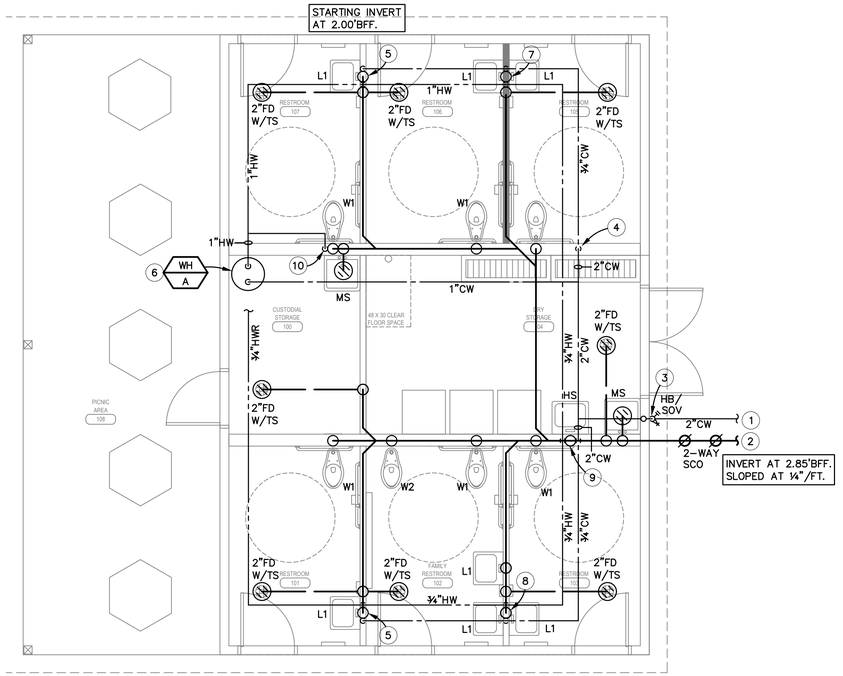

N

1 PLUMBING FLOOR PLAN

1/4" 1'-0"

KEYED NOTES :

1. EXTEND NEW 2"CW TO DIRECT CONNECT TO CITY WATER. NO WATER METER IS NEEDED. SEE CIVIL FOR CONTINUATION.
2. EXTEND NEW 4"WASTE TO 5'-0" BEYOND BUILDING EXTERIOR. INVERT PER PLANS. SEE CIVIL FOR CONTINUATION.
3. ¾"CW DOWN IN WALL TO FIXTURE.
4. 1½"CW DOWN IN WALL TO FULL SIZED HEADER W/SHOCK ABSORBER. PROVIDE ¾"CW TO MS AND 1¼"CW TO EACH (3)WC.
5. ½"H&CW DOWN IN WALL TO FIXTURE.
6. FULL SIZE T&P TO TERMINATE AT EXTERIOR +6"A.F.G. W/ 90° ELBOW.
7. ¾"H&CW DOWN IN WALL. PROVIDE ½"H&CW TO EACH (2)LAV.
8. ¾"H&CW DOWN IN WALL. PROVIDE ½"H&CW TO EACH (3)LAV.
9. ¾"HW DOWN IN WALL. PROVIDE ½"HW TO HS AND ¾"HW TO MS. 2"CW DOWN IN WALL TO FULL SIZED HEADER W/SHOCK ABSORBER. PROVIDE ½"CW TO HS, ¾"CW TO MS, AND 1¼"CW TO EACH (4)WC.
10. ¾"HW DOWN IN WALL TO FIXTURE.

GENERAL NOTES :

1. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.
2. BEFORE SUBMITTING BID, THE PLUMBING CONTRACTOR SHALL REVIEW THE ARCHITECTURAL DRAWINGS AND INCLUDE IN HIS BID AN AMOUNT TO FURNISH AND INSTALL ANY FIXTURES WHICH ARE SHOWN IN ADDITION TO FIXTURES SHOWN ON THE PLUMBING DRAWINGS.
3. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE MAKING UP OR INSTALLATION OF NEW WASTE SYSTEM.
4. CONTRACTOR SHALL VERIFY AND COORDINATE LOCATION OF ALL PLUMBING LINES WITH DUCTWORK AND ELECTRICAL SERVICES.
5. THE INSTALLATION OF ALL VALVES, UNIONS, THERMOMETERS, GAUGES, OR OTHER INDICATING OR RECORDING EQUIPMENT, OR SPECIALTIES REQUIRING FREQUENT READING, REPAIRS, ADJUSTMENT, INSPECTION, REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.
6. ALL VENTS THROUGH ROOF SHALL BE 10'-0" REMOVED FROM ALL AIR INTAKES, EVAPORATIVE COOLERS, ETC.
7. WHERE POSSIBLE, TIE VENTS TOGETHER SO THAT A MINIMUM NUMBER TERMINATE THROUGH THE ROOF.
8. WATER CLOSETS IN PUBLIC TOILET ROOMS SHALL CENTER ON THE FINAL LAYOUT OF TOILET PARTITIONS, EXCEPT AT ADA STALLS.
9. CONTRACTOR SHALL NOT CUT HOLES IN STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT.
10. CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.
11. CONTRACTOR SHALL ROUGH-IN ALL WASTES AND SUPPLIES TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURERS SHOP DRAWINGS AND MAKE FINAL CONNECTIONS. ALL SUPPLIES SHALL BE VALVED.
12. ASSUMED WATER PRESSURE-CONTRACTOR SHALL VERIFY ACTUAL WATER PRESSURE PRIOR TO CONSTRUCTION. IF PRESSURE IS LESS THAN 50 PSI CONTRACTOR SHALL CONTACT THE ENGINEER FOR PIPE SIZING EVALUATION. IF PRESSURE EXCEEDS 80 PSI, A PRESSURE REDUCING VALVE SHALL BE PROVIDED. PIPING VELOCITY SHALL NOT EXCEED 8 FEET PER SECOND.
13. PLANS AND WORK SHALL CONFORM TO 2018 IPC AND IFGC AS ADOPTED BY THE CITY OF BULLHEAD.

PLUMBING SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
—GW—	GREASE WASTE (GW)		POINT OF CONNECTION
————	EXISTING (E)		SHUT OFF VALVE (GATE)
————	SOIL WASTE LINE (W)		CHECK VALVE
————	VENT LINE (V)		UNION
————	COLD WATER (C.W.)		LUBRICATED PLUG VALVE
————	HOT WATER (H.W.)		HOSE BIBB (H.B.)
————	HOT WATER RETURN		BRANCH RISE OFF MAIN
— G —	GAS LINE	⌀S.C.O.	SURFACE CLEANOUT
—TW—	TEMPERED WATER	⌀F.C.O.	FLOOR CLEANOUT
—SW—	SOFT WATER		GLOBE VALVE
————	BUILDING SEWER		BALL VALVE
	FLOOR DRAIN (F.D.)	-R.D.L.-	ROOF DRAIN LEADER
	FLOOR SINK (F.S.)	-O.D.L.-	OVERFLOW DRAIN LEADER
	ROOF DRAIN (R.D.)	—CD—	CONDENSATE DRAIN LINE
	OVER FLOW DRAIN	—ICW—	INDUSTRIAL COLD WATER

NOTE: ONLY THOSE SYMBOLS SHOWN ON THE DRAWING APPLY

PIPING MATERIALS

SANITARY WASTE AND VENT SYSTEMS

PIPING:
ABS CONFORMING TO ASTM D 2661.

DOMESTIC WATER SYSTEM

PIPING:
ABOVE GRADE: TYPE "L" HARD DRAWN COPPER, CONFORMING TO ASTM B-88. OR PEX CONFORMING TO ASTM F 876. PEX PIPING 1.5" AND LARGER MUST BE RIGID TUBING.
BELOW SLAB: TYPE "K" SOFT DRAWN COPPER, CONFORMING TO ASTM B-88, WITH PLASTIC SLEEVE.

PIPING, EXTERIOR BELOW GRADE ONLY:
PVC CONFORMING ASTM D 1785, WITH TRACER WIRE.

