CHINA RECTANGULAR SINK, COLOR: WHITE, GRID STRAINER, SOLAR DC-POWERED POWERED FAUCET, INTEGRAL ASSE-1070 TMV, SPOUT 6-15/32", PROVIDE TRAP COVER	SINK: KOHLER SOHO K-20000 FAUCET: SLOAN EFX-275-SOL-BDT-CP-0.5GPM-MLM-FCT
SK-1	PANTRY SINK (ACCESSIBLE)	1/2"	1/2"	1-1/2"	1-1/2"	1.5 GPM	UNDER-COUNTER MOUNTED, 18-GAUGE DOUBLE BOWL STAINLESS STEEL SINK, 8" CENTERSET EXPOSED DECK MOUNTED CHROME FAUCET WITH ARC SPOUT AND 4" LEVER HANDLES	SINK: ELKAY ELUHAD311845PD FAUCET: ELKAY LKD2442BHC
SK-2	UTILITY SINK (ACCESSIBLE)	1/2"	1/2"	1-1/2"	3"	2.2 GPM	CAST IRON SERVICE SINK WITH DRILLED BACK 2 HOLES ON 8" CENTERS AND RIM GUARD; EXPOSED YOKE WALL-MOUNT FAUCET	SINK-AMERICAN STANDARD LAKEWELL 7692.008 FAUCET: AMERICAN STANDARD 8340.235
ESH-1	EMERGENCY SHOWER & EYE/FACE WASH STATION	1-1/4"	1-1/4"	1-1/2"	1-1/2"	20/3 GPM	FREESTANDING COMBINATION DRENCH SHOWER AND EYE/FACE WASH, STAINLESS STEEL BOWL WITH THERMOSTATIC MIXING VALVE (TMV-2)	GUARDIAN G1909
EWC-1	ELECTRIC WATER COOLER, HIGH/LOW, ACCESSIBLE, BOTTLE FILLER	1/2"	-	1-1/2"	1-1/2"	8.0 GPH	WALL-MOUNTED, BI-LEVEL, FILTERED & REFRIGERATED, ELECTRONICALLY-ACTIVATED BUBBLERS, SENSOR-ACTIVATED BOTTLE FILLER	ELKAY MODEL LZSTL8WSVRSK

NOTES: APPLY TO ALL MARKS, UNLESS NOTED OTHERWISE.

1. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ALL FIXTURE MOUNTING HEIGHTS AND LOCATIONS.
2. FIXTURE SCHEDULE IS COORDINATED WITH ARCHITECTURAL DRAWINGS. IF DISCREPANCY IS DISCOVERED, ARCHITECTURAL DRAWINGS SHALL GOVERN.
3. PROVIDE INTERNAL CLEANOUT WITH ALL ACCESSIBLE TRAPS.
4. COORDINATE CONNECTIONS WITH CASEWORK FIXTURES. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
5. INSTALL ACCESSIBLE INSULATION KIT ON EXPOSED DRAIN AND SUPPLIES.
6. PROVIDE WATERSENSE LISTED FAUCET OR FLUSHOMETER WHERE APPLICABLE
7. PROVIDE ENERGYSTAR LISTED FIXTURE WHERE APPLICABLE

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