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No. 24488
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COMMUNITY PARK RESTROOM - BHC

1251 HWY 95, BULLHEAD CITY, ARIZONA 86442 APN: 214-01-011

ARCHITECT OF RECORD

SELBERG ASSOCIATES INC.
ARCHITECTURE & PLANNING
2130 MESQUITE AVE. | SUITE 204
LAKE HAVASU CITY | ARIZONA | 86403
(928) 855-8544

PROJECT NO. 25053

ISSUED FOR: PERMIT SET

ISSUED DATE: 09-29-2025

REVISION	ISSUE DATE

SHEET TITLE:
PLUMBING FLOOR PLAN

SHEET NO.
P1.01

PLUMBING SPECIFICATIONS :

1. SCOPE
THE WORK SPECIFIED UNDER THIS CONTRACT INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION, SERVICES, PERMITS, INSPECTION FEES, ETC., REQUIRED IN THE COMPLETE INSTALLATION OF PLUMBING WORK AS SPECIFIED HEREIN AND SHOWN ON ACCOMPANYING DRAWINGS AND AS REQUIRED BY THE CONDITIONS AT THE SITE. THE GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE A PART OF THIS SECTION. IN ADDITION, WORK IN THESE SECTIONS ARE GOVERNED BY ALL PROVISIONS OF THE CONTRACT DOCUMENTS.

2. SUBMITTALS
SUBMIT SHOP DRAWINGS AND ALL DATA REQUIRED IN ACCORDANCE WITH DETAILED REQUIREMENTS OF DIVISION 1, GENERAL REQUIREMENTS, FOR ALL WORK PROVIDED UNDER DIVISION 15.

3. RECORD DRAWINGS
PROVIDE RECORD DRAWINGS WHICH SHALL CLEARLY SHOW ALL DIFFERENCES BETWEEN THE CONTRACT WORK AS DRAWN AND INSTALLED. PIPING MAINS BELOW SLAB AND/OR GRADE AND ALL BRANCH LINES BELOW SLAB OR GRADE IN EXCESS OF 5 FT. IN LENGTH SHALL BE DIMENSIONED FROM COLUMNS OF ANY PERMANENT STRUCTURE. ALSO, SHOW ALL WORK ADDED TO THE CONTRACT WHICH IS NOT SHOWN ON THE CONTRACT DRAWINGS.

RECORD DRAWINGS SHALL BE IN ACCORDANCE WITH DIVISION REQUIREMENTS.

4. EQUIPMENT LIST AND MAINTENANCE MANUAL
MAINTENANCE MANUAL SHALL INCLUDE ALL AVAILABLE MANUFACTURERS' OPERATION AND MAINTENANCE INSTRUCTIONS TOGETHER WITH THE RECORD DRAWINGS HERE IN BEFORE SPECIFIED AND ALL OTHER DIAGRAMS AND INSTRUCTIONS NECESSARY TO PROPERLY OPERATE AND MAINTAIN THE EQUIPMENT. THE MANUAL SHALL ALSO INCLUDE THE NAME, ADDRESS, AND PHONE NUMBER OF THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED IN ANY OF THE WORK SPECIFIED HEREIN. THE EQUIPMENT LIST AND MAINTENANCE MANUAL SHALL BE SUBMITTED IN ACCORDANCE WITH DIVISION 1, GENERAL REQUIREMENTS.

5. CODES, PERMITS, FEES, INSPECTIONS, RULES & REGULATIONS
THE CONTRACTOR MUST, AT HIS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS, PAY ALL LEGAL FEES AND CHARGES INCLUDING WATER AND SEWER DEVELOPMENT FEES, AND COMPLY WITH ALL STATE AND MUNICIPAL BUILDING AND SAFETY LAWS, ORDINANCES AND REGULATIONS, RELATING TO BUILDING AND PUBLIC HEALTH AND SAFETY. ALL WORK SHALL BE IN CONFORMANCE WITH THE GOVERNING CITY CODES.

6. EXCAVATION AND BACKFILL
COMPLETE ALL SAW CUTTING, EXCAVATION AND BACKFILL AS NECESSARY FOR THE INSTALLATION OF UNDERGROUND PIPING. COMPACT AND TAMP BACKFILL TO ORIGINAL GRADE IN ACCORDANCE WITH REQUIREMENTS AS SPECIFIED IN SECTION ENTITLED "EARTHWORK" AND REMOVE EXCESS DIRT AS DIRECTED. NO WORK SHALL BE COVERED UNTIL PROPERLY TESTED AND APPROVED. ALL PAVEMENT, SIDEWALK, PIPING, ELECTRICAL CONDUIT, ETC., CAUSED TO BE CUT OR DAMAGED BY THIS SECTION SHALL BE RESTORED TO ORIGINAL CONDITION BY WORKMEN QUALIFIED AND ACTIVE IN THE TRADES INVOLVED.

7. ELECTRIC WIRING
ALL POWER WIRING IS INCLUDED IN DIVISION 16, ELECTRICAL. THE RESPONSIBILITY FOR PROPER CONNECTIONS AND OPERATION IS INCLUDED UNDER THIS DIVISION.

8. WARRANTY
WARRANT THE SYSTEM, LABOR, MATERIALS AND EQUIPMENT FOR ONE (1) YEAR AFTER COMPLETION AND ACCEPTANCE. REPLACE OR REPAIR ALL DEFECTIVE WORKMANSHIP, EQUIPMENT, AND MATERIALS AT NO ADDITIONAL COST TO THE OWNER.

9. WORK SPECIFIED HEREIN
PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY TO FURNISH AND INSTALL COMPLETE PLUMBING AND PIPING SYSTEMS AS INDICATED OR SPECIFIED. INSTALL AND DELIVER ALL SYSTEMS COMPLETE, IN PERFECT WORKING ORDER, AND IN FULL ACCORDANCE WITH THE INTENT AND MEANING OF THE DRAWINGS AND SPECIFICATIONS. THE WORK, IN GENERAL, CONSISTS OF, BUT IS NOT NECESSARILY LIMITED TO, THE FOLLOWING:

COMPLETE SANITARY PLUMBING SYSTEMS FOR THE BUILDING WITH CONNECTIONS FROM EXISTING LINE IN THE BUILDING.

DOMESTIC WATER SYSTEM INCLUDING CONNECTION TO EXISTING STUB OUT, AND CONNECTIONS TO ALL PLUMBING FIXTURES AND EQUIPMENT.

ROUGH-IN AND FINAL CONNECTIONS OF WASTE AND WATER TO SPECIAL EQUIPMENT SPECIFIED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS OR SUPPLIED BY OWNER, INCLUDING KITCHEN EQUIPMENT, CONDENSATE DRAIN PIPING, P-TRAPS, WASTE TUBING STOPS, FLEXIBLE TUBE RISERS, ETC. AS REQUIRED.

VALVED OUTLETS AND CONNECTIONS TO ALL HEATING, AIR CONDITIONING, OR ELECTRICAL EQUIPMENT WITH LOCATION AS REQUIRED.

INSULATION INCLUDING DOMESTIC HOT WATER SUPPLY PIPING. PER IECC 2006 PROVIDE FOAM INSULATION OR INSULATE WITH 1"INSULATION HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCH/H x FT.SQUARED x °F.

PLUMBING SPECIALTIES, INCLUDING CLEAN-OUTS, DRAINS, FIXTURE SUPPORTS, INTERCEPTORS, ETC.

PLUMBING EQUIPMENT AS SPECIFIED AND SCHEDULED.

PLUMBING FIXTURES AS SPECIFIED.

ADEQUATE SUPERVISION OF ERECTION, BALANCING, ADJUSTMENTS AND INSTRUCTIONS FOR PROPER OPERATION AND MAINTENANCE.

PAYMENT FOR ALL PLUMBING PERMITS AND INSPECTION FEES.

STERILIZATION OF POTABLE WATER SYSTEM. PEX SYSTEM SHALL BE STERILIZED WITH 50 MILLIGRAMS OF CHLORINE PER LITER FOR 24 HOURS.

10. APPROVED MANUFACTURERS
SPECIFICATION HEREIN BY BRAND NAME IS INTENDED TO ESTABLISH A STANDARD OF QUALITY. FURTHER, THIS EQUIPMENT HAS BEEN CHECKED AS TO SIZE AND WEIGHT REQUIREMENTS AND SPACE ALLOCATION HAS BEEN MADE ACCORDINGLY.

SUBMITTAL OF EQUIPMENT BY OTHER ACCEPTABLE MANUFACTURERS MUST BE COMPLETE IN EVERY DETAIL, INCLUDING SPACE REQUIREMENTS, WEIGHT, COMPLETE PERFORMANCE DATA, AND SUPPLEMENTAL DATA REQUESTED BY THE ARCHITECT. CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURANCE THAT THE EQUIPMENT MEETS ALL THE REQUIREMENTS DETAILED IN THIS AND OTHER SECTIONS, AND INDICATED ON THE DRAWINGS.

EACH SECTION INCLUDES A LIST OF MANUFACTURERS WHOSE EQUIPMENT IS ACCEPTABLE TO MANUFACTURE, SUBJECT TO CONFORMANCE WITH ALL DRAWINGS, SPECIFICATIONS AND ADDENDA ITEMS. CAREFUL CHECKING MUST BE MADE TO VERIFY THAT THE EQUIPMENT WILL MEET ALL CAPACITIES, REQUIREMENTS, SPACE ALLOCATIONS, AND THAT THE WEIGHTS ARE NOT EXCESSIVE.

11. MATERIALS
MANUFACTURERS INDICATE A STANDARD OF QUALITY, OTHER MANUFACTURES MUST BE APPROVED AS AN EQUAL.

SANITARY WASTE VENT AND STORM DRAINAGE: ABS CONFORMING TO ASTM D 2661.

DOMESTIC WATER: TYPE "L" HARD DRAWN COPPER, CONFORMING TO ASTM B-88.

CLEAN OUTS: INTERIOR CONCRETE AND TILE FLOORS: "WADE W-7000". INTERIOR FINISHED WALLS: "WADE W-8460-R".

FLOOR DRAINS: TOILET ROOMS AND FINISHED AREAS: "WADE 1100-G".

FLOOR SINKS: EQUIPMENT ROOMS AND UNFINISHED AREAS: "WADE W-2530".

REDUCE PRESSURE BACKFLOW PREVENTER: WATTS #SS009, STAINLESS STEEL SHALL BE USED FOR ALL FOOD APPLICATIONS

BALL VALVES: NIBCO #S-585-70, 150# SOLDER JOINT FOR ALL LINES UP TO 2" IN DIAMETER.

CHECK VALVES: NIBCO #S-413-Y, 150# SOLDER JOINT FOR ALL VALVES UP TO 2" IN DIAMETER.

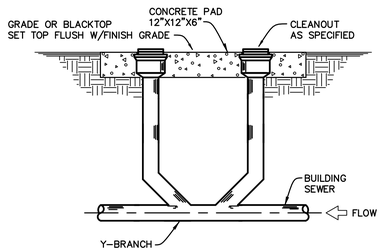
GLOBE VALVES: NIBCO #S-235-Y, 150# SOLDER JOINT FOR ALL VALVES UP TO 2" IN DIAMETER.

FIXTURES: USE POLISHED CHROME PLATED, ADJUSTABLE BRASS P-TRAPS AND WASTE ARMS WITH WALL ESCUTCHEONS AT ALL EXPOSED LOCATIONS. USE POLISHED CHROME PLATED FAUCETS WITH REMOVABLE TRIP, BRASS BODY AND BRASS HANDLES. FIXTURES AND SUPPLY FITTING SHALL BE AS SPECIFIED. PROVIDE DIAPHRAGM TYPE POLISHED CHROME PLATED FLUSH VALVES WITH INTEGRAL VACUUM BREAKERS AND SCREW DRIVER STOPS. PROVIDE FIXTURE STOPS AND VALVES AHEAD OF ALL EQUIPMENT OR FIXTURES. AFTER FIXTURES ARE SET IN PLACE AND SECURED TO WALLS, CAULK ALL AROUND BETWEEN FIXTURES AND WALL WITH EITHER "DOW CORNING #780" OR G.E. CONSTRUCTION SEALANT" WHITE SILICONE CAULKING COMPOUND.

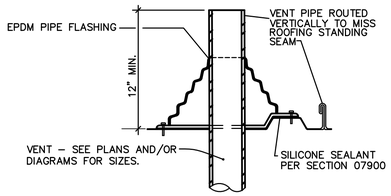
12. INSTALLATION
THE ENTIRE PLUMBING SYSTEM SHALL BE INSTALLED IN A NEAT, WORKMANLIKE, FINISHED, AND SAFE MANNER. CONCEAL ALL PIPING IN FINISHED AREAS UNLESS NOTED OTHERWISE. ALL PIPING SHALL BE ADEQUATELY SUPPORTED AND INSTALLED PARALLEL WITH THE BUILDING WALLS. THE ENTIRE INSTALLATION SHALL BE SUBJECT TO THE ARCHITECT'S APPROVAL.

13. TESTS
TEST WATER PIPING TO 100 PSI AND HOLD FOR 4 HOURS.
TEST SEWER AND VENT PIPING WITH A 10 FOOT HEAD OF WATER FOR 4 HOURS.
REPAIR ALL LEAKS UNTIL SYSTEMS ARE WATERTIGHT.

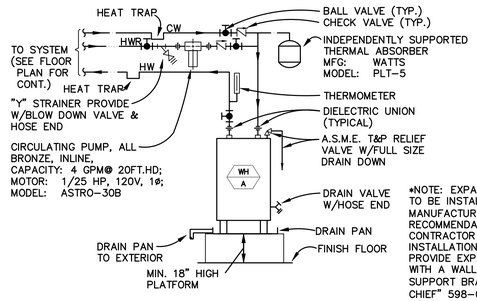
END OF SECTION



1 2-WAY SURFACE CLEANOUT
N.T.S.



2 VENT FLASHING - METAL ROOF
N.T.S.

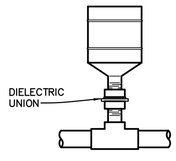


*NOTE: EXPANSION TANK TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO VERIFY INSTALLATION IN FIELD AND PROVIDE EXPANSION TANK WITH A WALL-MOUNTED SUPPORT BRACKET, "SIOUX CHIEF" 598-022 OR EQUAL

3 ELECTRIC WATER HEATER PIPING DIAGRAM
N.T.S.

SHOCK ABSORBER DETAIL

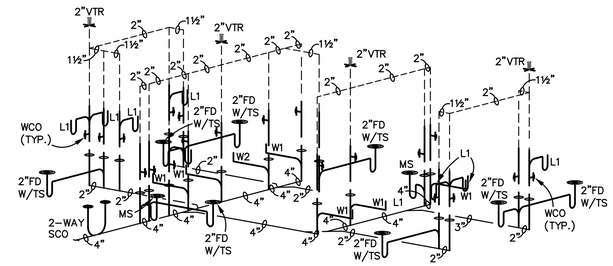
JR SMITH-HYDRO TROL	5005	5010	5020	5030	5040	5050
FIXTURE UNIT RATING	1-11	12-32	33-60	61-113	114-154	155-330



1. CONTRACTOR SHALL FURNISH & INSTALL SHOCK ABSORBERS ON ALL FLUSH VALVE OPERATED FIXTURES OR FIXTURES W/QUICK CLOSING VALVES.
2. WHEN WATER PRESSURE IN THE LINE IS OVER 65 PSI, INSTALL THE NEXT LARGER UNIT.
3. CONTRACTOR SHALL PIPE AIR CHAMBERS 12" LONG & (2) PIPE SIZES LARGER THAN SUPPLY LINE AT ALL ISOLATED FIXTURES OR BATTERY OF FIXTURES NOT REQUIRING SHOCK ABSORBERS.
4. SIZE OF SHOCK ABSORBERS REQUIRED ON BATTERYOF FIXTURES SHALL BE BASED ON FIXTURE UNIT VALVES OF FLUSH VALVE OPERATED FIXTURES ONLY.
5. WHERE SHOCK ABSORBERS ARE INSTALLED IN NON-ACCESSIBLE PIPE SPACES OR IN PARTITIONS, CONTRACTOR SHALL INSTALL 12"x12" STAINLESS STEEL ACCESS PANEL W/CYLINDER LOCK.
6. SHOCK ABSORBERS MANUFACTURED BY ZURN, JOSAM OR WADE EQUAL TO LIST ABV. ARE APPROVED.

4 SHOCK ABSORBER DETAIL
N.T.S.

P512



WASTE & VENT SCHEMATIC
SCALE: N.T.S.

* VERIFY EXACT FIXTURES WITH OWNER/ARCH. PRIOR TO ORDERING.
ALTERNATES TO BE APPROVED BY OWNER & ENGINEER PRIOR TO ORDERING.

PLUMBING FIXTURE SCHEDULE

	FIXTURE SPECIFICATIONS				FIXTURE CONNECTIONS			
MARK	DESCRIPTION	MANUFACTURER AND MODEL NUMBER	FITTING & CAPACITY	ACCESSORIES/ REMARKS	C.W.	H.W.	WASTE	VENT
W1	HANDICAP WATER CLOSET FLOOR OUTLET FLUSH VALVE	"ACORN" #1695-W-FVBO-HS -	"SLOAN" ROYAL #111 1.6 GPF	- - -	1¼"	-	4"	2"
W2	WATER CLOSET FLOOR MOUNTED FLUSH VALVE	"ZURN" CHILDRENS ECOVANTAGE #Z5675-BWL	"SLOAN" ROYAL #111 1.28 GAL PER FLUSH	VITREOUS CHINA, SIPHON ACTION, ELONGATED BOWL OPEN-FRONT SEAT	1¼"	-	4"	2"
L1	ADA LAVATORY WALL HUNG STAINLESS STEEL	"ACORN" #ELPS1 -	"SYMMONS" #SLC-6000, 0.5GPM SELF-CLOSING	¼ TURN ANGLE STOPS, TAILPIECE TRUEBRO #102 PIPE INSULATION "LEONARD" 170-LF MIXING VALVE	½"	½"	2"	1½"
HS	HAND SINK RECTANGULAR WALL HUNG	"AMERICAN STANDARD" LUCERNE #0355.012 4" CENTERS FAUCET	"SYMMONS" #S-20-2-G SINGLE LEVER, 2.2GPM	PERFORATED GRID, ¼ ANGLE STOPS, TAILPIECE, P-TRAP, RISER TRUEBRO #102 PIPE INSULATION	½"	½"	2"	1½"
FD	FLOOR DRAIN -	"J.R.SMITH" #2005-A -	"J.R.SMITH" TRAP SEAL #2692	- SQUARE TOP -	-	-	2"	1½"
WH-A	ELECTRIC WATER HEATER 35"TALLX21"WIDE	"A.O. SMITH" # DEN-30 30 GAL. CAPACITY	TWO 4500 W NONSIMULTANEOUS ELEMENTS	30 GPH @ 60°F RISE 208V, 1ø 4.5KW	-	-	-	-
MS	MOP SINK 24"x24"x10" DEEP FLOOR BASIN	"FIAT" #MSB-2424 -	SERVICE FAUCET #830-AA	HOSE & BRACKET - MOP HANGER W/ VACUUM BREAKER	¾"	¾"	3"	2"
HB	WALL HYDRANT HOSE BIBB -	"WOODFORD" #B-65 FREEZE PROOF	- ¾" INLET -	W/ VACUUM BREAKER BACKFLOW PREVENTER LOOSE TEE KEY	¾"	-	-	-

NOTE: PROVIDE LEONARD #170-LF THERMOSTATIC MIXING VALVE (OR EQUAL, COMPLYING WITH ASSE 1070) WITH A SET POINT OF 110°F ON ALL LAVATORY/SINKS.

8.0 PSI DROP

PIPE SIZE	GPM	FU (FT)	FU (FV)
½"	3	3	-
¾"	8	11	-
1"	18	25	-
1½"	30	55	14
1½"	44	103	35
2"	77	259	135
2½"	120	479	365
3"	170	748	739

WATER CALCULATION

STATIC PRESS.:	60 PSI			
BLDG. HEIGHT :	10			
60.00 PSI PRESSURE IN MAIN				
20.00 PSI PRESSURE REQUIRED AT FURTHEST FIXTURE				
40.00 PSI SUBTOTAL				
10.00 PSI DROP THRU RPPBFP				
30.00 PSI SUBTOTAL				
4.33 PSI DROP FOR ELEVATION				
25.67 PSI ALLOWABLE FOR PIPE FRICTION				
TOTAL LENGTH OF WTR SYSTEM		=	225	
EQUIVALENT FEET OF PIPE ALLOWED FOR				
TEES, ELBOWS, FITTINGS, ETC.		=	74.25	
TOT. DEVELOPED LENGTH OF WTR SYSTEM=			299.25	
* ALLOWABLE FRICTION LOSS		=	8.5781	PSI/100'*
7 LAV	2 FU	=	14 FU	
1 HS	2 FU	=	2 FU	
2 MS	3 FU	=	6 FU	
7 WC	10 FU	=	70 FU	
1 HB	5 FU	=	5 FU	
	TOTAL FU		97	
	TOTAL		97	67 GPM

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SHEET NO. P2.01